

"Schedule of Quantities" Cum "Unprice bid Format"

Name of Work: "Civil, Structural and Architectural works (Package-I & Package-II) " for Steam Generation Package for Bina Petchem and Refinery Expansion Project of BPCL at Bina, Madhya Pradesh, India.

Tender ref no. T0AZX00006 dated:16.02.2026

Section No.	Description	UOM	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)	Weightage %	Remarks
A	B	C	D	E	F	G	H
1	Package -1: Civil works - Construction of all the Equipment foundations and General Civil work etc.	SET	1			58.1467498%	Refer Annexure-A for detailed SOQ .
2	Package -2: Civil works- Constrcution of Buildings etc.	SET	1			41.8532502%	Refer Annexure-B for detailed SOQ .
	Total Sum					100.000%	0.00

Note:

- 1 Bidder to confirm having quoted their price in BHEL NIC portal (<https://eprocurebhel.co.in>) in the manner described in below, by writing "QUOTED" here
- 2 Bidder need not to quote the price here, lumsum Price quoted by bidder in (excel sheet) price bid format in BHEL NIC portal (<https://eprocurebhel.co.in>) shall be cosidered as the total price (For both Packages -I + Package- II) of this tender SOQ. Rate and amount against each line item shall be derived from the corresponding weightage assigned against each line item of this SOQ.
- 3 Evaluation Shall be based on total amount quoted by bidder for both the package-I & Package - II
- 4 The rate and amount are inclusive of all applicable taxes, except for the GST. For details of taxes, clause no. 13.0 of the SCC will be applicable.

(Bill of quantity/Schedule of quantity) Annexure-A

Package-I::Civil Work-Construction of all the Equipment foundations and General Civil work etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
1	A-1.1	Construction of Worker's Accommodation sheds(120-125 workers)having adequate no. of rest rooms along with toilets etc. including associated civil and Structural works on built,own and operate basis(ownership of sheds shall be in line withTCC)as per attached drawing, Standard Guidelines for Worker's Accommodation / Establishments at Project Site and respective of TCC for development of labour colony. Payment shall be released on completion of each shed/set as per attached drawing. Cement & Steel shall be in bidder's scope	Set	2			3.9372309
2	A-1.2	Payment for Lease of land provided for labour colony area including all statutory clearances, expenses for agreement and any other incidental charges, etc.	Acre-Month	25			0.2362339
3		Total=					0.0000000
4	100	EARTH WORK					0.0000000
5		Earth work In excavation, backfilling and disposal including necessary men/women, materials, equipment, loading, transportation, unloading, dewatering etc as per specification, drawing and as directed by engineer- in-charge for the following.					0.0000000
6	101	Earth work in excavation in all types of soil including ash which can be excavated by any means including setting out, levelling, dewatering (but excluding special type of dewatering viz. well point method), shoring & strutting (wherever required), dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 500 m, spreading/levelling of disposed materials etc all complete for following depths below ground level.					0.0000000
7	a	Depth from ground level but not exceeding 2 m	CUM	8389			0.3185621
8	b	Depth exceeding 2 m but not exceeding 4 m	CUM	2905			0.1375145
9	c	Depth exceeding 4 m but not exceeding 6 m	CUM	0			0.0000000
10	d	Depth exceeding 6 m but not exceeding 8 m	CUM	0			0.0000000
11	e	Depth exceeding 8 m but not exceeding 10 m	CUM	0			0.0000000
12	f	Depth exceeding 10 m but not exceeding 15 m	CUM	0			0.0000000
13	102	Extra over ST No. 101 for dewatering of ground water by well point method as per IS 9759.	CUM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
14	103	Earth work in excavation in soft rock (rock without any recovery of excavated materials in the form of hard stone/boulder) including weathered rock which can be excavated by means of crow bar, pick axe, pneumatic rock breaker attachment with excavator machine etc but does not require chiselling or blasting including setting out, levelling, dewatering (wherever required), shoring & strutting (wherever required), dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 500 m, spreading / levelling of disposed materials etc all complete for following depths below ground level.		0			0.0000000
15	a	Depth from ground level but not exceeding 2 m	CUM	7409			0.4162405
16	b	Depth exceeding 2 m but not exceeding 4 m	CUM	6833			0.4606567
17	c	Depth exceeding 4 m but not exceeding 6 m	CUM	32			0.0025888
18	d	Depth exceeding 6 m but not exceeding 8 m	CUM	0			0.0000000
19	e	Depth exceeding 8 m but not exceeding 10 m	CUM	0			0.0000000
20	f	Depth exceeding 10 m but not exceeding 15 m	CUM	0			0.0000000
21	104	Earth work in excavation in hard rock requiring blasting (but excluding controlled blasting) including wedging, line drilling, pre shearing etc as required, setting out, levelling, dewatering (wherever required), dressing the sides & bottom, all lifts, necessary licenses/statutory clearances for blasting, supply, storage & handling of blasting materials, stacking/disposal of surplus excavated material within a lead upto 500m, spreading / levelling of disposed materials etc all complete for following depths below ground level.		0			0.0000000
22	a	Depth from ground level but not exceeding 2 m	CUM	0			0.0000000
23	b	Depth exceeding 2 m but not exceeding 4 m	CUM	0			0.0000000
24	c	Depth exceeding 4 m but not exceeding 6 m	CUM	0			0.0000000
25	d	Depth exceeding 6 m but not exceeding 8 m	CUM	0			0.0000000
26	e	Depth exceeding 8 m but not exceeding 10 m	CUM	0			0.0000000
27	f	Depth exceeding 10 m but not exceeding 15 m	CUM	0			0.0000000
28	105	Earth work in excavation in hard rock requiring controlled blasting including wedging, line drilling, pre shearing etc as required, setting out, levelling, dewatering (wherever required), shoring & strutting (wherever required), dressing the sides & bottom, all lifts, necessary licenses/statutory clearances for blasting, supply, storage & handling of blasting materials, stacking/disposal of surplus excavated material within a lead upto 500m, spreading / levelling of disposed materials etc all complete for following depths below ground level.		0			0.0000000
29	a	Depth from ground level but not exceeding 2 m	CUM	0			0.0000000
30	b	Depth exceeding 2 m but not exceeding 4 m	CUM	0			0.0000000
31	c	Depth exceeding 4 m but not exceeding 6 m	CUM	0			0.0000000
32	d	Depth exceeding 6 m but not exceeding 8 m	CUM	0			0.0000000
33	e	Depth exceeding 8 m but not exceeding 10 m	CUM	0			0.0000000
34	f	Depth exceeding 10 m but not exceeding 15 m	CUM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
35	106	Earth work in excavation in hard rock requiring chiselling including wedging, line drilling, pre shearing etc as required, setting out, levelling, deawtering (wherever required), dressing the sides & bottom, all lifts, stacking/disposal of surplus excavated material within a lead upto 500m, spreading / levelling of disposed materials etc all complete for following depths below ground level.		0			0.0000000
36	a	Depth from ground level but not exceeding 2 m	CUM	0			0.0000000
37	b	Depth exceeding 2 m but not exceeding 4 m	CUM	0			0.0000000
38	c	Depth exceeding 4 m but not exceeding 6 m	CUM	0			0.0000000
39	d	Depth exceeding 6 m but not exceeding 8 m	CUM	0			0.0000000
40	e	Depth exceeding 8 m but not exceeding 10 m	CUM	0			0.0000000
41	f	Depth exceeding 10 m but not exceeding 15 m	CUM	0			0.0000000
42	107	Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 250 mm thickness using/with selected materials from compulsorily excavated soil available within a lead upto 500m and compacted as specified including re-excavation of stacked earth, watering, ramming/compaction by manual/mechanical means, dressing etc all complete.for the following.		0			0.0000000
43	a	Each layer compacted so as to achieve at least 95% maximum dry density as per IS-2720 (Part-VII)	CUM	0			0.0000000
44	b	Each layer compacted so as to achieve at least 90% maximum dry density as per IS-2720 (Part-VII)	CUM	0			0.0000000
45	c	Each layer compacted so as to achieve at least 85% maximum dry density as per IS-2720 (Part-VII)	CUM	0			0.0000000
46	d	Each layer compacted so as to achieve at least 75% relative density as per IS-2720 part XIV in case of sandy soils.	CUM	0			0.0000000
47	e	Each layer compacted so as to achieve at least 70% relative density as per IS-2720 part XIV in case of sandy soils.	CUM	0			0.0000000
48	108	Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 200 mm thickness using/with selected materials directly from excavation and compacted as specified including watering, ramming/compaction by manual/mechanical means, dressing etc all complete for the following.		0			0.0000000
49	a	Each layer compacted so as to achieve at least 95% maximum dry density as per IS-2720 (Part-VII)	CUM	0			0.0000000
50	b	Each layer compacted so as to achieve at least 90% maximum dry density as per IS-2720 (Part-VII)	CUM	7670			0.1356548
51	c	Each layer compacted so as to achieve at least 85% maximum dry density as per IS-2720 (Part-VII)	CUM	0			0.0000000
52	d	Each layer compacted so as to achieve at least 75% relative density as per IS-2720 part XIV in case of sandy soils.	CUM	0			0.0000000
53	e	Each layer compacted so as to achieve at least 70% relative density as per IS-2720 part XIV in case of sandy soils.	CUM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
54	109	Extra over ST No. 101 and 103 to 107 for carriage of excavated earth/selected materials for every 1 km or part thereof beyond an initial lead of 500m.	CUM	4634			0.0168739
55	110 a	Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 200 mm thickness using/with approved borrowed soil (borrowed soil to be arranged by the bidder) and compacted as specified including supplying borrowed soil, royalty (if any), watering, ramming/compaction by manual/mechanical means, dressing etc all complete for the following.		0			0.0000000
56	a	Each layer compacted so as to achieve at least 95% maximum dry density as per IS-2720 (Part-VII)	CUM	0			0.0000000
57	b	Each layer compacted so as to achieve at least 90% maximum dry density as per IS-2720 (Part-VII)	CUM	15633			1.6752150
58	c	Each layer compacted so as to achieve at least 85% maximum dry density as per IS-2720 (Part-VII)	CUM	0			0.0000000
59	d	Each layer compacted so as to achieve at least 75% relative density as per IS-2720 part XIV in case of sandy soils.	CUM	0			0.0000000
60	e	Each layer compacted so as to achieve at least 70% relative density as per IS-2720 part XIV in case of sandy soils.	CUM	0			0.0000000
61	111	Supplying and filling sand upto any depth under floors, around foundations, plinths etc. in layers not exceeding 200 mm thickness and compacted so as to achieve at least 80% relative density as per IS-2720 (Part-XIV) including spreading, watering, ramming/compaction by manual / mechanical means, dressing, royalty (if any) etc. all complete.	CUM	1219			0.4128057
62	200	CONCRETE WORKS		0			0.0000000
63		Providing and placing concrete work including cost of labour, materials and equipment for handling, transportation, batching, mixing, placing, vibrating and curing, (excluding cost of centering, shuttering and reinforcement) with mechanised equipments like batching plant, transit mixer, concrete pump etc. complete as per drawing, specifications and as per direction of engineer in charge for the following.		0			0.0000000
64	201	Concrete of grade M5 (1 part cement, 5 part sand, 10 parts of 40 mm graded aggregate by volume) as filling course at any depth below finished floor level, under and around foundations/floors, mass fill etc.	CUM	1372			3.5734912
65	202	Concrete of grade M10 (1 part cement, 3 part sand, 6 parts of 40 mm graded aggregate by volume) as lean concrete, levelling course , mud mat under and around foundations/floors at any depth below finished floor level etc.	CUM	0			0.0000000
66	203	Concrete of grade M15 (1 part cement, 2 part sand, 4 parts of 40 mm graded aggregate by volume) as lean concrete, levelling course , mud mat under and around foundations/floors at any depth below finished floor level etc.	CUM	8			0.0248567

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
67	204	Concrete under floors, paving, plinth protection, pipe encasing etc complete with 20 mm nominal size graded aggregate at any depth below finished floor level for the following grades.		0			0.0000000
68	a	M15 Grade	CUM	0			0.0000000
69	b	M20 Grade	CUM	38			0.1203030
70	205	Providing and laying Design Mix cement concrete conforming to IS:456 & IS 10262-2009 for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in foundations/substructure, grade slab, paving, drains, under floors etc at any level below finished floor level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer conforming to IS:9103 (latest) to achieve required slump in concrete all complete as per specification & drawing for the following.		0			0.0000000
71	a	M20 Grade	CUM	62			0.1962839
72	b	M25 Grade	CUM	6358			21.3225530
73	c	M30 Grade	CUM	1800			6.2004426
74	d	M35 grade	CUM	0			0.0000000
75	206	Providing and laying Design Mix cement concrete conforming to IS:456 & IS 10262-2009 for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in superstructure at any level above finished floor level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer conforming to IS:9103 (latest) to achieve required slump in concrete all complete as per specification & drawing for the following.		0			0.0000000
76	a	M25 Grade	CUM	101			0.3458122
77	b	M30 Grade	CUM	49			0.1722309
78	c	M35 grade	CUM	0			0.0000000
79	207-A	Providing and laying Design Mix cement concrete confirming to IS:456 & IS 10262-2009 for reinforced concrete works of grade M-30 Grade in machine foundations for TG, Gas Turbine, ID/FD/PA fans, BFP, Coal mills at all elevations below/above finished floor level except TG deck and top decks supported over vibration isolation system including addition of suitable plasticizer conforming to IS 9103(latest) to achieve a slump more than 125mm in concrete as per manufacturer's recommendation with 20 mm nominal size graded aggregate in concrete all complete as per specification & drawing.	CUM	569			2.0958870

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
80	208	Providing and laying Design Mix cement concrete as per IS:456 & IS 10262-2009 of grades mentioned below for reinforced concrete works using graded aggregate in top decks of all machine foundations supported on vibration isolation system (excluding supply and installation of vibration system) and top deck of TG foundation at all levels including addition of suitable plastisizers conforming to IS9103 to achieve a slump more than 125 mm in concrete as per manufacturers recommendation, preparation of scheme for concreting, getting it approved by engineer, labour, materials, equipment, handling, batching, transporting, mixing, pumping, placing, leveling, vibrating, compacting, curing, testing, cleaning and rendering the exposed surface with cement sand mortar to give a smooth and even surface, maintaining and submitting records of concreting, petrographic examination and potential reactivity of aggregate etc. all complete as per specification, drawing and instructions of engineer, including UPV testing as directed by engineer in charge, rectification of the defects in concreting observed by ultra-sonic pulse velocity (UPV) testing by cement/epoxy grout etc, but excluding formwork, staging, reinforcement, embeddments and temperature control of concrete. Payment terms - a) After casting 75% ; b) After receipt of ultrasonic test report - 25%.		0			0.0000000
81	a	M30 grade (with 20mm nominal size graded stone aggregate)	CUM	90			0.6822640
82	b	M35 grade (with 20mm nominal size graded stone aggregate)	CUM	0			0.0000000
83	c	M40 grade (with 20mm nominal size graded stone aggregate)	CUM	0			0.0000000
84	209	Extra over St. No. 205 to 208 for controlling of temperature of fresh concrete to less than 23 degree centigrade using ice, including all related arrangements for providing, storing and mixing of ice with water, cooling of aggregates etc. All complete as per specification, drawing and instruction of engineer in charge.	CUM	0			0.0000000
85	210	Extra over ST Nos. 205 to 207 for conducting UPV test for concrete at all levels including all equipments, making necessary arrangements, staging, submission of report etc. all complete as directed by engineer in charge and as per specification.	CUM	0			0.0000000
86	211	Providing and encasing of structural steel member with concrete using nominal aggregate size of 12.5mm down. Encased member shall be wrapped with welded wire mesh/chicken wire mesh with proper lap etc. complete as per specification for the following grades. (Payment of welded wire mesh, chicken wire mesh shall be made separately)		0			0.0000000
87	a	M20 grade	CUM	5			0.0162559
88	b	M25 grade	CUM	2			0.0066501

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
89	212	Screed concrete conforming to IS 456 with coarse sand and graded hard stone aggregate 12.5mm/6 mm nominal size on the roof at any level or thickness, drains etc complete as per following.		0			0.0000000
90	a	1:2:4 (1 part cement, 2 part sand, 4 parts of aggregate by volume)	CUM	0			0.0000000
91	b	1:1.5:3 (1 part cement, 1.5 part sand, 3 parts of aggregate by volume)	CUM	0			0.0000000
92	213	Providing and laying Design Mix cement concrete as per IS:456 & IS 10262-2009 for reinforced concrete works using graded aggregate for Concrete in precast works like roof slabs/trench covers, fins, lintels, chajas, beams, columns, wall panels, facias etc.at all levels in all kinds of work including formwork/moulds, curing, rendering the top exposed surface with cement sand mortar (1:3), handling, storing, transpoting, all leads, erection without damage, setting in position with cement sand mortar (1:3), filling the gaps between adjacent precast units with M30 grade concrete or cement sand mortar (1:3) and including making of holes for bolts for fixing, welding etc.complete with graded aggregate (20/12.5/10 mm) and as per specification and drawing for following grades.		0			0.0000000
93	a	M 25 grade	CUM	0			0.0000000
94	b	M 30 grade	CUM	53			0.2270666
95	214a	Providing and laying Design Mix cement concrete as per IS:456, IS 3370 & IS 10262-2009 for reinforced concrete works using graded aggregate for Concrete in water retaining/conveying structures including addition of Crystalline water-proofing compound of approved make as per CPWD specification & suitable plastisizer cum waterproofing cement additives confirming to IS 9103 latest to achieve a slump more than 125 mm in concrete as per manufacturers recommendation and conforming to limits of permeability as per IS 2545 and specification with 20 mm nominal size graded aggregate for following grades.		0			0.0000000
96	a	M 25 grade	CUM	0			0.0000000
97	b	M 30 grade	CUM	20			0.0807437
98	c	M35 grade	CUM	0			0.0000000
99	215	Dismantling concrete work for all types of structures at all levels including stacking of servicable material to a lead of 500 m and disposal of unservicable material upto a lead of 2 km, cutting of reinforcement, labour, equipment, safety precautions etc all complete as per drawings, specification and instructions of engineer in charge.		0			0.0000000
100	a	Plain cement concrete of all grades	CUM	33			0.0191060
101	b	Reinforced cement concrete of all grades	CUM	70			0.0587709

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
102	215-A	Extra for laying concrete in or under water and/or liquid mud including cost of pumping or bailing out water and removing slush etc. complete. Note :- The quantity will be calculated by multiplying the depth measured from the sub-soil water level up to centre of gravity of concrete under sub-soil water level with quantity of concrete in cum executed under sub-soil water. The depth of centre of gravity shall be reckoned correct to 0.1m. (0.05m or more shall be taken as 0.1m and less than 0.05m ignored).	cum per metre depth	569			0.2219991
103	216	Chipping of concrete in reinforced concrete work, cutting pockets, making openings at all levels and according to shapes, disposal of waste materials upto a lead of 2 km as directed by engineer including equipment, safety precautions, making good the broken surface etc all complete as per specification, drawing, instructions of engineer in charge but excluding cutting of reinforcement .	CUDM	350			0.0067364
104	217	Extra over and above St No 216 for cutting of reinforcement , all sizes and types including labour, equipment, return of cut reinforcement to store etc all complete as per specification, drawings and instructions of engineer in charge. Measurement shall be on the cross sectional area of reinforcement cut.	SQCM	56			0.0000874
105	218	Cutting Reinforced concrete with mechanised tools like Core drilling machine etc. for cutting pockets, holes, cores in slab, beam, column or foundation as per direction of engineer in charge.	CUDM	35			0.0030587
106	219	Providing and applying curing compound of approved make where ever required as per manufacturer's specification.	SQM	0			0.0000000
107	220	Providing & laying Plum cement concrete 1:3:6 with 75% graded metal of maximum size 40 mm and 25%plums of maximum size 150 mm.	CUM	0			0.0000000
108	221	Providing and laying Design Mix cement concrete conforming to IS:456 & IS 10262-2009 for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in sloped surface of canal lining or channel cast in alternate panels with provision of expansion gap/construction joints at any level below finished floor level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer conforming to IS:9103 (latest) to achieve required slump in concrete, compaction with special equipments, etc all complete as per specification & drawing for the following.		0			0.0000000
109	a	M20 Grade	CUM	0			0.0000000
110	b	M25 Grade	CUM	0			0.0000000
111	300	FORM WORKS		0			0.0000000
112		Providing, fixing and removing formwork at any elevations for all structures, as per specifications and including all labour, material, scaffoldings and centering complete including pockets etc. complete as per drawing, specifications and as per direction of engineer in charge for the following.		0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
113	301-A	Providing centering & steel shuttering including strutting, propping, bracing etc. and removal of form for foundations, footings, base of columns etc. below finished ground floor level as per drawing, specification and instruction of engineer in charge.	SQM	12982			4.3402100
114	302-A	Providing centering & steel shuttering including strutting, propping, bracing etc. and removal of form for above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, etc. including chamfering of edges as per drawing for all heights as per specification, drawing and instruction of engineer in charge.	SQM	3865			1.5169770
115	303-A	Providing centering & steel shuttering including strutting, propping, bracing etc. and removal of form for TG superstructure (above base raft level) including preparation of scheme, designing, submission and approval of staging drawing with sufficient props, braces and ties at every tier of height of approx. 4m for all heights complete including chamfering of edges, deshuttering as per drawing, specification, and instruction of engineer in charge.	SQM	180			0.3990835
116	304	Providing, fixing and removing formwork in block-outs/pockets and openings (below 0.1 sqm plan area) at all elevations including cutting, formation of all shapes and all other operations required for making the required shape and size all complete as per specification, drawing and instruction of engineer in charge.		0			0.0000000
117	a	Upto 150 mm depth	Each	200			0.0222641
118	b	Pockets of depths more than 150mm and upto 300 mm depth	Each	1285			0.2593557
119	c	Pockets of depths more than 300mm and upto 600 mm depth	Each	436			0.1657925
120	d	Pockets of depths more than 600mm and upto 1000 mm depth	Each	100			0.0614343
121	e	Pockets of depths more than 1000mm and upto 1500 mm depth	Each	0			0.0000000
122	305	Fairface plywood with filmface/laminated formwork above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, domes, arches, circular overhead tanks etc. for all heights where ever specifically mentioned in the drawing.	SQM	0			0.0000000
123	400	REINFORCEMENT		0			0.0000000
124	401	Providing, straightening, cutting, bending, placing in position at any level, binding of mild steel reinforcements conforming to grade 1 of IS:432 part 1 in concrete including cost of reinforcement and binding wire, labour, scaffolding, transportation to & from stores etc. all complete as per specifications & drawings.	MT	0			0.0000000
125	402	Providing, straightening, cutting, bending, placing in position at any level, binding in position of steel reinforcements of TMT steel of grade Fe-500 conforming to IS:1786 including cost of binding wire, labour, scaffolding, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer.	MT	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
126	403	Providing, straightening, cutting, bending, placing in position at any level, binding in position of steel reinforcements of TMT steel of grade Fe-500D or 500EQR confirming to IS:1786 including cost of 18-gauge black soft annealed SWG wire for binding of reinforcement bars, labour, scaffolding, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer.	MT	957			31.8832481
127	404	Extra over ST No. 402 & 403 for providing fusion bonded epoxy coating by mechanised & qualified process including blast cleaning to white metal as per Swedish code, heating in induction heater, electrostatically spraying the epoxy powder, complete fusion to give minimum coating thickness of 200-300 microns, gradual cooling without affecting the properties of steel, testing as per ASTM 775 and IS:13620, flexibility & holiday test, proper packing, safe transportation, touchup at site, etc. complete to ensure proper resistance of FBE against corrosive environment. The bidder has to transport the steel from BHEL site store to vendor plant and bringing back to site and special handling during straightening, cutting, bending, placing and providing PVC coated binding wire.	MT	0			0.0000000
128	405	Providing, straightening, cutting, bending, placing in position at any level, binding in position of corrosion resistant steel -HCRM re-bars of approved make with steel of grade Fe-500 confirming to IS:1786 norms including cost of binding wire, labour, scaffolding, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer.	MT	0			0.0000000
129	406	Providing, straightening cutting, bending, placing in position at any level, binding of mild steel reinforcements in brickwork including cost of reinforcement and binding wire, labour, scaffolding etc. complete all as per specifications & drawings.	MT	0			0.0000000
130	407	Providing, straightening, cutting, bending, placing in position at any level, binding in position high yield strength steel reinforcements in brickwork including cost of reinforcement and binding wire, labour, scaffolding etc. complete all as per specifications & drawings.	MT	0			0.0000000
131	500	WATER PROOFING WORKS		0			0.0000000
132		Water proofing works including all labour, material, equipment, transportation, handling, curing, sampling, testing etc at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
133	501	Providing and laying underbed grading plaster with cement mortar 1:4 (1 cement : 4 sand) and average thickness of 25 mm including preparation of surface, batching, mixing, leveling etc. all complete.	SQM	0			0.0000000
134	502	Providing and laying in-situ light weight foam concrete insulation as per relevant IS Code in suitable panels over roofs followed by a layer of 15 mm thick cement sand plaster 1:5 (1 cement: 5 coarse sand) after the curing period of laid foam concrete and providing of expansion joint at intervals as per the recommendation of manufacturer. The insulating properties shall be such that the thermal conductivity shall not exceed 0.125 Kcal/sqm-hr deg C. Cost shall include making of fillets, cleaning & preparation of surface, expansion joints at suitable intervals etc all complete for following.		0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
135	a	Average 50 mm thickness	SQM	0			0.0000000
136	b	Average 75 mm thickness	SQM	0			0.0000000
137	c	Average 100 mm thickness	SQM	0			0.0000000
138	503	Providing and applying bitumen felt water proofing for normal treatment having bonding materials consisting of blown type conforming to IS: 702 or residual bitumen conforming to IS: 73 or a mixture of the two with one layer of felt consisting of five courses and with a minimum overlap of 75 to 100 mm of felt including preparation of surfaces etc all complete. (For description of layers refer specification)		0			0.0000000
139	a	With hessian base felt	SQM	0			0.0000000
140	b	With fiber base felt	SQM	0			0.0000000
141	504	Providing and applying bitumen felt water proofing for heavy treatment having bonding materials consisting of blown type conforming to IS: 702 or residual bitumen conforming to IS: 73 or a mixture of the two with two layers of felt each consisting of seven courses and with a minimum overlap of 75 to 100 mm of felt including preparation of surfaces etc all complete for following base felts (For description of layers refer specification):		0			0.0000000
142	a	With hessian base felt	SQM	0			0.0000000
143	b	With fiber base felt	SQM	0			0.0000000
144	505	Providing and applying bitumen felt water proofing for extra heavy treatment having bonding materials consisting of blown type conforming to IS: 702 or residual bitumen conforming to IS: 73 or a mixture of the two with three layers of felt consisting of nine courses and with a minimum overlap of 75 to 100 mm of felt including preparation of surfaces etc all complete for following base felts (For description of layers refer specification):		0			0.0000000
145	a	With hessian base felt	SQM	0			0.0000000
146	b	With fiber base felt	SQM	0			0.0000000
147	506	Providing and applying PU based water proofing treatment with one coat of polyurethane or any other equivalent material based primer with an application rate of minimum 6 sq.m per litre and two successive liquid coatings of high solids content urethane pre-polymers or equivalent material based finish coats as per relevant IS/ASTM standards to form an elastomeric membrane with overall dry film thickness 1.5 mm subject to minimum 500 gm/sqm/coat application rate. Item includes surface preparation, polyscrim cloth /fabric for edges, joints & vulnerable points etc all complete as per specifications and directions of engineer in charge.	SQM	332			0.1640676

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
148	507	Providing and laying wearing course consisting of 25mm thick plain cement concrete of grade M15 (1:2:4) with graded aggregate of 12.5mm size cast in panels of maximum size 1.2mx1.2m and reinforced with 0.56 mm dia. galvanised chicken wire mesh and sealing of joints (in grooves of 6mm X 6mm) using silicon /elastomeric compound etc all complete.	SQM	0			0.0000000
149	508	Providing and laying cement concrete chequered flooring tiles of 22 mm thickness and size 250x250 mm / 300x300 mm conforming to IS 13801 with 8 mm thick 1:4 cement mortar over the top most layer of roofing treatment in pathway and entire equipment area with fine joints including sealing of joints (silicon/elastomeric sealant) etc all complete. (Water proofing paid elsewhere)	SQM	0			0.0000000
150	509	Providing and applying two coats of bitumen grade 85/25 as per IS 702 (@ 1.7kg/sqm)with 1% antistripping compound conforming to IS 6241 in foundation, wall, column etc on concrete surfaces exposed to soil / ash including surface preparation etc. all complete.	SQM	4864			0.4023015
151	509-A	Providing and laying of with membrane system consisting of the following layers (placed in same sequence): (a)Vapor barrier, polyethylene of 1000 gauge (0.25mm) thick shall be provided below PCC. (b)1.2mm thick HDPE membrane with smooth finish shall be provided under foundation/pilecap/raft etc. All complete including materials as specified in EIL specification : B296-000-81-41-SP-9802	SQM	0			0.0000000
152	509-B	Providing and laying cover with protection board of 8mm HDPE dimple board having minimum density of 85 kg/m ³ & hardness 20 (Shore-A) over 1.5mm thick self adhesive SBS Membrane with cross laminated high density polyethylene on the sides of foundation for all below ground membranes, coatings etc ; all complete (including cost of SBS membrane, laps,etc) including materials as specified in EIL specification : B224-000-81-41-SP-0001	SQM	0			0.0000000
153	509-C	Providing and laying one layer of 0.25 mm minimum thick polyethylene sheet below slabs; all complete including laps,etc including materials as specified in EIL specification	SQM	8436			0.1711442
154	509-D	Providing and laying four coats of High Build solvent free moisture compatible coal tar epoxy cured with polyamine hardener @ 250 µ DFT each along the vertical sides of all slabs on grade including process and yard paving ; all complete including laps,etc including materials as specified in EIL specification : B224-000-81-41-SP-0001	SQM	5742			1.4274294
155	509-E	Providing and applying 30 mm thick (min) free flow premix type non shrink cementitious grout having 28 days compressive strength not less than 40 N/sqm on top & side of pile head including providing two component polyurethane liquid membrane having consumption of 1.5 kg/sqm (1.5 mm thick) over the cementitious grout as per manufacturer specification etc all complete as per EIL specification: B224-000-81-41-SP-0001	SQM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
156	510	Providing and applying water proofing with blown bitumen bonding material conforming to IS:702 of 65/25 grade in Basements, ducts, pits, tunnels etc below the ground level on the concrete surfaces exposed to soil / ash and up to 150 mm above ground level on outside of walls and top of RCC slab including preparation of surface, brick lining single brick thick with 1:4 cement mortar etc. all complete with following number of layers of bitumen felts :		0			0.0000000
157	a	2 Layers of felt for depth up to 5m below ground level for floors	SQM	0			0.0000000
158	b	3 Layers of felt for depth beyond 5m below ground level for walls	SQM	0			0.0000000
159	511	Providing and mixing water proofing compound conforming to IS:2645 in concrete or cement mortar all complete.	KG	0			0.0000000
160	512	Anti termite chemical treatment of soil with Chloropyrifos emulsifiable concentrates (1%) conforming to IS :8944 all complete.	SQM	0			0.0000000
161	513	Providing and applying concrete structures two coats of ERPB (Epoxy resin based anticorrosive and chemical resistant paint) over a coat of CPCL (concrete penetrating bipolar corrosion inhibitor) with 300 to 325 micron DFT for protection of concrete against carbonation and chloride penetration in saline/marine environment all complete of approved make and as per manufacturer's recommendation	SQM	0			0.0000000
162	514	Providing and applying IP net coating system to exposed concrete surfaces of approved make and as per manufacturer's recommendation.	SQM	0			0.0000000
163	515-A	Providing and applying Over-deck insulation cum waterproofing system in 6 layers as follows: 1st layer- One coat of Polyurethane primer 2nd layer-Minimum 1.5 mm DFT (Dry Film Thickness) single component Polyurethane (PU) water proofing coating – base coat 3rd layer- 40 mm thick machine sprayed Polyurethane Foam insulation 4th layer Minimum 0.8 mm DFT (Dry Film Thickness) single component Polyurethane water proofing coating -top coating 5th layer Geo-textile membrane 6th layer Plain Cement Concrete (PCC) top protective layer (minimum 50mm thick, reinforced with 24 G wire netting, in chequered finish laid in panels of maximum 2500mm X 2500 mm size with required slope for roof drainage.). The work shall include base surface preparation, providing scrim cloth etc all complete as per EIL specification no. B957-420-81-46-JS-7410. (Payment for the 6th layer PCC top protective layer shall measured and paid separately)	SQM	80			0.0478070
164	515-B	Providing and laying wearing top protective finishing layer of PCC (minimum 50 mm thick) with chicken wire mesh shall be laid over Geo textile member in panels including curing, making grooves, khura etc. all complete as per EIL specifications no. B957-420-81-46-JS-7410.	CUM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
165	515-C	Providing and applying Polyurethane water proofing treatment over parapets/ vertical surfaces, gutter including surface preparation, continuous angular fillet/coving of minimum 75mm x 75mm size with PCC or cement sand mortar (in 1: 3 proportion) at junction of horizontal and vertical surfaces, applying primer, Polyurethane water proofing coating (minimum 1.5mm DFT), Scrim cloth reinforcement, Sand sprinkling and 12mm thick cement plastering over the water proofing coating etc. all complete as per ELL specification no. B957-420-81-46-JS-7410.	SQM	0			0.0000000
166	600	JOINTS AND FILLERS		0			0.0000000
167		Joints & fillers including all labour, material, equipment, transportation, handling etc at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
168	601	Supplying & installation of bitumen impregnated fibre board conforming to IS 1838 as joint filler at joints in concrete including nailing, coating of both faces with coal tar pitch/bitumin etc. all complete.		0			0.0000000
169	a	12 mm wide joints.	SQM	0			0.0000000
170	b	20 mm wide joints.	SQM	2580			0.9998549
171	c	25 mm wide joints	SQM	309			0.1740796
172	d	50 mm wide joints	SQM	0			0.0000000
173	601-A	Providing 20mm wide Expansion Joints in pavement slabs including cleaning the joints of all loose material, filling with 20mm thick impregnated fibre boards for the full depth of slab except for 25mm depth from top and sealing the top 25mm with approved Joint Sealing Compound as per IS code etc (Including providing and laying MS dowel bar Grade S 240, painting as required, GI pipe and cap and cotton waste) all complete as per drawings 7-65-00404 specifications and directions of Engineer-in-Charge.	RM	500			0.1681725
174	602	Providing and applying polysulphide based sealant conforming to IS:12118 in expansion joints in concrete including cleaning of joints, raking out groove, application of primer, scaffolding etc. all complete for following size grooves:		0			0.0000000
175	a	12mm X 25mm	RM	0			0.0000000
176	b	20mmX25mm	RM	1500			0.7248831
177	c	25mmX25mm	RM	0			0.0000000
178	d	50mmX25mm	RM	0			0.0000000
179	603	Supplying and filling in position hot applied bitumin sealing compound (Grade A) conforming to IS 1834 including cleaning, mixing, heating, pouring/injecting sealing compound in gaps in joints including application of primer etc. all complete.		0			0.0000000
180	a	10mm X 40mm	RM	0			0.0000000
181	b	12mm X 25mm	RM	0			0.0000000
182	c	20mmX25mm	RM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
183	604	Supplying and filling in position hot applied bitumin sealing compound (Grade B) conforming to IS 1834 including cleaning, mixing, heating, pouring/injecting sealing compound in gaps in joints including application of primer etc. all complete.		0			0.0000000
184	a	10mm X 40mm	RM	0			0.0000000
185	b	12mm X 25mm	RM	0			0.0000000
186	c	20mmX25mm	RM	0			0.0000000
187	605	Providing and sealing of joints with premium grade silicon sealant (Silpruf of GE silicons or approved equivalent) including cleaning of joints, raking out groove, joint filler tapes, application of primer, curing, scaffolding etc. all complete as per manufacturer's recommendation for following size groove:		0			0.0000000
188	a	25mmX25mm	RM	0			0.0000000
189	b	50mmX25mm	RM	0			0.0000000
190	606	Providing and fixing PVC water stops in joints conforming to IS 12200 & IS 15058 all complete for the following:		0			0.0000000
191	a	150 mm wide and 8 mm thick	RM	0			0.0000000
192	b	230 mm wide and 8 mm thick	RM	0			0.0000000
193	c	150 mm wide and 6 mm thick	RM	0			0.0000000
194	d	230 mm wide and 5 mm thick	RM	180			0.0182185
195	607	Providing and fixing copper water stops in joints of deep underground structure all complete for the following:		0			0.0000000
196	a	150 mm wide and 8 mm thick	RM	0			0.0000000
197	b	230 mm wide and 8 mm thick	RM	0			0.0000000
198	700	MS EMBEDMENTS		0			0.0000000
199		Embedments including all labour, material, equipment, transportation, handling etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
200	701	Supply, fabricating and fixing of mild steel embedments, inserts, pipe sleeves, angle pieces, rungs of various diameters, plates of dimensions as required etc. including welding, bolting, cutting, drilling, scaffolding, setting etc. all complete.	MT	34			1.0353099
201	702	Same as above with BHEL supplied material free of cost including loading, transportation, unloading etc. all complete from BHEL store to plant site.	MT	8			0.0601338
202	703	Fixing of embedments, inserts, pipe sleeves, angle pieces, anchor bolts of various diameters, plates of dimensions as required etc. including scaffolding, setting in position, transportation from BHEL site stores to work spot etc. all complete.	MT	0			0.0000000
203	704	Supply, Fabrication, transportation, delivery at site and erection, installation and alignment of mild steel foundation bolt assembly conforming to IS:2062 and grade 1 of IS:432 in concrete along with nuts, lock nuts (as per IS:1363, 1364 and IS:3138), washers, anchor plates, stiffner plates, protective tape, pipe sleeves, templates etc. including welding, cutting, grinding, threading, drilling etc. all complete.	MT	5			0.1869637
204	704	Supplying, fabricating, erecting and installing following items in concrete/brickwall for all kind of works, including setting material in concrete, layout, scaffolding, cutting, forming, grinding, drilling, bolting, welding, jointing, testing etc. all complete.		0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
205	b	PVC pipes / conduits of all diameters	kg	200			0.0208076
206	c	UPVC pipes / conduits of all diameters	kg	500			0.0863513
207	d	Expansion anchor fasteners (galvanised) of HILTI make(HUD-1 Universal Fastners) or equivalent of safe tensile capacity as specified below for brick work with expansion sleeve of A6 polyamide:		0			0.0000000
208	i	8mm Dia	Nos	50			0.0016646
209	ii	10mm Dia	Nos	50			0.0017947
210	iii	12mm Dia	Nos	50			0.0017686
211	iv	14mm Dia	Nos	25			0.0011964
212	e	Expansion fasteners (mechanical galvanised) of HILTI make or equivalent of safe tensile capacity as specified below for concrete work with expansion sleeve of stainless steel:		0			0.0000000
213	i	HST M8	Nos	50			0.0034072
214	ii	HST M10	Nos	50			0.0048378
215	iii	HST M12	Nos	50			0.0085571
216	iv	HST M16	Nos	50			0.0149814
217	v	HST M20	Nos	50			0.0303010
218	f	Chemical Expansion fasteners (galvanised)of HILTI make or equivalent of safe tensile capacity as specified below for concrete work with anchoring rod,nuts,washers,chemicals all complete,etc:		0			0.0000000
219	i	HAS-E5.8 M8	Nos	50			0.0092594
220	ii	HAS-E5.8 M10	Nos	50			0.0109240
221	iii	HAS-E5.8 M12	Nos	50			0.0147474
222	iv	HAS-E5.8 M16	Nos	50			0.0247350
223	v	HAS-E5.8 M20	Nos	25			0.0199622
224	vi	HAS-E5.8 M24	Nos	25			0.0259964
225	705	Placing, locking and releasing of Vibration Isolation spring modules over the foundation at all elevations including providing all assistance under the supervision of the supplier, transportation from BHEL store, necessary staging, platforms, leveling, alignment etc. all complete.	Each	0			0.0000000
226	800	GROUTING		0			0.0000000
227		Grouting including all labour, material, equipment, roughening surface, cleaning, ramming, curing etc. at any level unless otherwise specified as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
228	801	Providing & grouting with cement slurry mix of approved ratio using pressure pump for water retaining concrete structures as per approved procedure including cost of nipples/ nozzles, cement, admixture, curing, pressure pumps, slurry agitator etc. all complete. Cost shall include fixing of nipples at minimum 500 mm centre to centre spacing, cutting of nipples after completing of grouting, making good of the nipple hole with appropriate non-shrink cement paste, water tightness test etc. all complete wherever specified in the drawing.	SQM	0			0.0000000
229	802	Providing & grouting of pocket holes, pipe sleeves under base plates, machinery, pipe supporting structures etc. with mix 1:1 (1 cement :1 sand) using non shrink admixture etc. all Complete.	CUM	6			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
230	803	Providing & grouting of pocket holes, pipe sleeves and under base plate of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with mix 1:1:2 (1 cement : 1 coarse sand : 2 aggregate of 6 mm down graded stonechips) using non shrink admixture. (Cost of all material and cleaning the pocket by compressed air shall be in the scope of the contractor).	CUM	0			0.0000000
231	804	Providing & grouting of pocket holes, pipe sleeves and under base plates of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with ConbextraGP-1 or equivalent . (Cost of all material and cleaning of the pockets by compressed air shall be in the scope of the contractor).	CUM	12			0.2268939
232	805	Providing & grouting of pocket holes, pipe sleeves and under base plates of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing, etc. all complete with Conbextra GP-2 or equivalent . (Cost of all material and cleaning of the pockets by compressed air shall be in the scope of the contractor).	CUM	0			0.0000000
233	900	DOORS, WINDOWS, VENTILATORS, LOUVERS		0			0.0000000
234		Doors, windows, ventilators, louvers, roof ventilators, rolling shutters, partitions including all labour, material, equipments, transportation, handling, preparation of working drawings etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
235	901	Providing and fixing wooden frame conforming to IS 4021 made of best quality seasoned CP teakwood free from large or loose knots, cracks or other defects including sand paper smoothing, hold fasts, beading, primer and finish painting / polishing etc. all complete with proper wood joinery, accurately set to required lines or levels and rigidly secured in place. (Finish painting / polishing paid separately)	CUM	0			0.0000000
236	902	Providing and fixing teakwood frame panel door shutter as per IS 1003 with 35 mm x 150 mm vertical rail & 35mm x 125 mm horizontal rail and 12 mm thick interlocked panels of teakwood with proper wood joinery including beading, preparation of working drawings, godrej or equivalent make mortice lock with handels on both sides, approved ISI mark anodised fittings like door stopper, 300mm long tower bolts, 16x300mm long aldrops, 125mm long handles on both sides etc. butt hinges, sliding bolt, knobs, (all fitting shall be anodised aluminium color dyed), screws, primer and finish painting / polishing etc. all complete. (Finish painting / polishing paid separately)	SQM	0			0.0000000
237	903	Providing, fitting and fixing wooden flush door shutter as per IS 2202 part II, 35mm thick block board, 35x12 mm thick teakwood beading all around including preparation of working drawings, all fixtures and hardwares & fittings including surface finish as per EIL spec. no. 6-75-0003.	SQM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
238	904-A	Providing and fixing single or double steel door shutters with 45mm thk flush design shutter comprising of two outer sheets of 18 gauge steel sheets rigidly connected and reinforced inside with continuous vertical 20 gauge stiffeners, spot welded in position at not more than 150mm on centres including void filled with mineral wool (density as per specification), all fittings, Godrej or equivalent make mortice lock with handle on both sides, shop and final painting etc all complete.	SQM	0			0.0000000
239	904-B	Providing and fixing single or double steel door frame 125mm x 60mm with 16 gauge M.S. sheets galvanized steel pressed & profiled to required size with 3mm thick MS flat spacers welded towards jamb size, 3mm thick MS pad plate and 18 SWG galvanized steel mortar guard welded at all hinge & lock locations including the vertical members provided with 20mm x 20mm x 3mm welded MS angle threshold embedded in flooring, hollow frame filled up with concrete and "D" profile EPDM gasket etc. all complete as per EIL spec. no. 6-65-0004, 7-75-0070 & 7-75-0071.	SQM	0			0.0000000
240	905-A	Providing and fixing single or double steel door shutters with 18 gauge M.S. sheets shutter with all hardwares including final painting etc all complete as per EIL spec. no. 6-65-0004, 7-75-0070 & 7-75-0071.	SQM	30			0.1643745
241	906-A	Providing and fixing anodized extruded aluminium doors, windows, partition & ventilators (single or double shutter & frame) conforming to IS:1948, IS:1949 fabricated from extruded sections of HINDALCO/JINDAL or equivalent make having as per IS:1285, IS:733 and anodized and electro color coating of required shade as per IS1868 (minimum powder coating of 50 micron), fixed with rawl plugs, expansion fasteners, SS screws/fixing clips necessary filling of gaps at Junctions, at top, bottom & sides with required PVC/neoprene felt for bi-metallic protection, wire mesh etc. Glazing shall be 5 mm thick toughened glass including snap fit type beading, concealed screws, fixtures, Godrej or equivalent make Mortice lock with handle on both sides, etc all complete as per EIL Standard Nos. 6-75-0004, 7-75-0014, 7-75-0015, 7-75-0016, 7-75-0017. Aluminium section shall be smooth, free of stains, straight, mitred & jointed mechanically wherever required. (Glazing shall be paid separately).	kg	20			0.0046297
242	907	Providing and fixing soild power coated steel fire doors with vision panel (single or double shutter) confirming to IS:3614 and panic devices, shall be 45mm thk flush design comprising of two outer sheets of 18 gauge steel sheets rigidly connected and reinforced including all fittings, hardwares and resin bonded insulation infill etc. all complete as per specificaiton no. 6-75-0011. TAC requirements Minimum ratings shall be 2 Hrs.	SQM	30			0.1317118
243	908	Providing and fixing steel windows/ventilator with steel sections as per IS:1038, IS:1361 & IS:7452 latest revision.including all fittings, metal beadings, hold fasts, shop and final painting ,glazing etc. all complete. (Glazing shall be paid separately)		0			0.0000000
244	a	openable type	SQM	0			0.0000000
245	b	fixed type	SQM	12			0.0114421

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
246	909	Providing and fixing anodised aluminium work of Jindal, Hindalco or other equivalent approved make for door frames, windows, ventilators, partitions, railing etc with extruded standard tubular and other sections including all fittings & fixtures and accessories of approved make conforming to IS733 and IS1285, anodised and electro color dyed to required shade according to IS 1868 (minimum 50 micron), fixed with rawl plugs, expansion fasteners, SS screws or with fixing clips, including necessary filling of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt for bi-metallic protection etc.including preperation of working drawings, aluminium cleat angle, aluminium snap-on-beading for glazing/panelling, stair case tread nosing, with all fittings and fixtures (like tower bolts, handles, door stopper with rubber shoes, 'L' drops, stays, floor springs, hydraulic door closures etc.), CP brass/stainless steel screws, providing and fixing hinges/pivots, and making provision for fixing of fitting wherever required including cost of PVC/neoprene gasket, all complete as per drawing, specification and instructions of engineer in charge (Glazing and panelling shall be paid seperately).Weight of aluminium section only shall be measure.	Kg	300			0.0794328
247	910	Providing and fixing of aluminium composite panel(ACP) of following thickness with PVDF or polyester coating for interior partition of approved shade ,color etc all complete as per specification.		0			0.0000000
248	a	3mm	SQM	0			0.0000000
249	b	4mm	SQM	0			0.0000000
250	c	5mm	SQM	0			0.0000000
251	911	Providing and fixing of door closers as per IS 3564 ,of approved make & quality all complete of following type :		0			0.0000000
252	a	Over head hydraulic door closures	Each	0			0.0000000
253	b	Floor mounted Hydraulic door closers	Each	0			0.0000000
254	912	Providing and fixing pressed steel frames fabricated from 16 gauge M.S sheet mortised, reinforced drilled and tapped for hinges and locks bolts strikes, hold fasts adjustable floor anchors, floor tiles/weather bars ,paintings etc all complete as per specifications.	Kg	75			0.0051109
255	913	Providing and fixing in position MS rolling shutters shall conform to IS: 6248 and shall be constructed with interlocking lath sections formed out of cold rolled 0.9mm thick, 80mm wide steel strips for shutter width upto 3.5 M, or 1.25mm thick, 80mm wide steel strips for shutter width beyond 3.5 M, jointless MS channel section of 3.15mm thickness for guide, MS girders & bottom rail, shutter suspension stud with pully & cage, top rolling springs, locking arrangement etc. all complete as per manufacturers approved drawings. The entire shutter including all accessories shall be painted with 2 or more coats of approved quality &shade synthetic enamel paint over a coat of approved quality red oxide zinc chromate primer etc, all complete as per IS 6248 and specification of approved make of following types: The bottom lath shall be coupled to a lock plate fabricated from 3mm thick galvanised steel plate and securely rivetted with stiffening angles. (partly coiled and lath/full lath). Rate shall be inclusive of all material, fittings, finishes, painting etc all complete		0			0.0000000
256	a	Hand Operated	SQM	0			0.0000000
257	b	Mechanically Operated	SQM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
258	c	Electrically operated	SQM	12			0.0188641
259	914	Providing and fixing PVC doors(25 thk double skin) of sintex or equivalent make including all fitting & fixtures as per specification, drawing and instructions of engineer in charge.	SQM	0			0.0000000
260	915	Providing, fixing and fitting of glazing of first grade class in steel/aluminium/wooden frames, where ever required, cleaning after fixing including hardware, gaskets, clips, beadings etc. all complete.		0			0.0000000
261	a	4 mm thick clear sheet glass	SQM	0			0.0000000
262	b	4 mm thick clear float glass	SQM	10			0.0065752
263	c	5.5 mm thick clear float glass	SQM	0			0.0000000
264	d	6 mm thick wired glass	SQM	0			0.0000000
265	e	6mm thick Polycarbonate sheet multi (twin) wall fire retardant and ultra violet resistant with sealed open edges.	SQM	0			0.0000000
266	f	4 mm thick ground glass	SQM	0			0.0000000
267	g	6 mm thick tinted heat reflecting type float glass	SQM	0			0.0000000
268	h	5 mm thick toughened glass	SQM	50			0.0509525
269	i	Two nos. 6 mm thick clear toughened float glass hermetically sealed and separated by 12 mm thick air gap for thermal insulation (only single elevation area to be measured)	SQM	0			0.0000000
270	j	Two nos. 6 mm thick tinted toughened float glass hermetically sealed and separated by 12 mm thick air gap for thermal insulation (only single elevation area to be measured)	SQM	0			0.0000000
271	k	One outer 6mm thick tinted heat-reflecting type float glass and one inner 6mm thick plain float glass hermetically sealed and seperated by 12 mm thick gap for thermal insulation (only single elevation area to be measured).	SQM	0			0.0000000
272	l	6 mm thick laminated glass	SQM	0			0.0000000
273	916	Supplying and fixing weather stripping of approved make and quality to doors as per instructions of engineer in charge and specification complete.	RM	0			0.0000000
274	917	Providing and fixing 12 mm thick BWP particle board , decorative veneer (prelaminated) on both sides, as panels in aluminium framed door shutter, fixed with necessary snap-on-beading etc. all complete (excluding aluminium works).	SQM	0			0.0000000
275	918	Providing and fixing steel louvered window with ISMC 100 frame all round including verticals with 18G pressed steel louvers, painting etc. all complete.	SQM	0			0.0000000
276	919	Providing and fixing 1 mm thk. MS sheet sliding shutters with frame and diagonal braces of 50X50X6 angle iron, 3 mm MS gusset plates at junction and corners, 25 mm dia pulley, 50X50X6 angle and T-iron guide at the top and bottom respectively including painting etc. all complete.	SQM	0			0.0000000
277	920	Roof skylight structure for atrium with 6mm thick Polycarbonate sheet multi (twin) wall fire retardant and ultra violet resistant with sealed open edges for sky light for approved shape like dome, pyramidal etc. Joints are properly sealed with sealent, screws with pvc cap, self tapping screws, epdm rubber gasket.etc all complete as per detailed drawing and specification.	SQM	0			0.0000000
278	1000	BRICKWORK		0			0.0000000
279		Brickwork masonry including all labour, material, equipment, transportation, handling, scaffolding etc. at all levels as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
280	1001	Providing brick work in cement mortar 1:6 (1 part cement 6 parts coarse sand) in walls, chambers etc. in thickness varying from 230mm to 460mm at all depths, places and positions below plinth including raking out joints, curing, scaffolding etc. complete excluding plastering and painting.		0			0.0000000
281	a	Using Fly Ash Brick masonry of minimum Class 5.0 as per IS: 12894	CUM	0			0.0000000
282	b	Using clay ash bricks as per IS 13757 with crushing strength of 75 kg/cm2 and minimum percentage of fly ash 25%	CUM	0			0.0000000
283	c	Using burnt clay bricks of class designation 7.5 of nominal dimension	CUM	0			0.0000000
284	d	Using burnt clay bricks of class designation 5.0 of nominal dimension	CUM	0			0.0000000
285	1001-A	Providing brick work in cement mortar 1:4 (1 part cement 4 parts coarse sand) in walls, chambers etc. in thickness varying from 230mm to 460mm at all depths, places and positions below plinth including raking out joints, curing, scaffolding etc. complete excluding plastering and painting.		0			0.0000000
286	a	Using Clay Brick/flyash masonry shall be of Class 5.0 as per IS 1077 as per IS 2185 (Part-3)	CUM	51			0.1335236
287	b	Using clay ash bricks as per IS 13757 with crushing strength of 75 kg/cm2 and minimum percentage of fly ash 25%		0			0.0000000
288	c	Using burnt clay bricks of class 10.0 as per IS 1077		0			0.0000000
289	d	Using Pulverized Fuel Ash-Lime bricks of Class 10.0 as per IS:12894		0			0.0000000
290	1002	Providing brick work in cement mortar 1:6 (1 cement 6 coarse sand) in walls, chambers etc. in thickness 230mm at all heights, places and position above plinth including raking out joints, curing, scaffolding etc complete excluding plastering and painting.		0			0.0000000
291	a	Using fly ash lime bricks confirming to IS 12894 with crushing strength of 75 kg/cm2	CUM	0			0.0000000
292	b	Using clay ash bricks as per IS 13757 with crushing strength of 75 kg/cm2 and minimum percentage of fly ash 25%	CUM	0			0.0000000
293	d	Using burnt clay bricks of class designation 5.0 of nominal dimension (with minimum compressive strength as 5 N/mm ²)as per IS 1077.	CUM	10			0.0357994
294	1002 -A	Providing AAC block masonry Grade-1 confirming to IS Code IS:2185 (Part-3) (minimum compressive strength as 5 N/mm ²) with premixed thin bed mortar as per ASTM C1660 in walls, chambers etc including provision for bond beam etc.as per IS 6041 , all heights, places and position below plinth including raking out joints, curing, scaffolding etc complete excluding plastering and painting, as per specification and as instructions of engineer in charge.	Cum	0			0.0000000
295	1002 -B	Providing AAC block masonry Grade-1 confirming to IS Code IS:2185 (Part-3) (minimum compressive strength as 5 N/mm ²) with premixed thin bed mortar as per ASTM C1660 in walls, chambers etc including provision for bond beam etc.as per IS 6041 , all heights, places and position above plinth including raking out joints, curing, scaffolding etc complete excluding plastering and painting, as per specification and as instructions of engineer in charge.	Cum	0			0.0000000
296	1003	Providing brick work in cement mortar 1:4 (1 cement 4 coarse sand) in partition walls , chambers etc. in thickness 115mm at all heights, places and position above or below plinth/graded level including providing two nos. 6 mm diameter MS bars at every third layer, raking out joints, curing, scaffolding etc complete excluding plastering and painting as per specification.		0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
297	a	Using fly ash lime bricks confirming to IS 12894 with crushing strength of 75 kg/cm2	SQM	0			0.0000000
298	b	Using clay ash bricks as per IS 13757 with crushing strength of 75 kg/cm2 and minimum percentage of fly ash 25%	SQM	0			0.0000000
299	d	Using burnt clay bricks of class designation 5.0 of nominal dimension	SQM	0			0.0000000
300	1003-A	Providing brick work in cement mortar 1:6 (1 cement 6 coarse sand) in partition walls , chambers etc. in thickness 115mm at all heights, places and position above or below plinth/graded level including providing two nos. 6 mm diameter MS bars at every third layer, raking out joints, curing, scaffolding etc complete excluding plastering and painting as per specification.		0			0.0000000
301	a	Using Clay Brick masonry/fly ash masonry shall be of Class 5.0 as per IS 1077(with minimum compressive strength as 5 N/mm 2)	SQM	36			0.0159552
302	b	Using clay ash bricks as per IS 13757 with crushing strength of 75 kg/cm2 and minimum percentage of fly ash 25%		0			0.0000000
303	c	Using burnt clay bricks of class 10.0 as per IS 1077		0			0.0000000
304	d	Using Pulverized Fuel Ash-Lime bricks of Class 10.0 as per IS:12894		0			0.0000000
305	1004	Providing brick soling including spreading of earth, ramming, watering including 25mm thick cushion of sand complete but excluding excavation and disposal of surplus earth (excavation and disposal of surplus earth shall be measured under applicable item). Using brick on edge.		0			0.0000000
306	a	Using fly ash lime bricks confirming to IS 12894 with crushing strength of 75 kg/cm2	SQM	0			0.0000000
307	b	Using clay ash bricks as per IS 13757 with crushing strength of 75 kg/cm2 and minimum percentage of fly ash 25%	SQM	0			0.0000000
308	c	Using burnt clay bricks of class designation 7.5 of nominal dimension	SQM	0			0.0000000
309	d	Using burnt clay bricks of class designation 5.0 of nominal dimension	SQM	0			0.0000000
310	1005	Providing brick soling including spreading of earth, ramming, watering including 25mm thick cushion of sand complete but excluding excavation and disposal of surplus earth (excavation and disposal of surplus earth shall be measured under applicable item.)- Using flat bricks.		0			0.0000000
311	a	Using fly ash lime bricks confirming to IS 12894 with crushing strength of 75 kg/cm2	SQM	0			0.0000000
312	b	Using clay ash bricks as per IS 13757 with crushing strength of 75 kg/cm2 and minimum percentage of fly ash 25%	SQM	0			0.0000000
313	c	Using burnt clay bricks of class designation 7.5 of nominal dimension	SQM	0			0.0000000
314	d	Using burnt clay bricks of class designation 5.0 of nominal dimension	SQM	0			0.0000000
315	1006	Breaking of existing brick work at all levels including plastering, removing the rubbish up to a distance of 500 m including transportation, loading, unloading etc. all complete as directed by the engineer.	CUM	0			0.0000000
316	1007	Providing and encasing of structural steel member with masonry work around flanges, webs etc. and filling the gap between steel and masonry by minimum 12mm thick mortar. Encased member shall be wrapped with chicken wire mesh with 50mm lap etc. complete as per specification. (Chicken wire mesh to paid separately)	CUM	0			0.0000000
317	1008	Providing and laying 75 mm thick bed of dry brick aggregate including of excavation, disposal of surplus earth spreading of earth, ramming, watering etc. complete in all respects as directed by the engineer.	SQM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
318	1009	Making openings in existing brick wall or partition wall including making good the broken edges/surface with cement mortar etc. complete.	CUM	0			0.0000000
319	1010	Supply and placing in position mild steel wire fabric of square mesh 25 mm size and wire diameter of 2 mm for encasing of steel sections in concrete including cutting, bending, fixing etc. complete.	SQM	0			0.0000000
320	1011	Filling existing brick wall/ partition wall opening at all level including making good the broken edges/surface with cement mortar, painting, finishing to match with existing finishing, scaffolding/supporting at any level, removal of debris upto a lead of 1 km including loading, unloading, transportation etc. all complete.	SQM	0			0.0000000
321	1012	Providing and filling brick bats in soak pits all complete.	CUM	0			0.0000000
322	1100	DAMP PROOF COURSE		0			0.0000000
323		Damp proof course including all labour, material, equipment, transportation, handling, shuttering, centering, curing etc at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
324	1101-A	40mm thick DAMP PROOF COURSE with plain cement concrete of grade M20 (nominal mix) with 10mm & down size graded crushed stone aggregates shall be provided as damp-proof course at plinth level of all masonry walls. Integral water proofing compound (confirming to IS: 2645) as per manufacturer's specifications shall be mixed with concrete. Two coats of hot bitumen (Grade VG10 conforming to IS:73) @ 1.7 Kg/sq.m for each coat on top surface shall be provided as per specifications including cleaning, watering the top surface of walls, centering, shuttering, placing, tamping, curing, sprinkling an even layer of dry sharp sand over the hot bitumen before hardening as specified and directed.	SQM	73			0.0170502
325	1200	CEMENT MORTAR PLASTER		0			0.0000000
326		Cement mortar plaster including making grooves wherever required including all labour, material, scaffolding, curing etc at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
327	1201	Providing 18mm thick plaster in two layers outside the building/boundary wall in cement mortar 1:4 on walls with waterproof compound (cement mortar mixed with approved acrylic waterproof compound @ 1 Kg. per 50 Kg. of cement), finished to a smooth finish including providing 3mmx3mm size grooves at junctions of two dissimilar materials all complete.	SQM	395			0.0359581
328	1202	Providing 12mm thick plaster inside the building/boundary wall in cement mortar 1:4 on walls finished to a smooth finish as per specification all complete.	SQM	425			0.0256453
329	1202-A	Providing 15mm thick plaster inside the building/boundary wall in cement mortar 1:4 on walls finished to a smooth finish as per specification all complete.	SQM	20			0.0025439
330	1203	Providing 12mm thick plaster in cement mortar 1:6 on walls with rough finish all complete.	SQM	0			0.0000000
331	1204	Providing 6mm thick plaster on ceiling in cement mortar 1:3 finished to a smooth all complete.	SQM	119			0.0068093

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
332	1205	Providing 12mm thick plaster in walls, drains/culverts with a paste of neat cement @ 1kg/sqm and rubbed smooth with trowel etc. all complete.	SQM	0			0.0000000
333	1206	Providing and making decorative plaster of all types and design on walls, ceilings, arcs, columns with various thickness upto 18 mm including finishing all complete.	SQM	0			0.0000000
334	1207	Forming groove of uniform size from 12X12 mm upto 20X15 mm in plastered surface as per approved pattern, using wooden battens nailed to the under layer, including removal of wooden battens, repair of the edges of plaster panel and finishing the groove etc. complete as per specification, drawing and the instructions of engineer in charge.	RM	0			0.0000000
335	1208	Providing drip coarse on plastered surface at all elevations for all type of work such as chajjas, parapet, projections etc. including scaffolding, finishing etc. complete with all labour, tools and plants as per specification, drawing and instructions of engineer in charge.	RM	0			0.0000000
336	1209	Providing and laying encasement to box type steel beams at all levels with lath plaster 50 mm nominal thickness with cement plaster (1:4) over chicken wire mesh including all labour, materials, equipment, handling, transporting, mixing, placing, leveling, curing and cleaning, finishing the exposed surfaces etc including centering and shuttering all complete as per specification, drawing and instructions of engineer in charge (chicken wire mesh to be paid separately)	SQM	0			0.0000000
337	1210	Ruled pointing in masonry in CM 1:3 (1 cement and 3 fine sand) including raking out joints, curing etc. complete.	SQM	0			0.0000000
338	1300 FINISHES TO CONCRETE / PLASTERED SURFACES			0			0.0000000
339		Finishes, painting to concrete, plastered surfaces including all labour, material, equipment, surface preparation, scaffolding etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
340	1301	Two or more coats of white wash/ colour wash as per IS 627 of approved brand and manufacture to give an even shade including a priming coat as per specifications.	SQM	0			0.0000000
341	1302	Two or more coats of Exterior masonry paint (water or solvent base) of special resins, adhesives and additives mixed with fine, hard stone aggregate and suitable pigment. The paint shall be applied on a coat of primer over dried, prepared plaster surface as manufacturers guidelines. The final finished coating shall be fungus resistant, UV resistant, water repellent, alkali resistant and extremely durable with color fastness as per specification.	SQM	0			0.0000000
342	1303	Providing and applying two or more coats of oil bound distemper as per IS 428 of approved brand, shade and manufacture to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface as per manufacturers guideline.	SQM	0			0.0000000
343	1304	Two or more coats of acrylic distemper of approved brand and manufacture to give an even shade including a priming coat with distemper primer complete and as per EIL specification no 6-75-0007.	SQM	200			0.0057117

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
344	1305	Providing and applying two or more coats of Plastic emulsion paint as per IS 5411 of approved brand, shade and manufacture to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface as per manufacturers guideline and as per EIL specification no 6-75-0007.	SQM	652			0.0307960
345	1306-A	Providing and applying 2 or more coats of chemical/abarasion resistant NOVALAC epoxy paint of approved brand and colour to floors including preparation of surface to receive paint, providing and applying primer etc. complete all as per manufacturer's recommendations and as approved by engineer and as per EIL specification no 6-75-0007.	SQM	0			0.0000000
346	1306-B	Providing and applying 2 or more coats of chemical/abarasion resistant NOVALAC epoxy paint of approved brand and colour to walls and ceiling including preparation of surface to receive paint, providing and applying primer etc. complete all as per manufacturer's recommendations and as approved by engineer, at all heights above or below grade level, as per EIL specification no 6-75-0007.	SQM	0			0.0000000
347	1307	Two or more coats of fire resistant transparent paint as per IS 162 on all woodwork over french polish as per IS 348 or flat oil paint as per IS 137 of approved grade and manufacture to give an even shade as per specifications.	SQM	0			0.0000000
348	1308	Two or more coats of black anti-corrosive bitumastic painting of approved brand and manufacture to give an even shade complete.	SQM	0			0.0000000
349	1309	Two or more coats of synthetic enamel paint of approved make made from synthetic resins and drying oil with rutile titanium dioxide and other selected pigments to give smooth, hard, durable & glossy finish to all interior and exterior surfaces complete.	SQM	0			0.0000000
350	1310	Providing and applying 3 coats of water proof cement paint of approved make and color on exterior surface at all heights including material, labour, scaffolding, curing etc including primer coat complete as per specification.	SQM	0			0.0000000
351	1311	Providing and applying acrylic based textured finish, for external applications shall consist of quartz and silica aggregate, inorganic pigments and other additives to form a crack free, flexible, tough, waterproof coating. The final finish shall have UV resistance, fungus, bacterial resistance properties all complete with grooves filled with sealant of matching color and shade as per specification/drawing/approval of engineer in charge and as per EIL specification no 6-75-0007.	SQM	0			0.0000000
352	1312	Providing and applying 2 mm thick plaster of paris punning on walls including preparation of surface, staging, etc. to achieve a smooth even surface all complete as per specification and as directed by Engineer and as per EIL specification no 6-75-0007.	SQM	242			0.0090386
353	1313	Providing and applying ready made Epoxy Paint over areas other than steel structure with suitable pigments of approved shade as per specification and direction of Engineer. The epoxy paint shall be a two pack material and shall be resistant to water, splash, spillage & acidic environment. The epoxy paint coating shall be of 150micron thickness over epoxy primer.	SQM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
354	1314	Providing and applying Synthetic plaster for external applications composed of synthetic fibre and petroleum based chemical similar to RENOVO or equivalent and of approved natural color/shade applied on cured and dried plaster surface.The final finish Paint shall have UV resistance, fungus, bacterial resistance properties all complete with grooves filled with poly sulfide sealant of matching color and shade as per specification/drawing/approval of engineer in charge.	SQM	0			0.0000000
355	1315	Providing and applying two or more coats of Acrylic based exterior paint of approved brand and manufacture and required shade over one coat of primer after necessary cleaning/ washing, preparing the surface using coir brush/ wire brush, sand paper, including filling of cracks with putty wherever required etc. all complete to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface as per manufacturers guidelines. The final finished coating shall be fungus resistant, UV resistant, water repellent and extremely durable with color fastness as per EIL specification 6-75-0007.	SQM	242			0.0134572
356	1400	FLOORING AND SKIRTING		0			0.0000000
357		Flooring and skirting at any level including base layer, labour, material, equipments, transportation, handling, curing, polishing etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
358	1401-A	Providing and laying 40 mm thick heavy duty cement concrete in flooring with metallic hardener pigmented topping 12mm thick(Total thickness 52mm) uniform graded treated iron particles in flooring. Under layer of 40mm thick cement concrete mix 1:2:4 (1 cement: 2 sand : 4 stone aggregates 20mm well graded) and top layer of 12mm thick metallic concrete of mix 1:2 (1 cement hardner mix with approved quality metallic hardening compound :2 stone aggregate 6mm nominal size) by volume including cement slurry, rounding off edges, aluminium strips etc. all complete for following (Quoted item rate shall be inclusive of providing glass joint strips) and as per EIL specification 6-75-007.	SQM	553			0.1492978
359	1401-B	Providing and laying 40 mm thick heavy duty cement concrete mix 1:2:4 (1 cement: 2 sand : 4 stone aggregates) flooring with finishing layer of neat cement slurry complete as per EIL specification 6-75-0007	SQM	0			0.0000000
360	1402-A	Providing and laying 18 mm thick skirting and dado with cement mortar 1:3 (1 cement: 3 sand) finished with a floating coat of neat cement all complete as per specification.	SQM	0			0.0000000
361	1403	Providing and laying precast polished heavy duty cement concrete tiles (Carborundum topping) of size 300X300X25 thick of approved shade as per IS 1237, including cement mortar bedding of 1:3 (1 cement : 3 sand) jointed with neat cement slurry etc. all complete with pigment to match the shade of the tiles including rubbing, curing, grindig and polishing complete with laying as per IS 1443 etc. all complete for following:		0			0.0000000
362	a	Laid in floors	SQM	0			0.0000000
363	b	Laid in skirting	SQM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
364	1404	Providing and laying interlocking M30 Grade concrete blocks in paving with approved colour and pattern and should be laid on the subbase and bedding as per specifications and recommendations of manufacturer.		0			0.0000000
365	a	60mm	SQM	0			0.0000000
366	b	75mm	SQM	0			0.0000000
367	1405	Providing and laying 50 mm thick floor finish with 25mm thk Terrazo Tiles including cement mortar bedding of 1:3 (1 cement : 3 sand) with neat cement slurry etc. all complete.	SQM	0			0.0000000
368	1406-A	Providing and laying polished Kota stone 25mm thk in flooring . Under bed shall average 15mm thk of 1 cement :4 coarse sand and brought to proper level. The kota stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete as per EIL specification 6-75-002	SQM	0			0.0000000
369	1407	Providing and laying polished Kota stone 14mm to 16mm thk in flooring . Under bed shall average 35mm thk of 1 cement : 2 sand : 4 stone aggregates by volume and brought to proper level. The kota stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete.	SQM	0			0.0000000
370	1408	Providing polished Kota stone 18mm to 20mm thk in skirting projecting 6mm from adjacent plaster including cutting brickwall upto the required depth, edging, finishing etc. all complete.	SQM	0			0.0000000
371	1409	Providing polished Kota stone 14mm to 16mm thk in skirting projecting 6mm from adjacent plaster including cutting brickwall upto the required depth, edging, finishing etc. all complete.	SQM	0			0.0000000
372	1410	Marble stone Flooring laid in 50mm overall thickness with 18-20mm thick marble slabs (grade -1) with minium 30mm thick underbed of 1 cement : 2 sand : 4 stone aggregate by volume and brought to proper level.The marbel slabs/tiles laid over underbed with mortar 1:3, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete.	SQM	0			0.0000000
373	1411	Marble stone Flooring laid in 50mm overall thickness with 14 -16mm thick marble slabs (grade -1) with minium 35mm thick underbed of 1 cement : 2 sand : 4 stone aggregate by volume and brought to proper level.The marbel slabs/tiles laid over underbed with mortar 1:3, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete.	SQM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
374	1412-A	Providing and laying 18-20mm thick polished Granite stone of premium quality grade-1,colour and texture in flooring, steps, ramps with brass/ stainless steel strips. Under bed shall average 22mm thk of 1 cement : 4 coarse sand and brought to proper level. The granite stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete as per EIL specification 6-75-002	SQM	0			0.0000000
375	1413	Providing and laying 14 to16mm thick polished Granite stone of approved color and texture in flooring with brass/ stainless steel strips. Under bed shall average 35mm thk of 1 cement : 2 sand : 4 stone aggregate by volume and brought to proper level. The granite stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete.	SQM	0			0.0000000
376	1414	Providing and laying polished Granite stone 18-20mm thk in skirting and dado with 6mm thick projection from adjacent plaster including mortar ,cement slurry ,pigments, curing, grinding,moulding, granite polishing etc. all complete.	SQM	0			0.0000000
377	1415	Providing and laying polished Granite stone 14-16mm thk in skirting and dado with 6mm thick projection from adjacent plaster including mortar ,cement slurry ,pigments, curing, grinding,moulding, granite polishing etc. all complete.	SQM	0			0.0000000
378	1416	Providing and laying vitrified ceramic tiles of polished variety of size 600x600 from reputed / approved manufacturer, complete including underbed of cement mortar 1:3 with neat cement slurry etc. all complete for following		0			0.0000000
379	a	7mm thick tiles In flooring	SQM	0			0.0000000
380	b	10mm thick tiles In flooring	SQM	0			0.0000000
381	c	7mm thick tiles In skirting and dado upto specific height	SQM	0			0.0000000
382	d	10mm thick tiles In skirting and dado upto specific height	SQM	0			0.0000000
383	1417	Providing and laying vitrified ceramic tiles of matt finish of size 600x600mm from reputed / approved manufacturer including underbed of cement mortar 1:3 with neat cement slurry etc. all complete for following.		0			0.0000000
384	a	7mm thick tiles In flooring	SQM	0			0.0000000
385	b	10mm thick tiles In flooring	SQM	0			0.0000000
386	c	7mm thick tiles In skirting and dado upto specific height	SQM	0			0.0000000
387	d	10mm thick tiles In skirting and dado upto specific height	SQM	0			0.0000000
388	1418	Providing and laying 10 mm thk non-skid fully vitrified tiles of make 'MARBONITE' or 'FERRASTONE of BOSS Profile limited' or equivalent in flooring and skirting over 30 mm thick underbed of 1 part cement and 3 parts coarse sand by weight mixed with sufficient water, complete as per specification laid in pattern of following sizes		0			0.0000000
389	a	400X400 mm	SQM	0			0.0000000
390	b	600X600 mm	SQM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
391	1419	Providing and laying granite stone slab of 20mm thickness single piece for wash basin / sink slab /facia of black or approved colour with cutting,making corners,moulding and opening etc. all complete.	SQM	0			0.0000000
392	1420	Providing and laying Heavy Duty dust pressed Ceramic Tiles of 7mm thick of reputed manufacturer of approved finish shade and colour including underbed of cement mortar 1:3 with neat cement slurry etc. all complete.		0			0.0000000
393	a	300X300 mm	SQM	0			0.0000000
394	b	600X600 mm	SQM	0			0.0000000
395	1421	Providing and laying Heavy Duty dust pressed (grade-5) Ceramic Tiles (Matt Finish) of size 600x600mm(approved size) and 7mm thick of reputed / approved manufacturer (Kajaria,jhonson,Spartek or equivalent) of approved finish, shade and colour. The tiles shall be scratch resistance of minimum 5 on Mohr's scale and shall have a bending strength of 350 Kg./sqm,with Under bed shall average 43mm thk of 1 cement : 2 sand : 4 stone aggregates by volume and brought to proper level including cement mortar all complete.	SQM	0			0.0000000
396	1422	Providing & fixing Acid / Alkali resistant (Chemical resistant) tiles conforming to IS:4457 in flooring/Dado and shall be laid over bitumastic lining of min 12mm thick (to be laid in layers of 6mm each). The tiles shall be applied with 6mm thick Potassium Silicate bedding mortar as per IS:4441, 4443 & 4832 and including preparation of surface, application of bitumen primer, curing etc. all complete for following thicknesses. The tiles should be abrasion resistant & durable.		0			0.0000000
397	a	20mm thick	SQM	0			0.0000000
398	b	38mm thick	SQM	0			0.0000000
399	1423	Providing & fixing Acid / Alkali resistant (Chemical resistant) tiles conforming to IS:4457 in flooring/Dado beded and jointed with epoxy mortar all complete for following thicknesses. The tiles should be abrasion resistant & durable.		0			0.0000000
400	a	20mm thick	SQM	0			0.0000000
401	b	38mm thick	SQM	0			0.0000000
402	1424	Providing & fixing chemical resistant (AR)(Acid / Alkali) bricks (75mm thick) conforming to IS:4860 in the floor of neutralization pit. Surface on which lining to be applied shall be prepared in accordance with IS:2395. Bitumen primer as per IS:158 followed by 18mm thick bituminastic followed by 6mm thick potassium silicate mortar bedding shall be provided before laying AR bricks. The joints between AR bricks shall be filled with resin type of mortar conforming to IS:4832, part II, seal coat of readymade epoxy paint shall be provided on joints to cover up any porosity that may be left in mortar. End sealing shall be done with bituminastic AR bricks shall be laid with 6mm wide & 50mm deep pointing (epoxy / furnace / CNSL) & acid curing shall be done all complete as per specification.	SQM	0			0.0000000
403	1425	Providing and laying polished Marble slabs (Aranga white or equivalent approved shade/color /design) 20 mm thk in staircase landing/skirting and corridors over minimum 20 mm thick underbed of 1 cement : 2 sand : 4 stone aggregates by volume mixed with sufficient water to form a stiff workable mass. The marble slabs shall be laid over under-bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including moulded marbel nosing, pigments, curing, grinding, making corners, granite polishing etc. complete.	SQM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
404	1426	Providing and laying marble skirting /dado (Aranga white or approved shade/color /design) equivalent of minimum 20mm thickness projecting 6mm from adjacent plaster all complete including underbed cement mortar 1:3, scaffolding etc. all complete.	SQM	0			0.000000
405	1427	Providing and fixing glazed ceramic tiles of approved color and design of size 200x300mm / 300x300mm in dado of approved size , projecting 6mm uniformly from adjacent plaster or wall finish. The mix for underbed plaster shall consist of 1part cement and 3 parts sand by weight. fairly moist but firm, tiles shall be pressed over under bed by applying cement slurry including pigments, curing etc all complete for following thicknesses:		0			0.000000
406	a	5mm thick	SQM	0			0.000000
407	b	7mm thick	SQM	0			0.000000
408	1428	Providing and laying 3mm thick antistatic PVC flooring / skirting of approved shade,as per IS:3462 and laying as per IS:5318 all complete.	SQM	0			0.000000
409	1429	Providing and fixing removable type flooring system consisting of fire resistant particle board of size 600X600X35 mm with 0.05 mm thick aluminium foil lining at bottom and with 2 mm thick anti static PVC topping including proprietary floor supporting system complete as per specification.	SQM	0			0.000000
410	1430	Providing and fixing dividing strips in joints of cast in situ floorings at various elevations, finishing, all labour, material etc. complete as per drawing, specification and instructions of engineer in charge.		0			0.000000
411	a	Glass strips 40 mm wide and minimum 6 mm thick.	RM	0			0.000000
412	b	Aluminium strips 40 mm wide and minimum 3 mm thick	RM	0			0.000000
413	c	Brass strips 20 mm wide and minimum 4 mm thick.	RM	0			0.000000
414	1431	Providing and laying wodden panel flooring and skirting of PERGO or equivalent of approved color,shade all complete as per manufacturer specification.	SQM	0			0.000000
415	1432-A	Providing and laying of False Floor system consist of modular, removable, filled with cementitious compound, welded steel panels supported on all four edges by structural steel members bolted onto adjustable height pedestal assemblies forming a modular grid pattern. It is mandatory that all components of the false flooring system are sourced from same manufacturer. False floor understructure shall be installed to support the panels and shall be suitable to achieve a minimum finished cavity height of 600-1000mm from the existing floor level. The system shall ensure speedy assembly and removal for relocation and maintenance. The system shall also ensure easy adjustment of leveling (± 25 mm) and accurate alignment of panels in the vertical direction. False floor understructure shall consist of Base plate, pedestals, pedestal head assembly, stringers and necessary fittings, fixtures and accessories. All complete as per EIL specifications 675-0010 and EIL standrad no. 7-75-0049.	SQM	0			0.000000
416	1500	ROOFING / SIDE CLADDING		0			0.000000
417		Roofing / side cladding work including all labour, material, equipment, transportation, handling, scaffolding, lops, hooks, washers, corner pieces etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
418	1501	Designing, providing and fixing permanently color coated galvanised MS troughed metal sheet decking plate of approved colour and conforming to class3 of IS 14246 over roof purlins for cast-in-situ roof slab as per relevant IS code and specification. Bare metal thickness of deck plate shall be minimum 0.7mm with minimum trough depth of 44 mm having minimum yield strength of 250 MPa and shall serve as permanent shuttering to the roof slab 100mm thick measured over crest of metal decking & shall have adequate strength to support weight of green concrete and imposed loads of min 150 kg/sqm during construction between purlins as per manufacturer's recommendations/ calculations/ test certificates for approval including fixing of plates to purlins, side lapping, end lapping etc. all complete for below mentioned spans. The sheet shall be permanently coated with silicon modified polyester paint of minimum 20 micron DFT on exposed surface (facing operating floor) and minimum 7 micron on other face over epoxy primer applied over hot dipped galvanising @ 275 gm/sqm including fixing of sheet to purlin with self drilling white zinc plated heat treated carbon steel screws of minimum 5.6 mm dia @ 260mm c/c in the trough and stich screws between two adjacent sheets and sealing with epoxy sealant. Measurement of profile sheeting shall be of the plan area of roof covered by MS trough metal decking.		0			0.0000000
419	a	Span Upto 1800mm	SQM	0			0.0000000
420	b	Span Exceeding 1800mm and upto 2500 mm	SQM	0			0.0000000
421	1502	Providing and fixing shear connectors of mild steel studs having 16mm dia and minimum 75 mm projected length above purlin passing through metal decking as per relevant IS codes and specification.	QUINTAL	0			0.0000000
422	1503	Supply, fabrication and installation of self supported Arch shaped Galvalume roofing made by moulding of sheet of width 914mm and thickness 1 mm with mechanical press and dies to the desired curves and shape to form 2' 0" wide interlocking panels with water tight joints as per specification. Alloy Coating shall be AZ 150 (Aluminum 55%,Zinc 43.5%,Silicon 1.5%). Paint Coating shall be - Regular Modified Polyester(Top Coat 25 Micron & Bottom Coat 12 Microns epoxy).	SQM	0			0.0000000
423	1504-A	Designing, providing and fixing precoated glavanized steel sheets of minimum thickness (a) Base metal thickness 0.60 mm (negative tolerance not acceptable) (b) Total coated and painted thickness (finished) : 0.65 mm The work is inclusive of all roofing accessories like ridge, flashing, north light curves, facia, etc,Metallic selfdrilling self-tapping fasteners, self-drilling polymer coated Class III & Class IV Fasteners with EPDM washer all as per manufacturer's specifications, including, flashing, ridge, copings for all edges, caps, corners, overlapping and sealing the joints with approved silicone sealant to make the joints to be dust proof and leak proof inline with EIL specification Clause no:5 of 6-75-0008	SQM	171			0.0733856

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
424	1505	Designing, providing and fixing roofing and cladding panels composed of approved quality, profiled, precoated double skin steel sheets having base metal thickness of minimum 0.45mm (negative tolerance not acceptable) with SDP (Super Durable Polyester) paint system minimum 20 Microns in approved shade applied over 5 microns primer . Overall coated thickness of sheets shall not be less than 0.52 mm . Profile depth shall not be less than 28mm and pitch shall be 195 to 255mm. The bottom unexposed surface shall be provided with alkyd backer of minimum 5 microns over a 5 micron coat of primer . The steel sheets shall be made from cold rolled high tensile steel of 550 Mpa yield stress conforming to IS:513, IS:15916, ASTM AS:1397, (substrate shall have hot dipped metallic coating of Aluminium zinc alloy @ 150 gms/ Sq.m. on the both sides as per AS:1397-class AZ 150).. The roofing and cladding system shall Include all cutting, lapping, making and finishing cutouts for translucent sheets, roof extractors, ventilators etc. providing and fixing minimum 1.5mm thick GI "Z" shaped sub purlins/ sub girts to purlins or wall runners, fixing and capping all components of the insulated sheet system with approved quality, anti-corrosive self-drilling screws or fasteners, sealants, preparation of fabrication drawings etc. in accordance with approved manufacturer's standard practice etc. all complete.	SQM	0			0.0000000
425	1506	Providing and fixing insulation of resin bonded mineral wool of 50 mm nominal thickness conforming to IS 8183 having a density of 32 kg/cum glass wool or 48 kg/cum for rock wool, for cladding/under deck insulation including application of glue and tying with lacing wire, for glass/rock wool as per manufacturer's recommendations.	SQM	0			0.0000000
426	1507	Providing and fixing insulation of resin bonded mineral wool of 50 mm nominal thickness conforming to IS 8183 having a density of 32 kg/cum glass wool or 48 kg/cum for rock wool, for cladding/under deck insulation including wrapping in black polythene black supported over weld mesh 75X75X1.6 MM dia to hold in position and application of glue & tying with lacing wire, for glass/rock wool as per manufacturer's recommendation.	SQM	0			0.0000000
427	1508	Providing and installing under deck insulation using minimum 0.05 mm thick aluminium foil on exposed surface followed by 0.56 mm dia and 25 mm mesh GI wire netting, fixed at various elevations with rawl plugs including clips but excluding cost of insulation.	SQM	0			0.0000000
428	1508-A	Providing and fixing insulation of glass wool for under deck insulation including application of glue and tying with lacing wire, for glass wool as per Eil specification 6-75-0010.	SQM	0			0.0000000
429	1509	Providing and fixing non metal opaque PVC sheet similar to ONDEX roofing or equivalent including all fixing accessories.	SQM	0			0.0000000
430	1510	Providing and fixing 1 mm thick corrugated/semicorrugated G.I. sheet in roofs, cladding of minimum galvanisation of 275 gsm total on both sides with minimum 150mm overlapping, 8 dia G.I. hook bolts or 'J' Bolts and nuts @305 mm c/c along with G.I. and bitumen washers including cutting of sheets for opening etc. all complete.	SQM	0			0.0000000
431	1600	FALSE CEILING		0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
432		False ceiling including all labour, material, equipment, transportation, handling, suspension system etc at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
433	1601	Providing and fixing glass fibre reinforced gypsum plaster board (GRG) ceiling (having gypsum core mixed with glass fibre) system consisting of metal supporting grid system forming panels of specified size, suspended from RCC slab/structural steel or catwalkway grid above with 4 mm (minimum) galvanised wires (rods) with special height adjustment clips, including preparation of working drawing, providing openings for AC ducts, return air grills, light fixtures etc (but excluding the cost of catwalkway grid) all complete as per drawings, specification and instructions of the engineer.		0			0.0000000
434	a	12 mm thick GRG board with galvanised light gauge steel load bearing supporting GI frame and finished flat (seamless).	SQM	0			0.0000000
435	b	12 mm thick GRG board in profile (dome ,curved profiled etc.) with galvanised light gauge steel load bearing supporting GI frame and finished smooth (seamless).	SQM	0			0.0000000
436	1602-A	Providing, fixing and laying of Pre- finished/ coated mineral fibre board ceiling tiles 16mm thick (of size 600mm x 600mm) with durable regular edging and having following properties:- i) NRC (Noise Reduction Co-efficient) value of min. 0.55, ii) Light reflectance value of min. 85%, iii) K value of 0.052 to 0.057 w/m deg. C, iv) Fire performance conforming to class I as per BS: 476, v) Humidity Resistance at RH99%. vi) Weight 3.5 Kg./ sq. mtr. The tiles shall have fissured or granulated texture on the front side as specified. Back side shall be provided with protective coating. The false ceiling tiles shall be installed over supporting G.I. grid work as per manufacturerer's recommendations. The work includes providing necessary accessories, hardware, finishing etc. complete. The finished false ceiling shall be perfectly levelled and aligned, at desired height as per drawings. The grid shall be suspended by means of 4mm dia MS wire, 6mm thick MS cleat of 25mm x 25mm section, dash fasteners and level adjustors. The overall grid system shall be rigid by self locking joints, in accordance with false ceiling patterns, perfectly leveled and aligned at desirable height as per drawings. Exposed surfaces of the grid work shall be prefinished in baked polyester paint and shall be chemically cleaned.Required MS channel shall be measured & paid extra under respective item unit rate.All works shall be completed in all aspects as per EIL specification no: 6-75-0010.	SQM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
437	1603	Providing and fixing aluminium false ceiling . The Ceiling panels shall be minimum 0.7mm thick and of aluminium alloy AA 3003-1114 (as per IS 2676). Finishing of the panels shall be as specified. The panels shall be square edged, perforated or non-perforated having panel size 600mmx600mm .The suspension system shall be in accordance with approved Manufacturer's standard specification consisting of main runner profiles, hanger, perimeter profile etc.The system also includes providing perimeter angles and slit openings for fixing supply/return air grill, lighting fixtures, AC diffusers etc.All works shall be completed in all aspects as per EIL specification no: 6-75-0010.	SQM	126			0.1413780
438	1604	Providing, fixing and laying permanently colour coated aluminium false ceiling of approved colour with stove enamel finish of approved make in LINEAR and SQUARE type with corrosion resistance aluminium alloys panels of minimum thickness 0.5mm including 50mm thick mineral wool insulation (as per IS:8183) bound in polythene bags on top of panels. Additional hangers and height adjustment clips shall be provided for return air grills, light fixtures. A.C. ducts etc. suitable M.S. channel (minimum MC 75) grid 1200 c/c maximum shall also be provided above the false ceiling level for movement of personnel to facilitate maintenance of lighting fixtures, AC ducts etc.The work to be complete as per specifications, drawings and direction of engineer.(Materials for structural platform grid for movement made up of MS Channels/ Beams / Angles shall be supplied by BHEL and shall be paid under ST No 2301)	SQM	0			0.0000000
439	1605	Providing, fixing and laying anodised natural colour matt finished aluminium false ceiling of Jindal/Hindalco make with corrosion resistance aluminium alloys panels of minimum thickness 0.5mm including 50mm thick mineral wool (density 48kg/cum insulation (as per IS:8183) bound in polythene bags on top of panels. Additional hangers and height adjustment clips shall be provided for return air grills, light fixtures. A.C. ducts etc. suitable M.S. channel (minimum MC 75) grid shall also be provided above the false ceiling level for movement of personnel to facilitate maintenance of lighting fixtures, AC ducts etc.The work to be complete as per specifications, drawings and direction of engineer.(Materials for structural platform grid for movement made up of MS Channels/ Beams / Angles shall be supplied by BHEL and shall be paid under ST No 2301)	SQM	0			0.0000000
440	1606-A	Providing and Fixing Gypsum board false ceiling with seamless finish of board thickness 12.5mm conforming to BS 476 part 4 with approved acrylic emulsion paint or laminates of desired design and finish with suitable suspension system.Installation etc. shall be as per specification no:6-75-0010 etc. all complete	SQM	0			0.0000000
441	1700	RAIN WATER DOWN TAKE PIPES		0			0.0000000
442		Rain water down take pipes including all labour, material, transportation, 2 coats of approved paint over one primary coat, fixtures, accessories etc at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
443	1701	Providing and fixing HCl down take pipes of 100 mm dia. with water tight lead joint, fixing clamps etc. all complete.	RM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
444	1702	Providing and fixing galvanised MS down take pipes of 100 mm dia- Medium quality as per IS:1239(part-I) / IS:3589 all complete.	RM	0			0.0000000
445	1703	Providing and fixing HCl down take pipes of 150mm dia with water tight lead joint etc. all complete.	RM	0			0.0000000
446	1704	Providing and fixing galvanised MS down take pipes of 150 mm dia- Medium quality as per IS:1239(part-I) all complete.	RM	0			0.0000000
447	1705	Providing and fixing UPVC down take pipes of 110mm diameter as per IS:13592 type A all complete.	RM	270			0.0495792
448	1706	Providing and fixing UPVC down take pipes of 160mm diameter as per IS:13592 type A all complete.	RM	50			0.0140191
449	1707	Providing and fixing GI down take pipes conforming to IS:1239 /IS:3589 of medium duty all complete for following diameters.		0			0.0000000
450	a	100 mm Dia	RM	0			0.0000000
451	b	150 mm Dia	RM	0			0.0000000
452	c	200 mm Dia	RM	0			0.0000000
453	1708	Providing and fixing HDPE down take pipes conforming to IS:4984 as per specification of following diameters.		0			0.0000000
454	a	110 mm Dia	RM	0			0.0000000
455	b	160 mm Dia	RM	0			0.0000000
456	c	200 mm Dia	RM	0			0.0000000
457	1800	MISCELLANEOUS WORKS		0			0.0000000
458		Miscellaneous works including all labour, material, equipment etc. at any level unless otherwise specified as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
459	1801	Providing and Filling in trenches, plinths, area paving and other underground structures with graded stone aggregate of size range 63 mm to 45 mm in layers not exceeding 230 mm in thickness including breaking of stone boulders to required sizes, filling the interstices with selected sand and compacting to 85 % of original volume of stone stack for all lifts etc. all complete. Payment shall be made for the measurement of the volume of the compacted fill.	CUM	10			0.0083958
460	1802-A	Providing and mixing approved Bipolar Concrete penetrating Corrosion inhibiting admixture phenolic base in concrete as per detail specification of manufacturer etc. all complete. Payment shall be made per cum of concrete.refer EIL specification 6-68-0017	CUM	9024			1.5772458
461	1802	Supply and laying approved quality Stone aggregate 40 mm size in transformer yards.	Cum	10			0.0229039
462	1803	Anti termite chemical treatment of soil with Chlorpyriphos/Lindane E.C. 20% with 1% concentration conforming to IS:8944 and as per IS 6313 all complete. (Plinth area of building at ground floor only shall be measured for payment)	SQM	2643			0.1801065
463	1804	Supply and installation of approved 25mm thick vibration damping resilient pads on/around foundation of vibrating equipment and at other locations all complete.	SQM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
464	2410-A	Providing 50mm thick premix carpet surfacing laid to slope in two layers 30mm and 20mm respectively with 12mm downgraded stone chips mixed with 80/100 grade bitumen @ 52 Kg/Cu.M including compaction etc. all complete.	SQM	414			0.1076791
465	1806	Providing 50mm thick anti corrosive layer laid to required slope consisting of clean & well graded coarse sand mixed with A90 grade bitumen for softening point upto 45 degree Celcius or A65 grade bitumen for softening point above 45 degree celcius as per IS: 73 or its equivalent quality 8 to 10% by volume and rolled or compacted all complete.	SQM	0			0.0000000
466	1807	Providing and fixing G.I strips minimum 1.5mm thk and 150mm wide including fixing accessories etc. all complete.	Kg	0			0.0000000
467	1808	Providing and fixing aluminium strips minimum 18 SWG thk and 300mm wide over expansion joints with minimum lap of 50mm length including brass / aluminium screws, rawl plugs etc. all complete.	Kg	0			0.0000000
468	1809	Providing Chemical injection grouting with pressure pump for water retaining concrete structures conforming to IS:6494, including fixing nozzles, cost of approved cement, admixture, curing etc. all complete . Payment shall be made as per the consumption of chemical grout.	Kg	0			0.0000000
469	1810	Providing, laying and fixing rails and guide rails in concrete for transformer, rail track including cutting of rails, joining of rails, anchoring lugs etc all complete.	MT	0			0.0000000
470	1811	Providing and fixing weep holes in Walls, Drains consisting of 100 mm dia HDPE pipe sleeves with single side covering for the pipe mouth with galvanised welded wire fabric of 20 mm sq. opening covered with 40 mm downgraded aggregates in 300 X 300 mm sq. and 300 mm deep size all complete.	EACH	10			0.0008115
471	1812	Laying of earthing mats/rods including risers, transportation from yard stores, loading, unloading, cutting to length, welding, protective painting of joints etc. all complete. (Excavation & Back filling shall be paid separately under respective item of earth work. Earthing mats/rods shall be supplied by BHEL free of cost)	MT	0			0.0000000
472	1813	Providing Earthing pit as per drawing with charcoal & salt, GI pipes, GI earth electrodes, GI wire, GI strips, brick chamber with covers including associated earthwork etc. all complete.	EACH	0			0.0000000
473	1814	Construction of below ground earthing system test pits as per drawing / sketches including concreting, reinforcement, formwork, providing & fixing GI strip etc as per drawing and specification (excavation & backfilling only will be paid under applicable BOQ items & Earthing strips and electrodes will be supplied by BHEL free of cost).	EACH	0			0.0000000
474	1815-A	Construction of below ground earthing system earth electrodes as per drawing and specification. (Excavation and backfilling only will be paid under applicable BOQ items & Earthing strips and electrodes will be supplied by BHEL free of cost)	No	0			0.0000000
475	1815-B	Construction of below ground earthing system- Earth connection and riser pig tails as per drawing and specification. (Excavation and backfilling only will be paid under applicable BOQ items & steel shall be supplied by BHEL free of cost.)	No	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
476	1815-C	Construction of below ground earthing system test pits as per drawing/ sketches including brickwork, plaster, concreting, reinforcement, formwork, providing & fixing GI strips / pipes, GI wires, covers etc as per drawing & specification including associated earthwork (Earthing strips and electrodes will be supplied by BHEL free of cost).	EACH	0			0.0000000
477	1815-D	Providing and fixing GI rungs in concrete/brick walls having zinc coating of minimum 900 g/sqm etc. all complete.	Kg	50			0.0023148
478	1816	Providing and fixing PVC pressure release valve of minimum dia 90mm in water retaining structure including 160 mm dia housing pipe of minimum length 3.75 m with perforation as per IS4558, nylon jali, perforated end plug, collar, graded filter, excavation, fixing in concrete slab/wall etc. all complete.	EACH	100			0.4137582
479	1817	Providing and fixing HDPE pipes in concrete/ brick work of following sizes including cutting, fixing and levelling in position etc. all complete.		0			0.0000000
480	a	Upto 75 mm dia	RM	0			0.0000000
481	b	100 mm dia	RM	0			0.0000000
482	c	150 mm dia	RM	0			0.0000000
483	d	200 mm dia	RM	0			0.0000000
484	1818	Providing and laying dry stone pitching of 230 mm thickness for slope protection in cement mortar 1:6 including hammer dressing, raking of joints, pointing, preparing the bedding surface and voids filling with stone aggregate etc. all complete.	SQM	0			0.0000000
485	1819	Design, supply, fabrication, erection of stoplog gates in CW Pumps with embedments required, lifting beams, special tools & plants, spare parts for three years, machining, casting, all materials such as structural steel, cast steel, stainless steel, brass used for seals, rubber seals, gears, ball and roller bearing, branch bushings, greasing, bolts, nuts, lugs, threaded fastners etc., cleaning, sand blasting, hot double dip galvanised with minimum coating of zinc 750 gms/sqm., following by an application of etching primer and dipping in black bitumen as per B.S. 3416, erection along with a second stage concreting to true plumb and levels, submission of drawings / fabrication drawings for engineers approval etc all complete. The leakage through rubber seal shall not be more than 5 lit/min/metre length of seal under maximum head.(only weight of structural steel including embedments shall be considered for payment purpose) (SS component shall be measured separately for payment)	MT	0			0.0000000
486	1820	SS component mentioned under ST No. 1819.	MT	0			0.0000000
487	1821	Supplying, fabricating, erecting in position and testing / examining bolted and / or welded structural steel work for stationary screens made out of rolled sections and / or plates including cutting, straightening if required, edge preparation, bolting / welding of joints, cleaning, sand blasting, hot double dip galvanised with minimum coating of zinc as 750 gms./sqm. followed by application of an etching primer and dipping in black bitumen as per BS 3416 etc all complete.	MT	0			0.0000000
488	1822	Cutting of groove of 10mm X 40mm size with groove cutting machine in concrete paving all complete.	RM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
489	1823	Fire proofing of steel structures with VERMICULITE cementitious coating minimum 30mm thickness including supply of all materials for vermiculite fire proofing, galvanized (minimum zinc coating of 250 g/sqm) expanded metal steel sheet (confirming to IS: 412) minimum 1.84 kg/sqm of mesh size 4.5mm x 13.5mm , welded wire fabric reinforcement (confirming to IS: 1566) of post weld hot dipped galvanized mesh (minimum zinc coating of 250 g/sqm) (min 2mm thick wire, 50mm x 50mm size mesh), sealant for fireproofing terminating junction with non-bituminous polysulfide sealant, nuts, tie wires, welding, surface preparation, curing, staging, seal coat (paid in item no. 1904), compatible finish paintings (paid in item no. 1905), etc. all complete as per EIL standard no. 6-68-0033-Rev07	SQM	200			0.000000
490	1824-A	Supply and laying of vermiculite based lightweight cementitious concrete coating corresponding to 2 hours fire rating as per respective UL design number under UL-1709 (XR category) subject to a minimum of 65mm thickness as per Type-II of Standard Specification 080557C-000-JSS-1800-003 as fire proofing material of required thickness around structural steel members (viz. beams, columns, bracings etc.) for the required fire protection from reaching temperature 538 degree C; cleaning the steel surfaces and applying primer compatible to vermiculite material if required as per manufacturer specifications, supplying, placing and fixing in position cover plates conforming to IS:2062 and stiffeners for members exceeding 600 mm depth, supply and welding of MS nuts on angle and box sections and cover blocks for other sections, supplying, placing and fixing in position galvanized expanded metal sheet with mesh size 4.5 mm x 13.5 mm conforming to IS:412 except on angle and box sections, hot dipped galvanized welded wire fabric reinforcement 2 mm dia 50 mm x 50 mm mesh conforming to IS:1566, and tying the reinforcement to the cover blocks with galvanized 16 SWG tying wire, including cutting, straightening, cleaning, bending, applying primer on MS nuts and affected surfaces, curing or providing a layer of approved membrane of curing compound, patching of damaged portion wherever required to achieve a smooth and even surface, providing chamfering at corners, supplying and laying of non-bituminous polysulfide or silicon rubber mastic sealant at terminating edges/ metal joints, painting the surfaces with sealer coat of epoxy polyamide as base and finish coats of coating system No.1 of NORSOK Standard M-501, including the cost of all labour, materials, specified tests, shuttering, staging, scaffolding, working platforms, approaches, etc. for	sqm	200			0.4354127

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
491		Supply and laying of concrete of grade M30 as per Type-I of Standard Specification 080557C-000-JSS-1800-003 as fire proofing material with 10 mm and down size graded coarse and fine aggregates including admixture around structural steel members (viz. beams, columns, bracings etc.) minimum thickness 65mm all complete; cleaning the steel surfaces, supplying, placing and fixing in position cover plates conforming to IS:2062 and stiffeners for members exceeding 600 mm depth, supply and welding of MS nuts on angle and box sections and cover blocks for other sections, supplying, placing and fixing in position galvanized expanded metal sheet with mesh size 4.5 mm x 13.5 mm conforming to IS:412 except on angle and box sections, hot dipped galvanized welded wire fabric reinforcement 2 mm dia 50 mm x 50 mm mesh conforming to IS:1566, and tying the reinforcement to the cover blocks with galvanized 16 SWG tying wire, including cutting, straightening, cleaning, bending, vibrating, tamping, curing or providing a layer of approved membrane of curing compound, rendering with cement sand mortar (1:3) wherever required to achieve a smooth and even surface, providing L50x50x6 at corners or as specified in the drawing, applying primer on MS nuts, angles and affected surfaces, supplying and laying of non-bituminous polysulfide or silicon rubber mastic sealant at terminating edges/ metal joints, painting the surfaces with sealer coat of epoxy polyamide as base and finish coats of coating system No.1 of NORSOK Standard M-501, including the cost of all labour, materials, specified tests, shuttering, staging, scaffolding, working platforms, approaches, etc. for all shapes and positions at all heights upto & including 10 m above pavement etc. all complete as per specifications 080557C-000-LD-1790-001, 080557C-000-JSS-1800-003 and directions of Engineer-in-Charge. (ALL MATERIALS INCLUDING CEMENT TO BE SUPPLIED BY THE CONTRACTOR).	sqm	200			0.0455258
492	1824-A	Fire proofing of steel structures with In-situ CONCRETE of concrete grade M30 and minimum 65mm thickness including supply of all materials of galvanized (minimum zinc coating of 250 g/sqm) expanded metal steel sheet (confirming to IS: 412) minimum 1.84kg/sqm of mesh size 4.5mm x 13.5mm , welded wire fabric reinforcement (confirming to IS: 1566) of post weld hot dipped galvanized mesh (minimum zinc coating of 250 g/sqm) (min 2mm thick wire, 50mm x 50mm size mesh), sealant for fireproofing terminating junction with non-bituminous polysulfide sealant, nuts, tie wires, welding, surface preparation, curing, staging, seal coat (paid in item no. 1904), compatible finish paintings (paid in item no. 1905), etc. all complete as per EIL standard no. 6-68-0033-Rev07	SQM	200			0.0000000
493	1824-B	Providing and applying one sealer coat (50 microns) of epoxy polyamide over fireproofing surface. Coating system shall be UV resistant and shall be pre-qualified for coating system No.1 of NORSOK Standard M-501.	SQM	400			0.2902751
494	1824-C	Providing and applying two coats (100 microns per coat) of acrylic elastomeric or polyurethane as a finish paint over fireproofing surface. The coating system for finish coat shall be compatible and approved by fireproofing material vendor.	SQM	400			0.2902751
495	1825	Supply and laying approved quality Stone aggregate 40mm size in transformer yards.	CUM	0			0.0000000
496	1826	Supply and laying approved quality rounded pebbles / gravels of 40mm size in transformer yards.	CUM	0			0.0000000
497	1827	Supply and laying fire clay refractory brick work with fire clay mortar conforming to IS: 6 & 195 including curing etc. all complete on tank pads & in building walls.	CUM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
498	1828	Dismantling old existing reinforced/non-reinforced brickwork/blockwork/stone masonry work in mud/lime/ cement mortar at any level including clearing/cleaning, stacking the serviceable materials at plant site and disposal of unserviceable materials within a lead upto 1km all complete.	CUM	8			0.0067167
499	215 b	Dismantling concrete work for all types of structures at all levels including stacking of serviceable material to a lead of 500 m and disposal of unserviceable material upto a lead of 2 km, cutting of reinforcement, labour, equipment, safety precautions etc all complete as per drawings, specification and instructions of engineer in charge. Reinforced Cement Concrete of all grades	CUM	8			0.0067167
500	2313	Dismantling of steel structure, lowering of material and carriage of the dismantled material up to field fabrication shop / projects storage including temporary dismantling, cutting, re-welding, supporting, and restoring to correct position all temporarily dismantled members, re-alignment of all adjacent connected members to their correct positions (weight of such adjacent members and temporarily dismantled members not payable), scaffolding, staging, tools & tackles, gas cutting, welding, consumables etc all complete.	MT	4			0.0150043
501	1821	Sprinkling of water by water tanker fitted with perforated GI pipe (portable tanker minimum 3000 litre capacity) for roads and miscellaneous area within plant boundary, for dust suppression and reduction of suspended material at site for day to day work, as directed by BHEL site engineer (water for this purpose shall be provided by BHEL free of cost and utilisation of machine will be in terms of Tank-hour put in actual use for water sprinkling).	TANK-HR	960			0.1862692
502	1832	Providing & filling Bentonite Powder (Sodium base) mixed with water in electronic earthing pit as per drawing & direction below ground level including all materials, transportation, labour, incidental etc all complete as per specification.	CUM	0			0.0000000
503	1833	Supply & fixing FRP (fibre reinforced plastic) sheets 2 mm thick including GI hooks/ J or L bolts, nuts, washers, bitumen washers etc. complete including overlap 100mm .	SQM	0			0.0000000
504	1834	Providing and Filling below foundations with random rubble stone chipping in layers including breaking of stone boulders to required sizes, filling the interstices with selected sand and compacting to 85 % of original volume of stone stack for all lifts etc. all complete. Payment shall be made for the measurement of the volume of the compacted fill.	CUM	700			0.5054155
505	1835	Supply, providing and fixing heavy duty GI grating over storm water having minimum galvanisation of 900 g/sqm in drains	MT	5			0.0573690
506		ROADS		0			0.0000000
507	i	Preparation and consolidation of subgrade with Power roller of 8 to 12 Tonne capacity after excavating earth to an average depth of 22.5 cm depth, dressing to camber and consolidating with roal roller including making good the undulations etc. and rerolling the subgarde and disposal of surplus earth with 50 metres	SQM	11248			0.7605916
508	ii	Supplyng & laying WBM in 75mm consolidated	SQM	0			0.0000000
509	iii	Supplyng & laying WBM in 110mm consolidated	SQM	0			0.0000000
510	iv	Supplyng & laying Bitumenous Macadam in 50mm consolidated	SQM	0			0.0000000
511	v	20 mm compacted premix bituminous carpet	SQM	0			0.0000000
512	vi	Setting precast concrete edging block	RM	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
513	1836	Providing & fixing flame arrestor of approved specification at the end of vent pipes 100 mm dia including bird mesh, necessary fixing etc.. as per EIL drawing no 7-65-0219	each	15			0.1488593
514	1837	Supplying and providing 24 SWG chicken wire mesh etc. all complete	Kg	500			0.1215728
515	1840	Supplying, laying and commissioning carbon steel pipe line grade 'A96A' below GL including coating and wrapping (paid separately under item no. 1841) , joint testing, cost of materials etc. all complete as per EIL specification no. 6922-575-16-47-DB01, 6-65-1035, 6-65-1030, 6-65-1036, 6-79-0011 and drawings. (Earthwork excavation and back filling to be measured separately).		0.00			0.0000000
516		a) 100 mm dia.	RM.	0.00			0.0000000
517		b) 150 mm dia.	RM.	0.00			0.0000000
518	1840-A	Supplying, Laying and commissioning carbon steel pipe line grade 'A95A' below GL including 3LPE external coating and wrapping , joint testing, cost of materials etc. all complete as per EIL specification B957-000-06-42-PLS-01 and drawings. (Earthwork excavation and back filling to be measured separately).		0.00			0.0000000
519		a) 4" dia.	RM.	250.00			0.2132127
520		b) 6" dia.	RM.	250.00			0.2269005
521		c) 8" dia	RM.	400.00			0.6822805
522		d) 12" dia	RM.	165.00			0.2995086
523	1840-B	Supplying, laying and commissioning carbon steel pipe line of ASTM A672 Gr B60 CL12 (schedule STD) below GL including 3LPE external coating and wrapping , joint testing, cost of materials etc. all complete as per EIL specification B224-6-44-0005-9517 and drawings. (Earthwork excavation and back filling to be measured separately).		0.00			0.0000000
524		a) 16" dia	RM.	0.00			0.0000000
525		b) 20" dia	RM.	0.00			0.0000000
526		c) 24" dia	RM	0.00			0.0000000
527	1841	Coating and wrapping of CS pipes including cost of materials etc. all complete as per EIL specification no. 6-79-0011.		0.00			0.0000000
528		a) 100 mm dia.	RM.	20.00			0.0026305
529		b) 150 mm dia.	RM.	20.00			0.0039511
530	1842	Supplying and fixing M.S drain funnels of following diameter as per EIL drawing no. 7-65-0266 and specifications.		0.00			0.0000000
531		a) 150mm dia.	NOS.	20.00			0.0114133

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
532		b) 200mm dia.	NOS.	10.00			0.0075620
533	1843	Supplying and fixing 4" dia. Vent pipes of piping class A3A in manholes including fixing the pipe on piperacks at various elevations, necessary clamps, bends, screws etc. all complete as per specification B957-420-6-44-0005-7410 drawing no 7-65-0219	RM.	100			0.0747252
534	1844	Providing & Laying 150micron thick HM HDPE (grade-1) conforming to IS 10889 sheet below the concrete base including materials, labour etc. complete as per drawing / direction of engineer.	SQM	6749			0.2544322
535	1845	Providing and mixing dry lean Concrete sub base for cement concrete pavement conforming to EIL specification no:6-65-0019 etc. all complete .	Cum	675			1.7580951
536	2000	FENCING AND GATES		0			0.0000000
537		Fencing and gates including all labour, material, equipment etc at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
538	2001-A	Supply, fabrication and fixing of mild steel posts for fencing including painting etc all complete.	MT	0.5			0.0157883
539	2001	Supply, fabrication and installing in position and testing MS Gates out of channels, joists, angles, flats, plates, pipes, welded steel wire mesh & sheets including stiffeners, bracings, fabricated hinges, MS Aldrops with locking arrangement, tempered steel pivot, guide track of MS Tee, bronze aluminium ball bearing arrangements, castor wheels, paintings (two or more coats of synthetic enamel paint over red oxide zinc chromate primer) etc. all complete as per EIL standard no. 7-75-0051, 0052 as per specification	MT	5			0.1865225
540	2002	Transformer fencing shall be made of 50mm x 50mm x 6mm M.S. Angle frame, 50mm x 50mm x 6mm M.S. Tee stiffeners, 50mm x 50mm x 8mm welded mesh fixed to the frame by 25mm x 3mm M.S. flat beading. The gate / fencing shall be fixed to the masonry / R.C.C. by M.S. hinge arrangement (consisting of 65mm x 65mm x 6mm M.S. angle, bolt, washers etc.) with M.S. holdfast grouted with M15 concrete. The gate shall have M.S. pivot arrangement (ensuring smooth operation of the gate), one heavy duty 450mm long M.S. aldrop, heavy duty M.S. tower bolts etc. complete. The entire gate / fencing with fittings / fixtures / accessories shall be finished with two or more coats of synthetic enamel paint of approved make and shade over a coat of approved red oxide zinc chromate primer. All embedded metallic parts shall be provided with primer. Reference shall be made to EIL standard no. 7-75-0051, 0052 for further details of the system.	SQM	10			0.0051249

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
541	2003	Supplying and erecting in position 2.4 m high PVC coated gavanised chain linked fencing of minimum 8 gauge (including PVC coating) of mesh size 75mm x 75mm. The diameter of the hot dip galvanised steel wire for chain link fencing excluding PVC coating shall not be less than 12 gauge. Concertina of height of 600 mm at top of chain link fencing shall be provided with all accessories. Concertinal shall be from tensile serrated galvanised wire (HTSW) made with wire diameter of 2.5 mm which will be stretched to 6m and attached on two strands of galvanised HTSSW (high tensile spring steel wire) of 2.5mm dia by means of clips at 1m interval. These two HTSSW strands will be attached to the fence posts/ angles with 12 mm security fasteners. Cost to include for GI hook bolts, rings & washers, hot dip galvanised tension wires, 25X6 mm GI flat stretcher bar at end posts etc. all complete. (Structural post shall be separately under ST No. 2007)	RM	0			0.0000000
542	2004	Supplying and erecting in position 2.4 m high gavanised chain linked fencing conforming to IS 2761 of 10G hot dip galvanised steel wires woven in the form of zigzag mesh giving an opening size of 50 mm square. Concertina of height of 600 mm at top of chain link fencing shall be provided with all accessories. Concertinal shall be from tensile serrated galvanised wire (HTSW) made with wire diameter of 2.5 mm which will be stretched to 6m and attached on two strands of galvanised HTSSW (high tensile spring steel wire) of 2.5mm dia by means of clips at 1m interval. These two HTSSW strands will be attached to the fence posts/ angles with 12 mm security fasteners. Cost to include for GI hook bolts, rings & washers, hot dip galvanised tension wires, 25X6 mm GI flat stretcher bar at end posts etc. all complete.	RM	0			0.0000000
543	2005	Supplying and fixing 600mm high G.I. barbed wire fencing on top of boundary wall consisting of min. 6 nos. strands of barbed wire hot dip galvanised wire of 12G comprising of 2 ply with barbs of 16G spaced at 100mm including GI clips, anchors, accessories etc. all complete. (Structural post shall be separately under ST No. 2007)	RM	0			0.0000000
544	2006	Supplying and fixing 600mm high concertina on top of boundary wall including GI tension wires, clips, anchors, accessories etc. all complete. Concertinal shall be from tensile serrated galvanised wire (HTSW) made with wire diameter of 2.5 mm which will be stretched to 6m and attached on two strands of galvanised HTSSW (high tensile spring steel wire) of 2.5mm dia by means of clips at 1m interval. These two HTSSW strands will be attached to the fence posts/ angles with 12 mm security fasteners. (Structural post shall be separately under ST No. 2007)	RM	0			0.0000000
545	2007	Supply and fixing of hot dip galvanised mild steel posts for fencing. Rate of zinc coating shall not be less than 710 g/m2 on steel posts.	MT	0			0.0000000
546	2008	Supply, fabrication and fixing of mild steel posts for fencing including painting etc all complete.	MT	0			0.0000000
547	2009	Supply, fabrication and installing in position and testing galvanised MS Gates out of channels, joists, angles, flats, plates, pipes, welded steel wire mesh & sheets including stiffeners, bracings, fabricated hinges, MS Aldrops with locking arrangement, tempered steel pivot, guide track of MS Tee, bronze aluminium ball bearing arrangements, castor wheels, paintings etc. all complete.	MT	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
548	2010	Supply, fabrication and installing in position and testing MSGates out of channels, joists, angles, flats, plates, pipes, welded steel wire mesh & sheets including stiffeners, bracings, fabricated hinges, MS Aldrops with locking arrangement, tempered steel pivot, guide track of MS Tee, bronze aluminium ball bearing arrangements, castor wheels, paintings (two or more coats of synthetic enamel paint over red oxide zinc chromate primer) etc. all complete as per EIL standard no. 7-75-0051, 0052 and EIL specification.	MT	0			0.0000000
549	2011	Transformer fencing shall be made of 50mm x 50mm x 6mm M.S. Angle frame, 50mm x 50mm x 6mm M.S. Tee stiffeners, 50mm x 50mm x 8mm welded mesh fixed to the frame by 25mm x 3mm M.S. flat beading. The gate / fencing shall be fixed to the masonry / R.C.C. by M.S. hinge arrangement (consisting of 65mm x 65mm x 6mm M.S. angle, bolt, washers etc.) with M.S. holdfast grouted with M15 concrete. The gate shall have M.S. pivot arrangement (ensuring smooth operation of the gate), one heavy duty 450mm long M.S. aldrop, heavy duty M.S. tower bolts etc. complete. The entire gate / fencing with fittings / fixtures / accessories shall be finished with two or more coats of synthetic enamel paint of approved make and shade over a coat of approved red oxide zinc chromate primer. All embedded metallic parts shall be provided with primer. Reference shall be made to EIL standard no. 7-75-0051, 0052 for further details of the system.	SQM	0			0.0000000
550	2100	WATER SUPPLY		0			0.0000000
551		Water supply work including men, material, equipment etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
552	2101	Providing and fixing in position tested heavy duty type chromium plated (CP) brass long neck bib cocks including sockets, union, nuts etc all complete - 15mm nominal bore as per EIL specification 6-75-0009	EACH	5			0.0018857
553	2102	Providing and fixing in position heavy duty brass stop cock of approved quality including all specials etc all complete - 15mm nominal bore as per EIL specification 6-75-0009	EACH	5			0.0015216
554	2103	Providing and fixing in position heavy duty brass full way valve with wheel of approved quality including all specials etc all complete for following sizes:as per EIL specification 6-75-0009		0			0.0000000
555	a	25mm nominal bore.	EACH	2			0.0010373
556	b	50mm nominal bore.	EACH	2			0.0023835
557	2104	Providing and fixing A1K SS pipes shall be concealed and painted with anticorrosive paint, complete for internal works with GI sockets, unions, elbows, tees, nipples etc and clamps including cutting and making good the walls etc all complete for following sizes:		0			0.0000000
558	a	15 mm nominal bore.	RM	0			0.0000000
559	b	20 mm nominal bore.	RM	0			0.0000000
560	c	25 mm nominal bore.	RM	0			0.0000000
561	2116	Supplying,laying, fitting,fixing,jointing concealedGI pipes"J2A" for waterlines atvarious elevations with all fittings stop cock, valves bends, elbows, tees, reducers etc including excavation, back filling, concrete supports, hangers, straps with all materials etc., complete as per EIL specification no. 6-65-1027, 6-651070 and drawings.		0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
562	a	12 mm	RM.	0			0.0000000
563	b	19 mm	RM.	0			0.0000000
564	c	25 mm	RM.	0			0.0000000
565	d	32 mm	RM.	0			0.0000000
566	2105	Providing and fixing GI pipes class B complete for external work with GI sockets, unions, elbows, tees, nipples etc including trenching & refilling, anti-corrosive paint etc all complete for following sizes:		0			0.0000000
567	a	15 mm nominal bore.	RM	0			0.0000000
568	b	20 mm nominal bore.	RM	0			0.0000000
569	c	25 mm nominal bore.	RM	0			0.0000000
570	d	50 mm nominal bore.	RM	0			0.0000000
571	2106	Providing and fixing 610mmx453mmx6mm thk mirror from reputed mirror manufacturer. Mirror shall be mounted with glass adjustable revolving CP brackets with CP screws etc all complete.	EACH	0			0.0000000
572	2107	Providing and fixing 610mmx127mmx6mm thk clear glass with C.P Guard rails and mounted on C.P. brackets etc all complete.	EACH	0			0.0000000
573	2108	Providing and fixing 25 mm diameter stainless steel towel rails (600mm X 25mm) all complete as per EIL specification 6-75-0009	EACH	0			0.0000000
574	2109	Providing and fixing 20mm dia chromium plated M.S. pipes wall mounted towel rod with C.P. Brackets etc all complete.	EACH	0			0.0000000
575	2110	Providing and fixing C.P. soap holder mounted with C.P. screws etc all complete as per EIL specification 6-75-0009	EACH	0			0.0000000
576	2111	Providing and fixing stainless steel / C.P. liquid soap dispenser . Dispenser shall be round and easily revolving with removable threaded nozzle and mounted on C.P. brackets etc all complete as per EIL specification 6-75-0009	EACH	0			0.0000000
577	2112	Providing and fixing glazed vitreous wall mounted paper holder with suitable cover cum cutter fitted with CP screws etc. sll complete as per EIL specification 6-75-0009	EACH	0			0.0000000
578	2113	Providing and fixing chromium plated brass shower rose with 15 or 20 mm inlet all complete as per EIL specification 6-75-0009	EACH	0			0.0000000
579	2114	Providing & fixing in position Polyethylene with PUF insulation of Syntex or approved equivalent including making all necessary inlet & outlet pipes, fixture, ball cocks, valves etc all complete for following capacities. GI pipes shall be paid separately under ST No. 2105. as per specification.		0			0.0000000
580	a	1000 litres capacity	EACH	0			0.0000000
581	b	2000 litres capacity	EACH	0			0.0000000
582	c	5000 litres capacity	EACH	0			0.0000000
583	2115	Providing and fixing approved stainless steel sink with integrated drainboard as per IS:13983 of size 915x460x178mm with CI brackets, stainless steel chain with rubber plug 40mm, cp brass waste trap with necessary union complete including painting the fittings, cutting and making good the wall where required etc. all complete.	EACH	1			0.0023211
584	2200	SANITARY WORKS		0			0.0000000
585		Sanitary work including all labour, material, equipment etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
586	2201-A	Supply and fixing glazed vitreous china Wash Basin Superior quality conforming to IS:2556 part 4 of oval shape with R.S. or C.I. brackets painted white, 15mm chromium plated brass hot & cold faucets with nylon washers, chromium plated brass chain with rubber plug, 32mm chromium plated brass bottle trap and waste of standard pattern, 32mm dia chromium plated brass trap unions, plastic connection pipe with chromium plated nuts, fittings, cutting and making good the walls where required etc all complete as per EIL specification 6-75-0009.		0			0.0000000
587	a	White	EACH	0			0.0000000
588	b	Colored	EACH	0			0.0000000
589	2201-B	Supply and fixing glazed vitreous china Wash Basin Primium quality conforming to IS:2556 part 4 of oval shape with R.S. or C.I. brackets painted white, 15mm chromium plated brass hot & cold faucets with nylon washers, chromium plated brass chain with rubber plug, 32mm chromium plated brass bottle trap and waste of standard pattern, 32mm dia chromium plated brass trap unions, plastic connection pipe with chromium plated nuts, fittings, cutting and making good the walls where required etc all complete as per EIL specification 6-75-0009.		0			0.0000000
590	a	White	EACH	0			0.0000000
591	b	Colored	EACH	0			0.0000000
592	2202	Providing and fixing approved vitreous china laboratory sink of size 600x400x200mm conforming to IS:2556 (part-5) with R.S. or C.I. brackets, chromium plated brass chain with rubber plug 40mm, CP brass waste and 40mm CP brass trap with necessaary union complete including painting the fittings, cutting and making good the wall where required etc. all complete.	EACH	0			0.0000000
593	2203	Providing and fixing stainless steel kitchen sink of size 610x510x200mm conforming to IS: 13983 including all fittings etc. all complete as per EIL specification 6-75-0009.	EACH	0			0.0000000
594	2204	Providing and fixing colour glazed vitreous china Superior type European type water closet conforming to IS:2556 with siphon, open front solid plastic seat and plastic cover, low level 12.5 litre flushing cistern (same colour as WC) with valveless fittings, necessary C.P connections etc all complete as per EIL specification 6-75-0009.		0			0.0000000
595	a	Floor mounted	EACH	0			0.0000000
596	b	Wall mounted	EACH	0			0.0000000
597	2204	Providing and fixing colour glazed vitreous china Premium type European type water closet conforming to IS:2556 with siphon, open front solid plastic seat and plastic cover, low level 12.5 litre flushing cistern (same colour as WC) with valveless fittings, necessary C.P connections etc all complete as per EIL specification 6-75-0009.		0			0.0000000
598	a	Floor mounted	EACH	0			0.0000000
599	b	Wall mounted	EACH	0			0.0000000
600	2205	Providing and fixing colour glazed vitreous indian type Orissa pattern (580x440mm) water closet conforming to IS:2556 part 3 with all fittings including foot rests, low level 12.5 litre PVC flushing cistern with valveless fittings, necessary C.P connections etc all complete.	EACH	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
601	2206	Providing and fixing white flat back glazed vitreous china sensor operated urinals of size 440x265x355 mm with photo voltaic control flushing system as per IS:2556 (part 6, section 1) with flush pipes, lead pipes, gratings, traps and necessary C.P. fittings etc. all complete as per EIL specification 6-75-0009.	EACH	0			0.0000000
602	2207	Supply, laying and jointing UPVC pipes of class 3 as per IS:4985 including bends, branches and all other necessary fittings, M.S holder bats/clamps, cutting and making good the walls and floors, jointing, testing etc all complete for following.		0			0.0000000
603	a	75mm dia pipes	RM	0			0.0000000
604	b	110mm dia pipes	RM	50			0.0144352
605	c	160mm dia pipes	RM	50			0.0232524
606	d	200mm dia pipes	RM	0			0.0000000
607	2208	Providing, laying light duty non pressure NP3 class RCC pipes with collars jointed with stiff mixture of cement mortar 1:2 including testing of joints etc all complete for following.		0			0.0000000
608	a	200mm dia	RM	150			0.0961309
609	b	300mm dia	RM	200			0.1690614
610	c	450mm dia	RM	150			0.1690874
611	b	600mm dia	RM	150			0.2574154
612	e	900mm dia	RM	150			0.4174515
613	2209	Providing, laying light duty non pressure NP2 class RCC pipes with collars jointed with stiff mixture of cement mortar 1:2 including testing of joints etc complete for following.		0			0.0000000
614	a	150mm dia	RM	20			0.0080421
615	b	250mm dia	RM	20			0.0108928
616	c	300mm dia	RM	20			0.0120996
617	d	500mm dia	RM	20			0.0207139
618	2210	Providing, laying light duty non pressure NP4 class RCC pipes with collars jointed with stiff mixture of cement mortar 1:2 including testing of joints etc complete for following:		0			0.0000000
619	a	450mm dia	RM	30			0.0330840
620	b	600mm dia	RM	30			0.0542921
621	c	900mm dia	RM	30			0.0870172
622	2211	Providing and fixing C.I Manhole heavy duty cover of size 600mmx450mm including frame from reputed manufacture etc. all complete.	EACH	50			0.2938026
623	2212	Providing and fixing circular heavy duty C.I. manhole cover of 600 mm dia with frame etc. all complete.	EACH	50			0.3045706
624	2213	Providing and fixing square mouth S.W Gully trap grade 'A' complete with CI grating, brick masonry chamber and water tight CI cover with 300x300mm (inside). The weight of cover to be not less than 4.53 Kg and frame to be not less than 2.72 Kg etc all complete for following sizes:		0			0.0000000
625	a	100x100mm P or S Type.	EACH	0			0.0000000
626	b	150x100mm P or S Type.	EACH	0			0.0000000
627	c	150x150mm P or S Type.	EACH	0			0.0000000
628	2214	Providing and fixing square mouth S.W Gully trap grade 'A' complete with CI grating, brick masonry chamber and water tight CI cover with 300x300mm (inside). The weight of cover to be not less than 4.53 Kg and frame to be not less than 2.72 Kg etc all complete for following sizes:		0			0.0000000
629	a	100x100mm P or S Type.	EACH	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
630	b	150x100mm P or S Type.	EACH	0			0.0000000
631	c	150x150mm P or S Type.	EACH	0			0.0000000
632	2215	Providing and fixing C.I. floor traps with C.P jalli all complete.	EACH	0			0.0000000
633	2216	Providing and fixing heavy duty UPVC floor traps with C.P jalli all complete.	EACH	0			0.0000000
634	2217	Providing and installing approved brand single tap water cooler of 80 L cooling capacity all complete.	EACH	0			0.0000000
635	2218	Providing and installing approved brand single tap water cooler of 150 L cooling capacity all complete.	EACH	0			0.0000000
636	2219	Providing and fixing white vitreous urinal partitions of size 675x325x85mm all complete.	EACH	0			0.0000000
637	2220	Providing and fixing eye and face drinking water fountain (combined unit with receptacle conforming to IS: 10592) all complete as per specification.	EACH	0			0.0000000
638	2221	Providing and fixing heavy duty cast iron pipes for above and below ground sanitary works with water tight lead joint, fixing clamps, excavation, filling, disposal etc. all complete for the following.		0			0.0000000
639	c	150mm dia pipes	RM	0			0.0000000
640	d	200mm dia pipes	RM	0			0.0000000
641	2222	Providing, laying spun CI pipes with conforming to IS 1536 complete for following.(Excavation,backfilling,concrete to be paid seperately)		0			0.0000000
642	c	150mm dia	RM	0			0.0000000
643	d	200mm dia	RM	0			0.0000000
644	2300	STRUCTURAL STEEL		0			0.0000000
645		Structural steel works including all labour, material, equipments, transportation, handling etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
646	2301	Supply, fabrication and erection of structural steel Grade E350 Quality BR/B0 with mild steel rolled section / built up section / combination of both conforming to IS:2062, pipes conforming to IS:1161/ IS:1239, chequered plate conforming to IS: 3052, mild steel rounds, monorails, stays, safety chains, ladders, MS grating etc. in columns, beams, gantry girders, bunkers, silos, hoppers, roof trusses, portals, laced purlins, space frames, hangers, struts, monorails, galleries, stiffeners, wall beams, sheeting runners, brackets, stub columns, bracings, cleats, trestles, base plates, splice plates, chequered plate flooring, decking and seal plates, steel frame grid over false ceiling, walkway platforms, ladders, stairs, stringers, treads, landings, hand-rails etc including 2 coats of redoxide zinc-chromate primer (one coat at shop and one coat after erection), connection design & preparation of fabrication drgs, collection of steel from stores, fabrication, straightening, cutting, bending, rolling, grinding, machining, drilling, welding, electrodes and other consumables, alignment, erection bolts & nuts (weight of erection bolts, nuts and welds not payable), assembly, edge preparation, preheating (min preheat and interpass temperature of 20° C for welding over 20 mm and upto 40 mm & 66° C for welding over 40 mm and upto 63 mm & 110° C for thickness over 63 mm & use of low hydrogen/ radiogenic electrodes), post heating, testing of welders, inspection of welds, visual inspection, non destructive and special testing, rectification and correction of defective welding works, production test plate, inspection and testing, erection scheme, protection against damage in transit, stability of structures, installation of temporary structures, setting column bases, surface preparation by means of manual or mechanical power tools as per IS:1477 part 1, touch-up painting, rectification, dismantling and removal of all temporary structures (weight of temporary structures not payable), return of surplus / waste steel materials to store etc all complete. Including appointment of a seperate agency, approved by BHEL, for review and approval of fabrication drgs, in consultation with BHEL. as per Specification B957-000-06-42-PLS-01	MT	0			0.0000000
647	2302		MT	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
648	2303	Extra over ST NO. 2301 for providing and application of one coat of intermediate consisting of epoxy high built coating of 100 micron above the primer including touch up painting etc. all complete and as per Specification B957-000-06-42-PLS-01	MT	0			0.0000000
649	2304	Providing and applying two coats of synthetic enamel paint with minimum 50 micron total dry film thickness (DFT) of approved make and shade to achieve an even shade over steel sections already having primer coats and keeping overall DFT with primer not less than 110 microns including protection and cleaning, scaffolding etc. all complete.	MT	0			0.0000000
650	2305	Providing and applying acylic polyurethane finish paint with minimum 40 micron dry film thickness (DFT) of approved make (coat shall be applied after an interval of minimum overnight from the application of intermediate coat) to achieve total minimum DFT of 245 Micron.as per Specification B957-000-06-42-PLS-01	MT	0			0.0000000
651	2306	Providing, laying and clamping of crane rails over the crane girder at all elevations as per IS 3443 including all fixtures, clamps, testings etc. all complete as per drawing and specification.	MT	0			0.0000000
652	2307	Supplying, fabrication, erection and alignment of factory made electroforged galvanised grating units with structural steel Grade E250 Quality A/BR/B0 mild steel (having minimum galvanisation of 900 g/sqm) conforming to IS:2062 in flooring, platforms, drain and trench covers, walk-ways, passages, staircases with edge binding strips and anti-skid nosing in treads etc. including fixing clamps, fittings, fixtures, all taxes, duties, packing, grinding, drilling, welding, edge preparation, etc. all complete as per EIL specification 7-68-0697	MT	0			0.0000000
653	2308	Supplying, fabrication, erection and alignment of factory made galvanised welded grating units with mild steel conforming to IS:2062 in flooring, platforms, drain and trench covers, walk-ways, passages, staircases with edge binding strips and anti-skid nosing in treads etc. including 2 coats of redoxide zinc-chromate primer (one coat at shop and one coat after erection), fixing clamps, fittings, fixtures, all taxes, duties, packing, grinding, drilling, welding, edge preparation, etc. all complete.	MT	0			0.0000000
654	2309	Extra over above ST NO. 2301/2307 for finishing the grating units with hot dipped galvanisation @ 610 gm/sqm over blast cleaned steel surfaces instead of painting with two coats of red oxide zinc-chromate primer all complete.	MT	0			0.0000000
655	2310	Providing and fixing in position of permanent mild steel bolts (class 4.6 as per IS : 1367 and grade 'C' as per IS: 1363) and nuts, washers etc. up to and inclusive of 39 mm diameter and upto 300mm long for structural steel work etc all complete.	MT	0			0.0000000
656	2311	Providing and fixing in positing of high strength structural bolts (of property class 8.8 and product grade 'C' as per IS: 1367) and conforming to IS: 3757 and high strength structural hardened and tempered nuts (of property class '8' as per IS:1367) conforming to IS:6623 with hardened and tempered washers as per IS:6649 etc. up to and inclusive of 39 mm diameter and upto 300 mm long for structural steel work etc all complete.	MT	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
657	2312	Dismantling of steel structure , lowering of material and carriage of the dismantled material up to field fabrication shop / projects storage including temporary dismantling, cutting, re-welding, supporting, and restoring to correct position all temporarily dismantled members, re-alignment of all adjacent connected members to their correct positions (weight of such adjacent members and temporarily dismantled members not payable), scaffolding, staging, tools & tackles, gas cutting, welding, consumables etc all complete.	MT	0			0.0000000
658	2313	Addition to, alterations in and/or modification of " Erection Marks " including cutting of parts, gauging of welds, cutting, grinding, fabrication, welding, drilling holes, straightening, removal of bends, raising to the required level, painting, transportation, return of unutilised steel pieces to the project store, temporarily dismantling, cutting, re-welding, supporting and restoring to correct position of all the temporarily dismantled members, realignment of adjacent connected members (weight of such temporarily dismantled and adjacent members not payable) etc all complete for the following:		0			0.0000000
659	a	In erected position	MT	0			0.0000000
660	b	In fabrication yard	MT	0			0.0000000
661	2314	Re-erection of dismantled fabricated structural steel members including carriage of modified "Erection Marks" from the field fabrication shop to erection site, lifting to required position, aligning in position, tack welding, final welding and touch up painting including temporary dismantling and re-erection of temporarily dismantled members, cutting, re-welding, supporting and restoring to the correct position of all temporarily dismantled members, re-alignment of adjacent connected members(weight of such temporarily dismantled members and adjacent members not payable), scaffolding, staging, tools & tackles, gas cutting, welding, consumables etc all complete.	MT	0			0.0000000
662	2315	Supply, fabrication and erection of minimum 3.15 mm thick stainless steel liner of grade SS:409M on M.S. plate for inside surfaces vertical portion of bunkers including fixing with stainless steel studs, bolting (including countersunk), welding with electrode classification E308L for welding of stainless steel to stainless steel and E309 for stainless steel to mild steel etc. all complete.	MT	0			0.0000000
663	2316	Supply, fabrication and erection of minimum 4 mm thick stainless steel liner of grade AISI-304 ; Finish Grade 2B (Cold rolled, Annealed & Pickled and Skin passed) on M.S. plate for inside surfaces of hopper & mouth of bunker including fixing with stainless steel studs, bolting (including countersunk), welding with electrode classification E308L for welding of stainless steel to stainless steel and E309 for stainless steel to mild steel etc. all complete.	MT	0			0.0000000
664	2317	Providing and fixing in position PTFE type sliding bearings of reputed manufacturer, individual bearing suitable for required vertical loads as per the construction drawings and for maximum displacement of ±50 mm including all taxes, duties, transportation, installation, drilling, bolting, erecting, aligning etc all complete for following vertical loads.		0			0.0000000
665	a	20 Tons	EACH	0			0.0000000
666	b	25 Tons	EACH	0			0.0000000
667	c	40 Tons	EACH	0			0.0000000
668	d	50 Tons	EACH	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
669	e	60 Tons	EACH	0			0.0000000
670	2318	Providing and fixing flexible open ended bellow strap of neoprene of minimum thickness 2 mm and minimum width 200 mm with aluminium stripped edges as sealing below top of bunker and bottom of tripper floor to avoid the coal dust nuisance all complete.	RM	0			0.0000000
671	2319	Supply, fabrication and fixing of stainless steel pipe hand railing of 32 mm/40 mm dia including transportation, loading/unloading etc. all complete..	MT	0			0.0000000
672	2320	Supply, fabrication and fixing of GI pipe hand railing (1000 mm high) of 32 mm/40 mm dia (Medium Grade) including transportation, loading/unloading, painting etc. all complete . As per specification 7-68-0060 and Specification B957-000-06-42-PLS-01	MT	0			0.0000000
673	2321	Conducting radiography test on welds wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	RM	0			0.0000000
674	2322	Conducting ultasonic test on welds wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	RM	0			0.0000000
675	2323	Conducting ultasonic test on steel plates as per ASTM-A435 or equivalent wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	SQM	0			0.0000000
676	2324	Conducting magnetic particle test on welds wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	RM	0			0.0000000
677	2325	Conducting dye penetration test on welds wherever specified by the engineer including provision of necessary equipments, measuring devices, gauges etc. all complete (over and above the work already specified in the specifications.)	RM	0			0.0000000
678	2500	PILING WORKS		0			0.0000000
679	2501	Mobilisation of two sets of hydraulic rotary piling rigs and accessories capable of pile boring/drilling in all types of strata/installing various size of bored cast in situ RCC piles to project site and demobilisation of the same after completion of piling works etc all complete.	LS	0			0.0000000
680	2502	Mobilisation of two sets of conventional DMC/RMC piling rigs and accessories capable of pile boring/drilling in all types of strata/installing various size of bored cast in situ RCC piles to project site and demobilisation of the same after completion of piling works etc all complete.	LS	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
681	2503	Installation of Bored cast-in-situ piles (with permanent MS liner of 6mm thickness with minimum embedment length of approx 6.3m) as per IS 2911 (Part 1 Sec 2) with diameter and length as specified (length to be measured from pile cut-off level to the bottom of pile) using cement concrete grade M35 conforming to IS:456 with 20 mm nominal size stone aggregates with a minimum cement content of 400Kg per cum of concrete including providing all materials (but excluding reinforcement steel for which measurement/payment shall be made separately), boring/drilling in all types of soil, providing bentonite slurry and/or casing for stabilization of pile bore, flushing of pile bore, cleaning, providing plasticizer wherever required, breaking pile head to cut off level and exposing pile reinforcement for embedment in pile cap etc including empty boring from ground level to pile cutoff level etc all complete as per specification, drawing and as directed by the engineer-in-charge for the following. -		0			0.0000000
682	a	Pile with 450 mm diameter and 20 m length below cut off level	Each	0			0.0000000
683	b	Pile with 500 mm diameter and 17 m length below cut off level(only head breaking is to be considered-piling is by Customer)	Each	0			0.0000000
684	d	Pile with 550 mm diameter and 20 m length below cut off level	Each	0			0.0000000
685	e	Pile with 760 mm diameter and 20 m length below cut off level	Each	0			0.0000000
686	f	Pile with 900 mm diameter and 20 m length below cut off level	Each	0			0.0000000
687	2504	Extra over ST. No. 2503 for pile length more than the specified length of 20m below cut off level for the following.		0			0.0000000
688	a	For 450 mm diameter pile	Rm	0			0.0000000
689	b	For 500 mm diameter pile	Rm	0			0.0000000
690	c	For 550 mm diameter pile	Rm	0			0.0000000
691	d	For 760 mm diameter pile	Rm	0			0.0000000
692	e	For 900 mm diameter pile	Rm	0			0.0000000
693	2505	Rebate on ST.No.2503 for pile length less than the specified length of 20m below cut off level for the following.		0			0.0000000
694	a	For 450 mm diameter pile	Rm	0			0.0000000
695	b	For 550 mm diameter pile	Rm	0			0.0000000
696	c	For 600 mm diameter pile	Rm	0			0.0000000
697	d	For 760 mm diameter pile	Rm	0			0.0000000
698	e	For 900 mm diameter pile	Rm	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
699	2506	Extra over ST.No.2503 for boring/drilling in rock for a length not exceeding 3 times the diameter of pile, cleaning the pile hole, concreting etc all complete for the following.		0			0.0000000
700	a	For 450 mm diameter pile	Rm	0			0.0000000
701	b	For 500 mm diameter pile	Rm	0			0.0000000
702	c	For 600 mm diameter pile	Rm	0			0.0000000
703	d	For 760 mm diameter pile	Rm	0			0.0000000
704	e	For 900 mm diameter pile	Rm	0			0.0000000
705	2507	Conducting initial load test upto a maximum test load of 2.5 times the safe load capacity on single pile as specified in accordance with IS 2911 (Part-4) including preparation of pile head for testing, necessary excavation, all arrangements of loading, unloading, test equipments/accessories, jacks, recording of results, labour, submission of test report but excluding the cost of installation of pile (installation of pile shall be paid seperately) etc all complete as per specification, drawing and as directed by engineer in-charge for the following.		0			0.0000000
706	a	For vertical compression test by cyclic load method		0			0.0000000
707	i	450 mm diameter pile	Each	0			0.0000000
708	ii	500 mm diameter pile	Each	0			0.0000000
709	iii	600 mm diameter pile	Each	0			0.0000000
710	iv	760 mm diameter pile	Each	0			0.0000000
711	v	900 mm diameter pile	Each	0			0.0000000
712	b	For lateral load test		0			0.0000000
713	i	450 mm diameter pile	Each	0			0.0000000
714	ii	500 mm diameter pile	Each	0			0.0000000
715	iii	600 mm diameter pile	Each	0			0.0000000
716	iv	760 mm diameter pile	Each	0			0.0000000
717	v	900 mm diameter pile	Each	0			0.0000000
718	c	For tension/uplift test		0			0.0000000
719	i	450 mm diameter pile	Each	0			0.0000000
720	ii	500 mm diameter pile	Each	0			0.0000000
721	iii	600 mm diameter pile	Each	0			0.0000000

Item No.	ST. NO	DESCRIPTION OF ITEM	UOM	QUANTITY (a)	Rates in Rs.	Amounts in Rs.	Weightage %
722	iv	760 mm diameter pile	Each	0			0.0000000
723	v	900 mm diameter pile	Each	0			0.0000000
724	2508	Conducting routine load test on single job pile as specified in accordance with IS 2911 (Part-4) including preparation of pile head for testing, necessary excavation, providing all arrangements of loading, unloading, test equipments/accessories, jacks, recording of results, labour, submission of test report etc but excluding the cost of installation of job pile complete as per specification, drawing and as directed by the engineer-in-charge for the following.		0			0.0000000
725	a	For vertical compression test by maintained load method		0			0.0000000
726	i	450 mm diameter pile	Each	0			0.0000000
727	ii	500 mm diameter pile	Each	0			0.0000000
728	iii	600 mm diameter pile	Each	0			0.0000000
729	iv	760 mm diameter pile	Each	0			0.0000000
730	v	900 mm diameter pile	Each	0			0.0000000
731	b	For lateral load test		0			0.0000000
732	i	450 mm diameter pile	Each	0			0.0000000
733	ii	500 mm diameter pile	Each	0			0.0000000
734	iii	600 mm diameter pile	Each	0			0.0000000
735	iv	760 mm diameter pile	Each	0			0.0000000
736	v	900 mm diameter pile	Each	0			0.0000000
737	2509	Carrying out pile integrity test on 450mm/500mm/ 600mm/760mm/900mm diameter pile including all arrangements for test, equipments/accessories, materials, labour, submission of test report etc but excluding the cost of installation of job pile all complete as per specification and as directed by the engineer-in-charge.	Each	0			0.0000000
		Total=					100.0000

(Bill of quantity/Schedule of quantity) Annexure-B

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
1	A-1.1	Construction of Worker's Accommodation sheds(120-125 workers)having adequate no. of rest rooms along with toilets etc. including associated civil and Structural works on built,own and operate basis(ownership of sheds shall be in line withTCC)as per attached drawing, Standard Guidelines for Worker's Accommodation / Establishments at Project Site and respective of TCC for development of labour colony. Payment shall be released on completion of each shed/set as per attached drawing. Cement & Steel shall be in bidder's scope.	Set	2			5.4699977
2	A-1.2	Payment for Lease of land provided for labour colony area including all statutory clearances, expenses for agreement and any other incidental charges, etc.	Acre-Month	25			0.3281999
4	100	EARTH WORK					0.0000000
5		Earth work in excavation, backfilling and disposal including necessary men/women, materials, equipment, loading, transportation, unloading, dewatering etc as per specification, drawing and as directed by engineer- in-charge for the following.					0.0000000
6	101	Earth work in excavation in all types of soil including ash which can be excavated by any means including setting out, levelling, dewatering (but excluding special type of dewatering viz. well point method), shoring & strutting (wherever required), dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 500 m, spreading/levelling of disposed materials etc all complete for following depths below ground level.					0.0000000
7	a	Depth from ground level but not exceeding 2 m	CUM	605			0.0319180
8	b	Depth exceeding 2 m but not exceeding 4 m	CUM	302			0.0198612
9	c	Depth exceeding 4 m but not exceeding 6 m	CUM	0			0.0000000
10	d	Depth exceeding 6 m but not exceeding 8 m	CUM	0			0.0000000
11	e	Depth exceeding 8 m but not exceeding 10 m	CUM	0			0.0000000
12	f	Depth exceeding 10 m but not exceeding 15 m	CUM	0			0.0000000
13	102	Extra over ST No. 101 for dewatering of ground water by well point method as per IS 9759.	CUM	0			0.0000000
14	103	Earth work in excavation in soft rock (rock without any recovery of excavated materials in the form of hard stone/boulder) including weathered rock which can be excavated by means of crow bar, pick axe, pneumatic rock breaker attachment with excavator machine etc but does not require chiselling or blasting including setting out, levelling, dewatering (wherever required), shoring & strutting (wherever required), dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 500 m, spreading / levelling of disposed materials etc all complete for following depths below ground level.		0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
15	a	Depth from ground level but not exceeding 2 m	CUM	3024			0.2360276
16	b	Depth exceeding 2 m but not exceeding 4 m	CUM	1512			0.1416166
17	c	Depth exceeding 4 m but not exceeding 6 m	CUM	0			0.0000000
18	d	Depth exceeding 6 m but not exceeding 8 m	CUM	0			0.0000000
19	e	Depth exceeding 8 m but not exceeding 10 m	CUM	0			0.0000000
20	f	Depth exceeding 10 m but not exceeding 15 m	CUM	0			0.0000000
21	104	Earth work in excavation in hard rock requiring blasting (but excluding controlled blasting) including wedging, line drilling, pre shearing etc as required, setting out, levelling, dewatering (wherever required), dressing the sides & bottom, all lifts, necessary licenses/statuatory clearances for blasting, supply, storage & handling of blasting materials, stacking/disposal of surplus excavated material within a lead upto 500m, spreading / levelling of disposed materials etc all complete for following depths below ground level.		0			0.0000000
22	a	Depth from ground level but not exceeding 2 m	CUM	0			0.0000000
23	b	Depth exceeding 2 m but not exceeding 4 m	CUM	0			0.0000000
24	c	Depth exceeding 4 m but not exceeding 6 m	CUM	0			0.0000000
25	d	Depth exceeding 6 m but not exceeding 8 m	CUM	0			0.0000000
26	e	Depth exceeding 8 m but not exceeding 10 m	CUM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
27	f	Depth exceeding 10 m but not exceeding 15 m	CUM	0			0.0000000
28	105	Earth work in excavation in hard rock requiring controlled blasting including wedging, line drilling, pre shearing etc as required, setting out, levelling, dewatering (wherever required), shoring & strutting (wherever required), dressing the sides & bottom, all lifts, necessary licenses/statutory clearances for blasting, supply, storage & handling of blasting materials, stacking/disposal of surplus excavated material within a lead upto 500m, spreading / levelling of disposed materials etc all complete for following depths below ground level.		0			0.0000000
29	a	Depth from ground level but not exceeding 2 m	CUM	0			0.0000000
30	b	Depth exceeding 2 m but not exceeding 4 m	CUM	0			0.0000000
31	c	Depth exceeding 4 m but not exceeding 6 m	CUM	0			0.0000000
32	d	Depth exceeding 6 m but not exceeding 8 m	CUM	0			0.0000000
33	e	Depth exceeding 8 m but not exceeding 10 m	CUM	0			0.0000000
34	f	Depth exceeding 10 m but not exceeding 15 m	CUM	0			0.0000000
35	106	Earth work in excavation in hard rock requiring chiselling including wedging, line drilling, pre shearing etc as required, setting out, levelling, deawtering (wherever required), dressing the sides & bottom, all lifts, stacking/disposal of surplus excavated material within a lead upto 500m, spreading / levelling of disposed materials etc all complete for following depths below ground level.		0			0.0000000
36	a	Depth from ground level but not exceeding 2 m	CUM	0			0.0000000
37	b	Depth exceeding 2 m but not exceeding 4 m	CUM	0			0.0000000
38	c	Depth exceeding 4 m but not exceeding 6 m	CUM	0			0.0000000
39	d	Depth exceeding 6 m but not exceeding 8 m	CUM	0			0.0000000
40	e	Depth exceeding 8 m but not exceeding 10 m	CUM	0			0.0000000
41	f	Depth exceeding 10 m but not exceeding 15 m	CUM	0			0.0000000
42	107	Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 250 mm thickness using/with selected materials from compulsorily excavated soil available within a lead upto 500m and compacted as specified including re-excavation of stacked earth, watering, ramming/compaction by manual/mechanical means, dressing etc all complete.for the following.		0			0.0000000
43	a	Each layer compacted so as to achieve at least 95% maximum dry density as per IS-2720 (Part-VII)	CUM	0			0.0000000
44	b	Each layer compacted so as to achieve at least 90% maximum dry density as per IS-2720 (Part-VII)	CUM	0			0.0000000
45	c	Each layer compacted so as to achieve at least 85% maximum dry density as per IS-2720 (Part-VII)	CUM	0			0.0000000
46	d	Each layer compacted so as to achieve at least 75% relative density as per IS-2720 part XIV in case of sandy soils.	CUM	0			0.0000000
47	e	Each layer compacted so as to achieve at least 70% relative density as per IS-2720 part XIV in case of sandy soils.	CUM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
48	108	Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 200 mm thickness using/with selected materials directly from excavation and compacted as specified including watering, ramming/compaction by manual/mechanical means, dressing etc all complete for the following.		0			0.000000

Package -2: Civil works- Constrcution of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
49	a	Each layer compacted so as to achieve at least 95% maximum dry density as per IS-2720 (Part-VII)	CUM	0			0.0000000
50	b	Each layer compacted so as to achieve at least 90% maximum dry density as per IS-2720 (Part-VII)	CUM	1497			0.0367839
51	c	Each layer compacted so as to achieve at least 85% maximum dry density as per IS-2720 (Part-VII)	CUM	0			0.0000000
52	d	Each layer compacted so as to achieve at least 75% relative density as per IS-2720 part XIV in case of sandy soils.	CUM	0			0.0000000
53	e	Each layer compacted so as to achieve at least 70% relative density as per IS-2720 part XIV in case of sandy soils.	CUM	0			0.0000000
54	109	Extra over ST No. 101 and 103 to 107 for carriage of excavated earth/selected materials for every 1 km or part thereof beyond an initial lead of 500m.	CUM	998			0.0050488
55	110 a	Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 200 mm thickness using/with approved borrowed soil (borrowed soil to be arranged by the bidder) and compacted as specified including supplying borrowed soil, royalty (if any), watering, ramming/compaction by manual/mechanical means, dressing etc all complete for the following.		0			0.0000000
56	a	Each layer compacted so as to achieve at least 95% maximum dry density as per IS-2720 (Part-VII)	CUM	0			0.0000000
57	b	Each layer compacted so as to achieve at least 90% maximum dry density as per IS-2720 (Part-VII)	CUM	3493			0.5200236
58	c	Each layer compacted so as to achieve at least 85% maximum dry density as per IS-2720 (Part-VII)	CUM	0			0.0000000
59	d	Each layer compacted so as to achieve at least 75% relative density as per IS-2720 part XIV in case of sandy soils.	CUM	0			0.0000000
60	e	Each layer compacted so as to achieve at least 70% relative density as per IS-2720 part XIV in case of sandy soils.	CUM	0			0.0000000
61	111	Supplying and filling sand upto any depth under floors, around foundations, plinths etc. in layers not exceeding 200 mm thickness and compacted so as to achieve at least 80% relative density as per IS-2720 (Part-XIV) including spreading, watering, ramming/compaction by manual / mechanical means, dressing, royalty (if any) etc. all complete.	CUM	883			0.4154311
62	200	CONCRETE WORKS		0			0.0000000
63		Providing and placing concrete work including cost of labour, materials and equipment for handling, transportation, batching, mixing, placing, vibrating and curing, (excluding cost of centering, shuttering and reinforcement) with mechanised equipments like batching plant, transit mixer, concrete pump etc. complete as per drawing, specifications and as per direction of engineer in charge for the following.		0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
64	201	Concrete of grade M5 (1 part cement, 5 part sand, 10 parts of 40 mm graded aggregate by volume) as filling course at any depth below finished floor level, under and around foundations/floors, mass fill etc.	CUM	371			1.3424829
65	202	Concrete of grade M10 (1 part cement, 3 part sand, 6 parts of 40 mm graded aggregate by volume) as lean concrete, levelling course , mud mat under and around foundations/floors at any depth below finished floor level etc.	CUM	0			0.0000000
66	203	Concrete of grade M15 (1 part cement, 2 part sand, 4 parts of 40 mm graded aggregate by volume) as lean concrete, levelling course , mud mat under and around foundations/floors at any depth below finished floor level etc.	CUM	0			0.0000000
67	204	Concrete under floors, paving, plinth protection, pipe encasing etc complete with 20 mm nominal size graded aggregate at any depth below finished floor level for the following grades.		0			0.0000000
68	a	M15 Grade	CUM	0			0.0000000
69	b	M20 Grade	CUM	50			0.2199172
70	205	Providing and laying Design Mix cement concrete conforming to IS:456 & IS 10262-2009 for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in foundations/substructure, grade slab, paving, drains, under floors etc at any level below finished floor level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer conforming to IS:9103 (latest) to achieve required slump in concrete all complete as per specification & drawing for the following.		0			0.0000000
71	a	M20 Grade	CUM	0			0.0000000
72	b	M25 Grade	CUM	2182			10.1664582
73	c	M30 Grade	CUM	0			0.0000000
74	d	M35 grade	CUM	0			0.0000000
75	206	Providing and laying Design Mix cement concrete conforming to IS:456 & IS 10262-2009 for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in superstructure at any level above finished floor level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer conforming to IS:9103 (latest) to achieve required slump in concrete all complete as per specification & drawing for the following.		0			0.0000000
76	a	M25 Grade	CUM	1804			8.5812722
77	b	M30 Grade	CUM	0			0.0000000
78	c	M35 grade	CUM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
79	207-A	Providing and laying Design Mix cement concrete confirming to IS:456 & IS 10262-2009 for reinforced concrete works of grade M-30 Grade in machine foundations for TG, Gas Turbine, ID/FD/PA fans, BFP, Coal mills at all elevations below/above finished floor level except TG deck and top decks supported over vibration isolation system including addition of suitable plasticizer conforming to IS 9103(latest) to achieve a slump more than 125mm in concrete as per manufacturer's recommendation with 20 mm nominal size graded aggregate in concrete all complete as per specification & drawing.	CUM	0			0.0000000
80	208	Providing and laying Design Mix cement concrete as per IS:456 & IS 10262-2009 of grades mentioned below for reinforced concrete works using graded aggregate in top decks of all machine foundations supported on vibration isolation system (excluding supply and installation of vibration system) and top deck of TG foundation at all levels including addition of suitable plastisizers conforming to IS9103 to achieve a slump more than 125 mm in concrete as per manufacturers recommendation, preperation of scheme for concreting, getting it approved by engineer, labour, materials, equipment, handling, batching, transporting, mixing, pumping, placing, leveling, vibrating, compacting, curing, testing, cleaning and rendering the exposed surface with cement sand mortar to give a smooth and even surface, maintaining and submitting records of concreting, petrographic examination and potential reactivity of aggregate etc. all complete as per specification, drawing and instructions of engineer, including UPV testing as directed by engineer in charge, rectification of the defects in concreting observed by ultra-sonic pulse velocity (UPV) testing by cement/epoxy grout etc, but excluding formwork, staging, reinforcement, embeddments and temperature control of concrete. Payment terms - a) After casting 75% ; b) After receipt of ultrasonic test report - 25%.		0			0.0000000
81	a	M30 grade (with 20mm nominal size graded stone aggregate)	CUM	0			0.0000000
82	b	M35 grade (with 20mm nominal size graded stone aggregate)	CUM	0			0.0000000
83	c	M40 grade (with 20mm nominal size graded stone aggregate)	CUM	0			0.0000000
84	209	Extra over St. No. 205 to 208 for controlling of temperature of fresh concrete to less than 23 degree centigrade using ice, including all related arrangements for providing, storing and mixing of ice with water, cooling of aggregates etc. All complete as per specification, drawing and instruction of engineer in charge.	CUM	0			0.0000000
85	210	Extra over ST Nos. 205 to 207 for conducting UPV test for concrete at all levels including all equipments, making necessary arrangements, staging, submission of report etc. all complete as directed by engineer in charge and as per specification.	CUM	0			0.0000000
86	211	Providing and encasing of structural steel member with concrete using nominal aggregate size of 12.5mm down. Encased member shall be wrapped with welded wire mesh/chicken wire mesh with proper lap etc. complete as per specification for the following grades. (Payment of welded wire mesh, chicken wire mesh shall be made separately).		0			0.0000000
87	a	M20 grade	CUM	5			0.0225843
88	b	M25 grade	CUM	2			0.0092390

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
89	212	Screed concrete conforming to IS 456 with coarse sand and graded hard stone aggregate 12.5mm/6 mm nominal size on the roof at any level or thickness, drains etc complete as per following.		0			0.0000000
90	a	1:2:4 (1 part cement, 2 part sand, 4 parts of aggregate by volume)	CUM	0			0.0000000
91	b	1:1.5:3 (1 part cement, 1.5 part sand, 3 parts of aggregate by volume)	CUM	0			0.0000000
92	213	Providing and laying Design Mix cement concrete as per IS:456 & IS 10262-2009 for reinforced concrete works using graded aggregate for Concrete in precast works like roof slabs/trench covers, fins, lintels, chajas, beams, columns, wall panels, facias etc.at all levels in all kinds of work including formwork/moulds, curing, rendering the top exposed surface with cement sand mortar (1:3), handling, storing, transpoting, all leads, erection without damage, setting in position with cement sand mortar (1:3), filling the gaps between adjacent preacast units with M30 grade concrete or cement sand mortar (1:3) and including making of holes for bolts for fixing, welding etc.complete with graded aggregate (20/12.5/10 mm) and as per specification and drawing for following grades.		0			0.0000000
93	a	M 25 grade	CUM	0			0.0000000
94	b	M 30 grade	CUM	5			0.0297607
95	214a	Providing and laying Design Mix cement concrete as per IS:456, IS 3370 & IS 10262-2009 for reinforced concrete works using graded aggregate for Concrete in water retaining/conveying structures including addition of Crystalline water-proofing compound of approved make as per CPWD specification & suitable plastisizer cum waterproofing cement additives conforming to IS 9103 latest to achieve a slump more than 125 mm in concrete as per manufacturers recommendation and conforming to limits of permeability as per IS 2545 and specification with 20 mm nominal size graded aggregate for following grades.		0			0.0000000
96	a	M 25 grade	CUM	0			0.0000000
97	b	M 30 grade	CUM	0			0.0000000
98	c	M35 grade	CUM	0			0.0000000
99	215	Dismantling concrete work for all types of structures at all levels including stacking of servicable material to a lead of 500 m and disposal of unservicable material upto a lead of 2 km, cutting of reinforcement, labour, equipment, safety precautions etc all complete as per drawings, specification and instructions of engineer in charge.		0			0.0000000
100	a	Plain cement concrete of all grades	CUM	0			0.0000000
101	b	Reinforced cement concrete of all grades	CUM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
102	215-A	Extra for laying concrete in or under water and/or liquid mud including cost of pumping or bailing out water and removing slush etc. complete. Note :- The quantity will be calculated by multiplying the depth measured from the sub-soil water level up to centre of gravity of concrete under sub-soil water level with quantity of concrete in cum executed under sub-soil water. The depth of centre of gravity shall be reckoned correct to 0.1m. (0.05m or more shall be taken as 0.1m and less than 0.05m ignored).	cum per metre depth	545.5			0.2956855
103	216	Chipping of concrete in reinforced concrete work, cutting pockets, making openings at all levels and according to shapes, disposal of waste materials upto a lead of 2 km as directed by engineer including equipment, safety precautions, making good the broken surface etc all complete as per specification, drawing, instructions of engineer in charge but excluding cutting of reinforcement .	CUDM	0			0.0000000
104	217	Extra over and above St No 216 for cutting of reinforcement , all sizes and types including labour, equipment, return of cut reinforcement to store etc all complete as per specification, drawings and instructions of engineer in charge. Measurement shall be on the cross sectional area of reinforcement cut.	SQCM	0			0.0000000
105	218	Cutting Reinforced concrete with mechanised tools like Core drilling machine etc. for cutting pockets, holes, cores in slab, beam, column or foundation as per direction of engineer in charge.	CUDM	0			0.0000000
106	219	Providing and applying curing compound of approved make where ever required as per manufacturer's specification.	SQM	0			0.0000000
107	220	Providing & laying Plum cement concrete 1:3:6 with 75% graded metal of maximum size 40 mm and 25%plums of maximum size 150 mm.	CUM	0			0.0000000
108	221	Providing and laying Design Mix cement concrete conforming to IS:456 & IS 10262-2009 for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in sloped surface of canal lining or channel cast in alternate panels with provision of expansion gap/construction joints at any level below finished floor level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer conforming to IS:9103 (latest) to achieve required slump in concrete, compaction with special equipments, etc all complete as per specification & drawing for the following.		0			0.0000000
109	a	M20 Grade	CUM	0			0.0000000
110	b	M25 Grade	CUM	0			0.0000000
111	300	FORM WORKS		0			0.0000000
112		Providing, fixing and removing formwork at any elevations for all structures, as per specifications and including all labour, material, scaffoldings and centering complete including pockets etc. complete as per drawing, specifications and as per direction of engineer in charge for the following.		0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
113	301-A	Providing centering & steel shuttering including strutting, propping, bracing etc. and removal of form for foundations, footings, base of columns etc. below finished ground floor level as per drawing, specification and instruction of engineer in charge.	SQM	4037			1.8750987
114	302-A	Providing centering & steel shuttering including strutting, propping, bracing etc. and removal of form for above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, etc. including chamfering of edges as per drawing for all heights as per specification, drawing and instruction of engineer in charge.	SQM	7267			3.9626061
115	303-A	Providing centering & steel shuttering including strutting, propping, bracing etc. and removal of form for TG superstructure (above base raft level) including preparation of scheme, designing, submission and approval of staging drawing with sufficient props, braces and ties at every tier of height of approx. 4m for all heights complete including chamfering of edges, deshuttering as per drawing,specification, and instruction of engineer in charge.	SQM	0			0.0000000
116	304	Providing, fixing and removing formwork in block-outs/pockets and openings (below 0.1 sqm plan area) at all elevations including cutting, formation of all shapes and all other operations required for making the required shape and size all complete as per specification, drawing and instruction of engineer in charge.		0			0.0000000
117	a	Upto 150 mm depth	Each	10			0.0015466
118	b	Pockets of depths more than 150mm and upto 300 mm depth	Each	10			0.0028041
119	c	Pockets of depths more than 300mm and upto 600 mm depth	Each	10			0.0052829
120	d	Pockets of depths more than 600mm and upto 1000 mm depth	Each	0			0.0000000
121	e	Pockets of depths more than 1000mm and upto 1500 mm depth	Each	0			0.0000000
122	305	Fairface plywood with filmface/laminated formwork above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, domes, arches, circular overhead tanks etc. for all heights where ever specifically mentioned in the drawing.	SQM	0			0.0000000
123	EINFORCEMENT			0			0.0000000
124	401	Providing, straightening, cutting, bending, placing in position at any level, binding of mild steel reinforcements conforming to grade 1 of IS:432 part 1 in concrete including cost of reinforcement and binding wire, labour, scaffolding, transportation to & from stores etc. all complete as per specifications & drawings.	MT	0			0.0000000
125	402	Providing, straightening, cutting, bending, placing in position at any level, binding in position of steel reinforcements of TMT steel of grade Fe-500 confirming to IS:1786 including cost of binding wire, labour, scaffolding, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer.	MT	0			0.0000000

Package -2: Civil works- Constrcution of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
126	403	Providing, straightening, cutting, bending, placing in position at any level, binding in position of steel reinforcements of TMT steel of grade Fe-500D or 500EQR confirming to IS:1786 including cost of 18-gauge black soft annealed SWG wire for binding of reinforcement bars, labour, scaffolding, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer.	MT	525			24.2999947
127	404	Extra over ST No. 402 & 403 for providing fusion bonded epoxy coating by mechanised & qualified process including blast cleaning to white metal as per Swedish code, heating in induction heater, electrostatically spraying the epoxy powder, complete fusion to give minimum coating thickness of 200-300 microns, gradual cooling without affecting the properties of steel, testing as per ASTM 775 and IS:13620, flexibility & holiday test, proper packing, safe transportation, touchup at site, etc. complete to ensure proper resistance of FBE against corrosive environment. The bidder has to transport the steel from BHEL site store to vendor plant and bringing back to site and special handling during straightening, cutting, bending, placing and providing PVC coated binding wire.	MT	0			0.0000000
128	405	Providing, straightening, cutting, bending, placing in position at any level, binding in position of corrosion resistant steel -HCRM re-bars of approved make with steel of grade Fe-500 confirming to IS:1786 norms including cost of binding wire, labour, scaffolding, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer.	MT	0			0.0000000
129	406	Providing, straightening cutting, bending, placing in position at any level, binding of mild steel reinforcements in brickwork including cost of reinforcement and binding wire, labour, scaffolding etc. complete all as per specifications & drawings.	MT	2			0.1138886
130	407	Providing, straightening, cutting, bending, placing in position at any level, binding in position high yield strength steel reinforcements in brickwork including cost of reinforcement and binding wire, labour, scaffolding etc. complete all as per specifications & drawings.	MT	0			0.0000000
131	PROOFING WORKS			0			0.0000000
132	Water proofing works including all labour, material, equipment, transportation, handling, curing, sampling, testing etc at any level as per specification, drawings and as directed by engineer - in - charge.			0			0.0000000
133	501	Providing and laying underbed grading plaster with cement mortar 1:4 (1 cement : 4 sand) and average thickness of 25 mm including preparation of surface, batching, mixing, leveling etc. all complete.	SQM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
134	502	Providing and laying in-situ light weight foam concrete insulation as per relevant IS Code in suitable panels over roofs followed by a layer of 15 mm thick cement sand plaster 1:5 (1 cement: 5 coarse sand) after the curing period of laid foam concrete and providing of expansion joint at intervals as per the recommendation of manufacturer. The insulating properties shall be such that the thermal conductivity shall not exceed 0.125 Kcal/sqm-hr deg C. Cost shall include making of fillets, cleaning & preparation of surface, expansion joints at suitable intervals etc all complete for following.		0			0.0000000
135	a	Average 50 mm thickness	SQM	0			0.0000000
136	b	Average 75 mm thickness	SQM	0			0.0000000
137	c	Average 100 mm thickness	SQM	0			0.0000000
138	503	Providing and applying bitumen felt water proofing for normal treatment having bonding materials consisting of blown type conforming to IS: 702 or residual bitumen conforming to IS: 73 or a mixture of the two with one layer of felt consisting of five courses and with a minimum overlap of 75 to 100 mm of felt including preparation of surfaces etc all complete. (For description of layers refer specification)		0			0.0000000
139	a	With hessian base felt	SQM	0			0.0000000
140	b	With fiber base felt	SQM	0			0.0000000
141	504	Providing and applying bitumen felt water proofing for heavy treatment having bonding materials consisting of blown type conforming to IS: 702 or residual bitumen conforming to IS: 73 or a mixture of the two with two layers of felt each consisting of seven courses and with a minimum overlap of 75 to 100 mm of felt including preparation of surfaces etc all complete for following base felts (For description of layers refer specification):		0			0.0000000
142	a	With hessian base felt	SQM	0			0.0000000
143	b	With fiber base felt	SQM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
144	505	Providing and applying bitumen felt water proofing for extra heavy treatment having bonding materials consisting of blown type conforming to IS: 702 or residual bitumen conforming to IS: 73 or a mixture of the two with three layers of felt consisting of nine courses and with a minimum overlap of 75 to 100 mm of felt including preparation of surfaces etc all complete for following base felts (For description of layers refer specification):		0			0.0000000
145	a	With hessian base felt	SQM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
146	b	With fiber base felt	SQM	0			0.0000000
147	506	Providing and applying PU based water proofing treatment with one coat of polyurethane or any other equivalent material based primer with an application rate of minimum 6 sq.m per litre and two successive liquid coatings of high solids content urethane pre-polymers or equivalent material based finish coats as per relevant IS/ASTM standards to form an elastomeric membrane with overall dry film thickness 1.5 mm subject to minimum 500 gm/sqm/coat application rate. Item includes surface preparation, polyscrim cloth /fabric for edges, joints & vulnerable points etc all complete as per specifications and directions of engineer in charge.	SQM	0			0.0000000
148	507	Providing and laying wearing course consisting of 25mm thick plain cement concrete of grade M15 (1:2:4) with graded aggregate of 12.5mm size cast in panels of maximum size 1.2mx1.2m and reinforced with 0.56 mm dia. galvanised chicken wire mesh and sealing of joints (in grooves of 6mm X 6mm) using silicon /elastomeric compound etc all complete.	SQM	0			0.0000000
149	508	Providing and laying cement concrete chequered flooring tiles of 22 mm thickness and size 250x250 mm / 300x300 mm conforming to IS 13801 with 8 mm thick 1:4 cement mortar over the top most layer of roofing treatment in pathway and entire equipment area with fine joints including sealing of joints (silicon/elastomeric sealant) etc all complete. (Water proofing paid elsewhere)	SQM	0			0.0000000
150	509	Providing and applying two coats of bitumen grade 85/25 as per IS 702 (@ 1.7kg/sqm)with 1% antistripping compound conforming to IS 6241 in foundation, wall, column etc on concrete surfaces exposed to soil / ash including surface preparation etc. all complete.	SQM	2944			0.3382924
151	509-A	Providing and laying of with membrane system consisting of the following layers (placed in same sequence): (a)Vapor barrier, polyethylene of 1000 gauge (0.25mm) thick shall be provided below PCC. (b)1.2mm thick HDPE membrane with smooth finish shall be provided under foundation/pilecap/raft etc. All complete including materials as specified in EIL specification : B296-000-81-41-SP-9802	SQM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
152	509-B	Providing and laying cover with protection board of 8mm HDPE dimple board having minimum density of 85 kg/m ³ & hardness 20 (Shore-A) over 1.5mm thick self adhesive SBS Membrane with cross laminated high density polyethylene on the sides of foundation for all below ground membranes, coatings etc ; all complete (including cost of SBS membrane, laps,etc) including materials as specified in EIL specification : B224-000-81-41-SP-0001	SQM	0			0.0000000
153	509-C	Providing and laying one layer of 0.25 mm minimum thick polyethylene sheet below slabs; all complete including laps,etc including materials as specified in EIL specification	SQM	100			0.0028185
154	509-D	Providing and laying four coats of High Build solvent free moisture compatible coal tar epoxy cured with polyamine hardener @ 250 μ DFT each along the vertical sides of all slabs on grade including process and yard paving ; all complete including laps,etc including materials as specified in EIL specification : B224-000-81-41-SP-0001	SQM	100			0.0345372
155	509-E	Providing and applying 30 mm thick (min) free flow premix type non shrink cementitious grout having 28 days compressive strength not less than 40 N/sqm on top & side of pile head including providing two component polyurethane liquid membrane having consumption of 1.5 kg/sqm (1.5 mm thick) over the cementitious grout as per manufacturer specification etc all complete as per EIL specification: B224-000-81-41-SP-0001	SQM	0			0.0000000
156	510	Providing and applying water proofing with blown bitumen bonding material conforming to IS:702 of 65/25 grade in Basements, ducts, pits, tunnels etc below the ground level on the concrete surfaces exposed to soil / ash and up to 150 mm above ground level on outside of walls and top of RCC slab including preparation of surface, brick lining single brick thick with 1:4 cement mortar etc. all complete with following number of layers of bitumen felts :		0			0.0000000
157	a	2 Layers of felt for depth up to 5m below ground level for floors	SQM	0			0.0000000
158	b	3 Layers of felt for depth beyond 5m below ground level for walls	SQM	0			0.0000000
159	511	Providing and mixing water proofing compound conforming to IS:2645 in concrete or cement mortar all complete.	KG	0			0.0000000
160	512	Anti termite chemical treatment of soil with Chloropyrifos emulsifiable concentrates (1%) conforming to IS :8944 all complete.	SQM	0			0.0000000
161	513	Providing and applying concrete structures two coats of ERPB (Epoxy rasin based anticorrosive and chemical resistant paint) over a coat of CPCI (concrete penetrating bipolar corrosion inhibitor) with 300 to 325 micron DFT for protection of concrete against carbonation and chloride penetration in saline/marine enviornment all complete of approved make and as per manufacturer's recommendation	SQM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
162	514	Providing and applying IP net coating system to exposed concrete surfaces of approved make and as per manufacturer's recommendation.	SQM	0			0.0000000
163	515-A	Providing and applying Over-deck insulation cum waterproofing system in 6 layers as follows: 1st layer- One coat of Polyurethane primer 2nd layer-Minimum 1.5 mm DFT (Dry Film Thickness) single component Polyurethane (PU) water proofing coating – base coat Polyurethane (PU) water proofing coating – base coat 3rd layer- 40 mm thick machine sprayed Polyurethane Foam insulation 4th layer Minimum 0.8 mm DFT (Dry Film Thickness) single component Polyurethane water proofing coating -top coating 5th layer Geo-textile membrane 6th layer Plain Cement Concrete (PCC) top protective layer (minimum 50mm thick, reinforced with 24 G wire netting, in chequered finish laid in panels of maximum 2500mm X 2500 mm size with required slope for roof drainage.). The work shall include base surface preparation, providing scrim cloth etc all complete as per EIL specification no. B957-420-81-46-JS-7410. (Payment for the 6th layer PCC top protective layer shall measured and paid separately)	SQM	2560			2.1253863
164	507	Providing and laying wearing course above water proofing membrane in a slope, which consisting of minimum 25mm thick plain cement concrete of grade M15 (1:2:4) with graded aggregate of 12.5mm size cast in panels of maximum size 6sq.m and reinforced with 0.56 mmdia. galvanised chickenwire mesh and sealing of joints (in grooves of 6mm X 6mm) using silicon /elastomeric compound etc all complete	CUM	221			0.0501979
165	515-C	Providing and applying Polyurethane water proofing treatment over parapets/ vertical surfaces, gutter including surface preparation, continuous angular fillet/coving of minimum 75mm x 75mm size with PCC or cement sand mortar (in 1: 3 proportion) at junction of horizontal and vertical surfaces, applying primer, Polyurethane water proofing coating (minimum 1.5mm DFT), Scrim cloth reinforcement, Sand sprinkling and 12mm thick cement plastering over the water proofing coating etc. all complete as per EIL specification no. B957-420-81-46-JS-7410.	SQM	328			0.2251929
166	600	JOINTS AND FILLERS		0			0.0000000
167		Joints & fillers including all labour, material, equipment, transportation, handling etc at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
168	601	Supplying & installation of bitumen impregnated fibre board confirming to IS 1838 as joint filler at joints in concrete including nailing, coating of both faces with coal tar pitch/bitumin etc. all complete.		0			0.0000000
169	a	12 mm wide joints.	SQM	0			0.0000000
170	b	20 mm wide joints.	SQM	100			0.0538411
171	c	25 mm wide joints	SQM	328			0.2567199
172	d	50 mm wide joints	SQM	0			0.0000000

Package -2: Civil works- Constrcution of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
173	601-A	Providing 20mm wide Expansion Joints in pavement slabs including cleaning the joints of all loose material, filling with 20mm thick impregnated fibre boards for the full depth of slab except for 25mm depth from top and sealing the top 25mm with approved Joint Sealing Compound as per IS code etc (Including providing and laying MS dowel bar Grade S 240, painting as required, GI pipe and cap and cotton waste) all complete as per drawings 7-65-00404 specifications and directions of Engineer-in-Charge.	RM	0			0.0000000
174	603	Providing and applying polysulphide based sealant conforming to IS:12118 in expansion joints in concrete including cleaning of joints, raking out groove, application of primer, scaffolding etc. all complete for following size grooves:		0			0.0000000
175	c	12mm X 25mm	RM	164			0.0369790
176	d	20mmX25mm	RM	100			0.0375803
177	a	25mmX25mm	RM	0			0.0000000
178	b	50mmX25mm	RM	0			0.0000000
179	604	Supplying and filling in position hot applied bitumin sealing compund (Grade A) confirming to IS 1834 including cleaning, mixing, heating, pouring/injecting sealing compound in gaps in joints including application of primer etc. all complete.		0			0.0000000
180	a	10mm X 40mm	RM	0			0.0000000
181	b	12mm X 25mm	RM	0			0.0000000
182	c	20mmX25mm	RM	0			0.0000000
183	604-a	Supplying and filling in position hot applied bitumin sealing compund (Grade B) confirming to IS 1834 including cleaning, mixing, heating, pouring/injecting sealing compound in gaps in joints including application of primer etc. all complete.		0			0.0000000
184	a	10mm X 40mm	RM	0			0.0000000
185	b	12mm X 25mm	RM	0			0.0000000
186	c	20mmX25mm	RM	0			0.0000000
187	605	Providing and sealing of joints with premium grade silicon sealant (Silpruf of GE silicon or approved equivalent) including cleaning of joints, raking out groove, joint filler tapes, application of primer, curing, scaffolding etc. all complete as per manufacturer's recommendation for following size groove:		0			0.0000000
188	a	25mmX25mm	RM	0			0.0000000
189	b	50mmX25mm	RM	0			0.0000000
190	606	Providing and fixing PVC water stops in joints conforming to IS 12200 & IS 15058 all complete for the following:		0			0.0000000
191	a	150 mm wide and 8 mm thick	RM	0			0.0000000
192	b	230 mm wide and 8 mm thick	RM	0			0.0000000
193	c	150 mm wide and 6 mm thick	RM	0			0.0000000
194	d	230 mm wide and 5 mm thick	RM	0			0.0000000
195	607	Providing and fixing copper water stops in joints of deep underground structure all complete for the following:		0			0.0000000
196	a	150 mm wide and 8 mm thick	RM	0			0.0000000
197	b	230 mm wide and 8 mm thick	RM	0			0.0000000
198	700	MS EMBEDMENTS		0			0.0000000
199		Embedments including all labour, material, equipment, transportation, handling etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
200	701	Supply, fabricating and fixing of mild steel embedments, inserts, pipe sleeves, angle pieces, rungs of various diameters, plates of dimensions as required etc. including welding, bolting, cutting, drilling, scaffolding, setting etc. all complete.	MT	1			0.0423046

Package -2: Civil works- Constrcution of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
201	702	Same as above with BHEL supplid material free of cost including loading, transportation, unloading etc. all complete from BHEL store to plant site.	MT	0			0.0000000
202	703	Fixing of embedments, inserts, pipe sleeves, angle pieces, anchor bolts of various diameters, plates of dimensions as required etc. including scaffolding, setting in position, transportation from BHEL site stores to work spot etc. all complete.	MT	0			0.0000000
203	704	Supply, Fabrication, transportation, delivery at site and erection, installation and alignment of mild steel foundation bolt assembly conforming to IS:2062 and grade 1 of IS:432 in concrete along with nuts, lock nuts (as per IS:1363, 1364 and IS:3138), washers, anchor plates, stiffner plates, protective tape, pipe sleeves, templates etc. including welding, cutting, grinding, threading, drilling etc. all complete.	MT	0.5			0.0259745
204	704	Supplying, fabricating, erecting and installing following items in concrete/brickwall for all kind of works, including setting material in concrete, layout, scaffolding, cutting, forming, grinding, drilling, bolting, welding, jointing, testing etc. all complete.		0			0.0000000
205	b	PVC pipes / conduits of all diameters	kg	50			0.0072270
206	c	UPVC pipes / conduits of all diameters	kg	50			0.0119968
207	d	Expansion anchor fasteners (galvanised) of HILTI make(HUD-1 Universal Fastners) or equivalent of safe tensile capacity as specified below for brick work with expansion sleeve of A6 polyamide:		0			0.0000000
208	i	8mm Dia	Nos	10			0.0004625
209	ii	10mm Dia	Nos	10			0.0004987
210	iii	12mm Dia	Nos	10			0.0004914
211	iv	14mm Dia	Nos	10			0.0006649
212	e	Expansion fasteners (mechanical galvanised) of HILTI make or equivalent of safe tensile capacity as specified below for concrete work with expansion sleeve of stainless steel:		0			0.0000000
213	i	HST M8	Nos	10			0.0009467
214	ii	HST M10	Nos	10			0.0013442
215	iii	HST M12	Nos	10			0.0023777
216	iv	HST M16	Nos	10			0.0041555
217	v	HST M20	Nos	10			0.0084194
218	f	Chemical Expansion fasteners (galvanised)of HILTI make or equivalent of safe tensile capacity as specified below for concrete work with anchoring rod,nuts,washers,chemicals all complete,etc:		0			0.0000000
219	i	HAS-E5.8 M8	Nos	10			0.0025728
220	ii	HAS-E5.8 M10	Nos	10			0.0030353
221	iii	HAS-E5.8 M12	Nos	10			0.0040977
222	iv	HAS-E5.8 M16	Nos	10			0.0068729
223	v	HAS-E5.8 M20	Nos	10			0.0110934
224	vi	HAS-E5.8 M24	Nos	10			0.0144467
225	706	Placing, locking and releasing of Vibration Isolation spring modules over the foundation at all elevations including providing all assistance under the supervision of the supplier, transportation from BHEL store, necessary staging, platforms, leveling, alignment etc. all complete.	Each	0			0.0000000
226	800	GROUTING		0			0.0000000
227		Grouting including all labour, material, equipment, roughening surface, cleaning, ramming, curing etc. at any level unless otherwise specified as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
228	801	Providing & grouting with cement slurry mix of approved ratio using pressure pump for water retaining concrete structures as per approved procedure including cost of nipples/ nozzles, cement, admixture, curing, pressure pumps, slurry agitator etc. all complete. Cost shall include fixing of nipples at minimum 500 mm centre to centre spacing, cutting of nipples after completing of grouting, making good of the nipple hole with appropriate non-shrink cement paste, water tightness test etc. all complete wherever specified in the drawing.	SQM	0			0.0000000
229	802	Providing & grouting of pocket holes, pipe sleeves under base plates, machinery, pipe supporting structures etc. with mix 1:1 (1 cement :1 sand) using non shrink admixture etc. all Complete.	CUM	0			0.0000000
230	803	Providing & grouting of pocket holes, pipe sleeves and under base plate of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with mix 1:1:2 (1 cement : 1 coarse sand : 2 aggregate of 6 mm down graded stonechips) using non shrink admixture. (Cost of all material and cleaning the pocket by compressed air shall be in the scope of the contractor).	CUM	0			0.0000000
231	804	Providing & grouting of pocket holes, pipe sleeves and under base plates of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with ConbextraGP-1 or equivalent . (Cost of all material and cleaning of the pockets by compressed air shall be in the scope of the contractor).	CUM	0			0.0000000
232	805	Providing & grouting of pocket holes, pipe sleeves and under base plates of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing, etc. all complete with Conbextra GP-2 or equivalent . (Cost of all material and cleaning of the pockets by compressed air shall be in the scope of the contractor).	CUM	0			0.0000000
233	900	DOORS, WINDOWS, VENTILATORS, LOUVERS		0			0.0000000
234		Doors, windows, ventilators, louvers, roof ventilators, rolling shutters, partitions including all labour, material, equipments, transportation, handling, preparation of working drawings etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
235	901	Providing and fixing wooden frame conforming to IS 4021 made of best quality seasoned CP teakwood free from large or loose knots, cracks or other defects including sand paper smoothing, hold fasts, beading, primer and finish painting / polishing etc. all complete with proper wood joinery, accurately set to required lines or levels and rigidly secured in place. (Finish painting / polishing paid separately)	CUM	0			0.0000000
236	902	Providing and fixing teakwood frame panel door shutter as per IS 1003 with 35 mm x 150 mm vertical rail & 35mm x 125 mm horizontal rail and 12 mm thick interlocked panels of teakwood with proper wood joinery including beading, preparation of working drawings, godrej or equivalent make mortice lock with handels on both sides, approved ISI mark anodised fittings like door stopper, 300mm long tower bolts, 16x300mm long aldrops, 125mm long handles on both sides etc. butt hinges, sliding bolt, knobs, (all fitting shall be anodised aluminium color dyed), screws, primer and finish painting / polishing etc. all complete. (Finish painting / polishing paid separately)	SQM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
237	903	Providing, fitting and fixing wooden flush door shutter as per IS 2202 part II, 35mm thick block board, 35x12 mm thick teakwood beading all around including preparation of working drawings, all fixtures and hardwares & fittings including surface finish as per EIL spec. no. 6-75-0003.	SQM	294			1.5859016
238	904-A	Providing and fixing single or double steel door shutters with 45mm thk flush design shutter comprising of two outer sheets of 18 gauge steel sheets rigidly connected and reinforced inside with continuous vertical 20 gauge stiffeners, spot welded in position at not more than 150mm on centres including void filled with mineral wool (density as per specification), all fittings, Godrej or equivalent make mortice lock with handle on both sides, shop and final painting etc all complete.	SQM	0			0.0000000
239	904-B	Providing and fixing single or double steel door frame 125mm x 60mm with 16 gauge M.S. sheets galvanized steel pressed & profiled to required size with 3mm thick MS flat spacers welded towards jamb size, 3mm thick MS pad plate and 18 SWG galvanized steel mortar guard welded at all hinge & lock locations including the vertical members provided with 20mm x 20mm x 3mm welded MS angle threshold embedded in flooring, hollow frame filled up with concrete and "D" profile EPDM gasket etc. all complete as per EIL spec. no. 6-65-0004, 7-75-0070 & 7-75-0071.	SQM	294			2.1192098
240	905-A	Providing and fixing single or double steel door shutters with 18 gauge M.S. sheets shutter with all hardwares including final painting etc all complete as per EIL spec. no. 6-65-0004, 7-75-0070 & 7-75-0071.	SQM	294			2.2379825
241	906-A	Providing and fixing anodized extruded aluminium doors, windows, partition & ventilators (single or double shutter & frame) conforming to IS:1948, IS:1949 fabricated from extruded sections of HINDALCO/JINDAL or equivalent make having as per IS:1285, IS:733 and anodized and electro color coating of required shade as per IS1868 (minimum powder coating of 50 micron), fixed with rawl plugs, expansion fasteners, SS screws/fixing clips necessary filling of gaps at Junctions, at top, bottom & sides with required PVC/neoprene felt for bi-metallic protection, wire mesh etc. Glazing shall be 5 mm thick toughened glass including snap fit type beading, concealed screws, fixtures, Godrej or equivalent make Mortice lock with handle on both sides, etc all complete as per EIL Standard Nos. 6-75-0004, 7-75-0014, 7-75-0015, 7-75-0016, 7-75-0017. Aluminium section shall be smooth, free of stains, straight, mitred & jointed mechanically wherever required. (Glazing shall be paid separately).	kg	1000			0.3216009
242	907	Providing and fixing solid power coated steel fire doors with vision panel (single or double shutter) conforming to IS:3614 and panic devices, shall be 45mm thk flush design comprising of two outer sheets of 18 gauge steel sheets rigidly connected and reinforced including all fittings, hardwares and resin bonded insulation infill etc. all complete as per specifaicon no. 6-75-0011. TAC requirements Minimum ratings shall be 2 Hrs.	SQM	1000			6.0995769
243	908	Providing and fixing steel windows/ventilator with steel sections as per IS:1038, IS:1361 & IS:7452 latest revision.including all fittings, metal beadings, hold fasts, shop and final painting .glazing etc. all complete. (Glazing shall be paid separately)		0			0.0000000
244	a	openable type	SQM	164			0.3246334
245	b	fixed type	SQM	164			0.2172519

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
246	909	Providing and fixing anodised aluminium work of Jindal, Hindalco or other equivalent approved make for door frames, windows, ventilators, partitions, railing etc with extruded standard tubular and other sections including all fittings & fixtures and accessories of approved make conforming to IS733 and IS1285, anodised and electro color dyed to required shade according to IS 1868 (minimum 50 micron), fixed with rawl plugs, expansion fasteners, SS screws or with fixing clips, including necessary filling of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt for bi-mettalic protection etc.including preparation of working drawings, aluminium cleat angle, aluminium snap-on-beading for glazing/panelling, stair case tread nosing, with all fittings and fixtures (like tower bolts, handles, door stopper with rubber shoes, 'L' drops, stays, floor springs, hydraulic door closures etc.), CP brass/stainless steel screws, providing and fixing hinges/pivots, and making provision for fixing of fitting wherever required including cost of PVC/neoprene gasket, all complete as per drawing, specification and instructions of engineer in charge (Glazing and panelling shall be paid seperately).Weight of aluminium section only shall be measure.	Kg	1000			0.3678536
247	910	Providing and fixing of aluminium composite panel(ACP) of following thickness with PVDF or polyester coating for interior partition of approved shade ,color etc all complete as per specification.		0			0.0000000
248	a	3mm	SQM	0			0.0000000
249	b	4mm	SQM	0			0.0000000
250	c	5mm	SQM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
251	911	Providing and fixing of door closers as per IS 3564 ,of approved make & quality all complete of following type :		0			0.0000000
252	a	Over head hydraulic door closures	Each	0			0.0000000
253	b	Floor mounted Hydraulic door closers	Each	0			0.0000000
254	912	Providing and fixing pressed steel frames fabricated from 16 gauge M.S sheet mortised, reinforced drilled and tapped for hinges and locks bolts strikes, hold fasts adjustable floor anchors, floor tiles/weather bars ,paintings etc all complete as per specifications.	Kg	1000			0.0946735
255	913	Providing and fixing in position MS rolling shutters shall conform to IS: 6248 and shall be constructed with interlocking lath sections formed out of cold rolled 0.9mm thick, 80mm wide steel strips for shutter width upto 3.5 M, or 1.25mm thick, 80mm wide steel strips for shutter width beyond 3.5 M, jointless MS channel section of 3.15mm thickness for guide, MS girders & bottom rail, shutter suspension stud with pully & cage, top rolling springs, locking arrangement etc. all complete as per manufacturers approved drawings. The entire shutter including all accessories shall be painted with 2 or more coats of approved quality &shade synthetic enamel paint over a coat of approved quality red oxide zinc chromate primer etc, all complete as per IS 6248 and specification of approved make of following types: The bottom lath shall be coupled to a lock plate fabricated from 3mm thick galvanised steel plate and securely rivetted with stiffening angles. (partly coiled and lath/full lath). Rate shall be inclusive of all material, fittings, finishes, painting etc all complete		0			0.0000000
256	a	Hand Operated	SQM	0			0.0000000
257	b	Mechanically Operated	SQM	0			0.0000000
258	c	Electrically operated	SQM	80			0.1747196
259	914	Providing and fixing PVC doors(25 thk double skin) of sintex or equivalent make including all fitting & fixtures as per specification, drawing and instructions of engineer in charge.	SQM	0			0.0000000
260	915	Providing, fixing and fitting of glazing of first grade class in steel/aluminium/wooden frames, where ever required, cleaning after fixing including hardware, gaskets, clips, beadings etc. all complete.		0			0.0000000
261	a	4 mm thick clear sheet glass	SQM	294			0.2237345
262	b	4 mm thick clear float glass	SQM	0			0.0000000
263	c	5.5 mm thick clear float glass	SQM	0			0.0000000
264	d	6 mm thick wired glass	SQM	0			0.0000000
265	e	6mm thick Polycarbonate sheet multi (twin) wall fire retardant and ultra violet resistant with sealed open edges.	SQM	0			0.0000000
266	f	4 mm thick ground glass	SQM	0			0.0000000
267	g	6 mm thick tinted heat reflecting type float glass	SQM	0			0.0000000
268	h	5mm thick toughened glass	SQM	294			0.4162354
269	i	Two nos. 6 mm thick clear toughened float glass hermetically sealed and separated by 12 mm thick air gap for thermal insulation (only single elevation area to be measured)	SQM	0			0.0000000
270	j	Two nos. 6 mm thick tinted toughened float glass hermetically sealed and separated by 12 mm thick air gap for thermal insulation (only single elevation area to be measured)	SQM	0			0.0000000
271	k	One outer 6mm thick tinted heat-reflecting type float glass and one inner 6mm thick plain float glass hermetically sealed and seperated by 12 mm thick gap for thermal insulation (only single elevation area to be measured).	SQM	0			0.0000000
272	l	6 mm thick laminated glass	SQM	0			0.0000000

Package -2: Civil works- Constrcution of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
273	916	Supplying and fixing weather stripping of approved make and quality to doors as per instructions of engineer in charge and specification complete.	RM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
274	917	Providing and fixing 12 mm thick BWP particle board , decorative veneer (prelaminated) on both sides, as panels in aluminium framed door shutter, fixed with necessary snap-on-beading etc. all complete (excluding aluminium works).	SQM	1388			1.4374506
275	918	Providing and fixing steel louvered window with ISMC 100 frame all round including verticals with 18G pressed steel louvers, painting etc. all complete.	SQM	0			0.0000000
276	919	Providing and fixing 1 mm thk. MS sheet sliding shutters with frame and diagonal braces of 50X50X6 angle iron, 3 mm MS gusset plates at junction and corners, 25 mm dia pulley, 50X50X6 angle and T-iron guide at the top and bottom respectively including painting etc. all complete.	SQM	0			0.0000000
277	920	Roof skylight structure for atrium with 6mm thick Polycarbonate sheet multi (twin) wall fire retardant and ultra violet resistant with sealed open edges for sky light for approved shape like dome, pyramidal etc. Joints are properly sealed with sealent, screws with pvc cap, self tapping screws, epdm rubber gasket.etc all complete as per detailed drawing and specification.	SQM	0			0.0000000
278	1000			0			0.0000000
279		Brickwork masonry including all labour, material, equipment, transportation, handling, scaffolding etc. at all levels as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
280	1001	Providing brick work in cement mortar 1:6 (1 part cement 6 parts coarse sand) in walls, chambers etc. in thickness varying from 230mm to 460mm at all depths, places and positions below plinth including raking out joints, curing, scaffolding etc. complete excluding plastering and painting.		0			0.0000000
281	a	Using Fly Ash Brick masonry of minimum Class 5.0 as per IS: 12894	CUM	0			0.0000000
282	b	Using clay ash bricks as per IS 13757 with crushing strength of 75 kg/cm2 and minimum percentage of fly ash 25%	CUM	0			0.0000000
283	c	Using burnt clay bricks of class designation 7.5 of nominal dimension	CUM	0			0.0000000
284	d	Using burnt clay bricks of class designation 5.0 of nominal dimension	CUM	0			0.0000000
285	1001-A	Providing brick work in cement mortar 1:4 (1 part cement 4 parts coarse sand) in walls, chambers etc. in thickness varying from 230mm to 460mm at all depths, places and positions below plinth including raking out joints, curing, scaffolding etc. complete excluding plastering and painting.		0			0.0000000
286	a	Using Clay Brick/flyash masonry shall be of Class 5.0 as per IS 1077 as per IS 2185 (Part-3)	CUM	75			0.2728007
287	b	Using clay ash bricks as per IS 13757 with crushing strength of 75 kg/cm2 and minimum percentage of fly ash 25%		0			0.0000000
288	c	Using burnt clay bricks of class 10.0 as per IS 1077		0			0.0000000
289	d	Using Pulverized Fuel Ash-Lime bricks of Class 10.0 as per IS:12894		0			0.0000000
290	1002	Providing brick work in cement mortar 1:6 (1 cement 6 coarse sand) in walls, chambers etc. in thickness 230mm at all heights, places and position above plinth including raking out joints, curing, scaffolding etc complete excluding plastering and painting.		0			0.0000000
291	a	Using fly ash lime bricks conforming to IS 12894 with crushing strength of 75 kg/cm2	CUM	0			0.0000000
292	b	Using clay ash bricks as per IS 13757 with crushing strength of 75 kg/cm2 and minimum percentage of fly ash 25%	CUM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
293	d	Using burnt clay bricks of class designation 5.0 of nominal dimension (with minimum compressive strength as 5 N/mm ²)as per IS 1077.	CUM	323			1.6064768
294	1002 -A	Providing AAC block masonry Grade-1 confirming to IS Code IS:2185 (Part-3) (minimum compressive strength as 5 N/mm ²) with premixed thin bed mortar as per ASTM C1660 in walls, chambers etc including provision for bond beam etc.as per IS 6041 , all heights, places and position below plinth including raking out joints, curing, scaffolding etc complete excluding plastering and painting, as per specification and as instructions of engineer in charge.	Cum	42			0.1502143
295	1002 -B	Providing AAC block masonry Grade-1 confirming to IS Code IS:2185 (Part-3) (minimum compressive strength as 5 N/mm ²) with premixed thin bed mortar as per ASTM C1660 in walls, chambers etc including provision for bond beam etc.as per IS 6041 , all heights, places and position above plinth including raking out joints, curing, scaffolding etc complete excluding plastering and painting, as per specification and as instructions of engineer in charge.	Cum	635			2.2710971
296	1003	Providing brick work in cement mortar 1:4 (1 cement 4 coarse sand) in partition walls , chambers etc. in thickness 115mm at all heights, places and position above or below plinth/graded level including providing two nos. 6 mm diameter MS bars at every third layer, raking out joints, curing, scaffolding etc complete excluding plastering and painting as per specification.		0			0.0000000
297	a	Using fly ash lime bricks confirming to IS 12894 with crushing strength of 75 kg/cm ²	SQM	0			0.0000000
298	b	Using clay ash bricks as per IS 13757 with crushing strength of 75 kg/cm ² and minimum percentage of fly ash 25%	SQM	0			0.0000000
299	d	Using burnt clay bricks of class designation 5.0 of nominal dimension	SQM	0			0.0000000
300	1003-A	Providing brick work in cement mortar 1:6 (1 cement 6 coarse sand) in partition walls , chambers etc. in thickness 115mm at all heights, places and position above or below plinth/graded level including providing two nos. 6 mm diameter MS bars at every third layer, raking out joints, curing, scaffolding etc complete excluding plastering and painting as per specification.		0			0.0000000
301	a	Using Clay Brick masonry/fly ash masonry shall be of Class 5.0 as per IS 1077(with minimum compressive strength as 5 N/mm²)	SQM	30			0.0184722
302	b	Using clay ash bricks as per IS 13757 with crushing strength of 75 kg/cm ² and minimum percentage of fly ash 25%		0			0.0000000
303	c	Using burnt clay bricks of class 10.0 as per IS 1077		0			0.0000000
304	d	Using Pulverized Fuel Ash-Lime bricks of Class 10.0 as per IS:12894		0			0.0000000
305	1004	Providing brick soling including spreading of earth, ramming, watering including 25mm thick cushion of sand complete but excluding excavation and disposal of surplus earth (excavation and disposal of surplus earth shall be measured under applicable item). Using brick on edge.		0			0.0000000
306	a	Using fly ash lime bricks confirming to IS 12894 with crushing strength of 75 kg/cm ²	SQM	0			0.0000000
307	b	Using clay ash bricks as per IS 13757 with crushing strength of 75 kg/cm ² and minimum percentage of fly ash 25%	SQM	0			0.0000000
308	c	Using burnt clay bricks of class designation 7.5 of nominal dimension	SQM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
309	d	Using burnt clay bricks of class designation 5.0 of nominal dimension	SQM	0			0.0000000
310	1005	Providing brick soling including spreading of earth, ramming, watering including 25mm thick cushion of sand complete but excluding excavation and disposal of surplus earth (excavation and disposal of surplus earth shall be measured under applicable item.)- Using flat bricks.		0			0.0000000
311	a	Using fly ash lime bricks confirming to IS 12894 with crushing strength of 75 kg/cm2	SQM	0			0.0000000
312	b	Using clay ash bricks as per IS 13757 with crushing strength of 75 kg/cm2 and minimum percentage of fly ash 25%	SQM	0			0.0000000
313	c	Using burnt clay bricks of class designation 7.5 of nominal dimension	SQM	0			0.0000000
314	d	Using burnt clay bricks of class designation 5.0 of nominal dimension	SQM	0			0.0000000
315	1006	Breaking of existing brick work at all levels including plastering, removing the rubbish up to a distance of 500 m including transportation, loading, unloading etc. all complete as directed by the engineer.	CUM	10			0.0067211
316	1007	Providing and encasing of structural steel member with masonry work around flanges, webs etc. and filling the gap between steel and masonry by minimum 12mm thick mortar. Encased member shall be wrapped with chicken wire mesh with 50mm lap etc. complete as per specification. (Chicken wire mesh to be paid separately)	CUM	0			0.0000000
317	1008	Providing and laying 75 mm thick bed of dry brick aggregate including of excavation, disposal of surplus earth spreading of earth, ramming, watering etc. complete in all respects as directed by the engineer.	SQM	0			0.0000000
318	1009	Making openings in existing brick wall or partition wall including making good the broken edges/surface with cement mortar etc. complete.	CUM	1			0.0007993
319	1010	Supply and placing in position mild steel wire fabric of square mesh 25 mm size and wire diameter of 2 mm for encasing of steel sections in concrete including cutting, bending, fixing etc. complete.	SQM	0			0.0000000
320	1011	Filling existing brick wall/ partition wall opening at all level including making good the broken edges/surface with cement mortar, painting, finishing to match with existing finishing, scaffolding/supporting at any level, removal of debris upto a lead of 1 km including loading, unloading, transportation etc. all complete.	SQM	0			0.0000000
321	1012	Providing and filling brick bats in soak pits all complete.	CUM	0			0.0000000
322	1100	DAMP PROOF COURSE		0			0.0000000
323		Damp proof course including all labour, material, equipment, transportation, handling, shuttering, centering, curing etc at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
324	1101-A	40mm thick DAMP PROOF COURSE with plain cement concrete of grade M20 (nominal mix) with 10mm & down size graded crushed stone aggregates shall be provided as damp-proof course at plinth level of all masonry walls. Integral water proofing compound (confirming to IS: 2645) as per manufacturer's specifications shall be mixed with concrete. Two coats of hot bitumen (Grade VG10 conforming to IS:73) @ 1.7 Kg/sq.m for each coat on top surface shall be provided as per specifications including cleaning, watering the top surface of walls, centring, shuttering, placing, tamping, curing, sprinkling an even layer of dry sharp sand over the hot bitumen before hardening as specified and directed.	SQM	131			0.0425084
325	1200	CEMENT MORTAR PLASTER		0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
326		Cement mortar plaster including making grooves wherever required including all labour, material, scaffolding, curing etc at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
327	1201	Providing 18mm thick plaster in two layers outside the building/boundary wall in cement mortar 1:4 on walls with waterproof compound (cement mortar mixed with approved acrylic waterproof compound @ 1 Kg. per 50 Kg. of cement), finished to a smooth finish including providing 3mmx3mm size grooves at junctions of two dissimilar materials all complete.	SQM	2868			0.3627225
328	1202	Providing 12mm thick plaster inside the building/boundary wall in cement mortar 1:4 on walls finished to a smooth finish as per specification all complete.	SQM	3160			0.2649124
329	1202-A	Providing 15mm thick plaster inside the building/boundary wall in cement mortar 1:4 on walls finished to a smooth finish as per specification all complete.	SQM	790			0.1396006
330	1203	Providing 12mm thick plaster in cement mortar 1:6 on walls with rough finish all complete.	SQM	0			0.0000000
331	1204	Providing 6mm thick plaster on ceiling in cement mortar 1:3 finished to a smooth all complete.	SQM	2406			0.1912694
332	1205	Providing 12mm thick plaster in walls, drains/culverts with a paste of neat cement @ 1kg/sqm and rubbed smooth with trowel etc. all complete.	SQM	0			0.0000000
333	1206	Providing and making decorative plaster of all types and design on walls, ceilings, arcs, columns with various thickness upto 18 mm including finishing all complete.	SQM	0			0.0000000
334	1207	Forming groove of uniform size from 12X12 mm upto 20X15 mm in plastered surface as per approved pattern, using wooden battens nailed to the under layer, including removal of wooden battons, repair of the edges of plaster panel and finishing the groove etc. complete as per specification, drawing and the instructions of engineer in charge.	RM	0			0.0000000
335	1208	Providing drip coarse on plastered surface at all elevations for all type of work such as chajjas, parapet, projections etc. including scaffolding, finishing etc. complete with all labour, tools and plants as per specification, drawing and instructions of engineer in charge.	RM	256			0.0086136
336	1209	Providing and laying encasement to box type steel beams at all levels with lath plaster 50 mm nominal thickness with cement plaster (1:4) over chicken wire mesh including all labour, materials, equipment, handling, transporting, mixing, placing, leveling, curing and cleaning, finishing the exposed surfaces etc including centering and shuttering all complete as per specification, drawing and instructions of enginner in charge (chicken wire mesh to be paid separately)	SQM	0			0.0000000
337	1210	Ruled pointing in masonry in CM 1:3 (1 cement and 3 fine sand) including raking out joints, curing etc. complete.	SQM	720			0.0530750
338	1300	FINISHES TO CONCRETE / PLASTERED SURFACES		0			0.0000000
339		Finishes, painting to concrete, plastered surfaces including all labour, material, equipment, surface preparation, scaffolding etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
340	1301	Two or more coats of white wash/ colour wash as per IS 627 of approved brand and manufacture to give an even shade including a priming coat as per specifications.	SQM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
341	1302	Two or more coats of Exterior masonry paint (water or solvent base) of special resins, adhesives and additives mixed with fine, hard stone aggregate and suitable pigment. The paint shall be applied on a coat of primer over dried, prepared plaster surface as manufacturers guidelines. The final finished coating shall be fungus resistant, UV resistant, water repellent, alkali resistant and extremely durable with color fastness as per specification.	SQM	0			0.0000000
342	1303	Providing and applying two or more coats of oil bound destemper as per IS 428 of approved brand, shade and manufacture to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface as per manufacturers guideline.	SQM	0			0.0000000
343	1304	Two or more coats of acrylic distemper of approved brand and manufacture to give an even shade including a priming coat with distemper primer complete and as per EIL specification no 6-75-0007.	SQM	1574			0.0624503
344	1305	Providing and applying two or more coats of Plastic emulsion paint as per IS 5411 of approved brand, shade and manufacture to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface as per manufacturers guideline and as per EIL specification no 6-75-0007.	SQM	3950			0.2592031
345	1306-A	Providing and applying 2 or more coats of chemical/abarasion resistant NOVALAC epoxy paint of approved brand and colour to floors including preparation of surface to receive paint, providing and applying primer etc. complete all as per manufacturer's recommendations and as approved by engineer and as per EIL specification no 6-75-0007.	SQM	500			0.0974198
346	1306-B	Providing and applying 2 or more coats of chemical/abarasion resistant NOVALAC epoxy paint of approved brand and colour to walls and ceiling including preparation of surface to receive paint, providing and applying primer etc. complete all as per manufacturer's recommendations and as approved by engineer, at all heights above or below grade level, as per EIL specification no 6-75-0007.	SQM	400			0.0779358
347	1307	Two or more coats of fire resistant transparent paint as per IS 162 on all woodwork over french polish as per IS 348 or flat oil paint as per IS 137 of approved grade and manufacture to give an even shade as per specifications.	SQM	0			0.0000000
348	1308	Two or more coats of black anti-corrosive bitumastic painting of approved brand and manufacture to give an even shade complete.	SQM	0			0.0000000
349	1309	Two or more coats of synthetic enamel paint of approved make made from synthetic resins and drying oil with rutile titanium dioxide and other selected pigments to give smooth, hard, durable & glossy finish to all interior and exterior surfaces complete.	SQM	0			0.0000000
350	1310	Providing and applying 3 coats of water proof cement paint of approved make and color on exterior surface at all heights including material, labour, scaffolding, curing etc including primer coat complete as per specification.	SQM	0			0.0000000

Package -2: Civil works- Constrcution of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
351	1311	Providing and applying acrylic based textured finish, for external applications shall consist of quartz and silica aggregate , inorganic pigments and other additives to form a crack free, flexible, tough, waterproof coating. The final finish shall have UV resistance, fungus, bacterial resistance properties all complete with grooves filled with sealant of matching color and shade as per specification/drawing/approval of engineer in charge and as per EIL specification no 6-75-0007.	SQM	936			0.2387033
352	1312	Providing and applying 2 mm thick plaster of paris punning on walls including preparation of surface, staging, etc. to achieve a smooth even surface all complete as per specification and as directed by Engineer and as per EIL specification no 6-75-0007.	SQM	1840			0.0954772
353	1313	Providing and applying ready made Epoxy Paint over areas other than steel structure with suitable pigments of approved shade as per specification and direction of Engineer. The epoxy paint shall be a two pack material and shall be resistant to water, splash, spillage & acidic environment. The epoxy paint coating shall be of 150micron thickness over epoxy primer.	SQM	0			0.0000000
354	1314	Providing and applying Synthetic plaster for external applications composed of synthetic fibre and petroleum based chemical similar to RENOVO or equivalent and of approved natural color/shade applied on cured and dried plaster surface.The final finish Paint shall have UV resistance, fungus, bacterial resistance properties all complete with grooves filled with poly sulfide sealant of matching color and shade as per specification/drawing/approval of engineer in charge.	SQM	0			0.0000000
355	1315	Providing and applying two or more coats of Acrylic based exterior paint of approved brand and manufacture and required shade over one coat of primer after necessary cleaning/ washing, preparing the surface using coir brush/ wire brush, sand paper, including filling of cracks with putty wherever required etc. all complete to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface as per manufacturers guidelines. The final finished coating shall be fungus resistant, UV resistant, water repellent and extremely durable with color fastness as per EIL specification 6-75-0007.	SQM	1739			0.1343490
356	1400	FLOORING AND SKIRTING		0			0.0000000
357		Flooring and skirting at any level including base layer, labour, material, equipments, transportation, handling, curing, polishing etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
358	1401-A	Providing and laying 50 mm thick heavy duty cement concrete in flooring with metallic hardener pigmented topping 12mm thick(Total thickness 52mm) uniform graded treated iron paricles in flooring. Under layer of 40mm thick cement concrete mix 1:2:4 (1 cement: 2 sand : 4 stone aggregates 20mm well graded) and top layer of 12mm thick metallic concrete of mix 1:2 (1 cement hardner mix with approved quality metallic hardening compound :2 stone aggregate 6mm nominal size) by volume including cement slurry, rounding off edges, aluminium strips etc. all complete for following (Quoted item rate shall be inclusive of providing glass joint strips) and as per EIL specidication 6-75-007.	SQM	1766			0.6623924
359	1401-B	Providing and laying 40 mm thick heavy duty cement concrete mix 1:2:4 (1 cement: 2 sand : 4 stone aggregates) flooring with finishing layer of neat cement slurry complete as per EIL specidication 6-75-0007	SQM	1792			0.4723616
360	1402-A	Providing and laying 18 mm thick skirting and dado with cement mortar 1:3 (1 cement: 3 sand) finished with a floating coat of neat cement all complete as per specification.	SQM	39			0.0110811

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
361	1403	Providing and laying precast polished heavy duty cement concrete tiles (Carborundum topping) of size 300X300X25 thick of approved shade as per IS 1237, including cement mortar bedding of 1:3 (1 cement : 3 sand) jointed with neat cement slurry etc. all complete with pigment to match the shade of the tiles including rubbing, curing, grinding and polishing complete with laying as per IS 1443 etc. all complete for following:		0			0.0000000
362	a	Laid in floors	SQM	0			0.0000000
363	b	Laid in skirting	SQM	0			0.0000000
364	1404	Providing and laying interlocking M30 Grade concrete blocks in paving with approved colour and pattern and should be laid on the subbase and bedding as per specifications and recommendations of manufacturer.		0			0.0000000
365	a	60mm	SQM	0			0.0000000
366	b	75mm	SQM	0			0.0000000
367	1405	Providing and laying 50 mm thick floor finish with 25mm thk Terrazo Tiles including cement mortar bedding of 1:3 (1 cement : 3 sand) with neat cement slurry etc. all complete.	SQM	0			0.0000000
368	1406-A	Providing and laying polished Kota stone 25mm thk in flooring. Under bed shall average 15mm thk of 1 cement :4 coarse sand and brought to proper level. The kota stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete as per EIL specification 6-75-002	SQM	154			0.2174716
369	1407	Providing and laying polished Kota stone 14mm to 16mm thk in flooring. Under bed shall average 35mm thk of 1 cement : 2 sand : 4 stone aggregates by volume and brought to proper level. The kota stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete.	SQM	0			0.0000000
370	1408	Providing polished Kota stone 18mm to 20mm thk in skirting projecting 6mm from adjacent plaster including cutting brickwall upto the required depth, edging, finishing etc. all complete.	SQM	6			0.0077097
371	1409	Providing polished Kota stone 14mm to 16mm thk in skirting projecting 6mm from adjacent plaster including cutting brickwall upto the required depth, edging, finishing etc. all complete.	SQM	0			0.0000000
372	1410	Marble stone Flooring laid in 50mm overall thickness with 18-20mm thick marble slabs (grade - 1) with minium 30mm thick underbed of 1 cement : 2 sand : 4 stone aggregate by volume and brought to proper level.The marbel slabs/tiles laid over underbed with mortar 1:3, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete.	SQM	0			0.0000000
373	1411	Marble stone Flooring laid in 50mm overall thickness with 14 -16mm thick marble slabs (grade - 1) with minium 35mm thick underbed of 1 cement : 2 sand : 4 stone aggregate by volume and brought to proper level.The marbel slabs/tiles laid over underbed with mortar 1:3, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete.	SQM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
374	1412-A	Providing and laying 18-20mm thick polished Granite stone of premium quality grade-1, colour and texture in flooring, steps, ramps with brass/ stainless steel strips. Under bed shall average 22mm thk of 1 cement : 4 coarse sand and brought to proper level. The granite stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete as per EIL specification 6-75-002	SQM	294			0.6535682
375	1413	Providing and laying 14 to16mm thick polished Granite stone of approved color and texture in flooring with brass/ stainless steel strips. Under bed shall average 35mm thk of 1 cement : 2 sand : 4 stone aggregate by volume and brought to proper level. The granite stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete.	SQM	0			0.0000000
376	1414	Providing and laying polished Granite stone 18-20mm thk in skirting and dado with 6mm thick projection from adjacent plaster including mortar ,cement slurry ,pigments, curing, grinding,moulding, granite polishing etc. all complete.	SQM	0			0.0000000
377	1415	Providing and laying polished Granite stone 14-16mm thk in skirting and dado with 6mm thick projection from adjacent plaster including mortar ,cement slurry ,pigments, curing, grinding,moulding, granite polishing etc. all complete.	SQM	0			0.0000000
378	1416	Providing and laying vitrified ceramic tiles of polished variety of size 600x600 from reputed / approved manufacturer, complete including underbed of cement mortar 1:3 with neat cement slurry etc. all complete for following		0			0.0000000
379	a	7mm thick tiles In flooring	SQM	0			0.0000000
380	b	10mm thick tiles In flooring	SQM	589			0.7679078
381	c	7mm thick tiles In skirting and dado upto specific height	SQM	0			0.0000000
382	d	10mm thick tiles In skirting and dado upto specific height	SQM	400			0.5229448

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
383	1417	Providing and laying vitriified ceramic tiles of matt finish of size 600x600mm from reputed / approved manufacturer including underbed of cement mortar 1:3 with neat cement slurry etc. all complete for following.		0			0.0000000
384	a	7mm thick tiles In flooring	SQM	0			0.0000000
385	b	10mm thick tiles In flooring	SQM	0			0.0000000
386	c	7mm thick tiles In skirting and dado upto specific height	SQM	0			0.0000000
387	d	10mm thick tiles In skirting and dado upto specific height	SQM	0			0.0000000
388	1418	Providing and laying 10 mm thk non-skid fully vitriified tiles of make 'MARBONITE' or 'FERRASTONE of BOSS Profile limited' or equivalent in flooring and skirting over 30 mm thick underbed of 1 part cement and 3 parts coarse sand by weight mixed with sufficient water, complete as per specification laid in pattern of following sizes		0			0.0000000
389	a	400X400 mm	SQM	100			0.1053695
390	b	600X600 mm	SQM	50			0.0636336
391	1419	Providing and laying granite stone slab of 20mm thickness single piece for wash basin / sink slab /facia of black or approved colour with cutting,making corners,moulding and opening etc. all complete.	SQM	0			0.0000000
392	1420	Providing and laying Heavy Duty dust pressed Ceramic Tiles of 7mm thick of reputed manufacturer of approved finish shade and colour including underbed of cement mortar 1:3 with neat cement slurry etc. all complete.		0			0.0000000
393	a	300X300 mm	SQM	0			0.0000000
394	b	600X600 mm	SQM	0			0.0000000
395	1421	Providing and laying Heavy Duty dust pressed (grade-5) Ceramic Tiles (Matt Finish) of size 600x600mm(approved size) and 7mm thick of reputed / approved manufacturer (Kajaria,jhonson, Spartek or equivalent) of approved finish, shade and colour. The tiles shall be scratch resistance of minimum 5 on Mohr's scale and shall have a bending strength of 350 Kg./sqm,with Under bed shall average 43mm thk of 1 cement : 2 sand : 4 stone aggregates by volume and brought to proper level including cement mortar all complete.	SQM	0			0.0000000
396	1422	Providing & fixing Acid / Alkali resistant (Chemical resistant) tiles confirming to IS:4457 in flooring/Dado and shall be laid over bitumastic lining of min 12mm thick (to be laid in layers of 6mm each). The tiles shall be applied with 6mm thick Potassium Silicate bedding mortar as per IS:4441, 4443 & 4832 and including preparation of surface, application of bitumen primer, curing etc. all complete for following thicknesses. The tiles should be abrasion resistant & durable.		0			0.0000000
397	a	20mm thick	SQM	360			1.1307055
398	b	38mm thick	SQM	0			0.0000000
399	1423	Providing & fixing Acid / Alkali resistant (Chemical resistant) tiles confirming to IS:4457 in flooring/Dado beded and jointed with epoxy mortar all complete for following thicknesses. The tiles should be abrasion resistant & durable.		0			0.0000000
400	a	20mm thick	SQM	0			0.0000000
401	b	38mm thick	SQM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
402	1424	Providing & fixing chemical resistant (AR)(Acid / Alkali) bricks (75mm thick) conforming to IS:4860 in the floor of neutralization pit Surface on which lining to be applied shall be prepared in accordance with IS:2395. Bitumen primer as per IS:158 followed by 18mm thick bituminastic followed by 6mm thick potassium silicate mortar bedding shall be provided before laying AR bricks. The joints between AR bricks shall be filled with resin type of mortar conforming to IS:4832, part II, seal coat of readymade epoxy paint shall be provided on joints to cover up any porosity that may be left in mortar. End sealing shall be done with bituminastic AR bricks shall be laid with 6mm wide & 50mm deep pointing (epoxy / furnace / CNSL) & acid curing shall be done all complete as per specification.	SQM	0			0.0000000
403	1425	Providing and laying polished Marble slabs (Aranga white or equivalent approved shade/color /design) 20 mm thk in staircase landing/skirting and corridors over minimum 20 mm thick underbed of 1 cement : 2 sand : 4 stone aggregates by volume mixed with sufficient water to form a stiff workable mass. The marble slabs shall be laid over under-bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including moulded marbel nosing, pigments, curing, grinding, making corners, granite polishing etc. complete.	SQM	0			0.0000000
404	1426	Providing and laying marble skirting /dado (Aranga white or approved shade/color /design) equivalent of minimum 20mm thickness projecting 6mm from adjacent plaster all complete including underbed cement mortar 1:3, scaffolding etc. all complete.	SQM	0			0.0000000
405	1427	Providing and fixing glazed ceramic tiles of approved color and design of size 200x300mm / 300x300mm in dado of approved size , projecting 6mm uniformly from adjacent plaster or wall finish. The mix for underbed plaster shall consist of 1part cement and 3 parts sand by weight. fairly moist but firm, tiles shall be pressed over under bed by applying cement slurry including pigments, curing etc all complete for following thicknesses:		0			0.0000000
406	a	5mm thick	SQM	0			0.0000000
407	b	7mm thick	SQM	0			0.0000000
408	1428	Providing and laying 3mm thick antistatic PVC flooring / skirting of approved shade,as per IS:3462 and laying as per IS:5318 all complete.	SQM	0			0.0000000
409	1429	Providing and fixing removable type flooring system consisting of fire resistant particle board of size 600X600X35 mm with 0.05 mm thick aluminium foil lining at bottom and with 2 mm thick anti static PVC topping including proprietary floor supporting system complete as per specification.	SQM	0			0.0000000
410	1430	Providing and fixing dividing strips in joints of cast in situ floorings at various elevations, finishing, all labour, material etc. complete as per drawing, specification and instructions of engineer in charge.		0			0.0000000
411	a	Glass strips 40 mm wide and minimum 6 mm thick.	RM	0			0.0000000
412	b	Aluminium strips 40 mm wide and minimum 3 mm thick	RM	0			0.0000000
413	c	Brass strips 20 mm wide and minimum 4 mm thick.	RM	0			0.0000000
414	1431	Providing and laying wodden panel flooring and skirting of PERGO or equivalent of approved color,shade all complete as per manufacturer specification.	SQM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
415	1432-A	Providing and laying of False Floor system consist of modular, removable, filled with cementitious compound, welded steel panels supported on all four edges by structural steel members bolted onto adjustable height pedestal assemblies forming a modular grid pattern. It is mandatory that all components of the false flooring system are sourced from same manufacturer. False floor understructure shall be installed to support the panels and shall be suitable to achieve a minimum finished cavity height of 600-1000mm from the existing floor level. The system shall ensure speedy assembly and removal for relocation and maintenance. The system shall also ensure easy adjustment of leveling (±25mm) and accurate alignment of panels in the vertical direction. False floor understructure shall consist of Base plate, pedestals, pedestal head assembly, stringers and necessary fittings, fixtures and accessories. All complete as per EIL specifications 6-75-0010 and EIL standard no. 7-75-0049.	SQM	660			1.6930873
416	1500	ROOFING / SIDE CLADDING		0			0.0000000
417		Roofing / side cladding work including all labour, material, equipment, transportation, handling, scaffolding, laps, hooks, washers, corner pieces etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
418	1501	Designing, providing and fixing permanently color coated galvanised MS troughed metal sheet decking plate of approved colour and conforming to class 3 of IS 14246 over roof purlins for cast-in-situ roof slab as per relevant IS code and specification. Bare metal thickness of deck plate shall be minimum 0.7mm with minimum trough depth of 44 mm having minimum yield strength of 250 MPa and shall serve as permanent shuttering to the roof slab 100mm thick measured over crest of metal decking & shall have adequate strength to support weight of green concrete and imposed loads of min 150 kg/sqm during construction between purlins as per manufacturer's recommendations/ calculations/ test certificates for approval including fixing of plates to purlins, side lapping, end lapping etc. all complete for below mentioned spans. The sheet shall be permanently coated with silicon modified polyester paint of minimum 20 micron DFT on exposed surface (facing operating floor) and minimum 7 micron on other face over epoxy primer applied over hot dipped galvanising @ 275 gm/sqm including fixing of sheet to purlin with self drilling white zinc plated heat treated carbon steel screws of minimum 5.6 mm dia @ 260mm c/c in the trough and stitch screws between two adjacent sheets and sealing with epoxy sealant. Measurement of profile sheeting shall be of the plan area of roof covered by MS trough metal decking.		0			0.0000000
419	a	Span Upto 1800mm	SQM	0			0.0000000
420	b	Span Exceeding 1800mm and upto 2500 mm	SQM	0			0.0000000
421	1502	Providing and fixing shear connectors of mild steel studs having 16mm dia and minimum 75 mm projected length above purlin passing through metal decking as per relevant IS codes and specification.	QUINTAL	0			0.0000000
422	1503	Supply, fabrication and installation of self supported Arch shaped Galvalume roofing made by moulding of sheet of width 914mm and thickness 1 mm with mechanical press and dies to the desired curves and shape to form 2' 0" wide interlocking panels with water tight joints as per specification. Alloy Coating shall be AZ 150 (Aluminum 55%, Zinc 43.5%, Silicon 1.5%). Paint Coating shall be - Regular Modified Polyester (Top Coat 25 Micron & Bottom Coat 12 Microns epoxy).	SQM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
423	1504-A	Designing, providing and fixing precoated glvanized steel sheets of minimum thickness (a) Base metal thickness 0.60 mm (negative tolerance not acceptable) (b) Total coated and painted thickness (finished) : 0.65 mm The work is inclusive of all roofing accessories like ridge, flashing, north light curves, fascia, etc.,Metallic selfdrilling self-tapping fasteners, self-drilling polymer coated Class III & Class IV Fasteners with EPDM washer all as per manufacturer's specifications, including, flashing, ridge, copings for all edges, caps, corners, overlapping and sealing the joints with approved silicone sealant to make the joints to be dust proof and leak proof inline with EIL specification Clause no:5 of 6-75-0008	SQM	0			0.0000000
424	1505	Designing, providing and fixing roofing and cladding panels composed of approved quality, profiled, precoated double skin steel sheets having base metal thickness of minimum 0.45mm (negative tolerance not acceptable) with SDP (Super Durable Polyester) paint system minimum 20 Microns in approved shade applied over 5 microns primer. Overall coated thickness of sheets shall not be less than 0.52 mm . Profile depth shall not be less than 28mm and pitch shall be 195 to 255mm. The bottom unexposed surface shall be provided with alkyd backer of minimum 5 microns over a 5 micron coat of primer. The steel sheets shall be made from cold rolled high tensile steel of 550 Mpa yield stress conforming to IS:513, IS:15916, ASTM AS:1397, (substrate shall have hot dipped metallic coating of Aluminium zinc alloy @ 150 gms/ Sq.m. on the both sides as per AS:1397-class AZ 150).. The roofing and cladding system shall Include all cutting, lapping, making and finishing cutouts for translucent sheets, roof extractors, ventilators etc. providing and fixing minimum 1.5mm thick GI "Z" shaped sub purlins/ sub girts to purlins or wall runners, fixing and capping all components of the insulated sheet system with approved quality, anti-corrosive self-drilling screws or fasteners, sealants, preparation of fabrication drawings etc. in accordance with approved manufacturer's standard practice etc. all complete.	SQM	0			0.0000000
425	1506	Providing and fixing insulation of resin bonded mineral wool of 50 mm nominal thickness conforming to IS 8183 having a density of 32 kg/cum glass wool or 48 kg/cum for rock wool, for cladding/under deck insulation including application of glue and tying with lacing wire, for glass/rock wool as per manufacturer's recommendations.	SQM	0			0.0000000
426	1507	Providing and fixing insulation of resin bonded mineral wool of 50 mm nominal thickness conforming to IS 8183 having a density of 32 kg/cum glass wool or 48 kg/cum for rock wool, for cladding/under deck insulation including wrapping in black polythene black supported over weld mesh 75X75X1.6 MM dia to hold in position and application of glue & tying with lacing wire, for glass/rock wool as per manufacturer's recommendation.	SQM	0			0.0000000
427	1508	Providing and installing under deck insulation using minimum 0.05 mm thick aluminium foil on exposed surface followed by 0.56 mm dia and 25 mm mesh GI wire netting, fixed at various elevations with rawl plugs including clips but excluding cost of insulation.	SQM	0			0.0000000
428	1508-A	Providing and fixing insulation of glass wool for under deck insulation including application of glue and tying with lacing wire, for glass wool as per Eil specification 6-75-0010.	SQM	100			0.0330273
429	1509	Providing and fixing non metal opaque PVC sheet similar to ONDEX roofing or equivalent including all fixing accessories.	SQM	10			0.0082171
430	1510	Providing and fixing 1 mm thick corrugated/semicorrugated G.I. sheet in roofs, cladding of minimum galvanisation of 275 gsm total on both sides with minimum 150mm overlapping, 8 dia G.I. hook bolts or 'J' Bolts and nuts @305 mm c/c along with G.I. and bitumen washers including cutting of sheets for opening etc. all complete.	SQM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
431	1600	FALSE CEILING		0			0.0000000
432		False ceiling including all labour, material, equipment, transportation, handling, suspension system etc at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
433	1601	Providing and fixing glass fibre reinforced gypsum plaster board (GRG) ceiling (having gypsum core mixed with glass fibre) system consisting of metal supporting grid system forming panels of specified size, suspended from RCC slab/structural steel or catwalkway grid above with 4 mm (minimum) galvanised wires (rods) with special height adjustment clips, including preparation of working drawing, providing openings for AC ducts, return air grills, light fixtures etc (but excluding the cost of catwalkway grid) all complete as per drawings, specification and instructions of the engineer.		0			0.0000000
434	a	12 mm thick GRG board with galvanised light gauge steel load bearing supporting GI frame and finished flat (seamless).	SQM	0			0.0000000
435	b	12 mm thick GRG board in profile (dome ,curved profiled etc.) with galvanised light gauge steel load bearing supporting GI frame and finished smooth (seamless).	SQM	0			0.0000000
436	1602-A	Providing, fixing and laying of Pre- finished/ coated mineral fibre board ceiling tiles 16mm thick (of size 600mm x 600mm) with durable regular edging and having following properties:- i) NRC (Noise Reduction Co-efficient) value of min. 0.55, ii) Light reflectance value of min. 85%, iii) K value of 0.052 to 0.057 w/m deg. C, iv) Fire performance conforming to class I as per BS: 476, v) Humidity Resistance at RH99%. vi) Weight 3.5 Kg./ sq. mtr. The tiles shall have fissured or granulated texture on the front side as specified. Back side shall be provided with protective coating. The false ceiling tiles shall be installed over supporting G.I. grid work as per manufacturer's recommendations. The work includes providing necessary accessories, hardware, finishing etc. complete. The finished false ceiling shall be perfectly levelled and aligned, at desired height as per drawings. The grid shall be suspended by means of 4mm dia MS wire, 6mm thick MS cleat of 25mm x 25mm section, dash fasteners and level adjustors. The overall grid system shall be rigid by self locking joints, in accordance with false ceiling patterns, perfectly leveled and aligned at desirable height as per drawings. Exposed surfaces of the grid work shall be prefinished in baked polyester paint and shall be chemically cleaned.Required MS channel shall be measured & paid extra under respective item unit rate.All works shall be completed in all aspects as per EIL specification no: 6-75-0010.	SQM	736			0.6244579

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
437	1603	Providing and fixing aluminium false ceiling . The Ceiling panels shall be minimum 0.7mm thick and of aluminium alloy AA 3003-1114 (as per IS 2676). Finishing of the panels shall be as specified. The panels shall be square edged, perforated or non-perforated having panel size 600mmx600mm .The suspension system shall be in accordance with approved Manufacturer's standard specification consisting of main runner profiles, hanger, perimeter profile etc.The system also includes providing perimeter angles and slit openings for fixing supply/return air grill, lighting fixtures, AC diffusers etc.All works shall be completed in all aspects as per EIL specification no: 6-75-0010.	SQM	288			0.4489520
438	1604	Providing, fixing and laying permanently colour coated aluminium false ceiling of approved colour with stove enamel finish of approved make in LINEAR and SQUARE type with corrosion resistance aluminium alloys panels of minimum thickness 0.5mm including 50mm thick mineral wool insulation (as per IS:8183) bound in polythene bags on top of panels. Additional hangers and height adjustment clips shall be provided for return air grills, light fixtures. A.C. ducts etc. suitable M.S. channel (minimum MC 75) grid 1200 c/c maximum shall also be provided above the false ceiling level for movement of personnel to facilitate maintenance of lighting fixtures, AC ducts etc.The work to be complete as per specifications, drawings and direction of engineer.(Materials for structural platform grid for movement made up of MS Channels/ Beams / Angles shall be supplied by BHEL and shall be paid under ST No 2301)	SQM	0			0.0000000
439	1605	Providing, fixing and laying anodised natural colour matt finished aluminium false ceiling of Jindal/Hindalco make with corrosion resistance aluminium alloys panels of minimum thickness 0.5mm including 50mm thick mineral wool (density 48kg/cum insulation (as per IS:8183) bound in polythene bags on top of panels. Additional hangers and height adjustment clips shall be provided for return air grills, light fixtures. A.C. ducts etc. suitable M.S. channel (minimum MC 75) grid shall also be provided above the false ceiling level for movement of personnel to facilitate maintenance of lighting fixtures, AC ducts etc.The work to be complete as per specifications, drawings and direction of engineer.(Materials for structural platform grid for movement made up of MS Channels/ Beams / Angles shall be supplied by BHEL and shall be paid under ST No 2301)	SQM	0			0.0000000
440	1606-A	Providing and Fixing Gypsum board false ceiling with seamless finish of board thickness 12.5mm conforming to BS 476 part 4 with approve acrylic emulsion paint or laminates of desired design and finish with suitable suspension system.Installation etc. shall be as per specification no:6-75-0010 etc. all complete	SQM	448			0.2939955
441	1700	RAIN WATER DOWN TAKE PIPES		0			0.0000000
442		Rain water down take pipes including all labour, material, transportation, 2 coats of approved paint over one primary coat, fixtures, accessories etc at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
443	1701	Providing and fixing HCI down take pipes of 100 mm dia. with water tight lead joint, fixing clamps etc. all complete.	RM	0			0.0000000
444	1702	Providing and fixing galvanised MS down take pipes of 100 mm dia- Medium quality as per IS:1239(part-I) / IS:3589 all complete.	RM	0			0.0000000
445	1703	Providing and fixing HCI down take pipes of 150mm dia with water tight lead joint etc. all complete.	RM	0			0.0000000
446	1704	Providing and fixing galvanised MS down take pipes of 150 mm dia- Medium quality as per IS:1239(part-I) all complete.	RM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
447	1705	Providing and fixing UPVC down take pipes of 110mm diameter as per IS:13592 type A all complete.	RM	600			0.1530676
448	1706	Providing and fixing UPVC down take pipes of 160mm diameter as per IS:13592 type A all complete.	RM	293			0.1141336
449	1707	Providing and fixing GI down take pipes conforming to IS:1239 /IS:3589 of medium duty all complete for following diameters.		0			0.0000000
450	a	100 mm Dia	RM	0			0.0000000
451	b	150 mm Dia	RM	0			0.0000000
452	c	200 mm Dia	RM	0			0.0000000
453	1708	Providing and fixing HDPE down take pipes conforming to IS:4984 as per specification of following diameters.		0			0.0000000
454	a	110 mm Dia	RM	0			0.0000000
455	b	160 mm Dia	RM	0			0.0000000
456	c	200 mm Dia	RM	0			0.0000000
457	1800	MISCELLANEOUS WORKS		0			0.0000000
458		Miscellaneous works including all labour, material, equipment etc. at any level unless otherwise specified as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
459	1801	Providing and Filling in trenches, plinths, area paving and other underground structures with	CUM	0			0.0000000
460	1802-A	Providing and mixing approved Bipolar Concrete penetrating Corrosion inhibiting admixture phenolic base in concrete as per detail specification of manufacturer etc. all complete. Payment shall be made per cum of concrete.refer EIL specification 6-68-0017	CUM	4037			0.9802916
461	1802	Supply and laying approved quality Stone aggregate 40 mm size in transformer yards.	Cum	0			0.0000000
462	1803	Anti termite chemical treatment of soil with Chlorpyriphos/Lindane E.C. 20% with 1% concentration conforming to IS:8944 and as per IS 6313 all complete. (Plinth area of building at ground floor only shall be measured for payment)	SQM	2944			0.2787189
463	1804	Supply and installation of approved 25mm thick vibration damping resilient pads on/around foundation of vibrating equipment and at other locations all complete.	SQM	0			0.0000000
464	1805	Providing 50mm thick premix carpet surfacing laid to slope in two layers 30mm and 20mm respectively with 12mm downgraded stone chips mixed with 80/100 grade bitumen @ 52 Kg/Cu.M including compaction etc. all complete.	SQM	0			0.0000000
465	1806	Providing 50mm thick anti corrosive layer laid to required slope consisting of clean & well graded coarse sand mixed with A90 grade bitumen for softening point upto 45 degree Celcius or A65 grade bitumen for softening point above 45 degree celcius as per IS: 73 or its equivalent quality 8 to 10% by volume and rolled or compacted all complete.	SQM	0			0.0000000
466	1807	Providing and fixing G.I strips minimum 1.5mm thk and 150mm wide including fixing accessories etc. all complete.	Kg	0			0.0000000
467	1808	Providing and fixing aluminium strips minimum 18 SWG thk and 300mm wide over expansion joints with minimum lap of 50mm length including brass / aluminium screws, rawl plugs etc. all complete.	Kg	0			0.0000000
468	1809	Providing Chemical injection grouting with pressure pump for water retaining concrete structures conforming to IS:6494, including fixing nozzles, cost of approved cement, admixture, curing etc. all complete . Payment shall be made as per the consumption of chemical grout.	Kg	0			0.0000000
469	1810	Providing, laying and fixing rails and guide rails in concrete for transformer, rail track including cutting of rails, joining of rails, anchoring lugs etc all complete.	MT	0			0.0000000

Package -2: Civil works- Constrcution of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
470	1811	Providing and fixing weep holes in Walls, Drains consisting of 100 mm dia HDPE pipe sleeves with single side covering for the pipe mouth with galvanised welded wire fabric of 20 mm sq. opening covered with 40 mm downgraded aggregates in 300 X 300 mm sq. and 300 mm deep size all complete.	EACH	0			0.0000000
471	1812	Laying of earthing mats/rods including risers, transportation from yard stores, loading, unloading, cutting to length, welding, protective painting of joints etc. all complete. (Excavation & Back filling shall be paid separately under respective item of earth work. Earthing mats/rods shall be supplied by BHEL free of cost)	MT	0			0.0000000
472	1813	Providing Earthing pit as per drawing with charcoal & salt, GI pipes, GI earth electrodes, GI wire, GI strips, brick chamber with covers including associated earthwork etc. all complete.	EACH	0			0.0000000
473	1814	Construction of below ground earthing system test pits as per drawing / sketches including concreting, reinforcement, formwork, providing & fixing GI strip etc as per drawing and specification (excavation & backfilling only will be paid under applicable BOQ items & Earthing strips and electrodes will be supplied by BHEL free of cost).	EACH	0			0.0000000
474	1815-A	Construction of below ground earthing system earth electrodes as per drawing and specification. (Excavation and backfilling only will be paid under applicable BOQ items & Earthing strips and electrodes will be supplied by BHEL free of cost)	No	0			0.0000000
475	1815-B	Construction of below ground earthing system- Earth connection and riser pig tails as per drawing and specification. (Excavation and backfilling only will be paid under applicable BOQ items & steel shall be supplied by BHEL free of cost.)	No	0			0.0000000
476	1815-C	Construction of below ground earthing system test pits as per drawing/ sketches including brickwork, plaster, concreting, reinforcement, formwork, providing & fixing GI strips / pipes, GI wires, covers etc as per drawing & specification including associated earthwork (Earthing strips and electrodes will be supplied by BHEL free of cost).	EACH	0			0.0000000
477	1815-D	Providing and fixing GI rungs in concrete/brick walls having zinc coating of minimum 900 g/sqm etc. all complete.	Kg	0			0.0000000
478	1816	Providing and fixing PVC pressure release valve of minimum dia 90mm in water retaining structure including 160 mm dia housing pipe of minimum length 3.75 m with perforation as per IS4558, nylon jali, perforated end plug, collar, graded filter, excavation, fixing in concrete slab/wall etc. all complete.	EACH	0			0.0000000
479	1817	Providing and fixing HDPE pipes in concrete/ brick work of following sizes including cutting, fixing and levelling in position etc. all complete.		0			0.0000000
480	a	Upto 75 mm dia	RM	0			0.0000000
481	b	100 mm dia	RM	0			0.0000000
482	c	150 mm dia	RM	0			0.0000000
483	d	200 mm dia	RM	0			0.0000000
484	1818	Providing and laying dry stone pitching of 230 mm thickness for slope protection in cement mortar 1:6 including hammer dressing, raking of joints, pointing, preparing the bedding surface and voids filling with stone aggregate etc. all complete.	SQM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
485	1819	Design, supply, fabrication, erection of stoplog gates in CW Pumps with embedments required, lifting beams, special tools & plants, spare parts for three years, machining, casting, all materials such as structural steel, cast steel, stainless steel, brass used for seals, rubber seals, gears, ball and roller bearing, branch bushings, greasing, bolts, nuts, lugs, threaded fastners etc., cleaning, sand blasting, hot double dip galvanised with minimum coating of zinc 750 gms/sqm., following by an application of etching primer and dipping in black bitumen as per B.S. 3416, erection along with a second stage concreting to true plumb and levels, submission of drawings / fabrication drawings for engineers approval etc all complete. The leakage through rubber seal shall not be more than 5 lit/min/metre length of seal under maximum head.(only weight of structural steel including embedments shall be considered for payment purpose) (SS component shall be measured separately for payment)	MT	0			0.0000000
486	1820	SS component mentioned under ST No. 1819.	MT	0			0.0000000
487	1821	Supplying, fabricating, erecting in position and testing / examining bolted and / or welded structural steel work for stationary screens made out of rolled sections and / or plates including cutting, straightening if required, edge preparation, bolting / welding of joints, cleaning, sand blasting, hot double dip galvanised with minimum coating of zinc as 750 gms./sqm. followed by application of an etching primer and dipping in black bitumen as per BS 3416 etc all complete.	MT	0			0.0000000
488	1822	Cutting of groove of 10mm X 40mm size with groove cutting machine in concrete paving all complete.	RM	0			0.0000000
489	1823	Fire proofing of steel structures with VERMICULITE cementious coating minimum 30mm thickness including supply of all materials for vermiculite fire proofing, galvanized (minimum zinc coating of 250 g/sqm) expanded metal steel sheet (confirming to IS: 412) minimum 1.84 kg/sqm of mesh size 4.5mm x 13.5mm , welded wire fabric reinforcement (confirming to IS: 1566) of post weld hot dipped galvanized mesh (minimum zinc coating of 250 g/sqm) (min 2mm thick wire, 50mm x 50mm size mesh), sealent for fireproofing terminating junction with non-bituminous polysulfide sealant, nuts, tie wires, welding, surface preparation, curing, staging, seal coat (paid in item no. 1904), compatible finish paintings (paid in item no. 1905), etc. all complete as per EIL standard no. 6-68-0033-Rev07	SQM	0			0.0000000
490	1824-A	Fire proofing of steel structures with In-situ CONCRETE of concrete grade M30 and minimum 65mm thickness including supply of all materials of galvanized (minimum zinc coating of 250 g/sqm) expanded metal steel sheet (confirming to IS: 412) minimum 1.84kg/sqm of mesh size 4.5mm x 13.5mm , welded wire fabric reinforcement (confirming to IS: 1566) of post weld hot dipped galvanized mesh (minimum zinc coating of 250 g/sqm) (min 2mm thick wire, 50mm x 50mm size mesh), sealent for fireproofing terminating junction with non-bituminous polysulfide sealant, nuts, tie wires, welding, surface preparation, curing, staging, seal coat (paid in item no. 1904), compatible finish paintings (paid in item no. 1905), etc. all complete as per EIL standard no. 6-68-0033-Rev07	SQM	0			0.0000000
491	1824-B	Providing and applying one sealer coat (50 microns) of epoxy polyamide over fireproofing surface. Coating system shall be UV resistant and shall be pre-qualified for coating system No.1 of NORSOK Standard M-501.	SQM	0			0.0000000
492	1824-C	Providing and applying two coats (100 microns per coat) of acrylic elastomeric or polyurethane as a finish paint over fireproofing surface. The coating system for finish coat shall be compatible and approved by fireproofing material vendor.	SQM	0			0.0000000
493	1825	Supply and laying approved quality Stone aggregate 40mm size in transformer yards.	CUM	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
494	1826	Supply and laying approved quality rounded pebbles / gravels of 40mm size in transformer yards.	CUM	0			0.0000000
495	1827	Supply and laying fire clay refractory brick work with fire clay mortar conforming to IS: 6 & 195 including curing etc. all complete on tank pads & in building walls.	CUM	0			0.0000000
496	1828	Dismantling old existing reinforced/non-reinforced brickwork/blockwork/stone masonry work in mud/lime/ cement mortar at any level including clearing/cleaning, stacking the serviceable materials at plant site and disposal of unserviceable materials within a lead upto 1km all complete.	CUM	2			0.0023329
497	1829	Dismantling old existing plain/re-inforced concrete work at any level including clearing/cleaning, stacking the serviceable materials at plant site and disposal of unserviceable materials within a lead upto 1km all complete.	CUM	2			0.0016087
498	1830	Dismantling old existing structural steel work at any level including plates, bolts, cutting rivets, welding, dismembering and stacking the dismantled materials within a lead upto 1km etc all complete.	MT	1			0.0052114
499	1831	Sprinkling of water by water tanker fitted with perforated GI pipe (portable tanker minimum 3000 litre capacity) for roads and miscellaneous area within plant boundary, for dust suppression and reduction of suspended material at site for day to day work, as directed by BHEL site engineer (water for this purpose shall be provided by BHEL free of cost and utilisation of machine will be in terms of Tank-hour put in actual use for water sprinkling).	TANK-HR	0			0.0000000
500	1832	Providing & filling Bentonite Powder (Sodium base) mixed with water in electronic earthing pit as per drawing & direction below ground level including all materials, transportation, labour, incidental etc all complete as per specification.	CUM	0			0.0000000
501	1833	Supply & fixing FRP (fibre reinforced plastic) sheets 2 mm thick including GI hooks/ J or L bolts, nuts, washers, bitumen washers etc. complete including overlap 100mm .	SQM	0			0.0000000
502	1834	Providing and Filling below foundations with random rubble stone chipping in layers including breaking of stone boulders to required sizes, filling the interstices with selected sand and compacting to 85 % of original volume of stone stack for all lifts etc. all complete. Payment shall be made for the measurement of the volume of the compacted fill.	CUM	100			0.1003106
503	1835	Providing and fixing heavy duty GI grating over storm water having minimum galvanisation of 900 g/sqm in drains	MT	0			0.0000000
504	1836	ROADS		0			0.0000000
505	i	Preparation and consolidation of subgrade with Power roller of 8 to 12 Tonnee capacity after excavating earth to an average depth of 22.5 cm depth, dressing to camber and consolidating with roal roller including making good the undulations etc. and rerolling the subgarde and disposal of surplus earth with 50 metres	SQM	2944			0.2765733
506	ii	Supplyng & laying WBM in 75mm consolidated	SQM	0			0.0000000
507	iii	Supplyng & laying WBM in 110mm consolidated	SQM	0			0.0000000
508	iv	Supplyng & laying Bitumenous Macadam in 50mm consolidated	SQM	0			0.0000000
509	v	20 mm compacted premix bituminous carpet	SQM	0			0.0000000
510	vi	Setting precast concrete edging block	RM	0			0.0000000
511	1837	Providing & fixing flame arrestor of approved specification at the end of vent pipes 100 mm dia including bird mesh, necessary fixing etc.. as per EIL drawing no 7-65-0219	each	0			0.0000000
512	1838	Supplying and providing 24 SWG chicken wire mesh etc. all complete	Kg	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
513	1840	Supplying, laying and commissioning carbon steel pipe line grade 'A96A' below GL including coating and wrapping (paid separately under item no. 1841) , joint testing, cost of materials etc. all complete as per EIL specification no. 6922-575-16-47-DB01, 6-65-1035, 6-65-1030, 6-65-1036, 6-79-0011 and drawings. (Earthwork excavation and back filling to be measured separately).		0.00			0.0000000
514		a) 100 mm dia.	RM.	0.00			0.0000000
515		b) 150 mm dia.	RM.	0.00			0.0000000
516	1840-A	Supplying, laying and commissioning carbon steel pipe line grade 'A95A' below GL including 3LPE external coating and wrapping , joint testing, cost of materials etc. all complete as per EIL specification B957-000-06-42-PLS-01 and drawings. (Earthwork excavation and back filling to be measured separately).		0.00			0.0000000
517		a) 4" dia.	RM.	0.00			0.0000000
518		b) 6" dia.	RM.	0.00			0.0000000
519		c) 8" dia	RM.	0.00			0.0000000
520		d) 12" dia	RM.	0.00			0.0000000
521	1840-B	Supplying, laying and commissioning carbon steel pipe line of ASTM A672 Gr B60 CL12 (schedule STD) below GL including 3LPE external coating and wrapping , joint testing, cost of materials etc. all complete as per EIL specification B224-6-44-0005-9517 and drawings. (Earthwork excavation and back filling to be measured separately).		0.00			0.0000000
522		a) 16" dia	RM.	0.00			0.0000000
523		b) 20" dia	RM.	0.00			0.0000000
524		c) 24" dia	RM	0.00			0.0000000
525	1841	Coating and wrapping of CS pipes including cost of materials etc. all complete as per EIL specification no. 6-79-0011.		0.00			0.0000000
526		a) 100 mm dia.	RM.	0.00			0.0000000
527		b) 150 mm dia.	RM.	0.00			0.0000000
528	1842	Supplying and fixing M.S drain funnels of following diameter as per EIL drawing no. 7-65-0266 and specifications.		0.00			0.0000000
529		a) 150mm dia.	NOS.	0.00			0.0000000
530		b) 200mm dia.	NOS.	0.00			0.0000000
531	1843	Supplying and fixing 4" dia. Vent pipes of piping class A3A in manholes including fixing the pipe on piperacks at various elevations, necessary clamps, bends, screws etc. all complete as per specification B957-420-6-44-0005-7410 drawing no 7-65-0219	RM.	0.00			0.0000000
532	1844	Providing & Laying 150micron thick HM HDPE (grade-1) conforming to IS 10889 sheet below the concrete base including materials, labour etc. complete as per drawing / direction of engineer.	SQM	0			0.0000000
533	1845	Providing and mixing dry lean Concrete sub base for cement concrete pavement conforming to EIL specification no:6-65-0019 etc. all complete .	Cum	0			0.0000000
534	2000	FENCING AND GATES		0			0.0000000
535		Fencing and gates including all labour, material, equipment etc at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
536	2001-A	Supply, fabrication and fixing of mild steel posts for fencing including painting etc all complete.	MT	0.5			0.0219346

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
537	2001	Supply, fabrication and installing in position and testing MS Gates out of channels, joists, angles, flats, plates, pipes, welded steel wire mesh & sheets including stiffners, bracings, fabricated hinges, MS Aldrops with locking arrangement, tempered steel pivot, guide track of MS Tee, bronze aluminium ball bearing arrangements, castor wheels, paintings (two or more coats of synthetic enamel paint over red oxide zinc chromate primer) etc. all complete as per EIL standard no. 7-75-0051, 0052 as per specification	MT	5			0.2591359
538	2003	Supplying and erecting in position 2.4 m high PVC coated gavanised chain linked fencing of minimum 8 gauge (including PVC coating) of mesh size 75mm x 75mm. The diameter of the hot dip galvanised steel wire for chain link fencing excluding PVC coating shall not be less than 12 gauge. Concertina of height of 600 mm at top of chain link fencing shall be provided with all accessories. Concertinal shall be from tensile serrated galvanised wire (HTSW) made with wire diameter of 2.5 mm which will be stretched to 6m and attached on two strands of galvanised HTSSW (high tensile spring steel wire) of 2.5mm dia by means of clips at 1m interval. These two HTSSW strands will be attached to the fence posts/ angles with 12 mm security fasteners. Cost to include for GI hook bolts, rings & washers, hot dip galvanised tension wires, 25X6 mm GI flat stretcher bar at end posts etc. all complete. (Structural post shall be separately under ST No. 2007)	RM	0			0.0000000
539	2004	Supplying and erecting in position 2.4 m high gavanised chain linked fencing conforming to IS 2761 of 10G hot dip galvanised steel wires woven in the form of zigzag mesh giving an opening size of 50 mm square. Concertina of height of 600 mm at top of chain link fencing shall be provided with all accessories. Concertinal shall be from tensile serrated galvanised wire (HTSW) made with wire diameter of 2.5 mm which will be stretched to 6m and attached on two strands of galvanised HTSSW (high tensile spring steel wire) of 2.5mm dia by means of clips at 1m interval. These two HTSSW strands will be attached to the fence posts/ angles with 12 mm security fasteners. Cost to include for GI hook bolts, rings & washers, hot dip galvanised tension wires, 25X6 mm GI flat stretcher bar at end posts etc. all complete.	RM	0			0.0000000
540	2005	Supplying and fixing 600mm high G.I. barbed wire fencing on top of boundary wall consisting of min. 6 nos. strands of barbed wire hot dip galvanised wire of 12G comprising of 2 ply with barbs of 16G spaced at 100mm including GI clips, anchors, accessories etc. all complete. (Structural post shall be separately under ST No. 2007)	RM	0			0.0000000
541	2006	Supplying and fixing 600mm high concertina on top of boundary wall including GI tension wires, clips, anchors, accessories etc. all complete. Concertinal shall be from tensile serrated galvanised wire (HTSW) made with wire diameter of 2.5 mm which will be stretched to 6m and attached on two strands of galvanised HTSSW (high tensile spring steel wire) of 2.5mm dia by means of clips at 1m interval. These two HTSSW strands will be attached to the fence posts/ angles with 12 mm security fasteners. (Structural post shall be separately under ST No. 2007)	RM	0			0.0000000
542	2007	Supply and fixing of hot dip galvanised mild steel posts for fencing. Rate of zinc coating shall not be less than 710 g/m2 on steel posts.	MT	0			0.0000000
543	2008	Supply, fabrication and fixing of mild steel posts for fencing including painting etc all complete.	MT	0			0.0000000

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Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
544	2009	Supply, fabrication and installing in position and testing galvanised MS Gates out of channels, joists, angles, flats, plates, pipes, welded steel wire mesh & sheets including stiffners, bracings, fabricated hinges, MS Aldrops with locking arrangement, tempered steel pivot, guide track of MS Tee, bronze aluminium ball bearing arrangements, castor wheels, paintings etc. all complete.	MT	0			0.0000000
545	2010	Supply, fabrication and installing in position and testing MSGates out of channels, joists, angles, flats, plates, pipes, welded steel wire mesh & sheets including stiffners, bracings, fabricated hinges, MS Aldrops with locking arrangement, tempered steel pivot, guide track of MS Tee, bronze aluminium ball bearing arrangements, castor wheels, paintings (two or more coats of synthetic enamel paint over red oxide zinc chromate primer) etc. all complete as per EIL standard no. 7-75-0051, 0052 and EIL specification.	MT	1			0.0496010

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Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
546	2011	Transformer fencing shall be made of 50mm x 50mm x 6mm M.S. Angle frame, 50mm x 50mm x 6mm M.S. Tee stiffeners, 50mm x 50mm x 8mm welded mesh fixed to the frame by 25mm x 3mm M.S. flat beading. The gate / fencing shall be fixed to the masonry / R.C.C. by M.S. hinge arrangement (consisting of 65mm x 65mm x 6mm M.S. angle, bolt, washers etc.) with M.S. holdfast grouted with M15 concrete. The gate shall have M.S. pivot arrangement (ensuring smooth operation of the gate), one heavy duty 450mm long M.S. aldrop, heavy duty M.S. tower bolts etc. complete. The entire gate / fencing with fittings / fixtures / accessories shall be finished with two or more coats of synthetic enamel paint of approved make and shade over a coat of approved red oxide zinc chromate primer. All embedded metallic parts shall be provided with primer. Reference shall be made to EIL standard no. 7-75-0051, 0052 for further details of the system.	SQM	10			0.0071200
547	2100	WATER SUPPLY		0			0.0000000
548		Water supply work including men, material, equipment etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
549	2101	Providing and fixing in position tested heavy duty type chromium plated (CP) brass long neck bib cocks including sockets, union, nuts etc all complete - 15mm nominal bore as per EIL specification 6-75-0009	EACH	10			0.0052396
550	2102	Providing and fixing in position heavy duty brass stop cock of approved quality including all specials etc all complete - 15mm nominal bore as per EIL specification 6-75-0009	EACH	25			0.0105695
551	2103	Providing and fixing in position heavy duty brass full way valve with wheel of approved quality including all specials etc all complete for following sizes:as per EIL specification 6-75-0009		0			0.0000000
552	a	25mm nominal bore.	EACH	10			0.0072053
553	b	50mm nominal bore.	EACH	50			0.0827851
554	2104	Providing and fixing A1K SS pipes shall be concealed and painted with anticorrosive paint, complete for internal works with GI sockets, unions, elbows, tees, nipples etc and clamps including cutting and making good the walls etc all complete for following sizes:		0			0.0000000
555	a	15 mm nominal bore.	RM	20			0.0089692
556	b	20 mm nominal bore.	RM	25			0.0126310
557	c	25 mm nominal bore.	RM	25			0.0151793
558	2116	Supplying,laying, fitting,fixing,jointing concealed GI pipes"J2A" for waterlines atvarious elevations with all fittings stop cock, valves bends, elbows, tees, reducers etc including excavation, back filling, concrete supports, hangers, straps with all materials etc., complete as per EIL specification no. 6-65-1027, 6-651070 and drawings.		0			0.0000000
559	a	12 mm	RM.	50			0.0112116
560	b	19 mm	RM.	75			0.0189465
561	c	25 mm	RM.	120			0.0364303
562	d	32 mm	RM.	100			0.0394587
563	2105	Providing and fixing GI pipes class B complete for external work with GI sockets, unions, elbows, tees, nipples etc including trenching & refilling, anti-corrosive paint etc all complete for following sizes:		0			0.0000000
564	a	15 mm nominal bore.	RM	0			0.0000000

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Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
565	b	20 mm nominal bore.	RM	0			0.0000000
566	c	25 mm nominal bore.	RM	0			0.0000000
567	d	50 mm nominal bore.	RM	0			0.0000000
568	2106	Providing and fixing 610mmx453mmx6mm thk mirror from reputed mirror manufacturer. Mirror shall be mounted with glass adjustable revolving CP brackets with CP screws etc all complete.	EACH	10			0.0069957
569	2107	Providing and fixing 610mmx127mmx6mm thk clear glass with C.P Guard rails and mounted on C.P. brackets etc all complete.	EACH	10			0.0038664
570	2108	Providing and fixing 25 mm diameter stainless steel towel rails (600mm X 25mm) all complete as per EIL specification 6-75-0009	EACH	10			0.0034184
571	2109	Providing and fixing 20mm dia chromium plated M.S. pipes wall mounted towel rod with C.P. Brackets etc all complete.	EACH	0			0.0000000
572	2110	Providing and fixing C.P. soap holder mounted with C.P. screws etc all complete as per EIL specification 6-75-0009	EACH	10			0.0035268
573	2111	Providing and fixing stainless steel / C.P. liquid soap dispenser . Dispenser shall be round and easily revolving with removable threaded nozzle and mounted on C.P. brackets etc all complete as per EIL specification 6-75-0009	EACH	10			0.0025005
574	2112	Providing and fixing glazed vitreous wall mounted paper holder with suitable cover cum cutter fitted with CP screws etc. sll complete as per EIL specification 6-75-0009	EACH	20			0.0065910
575	2113	Providing and fixing chromium plated brass shower rose with 15 or 20 mm inlet all complete as per EIL specification 6-75-0009	EACH	10			0.0026523

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Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
576	2114	Providing & fixing in position Polyethylene with PUF insulation of Syntex or approved equivalent including making all necessary inlet & outlet pipes, fixture, ball cocks, valves etc all complete for following capacities. GI pipes shall be paid separately under ST No. 2105. as per specification.		0			0.0000000
577	a	1000 litres capacity	EACH	3			0.0184895
578	b	2000 litres capacity	EACH	0			0.0000000
579	c	5000 litres capacity	EACH	0			0.0000000
580	2115	Providing and fixing approved stainless steel sink with integrated drainboard as per IS:13983 of size 915x460x178mm with CI brackets, stainless steel chain with rubber plug 40mm, cp brass waste trap with necessary union complete including painting the fittings, cutting and making good the wall where required etc. all complete.	EACH	3			0.0127029
581	2200	SANITARY WORKS		0			0.0000000
582		Sanitary work including all labour, material, equipment etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
583	2201-A	Supply and fixing glazed vitreous china Wash Basin Superior quality (Sensor operated) conforming to IS:2556 part 4 of oval shape with R.S. or C.I. brackets painted white, 15mm chromium plated brass hot & cold faucets with nylon washers, chromium plated brass chain with rubber plug, 32mm chromium plated brass bottle trap and waste of standard pattern, 32mm dia chromium plated brass trap unions, plastic connection pipe with chromium plated nuts, fittings, cutting and making good the walls where required etc all complete as per EIL specification 6-75-0009.		0			0.0000000
584	a	White	EACH	4			0.0286998
585	b	Colored	EACH	4			0.0286651
586	2201-B	Supply and fixing glazed vitreous china Wash Basin Primium quality (Sensor operated) conforming to IS:2556 part 4 of oval shape with R.S. or C.I. brackets painted white, 15mm chromium plated brass hot & cold faucets with nylon washers, chromium plated brass chain with rubber plug, 32mm chromium plated brass bottle trap and waste of standard pattern, 32mm dia chromium plated brass trap unions, plastic connection pipe with chromium plated nuts, fittings, cutting and making good the walls where required etc all complete as per EIL specification 6-75-0009.		0			0.0000000
587	a	White	EACH	2			0.0143499
588	b	Colored	EACH	2			0.0143326
589	2202	Providing and fixing approved vitreous china laboratory sink of size 600x400x200mm conforming to IS:2556 (part-5) with R.S. or C.I. brackets, chromium plated brass chain with rubber plug 40mm, CP brass waste and 40mm CP brass trap with necessaary union complete including painting the fittings, cutting and making good the wall where required etc. all complete.	EACH	0			0.0000000
590	2203	Providing and fixing stainless steel kitchen sink of size 610x510x200mm conforming to IS: 13983 including all fittings etc. all complete as per EIL specification 6-75-0009.	EACH	5			0.0211715
591	2204	Providing and fixing colour glazed vitreous china Superior type European type water closet conforming to IS:2556 with siphon, open front solid plastic seat and plastic cover(hydraulically operated cover), low level 12.5 litre flushing cistern (same colour as WC) with valveless fittings, necessary C.P connections etc all complete as per EIL specification 6-75-0009.		0			0.0000000
592	a	Floor mounted	EACH	0			0.0000000
593	b	Wall mounted	EACH	5			0.0229746

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Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
594	2204	Providing and fixing colour glazed vitreous china Premium type European type water closet conforming to IS:2556 with siphon, open front solid plastic seat and plastic cover, low level 12.5 litre flushing cistern (same colour as WC) with valveless fittings, necessary C.P connections etc all complete as per EIL specification 6-75-0009.		0			0.0000000
595	a	Floor mounted	EACH	0			0.0000000
596	b	Wall mounted	EACH	5			0.0229746
597	2205	Providing and fixing colour glazed vitreous indian type Orissa pattern (580x440mm) water closet conforming to IS:2556 part 3 with all fittings including foot rests, low level 12.5 litre PVC flushing cistern with valveless fittings, necessary C.P connections etc all complete.	EACH	0			0.0000000
598	2206	Providing and fixing white flat back glazed vitreous china sensor operated urinals of size 440x265x355 mm with photo voltaic control flushing system as per IS:2556 (part 6, section 1) with flush pipes, lead pipes, gratings, traps and necessary C.P. fittings etc. all complete as per EIL specification 6-75-0009.	EACH	10			0.0994072
599	2207	Supply, laying and jointing UPVC pipes of class 3 as per IS:4985 including bends, branches and all other necessary fittings, M.S holder bats/clamps, cutting and making good the walls and floors, jointing, testing etc all complete for following.		0			0.0000000
600	a	75mm dia pipes	RM	0			0.0000000
601	b	110mm dia pipes	RM	400			0.1604391
602	c	160mm dia pipes	RM	50			0.0323046
603	d	200mm dia pipes	RM	0			0.0000000
604	2208	Providing, laying light duty non pressure NP3 class RCC pipes with collars jointed with stiff mixture of cement mortar 1:2 including testing of joints etc all complete for following.		0			0.0000000
605	a	200mm dia	RM	0			0.0000000
606	b	300mm dia	RM	0			0.0000000
607	c	450mm dia	RM	0			0.0000000
608	b	600mm dia	RM	0			0.0000000
609	e	900mm dia	RM	0			0.0000000

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Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
610	2209	Providing, laying light duty non pressure NP2 class RCC pipes with collars jointed with stiff mixture of cement mortar 1:2 including testing of joints etc complete for following.		0			0.0000000
611	a	150mm dia	RM	0			0.0000000
612	b	250mm dia	RM	0			0.0000000
613	c	300mm dia	RM	0			0.0000000
614	d	500mm dia	RM	0			0.0000000
615	2210	Providing, laying light duty non pressure NP4 class RCC pipes with collars jointed with stiff mixture of cement mortar 1:2 including testing of joints etc complete for following:		0			0.0000000
616	a	450mm dia	RM	0			0.0000000
617	b	600mm dia	RM	0			0.0000000
618	c	900mm dia	RM	0			0.0000000
619	2211	Providing and fixing C.I Manhole heavy duty cover of size 600mmx450mm including frame from reputed manufacture etc. all complete.	EACH	0			0.0000000
620	2212	Providing and fixing circular heavy duty C.I. manhole cover of 600 mm dia with frame etc. all complete.	EACH	0			0.0000000
621	2213	Providing and fixing square mouth S.W Gully trap grade 'A' complete with CI grating, brick masonry chamber and water tight CI cover with 300x300mm (inside). The weight of cover to be not less than 4.53 Kg and frame to be not less than 2.72 Kg etc all complete for following sizes:		0			0.0000000
622	a	100x100mm P or S Type.	EACH	10			0.0223964
623	b	150x100mm P or S Type.	EACH	0			0.0000000
624	c	150x150mm P or S Type.	EACH	10			0.0233287
625	2214	Providing and fixing square mouth S.W Gully trap grade 'A' complete with CI grating, brick masonry chamber and water tight CI cover with 300x300mm (inside). The weight of cover to be not less than 4.53 Kg and frame to be not less than 2.72 Kg etc all complete for following sizes:		0			0.0000000
626	a	100x100mm P or S Type.	EACH	0			0.0000000
627	b	150x100mm P or S Type.	EACH	8			0.0181831
628	c	150x150mm P or S Type.	EACH	0			0.0000000
629	2215	Providing and fixing C.I. floor traps with C.P jalli all complete.	EACH	20			0.0185155
630	2216	Providing and fixing heavy duty UPVC floor traps with C.P jalli all complete.	EACH	20			0.0132398
631	2217	Providing and installing approved brand single tap water cooler of 80 L cooling capacity all complete.	EACH	1			0.0274560
632	2218	Providing and installing approved brand single tap water cooler of 150 L cooling capacity all complete.	EACH	1			0.0491970
633	2219	Providing and fixing white viterous urinal partitions of size 675x325x85mm all complete.	EACH	10			0.0157332
634	2220	Providing and fixing eye and face drinking water fountain (combined unit with receptacle conforming to IS: 10592) all complete as per specification.	EACH	0			0.0000000
635	2221	Providing and fixing heavy duty cast iron pipes for above and below ground sanitary works with water tight lead joint, fixing clamps, excavation, filling, disposal etc. all complete for the following.		0			0.0000000
636	c	150mm dia pipes	RM	20			0.0242249
637	d	200mm dia pipes	RM	20			0.0336778
638	2222	Providing, laying spun CI pipes with conforming to IS 1536 complete for following.(Excavation,backfilling,concrete to be paid seperately)		0			0.0000000
639	c	150mm dia	RM	20			0.0317698

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Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
640	d	200mm dia	RM	20			0.0453421
641	2300	STRUCTURAL STEEL		0			0.0000000
642		Structural steel works including all labour, material, equipments, transportation, handling etc. at any level as per specification, drawings and as directed by engineer - in - charge.		0			0.0000000
643	2301	Structural steel work riveted, bolted or welded in built up section ection, trusses and framed work including cutting, hoisting, fixing in position and applying an priming coat of approved steel primer all complete.	MT	10			0.5737968
644	2302	Extra over ST NO. 2301 for blast cleaning of steel structures to near white metal surface(Sa 2 1/2) and applying self curing inorganic zinc silicate primer in coats of minimum 65 micron (DFT) and one coat of epoxy zinc phosphate of 40 micron primer instead of primer coat of redoxide zinc chromate. including touch-up painting etc all complete. as per Specification B957-000-06-42-PLS-01	MT	0			0.0000000
645	2303	Extra over ST NO. 2301 for providing and application of one coat of intermediate consisting of epoxy high built coating of 100 micron above the primer including touch up painting etc. all completeand as per Specification B957-000-06-42-PLS-01	MT	0			0.0000000
646	2304	Providing and applying two coats of synthetic enamel paint with minimum 50 micron total dry film thickness (DFT) of approved make and shade to achieve an even shade over steel sections already having primer coats and keeping overall DFT with primer not less than 110 microns including protection and cleaning, scaffolding etc. all complete.	MT	0			0.0000000
647	2305	Providing and applying acylic polyurethane finish paint with minimum 40 micron dry film thickness (DFT) of approved make (coat shall be applied after an interval of minimum overnight from the application of intermediate coat) to achieve total minimum DFT of 245 Micron.as per Specification B957-000-06-42-PLS-01	MT	0			0.0000000
648	2306	Providing, laying and clamping of crane rails over the crane girder at all elevations as per IS 3443 including all fixtures, clamps, testings etc. all complete as per drawing and specification.	MT	0			0.0000000
649	2307	Supplying, fabrication, erection and alignment of factory made electroforged galvanised grating units with structural steel Grade E250 Quality A/BR/B0 mild steel (having minimum galvanisation of 900 g/sqm) conforming to IS:2062 in flooring, platforms, drain and trench covers, walk-ways, passages, staircases with edge binding strips and anti-skid nosing in treads etc. including fixing clamps, fittings, fixtures, all taxes, duties, packing, grinding, drilling, welding, edge preparation, etc. all complete as per EIL specification 7-68-0697	MT	0			0.0000000
650	2308	Supplying, fabrication, erection and alignment of factory made galvanised welded grating units with mild steel conforming to IS:2062 in flooring, platforms, drain and trench covers, walk-ways, passages, staircases with edge binding strips and anti-skid nosing in treads etc. including 2 coats of redoxide zinc-chromate primer (one coat at shop and one coat after erection), fixing clamps, fittings, fixtures, all taxes, duties, packing, grinding, drilling, welding, edge preparation, etc. all complete.	MT	0			0.0000000
651	2309	Extra over above ST NO. 2301/2307 for finishing the grating units with hot dipped galvanisation @ 610 gm/sqm over blast cleaned steel surfaces instead of painting with two coats of red oxide zinc-chromate primer all complete.	MT	0			0.0000000
652	2310	Providing and fixing in position of permanent mild steel bolts (class 4.6 as per IS : 1367 and grade `C' as per IS: 1363) and nuts, washers etc. up to and inclusive of 39 mm diameter and upto 300mm long for structural steel work etc all complete.	MT	0			0.0000000

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Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
653	2311	Providing and fixing in positing of high strength structural bolts (of property class 8.8 and product grade `C' as per IS: 1367) and conforming to IS: 3757 and high strength structural hardened and tempered nuts (of property class `8' as per IS:1367) conforming to IS:6623 with hardened and tempered washers as per IS:6649 etc. up to and inclusive of 39 mm diameter and upto 300 mm long for structural steel work etc all complete.	MT	0			0.0000000
654	2312	Dismantling of steel structure , lowering of material and carriage of the dismantled material up to field fabrication shop / projects storage including temporary dismantling, cutting, re-welding, supporting, and restoring to correct position all temporarily dismantled members, re-alighment of all adjacent connected members to their correct positions (weight of such adjacent members and temporarily dismantled members not payable), scaffolding, staging, tools & tackles, gas cutting, welding, consumables etc all complete.	MT	0			0.0000000
655	2313	Addition to, alterations in and/or modifiction of " Erection Marks " including cutting of parts, gauging of welds, cutting, grinding, fabrication, welding, drilling holes, straightening, removal of bends, raising to the required level, painting, transportation, return of unutilised steel pieces to the project store, temporarily dismantling, cutting, re-welding, supporting and restoring to correct position of all the temporarily dismantled members, realignment of adjacent connected members (weight of such temporarily dismantled and adjacent members not payable) etc all complete for the following:		0			0.0000000

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Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
656	a	In erected position	MT	0			0.0000000
657	b	In fabrication yard	MT	0			0.0000000
658	2314	Re-erection of dismantled fabricated structural steel members including carriage of modified "Erection Marks" from the field fabrication shop to erection site, lifting to required position, aligning in position, tack welding, final welding and touch up painting including temporary dismantling and re-erection of temporarily dismantled members, cutting, rewelding, supporting and restoring to the correct position of all temporarily dismantled members, re-alignment of adjacent connected members(weight of such temporarily dismantled members and adjacent members not payable), scaffolding, staging, tools & tackles, gas cutting, welding, consumables etc all complete.	MT	0			0.0000000
659	2315	Supply, fabrication and erection of minimum 3.15 mm thick stainless steel liner of grade SS:409M on M.S. plate for inside surfaces vertical portion of bunkers including fixing with stainless steel studs, bolting (including countersunk), welding with electrode classification E308L for welding of stainless steel to stainless steel and E309 for stainless steel to mild steel etc. all complete.	MT	0			0.0000000
660	2316	Supply, fabrication and erection of minimum 4 mm thick stainless steel liner of grade AISI-304; Finish Grade 2B (Cold rolled, Annealed & Pickled and Skin passed) on M.S. plate for inside surfaces of hopper & mouth of hopper of bunkers including fixing with stainless steel studs, bolting (including countersunk), welding with electrode classification E308L for welding of stainless steel to stainless steel and E309 for stainless steel to mild steel etc. all complete.	MT	0			0.0000000
661	2317	Providing and fixing in position PTFE type sliding bearings of reputed manufacturer, individual bearing suitable for required vertical loads as per the construction drawings and for maximum displacement of ± 50 mm including all taxes, duties, transportation, installation, drilling, bolting, erecting, aligning etc all complete for following vertical loads.		0			0.0000000
662	a	20 Tons	EACH	0			0.0000000
663	b	25 Tons	EACH	0			0.0000000
664	c	40 Tons	EACH	0			0.0000000
665	d	50 Tons	EACH	0			0.0000000
666	e	60 Tons	EACH	0			0.0000000
667	2318	Providing and fixing flexible open ended bellow strap of neoprene of minimum thickness 2 mm and minimum width 200 mm with aluminium stripped edges as sealing below top of bunker and bottom of tripper floor to avoid the coal dust nuisance all complete.	RM	0			0.0000000
668	2319	Supply, fabrication and fixing of stainless steel pipe hand railing of 32 mm/40 mm dia including transportation, loading/unloading etc. all complete..	MT	0			0.0000000
669	2320	Supply, fabrication and fixing of GI pipe hand railing (1000 mm high) of 32 mm/40 mm dia (Medium Grade) including transportation, loading/unloading, painting etc. all complete . As per specification 7-68-0060 and Specification B957-000-06-42-PLS-01	MT	0			0.0000000

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Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
670	2321	Conducting radiography test on welds wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	RM	0			0.0000000
671	2322	Conducting ultasonic test on welds wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	RM	0			0.0000000
672	2323	Conducting ultasonic test on steel plates as per ASTM-A435 or equivalent wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	SQM	0			0.0000000
673	2324	Conducting magnetic particle test on welds wherever specified including equipments, measuring devices, gauges, test report etc. all complete.	RM	0			0.0000000
674	2325	Conducting dye penetration test on welds wherever specified by the engineer including provision of necessary equipments, measuring devices, gauges etc. all complete (over and above the work already specified in the specifications.)	RM	0			0.0000000
675	2500	PILING WORKS		0			0.0000000
676	2501	Mobilisation of two sets of hydraulic rotary piling rigs and accessories capable of pile boring/drilling in all types of strata/installing various size of bored cast in situ RCC piles to project site and demobilisation of the same after completion of piling works etc all complete.	LS	0			0.0000000
677	2502	Mobilisation of two sets of conventional DMC/RMC piling rigs and accessories capable of pile boring/drilling in all types of strata/installing various size of bored cast in situ RCC piles to project site and demobilisation of the same after completion of piling works etc all complete.	LS	0			0.0000000
678	2503	Installation of Bored cast-in-situ piles (with permanent MS liner of 6mm thickness with minimum embedment length of approx 6.3m) as per IS 2911 (Part 1 Sec 2) with diameter and length as specified (length to be measured from pile cut-off level to the bottom of pile) using cement concrete grade M35 conforming to IS:456 with 20 mm nominal size stone aggregates with a minimum cement content of 400Kg per cum of concrete including providing all materials (but excluding reinforcement steel for which measurement/payment shall be made separately), boring/drilling in all types of soil, providing bentonite slurry and/or casing for stabilization of pile bore, flushing of pile bore, cleaning, providing plasticizer wherever required, breaking pile head to cut off level and exposing pile reinforcement for embedment in pile cap etc including empty boring from ground level to pile cutoff level etc all complete as per specification, drawing and as directed by the engineer-in-charge for the following. -		0			0.0000000
679	a	Pile with 450 mm diameter and 20 m length below cut off level	Each	0			0.0000000
680	b	Pile with 500 mm diameter and 17 m length below cut off level(only head breaking is to be considered-piling is by Customer)	Each	0			0.0000000
681	d	Pile with 550 mm diameter and 20 m length below cut off level	Each	0			0.0000000
682	e	Pile with 760 mm diameter and 20 m length below cut off level	Each	0			0.0000000
683	f	Pile with 900 mm diameter and 20 m length below cut off level	Each	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
684	2504	Extra over ST. No. 2503 for pile length more than the specified length of 20m below cut off level for the following.		0			0.0000000
685	a	For 450 mm diameter pile	Rm	0			0.0000000
686	b	For 500 mm diameter pile	Rm	0			0.0000000
687	c	For 550 mm diameter pile	Rm	0			0.0000000
688	d	For 760 mm diameter pile	Rm	0			0.0000000
689	e	For 900 mm diameter pile	Rm	0			0.0000000

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Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
690	2505	Rebate on ST.No.2503 for pile length less than the specified length of 20m below cut off level for the following.		0			0.0000000
691	a	For 450 mm diameter pile	Rm	0			0.0000000
692	b	For 550 mm diameter pile	Rm	0			0.0000000
693	c	For 600 mm diameter pile	Rm	0			0.0000000
694	d	For 760 mm diameter pile	Rm	0			0.0000000
695	e	For 900 mm diameter pile	Rm	0			0.0000000
696	2506	Extra over ST.No.2503 for boring/drilling in rock for a length not exceeding 3 times the diameter of pile, cleaning the pile hole, concreting etc all complete for the following.		0			0.0000000
697	a	For 450 mm diameter pile	Rm	0			0.0000000
698	b	For 500 mm diameter pile	Rm	0			0.0000000
699	c	For 600 mm diameter pile	Rm	0			0.0000000
700	d	For 760 mm diameter pile	Rm	0			0.0000000
701	e	For 900 mm diameter pile	Rm	0			0.0000000
702	2507	Conducting initial load test upto a maximum test load of 2.5 times the safe load capacity on single pile as specified in accordance with IS 2911 (Part-4) including preparation of pile head for testing, necessary excavation, all arrangements of loading, unloading, test equipments/accessories, jacks, recording of results, labour, submission of test report but excluding the cost of installation of pile (installation of pile shall be paid seperately) etc all complete as per specification, drawing and as directed by engineer in-charge for the following.		0			0.0000000
703	a	For vertical compression test by cyclic load method		0			0.0000000
704	i	450 mm diameter pile	Each	0			0.0000000
705	ii	500 mm diameter pile	Each	0			0.0000000
706	iii	600 mm diameter pile	Each	0			0.0000000
707	iv	760 mm diameter pile	Each	0			0.0000000
708	v	900 mm diameter pile	Each	0			0.0000000
709	b	For lateral load test		0			0.0000000
710	i	450 mm diameter pile	Each	0			0.0000000

Package -2: Civil works- Constrcution of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
711	ii	500 mm diameter pile	Each	0			0.0000000
712	iii	600 mm diameter pile	Each	0			0.0000000
713	iv	760 mm diameter pile	Each	0			0.0000000
714	v	900 mm diameter pile	Each	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
715	c	For tension/uplift test		0			0.0000000
716	i	450 mm diameter pile	Each	0			0.0000000
717	ii	500 mm diameter pile	Each	0			0.0000000
718	iii	600 mm diameter pile	Each	0			0.0000000
719	iv	760 mm diameter pile	Each	0			0.0000000
720	v	900 mm diameter pile	Each	0			0.0000000
721	2508	Conducting routine load test on single job pile as specified in accordance with IS 2911 (Part-4) including preparation of pile head for testing, necessary excavation, providing all arrangements of loading, unloading, test equipments/accessories, jacks, recording of results, labour, submission of test report etc but excludng the cost of installation of job pile complete as per specification, drawing and as directed by the engineer-in-charge for the following.		0			0.0000000
722	a	For vertical compression test by maintained load method		0			0.0000000
723	i	450 mm diameter pile	Each	0			0.0000000
724	ii	500 mm diameter pile	Each	0			0.0000000
725	iii	600 mm diameter pile	Each	0			0.0000000
726	iv	760 mm diameter pile	Each	0			0.0000000
727	v	900 mm diameter pile	Each	0			0.0000000
728	b	For lateral load test		0			0.0000000
729	i	450 mm diameter pile	Each	0			0.0000000
730	ii	500 mm diameter pile	Each	0			0.0000000
731	iii	600 mm diameter pile	Each	0			0.0000000
732	iv	760 mm diameter pile	Each	0			0.0000000
733	v	900 mm diameter pile	Each	0			0.0000000
734	2509	Carrying out pile integrity test on 450mm/500mm/ 600mm/760mm/900mm diameter pile including all arrangements for test, equipments/accessories, materials, labour, submission of test report etc but excluding the cost of installation of job pile all complete as per specification and as directed by the engineer-in-charge.	Each	0			0.0000000

Package -2: Civil works- Constrction of Buildings etc.

Item No.	ST. NO	DESCRIPTION OF ITEM	UNIT	Quantity	Rates in Rs.	Amount in Rs.	Weightage %
735	1500	ROOFING / SIDE CLADDING: Roofing / side cladding work including all labour, material (unless otherwise specified in BOQ/contract specification), equipment, transportation, handling, scaffolding, laps, hooks, washers, corner pieces etc. at all level as per specification, drawings and as directed by engineer - in - charge.					0.0000000
736	2616	Providing temporary barricading around work area before start of work with min 0.5mm CGI/Color-coated sheet, structural frame with 40mm dia scaffolding pipe with minimum 600mm embedment in concrete with 4 nos horizontal runner throughout and vertical & diagonal post 1.200m apart(max) including submission design and getting it approved from BHEL / Customer including all material, labour, civil & structural work etc. all complete as per approved drawing & direction of engineer.(Cost of excavation, backfilling, concrete & shuttering shall be paid seperately). MS Pipe required shall be paid seperately in supply package ST No S2615.	SQM	7000			4.4318302
737	2617	Dismantling of temporary barricading around work area after completion of work made of 0.5mm CGI/Color-coated sheet, structural frame with 40mm dia scaffolding pipe with 600mm embedment in concrete with 4 nos horizontal runner throughout and vertical & diagonal post 1.200m apart (max) including removal of sheet, dismantling of all structural items, excavation, backfilling, braking of concrete if any & mending as required, segregating the materials and return to BHEL Store yard at BHPV area including loading, transportation, unloading & stacking all complete as per direction of engineer. (BHEL will arrange out gate pass from BPCL, Bina Site.)	SQM	7000			0.5299925
		Total=					100.0000