

The Tata Power Company Limited Invites Tenders through E-Tender Two-Part Bidding Process from interested and eligible bidders for the following package required for its Distribution Division:-

A. Summary of the tendered package:

Sr. No.	Description	Tender Reference no.	Bid Guarantee Fee / EMD (Rs.)	Tender Fee (Rs.)
For the following package contact person shall be Mr. Vinayak Shinde [Lead – Corporate Contracts] (vinayak.shinde@tatapower.com). With a copy (Cc) to Mr. Vivek Mittal [Group Head – Corporate Contracts] (vivek.mittal@tatapower.com)				
1.	General Civil Works for Pump House & 22 kV Switchgear at Kolshet.	CC23VJS010	5,00,000 /-	1,000 /-

For additional technical details and techno-commercial Pre-Qualification Requirement (PQR) for the subject tender, please refer **Section C** below.

B. Guidelines for Participating:

Interested bidders having executed similar contracts may participate by submitting the following documents upto **1500 hrs. Wednesday, 15th June 2022:-**

1. Non-Refundable Tender Fee, as indicated in the table above, in the form of
 - a) Direct deposit in the following bank account and submit the receipt along with a covering letter clearly indicating the Tender Reference number –
Beneficiary Name – The Tata Power Co. Ltd.
Bank Name – HDFC Bank Ltd.
Branch Name – Fort Branch, Mumbai
Address – Maneckji Wadia Building, Nanik Motwani Marg, Fort, Mumbai 400023.
Branch Code – 60
Bank & Branch Code – 400240015
Account No – 00600110000763
Account type – CC
IFSC Code – HDFC0000060

2. Bidders to also submit duly signed and stamped letter indicating name of authorized person, contact number and e-mail id (mandatory) on Bidder's letter head. It is mandatory to mention Tender Reference no. in the said letter.

Note:- Once the above-mentioned documents are received, a detailed RFQ shall be issued through our E-Tender system.

It may be please be noted that all future correspondence will be strictly done only with the **Interested Bidders** who have done the above 2 steps in-time only with the Authorized Person through Tata Power E-Tender System.

It may be please be noted that Earnest Money Deposit (EMD) of **INR 5.00 Lakhs** is not to be submitted now. It is required at a later stage along with tender submission in our E-Tender system. EMD will be required in the form of Bank Guarantee.

C. Additional technical details:

C1. Estimated Bill of Quantities (BoQ):

Attached below from pages 4 to 18.

C2. Techno-commercial pre-qualification requirement (PQR):-

(1) Technical PQR:

a) Bidder should have experience for similar type of work like supply, construction and successful commissioning of civil, structural work for reactor / transformer / equipment foundation / underground tank / switchyard equipment foundations / dismantling and reconstruction of Roads / dismantling of gantry tower structures / construction of cable trench / construction of fire-fighting pump house along with pump foundations / construction of switchgear rooms etc. on EPC / Item rate basis during the past 5 (five) calendar years. (Calendar years would be counted from the date of submission of bid).

b) Further, Bidder must have successfully executed the following quantum of works (including supply of all materials) on cumulative basis during the past 5 (five) calendar years:

Excavation (in soil / hard rock)- 1750 cubic meters

RCC - 900 cubic meters

Reinforcement works – 110 Tons

Structural steel works - 25 Tons

Bidder to submit credentials / PO copies for supporting the above noted criteria. Owner has the right to reject the bid in case it is observed that the Bidder does not meet the relevant experience for the subject works.

(2) Financial PQR:

a) Bidder should have average annual turnover of minimum of Rs. 3 Crores during last three financial years. Copy of audited Balance Sheet and P&L Account to be submitted in this regard.

General Civil Works at Kolshet				
Sr. No.	Service code	Description	Quantity	Unit
1	4135145	Excavate ordinary soil 0 to 3m incl. MCGM permit. Excavation below existing ground level at depths indicated below from existing ground level, including clearing away vegetation, providing berms, shoring, strutting as required in all types of soil soft as well as hard including soil intermixed with boulders and slushy soil, micro levelling at the bottom and ramming the founding stratum where foundation rests etc complete covering all lifts, dewatering during excavation etc complete, backfilling etc complete, all as per specification and as directed by ENGINEER	1020	M3
2	4135146	Excavate ordinary soil 3 to 6m incl. MCGM permit. Excavation below existing ground level at depths indicated below from existing ground level, including clearing away vegetation, providing berms, shoring, strutting as required in all types of soil soft as well as hard including soil intermixed with boulders and slushy soil, micro levelling at the bottom and ramming the founding stratum where foundation rests etc complete covering all lifts, dewatering during excavation etc complete, backfilling etc complete, all as per specification and as directed by ENGINEER	200	M3
3	4135148	Excavate hard rock chiseling 0- 3m, MCGM Excavation below existing Ground Level for foundations, drains, compound wall and underground tanks or any other structure within the OWNER's Premises in hard rock by ordinary chiseling; clearing away vegetation trees of all girth, bushes, underground roots, stumps etc., including shoring, strutting and all safety provisions, by providing adequate slopes using hard barricading as per OWNER's standards including careful handling of underground utilities etc., including backfilling as directed by the Owner, stacking and multiple handling of earth within the OWNER's Premises and disposal of surplus earth beyond plot boundary in MCGM approved area etc. as directed by Engineer-in-charge, including dewatering, preparing the bed for foundation etc. Payment for earth works shall be on net plan area of PCC. No payment will be made for side slopes, working area etc. The rate shall be inclusive of taking permission from Collector/MCGM or any other authorities beyond MCGM limit for the dumping place in consultation with the Municipal and/or other Local Authorities & Debris Management Cell. Contractor should ensure that this disposal cause no nuisance to the residents of town. Disposal is at the risk and cost of the Contractor.	10	M3

4	4135149	<p>Excav hard rock chiseling 3- 6m, MCGM</p> <p>Excavation below existing Ground Level for foundations, drains, compound wall and underground tanks or any other structure within the OWNER#s Premises in hard rock by ordinary chiseling; clearing away vegetation trees of all girth, bushes, underground roots, stumps etc., including shoring, strutting and all safety provisions, by providing adequate slopes using hard barricading as per OWNER#s standards including careful handling of underground utilities etc., including backfilling as directed by the Owner, stacking and multiple handling of earth within the OWNER#s Premises and disposal of surplus earth beyond plot boundary in MCGM approved area etc. as directed by Engineer-in-charge, including dewatering, preparing the bed for foundation etc. Payment for earth works shall be on net plan area of PCC. No payment will be made for side slopes, working area etc. The rate shall be inclusive of taking permission from Collector/MCGM or any other authorities beyond MCGM limit for the dumping place in consultation with the Municipal and/or other Local Authorities & Debris Management Cell. Contractor should ensure that this disposal cause no nuisance to the residents of town. Disposal is at the risk and cost of the Contractor.</p>	10	M3
5	4135154	<p>P/L murrum brought outside</p> <p>Providing and filling in good quality of murrum brought by the Contractor from outside in 15 to 20 cm thick layers including watering and consolidating so as to achieve compaction upto 95% of Standard Proctor Density, etc. complete in all aspects as directed by the Engineer-in-Charge.</p>	40	M3
6	4135155	<p>P/L rubble soling 230mm</p> <p>Providing & laying dry rubble stone soling with maximum 230mm size hard stone set in regular lines, hand packed and interstices thoroughly filled with small chips including filling in with good quality murrum/ metal stone and compacted with compact roller and spreading 12mm thick layer of grit on top, etc. complete in all aspects as directed by the Engineer-in-Charge.</p>	250	M3
7	4135165	<p>P/L PCC M15 below ground</p> <p>Providing and laying Ready Mix Concrete, M15 Grade using 20 mm downgraded aggregates below ground for blinding layer under R.C. foundation and bedding, bottom of pits, sumps, chambers, trenches, anchor blocks, rubble masonry and brick walls etc. as per drawing or as directed by the Engineer-in-Charge including vibrating, compacting, curing, shuttering if required, etc. complete</p>	50	M3
8	4135164	<p>P/L PCC M15 above ground</p> <p>Providing and laying Ready Mix Concrete of M15 Grade using 20 mm downgraded aggregates above ground for coping to plinth or parapet, transoms and mullions, for protection of dowel bars of slabs, beams, columns, etc. moulded or chamfered as per drawing or as directed by the Engineer-in-Charge including shuttering, formwork, vibrating, compacting, curing, etc. complete for all lifts and levels.</p>	10	M3

9	4135168	P/L RCC M30 -trench,UG tank,pile cap Providing and placing in position Ready Mix Concrete of M30 grade for all shapes, at all levels above or below ground including admixtures if any, centering, shuttering, scaffolding, vibrating, compacting, curing, dewatering, levelling, cutouts, openings, finishing, removal of formwork, etc. complete, for all lead and lifts, to obtain class F1 finish with leak proof concrete as per specifications/drawings and as directed by the Engineer- in-Charge for the following items (excluding reinforcement and structural steel):All foundations including bottom slabs of trenches, Underground tanks, pile caps, grade slabs, etc.	310	M3
10	4135170	P/L RCC M30 columns/pedesta at all Ht. Providing and placing in position Ready Mix Concrete of M30 grade for all shapes, at all levels above or below ground including admixtures if any, centering, shuttering, scaffolding, vibrating, compacting, curing, dewatering, levelling, cutouts, openings, finishing, removal of formwork, etc. complete, for all lead and lifts, to obtain class F1 finish with leak proof concrete as per specifications/drawings and as directed by the Engineer- in-Charge for the following items (excluding reinforcement and structural steel)-RCC columns, pedestals, brackets, walls	65	M3
11	4135174	P/L RCCM30-Base raft/Wall "Providing and placing in position Machine Mix Concrete of M30 grade using digital weight batching for all shapes, at all levels above or below ground including admixtures if any, centering, shuttering, scaffolding, vibrating, compacting, curing, dewatering, levelling, cutouts, openings, finishing, removal of formwork, etc. complete, for all lead and lifts, to obtain class F1 finish with leak proof concrete as per specifications/drawings and as directed by the Engineer-in-Charge for the following items (excluding reinforcement and structural steel):#Base raft and wall (Finish type F1)"	250	M3
12	4135171	P/L RCC M 30 slabs,/steps, beams etc Providing and placing in position Ready Mix Concrete of M30 grade for all shapes, at all levels above or below ground including admixtures if any, centering, shuttering, scaffolding, vibrating, compacting, curing, dewatering, levelling, cutouts, openings, finishing, removal of formwork, etc. complete, for all lead and lifts, to obtain class F1 finish with leak proof concrete as per specifications/drawings and as directed by the Engineer- in-Charge for the following items (excluding reinforcement and structural steel)RCC M 30 slabs, steps, waist slabs, beams, lintels	225	M3
13	4135179	P/L RCCM25-Columns/pedestals/wall Providing and placing in position Ready Mix Concrete of M25 grade for all shapes, at all levels above or below ground including admixtures if any, centering, shuttering, scaffolding, vibrating, compacting, curing, dewatering, levelling, cutouts, openings, finishing, removal of formwork, etc. complete, for all lead and lifts, to obtain class F1 finish with leak proof concrete as per specifications/drawings and as directed by the Engineer- in-Charge for the following items (excluding reinforcement and structural steel):RCC columns, pedestals, brackets, walls	5	M3

14	4163420	CISE, Providing core cutting including gr CISE, Providing Core Cutting holes in concrete required for services (if not provided in drawing earlier during casting) of thickness not exceeding 50 cm including grouting the same in cement concrete 1:1:2 after positioning of service lines, bolts, holes, etc. of 100mm diameter.#	3	NO
15	4199442	200mm diameter core cutting CISE, 200mm diameter core cutting#	3	NO
16	4135343	Opening in brick 100-300mm dia "Making holes/openings in brick wall (depth of hole not exceeding 450 mm) and finishing the same with plaster in CM 1:4 as directed by Engineer and at all locations and levels.# Greater than 100 mm dia. But less than 300 mm dia. Or equivalent in area (with fire proofing brick).	1	NO
17	4135348	Grouting base 45N/mm ² "Grouting of the bases of equipment / stanchions including anchor bolt pocket/ pipe sleeves etc. With premixed free flowing non-shrinking grout of the following strengths as per the manufacturer's instructions.# Grout having a minimum strength of 45 N / mm ²	5	M3
18	4135349	P/L Plum Conc.-150-230mm Providing and placing in position plum concrete of required thickness, at all depths with 33% boulders of size 150mm to 230mm and 67% Ready Mix Concrete of M15 grade including shuttering, vibrating, compacting, curing, dewatering, levelling, finishing, removal of formwork, etc. complete as per specifications/drawings and as directed by the Engineer-in-Charge.	3	M3
19	4135915	P/L Internal plaster 12 mm thk Providing internal cement plaster 12 mm thick plain finish in single coat in cement mortar 1:4 with hacking, surface preparation, including scaffolding and curing, grooves, bands, drip moulds, including providing and fixing chicken mesh of 22 gauge, with about 15 cm width of approved quality at the junction of reinforced cement concrete members and brick work, including fixing mesh in position by necessary drilling in concrete/ B.B masonry, etc. complete.	800	M2
20	4135916	P/L external plaster 20 mm thk Providing & applying 20 mm thick external sand faced plaster in cement mortar 1:4 using addition of integral water proofing compound 100% virgin polypropylene fibrillated fibres @125 gm/bag of cement as per manufacturer's specifications water proofing compound of approved make as per the manufacturer's specifications, in two layers (first layer of 14 mm thickness and the second layer of 6 mm thickness) on all types of external surfaces using coarse, clean sand including surface preparation, curing both the coats, bends, grooves, drip moulds and all scaffolding, curing, including providing and fixing chicken mesh of 22 gauge, with about 15 cm. width of approved quality at the junction of reinforced cement concrete members and brick work, including fixing mesh in position by necessary drilling in concrete/ B.B masonry, etc. complete.	800	M2
21	4135351	P/L HYSD CRS Fe 500 bars "Supply, Cleaning, cutting, bending, as per drawings and placing in position High yield strength deformed reinforcement bars conforming to IS: 1786 at all locations and levels including binding with soft annealed 18G black wire, etc. Complete as shown on drawings and as directed by the Engineer (No payment will be made for staper bar, layer pin, chair, tie rods and other supports, binding wires, laps)#a) For HYSD CRS bars conforming to grade Fe 500 of IS 1786"	85	MT

22	4135352	Prov/Fab Structural steel Providing structural steel work in rolled / builtup sections fixed with connecting plates or angles, gussets, cleats, channels as per drawings including cutting, fabricating, hoisting, erecting at all levels and locations, fixing in position, making welded/bolted connections and with two coats of zinc phosphate primer (One shop coat and one site coat) and painting with finishing coats of synthetic enamel paint to get desired finish, including scaffolding, preparation of surfaces, transporting, loading, unloading etc. complete as directed by the Engineer-in-Charge.	20	MT
23	4135352	Prov/Fab Structural steel Providing structural steel work in rolled / builtup sections fixed with connecting plates or angles, gussets, cleats, channels as per drawings including cutting, fabricating, hoisting, erecting at all levels and locations, fixing in position, making welded/bolted connections and with two coats of zinc phosphate primer (One shop coat and one site coat) and painting with finishing coats of synthetic enamel paint to get desired finish, including scaffolding, preparation of surfaces, transporting, loading, unloading etc. complete as directed by the Engineer-in-Charge. Same as item above but the structural member shall be of removable type with permanent bolted connection, such as framing for removable floors etc.,	5	MT
24	4135353	Prov/Fab MS inserts in concrete Supplying, cutting, fabricating and erecting M.S. anchor bolts, pipe sleeves, channels, angles, plates, rails, beams and all other types of inserts in concrete members and placing them in position as specified on drawings at all locations and at all levels, etc. including two coats of approved oil paint over one coat of zinc phosphate primer with finishing coats of synthetic enamel paint to get desired finish over exposed surfaces, including scaffolding, preparation of surfaces, transporting, loading, unloading etc. complete as directed by the Engineer-in-Charge.	2	MT
25	4135908	P/F Brick masonry 350mm thk Providing Brick Masonry 350 mm thick in cement mortar 1:4 (1 cement : 4 coarse sand) using best quality locally available first class kiln bricks having crushing strength of 35 Kg/sqcm and water absorption not more than 20%, in superstructure for walls, parapets, etc., at all levels including scaffolding, curing, raking of joints, providing RCC transomes and mullions of grade M15 including shuttering, etc. complete. (reinforcement and concrete for transomes and mullions shall be paid separately in respective items)	75	M2
26	4170220	CORE CUTTING ,50 Dia Providing core cutting services including required tools ,tackle, transportation as per size mention below#50 dia	5	NO
27	4135357	Prov/Fab Chequered Plates Supplying, fabricating, delivering to site, loading, unloading, etc. and erecting chequered plate of diamond shape pattern including all operations but not limiting to such as straightening, cutting, drilling, grinding, welding (weight not included), making holes for lifting, cleaning and preparing surface by power tools and wire brushing and applying on the soffit of chequered plate one shop coat of zinc phosphate primer after fabrication and one coat of the same after erection and finishing coats of synthetic enamel paint of approved shade to get desired finish, etc. complete as per specifications and as directed by the Engineer-in- Charge.	2	MT
28	4135358	P/L rebars Hilti RE500-10 mm dia Providing and fixing the rebars of RE 500 of Hilti at required locations and levels including drilling the hole, etc. complete as directed by the Engineer-in-Charge.-10 dia	10	NO

29	4135359	P/L rebars Hilti RE500-12 mm dia Providing and fixing the rebars of RE 500 of Hilti at required locations and levels including drilling the hole, etc. complete as directed by the Engineer-in-Charge.-12 dia	10	NO
30	4135360	P/L rebars Hilti RE500-16 mm dia Providing and fixing the rebars of RE 500 of Hilti at required locations and levels including drilling the hole, etc. complete as directed by the Engineer-in-Charge.' 16 dia	10	NO
31	4135421	P/L RCC NP2 hume pipe-150MMdia "Providing and laying RCC NP2 class Hume pipe with collar joint including jointing and filleting in 1:4 C.M, including plugging of both the ends with gunny bags, brick masonry in C.M 1:4 with plaster in C.M. 1:4 and curing, etc. complete as specified and as directed by Engineer-in-Charge. (All the pipes supplied shall confirm to relevant IS codes. The Contractor shall also arrange to get the pipes tested in accordance with tests specified in IS 3597:1985 at Contractor's cost and as directed. Testing shall be carried out in presence of Engineer-in-Charge. Laying of pipes shall be carried out as per IS 783 including all leads and lifts, etc. complete as directed by Engineer-in-Charge.#150 mm dia"	40	M
32	4135422	P/ L RCC NP2 hume pipe-200MM dia "Providing and laying RCC NP2 class Hume pipe with collar joint including jointing and filleting in 1:4 C.M, including plugging of both the ends with gunny bags, brick masonry in C.M 1:4 with plaster in C.M. 1:4 and curing, etc. complete as specified and as directed by Engineer-in-Charge. (All the pipes supplied shall confirm to relevant IS codes. The Contractor shall also arrange to get the pipes tested in accordance with tests specified in IS 3597:1985 at Contractor's cost and as directed. Testing shall be carried out in presence of Engineer-in-Charge. Laying of pipes shall be carried out as per IS 783 including all leads and lifts, etc. complete as directed by Engineer-in-Charge.#250 mm dia"	40	M
33	4135157	Dism.brickmasonry incl MCGM disposal "Dismantling and disposal of brick masonry at all levels and listing the scrap material as directed by the Engineer-in-Charge with all leads and lifts, etc. complete in all aspects as described and as directed by the Engineer-in-Charge. The rate quoted shall be inclusive of factors like MCGM disposal, Royalty & Collector's permission, stacking, spreading and backfilling, etc.#(Contractor to take permission from Collector/MCGM or any other authorities beyond MCGM limit for the dumping place in consultation with the Municipal and/or other Local Authorities & Debris Management Cell. Contractor should ensure that this disposal cause no nuisance to the residents of town. Disposal is at the risk and cost of the Contractor.)"	5	M3
34	4135158	Dism PCC incl MCGM disposal charges "Dismantling and disposal of plain concrete at all levels and listing the scrap material as directed by the Engineer-in-Charge with all leads and lifts, etc. complete in all aspects as described and as directed by the Engineer-in-Charge. The rate quoted shall be inclusive of factors like MCGM disposal, Royalty & Collector's permission, stacking, spreading and backfilling, etc.#(Contractor to take permission from Collector/MCGM/concern authorities for the dumping place in consultation with the Municipal and/or other Local Authorities & Debris Management Cell. Contractor should ensure that this disposal cause no nuisance to the residents of town. Disposal is at the risk and cost of the Contractor.)"	1	M3

35	4135159	<p>Dism RCC incl MCGM disposal charges</p> <p>"Dismantling and disposal of reinforced cement concrete including reinforcement at all levels, listing the scrap material and returning the reinforcement steel to Owner's store at Dharavi as directed by the Engineer-in-Charge with all leads and lifts, etc. complete in all aspects as described and as directed by the Engineer-in-Charge. The rate quoted shall be inclusive of factors like MCGM disposal, Royalty & Collector's permission, stacking, spreading and backfilling, etc. #(Contractor to take permission from Collector/MCGM/concern authorities for the dumping place in consultation with the Municipal and/or other Local Authorities & Debris Management Cell. Contractor should ensure that this disposal cause no nuisance to the residents of town. Disposal is at the risk and cost of the Contractor.)"</p>	64	M3
36	4135160	<p>Dis Str. Steel incl MCGM disposal</p> <p>"Dismantling and disposal of structural steel, listing the scrap material and returning the structural steel to Owner's store at Dharavi as directed by the Engineer-in-Charge with all leads and lifts, etc. complete in all aspects as described and as directed by the Engineer-in-Charge. The rate quoted shall be inclusive of factors like MCGM disposal, Royalty & Collector's permission, stacking, etc. #(Contractor to take permission from Collector/MCGM or any other authorities beyond MCGM limit for the dumping place in consultation with the Municipal and/or other Local Authorities & Debris Management Cell. Contractor should ensure that this disposal cause no nuisance to the residents of town. Disposal is at the risk and cost of the Contractor.)"</p>	34	MT
37	4135903	<p>P/F Flyash masonry 190mm,fdn/plinth</p> <p>Providing Flyash Block Masonry (Charbhuj Infrastructure make or equivalent make), 190 mm thick and above in cement mortar 1:5 (1 cement: 5 coarse sand) using best quality locally available flyash blocks having crushing strength of 50 Kg/sqcm and water absorption not more than 10%, at all levels in foundation, plinth and steps including dewatering, scaffolding, raking of joints, curing, etc. complete.</p>	28	M3

38	4135910	<p>P/L water proofing China mosaic</p> <p>Providing and laying integral cement based water proofing treatment with China Mosaic finish including preparation of surface as required for treatment of roofs, balconies, terraces, RC gutters, etc. consisting of following operations.#(a) Applying and grouting a slurry coat of neat cement using 2.75 kg/m² of cement admixed with proprietary water proofing compound conforming to IS: 2645 over the RCC slab including cleaning the surface before treatment.#(b) Laying cement concrete using broken bricks/brick bats 25 mm to 100 mm size 50% of cement mortar 1:5 (1 cement:5 coarse sand) admixed with proprietary water proofing compound conforming to IS: 2645 over 20 mm thick layer of cement mortar of mix 1:5 (1 cement: 5 coarse sand) admixed with proprietary water proofing compound conforming to IS: 2645 to required 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 admixed with proprietary water proofing compound conforming to IS: 2645.#(d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement 4 coarse sand) admixed with proprietary water proofing compound conforming to IS: 2645 and finally finishing the surface with trowel with neat cement slurry and making of 300 mm x 300 mm square where required or preparing the surface to receive tiles on it with Drip mould in cement mortar at the junction of plaster and parapet.#(e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. (f) Finally finishing top with fixing assorted pieces of glazed tiles on a layer of neat cement grout 10 mm thk, properly tamping to the required grade including curing, cleaning with dilute acid, etc. complete.#(g) All above operations to be done in order and as directed and specified by the Engineer-in-Charge. Contractor shall give 10 years guarantee on court fee stamp paper of Rs. 1000/-.#(h) With average thickness of 150 mm and minimum thickness at Khurra as 75 mm."</p>	435	M2
39	4135914	<p>P/L Internal plaster 6 mm thk</p> <p>Providing internal cement plaster 6 mm thick to ceiling in a single coat in cement mortar 1:4 to rough/fair concrete surface, in all positions with hacking, surface preparation, including scaffolding, curing, grooves, bands, drip moulds, etc. complete.</p>	256	M2
40	4135917	<p>P/L 50mm Thk Ironite floor finish</p> <p>Providing and laying 50 mm thick heavy duty Ironite floor finish of 1mx1m panel size with Ironite hardener topping, under layer of 38 mm thick cement concrete of grade M25 and top layer of 12 mm thick metallic concrete of mix 1:2 (1 cement hardener mix : 2 stone aggregate 6 mm nominal size) by volume with metallic hardening compound of approved quality mixed as per manufacturer's recommendation including cement slurry, side shuttering, rounding off edges and glass strips of 12mm high x 5mm thick in required panels, etc. complete.</p>	175	M2
41	4135919	<p>P/L 50 MM thk ironite floor w/t hardener</p> <p>"Providing and laying 50 mm thick heavy duty Ironite floor finish of 1mx1m panel size with Ironite hardener topping, under layer of 38 mm thick cement concrete of grade M25 and top layer of 12 mm thick metallic concrete of mix 1:2 (1 cement hardener mix : 2 stone aggregate 6 mm nominal size) by volume with metallic hardening compound of approved quality mixed as per manufacturer's recommendation including cement slurry, side shuttering, rounding off edges and glass strips of 12mm high x 5mm thick in required panels, etc. complete.#Same as above but without ironite hardener"</p>	100	M2

42	4135938	P/F Antistatic falseflooring 600 high "Providing and fixing Anti static false flooring 300 mm high with load bearing capacity of 1200 kg concentrated load and 2000 kg /sqm distributed load, of Unitle Everest or equivalent consisting of:#a) pedestal supports made of 25 od, 1.5 mm thk MS seamless pipe welded vertically at the centre of 100 x 100 x 3 mm thick die pressed MS base plate with hard PVC bushing on top free end.#b) Jack heads made of pressure die cast, galvanised, square , 2 mm the MS sheet, with 4 Nos 2 x 10 mm die cut notches, 90 degrees apart, to hold the stringers. And with a centrally welded M16 x100 mm stud with nut for level adjustment up to +/- 25 mm.#c) Stringers made out of die pressed channels 25x25x25 mm with two die pressed notches at the two ends to snap fit to the jack head.#d) Truly levelled and aligned removable composite floor panels of 610 x 610 x 31 mm made of 1.5 mm thick MS die formed bottom tray, 1.5 mm thick top plate with cavity filled with specially designed light weight concrete.#e) The top surface shall be finished with non combustible high pressure laminate antistatic tiles conforming to BS-2050 of 1998 table III #Including making steps including treads and risers or ramp, making openings/ cutouts, levelling, cutting, drilling, cleaning, etc. complete.#same as above but 600 high"	250	M2
43	4135942	P/A Lime POP 4 to 8mm thk applying of 4.0 to 8.0 mm thick lime POP punning over it to give a smooth levelled finish, the cost shall include all labour, materilas, etc complete.	388	M2
44	4135943	P/A cement based white putty Providing and applying cement based white putty in two coats over a plastered surface to give a smooth levelled finish to recieve paint. Surface to be pre-wetted and made free of any loose particles and stains etc. The cost shall include all labour, materials, etc complete.	388	M2
45	4135945	P/A cement based exterior paint "Providing and applying three coats of acrylic emulsion (washable) external paint of Asian make ACE / Nerolac Suraksha / ICI Dulux Super Coat or approved equivalent with required shade over a coat of primer on all exterior surfaces at all levels, including making good the damaged and rough surface, cleaning, curing, all scaffolding, etc., complete as per manufacturer#s specifications and as directed by the Engineer.#Same as above but cement based exterior paint"	862	M2
46	4135944	P/A Acrylic emulsion ext. paint Providing and applying three coats of acrylic emulsion (washable) external paint of Asian make ACE / Nerolac Suraksha / ICI Dulux Super Coat or approved equivalent with required shade over a coat of primer on all exterior surfaces at all levels, including making good the damaged and rough surface, cleaning, curing, all scaffolding, etc., complete as per manufacturer#s specifications and as directed by the Engineer.	173	M2
47	4135947	P/A Oil Bound Distemper Providing and applying two coats of first quality Oil Bound Distemper internal paint of approved colour and shade over one coat of primer, including scaffolding, preparing the surface to receive the primer and finishing coats complete.	603	M2
48	4136648	P/F polis black granite on openng,15mm Providing and fixing 15 mm thick, maximum of 300mm width polished black granite on sides of opening on 20 mm thick cement mortar 1:3 including polishing to exposed edges, cement float, filling joints with neat cement slurry mixed with pigment to match shade of granite, raking and finishing the joints with silicon sealant, curing, rubbing and cleaning complete at all levels.	31	M

49	4135950	P/F Black granite, openings 15mm thk Providing and fixing 15 mm thick black granite on all four sides opening in step fashion 20 mm thick cement mortar 1:3 including polishing to exposed edges, cement float, filling joints with neat cement slurry mixed with pigment to match shade of marble, raking and finishing the joints with silicon sealant, curing, rubbing, polishing and cleaning complete at all levels 2nos in steps with minimum 50mm overlapping and maximum of 300mm width in combination.	16	M
50	4136585	P/F Elec Rolling Steel Shutters Providing and fixing Electrically operated rolling steel shutters fabricated from 18 gauge GI sheets with slide guides, bottom rail, brackets, door suspension shaft, housing box at operation arrangement, lock plates, locking arrangement, fixing bolts, pulling handles, hood, rolling arrangement and 2 coats of approved synthetic enamel paint over a coat of zinc primer complete. Provision of wicket gate shall be paid under separate item, in that case area of wicket gate shall be deducted from this item for payment	10	M2
51	4136650	P/F wicket gate in rolling shutter Providing and fixing wicket gate in mechanically and/ or electrically operated rolling shutter (wicket gate area shall be deducted from the respective item applicable for rolling shutter for payment purpose.)	2.5	M2
52	4136589	P/F 2 hrs Fire Rated shutter door Providing & fixing factory made 2 hour rated fire doors by Shakti Met-Dor / Ahura Mazda or approved equivalent single & double shutter, the door frames will be built into brick or block walls using corrugated TEE anchors not welded to the frames (first fix). Frames may also be fixed on plastered openings with the help of Anchor Fasteners (second fix). Door frames must be supplied to knockdown form with butt joints for bolted assembly at site. Door leaves will be 46mm thk. fully flush, double skin door shell with Lock Seam joints at style edges. In-fill to give the required rigidity and effective acoustics & thermal insulation. Vision glass will be provided in circular / square/ rectangular shape..Stainless steel ball bearing butt hinges 3mm thk. fixed flush to the frame & shutter. Mortise sash lock : OZML-DL1-SS-55 with SS lever handles :make Zone : Model OMH - 11L, Over head door closer - Model : NSK - 6825 ,mortise dead bolt, mortise latch, panic deviceetc. to be provided as required. Concealed extended lever action flush bolts to be provided on top of the door to the leading style. The rate shall include all the necessary hardware, vision glasses, adhesive tapes & silicon sealant complete as described above.	12	M2
53	4120231	P/F hollow metal pressed section door Provide,fix hollow metal pressed section door made up of MS door frame,150x65x1.25mm thk with single rebet,MS pad plates welded at all hinge and lock locations,MS frame spacers at 600 centre to centre,base ties 2 numbers,25x25x3mm MS angle,MS holdfast 300x25x6mm at max 600mm centre to centre (min 6 Nos),Neoprene bushings glued to frame with synthetic adhesive and shutter 45mm thk flush welded fabricated with 2 outer skins of 1.25mm thk MS sheet,1mm thick steel sheet stiffners at 500mm centre to centre,6mm thick MS flat along perimeter of shutter including 150 mm long heavy duty MS hinges at max 600 mm center to centre(min 3 Nos for each shutter,iron oxidised 200 long tower bolt for each shutter,300 long door handles- 2 Nos for each shutter,spring loaded door stopper for each shutter,concealed type lever lock with handle incl 1 coat of red oxide primer,2 coats of synthetic enamel paint,filling the hollows of door frame with CM 1:6, etc. complete for all lifts. For single shutter	13	M2

54	4141746	<p>CISE, Aluminium framed glazed window</p> <p>CISE, Aluminium framed glazed windows: Providing and fixing extruded Aluminium built up standard tubular sections/ appropriate Z and other sections of Jindal, Hindalco or equivalent make conforming to IS: 733 and IS: 1285, anodised transparent or dyed to required shade according to IS: 1868. (Minimum coating of grade AC 15), fixed with rawl plugs and screws or with fixing clips or with expansion hold fastners including filling the gaps between opening and aluminium frame with silicon sealant or poly-sulphide sealant as directed, necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/ Neoprene felt, etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, The quote shall include all necessary hardware and accessories like aluminium snap beading for glazing/ panelling, C P brass/ stainless steel screws, colour toughened glass minimum 6mm thick of st gobain or equivalent all complete as per architectural drawings and the directions of Engineer. Vendor shall prepare and submit shop drawings for owner's approval. #ii) operable (casement window)</p>	143	M2
55	4141747	<p>CISE, Aluminium framed glazed windows</p> <p>CISE, Aluminium framed glazed windows: Providing and fixing extruded Aluminium built up standard tubular sections/ appropriate Z and other sections of Jindal, Hindalco or equivalent make conforming to IS: 733 and IS: 1285, anodised transparent or dyed to required shade according to IS: 1868. (Minimum coating of grade AC 15), fixed with rawl plugs and screws or with fixing clips or with expansion hold fastners including filling the gaps between opening and aluminium frame with silicon sealant or poly-sulphide sealant as directed, necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/ Neoprene felt, etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, The quote shall include all necessary hardware and accessories like aluminium snap beading for glazing/ panelling, C P brass/ stainless steel screws, colour toughened glass minimum 6mm thick of st gobain or equivalent all complete as per architectural drawings and the directions of Engineer. Vendor shall prepare and submit shop drawings for owner's approval. #i) Sliding windows upto 4 tracks with additional tack for mosquito net</p>	60	M2
56	4141745	<p>CISE, Glass Louvered window with exhaust</p> <p>CISE, Aluminium framed glazed windows: Providing and fixing extruded Aluminium built up standard tubular sections/ appropriate Z and other sections of Jindal, Hindalco or equivalent make conforming to IS: 733 and IS: 1285, anodised transparent or dyed to required shade according to IS: 1868. (Minimum coating of grade AC 15), fixed with rawl plugs and screws or with fixing clips or with expansion hold fastners including filling the gaps between opening and aluminium frame with silicon sealant or poly-sulphide sealant as directed, necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/ Neoprene felt, etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, The quote shall include all necessary hardware and accessories like aluminium snap beading for glazing/ panelling, C P brass/ stainless steel screws, colour toughened glass minimum 6mm thick of st gobain or equivalent all complete as per architectural drawings and the directions of Engineer. Vendor shall prepare and submit shop drawings for owner's approval. #iii) Glass Louvered window with exhaust fan slot</p>	12	M2

57	4136676	P/F Mineral fibre grid False Ceiling MINERAL FIBRE grid FALSE CEILING of Saint Gobain or equivalent (600x600mm grid). Bidder to provide adequate steel sections (Channels, I or T sections) and hanger supports to cater to the false ceiling loads. Standard sections as spelled out in Saint Gobain or equivalent manufacturer catalogue to be provided. OWNER would check the design and adequacy and has the right to reject if found inadequate.	205	M2
58	4136678	P/F monolithic Gypsum False Ceiling Providing all materials and fixing monolithic Gypsum FALSE CEILING of Saint Gobain or equivalent. Bidder to provide adequate steel sections (Channels, I or T sections) and hanger supports to cater to the false ceiling loads. Standard sections as spelled out in Saint Gobain or equivalent manufacturer catalogue to be provided. OWNER would check the design and adequacy and has the right to reject if found inadequate.	44	M2
59	4135925	P/L polished Kota in treads Providing and laying polished kota of colour as approved by Owner having a minimum thickness of 20 mm in treads of steps and staircase in one piece with rounded nosing and 3 Nos of anti skid grooves on 1:4 cement mortar (1 cement : 4 course sand) bedding to give an overall thickness of 50 mm including cement float, filling joints with neat cement slurry mixed with pigment to match shade of white marble , curing, rubbing, polishing and cleaning complete at all levels.	7	M2
60	4135921	P/L dado or skirting or risers of kota Providing and laying in required position dado or skirting or risers of kota of quality and colour as approved by Owner having a minimum thickness of 25 mm on 12 mm (average) thick, 1:3 cement mortar (1 cement : 3 course sand) bedding including filling joints with neat cement slurry mixed with matching colour pigment, curing, rubbing, hand polishing and cleaning complete at all levels.	2	M2
61	4136595	P/F SS railings, staircase/ramps/floors Providing, Fabrication, Erection, Alignment, Welding, etc., of stainless steel Railing for staircase/ ramp/ floors 1200 mm High with AISI 304 SATIN Polished steel with with main 50mm dia SS pipe as main runner and 25mm dia pipe at 3 levels along the running length of the staircase and vertical supports in 35mm dia SS pipes @1200mm c/c, the pipe to be 1.5mm thick including stainless steel beading / stainless steel cleats / stainless steel fasteners, toe guard plate wherever specified; of grade SS:304, annealed ,pickled and polished to bright finish, in square / round shape, including all material, equipment, handling, transportation, cutting, bending, welding, fastening, preparation and checking of fabrication drawing, and getting the same approved, site fabrication, testing, etc., all complete, as per specification, drawings, and instruction of the Engineer.	25	M
62	4135895	S/I Rain water harvesting system supply, installation, protection, cleaning and handover of rain water harvesting system, including filter as per authority and owner requirements	1	NO

63	4136587	<p>P/F hollow metal pressed door 25x25x3</p> <p>Providing and fixing hollow metal pressed section door made up of MS door frame, 150 x 65 x 1.25mm thick with single rebet, MS pad plates welded at all hinge and lock locations, MS frame spacers at 600 centre to centre, base ties 2 numbers, 25 x 25 x 3 mm MS angle, MS holdfast 300 x 25 x 6 mm at maximum 600mm centre to centre (minimum 6 Nos), Neoprene bushings glued to frame with synthetic adhesive and shutter 45 mm thick flush welded fabricated with 2 outer skins of 1.25 mm thick MS sheet, 1mm thick steel sheet stiffeners at 500mm centre to centre, 6mm thick MS flat along perimeter of shutter including 150 mm long heavy duty MS hinges at maximum 600 mm center to centre (minimum 3 Nos for each shutter, iron oxidised 200 long tower bolt for each shutter, 300 long door handles- 2 Nos for each shutter, spring loaded door stopper for each shutter, concealed type lever lock with handle including one coat of red oxide primer and 2 coats of synthetic enamel paint, filling the hollows of door frame with CM 1:6, etc. complete for all lifts. For single shutter</p>	10	M2
64	4136583	<p>P/F Louvers</p> <p>Providing and fixing Louvers in Plain Panel of approved colour consisting of panel 0.6mm thick with round edges panel length up to 6mtrs coil coated on a continuous paint line double baked and roll formed from enamelled corrosion Resistance Aluminium Alloy AA3005 (Al.Mg.) for higher strength and good Roll forming characteristics. Panels shall be clipped at a distance of 86 mm to baked enameled Aluminium panel stringer 33mm wide and 86mm deep x 0.95 mm thick in a standard length of 5mtrs made of double baked enameled Aluminum Alloy AA5050 (Al.Mg.) white to hold the panel in a module of 86mm centre to centre. The prongs on stringers shall be to accommodate an angle of 21.30 Degrees between two panels. stringers shall be fixed at 150 mm from panel ends and at a distance of maximum 900 mm centre to centre across the panel span. The carrier shall be fixed to a suitable structure by means of rigid fixing details. All properties and specifications shall comply with ECCA directives and more specifically EN 1396:1996</p>	15	M2
65	4168837	<p>One coat of paint in Operational Area</p> <p>Additional One coat of paint in Operational Area.#Providing and applying one finish coats of first quality Acrylic washable internal paint/acrylic distemper of approved colour and shade.#Including scaffolding, patch repair, touch-up, preparing the surface to provide final finish coat.#Complete as directed by Engineer-in-Charge.</p>	800	M2
66	4170226	<p>CISE,P/F Rungs</p> <p>Providing , supplying & fixing of GI Rungs in RCC including necessary arrangement & welding works at all height and as directed by engineer in charge.</p>	120	NO
67	4146005	<p>P/A Crystalline water proofing system</p> <p>Supplying all materials, adding crystalline water proofing system for concrete works applicable for RCC raft, side walls of basement, cable trenches, tunnels, underground tanks, over head tanks, roof slabs, etc as per manufacturer's guidelines. Contractor to provide a leak proof warranty for a period of minimum 10 years for all the concrete waterproofing works covered under this item. (Note: Concrete will be paid as per Item no. 17 of BOQ issued with PO. This item is only for adding crystalline waterproofing compound)</p>	785.00	M3

68	4135156	P/L anti termite treatment "Supplying and Providing pre-constructional anti-termite treatment, and creating a chemical barrier, under and on sides of trenches, wall footings, top surface of plinth filling, including junction of wall and floor along the perimeter of building, with approved emulsifiable insecticides at the rates and concentrations as per IS.6313 (Part-II) and as directed by Engineer. (Treated plinth area of the building at ground floor only shall be measured)#(Contractor to submit guarantee on Rs. 1000 stamp paper, guaranteeing against termite attack for a period of 5 years.)"	525.00	M2
69	4135186	P/A Dr. Fixit waterbar "External Area of Retaining Wall (Open Excavation / Two side shuttering):#Providing and applying water swell-able bar at starter & construction joints Dr. Fixit Waterbar of 20mm X 20mm at all construction joints, it shall have unrestrained volumetric expansion up to 100% in 30 days, Hydrostatic pressure resistance of 100 meters. Dr. Fixit Waterbar shall be fixed to the concrete using a gun grade hydrophilic adhesive Dr. Fixit Adhesive."	1,000	M
70	4170224	FRP MAN HOLE COVER Providing supplying & fixing of FRP manhole cover of size 900 mm*900 mm including necessary fitting & tool tackle, transportation etc as directed by engineer in-charge.#	6	NO
71	4168824	P&F, BMC Cover, Circular 600mm Dia BMC Approved Heavy Duty Manhole Cover (FRP cover 600mm dia):#Supply and installation of BMC approved heavy duty FRP covers of 600mm dia.#Including all fixing arrangements and frames as per the manufacturer.#Complete with making on site arrangement for installation and handing over.#At all levels & complete, as directed by Engineer-in-Charge.#	4	EA
72	4170222	Moulding of granite PROVIDING HALF ROUND MOULDING & REDOING IN CM (1:3) COMPLETE in windows/louver/doors/ventilators etc as directed by Engineer in-charge.	100	M
73	4136586	P/F Mech Rolling Shutters Providing and fixing mechanically operated rolling steel shutters fabricated from 18 gauge GI sheets with slide guides, bottom rail, brackets, door suspension shaft, housing box at operation arrangement, lock plates, locking arrangement, fixing bolts, pulling handles, hood, rolling arrangement and 2 coats of approved synthetic enamel paint over a coat of zinc primer complete. Provision of wicket gate shall be paid under seperate item, in that case area of wicket gate shall be deducted from this item for payment.	20	M2
74	4205978	P/S/F Rolling Shutter/Door Bottom Rubber P/S/F Rolling Shutter/Door Bottom Rubber Seal with all required tool tackles, transportation fixing with chemical as directed by engineer in charge.	30	M

75	4184987	<p>P/F Infratop false ceiling CISE, Supply and fixing of Infratop false ceiling with hidden/visible perforations, of panel sizes of 340mmx 2700mm, durable and resistant to moisture, water and borer-fungus-termite attack. Panels to be installed with GI / Aluminium sections of suitable gauge & size according to site conditions . Panels SV 08/07 &09 with suitable trims SV 15 with dimensions 40x19x22x12x3050 (all in mm) for edge profiles and SV 18 with dimensions 67x3050 mm with T head of 42mm for Connecting profiles . Panels must be maintenance free , rust proof and are 100% Water proof . Advised especially for Soffit areas , under the roof installation . 10 years warranty for colour & finish of the panels and the profiles from VOX or equivalent</p>	85	M2
76	4190404	<p>S/F Infratop Perforated False Ceiling Vertical Supply and fixing of Infratop false ceiling manufactured in europe with hidden/visible perforations, of panel sizes of 340mmx 2700mm, durable and resistant to moisture, water and borer-fungus-termite attack. Panels to be installed with GI / Aluminium sections of suitable gauge & size according to site conditions . Panels SV 08/07 &09 with suitable trims SV 15 with dimensions 40x19x22x12x3050 (all in mm) for edge profiles and SV 18 with dimensions 67x3050 mm with T head of 42mm for Connecting profiles . Panels must be maintainance free , rust proof and are 100% Water proof . Advised especially for Soffit areas , under the roof installation . 10 years warranty for colour & finish of the panels and the profiles from VOX. (USING SHEETS Vertically)#</p>	85	M2