

Contract CC-107R Repairs, Retrofitting and miscellaneous civil works in DMRC Staff Quarters Phase-II at Mundaka, New Delhi.

ADDENDUM No.2					
(SUMMARY SHEET)					
Modifications to Tender Documents					
S. No.	Document	Clause No. /Page No.	In place of	Please read as	Remarks
Volume- 1 (NIT,ITT & FOT)					
1.	NIT- Scope of Work	1.1.2 Key Details	Page 1	Page 1R	Key Details Modified
Volume- 6 (BOQ)					
1.	BOQ	-	-	-	BOQ Replaced

NOTICE INVITING TENDER (NIT)

1.1 GENERAL (e-Tender)

1.1.1 Name of Work:

Delhi Metro Rail Corporation (DMRC) Ltd. invites open e-tender from eligible applicants, who fulfil qualification criteria as stipulated in Clause 1.1.3 of NIT, for the work “**Repairs, Retrofitting and miscellaneous civil works in DMRC Staff Quarters Phase-II at Mundaka, New Delhi.**”

The brief scope of the work is provided in NIT.

1.1.2 Key details :

Approximate cost of work	INR 5.68 Crores
Tender Security	INR 5.68 Lacs
Completion period of the Work	09 (Nine) months
Validity of Tender Security in case of BG	09.03.2017
Tender documents on sale	From 02.06.2016 to 13.07.2016 21.07.2016 (up to 1500 hrs) on e-tendering website https://eprocure.gov.in/eprocure/app .
Cost of Tender documents	INR 21,000/- (inclusive of 5% DVAT) Non-Refundable (Demand Draft /Banker's cheque drawn on a Scheduled Commercial Bank based in India and should be in favour of "Delhi Metro Rail Corporation Ltd" payable at New Delhi) Cost of tender documents i.e, D.D. / Banker's cheque, in original, shall be accepted only upto 1500 hrs on 13.07.2016 21.07.2016 in the office of Executive Director/Contracts at the address mentioned hereinafter.
Pre-Bid Meeting	15.06.2016 at 1100 hrs.
Last date of Seeking Clarifications	16.06.2016 upto 1730 hrs. Queries/clarifications from bidders after due date and time shall not be acknowledged.
Last date of issuing addendum	24.06.2016 13.07.2016
Tender submission Start Date & Time	01.07.2016 from 0900 Hrs
Tender submission End Date and Time of tender	13.07.2016 21.07.2016 upto 1500 hrs
Date & time of opening of Tender	14.07.2016 22.07.2016 at 1500 hrs.
Authority and place for submission of Tender Document cost, Pre-bid Meeting and seeking clarifications	Executive Director/Contracts, Delhi Metro Rail Corporation, 5 th floor, A-Wing, Metro Bhawan, Fire Brigade Lane, Barakhamba Road, New Delhi –110 001

**BILL OF QUANTITIES
PREAMBLE**

CONTRACT – CC-107R:- Repairs, Retrofitting and miscellaneous civil works in DMRC Staff Quarters Phase-II at Mundaka, New Delhi.

1	The Bill of Quantities shall be read in conjunction with instructions to Tenderers, General and Special Conditions of Contract, Notice Inviting Tenders, Technical Specification .Schedule 'A' comprise of DSR items. The tenderer has to quote % above/below/at par the rates against BOQ amount given in Schedule 'A'
2	Schedule 'B' comprise of NDSR items. The tenderer has to quote % above/below/at par the BOQ amount given in Schedule 'B'.
3	Tenderers should quote the percentage above (+) /below (-) or at par in respect of all schedules of the BOQ.
4	The rates and prices to be tendered in the unit priced Bill of Quantities are for completed and finished items of work and complete in all respect.
5	If the tenderer fails to quote rates against any item, the tender may be treated as incomplete and non-responsive and shall be rejected.
6	Tenderers shall quote their offer in Indian Rupees (Rs.) only.
7	Errors will be corrected by the employer for any arithmetic errors in computation or summation as per contract conditions.
8	All the unit rates and amounts should be filled both in figures and words. In case of any discrepancy between the two, the value provided in words shall be treated as sacrosanct.
9	The work executed against the BOQ items in would be paid on measurement basis.
10	The Contractor may raise their 'On Account'' payments on monthly basis as per the status of work on the last day of the respective month.
11	All DSR items shall be governed with latest CPWD specifications.

Summary Sheet (Table-I)							
CONTRACT – CC-107R:- Repairs, Retrofitting and miscellaneous civil works in DMRC Staff Quarters Phase-II at Mundaka, New Delhi.							
Name of Bidder							
S. No.	Description	BOQ Amount(Rs)	Quoted Percentage Above/Below/at par BOQ			Quoted Amount	
				In Figure	In Words	In Figure	In Words
1	SCHEDULE - A : (DSR ITEMS)	2,55,20,608.17				0.00	
2	SCHEDULE - B : (NDSR ITEMS)	3,13,00,007.00				0.00	
3	Total Amount (Rs)	<u>5,68,20,615.17</u>				0.00	
4	Rebate if Any					0.00	
5	Total of All Schedules after Rebate					0.00	

**Details of Service Tax Component Included in Total Quoted Price at S. No.5 above
(Table-II)**

S. No.	Description	Amount (in Rupees)	
		(in figure)	(in words)
1	Amount of 'Service Tax componet' included in the Total Quoted amount at S. No. 5 of table-I above.		

NOTE:-

1) The amount to be furnished in Table-II for Service Tax is for the purpose of reimbursement only. The amount furnished by the tenderer against 'Component of Service Tax' in Table-II above shall be the upper ceiling limit for the purpose of reimbursement of service tax as brought out in Clause C2.6(a) of ITT. DMRC will reimburse only the actual 'Service Tax' or the amount indicated against item no. 1 of Table-II whatever is lower.

2) If the tenderer furnish a negative amount against 'Component of Service Tax' in Table-II above, in such case the amount pertaining to 'Service Tax' shall be treated as 'NIL/zero' and the amount of 'Service Tax' shall be deemed to be included in their original offer. Secondly, if the tenderer does not furnish any amount or furnishes a 'zero' amount against 'Component of Service Tax' in Table-II above, in such case also the amount in respect of 'Service Tax' shall be deemed to be included in their original offer.

DELHI METRO RAIL CORPORATION LIMITED

Contract CC-107R: Repairs, Retrofitting and miscellaneous civil works in DMRC Staff Quarters at Mundaka, New Delhi

BILL OF QUANTITIES**SCHEDULE- A (DSR ITEMS)**

It. No.	DSR No.	Description	Quantity	Unit	Estimated Rate (Rs)	Amount (Rs)
			DSR		DSR	DSR
PROTECTION WORKS						
DISMANTLING AND DEMOLITION						
1	15.19	Dismantling steel work manually / by mechanical means in built up sections without dismembering and stacking within 50 metres lead as per direction of Engineer-in-charge. (Steel work shall be dismantled to replace the embeddlength of steel sections of steel work completely from R.C.C./ C.C./ brick work etc.) . Modifications and refixing shall be paid seperatly.	16800	Kg	1.45	24360.00
2	15.7.4	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50metres lead as per direction of Engineer-in-charge. In cement mortar	81	cum	754.10	61082.10
3	15.2.1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge. Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	100	cum	892.70	89270.00
4	15.23.1	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 10 mm to 25 mm	1000	Sqm	28.20	28200.00
5	15.56	Dismantling old plaster or skirting, ceramic glazed tiles, raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	24000	Sqm	20.05	481200.00
6	15.45.1	Dismantling C.I. pipes including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metre lead as per direction of Engineer-in-charge: Up to 150 mm diameter	150	metre	168.60	25290.00
7	15.44.1	Dismantling G.I. pipes (external work) including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means including stacking of pipes within 50 metres lead as per direction of Engineer-in-charge : (a) 15 mm to 40 mm nominal bore	450	metre	57.85	26032.50
	15.44.2	(b) Above 40 mm nominal bore	450	metre	65.25	29362.50
8	15.60	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting,unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all liftsinvolved.	1675	Cum	123.70	207197.50
REPAIR & RETROFITTING WORKS						
9	5.9.6	Centering and shuttering including strutting, propping etc. and removal of form for (a) columns, pillars, Piers, Abutments, Posts and Struts.	1500	Sqm	453.35	680025.00
	5.9.5	(b) Lintels, beams, plinth beams, girders, bressumers and cantilevers	100	Sqm	332.15	33215.00
	5.9.3	(c) Suspended floors, roofs, landings, balconies and access platform	500	Sqm	401.65	200825.00
10	5.22A.3/ 5.22A.6	Steel reinforcement for R.C.C. work including straightening, cutting, bending,placing in position and binding all complete above plinth level. Thermo-Mechanically Treated bars as per requirement at site for repair works without mixing the grade of reinforcement.	19000	Kg	68.10	1293900.00
11	6.4.2	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand)	43.5	cum	5426.15	236037.53
12	6.5	Extra for brick work / AAC block masonry / Tile brick masonry in superstructure above floor V level, for each four floors or part thereof by mechanical means	37.5	cum	289.05	10839.38
13		Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required				

	22.7.1	slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer- in- Charge : (a) With average thickness of 120 mm and minimum thickness at khurra as 65 mm	1500	sqm	1019.05	1528575.00
14	5.33.2	Providing and laying in position machine batched and machine mixed design mix M 25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.	49	Cum	7014.55	343712.95
Miscellaneous civil works						
15	13.1.2	12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	17500	Sqm	149.45	2615375.00
16	13.16.1	6 mm cement plaster of mix : 1:3 (1 cement : 3 fine sand)	2500	Sqm	134.70	336750.00
17	13.12	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 coarse sand) and a top layer 6 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) finished rough with sponge.	7000	Sqm	258.90	1812300.00
18	13.4.1	12 mm cement plaster of mix : 1 cement: 4 coarse sand	2000	Sqm	172.30	344600.00
19	13.5.1	15 mm cement plaster on rough side of single or half brick wall of mix : 1:4 (1 cement: 4 coarse sand)	3000	Sqm	200.05	600150.00
20	13.6.1	20 mm cement plaster of mix : 1:4 (1 cement: 4 coarse sand)	1000	Sqm	200.05	200050.00
21	13.2.2	15 mm cement plaster on the rough side of single or half brick wall of mix : 1:6 (1 cement: 6 fine sand)	5000	Sqm	172.80	864000.00
22	5.30	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	1500	Sqm	30.75	46125.00
23	12.44	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams.	96	Each	41.10	3945.60
24	13.22	Extra for plastering exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof.	15000	Sqm	37.95	569250.00
25	13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	20000	Sqm	110.95	2219000.00
26	13.45.1	Finishing walls with textured exterior paint of required shade : New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/ 10 sqm	6000	sqm	146.45	878700.00
27	16.65.1	Finishing walls with textured exterior paint of required shade : Old work (Two or more coats on existing cement paint surface applied @ 3.28 ltr/10 sqm.	12000	sqm	125.00	1500000.00
28	14.46	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	25000	Sqm	9.90	247500.00
29	13.41.1	Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade : New work (two or more coats) over and including water tinnable priming coat with cement primer	20000	Sqm	89.70	1794000.00
30	13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : Two or more coats on new work/ old surface including cleaning of surface.	3000	Sqm	74.40	223200.00

31	11.26.1	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) : 25 mm thick for repair work	450	Sqm	1141.40	513630.00
32	11.64.4	Precast terrazo tiles 22 mm thick with graded marble chips of size upto 12 mm, laid in floors, and landings, jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing and polishing complete, on 20 mm thick bed of cement mortar 1:4 (1 cement:4 coarse sand) : (a) Ordinary cement without any pigment	250	Sqm	880.85	220212.50
33	15.25	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	300	Sqm	97.95	29385.00
34	8.6	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete	1000	Sqm	48.50	48500.00
35	11.37	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigment etc, complete.	150	Sqm	836.65	125497.50
36	11.36	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	300	Sqm	836.65	250995.00
37	2.8.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50m in all kinds of soil.	100	cum	157.50	15750.00
38	2.26	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.	100	cum	46.25	4625.00
39	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	100	cum	112.40	11240.00
40	1.1.2	Disposal of surplus earth to a distance of 5 Km	27	cum	153.07	4132.89
41	4.1.8	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level in 1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	1.5	cum	4301.15	6451.73
42	10.25.2	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steelprimer using structural steel etc. as required.In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	200	Kg	90.10	18020.00
43		Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, 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 per direction of Engineer in Charge				
	18.7.2	(a) 20 mm nominal outer dia Pipes	100	metre	190.55	19055.00
	18.7.3	(b)25 mm nominal outer dia Pipes	100	metre	231.30	23130.00
44		Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				
	12.41.1	(a) 75 mm diameter	250	metre	145.70	36425.00
	12.42.2	(b)110 mm diameter	250	metre	231.65	57912.50
45		Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS :5382, leaving 10 mm gap for thermal expansion.				
	12.42.6.1	(a) Shoe (Plain)	10	Each	167.50	1675.00
	12.42.6.2	(b)110 mm Shoe	10	Each	295.10	2951.00
		ELECTRICAL WORKS				
46		Wiring for light/ fan / exhaust fan / call bell points using 1.5 sqmm FRLS PVC insulated copper conductor single core in surface MS conduit with piano type switch phenolic laminated sheet, suitable size MS box and earthing the point with 1.5 sqmm FRLS PVC insulated copper conductor single core cable etc for:				
	1.1.1	Group A	1750	Point	635.00	1111250.00
	1.1.2	Group B	300	Point	769.00	230700.00
47	1.7.2	Wiring for circuit/ submain wiring along with earth wire FRLS PVC insulated copper conductor single core cable in surface conduit using 2 x 2.5 Sqmm + 1 x 2.5 sqmm earth wire	1175	RM	200.00	235000.00
48		Any other DSR items (civil)				3000000.00
		Total cost of DSR Items				25520608.17

DELHI METRO RAIL CORPORATION LIMITED

Contract: CC-107R: Repairs, Retrofitting and miscellaneous civil works in DMRC Staff Quarters at Mundaka, New Delhi

BILL OF QUANTITIES

SCHEDULE- B (NDSR ITEMS)

It. No.	DSR No.	Description	Quantity	Unit	Estimated Rate	Amount
			NDSR		NDSR	NDSR
PROTECTION WORKS						
1		Providing barricade along the demarked periphery of site using MS pipes/posts up to 1.80m height temporarily with all warning signs and removing the same after the completion of job. Complete including all necessary fitting as per specifications/ instructions of the Engineer-in- charge..	490	Metre	165.00	80850.00
2		Providing and erecting the safety net of opening 75 mmx75mm size at 1st floor level to prevent the debris falling on ground during progress of work and keeping the same in position during the entire period of work.	400	Sqm	406.00	162400.00
3		Providing and erecting steel propes (upto 3M height, braced at centre and supported a continuous 2"x3"wooden runner, resting on wedge and block minimum capacity 3Ton) to support the structure provisionally during repair and jacketing etc. and maintaining them in position till required as directed by the Engineer-in-charge	630	Nos.	64.00	40320.00
4		Providing, erecting, maintaining and removing temporary protective safety screens made out of specified fabric with all necessary fixing arrangement to ensure that it remains in position for the work duration as required by Engineer-in- Charge. Jute cloth/woven PVC cloth/ Geotextile	1000	Sqm	75.00	75000.00
5		Protection works to electrical points, switch boards, junctions boxes, fan boxes etc. ,railings , grills , windows including glass panes etc. from inside as well as outside the qtrs , during the execution of work as per site requirement by providing and fixing 6mm thick plywood with wooden framework of required size, or other alternative arrangements approved by Engineer-in- charge, including the required fixing arrangement as per site conditions, maintaining and removal of the protection works, complete as per direction of Engineer-in- Charge	144	Each quarter	6915.00	995760.00
6		Covering the existing flooring with tarpualine sheet before dismantling/ exposing the R.C.C. members/ dismantling brick work etc., removing the same after repair and plaster, painting work etc. as per direction of the Engineer-in- charge.	5000	Sqm	40.00	200000.00
7		Protection works to electrical equipment meters etc. using suitable plastic cover, tying and securing all complete at all floor levels, including the cost of maintaing and removal of all the arragements.	3	Each block	4490.00	13470.00
8		Providing and fixing working platform with M.S. frame work and wooden/ plywood of required thickness, with sufficient strength to take the load of falling debris, concrete during chipping/dismantling of R.C.C. elements like slabs, beams, columns , walls for repair / replacement/ strenthening of R.C.C. work inside the quarters and common areas, complete as per direction of Engineer -in- charge including the cost of making arrangements for safe disposal of R.C.C. debris/ malba etc. and protection of existing floor, all fittings & fixtures of sanitary works, during the dismantling and all types of repair works including shotcreting and or special treatments to R.C.C. elements. Cost shall be including maintaining & removal of all the arrangements. (Plan area shall be measured for payment)	3000	Sqm	200.83	602490.00
9		Protection of M.S. railings/ grills /ladders or other existing M.S items , in common areas, staircase etc. by making suitable arrangements as and when required, as per site requirements and type of repair works during the full period of execution of works, complete as per direction of Engineer- in -charge. (Elevation area actually protected shall be measured for payment)	1000	sqm	10.00	10000.00
10		Protection work for CP brass fittings, kitchen sink, mirror, wooden cupboards, overhead cabinets, under counter storage by proving suitable covers arrangements approved by Engineer-in- charge including maintaining & removal or alternatively dismantling , storing in safe custody and refixing, complete as per approval and direction of Engineer-in- charge.	144	Each quarter	1000.00	144000.00
DISMANTLING AND DEMOLITION						

11	Breaking and removing the existing water proofing of terrace using light hammer (permission to use 5 to 7 Kg electrical hammer can be granted subject to the approval of Engineer-in-charge) without causing vibration up to mother slab including cleaning of the concrete surface of dirt, dust, greasy material, laitance and carriage of malba / debris up to 50 metres initial lead from the building including loading and unloading, for all heights, and lifts as per direction of Engineer-in-charge.	180	Cum	550.50	99090.00
16	Removal of existing electrical fittings & fixtures from inside the quarters -tube light, ceiling fans, exhaust fans, bulb holders, door bell, and other such type of installations, stacking, storing in safe custody and refixing after completion of all the repair works.	144	Each quarter	1100.00	158400.00
18	Identifying ,marking, numbering the area of damaged reinforced cement concrete and maintaining the record of pre-assessment of quantity, type of treatment required as per site condition, under the supervision of qualified Engineer authorized by the contractor and approved by Engineer -in-charge.	3	Each block	25000.00	75000.00
19	Chipping of unsound /weak concrete materials from slabs, beams, columns etc. , complete as per direction of Engineer-in-charge.	7500	Sqm	26.00	195000.00
20	Removal of existing electrical fittings & fixtures from common areas, staircase, external walls, columns, terrace , lift machine rooms, lift & toilet shafts electrical panel rooms and all the areas except the area inside the quarters - ceiling fans, exhaust fans, bulb holders, tube light fittings including tubes, and other such type of installations , including stacking, storing in safe custody and refixing after completion of all the repair works, alternatively full protection of the fittings & fixtures, electrical installations approved by Engineer-in -charge.	3	Each block	20000.00	60000.00
REPAIR & RETROFITTING WORKS					
24	providing and fixing double scaffolding system(cup lock type) on the exterior side of building/structure, up to 25 meter height, above ground level, including additional rows of scaffolding in stepped manner as per requirement of site, made with 40mm dia M.S. tube, placed 1.5metre centre to centre, horizontal & vertical tubes joint with cup and lock system with M.S tubes, M.S tube chalis, M.S. clamps and staircase system in the scaffolding , working platform , walkway wherever required , lighting arrangement etc. and maintaining it in serviceable condition for execution of work of civil repair/structural repair & rehabilitation /cleaning and /or pointing and/or applying chemical and removing it thereafter . The scaffolding system shall be stiffened with bracing, runners, connecting with the building etc. wherever required, if feasible, for inspection or work at required locations with essential safety features for the workman etc., complete as per directions and approval of engineer-in-charge. Note:- 1. The elevation area of the scaffolding shall be measured for payment purpose. 2. The payment will be made once only for execution of all item for such works . 3. No deduction shall be made from the DSR / NDSR B.O.Q. items of the contract for the component of scaffolding included in the individual item.	12250	Sqm	199.88	2448530.00
25	Nozzle Fixing: Drilling 12-16 mm dia holes at honeycomb portions/voids/construction joints/cracks etc. spaced at specified spacing and placing 8-12mm dia nozzle of length 75mm suitable for grouting into a 150 mm deep hole using polymer mortar including cutting of nozzle after the grouting and finishing with polymer mortar etc. complete.	1113	Nos.	48.00	53424.00
26	Injection grouting : Providing and applying injection grouting through the nozzles provided into the cracks/ honeycombed areas by suitable grouting pump under pressure till the refusal including all labour , supervision, tools and tackles and transportation etc. complete as per direction of Engineer -in- charge				
	(a) Cement slurry mixed with non-shrink additive like Masterflow 150 of BASF/ Cebex 100 of Fosroc/ Intraplast EP of Sika or equivalent. For terraces and sunken floors	600	Kg	15.00	9000.00
	(b) Low viscous(200 CPS) Epoxy Resin like BASF Msterinject 1315/Nitofil UR63 of Fosrock/ Dr. Fixit Plain injection or equivalent material for R.C.C. columns	156	Kg	1800.00	280800.00
	(c)Readymade high strength, non-shrink cementitious grout like Master flow 915 or equivalent material.	1326	Kg	36.00	47736.00
27	Cleaning reinforcement of total rust by tapping and using mechanical wire brush or any other suitable way including from behind and around the reinforcement bars to give it a totally rust free finished steel surface (Mode of measurement - concrete surface area with exposed reinforcement)	7500	Sqm	50.00	375000.00

28	Providing and supplying the one competent, Polymer modified cementitious anti-corrosive primer (having the technical parameters mentioned in material specifications) formulated to provide dual protection of a polymeric barrier and an integral corrosion-inhibiting system, to the existing steel and additional steel provided before patching of damaged areas, using suitable tools and equipment inclusive of Material, Manpower and Equipment. BASF Master Emaco P130/ Fosroc Nitoprime Zincrich /Sika Rustoff 100 or other equivalent (mode of measurement - concrete surface area with exposed reinforcement)	7500	Sqm	165.00	1237500.00
29	Providing and repairing the damaged concrete portion with single component, fibre reinforced, dual shrinkage- compensated thixotropic, cementitious patch repair mortar (having the technical parameters mentioned in material specifications) capable of applying 25mm thick in single layer initially by hand and finishing with trowed carefully compacting the same around the rebars and finishing to bring it in line with existing concrete surface with an average specified thickness inclusive of manpower , material and Equivalent Master Emaco 5348 of BASF Renderoc HB-60 of Fosroc/Sikadur 41 of Sika or equivalent. (a) 25mm thickness	6150	sqm	2150.00	13222500.00
	(b) 50 mm thickness in two layers	210	sqm	4300.00	903000.00
30	Providing and fixing shear connections of 10 mm dia HYSD steel with two components, styrene & cement free epoxy- acrylate fixing and anchoring compound (having the technical parameters mentioned in material specifications) using standard sealant applicator gun after drilling holes of 12mm diameter to a minimum depth of 100 mm at required locations, inclusive of all material, manpower and equipment Masterflow 935 of BASF/ Lokfix P25 of Fosroc or equivalent	2500	Nos.	73.00	182500.00
31	Providing strengthening to columns by all round jacketing to specified columns up to top of foundation level using minimum 125 mm thick M-45 self compacting concrete as directed, including removing loose concrete, cleaning the reinforcement mechanically, using wire brush etc. complete but excluding formwork and reinforcement ; Cement content: 380Kg/ cum Admixture: Master Glenium of BAF or equivalent. Note: Thickness of 125mm shall be measured from the outer face of main reinforcement & additional material poured beyond the same shall not be separately measured and paid for.	800	sqm	1830.00	1464000.00
33	Fixing only grills to locations inside the quarters after completion of repairs of quarters.	16800	Kg	12.00	201600.00
35	Providing and applying single component, reactive, hydrofobic, silane based coating to all the exposed concrete surface. The coating shall have penetrative action blocking pore capillaries but allowing water vapour to come out from the substrate, complete as per direction of Engineer- in -charge. Make- MasterSeal 380 by M/s BAS/ Nitocote SN 502/ SN 511 of Fosroc/ Sikagard 506 of Sika or equivalent.	7500	Sqm	270.00	2025000.00
36	Providing and laying of prepacked dual shrinkage compensated polymer modified micro- concrete like Master Emaco 5346 of BASF / Renderoc LA 55 of Fosroc/ Sika Rep Microcrete-4 of Sika or equivalent material, complete as per direction of Engineer-in- charge.	1500	Kg	24.35	36525.00
39	Providing and application of bond coat on the concrete surface by mixing high dispersion SBR latex like MasterEmco SBR2 of BASF with white cement in the ratio of 2:3. The mixing should be done to a lump free consistency for the bond coat and the screed/ mortar should be applied once the bond coat is tacky. Master Emco SBR 2 of BASF or Nitobond SBR (Latex) of Fosroc or equivalent.	7500	Sqm	98.00	735000.00
40	Providing and applying a coat of acrylic based polymer waterproof coating over slab before laying of waterproofing treatment using Masterseal 551SF / Brushbond of Fosroc / Sikatop Seal 107 of Sika or equivalent complete as per direction of Engineer-in- charge.	1500	Sqm	125.00	187500.00
42	Tack welding the new rebar to existing new rebar with minimum 100 mm lap, complete as per direction of Engineer-in- charge. (No. of tack weld shall be counted)	1200	Nos	28.50	34200.00
43	Providing and using single component cement based non-shrink micro concrete of approved manufacture by mixing graded stone aggregate 10mm and down and coarse sand as per manufacturers specification & direction of Engineer –in-charge complete as per design and approved by Engineer -in-charge at all floor and all heights.	20	Cum	60000.00	1200000.00

44	Providing and fixing 10mm dia mild steel /HYSD steel L-shaped hooks with two components, styrene & cement free epoxy- acrylate fixing and anchoring compound (having the technical parameters mentioned in material specifications) using standard sealant applicator gun after drilling holes of required diameter to a minimum depth of 75 mm at required locations, for holding / fixing / placing in position the steel mesh reinforcement at desired level/ stretching, inclusive of all material, manpower and equipment Masterflow 935 of BASF/ Lokfix P25 of Fosroc or equivalent	2000	Nos.	36.50	73000.00
45	Shotcreting R.C.C. columns, beams and slabs etc. in layers with approved design mix concrete having the specified minimum characteristic compressive strength with ordinary portland cement , coarse sand and graded stone aggregate of 10mm maximum size in proportion as per design criteria including the cost of centring and shuttering at edges and corners etc. as directed by Engineer -in- charge. The rates shall include the providing necessary. The levelling gauges if used shall be paid for separately (Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/ tapping with a blunt metal instrument). Up to a height of 15m above plinth level. (a) Up to 50 mm thick in grade M-30 with cement not less than 400 Kg per cum.	1000	Sqm	1100.00	1100000.00
	(b) Extra for every additional height of 3.00 metres or part thereof	500	Sqm	110.00	55000.00
	(c) Extra for additional thickness or deduct for less thickness, for every 10mm thickness provided than specified thickness of shotcrete, complete as per direction of Engineer-in- charge.	200	Sqm	220.00	44000.00
46	Providing, cuttings to required size and fixing galvanised steel wire fabric 25x25mm mesh of 12 SWG, to exposed reinforcement/ R.C.C. structural members- slab, beam, columns etc. for repair, rehabilitation works,at all height and locations, complete as per direction of Engineer in charge (cost of providing & fixing mechanical /chemical fasters if required , shall be paid for separately).	5000	Kg	100.00	500000.00
48	Providing, applying & fixing non intrusive, impervious, non-destructive and wet wrapping type structural strengthening Tyfo SEH 51 fibre wrap system to RCC members. The work shall consist of applying a priming coat over the prepared surface and wrapping a single layer of high strength fabric made up of E-Glass fibre interwoven with Kevlar fibre (SEH-51 make) saturated with two component approved high strength epoxy compound (TYFO-S EPOXY make) as approved removing / drawing out the entrapped air etc. all complete as per manufacturer's specifications and directions of the Engineer-in-charge. Note: The surface area of the approved high strength glass fiber mesh along with laps actually embedded in high strength epoxy resin and applied for the columns, walls slabs top side with a priming coat of TYFO-S Epoxy shall be measured for payment.	500	sqm	3500.00	1750000.00
49	Sprinkling of river sand on the wrapped surface after rectifying air voids, if any to make the surface rough to take any further finishes.	500	sqm	75.00	37500.00
Miscellaneous civil works					
50	Credit for dismantled unserviceable materials M.S. /G.I. /C.I. complete as per direction of Engineer-in-charge. Material shall be removed immediately and rates shall be including loading, unloading for all lead & lifts carriage,etc. (Material shall be property of contractor)	250	Kg	-15.00	-3750.00
51	Credit for dismantled unserviceable brass / C.P. brass fittings, complete as per direction of Engineer-in-charge. Material shall be removed immediately and rates shall be including loading, unloading for all lead & lifts carriage,etc. (Material shall be property of contractor)	25	Each	-50.00	-1250.00
52	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) : 25 mm thick for repair work with available kota stone	150	Sqm	841.40	126210.00
53	Precast terrazo tiles 22 mm thick with graded marble chips of size upto 12 mm, laid in floors, and landings, jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing and polishing complete, on 20 mm thick bed of cement mortar 1:4 (1 cement:4 coarse sand) : (a) Ordinary cement without any pigment . With available tiles	120	Sqm	530.85	63702.00
Total cost of NDSR Items					3130007.00

Note :

1. The Tenderer shall indicate price adjustment against each deviation in Annexure 13A of BOQ. This price is the price which the tenderer shall reduced from this tender price if deviation(s) is/are accepted by the Employer.
2. Where there is no deviation, the statement should be returned duly signed with an endorsement indicating 'No Deviations'. In case, Performa of deviations is not submitted or submitted as blank, it will be construed that the tenderer has not proposed any deviations from tender documents.
3. If the tenderer proposes deviations in tender documents, and/or any other terms and conditions of the tender, other than in this Annexure, it will have no effect.

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