Inviting Bids from eligible Firms/Contractors/Agency /Individual for Civil & Structural works for extension of Administrative Building at Purabi Dairy(WAMUL) under WAMUL

INVITATION FOR BID (IFB)











The West Assam Milk Producers' Co-operative Union Ltd. PURABI DAIRY

INVITATION FOR BID

WAMUL/Admin/Civil & Strucutral works/2023-2024/02

Dated: 29-07-2023

Sub: Inviting Bids from eligible Firms/Contractors/Agency/Individual for Civil & Structural Works for extension of Administrative Building at Purabi Dairy(WAMUL)

West Assam Milk Producers' Cooperative Limited (WAMUL) is pleased to invite eligible Firms/Contractors /Agency/Individual for construction of Various Civil and Structural Works at Purabi Dairy(WAMUL)-Assam as details mentioned below:

S.No.	Brief Description of works	Technical Speciation (along with Drawing) and BOQ	Location	Completion Time
1	Civil & Structural Works for extension of Administrative Building	Attached Annexure- 1	Purabi Dairy(WAMUL) Panjabari, Guwahati, Assam, 781037	180 days from the date of issue of Work Order

Schedule of bidding:

The bidding shall be done on the basis of two envelopes (technical and financial envelopes), single stage tendering process and shall be having the following timelines:

S1. No.	Particulars	Date	Time
1.	Commencement of bid publishing of Tender	29-07-2023	-
2.	Last date of submission of technical and financial bids	19-08-2023	12.00 HRS
3.	Date of technical bid opening	19-08-2023	12.30 HRS

Terms and Conditions

1. Eligibility criteria of the bidder

The Bidder shall have successfully executed/completed contracts of preferably similar nature of work** during last three years ending last day of the month previous to the month in which bid is opened, either of the following:

i. One contract work of preferably similar nature costing not less than INR. 1 Crore.

OF

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Two contracts/works of preferably similar nature each costing not less than INR. 60 Lakhs.

OR

Three contracts/works of preferably similar nature each costing not less than INR. 50 Lakhs.

ii. The average annual financial turnover should not be less than INR. 4 crores in the last 3 financial years (FY 2019-2020,2020-2021 & 2021-2022 or 2020-2021, 2021-2022 & 2022-2023) (Years should be consecutive).

(Relevant Documents: CA certificate copy having valid UDIN No. or audited balance sheets of last any 3 Financial Years as mentioned)

iii. Valid GST No., PAN No., Address Proof & Cancelled Cheque.

Notes:

** Civil & Structural works for RCC framed or Load bearing structure/RCC Roads/ Paver block Roads/Bitumen Road / Industrial buildings of Dairy Plant/MS Roofing shed/ Food & Beverage / Pharma / Chemical / Hospital / Electronics /Frozen semen station having clean room laboratory/ bio containment laboratory/ University/ Educational Institute.

Bidders shall submit the following details to support their claim for meeting the minimum eligibility requirement:

- a) Name / Names of project to be considered for meeting minimum eligibility criteria.
- b) Nature of each project / work completed.
- c) Value of work of each project / work completed.
- d) Location of execution of each project/work completed. The copy of purchase order/work order, completion certificate and abstract sheet of final bill/invoice showing the cumulative value of work done should be submitted in order to support aforesaid details. In case, the final bill/invoice, does not contain cumulative value of work done, copy of all the bills/ invoices submitted prior to the final bill should be attached.
- **2. Earnest Money Deposit:** The Bidders shall submit EMD amounting to Rs. 60,000/- in the form of Bank Draft in in favor of "West Assam Milk Producers Cooperative Union Limited" Payable at Guwahati. If the bidder is not earnest about the bid, then the bid security is liable to be forfeited.
- **3.Performance Security:** The successful bidder shall furnish to the WAMUL a performance security of 5% of the contract value in the form of Bank Guarantee or a Bank Draft from any Nationalized/Scheduled Bank in favor of "West Assam Milk Producers Cooperative Union Limited", Payable at Guwahati within 30 days after the issue of Work and shall be valid for one year from the date completion of work. The Performance Security furnished by the successful bidder will be retained by the office up to 60 days after expiry of Performance Obligation Period/PBG. The PBG held by the office till it is returned to the successful bidder will not earn any interest.

4. Work Completion time: within 180 days from the issue of work order. 18876

Both

5.Payment terms:

The payment will be made on the basis of total 4 (four) Nos of running accounts (RA) bills.

The $1^{\rm st}$ RA bill payment will be made 25% after completing the 30% of the entire work. The $2^{\rm nd}$ RA bill payment will be made 25% after completing the 60% of the entire work. The $3^{\rm rd}$ RA bill payment will be made 25% after completing the 90% of the entire work. The $4^{\rm th}$ and final RA bill will be made after completion of the entire work. The payment will be paid of the said work within the stipulated time subject to bill certification by competent authority of WAMUL.

- **6. Validity of the Bids**: Bids must be valid for 120 days from the due date of Submission. The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- 7. Liquidated Damages: If the bidder fails to deliver any or all the goods or perform the services within the time period(s) specified in the purchase order/contract, the WAMUL shall, without prejudice to its other remedies under the purchase order/contract, deduct from the purchase order/contract price, as liquidated damages, a sum equivalent to the following clauses which is applicable as per Order.
 - b) 0.5% of the delayed items for each completed week of delay.

The total amount so deducted shall not exceed 10% of the purchase order/contract value. Once the maximum is reached, the WAMUL may consider cancellation/termination of purchase order/contract, and forfeiture of performance/ deposit bond

8. Price Bid

- 8.1. The Prices shall be quoted in Indian Rupees only.
- 8.2. Each bidder shall submit only one Bids. Bidder shall not contact other Bidders in matters relating to this Bids
- 8.3. Documents: The Bids shall comprise two Parts, namely the Technical Part and the Financial Part. Both Parts shall be submitted simultaneously in a single cover.
- i) The Technical Part of Bids shall comprise the following:
- a) Letter of Bids Technical Part Comprises of all relevant documents as mentioned at point 1 of eligibility criteria of the bidder.
- b) Complete address and contact details of the Bidder having the following information:

Name of Firm

Address for communication

Telephone No(s): Office

Mobile No.

Electronic Mail Identification (E-mail ID)

ii. The Financial Part of Bids shall comprise the following:

(a) Price Schedule as per specified format (BOQ) Attached Annexure-1

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9. Evaluation and Award of Contract:

9.1. The Purchaser will evaluate on overall basis and compare the Bids of the responsive bidders only to be responsive i.e. which are properly signed; and Conform to the terms and conditions, and specifications

9.2. The Bids would be evaluated for complete set/works to be executed under this RFB

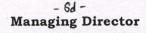
- 9.3. GST, charges in connection with the services shall be taken into account in evaluation.
- 9.4. The Purchaser will award the contract to the bidder whose Bids has been determined to be responsive and who has offered the lowest evaluated Bids price.
- 9.5. Notwithstanding the above, the Purchaser reserves the right to accept or reject any Bids and to cancel the bidding process and reject all Bids at any time prior to the award of contract.
- 9.7. The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the Bids validity period. The terms of the accepted offer shall be incorporated in the supply order.
- 10. Cancellation of Contract: WAMUL shall be free to cancel the order either in full or in part, in the case of non-delivery/ non-completion of execution within the stipulated completion period.
- 11. **Rejection**: WAMUL reserves the right to reject the goods either in part or full if at the time of delivery, it is noticed that the services provided do not conform to the specifications/description given in the purchase order
- 12. For any dispute/legal issues, the jurisdiction is at Guwahati Only.

Bids can be submitted in person on or before the due date and time specified above. Such Bids should be dropped in the tender box only kept at the Office of the "West Assam Milk Producers Cooperative Union Limited, Juripar Panjabari-Guwahati-781037"

Alternatively, the bidder can submit the Bids by registered post so as to reach the above address on or before the due date and time specified above. Bids received after due date and time will not be considered and WAMUL shall not be liable or responsible for any postal delays.

The completed RFB document duly signed on all the scanned signed pages by WAMUL should be submitted by the bidder along with the offer letter.

13. The bidder should submit the bids (technical bid along with all the required supporting documents and the financial bid in the designated format mentioned in Annexure-I) in two (02) separately sealed envelopes and then insert them in a single large envelope duly sealed and shall address to on or before last date of submission of bid:



West Assam Milk Producers' Cooperative Union Limited (Purabi Dairy), Guwahati-781037, Assam.





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Techn	ical Specification & B.O.Q. FOR CIVIL & STRUCTU EXTENSION OF ADMIN. BLDG. FOR PURABI DAIR -			1	
SR.NO.	Item Description	Unit	Rate (Rs.)	Qty	Amount
1	Excavation in all types of soil, including murrum, for foundations of wall, columns, plinth beams, basement, raft, ducts, trenches, underground sumps, septic tanks, soak well, manhole chambers, gully chambers, including shoring, strutting, bailing out water/pumping off water if required, re-filling the trenches, foundation pits, ramming, watering consolidating in 15 cms to 20 cms layers as directed, removing and stacking simultaneously the excavated stuff any where within the site area complete as directed - From NGL to 1.5 m depth	CU.M.		22.00	-
2	Excavation in all types of soil, including murrum, for foundations of wall, columns, plinth beams, basement, raft, ducts, trenches, underground sumps, septic tanks, soak well, manhole chambers, gully chambers, including shoring, strutting, bailing out water/pumping off water if required, re-filling the trenches, foundation pits, ramming, watering consolidating in 15 cms to 20 cms layers as directed, removing and stacking simultaneously the excavated stuff any where within the site area complete as directed - For depth exceeding 1.5 m but up to 3.0 m			7.00	
3	Filling in plinth with selected excavated earth and rock stuff available within site in layers of thickness 200mm including screening if required, watering, ramming and compactin as directed using mechanical plate compactor and / vibro-roller and/ Power roller of 8 to 12 MT, testing cost for suitability of avialable earth/rock & compaction of each layer,cost of transportation,loading & unloading anywhere within site complete as directed.	CuM		7.00	
4	Filling in ground other than plinth with selected excavated earth and rock stuff available within site, for land development etc. within the site, to required level, spreading in layers of thickness 200mm, inlcuding screening if required/as directed, watering, ramming, consolidating using power roller of 8 to 12 MT including testing cost for suitability of avialable earth/rock & compaction of each layer,cost of transportation,loading & unloading anywhere within site complete as directed.	CuM		2.00	



5	Providing and laying in a compact manner 150 mm thick metal soling in plinth in two layers using	CUM	2.00	-
	average 60 to 80 mm size stones simillar to which			
	used for concrete and RCC works, including test of			
	materials, filling in the voids with largest possible similar stones, covering and levelling the surface			
	with sand/ layer of murum, dry compaction followed			
	by watering, topping up with sand / murram and			
	consolidation with mechanical plate compactor etc.			
	all complete as directed.			
6	Carting away the excavated surplus earth / debris	CUM	26.00	
	/rock /rock stuff etc. out side of the site including loading at site, transportation, unloading, spreading			
	etc complete as directed. Lead shall be goverend as			
	per the locations of the disposal sites out side the			
	site premises and as per the local laws of the			
	governing authorities in the area.			
7	TOTAL FOR EXCAVATION			
8	CONCRETE			-
9	Providing and laying machine mixed plain cement	CuM	1.00	<u>-</u>
	concrete (PCC) 1:4:8 in volumetric proportion (1 parts of cement: 4 part coarse sand : 8 part stone			
	aggregates of size 37 mm and down) for specified			
	thickness, for foundations below masonry/RCC			
	walls, column footings, sunken floor terraces at any			
	height above plinth level, raft at any depth below			
	floors, pavements, roads, plinth protection, bed blocks, anchor blocks, etc. including centring and			
	shuttering if required, laying spreading, ramming,			
	consolidating as per requirement and curing etc.			***
	complete as directed. Note:-Stone aggregates may			
	be 20mm and down graded or 37mm and down			0.00
	graded for use in PCC. This item shall be paid for elements in any shape, size & thickness or depth			
	and also for columns at terrace for future expansion			
	provision, encasing of pipes/services, screed			
	[p. c			
	concreting etc. all. Item includes shuttering work at			



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10	Providing & laying in position machine mixed and	CUM		11.00	-
	machine vibrated M-25 grade cement concrete of				
	controlled grades having minimum cement content				
	as specified under the technical specification for				
	reinforced cement concrete structural elements in				
	any shape, size, thickness or depth and design viz.				
	foundations, columns, beams, slabs, raft, floor plinth				
	beams, plinth beam ledges, window sills, copings,				
	thin band beams, walls, parapets boxes, folded				
	plates, chajjas, mullions, retaining walls, fins,				
	staircases, overhead and underground water and				
	other fluid tanks, statically loaded foundation				
	rafts/floor, water troughs, manhole slab, septic tank				
	slab, soak well slab, fins, fins forming box louvers,				
	facias, eaves, arches, domes, road kerbs, etc. its				
	concrete elements in any shape, size,				
	thickness/depth and design as per structural design				
	and as directed in specified compressive strength				
	expressed in N/mm2 at 28 days as per IS 456-2000				
	using 20mm or as specified size of crushed stone				
	aggregates including design of concrete mixes as				
	per procedure specified in IS 10262, approval and				
	establishment of concrete mix as per design mix ,				
	automatic controlled weigh batched proportioning for				
	all ingredients including water and admixtures,				
	PC/PLC controlled batching machine having vividly				
	display for real-time monitoring and collection of				
	computer data of batch reports and printing batch				
	reports on daily basis for submission to site				
11	Providing & laying in position machine mixed and	CUM		121.00	<u>-</u>
	machine vibrated M-25 grade cement concrete of				
	controlled grades having minimum cement content				
	as specified under the technical specification for				
	reinforced cement concrete structural elements in				
	any shape, size, thickness or depth and design viz.				
	foundations, columns, beams, slabs, raft, floor plinth				
	beams, plinth beam ledges, window sills, copings,				
	thin band beams, walls, parapets boxes, folded		Notes 1		
	plates, chajjas, mullions, retaining walls, fins,				
	staircases, overhead and underground water and				
	other fluid tanks, statically loaded foundation				
	rafts/floor, water troughs, manhole slab, septic tank				
1.5	slab, soak well slab, fins, fins forming box louvers,				
	facias, eaves, arches, domes, road kerbs, etc. its				
	concrete elements in any shape, size,				
	thickness/depth and design as per structural design				
	and as directed in specified compressive strength				
	expressed in N/mm2 at 28 days as per IS 456-2000				
	using 20mm or as specified size of crushed stone				
	aggregates including design of concrete mixes as				
	per procedure specified in IS 10262, approval and				
	establishment of concrete mix as per design mix,				
	automatic controlled weigh batched proportioning for				
	all ingredients including water and admixtures,				
	PC/PLC controlled batching machine having vividly				
	display for real-time monitoring and collection of				
	computer data of batch reports and printing batch				
	reports on daily basis for submission to site	Research to the second			

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12	Providing and erecting in position form work	SQM	77.00	
	shuttering, centering & boxing using approved quality new plywood and metal plates shuttering materials of approved quality for concrete elements vertical, horizontal, inclined, circular, curved etc. in all sizes, shapes and designs as per drawing including necessary staging/false staging at all intermediate levels, scaffolding, bolts/nuts, fastener nails, wires for keeping in position till concrete is laid and members have acquired required strength, removal thereafter, applying shuttering oil etc. complete as directed. Laminated plywood shall be essentially used for beam bottom and beam side in order to minimise the joints in shuttering work. Work to be carried out at all levels below ground level and up to highest plinth level.			
13	Providing and erecting in position form work shuttering & boxing using new plywood and metal plates shuttering materials of approved quality for concrete elements vertical, horizontal, inclined, circular, curved etc. in all sizes, shapes and designs as per drawing including necessary staging at all intermediate levels, scaffolding, bolts/nuts, fastener nails, wires for keeping in position till concrete is laid and members have acquired required strength, removal thereafter, applying shuttering oil etc. complete as directed. Laminated plywood shall be essentially used for beam bottom and beam side in order to minimise the joints in shuttering work Form Work in superstructure to all heights above highest plinth level upto 12mtr for all concrete elements of any shape, size & direction etc complete as directed.	SQM	966.00	
14	Supplying and mixing with cement for cement concrete/cement mortar, liquid integral water proofing compound of approved make & quality as per the specific item of work/as directed conforming to IS: 2645 and manufacturer's specifications etc. complete as directed including the cost of testing etc. Contrctor to submit a copy of invoice for each supply.	Litre	62.00	
15	Providing and laying cement concrete of grade 1:1.5:3, (1 part of cement: 1.5 parts of coarse sand: 3 parts of stone aggregates of size 12mm and downgraded) at all height from highest plinth level for filling the gap between the roof sheets and the underneath masonry walls and RCC elements in horizontal, sloping, curvature profile including providing & erecting in position scaffolding, staging and self finishing on both the sides, curing etc complete as directed. (Item self explainatory)	CUM	1.00	
16	Providing and laying 150mm X 150mm size cement concrete & cement finish vata in proportion 1:2:4 (1 cement: 2 course sand : 4 part 10mm or down graded stone aggregates) including making and finishing zaries in wall etc. finish with good surface as directed. (Item self explainatory)	RM	84.00	

17	Providing and Fixing of reinforcement steel dowel bar in the existing RCC elements by re-bar method including machine drilling with minimum drilling hole dia. shall be 1.5 times of the dia. of dowel bar to be inserted (or as per the recommendations of the manufacturer) and up to suitable inset depth as per the recommendation of manufacturer), providing and applying of necessary anchoring mortar chemicals such as epoxy based resin and hardener of approved make like HILTI India / Fischer or equivalent approved and work to be carried through the competent auhtorised agency/applicator using all standard equipment cum accessories such as pneumatic dispenser, injection adapter, static mixer tube etc including all materials, labours, tools, etc complete as directed for 8 mm dia bars. (Reinforcement shall be paid under relevant item of this tender), complete as directed. (Item self explainatory)	No.	25	
18	Providing and Fixing of reinforcement steel dowel bar in the existing RCC elements by re-bar method including machine drilling with minimum drilling hole dia. shall be 1.5 times of the dia. of dowel bar to be inserted (or as per the recommendations of the manufacturer) and up to suitable inset depth as per the recommendation of manufacturer), providing and applying of necessary anchoring mortar chemicals such as epoxy based resin and hardener of approved make like HILTI India / Fischer or equivalent approved and work to be carried through the competent auhtorised agency/applicator using all standard equipment cum accessories such as pneumatic dispenser, injection adapter, static mixer tube etc including all materials, labours, tools, etc complete as directed for 10 mm dia bars. (Reinforcement shall be paid under relevant item of this tender), complete as directed. (Item self explainatory)	NO.	25	
19	Providing and Fixing of reinforcement steel dowel bar in the existing RCC elements by re-bar method including machine drilling with minimum drilling hole dia. shall be 1.5 times of the dia. of dowel bar to be inserted (or as per the recommendations of the manufacturer) and up to suitable inset depth as per the recommendation of manufacturer), providing and applying of necessary anchoring mortar chemicals such as epoxy based resin and hardener of approved make like HILTI India / Fischer or equivalent approved and work to be carried through the competent auhtorised agency/applicator using all standard equipment cum accessories such as pneumatic dispenser, injection adapter, static mixer tube etc including all materials, labours, tools, etc complete as directed for 12 mm dia bars. (Reinforcement shall be paid under relevant item of this tender), complete as directed. (Item self explainatory)	NO.	65	

20	Providing and Fixing of reinforcement steel dowel bar in the existing RCC elements by re-bar method including machine drilling with minimum drilling hole dia. shall be 1.5 times of the dia. of dowel bar to be inserted (or as per the recommendations of the manufacturer) and up to suitable inset depth as per the recommendation of manufacturer), providing and applying of necessary anchoring mortar chemicals such as epoxy based resin and hardener of approved make like HILTI India / Fischer or equivalent approved and work to be carried through the competent auhtorised agency/applicator using all standard equipment cum accessories such as pneumatic dispenser, injection adapter, static mixer tube etc including all materials, labours, tools, etc complete as directed for 16 mm dia bars. (Reinforcement shall be paid under relevant item of this tender), complete as directed. (Item self explainatory)	NO.	55	-
21	Providing and Fixing of reinforcement steel dowel bar in the existing RCC elements by re-bar method including machine drilling with minimum drilling hole dia. shall be 1.5 times of the dia. of dowel bar to be inserted (or as per the recommendations of the manufacturer) and up to suitable inset depth as per the recommendation of manufacturer), providing and applying of necessary anchoring mortar chemicals such as epoxy based resin and hardener of approved make like HILTI India / Fischer or equivalent approved and work to be carried through the competent auhtorised agency/applicator using all standard equipment cum accessories such as pneumatic dispenser, injection adapter, static mixer tube etc including all materials, labours, tools, etc complete as directed for 20 mm dia bars. (Reinforcement shall be paid under relevant item of this tender), complete as directed. (Item self explainatory)	NO.	25	
22	Providing and Fixing of reinforcement steel dowel bar in the existing RCC elements by re-bar method including machine drilling with minimum drilling hole dia. shall be 1.5 times of the dia. of dowel bar to be inserted (or as per the recommendations of the manufacturer) and up to suitable inset depth as per the recommendation of manufacturer), providing and applying of necessary anchoring mortar chemicals such as epoxy based resin and hardener of approved make like HILTI India / Fischer or equivalent approved and work to be carried through the competent auhtorised agency/applicator using all standard equipment cum accessories such as pneumatic dispenser, injection adapter, static mixer tube etc including all materials, labours, tools, etc complete as directed for 25 mm dia bars. (Reinforcement shall be paid under relevant item of this tender), complete as directed. (Item self explainatory)	NO.	25	-

23	Providing, fabricating and fixing in position TMT reinforcement steel bars of minimum grade Fe 500	Kg	12000	- 1
	confirming to IS 1786 - 1985 of approved or equivalent make for RCC structures as per design including transporting, unloading and incidental charges for handling cutting, bending, and binding			
	with two strands of annealed steel wire of 18 gauge, welding if necessary for all heights below and above plinth level etc. complete as directed. For all dia. reinforcement			
24	Making holes in old /new concrete by drilling up to 260 mm depth for 16 mmm dia .Anchor bolt by Fischer / Hilty system at all height including fixing of base plate. Base plate will be paid under relevant item.	No.	25	-
25	Making holes in old /new concrete by drilling up to 260 mm depth for 20 mmm dia .Anchor bolt by Fischer / Hilty system at all height including fixing of base plate. Base plate will be paid under relevant item.	No.	25	
26	P/A. cocrete bonding compound S.B.R. Latex to old /new concrete surface at all level. Vertical & Horizontal	Litre	30	
27	Charges of welding the reinforcement bars for lapping with the reinforcement bars of existing structure to take-up further RCC works, welding shall be carried out as per the recommendations of structural consultant, welding of new reinforcement steel with existing reinforcement steel shall be carried out for a length of 300mm to 500mm and for all diameter of steel bars etc complete as directed. (new reinforcement steel shall be paid separately under the respective item).	No.	206.00	
28	TOTAL OF CONCRETE			•
29	BRICK WORK	01114	0.00	-
30	Providing and constructing brick masonry in any shape in machine mixed Cement Mortar (CM) 1:6 (1 part cement and 6 part coarse sand) in all works with approved quality bricks having minimum crushing strength 40 Kg./Sq.cm including all necessary scaffolding, racking out the joints, curing etc. complete as directed in foundation at all levels below and up to highest plinth level.	CUM	6.00	
31	Providing and constructing brick masonry in any shape in machine mixed Cement Mortar (CM) 1:6 (1 part cement and 6 part coarse sand) in all works with approved quality bricks having minimum crushing strength 40 Kg./Sq.cm including all necessary scaffolding, racking out the joints, curing etc. complete as directed in superstructure at all heights above highest plinth level		129.00	
32	Providing and constructing 115 mm thick brick masonry in partition with approved quality bricks having minimum crushing strength 40 Kg./Sq.cm, at all levels in CM 1:4 (1 part cement and 4 part coarse sand) including scaffolding, racking out joints, reinforcement of 2 Nos. 6 mm dia bars at every fourth course or 25 mm x 1.2 mm iron hoop in every 3rd course, curing, etc. complete as directed. (Rate includes the cost of MS bars or iron hoop).	SqM	85.00	

33	TOTAL OF BRICK WORK			
34	WOOD WORK			
35	Providing and fixing powder coated aluminium (minimum thickness of powder coating 50 micron) frame works for doors, windows, ventilators and partitions with extruded built-up standard tubular sections / appropriate Z sections and other sections of approved or equivalent make conforming to IS: 733 and IS: 1285, fixed with rawl plugs and screws or with fixing clips, or with expansion hold-fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/Neoprene felt, Silicon sealant of approved make etc. Aluminium sections shall be smooth, rust free, straight, mitered and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing/paneling, CP Brass/stainless steel screws, all complete as per architectural drawings and the direction of the Engineer -in-charge, (Cost of glazing / paneling shall paid separately as per the respective items).	KG	1412	
36	P/F Satin stainless steel grade 316 pull handle of approved or equivalent make, including the cost of screw and other incidental charges complete. For size 150 mm	NO	29.00	-
37	Providing and fixing satin stainless steel grade 316 pull handle of approved or equivalent make, including the cost of screw and other incidental charges complete. For size 300 mm	NO	4.00	
38	Providing and fixing Satin Stainless steel finish grade 316 mortice lock consisting of lock cylinder with half cylinder one side key and handles of approved or equivalent make, including the cost of screw and other incidental charges complete.	NO .	4.00	
39	Providing and fixing of additional Hinges, Satin SS finish of approved or equivalent make including the cost of screws and other incidental charges (Extra over and above) as per the approved sample complete (if not mentioned in item description)	NO	62.00	-
40	Providing and fixing toughened glass of 5.50mm thickness glazing in aluminium door, window, ventilator shutters and partitions with PVC/ neoprene gasket etc. complete as per the architectural drawings and as directed. (Cost of aluminium snap beading and aluminum sections shall be paid separately against the respective item)	SqM	153.00	
41	Providing & Fixing 4mm thick Compact sheet in aluminium door and partitions. Compact sheet shall be made from solid grade compact High Pressure Laminate manufactured under high pressure and temperature with bunch of kraft papers and decorative papers including approved quality PVC/ neoprene gasket etc complete as directed. (Cost of aluminium snap beading and aluminum sections shall be paid separately against the respective item)	SqM	11.00	

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, 42	Providing and fixing concealed lock in sliding windows of approved make & shade as directed.	NO	53.00	÷
43	Providing and fixing door frame of size 125mm x 62mm of Sal Wood with two rebates and grooves as per architectural details, frame shall be fixed with masonry/RCC works by providing and fixing of special frame anchors of HILTI/equivalent approved make as per manufacturers recommendations, minimum four anchors on each legs including provision in the frame for fixing mortise lock, door closer, tower bolts, stoppers, aldrops etc including two or more coats of first quality synthetic enamel paint of approved make over a coat of primer or four stage polishing on the wood surfaces prepared with application of two or more coats of approved make wood putty cum primer etc complete as directed.	RMT	17.00	
44	Providing and fixing, floor mounted door closer of approved make in place of SS hinges / pivot and leaf mounted door closer, complete as directed.	NO	6.00	
45	Providing and fixing flush door shutter of 37 mm (total thickness) with 1 mm thick lamination on both side of approved make and quality thermosetting synthetic resin bond solid batten core with 10 mm thick lipping of first quality teak wood batten on all edges with Aluminum anodized / powder coated fixtures and fittings such as tower bolts, handles, aldrops, door stopper, hinges etc. as per details, of approved make, including 2 or more coat of first quality synthetic enamel paint of approved make & shade, over a coat of wood primer, or flat paint or polish of required shade etc. all complete as directed	SQ.M.	9.00	
46	Providing and fixing Aldrop of Stainless Steel (SS) 316 grade and of approved size and make including all the fixing accessories as per the recommendations of manufacturer etc complete as directed. Size: 300 mm long.		6.00	-
47	Providing and fixing Satin SS finish stainless steel grade 304 tower bolt of approved or equivalent make, including the cost of screw and other incidental charges complete For size 250mm x 12 mm.		10.00	
48	Providing and fixing Satin Stainless steel finish grade 316 floor mounted door stopper approved or equivalent make, including the cost of screw and other incidental charges complete.		10.00	<u>-</u>
49	Providing and fixing IS: 3564 marked aluminium extruded section body tubular type universal hydraulic door closer with double speed adjustment with necessary accessories and screws etc. complete.		10.00	-



50	Providing & Fixing Stainless Steel grade 304 fly proof wire mesh of 22/23 gauge of wire with 1mm average gap between wires and fixing tightly with matching aluminium beading/Channel with EPDM gasket felt as per architect's details, with expansion bolts/screws, necessary cleats for jointing with cadmium coated screws/ bolts nuts etc. complete on Aluminium Window / Ventilator as per drawing and as directed.	KG	37.00	
51	TOTAL OF WOOD WORK			
52	FINISHING			-
53	Providing and applying 12 mm thick plain cement plaster finish at all heights and below highest plinth level in Cement Mortar (CM) 1:4 (1 part cement: 4 parts sand- 50% coarse and 50% fine) in line, level and plumb to the walls, concrete elements, beams, ceiling, stair, columns, pardis, including making plaster bands, stripes, moulds, pattas, grooves etc, over any brick or concrete surface as specified including scaffolding, curing and finishing smooth, complete as directed.	SqM	559.00	
54	Providing and applying 19 mm thick plain cement plaster finish in two layers with first coat of 12mm thick with Cement Mortar (CM) 1:4 (1 part cement: 4 parts sand- 50% coarse and 50% fine) in line, level and plumb and second coat of 7 mm thick with CM (1:2) (1 part cement: 2 part fine sand) to the walls, concrete elements, beams, ceiling, stair, columns, pardis, including making plaster bands, stripes, moulds, pattas, grooves etc, over any brick or concrete surface as specified including scaffolding, curing and finishing smooth, complete as directed at all heights and below highest plinth level.	SqM	958.00	
55	Providing and applying 19 mm thick sand faced cement plaster in two coats at all heights below and above highest plinth level with first coat of 12 mm thickness with cement mortar 1:4 (1part cement: 4 part of coarse sand) and top coat of 7 mm thickness with cement mortar 1:3 (1part cement: 3 parts of coarse sand) finishing using sponge to give uniform finish, on all types of concrete/brick surfaces including making plaster bands, stripes, pattas, grooves, drip moulds as per drawing/details, including scaffolding, curing etc., complete as directed.	SqM	744.00	
56	Providing and applying 25 mm thick water proof cement plaster in two layers of 15 mm under layer and 10 mm thick top layer both in C M 1: 3 (1 part cement: 3 part sand -50% coarse and 50% fine) in line, level and plumb at all heights below and above highest plinth level, including adding water proofing compound of approved quality and make as per manufacturer's specifications necessary scaffolding curing etc complete as directed. (Quantity of waterproofing admixture added, shall be measured and paid for under relevant item).		57.00	

57	Providing and applying neat cement finish to the plastered surface @ 2.2 Kg per SqM, including scaffolding, rubbing smooth with steel trowel / planer at all heights and below and above highest plinth level, curing etc. complete as directed.	SqM	57.00	-
58	Providing and applying (with brush only) white washing with lime on new /old work, at all heights below and above highest plinth level, three or more coats to give an even shade to walls, ceiling, AC sheets, etc., including addition of glue of approved make, Indigo (blue) to give bright finishing including scaffolding etc. complete as directed.	SqM	200.00	_
59	Providing and applying plastic emulsion paint of approved make and desired shade, on new / old work including the preparation of surface for painting, applying primer and putty, rubbing the surface, again applying primer, applying plastic paint in two or more coats to give an even shade, at all heights below and above highest plinth level, scaffolding etc complete as per manufacturer's specifications and as directed.	SqM	1,678.00	
60	Providing and fixing high tensile strength acid and alkali resistant latex metal free composition nontoxic Fiber Glass Mesh (FGM) of minimum density of 145 GSM (Gram per SqM) and 5mm X 5mm meshing size for reinforcement of surfaces during all kinds of plaster works at the junction of masonry work and RCC work or on any other place as directed to receive plaster including fixing the FGM in 300mm wide patta with Cement mortar (1 part cement :1 part fine sand) stretched properly and at all the heights below and above highest plinth level including scaffolding etc complete as directed.	SqM	57.00	
61	Providing and applying acrylic based Anti fungus exterior paint of approved make of desired shade on new work of smooth / sand faced / rough cast plaster finish Preparation of surface to be painted should be free from dust, grease any growth of fungus, algea or moss needs to be removed thoroughly by vigorous wire brushing and washing the surface with water, Freshly plastered surface to be allowed to cure completely. In case of surface imperfections such as holes, dent and cracks are to be filled only by using mixture of white cement and fine sand in the ratio of 1:3 at no extra cost (note-Any kind of putty is not recommended) for painting, applying primer of approved make, applying 2 coats of approved make paint as per specification at all heights below and above highest plinth level, scaffolding etc. complete as directed. (Measurement to be of the treated surface & nothing extra for rough / sand face surface)	SqM	2639.00	
	(1800 - Ca)			



62	Providing and fixing 12.5 mm thick tapered edge Gypsum board conforming to IS:2095-Part 1 for vertical and horizontal surfaces at all height false ceiling including providing and fixing of frame work made of special sections power pressed from M.S. sheet and galvanized in accordance with zinc coating of grade 350 as per IS:277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 22 mm and 37 mm at 1200 mm centre to centre. One flange fixed to ceiling with dash fasteners 12.5 mm dia. x 40 mm long with 6 mm dia. bolts to the angle hangers of 25 x 25 x 0.55 mm of required length and other end of angle hanger being fixed with nut and bolts to G.I. channel 45 mm x 15 mm x 0.9 mm running at the rate of 1200 mm centre to centre to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having clips of 10.5 mm at 450 mm centre to centre shall be fixed in a direction perpendicular to G.I. channels with connecting clips made out	SqM	16	1.00	-
63	TOTAL OF FINISHING				-
64	FLOORING				
65	Providing and laying pre-polished machine cut single piece green Kota stone of uniform shade in required size as per drawing 25 to 40 mm thick for treads, risers, sides of staircase, kitchen platform, window cills over 20 mm thick cement mortar bed of CM 1:4 (1 part cement :4 part of coarse sand) with thick cement slurry including making 3 to 5 mm V shaped grooves if required, curing machine / hand, curing, grinding, polishing, wax polishing etc complete as directed For Kota stones of size above 1.0M and upto1.5 M long in single piece.	SqM		6.00	<u>-</u>
66	Providing and laying pre-polished machine cut green Kota stone of uniform shade in required size as per drawing,18 to 20 mm thick in skirting / dado flush with plaster with a groove or projecting as per detail / approved pattern over a bedding of 12 mm thick cement mortar 1:4 (1 part cement :4 part coarse sand) including spreading neat cement slurry with flush pointing of the joints with cement paste mixed with matching green colour, curing, machine / hand polishing, wax polishing moping the finished surface with water and kerosene for 10 days etc. complete as directed. The joints of skirting / dado to be matched with flooring without any extra cost.	SqM		9.00	



67	Providing and laying pre-polished machine cut single piece green Kota stone of uniform shade in required size as per drawing 20 to 25 mm thick for treads, risers, sides of staircase, kitchen platform, window cills over 20 mm thick cement mortar bed of CM 1:4 (1 part cement :4 part of coarse sand) with thick cement slurry including making 3 to 5 mm V shaped grooves if required, curing machine / hand, curing, grinding, polishing, wax polishing etc complete as directed For stone up to 1.0 M long in single piece.	SqM	43.00	-
68	Providing and laying 75 mm thick waterproofing treatment for balcony, sunk slabs, toilets, water tanks, slopping terraces, returns (watta) at all levels with brick / stone aggregates etc complete as directed. at all the levels, with layer of 20 mm thick cement mortar 1:3 (1 part cement: 3 part coarse sand) mixed with water proofing compound of approved make and as specified by the manufacturer, laying brick bats of required size impregnating in to the base mortar bed with gap of 12 mm all around according to slope, level and curing the same, the gaps around brick bats filled with cement mortar 1:3 (1 part cement: 3 part coarse sand) mixed with waterproofing compound as above, 15 to 20 mm layer above brick bats and finishing top with neat cement @ 2.75 Kg/Sq.M. making square 300 x 300 mm chequered finish marks with string, finishing around rain water outlets curing etc. complete including furnishing of guarantee for 10 years. The work should be carried out through an approved specialised agency.	SqM	12.00	-
69	PROVIDING & MAKING KHURRAS 450MM X 450MM FOR 150MM DIA OUTLET	NO	4.00	-



70,	Providing and laying 18 - 20 mm thick pre-polished to mirror finish machine cut approved quality Granite stone Flooring of required size (length and width of the stone slab), colour in approved pattern including bands, strips patta in flooring, platform top, treads / cills of uniform colour, texture and pattern over 20 mm thick cement mortar 1:4 (1 part cement: 4 part sand) with cement paste @ 4.4 Kg/SqM filling of joints with white cement / cement mixed with colour pigments to match the shade, applying epoxy based damp proof coating on the base concrete surface, rounding off the exposed edges as per the drawing, necessary curing, polishing, protection of finished surface, cleaning the same finally etc. complete as directed. Note:-Basic rate of granit stone shall be Rs. 2500/Sqm The item also includes providing narrow bands up to 150mm width wherever required as per the drawing. If required, granite shall also be fixed by leaving 4mm x 4mm joints through spacers. The item also includes vanity counters etc. Granite stone shall be mirror polished, premoulded and prepolished and machine cut. Item rate shall also be inclusive of making V grooves as per drawing where ever required, full/half round moulding of the exposed edges as per the drawing, fixing grit aggregates back on stone with araldite/equivalent solution for bonding etc are included. Cement slurry/paste shall be applied @ 4.4 Kg/SqM or more if required for required thickness.	SqM	6.00	
71	Providing and laying pre-polished to mirror finish average 18 - 20 mm thick machine cut approved quality Granite stone of required size (length and width of the stone slab), in approved pattern, single piece in skirting, dado, risers of uniform colour, texture and pattern over 12 mm thick cement mortar 1:3 (1 part cement: 3 part coarse sand) with cement paste @ 4.4 Kg/SqM filling of joints with white cement / cement mixed with colour pigments to match the shade, applying epoxy based damp proof coating on the base concrete/wall surface, curing, polishing, protection of finished surface, cleaning the same finally etc. complete as directed. Basic rate of granit stone shall be Rs. 2500/Sqm The item also includes P & L granite stone for risers of staircase, facia & drops, door frames, wall lining (veneer work), jambs, cills & soffits of window, door and ventilator openings. Item rate shall also be inclusive of making V groove as per drawing where ever required, full/half round moulding of exposed edges as per drawing, fixing grit aggregates back on stone with araldite/equivalent solution for bonding etc. THK of granite may vary from 18 mm to 20 mm. facias, drops etc shall be fixed using special resin based epoxy adhesives (araldite / equivalent approved). Granite stone shall be mirror polished, premoulded, prepolished, machine cut. Single piece granite shall be up to 1500 mm long whereas granite for door frame shall be of full length/Height. Cement slurry/paste shall be applied @ 4.4 Kg/SqM or more if required for required THK. The item includes providing narrow bands also up to 150mm width wherever required as per drawing.		8.00	
72	LABOUR CHARGES FOR MAKING ANTISKID STRIP IN GRANITE STONE 25 MM WIDTH & 5MM DEEP	RM	28.00	- -
73	P&L 18 MM TO 20MM THICK PRE-POLISHED TO MIRRO FINISH SINGLE PIECE GRANITE STONE - 1.5M LONG FOR SKIRTING, DADO, RISERS	SqM	22.00	-

74	Providing and laying cement water-proofing of average 115 mm thick for balcony, terrace etc at all the levels, with layer of 20 mm thick cement mortar 1:3 (1 part cement : 3 part coarse sand) mixed with water proofing compound of approved make and as specified by the manufacturer, laying brick bats of required size impregnating in to the base mortar bed with gap of 12 mm all around according to slope, level and curing the same, the gaps around brick bats filled with cement mortar 1:3 (1 part cement : 3 part coarse sand) mixed with waterproofing compound as above, 15 to 20 mm layer above brick bats, curing and testing of water proofing, laying China Mosaic flooring work over the prepared surface in slope using broken equal pieces of white glazed tiles not more than 25 to 37 mm wide and long and colored glazed tiles equal pieces for making pattas, vattas etc. as per details with necessary bedding in CM (1:4) laid in required slope, consolidating with wooden hammer, filling joints with Birla white cement, cleaning the surface and acid washing etc. complete as directed at any height. 1. The Work to be carried out at all the heights. The individual rates shall be inclusive of all lifts, lead and handling of materials, necessary scaffolding and staging, 2. Rates shall be inclusive of the slopes to be provided in all the above flooring items as directed and as per the drawings, garantee for 10 years. The work should be carried out through an approved specialised agency like India Water Proofing Co. or equivalent.	SqM	1.00	
75	PROVIDING & LAYING OF POURABLE GRADE POLYSULPHATE SEALENT - 6 MM WIDTH PER 10MM DEPTH	RM	15.00	_
76	LABOUR CHARGES FOR HALF ROUND MOULDING TO KOTA STONE	RM	80.00	-
77	LABOUR CHARGES FOR FULL ROUND MOULDING TO KOTA EDGES	RM	11.00	-
78	Providing & laying 8-10 mm premium /1st quality vitrified tiles of approved make having size 600x600 mm or any approved size and shade having plain edges in flooring/dado/skirting over average 20 mm thk. Cement mortar 1:4 (1 part cement: 4 part coarse sand) bed laid to requisite ,line, level & slope, fixed with cement slurry @ 4.4kg/sqm of honey like consistency, making 3-5mm grooves using spacers & filling of joints with pigmented tile grout of approved make to match the shade etc. in flooring, providing & fixing skirting/ dado in line and level over the 12 mm thk. cement plaster in neat cement slurry @ 4.4kg/sqm of honey like consistency, with cleaning the area with water or water with mild acid etc. all complete as directed <i>Item to be executed for Glazed Vitrified Tile (GVT)</i> . Thickness for GVT shall 9mm-10mm. Basic Rate for Vitrified tile Rs 900 per Sqm.	RM	329.00	
79	PROVIDING & LAYING 10-12 MM VITRIFIED TILES IN SKIRTING	RM	100.00	-



Providing of 1.8mm to Zmm thick Poly Propylene (PP) floor protection sheets/PF Flut Boards of minimum 250GSM (Gram Per Square Meter) and laying by Keeping overlaps at all the sides for minimum 150mm and fixed the sheets by providing and applying industry quality sticking lape over the vitrified/granite stone/flues flooring for protection of flooring till the other finishing/furniture works are completed and clearance provided by site engineer for removal and removing carefully etc completed as directed. Measurements shall be paid only for the flooring protected in SqM. Wastages and overlaps shall not be considered for the payment/measurements. Providing and fixing both side polished, single piece 15-18 mm thick Granite Stone Pardi using Granite with machine cut edges and cut to required shape etc. complete as directed. Providing and fixing PVC strips 3/5 mm & 50 mm wide in proper vertical position in IPS or Cast in Situ. Flooring in line and level as per the direction. Providing and fixing provided in the provided in proper vertical position in IPS or Cast in Situ. Flooring in line and level as per the direction.					
15-18 mm thick Granite Stone Pardi using Granite with machine cut edges and cut to required shape etc. complete as directed. 82 Providing and fixing PVC strips 375 mm & 50 mm wide in proper vertical position in IPS or Cast in Situ. Flooring in line and level as per the direction. 83 TOTAL OF FLOORING 84 STEEL WORK 85 Providing, fabricating and fixing in position, grill, railing, steel ladder, Safety MS bars to windows/ ventilator of MS rolled sections as per architect's details including cutting welding, grinding to smooth surface, fixing hold fast of MS sections embedded in concrete 1:2-4 (1 part cement, 2 part coarse sand, 4 part of stone aggregate 12 mm and down), anchor botts including 2 or more coats of first quality synthetic enamel paint of approved make over a coat of primer etc. complete as directed. 86 Providing, fabricating and fixing in position MS inserts such as nosing, corner angles of columns, plates, flats, tee's, protection channels of reception dock, supports, brackets and monoralis, hooks, frame around cut-out, MS pipe sleeves etc. as per drawings and specifications, in true line and level including embedding the same into the permanent works at the time of casting of RCC works or fixing with or without base plate fixed to RCC element with appropriate size expansion botts as per design, with necessary welding, grinding and painting with two or more coat of approved first quality synthetic enamel paint over a coat of primer etc. complete as directed. 87 Providing, fabricating and fixing MS pipe railing as per the architect's details / as directed using MS pipes / square or hollow section, with necessary specials including painting with two or more coats of synthetic enamel paint of approved make and quality over a coat of red oxide primer etc complete as directed. (MS standard rolled sections used in railing shall be measured and paid under respective item)	80	(PP) floor protection sheets/PP Flute Boards of minimum 250GSM (Gram Per Square Meter) and laying by keeping overlaps at all the sides for minimum 150mm and fixed the sheets by providing and applying industry quality sticking tape over the vitrified/granite stone/tiles flooring for protection of flooring till the other finishing/furniture works are completed and clearance provided by site engineer for removal and removing carefully etc completed as directed. Measurements shall be paid only for the flooring protected in SqM. Wastages and overlaps shall not be considered for the	SqM	88	
Providing and fixing PVC strips 3/5 mm & 50 mm wide in proper vertical position in IPS or Cast in Situ. Flooring in line and level as per the direction. 83	81	15-18 mm thick Granite Stone Pardi using Granite with machine cut edges and cut to required shape	SqM	2.00	-
84 STEEL WORK 85 Providing, fabricating and fixing in position, grill, ralling, steel ladder, Safety MS bars to windows/ ventilator of MS rolled sections as per architect's details including cutting welding, grinding to smooth surface, fixing hold fast of MS sections embedded in concrete 1:2:4 (1 part cement, 2 part coarse sand, 4 part of stone aggregate 12 mm and down), anchor bolts including 2 or more coats of first quality synthetic enamel paint of approved make over a coat of primer etc. complete as directed. 86 Providing, fabricating and fixing in position MS inserts such as nosing, corner angles of columns, plates, flats, tec's, protection channels of reception dock, supports, brackets and monoralis, hooks, frame around cut-out, MS pipe sleeves etc. as per drawings and specifications, in true line and level including embedding the same into the permanent works at the time of casting of RCC works or fixing with or without base plate fixed to RCC element with appropriate size expansion bolts as per design, with necessary welding, grinding and painting with two or more coat of approved first quality synthetic enamel paint over a coat of primer etc. complete as directed. 87 Providing, fabricating and fixing MS pipe railing as per the architect's details / as directed using MS pipes / square or hollow section, with necessary specials including painting with two or more coats of synthetic enamel paint of approved make and quality over a coat of red oxide primer etc complete as directed. (MS standard rolled sections used in railing shall be measured and paid under respective item) Bellow 18.78 / MS	82	Providing and fixing PVC strips 3/5 mm & 50 mm wide in proper vertical position in IPS or Cast in	RM	15.00	
Providing, fabricating and fixing in position, grill, railing, steel ladder, Safety MS bars to windows/ ventilator of MS rolled sections as per architect's details including cutting welding, grinding to smooth surface, fixing hold fast of MS sections embedded in concrete 1:2:4 (1 part cement, 2 part coarse sand, 4 part of stone aggregate 12 mm and down), anchor bolts including 2 or more coats of first quality synthetic enamel paint of approved make over a coat of primer etc. complete as directed. 86 Providing, fabricating and fixing in position MS inserts such as nosing, corner angles of columns, plates, flats, tee's, protection channels of reception dock, supports, brackets and monoralis, hooks, frame around cut-out, MS pipe sleeves etc. as per drawings and specifications, in true line and level including embedding the same into the permanent works at the time of casting of RCC works or fixing with or without base plate fixed to RCC element with appropriate size expansion bolts as per design, with necessary welding, grinding and painting with two or more coat of approved first quality synthetic enamel paint over a coat of primer etc. complete as directed. 87 Providing, fabricating and fixing MS pipe railing as per the architect's details / as directed using MS pipes / square or hollow section, with necessary specials including painting with two or more coats of synthetic enamel paint of approved make and quality over a coat of red oxide primer etc complete as directed. (MS standard rolled sections used in railing shall be measured and paid under respective item) 88 **TOTAL OF STEEL WORK**					<u>-</u>
inserts such as nosing, corner angles of columns, plates, flats, tee's, protection channels of reception dock, supports, brackets and monorails, hooks, frame around cut-out, MS pipe sleeves etc. as per drawings and specifications, in true line and level including embedding the same into the permanent works at the time of casting of RCC works or fixing with or without base plate fixed to RCC element with appropriate size expansion bolts as per design, with necessary welding, grinding and painting with two or more coat of approved first quality synthetic enamel paint over a coat of primer etc. complete as directed. 87 Providing, fabricating and fixing MS pipe railing as per the architect's details / as directed using MS pipes / square or hollow section, with necessary specials including painting with two or more coats of synthetic enamel paint of approved make and quality over a coat of red oxide primer etc complete as directed. (MS standard rolled sections used in railing shall be measured and paid under respective item) 88 TOTAL OF STEEL WORK		Providing, fabricating and fixing in position, grill, railing, steel ladder, Safety MS bars to windows/ventilator of MS rolled sections as per architect's details including cutting welding, grinding to smooth surface, fixing hold fast of MS sections embedded in concrete 1:2:4 (1 part cement, 2 part coarse sand, 4 part of stone aggregate 12 mm and down), anchor bolts including 2 or more coats of first quality synthetic enamel paint of approved make over a	Kg	258.00	
per the architect's details / as directed using MS pipes / square or hollow section, with necessary specials including painting with two or more coats of synthetic enamel paint of approved make and quality over a coat of red oxide primer etc complete as directed. (MS standard rolled sections used in railing shall be measured and paid under respective item) Date - 18.8.76 TOTAL OF STEEL WORK	86	inserts such as nosing, corner angles of columns, plates, flats, tee's, protection channels of reception dock, supports, brackets and monorails, hooks, frame around cut-out, MS pipe sleeves etc. as per drawings and specifications, in true line and level including embedding the same into the permanent works at the time of casting of RCC works or fixing with or without base plate fixed to RCC element with appropriate size expansion bolts as per design, with necessary welding, grinding and painting with two or more coat of approved first quality synthetic enamel paint over a coat of primer		26.00	
		per the architect's details / as directed using MS pipes / square or hollow section, with necessary specials including painting with two or more coats of synthetic enamel paint of approved make and quality over a coat of red oxide primer etc complete as directed. (MS standard rolled sections used in railing shall be measured and paid under respective item)		362.00	-
	88 89	TOTAL OF STEEL WORK MISCELLANEOUS			•

90	Providing and fixing night latch of approved make with a set of keys etc complete as directed.	No	1.00	-
91	Providing and fixing approved make 6 lever Mortice lock of approved make with pair of brass oxidized/chromium plated handles and set of keys etc complete as directed.	No	2.00	-
92	Providing & filling electrical jharies 150 to 250 mm wide and average 50 to 75 mm deep with cement mortar 1:3 and finishing the same to match with the surrounding including painting/white washing etc. complete as directed.	RM	25.00	-
93	Dismantling stone/Brick masonry walls or partition wall plastered or un plastered as per instructions including finishing the broken surface to match with the surroundings, removal and disposal of debries within site including cutting the reinforcement bars, if any etc. complete as directed.	CuM	41.00	-
94	Dismantling the RCC beams, slabs, lintels, columns, pardi, walls, platform etc. including finishing the broken surface to match with the surroundings, removal and disposal of debries within site, including cutting the reinforcement/ MS inserts stacking the same and handing over to stores / yard within site etc. complete as directed.	CuM	10.00	-
95	Providing and filling the jharies 25mm to 150mm wide and 50mm to 100mm deep with PCC 1:2:4 (1 part cement:2part sand: 4 parts 12.5 and down graded aggregates) and finishing the same as per surroundings including scaffolding, cutting the reinforcement bars, curing etc. complete as directed	RM	25.00	
96	Dismantling plain cement concrete in flooring/pavement/ wall foundation etc. as per instruction and disposing the debris/muck within the site at approved location.	CuM	35.00	*
97	Dismantling / scrapping and removing existing plain/sand faced/grit cement plaster of any thickness from the brick/RCC works including necessary scaffolding at all heights and levels and disposing the debries within the site etc. complete as directed.	SQM	125.00	
98	Dismantling steel work in built up sections in angles, tees, flats, pipes, chain link, barbed wire, baseplate and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. at all heights including dismembering and stacking within the premises upto a lead of 350m. and scaffolding complete as directed.	Kg.	300.00	-
99	Providing and making Core Cutting in R.C.C elements of any thickness up to 450mm deep bore using core cutter machines and tools etc complete as directed. For 100mm dia.	NO	1.00	oph •
100	Providing and making Core Cutting in R.C.C elements of any thickness up to 450mm deep bore using core cutter machines and tools etc complete as directed. For 150mm dia. No.G - 8/76-77	NO	1.00	-

101	Providing and fixing of 100mm dia PVC pipe pieces/sleeves of 500mm long of approved make with pressure rating of 4kg/Sq CM in the brick/stone masonry wall by placing while simultaneously with wall construction or including making holes, fixing the pipe piece and finishing properly to match with surrounding wall finishing, capping one end of the PVC pipe piece with matching sized PVC pipe cap of the same make as that of PVC pipe, fixing it without adhesive solution, including cutting the pipes, wastages, at all levels above and below ground level etc complete as directed	NO .	2.00	
102	Providing and Fixing heavy duty antiskid surfaced PVC rungs of minimum 25mm thick, minimum 175mm wide, minimum 265mm long, reinforced with joint less "U" shaped 12mm dia MS reinforcement steel embedded in PVC rung and capable of withstanding load of minimum 200Kg including fixing or grouting in masonry, RCC or concrete works and finishing the surface good as per the surrounding etc complete as directed.	NO	4.00	
103	Making Cutouts in Brick work & finishing with 19 mm th. Cement plaster in C:M 1:4 up to 12.00mt. Ht.	Sqm	1.00	
104	Making Cutouts in Brick work & finishing with 19 mm th. Cement plaster in C:M 1:4 from 12.00mt. To all heights.	Sqm	1.00	-
105	Charges for making holes in brick walls with or without plaster / tiles with mechanical cutter like HILTI etc. including disposing the debris and finishing the same as per requirements. Measurement of holes will be taken per no. of holes drilled as per following range of diameters. Making of holes by hammer and chisel will not be considered in this item. For Diameter of holes upto 201 mm to 300 mm clear.	NO	1.00	-
106	TOTAL OF MISCLENIOUS WORK			
107	WATER SUPPLY			
108	Providing & fixing heavy duty Gun Metal wheel valve of approved quality and make ISI marked, for lines of following diameters complete as directed - For 25 mm dia NB pipeline.	NO	1.00	-
109	Providing and fixing forged brass lever operated ball valve of full flow with forged brass ball (Machined to mirror smooth finish with hard chrome plated) and spindle with setting and gland of superior quality having minimum working pressure of 10kg/cm2 etc. complete as directed. For 20mm Dia.	No		-
110	Providing and fixing chromium plated brass Bib Cock With Wall Flange of approved make with chromium plated flange (disc) etc. for 15 mm dia NB pipeline, complete as directed. Make:JAQUAR, Series: FLORENTINE, code: FLR-5047N (page no. 71). Basic Rate Rs. 1150/= Per No.	No	3.00	-
111	Providing and fixing longbody CP brass bib cock of approved make with chromium plated flange (disc) etc. for 15 mm dia NB pipeline, complete as directed.	NO	1.00	-

112	Providing and fixing chromium plated concealed brass heavy-duty stop cock of approved make with chromium plated flange (disc) etc. complete as directed - For 15 mm dia NB pipeline.	. NO	2.00	-
113	Providing and fixing chromium plated brass heavy duty angle valve of approved make with chromium plated flange (disc) etc. complete as directed - For 15 mm dia NB pipeline.	No	2.00	
114	Providing and laying Chromium plated brass metal pillar cock of approved make and suitable for 15 mm dia as directed.	NO	2.00	
115	Providing and Fixing CP Health Faucet (Hand Shower) with 1 mt: flexible tube and Wall Hook complete of approved make	NO	3.00	
116	Providing & fixing CI Circular manhole cover of 455mm dia. of 40 Kg. weight including CI frame of approved make. The cover shall be got approved in advance and shall be fixed by grouting the frame in brickwork / RCC cover slab, including painting with two coats of bituminous paint etc. complete as directed.	KG	150.00	
117	Providing and fixing heavy duty HD-20 grade designation SFRC manhole covers and frame of 560mm internal diameter confirming to IS:12592, total weight of cover and frame to be not less than 182 kg. fixed in cement concrete 1:2:4 mix (1 cement : 2 course sand : 4 graded stone aggregate 20mm nominal size) including centering and shuttering all complete.	Nos	2.00	
118	Providing and laying concealed in earth waterline of 50mm dia, SCH- 80, uPVC pipe of approved make including excavation of trenches in soil/murum/rock, laying and jointing the pipes and fittings in line and level, including fittings as per manufacturer's recommendations, refilling excavated earth, compacting & watering etc complete as directed.	RM	5.00	
119	Providing and laying concealed in earth waterline of 65mm dia, SCH- 80, uPVC pipe of approved make including excavation of trenches in soil/murum/rock, laying and jointing the pipes and fittings in line and level, including fittings as per manufacturer's recommendations, refilling excavated earth, compacting & watering etc complete as directed.	RM	5.00	
120	Providing and laying concealed in earth waterline of 80mm dia, SCH- 80, uPVC pipe of approved make including excavation of trenches in soil/murum/rock, laying and jointing the pipes and fittings in line and level, including fittings as per manufacturer's recommendations, refilling excavated earth, compacting & watering etc complete as directed.	RM	5.00	



121	Providing and installing on terrace, multilayered cylindrical vertical PVC water storage tanks of approved make of capacity from 500 ltrs to 5000 ltrs with closed top having manhole and cover with threaded lid & extra insert lid for protection against algae formation, UV stabilised with white coloured outer layer, water tank shall be made from food grade material including shifting the tank from site store, supplying and fixing connection inlets, outlets, air vents, overflow, drain pipes including washers, check nuts, Neosprine gaskets etc of specified sizes and as per the recommendations of manufacturer including hydraulic testing and painting all the accessories with one coat of primer and two coats of synthetic enamel paint of approved make if required etc complete as directed.	Ltr.	2000.00	
122	Providing and fixing concealed/ open 50 mm dia Chlorinated Polyvinyl Chloride (CPVC) pipes for water line 10Kg/ cm2, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as directed	RM	15.00	-
123	Providing and fixing concealed/ open 40 mm dia Chlorinated Polyvinyl Chloride (CPVC) pipes for water line 10Kg/ cm2, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as directed	RM	7.00	-
124	Providing and fixing concealed/ open 25 mm dia Chlorinated Polyvinyl Chloride (CPVC) pipes for water line 10Kg/ cm2, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as directed	RM	10.00	
125	Providing & fixing concealed cPVC pipe SDR -11 class water pipe line of ISI mark of following diameters at all levels, including all necessary heavy duty specials (fittings) of ISI mark, fixing with approved arrangement viz. standard pattern holders bat clamps made out of MS flat carrier fixed with bolts in the RCC or brick masonry and "C" clamp fixed to secure the pipe with GI bolts / screws / washers of required shape and size so as to fit tightly on the pipes when tightened with screwed, making holes, cutting floors, making good the walls and floors etc. complete as directed for 15mm dia.	RM	5.00	



. 126	Providing & fixing concealed cPVC pipe SDR -11 class water pipe line of ISI mark of following diameters at all levels, including all necessary heavy duty specials (fittings) of ISI mark, fixing with approved arrangement viz. standard pattern holders bat clamps made out of MS flat carrier fixed with bolts in the RCC or brick masonry and "C" clamp fixed to secure the pipe with GI bolts / screws / washers of required shape and size so as to fit tightly on the pipes when tightened with screwed, making holes, cutting floors, making good the walls and floors etc. complete as directed for 25mm dia.	RM	5.00	
127	Providing & fixing open uPVC pipe SCH-80 class water pipe line of ISI mark of following diameters at all levels, including all necessary heavy duty specials (fittings) of ISI mark, fixing with approved arrangement viz. standard pattern holders bat clamps made out of MS flat carrier fixed with bolts in the RCC or brick masonry and "C" clamp fixed to secure the pipe with GI bolts / screws / washers of required shape and size so as to fit tightly on the pipes when tightened with screwed, making holes, cutting floors, making good the walls and floors etc. complete as directed for 25mm dia.	RM	5.00	
128	PROVIDING AND LAYING CONCEALED ALL KINDS OF MASONRY WALL AND Note:-Item also includes for providing and making all necessary and required permanent connections/terminations with new as well as existing pipes (uPVC/cPVC/GI/MS/etc) and the pipes laid under the scope of other contractors/agencies (uPVC/cPVC/GI/MS/etc) if required and for which necessary specials and fittings (excluding Valves) shall be provided and fixed.	RM	6.00	
129	TOTAL OF WATER SUPPLY WORK			
130	SANITARY			<u>-</u>
131				
132	Providing and fixing large flat back white glazed first quality urinal of approved make with all fixing accessories including Chrome Plated (CP) auto closing concealed urinal flush valve with wall flange of approved make including the required length of 40 mm dia. cPVC waste pipe to be laid concealed in wall up to floor drain with plain and brass threaded bends concealed in wall etc complete as per the recommendations of manufacturer and as directed.		3.00	



133	Providing and fixing first quality white glazed wash basin of 550mm x 400mm x 200mm size and approved shape with necessary specials and wall brackets as per the recommendations of manufacturer, one chromium plated (CP) brass auto closing system with built-in control cock with wall mounted flange pillar cock of 15mm dia or pillar cock of approved make, CP Bottle trap of size 300mm x 190mm (with internal partition) 32mm dia size with 300mm & 190mm long wall connection pipes & wall flange of approved make, one 15mm CP angle stop cock with wall flange of approved make, 450mm long braided hoses with two 15mm nuts & rubber washers without nipple of approved make and all required fittings, 31mm dia chromium plated waste couplings of approved make, heavy duty brackets with two coats of aluminium paint over brackets, including the required length of 40 mm dia. cPVC waste pipe to be laid concealed in wall up to floor drain with plain and brass threaded bends concealed in wall etc. complete as directed.	NO	2.00	
134	Providing and fixing First quality wall mounted European type white glazed vitreous china Water Closet of size 495mm X 350mm X 335mm of approved make including all accessories and fixing with CI chair brackets or SS fastners as per the recommendation of manufacturer, seat cover of approved make, Flush Valve of 40mm dia Size (concealed body) with exposed shut off provision of approved make, Hand shower (Health Faucet) with 8mm dia 1.2 meter long easy flex tube in chrome finish of approved make & CP wall hook, Rack Bolts, braided connection pipe, two way bib cock with wall flange of approved make, cutting and making good the walls and floors, treating the joints with silicon joint etc complete as directed.	NO	3.00	
135	Providing and fixing sink white glazed vitreous china of 600x450x 250 mm of approved make in one piece construction including a combined overflow, 65 mm CP brass waste coupling with rubber plug and chain of approved make all necessary fittings and specials such as CI brackets, overflow, 40 mm dia GI waste pipe, applying two coats of aluminium paint to the brackets / waste pipe etc. complete as directed.	NO	1.00	-
136	Providing and fixing Stainless Steel grade 304 Sink of overall size 685mm X 510mm and bowl size 610mm X 460mm X 250mm of approved make with Chrome Plated (CP) Fittings such as CP Sink Cock, CP Angle Stop cock, CP Bottle Trap including all necessary fittings and specials such as CI brackets, CP waste coupling, 40 mm dia. cPVC waste pipe to be laid concealed in wall up to floor drain with plain and brass threaded bends, applying two coats of aluminium paint to the brackets etc. complete as directed.		1.00	

. 137	Providing and fixing. approved make white/ approved colour Vetrious China oval wash basin 560x 410mm for counter mounting, specially fabricated brackets painted white, 32mm dia C.P waste coupling (code ALD-705), 32mm dia C.P cast brass bottle trap and pipe to wall with C.P wall flange and rubber adopter for waste connection complete, including cutting and making good the walls wherever required. or approved equivalent)	NO	2.00	<u>.</u>
138	Providing & fixing brass chromium plated towel rail of approved make of 610 mm length including drilling, supply and fixing brass screws securing the rail firmly at both the ends etc. complete as directed.	NO	1.00	-
139	Providing and fixing GI 'B' class water spout of 50 mm dia NB and length 200 to 450 mm, including cutting the Brickwork or RCC and fixing the same, making good the surface after work is complete, including painting of pipe etc. complete as directed.	NO	2.00	-
140	Supply and fixing CP sawan neck tap with left/right hand operating knob, including cutting and making good the wall etc. of approved make	NO	1.00	-
141	Providing and fixing C.P. brass towel ring fixed to PVC cleats with C.P. brass screws of approved make	NO	1.00	-
142	Providing and fixing 32 mm dia chromium plated brass heavy type approved quality bottle trap with matching wall flange etc. all complete as directed.	NO	4.00	-
143	Providing and fixing C.P. Brass Coat Hook fixed with P.V.C. cleats with C.P. Brass screw all complete	NO	3.00	
144	Providing and constructing square or circular mouth 100 mm dia. PVC gully trap of approved make having size around 160mm X 110mm including rising piece, PVC grating. Gully trap shall be having one outlet and three closed inlets, seal traps, etc all for domestic and industrial grade, including excavation, foundation concrete BBCC 1:5:10(1 part cement, 2 part coarse sand, 4 part of brickbat) 230 mm thick masonry, in Cement Mortar (CM) 1:6 (1 part cement, 6 part coarse sand), cement mortar 1:3 (1 part cement,3 part coarse sand) plaster, neat cement finish and back filling etc. and water tight PVC cover with frame of suitable size (inside) etc complete as per the design complete as directed.	NO .	4.00	
145	Providing and fixing Stainless Steel Perforated trap cover of 150 X 150 mm (minimum 18SWG) into Floor tile including cutting of tile, silicon filling for water proofing, etc. complete over P trap or Nahni trap.	NO	5.00	-
146	Providing and fixing Stainless Steel Perforated trap cover of 100 X 100 mm (minimum 18SWG) into Floor tile including cutting of tile, silicon filling for water proofing, etc. complete over P trap or Nahni trap.	NO	3.00	-

Date - 18.8.76

147	Providing and fixing uPVC type B Ring fit SWR Pipe of ISI mark of following diameters at all levels, including any/all type fittings, Multi floor trap, P-traps heavy duty specials (fittings) of ISI mark, with specialized joint, rings, fitting Concealed or open on wall/ RCC with all necessary chasses (jharies in walls) for laying pipe line in masonry or Open on wall with standard pattern holders bat clamps made out of MS flat carrier fixed with bolts in the RCC or brick masonry and "C" clamp fixed to secure the pipe with GI bolts / screws / washers of required shape and size so as to fit tightly on the pipes when tightened with screwed, testing after installation of pipe, making holes, cutting floors, making good the walls and floors etc. complete as directed for 75mm OD.	RM	4.00	
148	Providing and fixing uPVC type B Ring fit SWR Pipe of ISI mark of following diameters at all levels, including any/all type fittings, Multi floor trap, P-traps heavy duty specials (fittings) of ISI mark, with specialized joint, rings, fitting Concealed or open on wall/ RCC with all necessary chasses (jharies in walls) for laying pipe line in masonry or Open on wall with standard pattern holders bat clamps made out of MS flat carrier fixed with bolts in the RCC or brick masonry and "C" clamp fixed to secure the pipe with GI bolts / screws / washers of required shape and size so as to fit tightly on the pipes when tightened with screwed, testing after installation of pipe, making holes, cutting floors, making good the walls and floors etc. complete as directed for 110mm OD.	RM	5.00	
149	Providing and fixing looking mirror 5 mm thick of approved make over a backing of 12 mm thick Novaboard firmly fixed with brass oxidized screws, CP cup type screw etc. including the painting the exposed surfaces complete as directed.	Sqm	2.00	
150	Providing and fixing 125mm PVC Nahani trap (floor trap) self cleaning design with outlet size 75mm dia of approved make with perforated brass cast CP jali including cutting the floor and fixing trap in CC 1:2:4 making good the floor etc. complete as directed.	NO	5.00	-
151	Providing and laying 110 mm diameter uPVC rain water line of 4 Kg / Sq cm rating of approved make with all necessary specials to be jointed adhesive as per manufacturers specifications etc complete for open pipeline / in brick wall / RCC structure including clamping to secure in position etc. complete as directed.	RM	3.00	-
152	Providing and laying 160 mm diameter uPVC rain water line of 4 Kg / Sq cm rating of approved make with all necessary specials to be jointed adhesive as per manufacturers specifications etc complete for open pipeline / in brick wall / RCC structure including clamping to secure in position etc. complete as directed.	RM	30.00	-

153	Providing and fixing JAQUQR or Equivalent make Metropole Flush Valve of 40mm dia size (concealed body) with exposed shut off provision of approved make including cutting and making good the walls	RM	4.00	
	etc complete as directed. Jaquar - Code : FLV - 1093SQ. Basic Rate Rs. 3000/ = Per No.			
154	Providing and laying 300mm dia (Nominal Diameter) uPVC, FOAMCORE, SN8 pipe of approved make including all necessary fittings, excavation of trenches in soil/murum/rock up to 1500mm depth, providing & laying 150 mm thick BBCC 1:5:10 (1 part cement, 5 part coarse sand, 10 part brickbat) as bedding, laying and jointing the pipe in required line, level and as per manufacturer's specification, encasing the pipe by providing & laying with 100mm thick PCC 1:5:10 (1 part cement, 5 part coarse sand, 10 part stone aggregate) at all the three sides around of the pipe, refilling of the trenches, watering, compacting and testing before concealing the pipe etc complete as directed.	RM		
155	Providing and laying 250mm dia (Nominal Diameter) uPVC, FOAMCORE, SN8 pipe of approved make including all necessary fittings, excavation of trenches in soil/murum/rock up to 1500mm depth, providing & laying 150 mm thick BBCC 1:5:10 (1 part cement, 5 part coarse sand, 10 part brickbat) as bedding, laying and jointing the pipe in required line, level and as per manufacturer's specification, encasing the pipe by providing & laying with 100mm thick PCC 1:5:10 (1 part cement, 5 part coarse sand, 10 part stone aggregate) at all the three sides around of the pipe, refilling of the trenches, watering, compacting and testing before concealing the pipe etc complete as directed.	RM	5.00	
156	Providing and laying uPVC Eco drain or Fome Core SN8 pipe of approved quality including all necessary fittings, excavation of trenches in soil/murum up to 1500mm depth, providing & laying 150 mm thick BBCC 1:5:10 (1 part cement, 5 part coarse sand, 10 part brickbat) as bedding, laying and jointing the pipe in line and level as per manufacturer's specification with PCC 1:5:10 (1 part cement, 5 part coarse sand, 10 part stone aggregate) all around of the pipe, refilling of the trenches, testing before concealed the pipe etc. complete as directed. Encasing of the pipe line with PCC 1:5:10 will be not be paid separately for 160 mm OD.	RM	3.00	



157	Providing and laying uPVC Eco drain or Fome	RM	5.00	-
	Core SN8 pipe of approved quality including all necessary fittings, excavation of trenches in soil/murum up to 1500mm depth, providing & laying 150 mm thick BBCC 1:5:10 (1 part cement, 5 part coarse sand, 10 part brickbat) as bedding, laying and jointing the pipe in line and level as per manufacturer's specification with PCC 1:5:10 (1 part cement, 5 part coarse sand, 10 part stone aggregate) all around of the pipe, refilling of the trenches, testing before concealed the pipe etc. complete as directed. Encasing of the pipe line with PCC 1:5:10 will be not be paid separately for 110 mm OD.			
158	Providing and Fixing Electric Hand dryers, fully automatic, metal body in powder coating S.S. Finish of approved make	NO	1.00	
	TOTAL OF SANITARY WORK			•
				-
	TOTAL OF CIVIL & STRUCTURAL WORK			
	Grand Total (including of GST 18%)			

