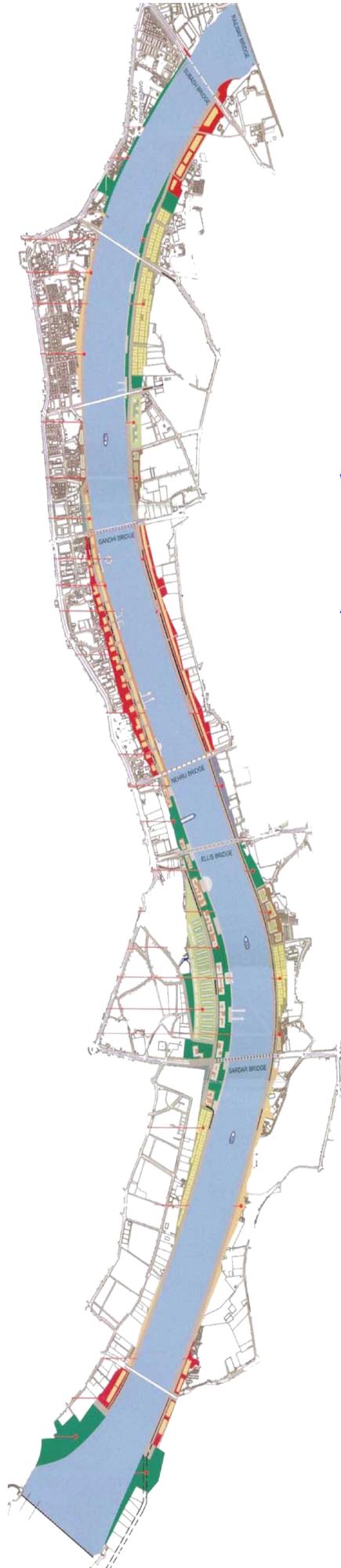


SABARMATI RIVER FRONT DEVELOPMENT



Sabarmati River Front Development
Corporation Limited

2nd Floor, Riverfront House,
B/h H. K. Arts College,
Between Gandhi Bridge and Nehru Bridge,
Pujya Pramukh Swami Marg (River Front Road –
West)
Ahmedabad - 380 009

BID DOCUMENT

WORK OF CONSTRUCTION OF
SOUVENIR SHOP AND TICKET
BOOTH NEAR FLOWER PARK
AREA, INCLUDING CIVIL,
PLUMBING, ELECTRICAL, ELV,
FFTG & HVAC FOR SRFDCL

VOLUME- 03

~~V) Form of Bid~~

VI) Bill of Quantities



SECTION V
FORM OF BID



Contractor's Bid

Description of the Works: _____

BID for

To _____ : The Chairman,
Sabarmati River Front Development Corporation Limited
Address _____ : 1st Floor, Dr. Ramanbhai Patel House, West Zone Office, Ahmedabad
Municipal Corporation, Usmanpura, Ahmedabad 13

Gentlemen,

Having examined the bidding documents including addendum, visited the site of works, we offer to execute the Works described above in accordance with the Conditions of Contract, Specifications, Drawings and Bill of Quantities accompanying this Bid at the quoted percentage above/below* the contract price mention in Bid BOQ at arrived contract Price of _____ [in figures] (_____) [in letters]¹.

The advance Payment required is: Rupees _____.

This Bid and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any Bid you receive.

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

<u>Name and address of agent</u>	<u>Amount</u>	<u>Purpose of Commission or gratuity</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

(if none, state "none")

We hereby confirm that this Bid complies with the Bid Validity and Bid Security required by the Bidding documents.

*: **Strike out which is not applicable.**

We attached herewith proof of submission of income tax returns along with profit & loss statement attached with tax returns.

Yours faithfully,

Authorised Signature _____:

Name & Title of Signatory _____:

Name of Bidder _____:

Address _____:

¹ To be filled in by the Bidder, together with his particulars and date of submission at the bottom of the Form of Bid.



**SECTION VI
BILL OF QUANTITIES**



MEASUREMENT PREAMBLE

1. All quantities in the Bill of Quantities are estimated quantities. For all payment purposes measurements, as prescribed in the contract document shall be taken and quantities shall be computed from such measurements.
2. The inclusions and exclusions from quoted rates are specified in the details of each item of work in the specifications and the Bill of Quantities. In case there is no specific mention of a particular detail, the mode of measurements as prescribed in MORTH specifications or other standard specification for such an item shall be followed.
3. In the event of contradiction between the MORTH specifications or other standard specification referred to above and this Contract document, the provisions of this Contract document shall prevail.

**SECTION VI
BILL OF QUANTITY**

**WORK OF CONSTRUCTION OF SOUVENIR SHOP AND TICKET BOOTH NEAR FLOWER
PARK AREA, INCLUDING CIVIL, PLUMBING, ELECTRICAL, ELV, FFTG & HVAC FOR SRFDCL**

SUMMERY SHEET

ITEM	ITEM DESCRIPTION	Total Amount (in Rs)
A	CIVIL & PLUMBING WORKS	75,99,836
B	Electrical, ELV & HVAC Works	20,09,424
C	FFTG Works	19,050
Total Amount (In Rs.) (A+B+C)		96,28,310

Note: Above Cost is excluding GST

BILL OF QUANTITY

SUB SECTION

CIVIL & PLUMBING WORKS

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
A	CIVIL & PLUMBING WORKS				
A1	Civil Work				
	EARTH WORK & CARRIAGE OF MATERIAL				
	<p>Note:</p> <p>1) The method of excavation shall be approved by the Engineer in charge before execution.</p> <p>2) Excavation shall be carried out very carefully without damaging existing structures and surrounding if any.</p> <p>3) If required, the contractor shall provide stabilization by any means to protect the foundation of the existing structure and building without any extra cost.</p> <p>4) Rate shall include dewatering work (pumping out and removing slush) while execution in underwater condition if required.</p> <p>5) Contractor shall conducting underground utility survey mapping by executing required number of trial pits or by any other suitable means before executing the work as per direction by the engineer in charge.</p>				
1	<p>Excavation for all kinds of soil</p> <p>Earthwork in excavation for all kind of soil by any means including getting out the excavated soil, sorting and stacking of useful material, dressing of the sides, ramming of bottom, and disposal of surplus excavated earth for all lead within campus area and lift up to 1.5 mt depth, etc complete as directed by engineer-in-charge. In case of excavation for pipe, cable, any services trenches, making base for road work, pavement works walkway, etc, proper slop and camber by any means shall be maintain and dressing of the sides shall be made as per requirement and as directed by engineer-in-charge.</p>	Cum	184	262	48,158.3
2	<p>Excavation for all kinds of soil</p> <p>Earthwork in excavation for all kind of soil by any means including getting out the excavated soil, sorting and stacking of useful material, dressing of the sides, ramming of bottom, and disposal of surplus excavated earth for all lead within campus area and lift from 1.5 mt to 3.0 mt, etc complete as directed by engineer-in-charge. In case of excavation for pipe, cable, any services trenches, making base for road work, pavement works walkway, etc, proper slop and camber by any means shall be maintain and dressing of the sides shall be made as per requirement and as directed by engineer-in-charge.</p>	Cum	168	283	47,518.8
3	<p>Filling available excavated earth (excluding rock)</p> <p>Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations, plot filling, etc. in layers not exceeding 20cm in depth, with optimum moisture content to give at least 95% of the maximum dry density (proctor density) including watering, ramming and compacting by any means, including transportation, loading, unloading, screening, passes etc. all complete for all lead (from anywhere from the campus area) and lift and as directed by the Engineer-in-charge</p>	Cum	256	130	33,379.8
4	<p>Filling of good earth/ murrum</p> <p>Excavating, supplying, and filling of good earth/ murrum brought from outside (including royalty) by any means; in trenches, plinths, sides of foundations, plot filling, etc. in layers not exceeding 20cm in depth, with optimum moisture content to achieve at least 95% of the maximum dry density (proctor density) including watering, ramming and compacting using any means for compaction, including transportation, loading, unloading, screening, passes etc. all complete for all lead and all lift and as directed by the Engineer-in-charge.</p>	Cum	198	289	57,233.9
5	<p>Filling of sand</p> <p>Providing and filling in plinth, under the floor, sunk, subbase of any elements or other location as per drawing with river sand/ manufactured sand, etc including, watering, ramming consolidating, and dressing complete for all lead and all lift and as directed by the Engineer-in-charge.</p>	Cum	50	460	23,009.5
6	<p>Carriage of excavated earth/ gravel by mechanical transport including loading, transporting, unloading, stacking & leveling at the non-objectional location for the lead of up to the specified Km beyond initial lead and all lifts, etc complete and as per the direction of the Engineer-in-Charge. Item shall be executed after prior approval of the Engineer in charge.</p> <p>a) beyond initial lead up-to 1.00 km</p>	Cum	96	38	3,690.2
7	<p>b) beyond initial lead up-to 2 Km</p>	Cum	96	50	4,798.1

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
8	c) beyond initial lead up-to 3 Km	Cum	96	61	5,886.7
9	d) beyond initial lead up-to 4 Km	Cum	96	72	6,928.3
10	e) beyond initial lead up-to 5 Km	Cum	96	83	7,931.5
11	Rubble soling Providing and laying metal/rubble soling in the foundations and for plinth protection or other locations as per the drawings, using hard stones up to 300mm thick (as per the thickness of soling), filling, covering and leveling the surface with a layer of sand after filling the voids (up to 25%) with smaller sized black trap stones of 20-40 mm, 40-63 mm, 63-90 mm, 90-150 mm size stones, metals, stone chips, including watering, ramming well and consolidating each layer by static roller/ vibratory roller or any means of required capacity for all lead and lift as directed by the Engineer-in-charge.	Cum	72	1,448	1,04,251.7
12	Anti-termite treatment Providing and injecting Chemical emulsion for PRE-CONSTRUCTIONAL anti-termite treatment and creating a chemical barrier on the top surface of plinth filling, inside the junction of wall and floor, on top of damp proof course or on masonry at the level of plinth filling as per IS 6313 (Part-2)-2013 using a chemical like Imidacloprid 30.5% SC (CIB approved, BIS & CBRI certified) and proportion of dilution with water shall be as per manufacturer's specification. The emulsion shall be applied as mentioned below, all as per the specifications and directions of the Engineer-in-charge. A guarantee bond of 10 years shall be furnished in the prescribed proforma. The rate shall be inclusive of material required for Anti Termite Treatment and labour and equipment required for applying in any condition etc. complete as directed by the engineer in charge. (Stage of treatment may vary as per site condition and approved by the Engineer in charge before execution.) a) Treatment of the soil below the raft or any type of foundation - Before laying the PCC, the compact and leveled soil shall be treated at 5 liters per sqm. OR In case of soils/ sand filled above the raft, the treatment at 5 liters per sqm shall be carried out on the top surface of filled soil/ sand. b) Treatment of the soil along the retaining wall - The soil retained by the walls (soil coming in contact with the retaining wall) shall be treated at the rate of 7.5 liters per sqm of the vertical surface in full depth. c) Treatment of soil along the external perimeter of the building - After the building is complete, the earth along the external perimeter of the building shall be rodded at intervals of 150 mm and to a depth of 300 mm. The rods should be moved backward and forward, parallel to the wall to break up the earth and emulsion poured along the wall at the rate of 7.5 liters per square meter of vertical surfaces. d) Top surface of the plinth filling including damp proof courses at the rate of 5 liter/sqm of internal plinth area (if required)(As per IS:6313 Part II-2013). For any area without a basement, treatment shall be done as per IS:6313 Part-II-2013. e) Treatment of soil surrounding pipes, wastes, and conduits - When pipes, wastes, and conduits enter the soil inside the area of the foundation, soil surrounding the point of entry shall be loosened around each of such pipe, waste or conduits for a distance of 150mm and up to a depth of 75 mm before the treatment is commenced. When they enter the soil external to the foundation, they shall be similarly treatment for a distance of 300 mm, unless they stand clear of the walls of the building are about 75 mm. f) 1 liter / linear meter along the junction of wall and floor at all stages g) 2 liter per linear meter for expansion joints in touch with soil/sand. The contractor shall submit a methodology statement to the engineer in charge before starting the work. The footprint area of the Basement Area of the building shall be considered for payment in sqm.	Sqm	94	90	8,492.0

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
13	<p>Boring (empty boring) holes to the required depth (measured from bottom of pile cap to founding level) of any type of piles (with/without under reamed) by any means in any kind of soil/ any kind of earth strata like soil, sand, clay, murrum, gravel, pebble, boulder, rock, road crust, etc. for pile of 450mm diameter, supported with the help of polymer slurry including all required plant & machineries, getting out the material, disposal of excavated material with all leads & lifts within plot boundary/ site area, mobilization demobilization, remobilization if required, transportation of required plant and machineries, etc. as directed by Engineer in charge. Method of boring shall be as per IS 2911-Part 1 - Section -II and as follows.</p> <p>(1) Bore hole Drilling shall be done by any means and using temporary casing of required depth up to cut off level of pile (wherever required), polymer slurry only to be used and drilling shall be carried out as directed by the Engineer. Use of bentonite slurry shall not be permitted.</p> <p>(2) Rate shall also include drilling and socketing in rock at required depth. The item is with the cost of polymer to be used for stabilization of bore.</p> <p>(3) Length of pile shall be measured from cut off level and up to the founding level for payment.</p> <p>(5) Concrete and reinforcement shall be paid in relevant tender items.</p>	Rmt	288	1,099	3,16,379.5
Total Carried Over to Summary					6,67,658.4
PLAIN & REINFORCEMENT CEMENT CONCRETE WORK					
	<p>Note -</p> <p>1) All types of shuttering shall be designed by the contractor and submitted to the Engineer in charge along with design calculations (if required) and approved by the Engineer in charge. However, the Stability and compatibility of shuttering shall be the responsibility of the contractor. Shuttering shall be executed as per the approved shop drawing. No extra payment shall be made for the above.</p> <p>2) Rate shall be inclusive of dewatering work (pumping out and removing slush) while execution in underwater conditions. The contractor shall not claim for dewatering if required.</p> <p>3) Rate shall be inclusive of providing grooves, drip moulds, pockets, cut-outs, etc., and co-ordination of insert sleeves, insert plate (cost of insert sleeves/ plate shall be paid separately), encasing if any wherever required while casting for all level all height.</p>				
13	<p>Concrete (PCC) of grade - M15 Providing and laying in position Ready mix concrete/ batch mix concrete of cement concrete (PCC) of grade - M15 cement concrete work, using cement content as per approved design mix (Min cementitious level as per latest IS 456 shall be maintained) manufactured in fully automatic batching plant and transported to the site of work in transit mixer for all lead having a continuous agitated mixer, for reinforced cement concrete work including pumping from transit mixer to site of laying; cost of admixtures in recommended proportions as per IS: 9103 to accelerate, retard the setting of concrete, improve workability without impairing strength and durability; finishing, compacting, vibrating, curing, dewatering (if required), etc, including the cost of form work (if required) and removal of formwork, dewatering (if required), etc. complete for all level, all height/ depth and for all lead and lift and as directed by the Engineer.</p>	Cum	28	4,544	1,27,224.7
	<p>Ready mix concrete Providing and laying in position Ready mix concrete/ batch mix concrete of specified grade for reinforced cement concrete work, using cement content as per approved design mix (Min cementitious level as per latest IS 456 shall be maintained) manufactured in fully automatic batching plant and transported to the site of work in transit mixer for all lead having a continuous agitated mixer, for reinforced cement concrete work including pumping from transit mixer to site of laying; cost of admixtures in recommended proportions as per IS: 9103 to accelerate, retard the setting of concrete, improve workability without impairing strength and durability; finishing, compacting, vibrating, curing, dewatering (if required), etc, excluding the cost of Formwork and reinforcement, etc complete for all elements, all floors, all level, any heights/ depths, any lead and lift as directed by Engineer Incharge.</p>				
14	Concrete of M 25 grade	Cum	126	4,902	6,17,664.6
15	Concrete of M 30 grade	Cum	25	5,094	1,27,352.5

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
	<p>Reinforcement for R.C.C. Providing Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position, and binding (with GI wire) all complete for all leads and lifts, all levels, all floors, all heights/ depth, etc complete and as directed by the Engineer in charge. No separate payment shall be made for chairs, pins, lifting hooks, spacers, wastage, rolling margin and binding wire</p>				
16	Thermo-Mechanically Treated bars (Fe 500 D)	Kg.	18,788	76	14,31,833.5
	<p>Formwork using any type of suitable material and/ or proprietary system Providing and fixing formwork using any type of suitable material and/or proprietary formwork system to achieve a fair finished concrete with any shape and any size in plan and elevation including centering, shuttering, strutting, propping, and removal, etc.for all elements, all floors, all level, any heights/ depths, any lead and lift. The height of the propping and centering below supporting floor to ceiling not exceeding 4.50 mts. and removal of the same for in-situ reinforced concrete and plain concrete work, etc complete and as directed by the Engineer-in-charge. The area of shuttering in contact with the concrete surface shall be measured for payment without considering any wastage. No deductions in measurement shall be considered from the shuttering due to the openings/ cutouts in the wall/beam. However, Nothing extra shall be paid for forming such openings. also, in case of any type of cutouts/openings in the slab, it shall not be measured for payment. However, Nothing extra shall be paid for forming such openings Where it is not specifically stated in the description of the item that formwork shall be paid for separately, the rate of the RCC item shall be deemed to include the cost of form work. The measurements shall be taken separately for the following item.</p>				
17	a) Form work for Foundations, footings, bases of columns, sides of the raft, base PCC, etc.	Sqm	223	268	59,844.3
18	b) Formwork for Columns, Posts, and Struts etc.	Sqm	144	396	56,969.3
19	<p>c) Formwork for Wall RCC walls of any thickness, any shape including attached pilasters, buttresses, plinth, and string courses, etc including the cost of tie bolt and heavy duty PVC pipe sleeve (above plinth), left in concrete spring coil and plastic cone assembly/ water barrier tie rod assembly (below plinth, water retaining structures) and removing the PVC cone, spring, sleeve, etc and grouting the same with non-shrink grout/ ready mix patch repair mortar for concrete complete as per the direction of Engineer-in-charge. Length and diameter of tie rod assembly shall be as per thickness and height of wall. The contractor shall get prior approval of tie rod assembly and water barrier. (Horizontal/ vertical lines shall be matched for each shuttering panel).</p>	Sqm	59	327	19,305.4
20	d) Formwork for Slabs, Suspended floors, roofs, landings, balconies, and access platforms etc.	Sqm	106	349	37,044.9
21	e) Formwork for beams, lintels, coping, girders etc.	Sqm	240	357	85,785.6

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
22	<p>Exposed concrete formwork</p> <p>Extra for providing and fixing formwork for exposed concrete surfaces with any pattern (vertical or horizontal surface of any shape) to achieve the desired finish for any element in the desired pattern and size as per the issued drawings and specifications. This includes using any type of formwork material/suitable proprietary formwork system (material/ system shall be approved by the Engineer-in-charge before procurement) to achieve the desired finish as per the approved sample for any type of RCC element including neat cleaning, grinding, rendering the exposed concrete surface, as directed by the Engineer-in-charge, However, unless anywhere specified, Black film plywood of required thickness and approved make of required size & shape to be used as a formwork material in any proprietary formwork system with required framing for exposed concrete work to achieve satisfactory finishing. The rate shall be applicable for all levels, all places, and all shapes and shall include all necessary specialized centering/shuttering materials. The Contractor shall submit a shuttering pattern/ shop drawing including tie-rod hole positions, and Architectural grooves and cutout based on the Architectural intent with the control line. this item shall be executed only after the shuttering pattern is approved by the Architect and the Engineer-in-charge. The same kind of shuttering material should be used for standard as well as residual sizes. These areas shall be entirely free from honeycombing, stains, fins, lipping, nail or screw marks, raised grain marks, air holes, or any other imperfections; bulging, offsets, misalignment of the concrete and shall have an even shade, texture, and level throughout. At the construction joints, the formwork should be tightly fixed and securely anchored, close to the joints for seamless construction. Number of repetition of shuttering shall be minimum enough to achieved satisfactory finish of concrete, and no any additional cost to be paid for it. The Contractor shall get prior approval for the reuse of the shuttering material for repetition from the Engineer-in-charge.</p>	Sqm	106	654	69,289.0
	<p>Mock-ups for all exposed work (with concrete & TMT, however Concrete & TMT for mock up work shall be paid in relevant tender item, however exposed shuttering for mock up work shall not be payable) to be prepared by the Contractor and approved by the Architect before mass execution work. Required number of exposed work mock up shall be prepared as per design intent untill satisfactory finish is not received without any extra cost for shuttering work. The Architect reserves the right to reject part or all of the work that is substandard or not conforming to the approved sample as per the mock up. The rate shall also include the cost of providing Architectural grooves, buttons(including finishing the grooves/button with approved grouting material wherever required) of required size and pattern in concrete work as per the issued drawing, cut-out of any size in concrete elements as per drawing, etc in formwork.</p>				
23	<p>Exposed concrete formwork - textured/ Devdar finish</p> <p>Extra for providing and fixing formwork for exposed concrete surfaces (textured/ Devdar finish) with any pattern (vertical or horizontal surface of any shape) to achieve the desired finish for any element in the desired pattern and size as per the issued drawings and specifications. This includes using any type of formwork material/suitable proprietary formwork system (material/ system shall be approved by the Engineer-in-charge before procurement) to achieve the desired finish as per the approved sample for any type of RCC element including neat cleaning of the exposed concrete surface, as directed by the Engineer-in-charge. The rate shall be applicable for all levels, all places, and all shapes and shall include all necessary specialized centering/shuttering materials. The Contractor shall submit a shuttering pattern/ shop drawing including tie-rod hole positions, and Architectural grooves and cutout based on the Architectural intent with the control line. this item shall be executed only after the shuttering pattern is approved by the Architect and the Engineer-in-charge. The same kind of shuttering material should be used for standard as well as residual sizes. These areas shall be entirely free from honeycombing, stains, fins, lipping, nail or screw marks, raised grain marks, air holes, or any other imperfections; bulging, offsets, misalignment of the concrete and shall have an even shade, texture, and level throughout. At the construction joints, the formwork should be tightly fixed and securely anchored, close to the joints for seamless construction. Mock-ups for all exposed work to be prepared by the Contractor and approved by the Architect before mass execution work. The Architect reserves the right to reject part or all of the work that is substandard or not conforming to the approved sample as per the mock up. The Contractor shall get prior approval for the reuse of the shuttering material for repetition from the Engineer-in-charge. The rate shall also include the cost of providing Architectural grooves of required size and pattern in concrete work as per the issued drawing, cut-out of any size in concrete elements as per drawing, etc in formwork.</p>	Sqm	39	808	31,523.7
Total Carried Over to Summary					26,63,837.5

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
WATERPROOFING WORK					
24	<p>Waterproofing for balcony/ terrace area - Polyurethane coating</p> <p>Providing and applying single component, elastomeric PU (Polyurethane) coating waterproofing system, to be applied to achieve a minimum 1.5mm DFT with a required coat (minimum 2 coats) uniformly spread in the entire area of covered/noncovered balcony, terrace, and similar locations. The system shall be executed as follows:</p> <ol style="list-style-type: none"> 1) Surface preparation shall be done as per manufacturer's specifications followed by single-component PU waterproof coating 2) making fillet/provision of corner tape 3) PU (Poly Urethane) primer application as per manufacturer's recommendation 4) PU waterproofing can be applied by roller, spray, or short hair brush. Waterproofing shall cover the entire parapet wall/wall up to a minimum of 300mm. 5) Laying Geotextile (non-woven polyester) membrane in 200 GSM, with a minimum of 100mm wide overlap and on typical locations like wall & floor junctions, rainwater down take pipes, etc. shall be embedded between two coats as per the manufacturer's specifications. 6) Protection screed laid to slope which shall be paid under relevant BOQ items. 	Sqm	106	1,026	1,08,804.8
	<p>The PU (Polyurethane) coating system must deliver the following properties:</p> <ol style="list-style-type: none"> 1) Tensile Strength - >1.0 N/mm² 2) Crack bridging capacity - minimum 1.5 mm 3) An elongation of a minimum of 400% as per ASTM D 412. 4) Solids by Volume >85% <p>Cost includes all material, labour, T&P, geotextile, and wastage involved as mentioned in the item except protection of the concrete screed.</p> <p>The Contractor shall submit a methodology statement with all details in illustrative sketch form and get approval from the Engineer-in-charge. Application shall be carried out by an approved applicator of the manufacturer and as per the manufacturer's recommendation. The applied area of PU (Polyurethane) coating as per the approved methodology (horizontal and vertical) shall be measured for payment without any overlaps.</p>				
25	<p>M25 Garede concrete screed for leveling</p> <p>Supplying and laying M25 grade vibrated concrete screed in proper slope and gradient including saw cutting (approx. 6mm W x 30mm D) at 3m x 4m panels or less size, making angle fillet of 50mm x 50mm at the corners using M25 grade concrete and filling the grooves with PU sealant (minimum 20 mm depth over PE backer rod). If Screed concrete shall be laid over on existing concrete surface, a bonding agent shall be applied before laying of concrete. Cost includes all material, labour, T&P, and wastage involved as mentioned in the item. Reinforcement, if required, shall be paid under relevant agreement items.</p>	Cum	11	6,042	66,459.5
26	<p>Integral crystalline admixture - RCC structures</p> <p>Providing and mixing integral crystalline admixture for waterproofing treatment to RCC structures like basement rafts, retaining walls, sewage & water treatment plant, tunnels/subway, etc. at the time of transporting of concrete into the drum of the ready-mix truck/ at RMC plant as per direction of the Engineer-in-charge, using integral crystalline admixture @ 0.80% (minimum to the weight of cement content per cubic meter of concrete) or maximum 2.4 Kg/Cum or as recommended by the manufacturer's specifications. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e. by reducing permeability of concrete by more than 90%, compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure. The crystalline admixture shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out as per specifications and the directions of the Engineer-in-charge.</p>	Kg	206	390	80,327.6
27	<p>China Mosaic flooring</p> <p>Providing & laying china mosaic flooring for plain and curved surfaces, comprising of 20 to 25 mm size broken white/colour pieces of ceramic/glazed tiles laid over 12 to 15mm thick cement mortar, 1:6 (1 cement: 4 coarse sand) bedding including applying cement slurry at the rate of 2.75 kg per sqm on plain or sloped surfaces with joints not exceeding 5 mm, including filling the gaps with white cement mixture & mixing with synthetic polyester fiber, triangular in shape having specific gravity of 1.34 to 1.40, cross-section size ranging from 10 to 40 micron & length up to 6mm, mixing fiber @ 125 grams per 50kg of cement in cement mortar, including providing and mixing waterproofing material in mortar @ 1 kg per 50 kg of cement, all complete as per the direction of the Engineer-in-charge. The flooring shall be tampered with a wooden rammer not exceeding 2 Kg in weight to bring the mortar up to the surface, including rounding of the junctions and extending them up to 150 mm. along the parapet wall. The rate shall include bands if a different colour is used, any pattern or design as per drawing and direction, making vata/ fillet, curing, cleaning with water and oxalic acid, etc. complete. Only the Plan area shall be measured for</p>	Sqm	106	850	90,069.3
Total Carried Over to Summary					3,45,661.1

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
MASONRY WORK					
28	Providing and laying Brick masonry works using common burnt clay bricks conforming to IS 1077-1992 having Compressive strength not less than 35 kg/Sq.cm in cement mortar 1:5 (1 cement: 5 coarse sand) in any shape, any thickness including finishing, curing, scaffolding racking / flush jointing, etc. complete for all level, all depth/height, as per drawing and as directed by Engineer in Charge.	Cum	25	4,052	1,01,294.5
AAC BLOCK MASONRY WORKS					
Note: 1) Polymer-modified adhesive mortar for AAC blocks shall be of an approved make, shall meet the technical parameters as per the specifications, and comply with the respective IS code and as directed by the Engineer-in-charge. 2) Masonry work shall be carried out for all floors, all levels, all heights, and all places including loading, unloading, stacking, transporting, hoisting, and erecting by any means (mechanical or manual).					
29	Providing and laying autoclaved aerated cement blocks masonry with a minimum crushing strength of 35 kg/sqcm, density in oven-dry condition between 651 to 750 kg/cum, thermal conductivity of 0.16 W/mK, fire resistance of 4 hours, of an approved make and required thickness in the superstructure, above plinth level. The blocks shall be laid using a polymer modified adhesive mortar of required thickness as per the manufacturer's specifications of an approved make, including finishing, curing, scaffolding, racking out the joints/ flush jointing, cleaning the surface with necessary tools, tackles, etc complete for all heights, all floors, all levels, and in true line, level and plumb as per the issued drawings/ specifications and as directed by the Engineer-in-charge. If required, RCC bands, runners, and mullions shall be provided in the block masonry work as per the issued drawings. The cost of RCC work for runners/mullions (i.e. concrete, formwork, reinforcement, etc) shall be paid under the relevant Tender items.	Cum	15	5,757	86,360.3
GLASS BRICK MASONRY WORKS					
Note: 1) The same manufacturer is required for the different types of glass bricks from the approved make list. 2) The Contractor shall get approval of the loose sample from the Architect before execution. 3) The stability and water tightness of the glass brick masonry work shall be the Contractor's responsibility. 4) The Contractor is required to submit a methodology statement for glass brick masonry work for approval before mass execution. 5) Glass bricks shall be well packed during transportation as per the manufacturer's specifications, to avoid damage. Damaged bricks shall not be used for execution. 6) The gap between the glass brick masonry work and the adjacent elements (RCC/Masonry/drywall/steel etc.) shall be filled (on both sides) with a suitable sealant. Water ingress shall not be allowed from the joints. The Contractor is responsible for ensuring the same. 7) All the grooves (both sides) between the glass bricks shall be smoothly finished with paste/putty of white cement and polymer for water tightness.					
30	Providing and fixing 190 mm (Length) x 190 mm (breadth) x 80 mm (thickness) glass bricks of an approved make , shade, finish/texture, design, and scaffolding for all levels, all floors, all heights, in true line, level and plumb as per the issued drawings/specifications and as directed by the Engineer-in-charge, etc and as per the following : 1) Drilling holes of required dia in the periphery of the opening to fix 5mm GI wire (2 no holes @ 200c/c in both directions). 2) GI wire shall be embedded in the holes and grouted with rebaring chemicals of an approved make. 3) 2 no. GI wires shall be provided with PVC spacers (for provision of groove) in each joint - horizontal as well as vertical. 4) Glass bricks to be fixed with suitable white/transparent adhesive of an approved make and/or polymer-based white cement mortar 1:2 (1 white cement: 2 sand + white marble dust), in approximately 10mm thickness. 5) The glass bricks shall be fixed with the placing of GI wires vertically as well as horizontally after passing through the spacer and having a minimum lap length of 200mm. 6) Joints along the periphery of the glass bricks shall be filled with weather silicone sealant of an approved make and color. 7) All the grooves (both sides) between the glass bricks shall be smoothly finished with paste/putty of white cement and polymer for water tightness. The actual installed area of the glass brick shall be measured for payment without any wastage.	Sqm	3	13,695	41,085.8
Total Carried Over to Summary					2,28,740.5
PLASTER WORK					
31	12-15 mm thick plaster Providing and laying 12 to15 mm thick single coat mala cement plaster on masonry work/ concrete work in cement mortar (1 Cement : 3 coarse sand) finished with trowel including making drip moulds, grooves forming pattas, scaffolding, curing etc. complete for all level, all shape and as directed by Engineer in Charge.	Sqm	177	177	31,254.7

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
32	Average 20 mm thick plaster-ready mix cement mortar Providing and applying 18 mm Plaster in two coats; under layer 12 mm thick finished with a top layer 6 mm thick polymer added ready mix cement mortar finished with a trowel. GI hexagonal chicken mesh of size 20 mm x 20 mm of 22 gauge and minimum 200 mm wide at RCC & masonry junctions or between different materials and 145 GSM of minimum 150mm wide fiberglass mesh with alkali resistant coating shall be fixed at chasing areas of plumbing and electrical works, at corners and door and window joints as per manufacturer's specifications with GI nails, hacking of concrete/application of bonding agent, finishing, curing, making grooves, forming pattas, scaffolding in any shape for all floors, all levels, all heights, etc. complete as directed by the Engineer-in-charge. The rate shall be inclusive of bonding agent, chicken wire mesh, glass fiber mesh, provision of grooves/drip moulds as per the issued drawings, etc. complete and as directed by the Engineer-in-charge.	Sqm	191	192	36,765.6
33	12 to 15 mm thick water proof Plaster Providing and laying 12 to 15 mm thick water proof single coat smooth / wired finish cement plaster on sides of masonry work / block work / RCC work, in any shape, in CM 1:3 (1 cement : 3 fine sand) and water proofing compound of approved make in proportions recommended by the manufacturer, finishing the surface wired finish/ smooth finish with a floating coat of neat cement slurry for all floors, all height including hacking to RCC surface, scaffolding, curing etc. complete as directed by engineer-in-charge.	Sqm	50	185	9,243.5
34	Providing and applying approved coloured and approved size natural stone chips STONE CREAT type PLASTER for exterior / interior surface on any surface up to full height from ground level consisting of 8mm - 10 mm thick coat of CM 1:1 (1 cement (Grey / White / Colour : 1 stone grit (approved coloured chips)) including 10mm alluminium channel for expansion joint(if required as per design intent) / grooves, matching shade of pigment, curing, necessary scaffolding in true line and level etc. complete as directed by EIC. Selected natural stone chips/grit mixture with different composition of different stone chips shall be approved before mock up. Mock up work shall be done using selected approved natural stone chips/grit for approval from the architect and the engineer in charge before mass execution. Mass execution shall be execute confirming to approved mock up. Architect reserves right to reject part or all work of sub standard or not in confirmation to approved sample and as per mock up. Actual executed area of stonecrete plaster works shall be measured for payment without considering any wastage. Base coat plaster shall be paid under relevent tender item.	Sqm	191	2,698	5,15,348.6
Total Carried Over to Summary					5,92,612.3
PAINT WORK					
	Note:- 1) All adhesives, sealants & paint shall be water based, with low VOC with acceptable VOC content as per Green Building Norms requirements and lead free. 2) Paint shall be applied after thoroughly brushing the surfaces, free from mortar dropping and other foreign matter, preparing the surface even and sand papered smooth etc, after applying every coat of putty and primer complete. 3) Contractor shall furnish warranty paper, wherever applicable. 4) If necessary more coats shall be applied till the surface presents a uniform appearance without any extra cost. 5) Paint shall be applied with any means (i.e. brush, roller, spray etc) 6) Contractor shall prepare sample of minimum three shades as suggested by engineer in charge for approval. 7) The rate shall be applicable for all floor, all level, all height by any means of scaffolding.				
35	White cement-based putty Providing and applying white cement-based putty of average thickness 1 mm, of an approved make and manufacturer, over any surface, to prepare the surface even and smooth, complete, for all floors, all heights and all levels. . The single time applied area of putty shall be measured for payment without considering any wastage.	Sqm	177	124	22,006.4
36	Primer Providing and applying priming coats with a primer of an approved make and manufacturer, having low VOC (Volatile Organic Compound) content, modified acrylic, water-based alkali-resistant primer with low VOC over any surface, complete, for all floors, all heights and all levels. The single time applied area of primer shall be measured for payment without considering any wastage.	Sqm	177	104	18,333.7

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
37	<p>Acrylic emulsion paint - interior grade</p> <p>Providing and applying two coats of superior quality, interior-grade premium acrylic emulsion paint from an approved make and shade. The paint must be highly washable, anti-fungal, anti-bacterial, scratch-resistant, and scrub-resistant, with a VOC (Volatile Organic Compound) content of less than 50 grams per litre of an approved brand and manufacturer. This application will be carried out on walls, ceilings, false ceilings, partitions, etc., including any additional coats required to achieve an even shade and colour across all floors, all levels, all heights, complete..</p> <p>The single time applied area of paint shall be measured for payment without considering any wastage. The Contractor shall prepare the required number of mock-ups in the specified sizes with different shades or colours for approval from the Architect and the Engineer-in-Charge before proceeding with the full execution, at no additional cost.</p>	Sqm	177	160	28,263.4
38	<p>Acrylic emulsion paint with primer - Exterior grade</p> <p>Providing and applying 100% acrylic smooth exterior paint with an exterior primer from an approved make and shade. The paint shall have a VOC (Volatile Organic Compound) content of less than 50 grams per litre. This includes applying two or more coats of paint and the necessary number of primer coats as per the manufacturer's specifications on any surface, complete, for all floors, all heights, all levels.</p> <p>The exterior paint and primer shall come with a minimum 7-year warranty. The Contractor shall prepare the required number of mock-ups in specified sizes with different shades or colours for approval from the Architect and the Engineer-in-Charge before proceeding with the full execution, at no additional cost. The single time applied area of paint shall be measured for payment without considering any wastage.</p>	Sqm	191	220	42,111.7
39	<p>Exterior Texture</p> <p>Providing and applying external finish of Fine Flakes textured homogeneous wall finishing system from BAKELITE HYLAM LTD consisting of a TWO component system of Dry Flakes (8.5 kgs per Pack) made of a special; grade of heat treated China clay with rigid homopolymer coated with fade resistant pigments, 100% acrylic polymer Bonding agent (5kgs per pack) with the applied thickness of the coating being between 0.8mm-1.2mm to be applied on a cured, smooth level plaster without keying, as per the shades/combinations approved, as per the manufacturer directions, for usages, to be applied by an approved applicator of the manufacturer, as per the directions / supervision of the engineers in charge, all complete. The above textured coating should conform to surface spread of flame Class one of BS 476: Part 7: 1971 and Pull off strength of the coating to meet JISA 6909. Texture coating shall be of approved make, shade and pattern and as per following for all level, all height including Surface preparation - thoroughly brushing the surfaces free from mortar dropping and other foreign matter and smoothening with sand paper up to the requirement.</p> <p>The rate includes surface preparation, primer application, texture coating, protection coating, making of grooves, pattas, finishing and scaffolding as directed by engineer in charge.</p> <p>The item shall be executed by an approved applicator only. Sample (shade and patterns as suggested by EIC) shall be prepared for review and approval. Work shall be carried out as per the final approved sample.</p> <p>Texture shall be Easy to apply, Water Resistance, Abrasion Resistance, Washable Resistance, Alkali Resistance, Acid Resistance, Repeated cooling and warming resistance, Impact Resistance, Fungus and Algal Resistance, Resistance to damp as per respective IS or other codes as per suggested by the engineer incharge.</p>	Sqm	50	753	37,645.0
40	<p>PU polish - for external/internal wooden & veneered surfaces:</p> <p>Providing and applying interior/exterior grade water-based polyurethane (PU) polish of any shade and finish (matt, glossy, or semi-glossy) of an approved make on new or existing external and internal wooden and veneered surfaces at all levels and heights. The polish work shall be carried out as follows:</p> <ol style="list-style-type: none"> 1) Surface Preparation: Sandpapering with various grades, up to 220 macro grit, to the satisfaction of the Engineer-in-Charge. 2) Sealer Application: Applying two coats of sealer using a spray gun or other suitable means, allowing sufficient drying time as per the manufacturer's specifications. 3) Wet Rubbing: Once the sealer coat has dried, wet rubbing with fine emery cloth using ample water to remove the excess sealer layer and smooth the surface. After wet rubbing, apply special grade PU fillers to fill any small or large holes/grooves. Allow the filler coat to dry as per the manufacturer's specifications. 4) First Coat of PU Polish: Apply the first coat of PU polish with a spray gun or suitable means. Once dry, sandpaper the surface using fine sandpaper up to 400 micro-grit. This process shall be repeated three times, ensuring a smooth finish. 5) Stainer Coat Application: Apply a stainer coat of the approved shade, if required. Sandpaper the wood surface using fine sandpaper up to 600 micro-grit as per step wise requirement for polishing, to achieve a smooth finish, to the satisfaction of the Engineer-in-Charge. <p>The polish application shall be conducted according to the manufacturer's specifications and as directed by the Engineer-in-Charge. A sample must be approved by the Architect before the full execution of the work. The single time applied area of polish shall be measured for payment without</p>	Sqm	66	2,335	1,54,124.5

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
41	<p>Stain-repellent transparent coating - For natural stone, exposed concrete work, exposed brickwork</p> <p>Providing and applying water-based, low VOC, breathable and biodegradable, water, oil, and stain-repellent transparent fluorocarbon-based coating with anti-graffiti properties (suitable product according to natural stone, exposed concrete work, exposed brickwork) of approved make having fluoro carbon-based nanotechnology at all heights & leads and wherever instructed by Engineer-In-Charge. The treatment shall be in two coats wet-on-wet or as recommended by the approved manufacturer including preparation of surfaces by cleaning, curing, protecting, scaffolding, etc complete. The rate includes the cost of all materials, their application by specialized applicators by spray coating with an airless sprayer, cleaning the substrate of all laitance, construction dust, contaminants, scaffolding, labour, etc., all complete and at all levels, leads and heights as per particular specification & directions of Engineer-in-Charge. Guarantee Bond in the prescribed proforma shall be executed by the contractor for the satisfactory performance of the application for 10 years. The look and feel of the natural stone surface, Exposed brickwork and exposed concrete shall not be affected by coating.</p>	Sqm	106	276	29,222.1
Total Carried Over to Summary					3,31,706.7
DOOR WINDOW WORK					
	<p>Note -</p> <p>1. Only first class wood shall be used for any kind of woodwork. All wood (kiln seasoned and termite treated) and wood base material shall be treated with anti-termite treatment as per relevant IS Code before use and after installation. The guarantee shall be furnished for 10 years in the prescribed format as directed by the Engineer-in-charge.</p> <p>2. Plywood (BWP grade IS – 710), laminate or other composite wood-based products shall be free of urea formaldehyde.</p> <p>3. All veneer, and wood shall be FSC (Forest Stewardship Council) & Green Guard Certified.</p> <p>4. All loose samples of materials shall be approved by the Engineer-in-charge.</p> <p>5. All adhesives and sealants shall be with low VOC and lead-free with acceptable VOC content as per GRIHA requirements.</p> <p>6. The Contractor shall prepare a shop drawing based on the Design Intent / Concept Drawings and get approval from the Engineer-in-Charge. The Contractor shall prepare mock-up of doors, windows, and other elements with all required hardware and get approval from the Engineer-in-Charge before execution of work. Work shall be carried out as per the final approved shop drawing and approved mock-up. The Contractor shall be responsible against stability, safety, leakage, etc all complete. Testing work shall be carried out by the Contractor as suggested by the Engineer-in-charge. (If required).</p> <p>7. All types of locks shall be with computerized 3 No. keys (SS 304/ brass) and master keys (if mentioned in the nomenclature of the item). The grouping of master keys shall be as suggested by the Engineer-in-Charge. Nothing extra shall be payable for the master key provision.</p> <p>8. Glass for external doors and windows shall be with desired parameters as per Green Building requirements.</p> <p>9. The Contractor shall provide test certification for all fire-rated items.</p> <p>10. Contractor shall make provision for access control system and other mechanical/automation devices, coordinate with other services, and make good, etc complete.</p> <p>11. All doors, windows, and other elements shall be fabricated and finished at the factory/workshop, and only fixing and final finishing shall be executed at the site unless otherwise approved by the Engineer-in-charge.</p> <p>12. Work for doors, windows, and other elements shall be carried out for all floors, all levels, all heights, and all places including loading, unloading, stacking, transporting, hoisting, and erecting by any means (mechanical or manual).</p> <p>13. All silicone sealant shall be grey in colour or as directed by the Engineer-in-charge.</p> <p>14. For DGU glass, silicone, tape, and spacer shall be grey in colour or as directed by the Engineer-in-charge.</p> <p>15. All types of coating (polyester powder coating, anodizing and PVDF coating for aluminium work shall have minimum 15 years of life).</p>				
42	<p>Teak wood frames for doors/windows etc.</p> <p>Providing and fixing frames for doors, windows, transoms, louvers and ventilators, jambs, sills, jambs, skirting, hand rail for railing, wooden band, and any type of interior work, using best quality kiln seasoned, termite treated first-class teak wood and fixed in position with hold fast lugs or with dash fasteners with required dia. & length of an approved make, etc. for all levels, all floors, all heights, etc as per the issued drawing and as directed by the Engineer-in-charge.</p> <p>The rate shall be inclusive of all types of consumables, accessories, fasteners, and any type of corner treatment (i.e. chamfering, pencil corner, bevelling, moulding, etc.). Polishing, hardware, and carving work shall be paid as per relevant Tender items.</p> <p>The Contractor shall get the approval for the loose sample of first-class teak wood along with its source location from the Engineer-in-charge before execution.</p>	Cum	1	1,44,164	1,44,163.7

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
43	<p>45 mm thick wooden panelled shutter</p> <p>Providing and fixing in-position door/window shutters (Openable/fixed, single leaf/double leaf) made out of best quality kiln seasoned, termite treated first-class fully teak wood paneled 45mm thick door/window shutter of any size as per issued drawing for all levels, all floors, all heights fabricated as follows:</p> <p>1) Door/window shutter framing i.e. top rail, bottom rail, lock rail, both vertical stiles, intermediate members between two panels (horizontal and vertical) shall be made out of first-class, best quality kiln seasoned, termite-treated teak wood with 45 mm thickness and width as per the issued drawing.</p> <p>2) 35mm thick single/both side beveled edged wooden panels made out of first-class, best quality kiln seasoned, termite-treated teak wood fixed in shutter framing with necessary fixing arrangements as per the issued drawing.</p> <p>3) Door/window shutter framing shall be made in a way that teak wood beading be used only on one side for fixing the wooden panel in the framing.</p> <p>5) The door frame shall be fitted with a suitable acoustic peripheral door seal of an approved make on three sides of the frame.</p> <p>4) All types of exposed wood shall be finished with PU polishing work. However it shall be paid as per relevant Tender item.</p> <p>5) All necessary hardware for the door shutter shall be paid as per the relevant Tender items.</p>	Sqm	5	9,299	46,495.4
	<p>The rate shall be inclusive of all the teak wood members for the shutter necessary anchor fasteners, sheet metal screws, nails, adhesives, acoustic peripheral door seals, and necessary consumables with all labor, Architectural mouldings, bevelling, sandpapering, edge moulding, forming of groves etc complete as per the issued drawing, design & direction by the Engineer-in-charge. The Contractor shall get the approval for the loose sample of first-class teak wood along with its source location from the Engineer-in-charge before execution. Contractor shall prepare shop drawings based on the concept design/drawings and get approval from the Engineer-in-charge before execution. Based on the approved shop drawing, the Contractor shall prepare a mock-up of the door for approval. The stability of the door is the responsibility of the Contractor.</p> <p>The out-to-out area (one side) of the paneled door shutter (without door frame) shall be measured for payment. No wastage shall be measured for payment.</p>				
44	<p>45 mm thick fully glazed panelled shutter</p> <p>Providing and fixing in-position door/window shutters (Openable/fixed, single leaf/double leaf) made out of glazed panels fixed in 45 mm thick best quality kiln seasoned, termite treated first-class teak wood frames of any size as per issued drawing for all levels, all floors, all heights fabricated as follows:</p> <p>1) Door/window shutter framing i.e. top rail, bottom rail, lock rail, both vertical stiles, intermediate members between two panels (horizontal and vertical) shall be made out of first-class, best quality kiln seasoned, termite-treated teak wood with 45 mm thickness and width as per the issued drawing.</p> <p>2) Plane-flat/beveled edge (single/both sides) glass panels with specified thickness, shape, finish, pattern, etc. fixed in shutter frame with wooden beading with necessary fixing arrangements as per the issued drawing. Specified glass shall be paid under relevant Tender items.</p> <p>3) Door/window shutter framing shall be made in a way that only one side of teak wood beading is used for fixing the glass panel in the framing.</p> <p>5) The door frame shall be with a suitable acoustic peripheral door seal of an approved make on the sides of the frame.</p> <p>4) All types of exposed wood shall be finished with PU polishing. However, it shall be paid under the relevant Tender item.</p> <p>5) Necessary door shutter hardware shall be paid under relevant Tender items.</p>	Sqm	6	5,972	35,832.8
	<p>The rate shall be inclusive of all the teak wood members for the shutter necessary anchor fasteners, sheet metal screws, nails, adhesives, and necessary consumables with all labor, Architectural mouldings, sandpapering, edge moulding, grove provisions, etc complete as per the issued drawing, design & direction by the Engineer-in-charge. The Contractor shall get the approval for the loose sample of first-class teak wood along with its source location from the Engineer-in-charge before execution. Contractor shall prepare shop drawings based on concept design/drawings and get approval from the Engineer-in-charge before mass execution. Based on the approved shop drawing, the Contractor shall prepare a mock-up of the door for approval. The stability of the door is the responsibility of the Contractor.</p> <p>The out-to-out area (one side) of the glazed paneled door shutter (without the door frame) shall be measured for payment without deducting the area of glass. No wastage shall be measured for payment.</p>				

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
45	<p>45 mm thick composite panelled shutter Providing and fixing in-position 45 mm thick composite (wooden and glazed panel) door/window shutters (Openable/fixed, single leaf/double leaf) made out of best quality kiln seasoned, termite treated first-class fully teak wood paneled door/window shutter fixed in 45 mm thick best quality kiln seasoned, termite treated first-class teak wood frame and glazed panel (partly panelled and partly glazed) of any size made for all levels, all floors, all heights out as follows: 1) Door/window shutter framing i.e. top rail, bottom rail, lock rail, both vertical stiles, intermediate members between two panels (horizontal and vertical) shall be made out of first-class, best quality kiln seasoned, termite-treated teak wood with 45 mm thickness and width as per the issued drawing. 2) Plane-flat/beveled edge (single/both sides) glass panels with specified thickness, shape, finish, and pattern, etc., and 25mm thick single/both side beveled edged wooden panels made out of first-class, best quality kiln seasoned, termite-treated teak wood fixed in shutter framing with wooden beading with necessary fixing arrangements as per the issued drawing. Specified glass shall be paid under relevant Tender items. 3) Door/window shutter framing shall be made in a way that only one side teak wood beading is used for fixing the glass panel in the framing. 5) The door frame shall be with a suitable acoustic peripheral door seal of an approved make on sides of the frame. 4) All types of exposed wood shall be finished with PU polishing. However it shall be paid under relevant Tender item. 5) Necessary door shutter hardware shall be paid under relevant Tender items.</p>	Sqm	3	7,702	23,106.8
	<p>The rate shall be inclusive of all the teak wood members for the shutter frame, necessary anchor fasteners, sheet metal screws, nails, adhesives, and necessary consumables with all labor, Architectural mouldings, sandpapering, edge moulding, grove provisions, etc complete as per the issued drawing, design & direction by the Engineer-in-charge. The Contractor shall get the approval of the loose sample of first-class teak wood along with its source location from the Engineer-in-charge before execution. The Contractor shall prepare shop drawings based on the concept design/drawings and get approval from the Engineer-in-charge before mass execution. based on the approved shop drawing, the Contractor shall prepare a mock-up of the door for approval. The stability of the door is the responsibility of the Contractor. The out-to-out area (one side) of the composite paneled door shutter (without door frame) shall be measured for payment without deducting the area of glass. No wastage shall be measured for payment.</p>				
46	<p>Flush Door - 40mm thickness Providing and fixing door shutter made out of factory-made and pressed laminated/veneer finish 40mm thick (without finish) flush door shutter, made of ISI marked non-decorative type flush door shutters conforming to IS:2202 (Part I), the core of block board construction with the frame of 1st class hardwood, pine filler and well matched commercial 3 ply veneer with vertical grains or cross bands and face veneers on both faces of shutters having laminates/veneer of an approved make, shade, finish (which would be paid separately) as approved by the Engineer-in-charge on both faces of the shutter fixed with phenol formaldehyde synthetic resin type adhesive conforming to IS 848 including providing and fixing 6mm thick peripheral external lipping made out of first class teak wood, on all edges of the door shutter with specified polishing on all exposed faces of lipping including fixing shutters etc complete for all levels, all floors, all heights as per the issued drawings and as directed by the Engineer-in-charge. The rate shall be inclusive of flush door shutter, teak wood lipping with PU polish, provision of hardware, necessary consumables, accessories, etc but excluding the cost of veneer/laminates, all required hardware, and polishing on veneer, etc complete for all heights as per the issued drawing, design & direction by the Engineer-in-charge. The out-to-out area (one side) of the Flush door shutter shall be measured for payment.</p>	Sqm	12	2,291	27,487.6
47	<p>4 mm thick decorative veneer Providing and fixing 4 mm thick decorative veneer (factory pressed with door shutter or plywood for interior work) conforming to IS: 1328 (type-1) having the top layer of minimum 0.3 mm slice thickness of wood and base layer of 3.5 mm thick BWP Gurjan Ply of an approved make, shade and pattern/texture, for plain lining/cladding/ceiling work, on flush door shutter, pelmet or any interior work in any design, any pattern, any shape, etc with necessary screws, adhesive including priming coat on the unexposed surface. The veneer shall be fixed on the ply with or without grooves as per the issued drawing. If required, perforations shall be executed as per the issued drawing (on ply+ veneer surface) and paid separately under relevant Tender items. The actual installed area of the veneer shall be measured for payment.</p>	Sqm	12	1,242	14,904.6
48	<p>1 mm thick laminate Providing & Fixing 1 mm thick high pressure (factory pressed) laminate sheet of any type, any finish, any shade, any texture of approved make and shade with high-density protective surface layer and reverse side of adhesive bonding quality conforming to IS: 2046 Type S, including cost of adhesive of approved quality. Laminate shall be applied on the door shutter, wall paneling, ceiling, or any interior work, etc. The sample shall be approved by the Engineer-in-charge. The actual installed area of the laminate shall be measured for payment.</p>	Sqm	12	775	9,296.6

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
	<p>Glass Providing and fixing glass in the door, window, ventilation, fixed glazing, partitions, etc. for all levels, all floors, all heights with EPDM rubber/neoprene gasket, etc. complete as per the issued drawings and directions of the Engineer-in-charge. (Cost of beading shall be covered under basic item). Glass shall be of any shade, any size, any shape of approved make as per issued drawing and confirm to IS:2835 or IS:2553. The sample shall be approved before execution of the work. The installed area shall be measured for payment without considering any wastage.</p>				
49	c) With clear toughened glass panes of 12.0 mm thickness	Sqm	31	2,458	76,196.1
	<p>Floor Spring Providing and fixing double action hydraulic floor spring of an approved make with SS 304 cover plate having SS matt/ brush finish (with outer box) & adjustable concealed cast top pivot (two-piece), bottom strap, with back check, adjustable closing speed, and hold open function, with a minimum one-year guarantee for any type of door of specified capacity for all levels, all floors, and all heights. The rate shall be inclusive of cutting of floor neatly, fixing the floor spring, grouting, cleaning, polishing the floor and maintaining it in good working condition. In the case of an aluminium shutter, the bottom arm of the floor spring & the top pivot shall be firmly fixed to the aluminum members using required sized teak wood by making a rebate in the wood which is included in this item. Selection of floor spring shall be as per the size and weight of the door, as per the manufacturer's recommendation, and as directed by the Engineer-in-charge. The Contractor shall arrange loose samples for approval from the Engineer-in-Charge before mass execution. If required, All exposed surfaces made of stainless steel or other metal shall be finished with a matt PVD brass finish. sample shall be approved before mass execution.</p>				
50	a) Floor spring for any type of door with cover plate and extended spindle to hide the floor spring cover plate. Closing force complying with EN 1154 2 - 5, as per the manufacturer's specifications, and/or compatible with the shutter weight. If required, All exposed surfaces made of stainless steel or other metal shall be finished with a matt PVD brass finish. sample shall be approved before mass execution.	No.	4	13,812	55,246.8
51	<p>SS 304 Pivot hinge Providing and fixing SS 304 grade pivot hinge in satin stainless steel matt finish of required size and capacity of an approved make for all levels, all floors, and all heights for any type of door, with required SS 304 screws, etc. complete. The rate shall be inclusive of fixing as per the manufacturer's specifications and maintaining it in good working condition. The Contractor shall arrange loose samples for approval from the Engineer-in-Charge before mass execution. If required, All exposed surfaces made of stainless steel or other metal shall be finished with a matt PVD brass finish. sample shall be approved before mass execution.</p>	Set	10	533	5,329.3
52	<p>Shaft door lock Providing and fixing shaft door lock with key (Alen Key lock) with escutcheons (keyhole plate), strike plate, locking sleeve, etc in stainless steel matt finish of an approved make in any approved shape/size for any type of doors with necessary SS 304 screws, etc complete as per the issued drawing and as directed by the Engineer-in-charge. The rate shall be for all heights, all floors, and all places. The Contractor shall arrange loose samples for approval from the Engineer-in-Charge before mass procurement and execution. If required, All exposed surfaces made of stainless steel or other metal shall be finished with a matt PVD brass finish. sample shall be approved before mass execution.</p>	No.	3	694	2,083.1
	<p>Brass hinges Providing and fixing good quality hinges made out of brass with specified size for doors, windows, ventilators, transom, etc., of an approved make, with matt PVD brass finish for all levels, all floors, and all heights with brass screws, accessories, and pin of the required size for fixing, etc. complete as per the issued drawing and as directed by the Engineer-in-charge. The Contractor shall arrange loose samples for approval from the Engineer-in-Charge before mass procurement and execution</p>				
53	b) 100 x 75 x 3 mm - with ball bearing	No.	8	1,148	9,184.2
	<p>Brass Push-Pull handle Providing and fixing good quality push-pull pair of handles made out of brass with specified size, of H/D shape for the door, window, etc., of an approved make and finished with matt PVD brass finish for all levels, all floors, and all heights with brass screws, accessories, and pin of the required size for fixing, etc. complete as per the issued drawing and as directed by the Engineer-in-charge. The Contractor shall arrange loose samples for approval from the Engineer-in-Charge before mass procurement and execution</p>				
54	a) 300 mm long, brass pipe of size 25mm dia x 3mm (thickness of pipe)	Pair	6	7,328	43,969.0

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
	<p>Brass handle Providing and fixing good quality handle made out of brass of specified size, any type in any shape for doors, windows, transom, etc. of an approved make and finished with matt PVD brass finish for all levels, all floors, and all heights with brass screws, accessories, and pin of the required size for fixing, etc. complete as per the issued drawing and as directed by the Engineer-in-charge. The Contractor shall arrange loose samples for approval from the Engineer-in-Charge before mass procurement and execution</p>				
55	b) 150 mm long, 15mm dia/wide x 3mm thick	No.	4	1,021	4,082.4
	<p>Brass Tower Bolt Providing and fixing high-quality tower bolts made of brass in specified sizes and specified shape (with or without flap) for doors, windows, transoms, etc. The tower bolts shall be of an approved make and finished with a matt PVD brass finish. This applies to all levels, floors, and heights, with brass screws, accessories, and pins of the required size for fixing, as per the issued drawing and the directions of the Engineer-in-Charge. The Contractor is required to arrange loose samples for approval from the Engineer-in-Charge before proceeding with mass procurement and execution</p>				
56	b) 150mm long, barrel of 15mm dia with min 9 mm rod	No.	17	1,002	17,026.7
57	<p>Brass Door Stopper Providing and fixing good quality door stopper made out of brass with specified sizes, with or without magnet/rubber or PVC base, lever type, shutter mounted/ wall mounted/floor mounted in any design as required, of approved make for doors, windows, transom, etc. of an approved make and finished with matt PVD brass finish for all levels, all floors, and all heights with brass screws, accessories, and pin of the required size for fixing, etc. complete as per the issued drawing and as directed by the Engineer-in-charge. The Contractor shall arrange loose samples for approval from the Engineer-in-Charge before mass procurement and execution</p>	No.	6	544	3,262.4
58	<p>Brass Aldrop Providing and fixing good quality aldrop made out of solid extruded brass of 250 to 300 mm x minimum 15 mm size with required number of brackets of an approved make and shape for doors, windoww, transom, etc., and finished with matt PVD brass finish for all levels, all floors, and all heights with brass screws, accessories, and pin of the required size for fixing, etc. complete as per the issued drawing and as directed by the Engineer-in-charge. The Contractor shall arrange loose samples for approval from the Engineer-in-Charge before mass procurement and execution</p>	No.	4	4,225	16,901.1
59	<p>Mortise latch and lock with the handle made out of brass Providing and fixing a set of mortise latch and lock made of brass with a 55mm backseat, 20mm square for end with 72 mm centers including a brass strike plate, cylinder of length 60/70 mm with standard Euro profile pin cylinder/half pin cylinder (with/without latch) with both side key/one side key one side knob operation, with one pair of brass mortise lever handles made of solid brass of approximately size 100 to 150mm long with cover plate/cap, Brass escutcheons (keyhole plate) of required size as approved for any type of door, finished with matt PVD finished as per approved make for all levels, all floors, and all heights with necessary brass screws, accessories, and pin of the required size for fixing, etc. complete as per the issued drawing and as directed by the Engineer-in-charge. All exposed surfaces (i.e. lever handle with cap, strike plate, keyhole plate, etc) shall be made of brass and shall be finished with matt PVD brass finish. The lock shall have a minimum of 3 keys. The rate shall be inclusive of fixing as per the manufacturer's specifications and maintaining it in good working condition. The Contractor shall arrange loose samples for approval from the Engineer-in-Charge before mass procurement and execution</p>	Set	4	13,355	53,418.9
Total Carried Over to Summary					5,87,987.5

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
FLOORING WORK AND ROOFING					
	<p>Note:-</p> <p>1) All natural stones shall be free from cracks, lines, stains, and efflorescence spots, and even in shade for all kinds of stonework.</p> <p>2) All natural stones shall be selected and sorted for uniform colour, figure, and thickness and approved by the Engineer-in-Charge prior to procurement.</p> <p>3) All natural stones shall be from the same lot and/or source (stone quarry) for the same kind of work to avoid shade variation and as approved by the Engineer-in-Charge.</p> <p>4) All types of loose and laid samples of flooring shall be approved by the Engineer-in-Charge.</p> <p>5) The Contractor shall apply an approved Stone Impregnation primer/sealer coat on both sides and all edges (after cutting and finishing the stone as per size) of stones, a minimum of two coats as per the manufacturer's specifications and as directed by the Engineer-in-Charge. No extra payment shall be made for the same.</p> <p>6) The Contractor shall co-ordinate and execute for all services in the flooring and wall lining/cladding work i.e. making openings/cut-outs for any services (i.e. elevator operating panel in the lift wall cladding, raceways in flooring, junction boxes, etc), and making good as per the satisfaction of the Engineer-in-Charge.</p> <p>7) All stones shall be cut to size by water jet cutting/laser cutting/ CNC machine according to the design and shape for the best workmanship etc, according to the design and as per the approved shop drawing</p> <p>8) All adhesives and sealants shall be compatible with the material as per IS 15477 and as per the manufacturer's specifications and lead-free with acceptable VOC content as per Green buildings requirements.</p> <p>9) The finished floor surfaces shall be protected with 12mm thick POP sheets over LDPE sheets up to the handling over of the Project. The treads of the stairs shall be protected with a metal/plywood angle to avoid damage to the edges of the treads. POP shall not directly (or with the use of paper) be applied on the flooring.</p> <p>10) The screed below the flooring/base mortar thickness shall be as per the drawing. In case of any type of stone/tile, it shall be fixed with an adhesive and the total thickness of base mortar/screed shall be paid as per relevant Tender items.</p> <p>11) All stones shall be factory cut and factory finished. Polish or any type of texture finish on any stones shall be as per the satisfaction of the Engineer-in-Charge. .</p> <p>12) Flooring and wall cladding/lining work shall be carried out for all floors, all levels, all heights, and all places.</p> <p>15) The rate shall be inclusive of all types of wastage for all materials.</p>				
	<p>Kadappa Stone - For Flooring - fixing with cement mortar</p> <p>Providing and laying machine cut Kadappa stone of specified thickness, specified finish, any shade (uniform), any size and any shape for flooring in required design and patterns as per the drawings, laid over an average bedding of 40 mm thick cement mortar 1:4 (1 cement : 4 coarse sand), and joined with grooves or without groove with grey cement slurry mixed with a pigment to match the shade of the slabs, including finishing, rubbing, curing, polishing, cleaning, protection, scaffolding, wastage, etc. all complete for all levels, all floor, all height, as specified and as directed by the Engineer-in-Charge.</p> <p>The rate shall be inclusive of kadappa stone (as per the approved sample), fixed with cement mortar bedding, cement slurry, matching pigment, all labour etc complete but excluding filling with epoxy grout and additional cement mortar bedding/ concrete screed bedding (if required as per drawing) which shall be payable under relevant Tender item. The contractor shall arrange loose Samples for approval from the Engineer-in-Charge before mass execution.</p> <p>The actual laid area of the Kadappa stone shall be measured for payment without considering any wastage.</p>				
60	25 mm thick any type of Textured finish Kadappa stone i.e. river wash, leather finish, linen finish, lappato finish or similar finish	Sqm	90	1,435	1,29,141.9
	<p>Grouting the joints of flooring/ wall tiles/ stone</p> <p>Extra for Providing and Grouting the joints of flooring/ wall tiles/ stone as specified having joints of up to 5 mm width in total thickness, using epoxy grout/ PU grout (internal/external category) of approved make and shade including PVC spacer, filling/ grouting, protecting tile, abro-tap and finishing complete as per direction of Engineer-in-charge.</p>				
61	Grouting for any type stone of any size and in total thickness of stone	Sqm	90	113	10,198.8

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
62	Additional Floor bedding with concrete screed : Cement concrete pavement/ flooring/ for additional floor screed with M10 grade, including spreading as per gradient, levelling and finishing complete as directed by Engineer in charge.	cum	7	6,836	47,850.5
63	Sandwich panels for roofing Providing and fixing pre-painted sandwich panels for roofing, of an approved make. The panels shall feature PPGL type 35/250 profile sheets, SMP coated, with a thickness of 0.5 mm (TCT) for both external and internal surfaces, and light profiling at the bottom, with a guard film on both sides. The insulation core shall be rigid PIR insulation with a minimum density of 40 kg/m ³ and a minimum thickness of 50 mm at the valley. The rate shall include all necessary accessories such as fasteners, washers, stitch rivets, lap sealant, fillers, gable and eaves flashings, and ridges, using the same material as the panel skins. The work will involve sealing laps with sealant, protecting exposed ends, and ensuring proper installation as directed by the Engineer-in-Charge for all floors, all levels, and all heights. The panels shall be procured in the approved colour and brand. The actual installed plan area of the sandwich panels will be measured for payment, excluding any wastage.	Sqm	33	3,244	1,07,049.4
Total Carried Over to Summary					2,94,240.5
FALSE CEILING					
	Gypsum False ceiling: Providing and installing a gypsum false ceiling at all heights, including a framework made from special sections, power-pressed from M.S. sheets, and galvanized with a zinc coating of 150 gms/sqm (both sides) in accordance with IS: 277. The framework shall consist of angle cleats, 25 mm wide x 1.6 mm thick, with flanges of 27 mm and 37 mm, spaced at 1200 mm centre-to-centre. One flange shall be fixed to the ceiling with dash fasteners, 12.5 mm dia x 50 mm long and 6 mm dia bolts, while the other flange shall be attached to angle hangers of 25x10x0.50 mm, of required length, with nuts and bolts. The opposite end of the angle hanger shall be secured to intermediate G.I. channels (45x15x0.9 mm), spaced 1200 mm centre-to-centre. The ceiling sections, made from 0.5 mm thick bottom wedge sections (80 mm with 26 mm tapered flanges and 10.5 mm lips), shall be positioned perpendicular to the intermediate G.I. channels at 450 mm intervals using connecting clips made of 2.64 mm dia x 230 mm long G.I. wire at each junction. Perimeter channels, 0.5 mm thick and 27 mm high with 20 mm and 30 mm flanges, shall be fixed to the wall or partition using rawplugs at 450 mm intervals, with 25 mm long drywall screws spaced at 230 mm. Gypsum boards shall be attached to the ceiling sections and perimeter channels with 3.5 x 25 mm drywall screws at 230 mm intervals. Jointing and finishing shall include a flush finish of tapered and square edges using recommended jointing compound, jointing tapes, and three layers of jointing compound covering up to 150 mm on both sides of the joint, followed by two coats of primer suitable for the board. All work will be executed as per the manufacturer's specifications. In the false ceiling work, vertical drops (drop-down patta) more than 300 mm shall be measured and paid. The rate shall also include the cost of making openings for light fittings, grills, diffusers, and cut-outs made with frames of perimeter channels suitably fixed, all complete, as per the drawings, specifications, and direction of the Engineer in Charge, but excluding the cost of putty and painting. The installation shall be carried out by an approved installer and the material of the suspension system shall be as per the manufacturer's specifications. The Contractor shall prepare shop drawings with coordination of all services and openings/accesses. The sample, shop drawings, and mock-ups shall be approved by the Engineer-in-Charge. The actual installed area in plan and area for vertical drop down more than height/width of 300 mm shall be measured for payment without considering any wastage and without deductions of area for lights, diffusers, columns, etc. Nothing extra shall be paid for making provisions for providing lights, diffusers, AC grills, fire alarm systems, sprinkler systems, and other such fittings/services. All work shall be carried out as per the approved sample, mock-up, and shop drawings including all material and labour.				
64	b) 12.5 mm thick fire resistant glass reinforced gypsum (GRG) boards (Confirming to BS476) complying to IS: 2095 : 2011	Sqm	9	2,486	22,370.5

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
65	<p>External grade HPL False ceiling</p> <p>Providing and fixing suspended false ceiling in any size, any shape, any level, all height, any pattern made of Exterior grade minimum 6mm thick any finish, any shade, any color, of approved make duromer high-pressure laminates (HPL) board as per EN 438-6 type EDF manufactured with norm conformity of EN 438-7 using patented NT Technology (NT is Non-fading high performance acrylic polyurethane surface Technology), Certified by Third party for 33 years of outdoor exposures. Max Exterior Panels are double hardened including acrylic polyurethane resin which is thermally cured under High pressure & High temperature, with an operational range of -80°C to +80°C. These Panels also have the CE-Mark necessary for their use in building applications with Fire Testing as per BS 476-7(Class 1), ASTM E 84 (FSI -10), and EUEN13501-1 (BS2,D0)</p> <p>Installation of Max Exterior HPL panels to be done by FS-01 Clip (minimum size 70 X 30 X 12 x 3 mm thick) with recommended Aluminum Sections (L section/T section) held by required capacity Aluminum brackets (minimum size 90 x 55 X 36 x 3 mm thick). Recommended Aluminum T section of Minimum 75x37x2 mm thick and L section of Minimum 40x37x2.9mm thick held by Bracket with Wind load and Dead load slot as per design, self tapping screws, anchored by required capacity anchor fasteners of approved make along with Thermal Separator/bi-metalic seperator. Every brackets shall be fixed at minimum 1200 mm C/C distance and FS-01 Clip shall be fixed at minimum 450 mm C/C. (Aluminum member size and number shall be as per actual requirement to recive it expected performance & stability of whole system, however Minimum thickness and size of meber shall be as per specified). If required Contractor shall appoint facade consultant to validate the design provided by the authorized applicator ofthe manufacturer for the false ceiling without any extra cost.</p>	sqm	26	9,502	2,47,048.9
	<p>Integration of false ceiling with MS member of roofing and standing seam roofing is included in this item and for it, all necessary work shall be execute as per recommandation of the manufacturer. Complete fixing shall be execute by the approved applicator of manufacturer of the system without any extra cost. To execute complete system as per manufacturer's specifications and recomandation, all type of work is included in this item without any extra cost. Stability responsibility shall be of the contractor and all necessary calculation and load shall be considered for execution of this system.</p> <p>The Panels to be jointed and finished as per design intent, and as per manufacturer specifications and Item is with including the cost of making openings for light fittings, grills, diffusers, cut-outs made with frame of necessary framing suitably fixed all complete as per drawing and specification and direction of the Engineer in Charge.</p> <p>In False ceiling, drop-down patta (vertical) more than height/width of 300 mm shall be measured and paid. The rate shall also include the cost of making openings for light fittings, grills, diffusers, and cut-outs made with a required framing suitably fixed, all complete as per drawings, specifications, and direction of the Engineer in Charge.</p> <p>The contractor shall prepare shop drawings with coordination of all services and opening/ excess. Sample, shop drawing, and mock-up shall be approved by the Engineer in charge. The actual installed area in the plan and area for vertical drop down shall be measured for payment without considering any wastage and without deductions of area for lights, diffusers, columns, etc. Nothing extra shall be paid for making provisions for providing lights, diffusers, AC grills, fire alarm systems, sprinkler systems, and other such fittings/services. In case of any additional MS work is required to execute shall be payable in relevant tender item.</p>				
	Total Carried Over to Summary				2,69,419.4
	METAL WORK				
	<p>Note -</p> <ol style="list-style-type: none"> All adhesives, sealants & paint shall be with low VOC with acceptable VOC content as per GRIHA requirements and lead free. Contractor shall prepare shop drawing base on concept design/ drawing for any type of fabrication work and get approved. Contractor shall prepare mock-up/ prototype (as suggested) as per approved shop drawing for approval. Work shall be carried out as per approved shop drawing, approved mock-up/ prototype and as suggested by Engineer in charge. Rate shall be for all floor, all level all height. The rate shall include cost of all types of fasteners (ETA approved) to be used for fixing. Structural stability shall be responsibility of contractor for all kind of metal work. All elements shall be factory fabricated and finished, only final finishing to be made on site with all precautions. Contractor shall coordinate all services work (cut-outs and provisions) in metal work. All cut-out and services provisions shall be finished at factory/ work shop. contractor shall provide PVC/ nylon seprator, where two different metals connect to avoid galvanic reactions. 				

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
66	<p>Structural steel work - Fabrication works - with paint</p> <p>Providing, fabricating, assembling, hoisting, erecting and fixing in position structural steel work at all heights/ all levels/ all shapes & sizes with all leads & lifts using any type of MS section like rolled steel sections, hollow sections, plates, chequered plates, bar, sheet, rod, threaded bolt, railing etc. all confirming to latest relevant IS codes for the metal elements i.e. window grill, transom bar, bright bar in wooden door - window frame, railings, gates, grills, bracings, foundation plate & bolt, support at truss system, truss, purlin, rafter, cleat, platforms, brackets, fencing pole, signage pole, service elements, Jali, clamp, logo, sculpture etc. including straightening, cutting, bending, embosing, bolting and welding, eatching (if required) the members all as per structural drawings and as per detailed specifications (for materials & workmanship) including profile cutting, smooth grinding, machining of edges/ faces, necessary welding (electric arc welding) for required weld lengths and sizes, machine drilling of holes for joining/ anchoring/bolting, necessary arrangements of templates to keep the foundation bolts in position dry sanding, degreasing (wet cleaning) & preparation of rust-free surface manually or mechanically, metal putty to make the surface even and smooth, necessary scaffolding/ staging, anchor fasteners, extra for bending elements for fixing etc complete.</p>	Kg.	2,477	181	4,48,683.8
	<p>Contractor prepare shop drawing and get approved. The fabrication work shall start only after approval of the fabrication drawings. Fabrication shall be in a perfect Architectural workmanship manner and as provided in Section V & VI of IS 800 & IS 7215. Contractor shall responsible against stability, safety etc all complete, structural steel work as per approved make.</p> <p>The rate shall include for applying (on all surfaces of MS member) two or more coats PU paint (DFT min 40 micron per coat)/ Hammer Finish paint of approved make and shade over two coat (DFT min 50 micron per coat) of anti corrosive epoxy base primer for PU paint/ epoxy primer for hammer finish paint, as per manufacturer's specification, anchor fastener etc all complete.</p>				
67	<p>Extra for providing Hot dip galvanizing work confirming to IS 4759/ 2629/ 2633 with zinc of 610 GSM thickness on any type of MS section for any elements etc. for all the places, all heights, all level as per the drawing and as instructed by Engineer in charge. The rate shall include preparing the surface by shot blasting/ acid washing prior to hot deep galvanizing, labour, tools, machinery etc complete (Sample to be approved). The weight of steel sections before galvanization shall be measured for payment. The cost of steel sections shall be paid for separately under relevant item.</p>	Kg	100	53	5,277.0
Total Carried Over to Summary					4,53,960.8
EXTERNAL DEVELOPMENT WORK					
	<p>Note -</p> <ol style="list-style-type: none"> 1) Stones shall be free from cracks, lines, stains, white spots of efflorescence and even in shade for all kind of stone work. 2) Stones shall be selected and sorted for uniform colour, figure and thickness and approved by Engineer in charge prior to procurement. 3) Stone shall be from same lot and/ or source (stone quarry) for same kind of work and as approved by Engineer in charge. 4) Contractor shall apply Stone Impregnation primer/ sealer coat on back side and all edges (after cutting and finishing of the stone as per size) of stones of approved make. Stone Impregnation primer/ sealer coat shall be of water based with pH value 7 to 10 in minimum two coat as per manufacturer's specification and as directed by Engineer in charge. No extra shall be paid for the same. 5) Contractor shall prepare and submit shop drawing for all kind of stone work with sub base/ framing work/ fixing arrangement/ joinery with all required fasteners and get approval from Engineer in charge. 6) Mock up/ sample shall be prepared as per approved shop drawing and get approved by Engineer in charge before execution of work. 7) All adhesives and sealants shall be with low VOC and lead free with acceptable VOC content as per Green Building requirements. 8) Stone work shall be carried out for all floor, all level, all height, all places including loading, unloading, stacking, transporting, hoisting, erecting by 9) All type of stones shall be cut to size with help of with water jet cutting/ laser cut/ CNC machine according to the design and shape for best workmanship as per shop drawing. 10) Granite shall be mirror polished/ flame finished/ sand blasted/ river wash finish or other as per specified. 11) All type of stone/ stone elements shall be factory cut and factory finished. Finish on any stone shall be as per satisfaction of Engineer in charge. If required, final finish/ touch-up shall be executed at site as per direction of Engineer in charge. 12) Structural stability of solid stone work shall be responsibility of contractor. 13) Contractor shall make necessary provision for any services cut-out/ other required provision, co-ordinate with all services work and making good etc complete. 14) All visible surfaces of stone shall be same finished. 				

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
	<p>Red mandana stones - for treads/copping/seating - fixing with adhesive</p> <p>Providing and laying machine-cut red mandana stones in a single piece of specified thickness, specified finish, of any shade (uniform), any size, and any shape for treads of steps, coping and seating, etc as per the drawings. Stone slabs to have pencil corners and polished at the exposed edges in even and uniform thickness and laid over existing cement mortar bedding, and fixed with minimum 6mm thick stone fixing adhesive as per IS-15477, of an approved make, and joined (paper joint) with grey/white cement slurry mixed with a pigment to match the shade of the slabs, including finishing, rubbing, curing, polishing, cleaning, protection, scaffolding, wastage, etc. all complete, for all levels, all floors, all heights, and as directed by the Engineer-in-Charge. The joint between the treads and risers shall be finished as per the drawing.</p> <p>The rate shall be inclusive of mandana stones (as per the approved sample), adhesive for fixing, cement slurry, matching pigment, all labour, etc complete, but excluding cement mortar bedding which shall be payable under the relevant Tender items. The Contractor shall arrange loose samples for approval from the Engineer-in-Charge before mass execution.</p> <p>The actual laid area of the Kota stones shall be measured for payment without considering any wastage.</p>				
68	40 mm thick any type of textured finish RED MANDANA stones, i.e. river washed, leather finish, linen finish, lappato finish or similar finish	Sqm	21	2,438	51,200.9
69	<p>Kota Stone - For Flooring - fixing with cement mortar</p> <p>Providing and laying machine-cut 40 mm thick any type of Polished/ Textured (i.e. river wash finish, leather finish, linen finish, canvas finish etc) finish Kota stone of specified thickness, specified finish, any shade (uniform), any size, and any shape for flooring in required design and patterns as per the drawings, laid over upto bedding 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) with cement mortar of 1:2 (1 cement: 2 sand) applied to the sides of the stones, with the groove or without groove and jointed with grey/white cement slurry mixed and filling of grooves with cement mortar with pigment to match the shade of the slabs, including finishing, rubbing, curing, polishing, cleaning, protection, scaffolding, wastage, etc. all complete for all levels, all floor, all height, as specified and as directed by the Engineer-in-Charge.</p> <p>The rate shall be inclusive of Kota stone (as per the approved sample), fixed with cement mortar bedding, cement slurry, matching pigment, all labour, etc, complete but excluding filling with grout and additional cement mortar bedding/ concrete screed bedding (if required as per drawing) which shall be payable under the relevant item. The contractor shall arrange loose Samples for approval from the Engineer-in-Charge before mass execution.</p> <p>The actual laid area of the Kota stone shall be measured for payment without considering any wastage.</p>	Sqm	315	1,688	5,31,754.7
70	<p>Kota stones - for treads/copping/seating - fixing with cement mortar</p> <p>Providing and laying machine-cut Kota stones in a single piece of 25mm thickness, polished/textured finish, of any shade (uniform), any size, and any shape for treads of steps, coping and seating, etc as per the drawings. Kota stone slabs to have pencil corners and polished at the exposed edges in even and uniform thickness and laid over an average 20 mm thick base of cement mortar 1: 4 (1 cement: 4 coarse sand), and joined (paper joint) with grey/white cement slurry mixed with a pigment to match the shade of the slabs, including finishing, rubbing, curing, polishing, cleaning, protection, scaffolding, wastage, etc. all complete, for all levels, all floors, all heights, and as directed by the Engineer-in-Charge. The joints between the treads and risers shall be finished as per the drawing.</p> <p>The rate shall be inclusive of Kota stones (as per the approved sample), fixed with cement mortar bedding, cement slurry, matching pigment, all labour, etc complete. The Contractor shall arrange loose samples for approval from the Engineer-in-Charge before mass execution.</p> <p>The actual laid area of the Kota stones shall be measured for payment without considering any wastage.</p>	Sqm	14	1,364	19,101.7

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
71	<p>Kota Stone - For risers of steps, dado etc. or similar - fixing with cement mortar</p> <p>Providing and laying machine-cut Kota stone 25 mm thick any type of Polished/ Textured (i.e. river wash finish, leather finish, linen finish, canvas finish etc) finish Kota stone in a single piece of any shade (uniform), any size, and any shape in the risers of steps, dado or similar etc. as per the drawings. Kota stone slab having pencil corner and same polished at the exposed edge in even and uniform thickness and laid in any pattern fixed on any type of leveled surface with approximate 12 mm thick (average) cement mortar 1:3 (1 cement : 3 coarse sand)/suitable adhesive as per manufacturer specification, and jointed (paper joint) with grey/ white cement slurry mixed with pigment to match the shade of the slabs, including finishing, rubbing, curing, polishing, cleaning, protection, scaffolding, wastage, etc. all complete for all levels, all floor, all height, and as directed by the Engineer-in-Charge. The joint between the tread and riser shall be finished as per the drawing. The rate shall be inclusive of Kota stone (as per the approved sample), cement mortar for fixing/ adhesive, cement slurry, matching pigment, all labour, etc complete. The contractor shall arrange loose Samples for approval from the Engineer-in-Charge before mass execution.</p> <p>The actual laid area of the Kota stone shall be measured for payment without considering any wastage.</p>	Sqm	49	1,554	76,125.4
72	<p>Kadappa Stone - For Flooring - fixing with cement mortar</p> <p>Providing and laying machine-cut 50 mm thick any type of Polished/ Textured (i.e. river wash finish, leather finish, linen finish, canvas finish etc) finish kadappa stone of specified thickness, specified finish, any shade (uniform), any size, and any shape for flooring in required design and patterns as per the drawings, laid over upto bedding 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) with cement mortar of 1:2 (1 cement: 2 sand) applied to the sides of the stones, with the groove or without groove and jointed with grey/white cement slurry mixed and filling of grooves with cement mortar with pigment to match the shade of the slabs, including finishing, rubbing, curing, polishing, cleaning, protection, scaffolding, wastage, etc. all complete for all levels, all floor, all height, as specified and as directed by the Engineer-in-Charge.</p> <p>The rate shall be inclusive of stone (as per the approved sample), fixed with cement mortar bedding, cement slurry, matching pigment, all labour, etc, complete but excluding filling with grout and additional cement mortar bedding/ concrete screed bedding (if required as per drawing) which shall be payable under the relevant item. The contractor shall arrange loose Samples for approval from the Engineer-in-Charge before mass execution.</p> <p>The actual laid area of the stone shall be measured for payment without considering any wastage.</p>	Sqm	14	2,144	30,016.4
73	<p>Precast elements for misc. items</p> <p>Providing, hoisting and fixing fair finish Precast Concrete of M 25 grade in light pole cover, base of dustbin, saucer drain, coping, precast manhole cover any type of foundations etc of approved make and as per sample, including cost of required centring and shuttering and arranging precast members in position with required joining arrangement, MS stud or anchor/bolting with grouting etc complete all material, loading, transportation, unloading, tools, tackles, scaffolding, machinery, equipment, for all level, for all height/ depth, and as per direction of Engineer-in-Charge. Contractor shall provide loosed sample of each elements at location suggested by engineer incharge for review and approval from Engineer in charge before mass production/ execution. Architect reserves right to reject part or all work of sub standard or not in confirmation to approved sample as per mock up. Contractor shall prepare coordinated shop drawing for all elements with all members including all services/other allied civil works provision and get approval from Architect and engineer in charge.</p> <p>If required, excavation and base preparation work shall be paid in relavent tender items.</p> <p>Actual volume of installed precast elements shall be measured for payment. Sample and mock shall not be payable if rejected or casted in other location (not in scope of work area).</p>	cum	5	14,350	71,749.2
74	<p>Precast Planter</p> <p>Providing, hoisting, and arranging in position precast exposed/ fair finish, factory made concrete planter of approximate size 800mm x 600mm x 580mm (± 100mm) as per design intent and architect selection, of approved make, made of minimum M-25 grade reinforced cement concrete.</p> <p>The rate shall also include for erecting and fixing the planter in position as per drawing, fixing, finishing,TMT reinforcement bar (if required) etc complete as directed by Engineer in charge.</p> <p>Contractor shall submit methodology for erection of planter and get approved from Engineer in charge. Installed planter shall not have any damages.</p> <p>Sample shall be approved by Architect and Engineer in charge before mass production. Architect reserves right to reject part or all work of sub standard or not in confirmation to approved sample as per mock up. Sample and mock shall not be payable if rejected or casted in other location (not in scope of work area).</p>	No.	2	546	1,092.9

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
75	<p>Providing and erecting 2.00 metre high temporary barricading at site; made of precast sheet/ MS panel with required MS fabrication work with required civil work. Suitable arrangement shall be made to fix the barricading to avoid from overturning by suitable arrangement. Stability of barricading shall be responsibility of contractor. The work shall be executed as per drawing/ direction of Engineer-in-Charge which includes writing and painting, arrangement for traffic diversion such as traffic signals during construction at site for day and night, glow lamps, reflective signs, marking, flags, caution tape as directed by the Engineer-in-Charge. The barricading provided shall be retained in position at site continuously i/c shifting of barricading from one location to another location as many times as required during the execution of the entire work till its completion.</p> <p>Rate include its maintenance for damages, painting, all incidentals, labour materials, equipments and shifting required to execute the job. The barricading shall not be removed without prior approval of Engineer-in-Charge. No extra rental will be given to the contractor in case of any delays from his part for construction or due to any valid time limit extensions.</p> <p>(Note :- Procured quantity of barricading shall be approved by the engineer in charge before procurement/ fabrication of barricading and One time length of the procured barricading shall be measured for payment. The rate include providing barricading from start of work till completion of work i/c shifting. The barricading provided shall remain to be the property of the contractor on completion of the work).</p>	Rmt	69	1,075	74,174.3
76	<p>Providing and fixing SS 304 grade brush finish 1.0 mm thick Internal signage of any shape any size and in any language like Gujarati, Hindi and English with letter, numbers, graphic, arrow, symbol etc made by etching with duco paint/ laser print or vinyle sticker with lamination of approved shade. All signage plates shall be made in CNC water jet cutting, with all smoothen edges and pencil round corner. Signage matter shall be as per drawing. The plate shall be fixed on brick masonry or RCC wall/ door with the necessary fixing like stud, fastner, self adhesive or adhesive etc complete for all floor all height as directed by Architect and Engineer in charge. The rate shall be inclusive of all material, labour, drilling, fasteners/ adhesive, scaffolding etc. at all heights. Only elevation area shall be measured and paid. The contractor shall submit the shop drawings based on concept design and prepare the sample and get it approval before</p>	Sqm	2	20,530	41,059.0
	<p>General Notes for Horticulture work:</p> <p>1.All plants shall be of the size specified in the Plant Schedule & Planting Palette at the time of delivery to the site and shall be obtained from an approved source.</p> <p>2.All plants shall be supplied as specified in tender documents and the Contractor is expected to import stock if it is not available locally.</p> <p>3.Consultant shall inspect and approve all imported and locally sourced plant material at place of origin.</p> <p>4.All plants shall be container grown, except for field grown palm species. Container grown nursery stock shall be vigorous, healthy, and have a well established root system spread throughout the growing medium container to maintain a firm ball when the container is removed.</p> <p>5.The Tender must be based, without exception, upon plants that are specified. If plants are subsequently found to be unobtainable, alternatives may be submitted, stating how they differ from the Specification. Such substitutions may not be acceptable and submission of further alternatives may be required. Approval in writing shall be obtained for any substitution.</p>				
77	<p>Soil Filling for Gardening/Plantation</p> <p>Providing and laying good quality garden soil, obtained from outside which can be useful for all plants as per specification. Garden soil shall be mixture of 1 part Garden Sweet Soil : 1 part Coco Peat : 1 part Well Rotted Organic Compost (1:1:1) including laying of soil in required quantity and in proper slope as mentioned in drawing, watering, compacting and dressing etc. complete, as directed in specifications and by engineer in charge.</p>	Cum	20	903	18,058.8
	<p>Tree Plantation</p> <p>Supplying, transporting, hoisting and planting well grown species for trees of required height and species as per selection given by Architect. Tree shall be planted in excavated pit/ tree pit with hume pipe of required size without damaging any primary roots. Rate shall be inclusive of supplying of tree, loading, transporting, unloading,excavation for tree pit, disposal of any type of soil, planting by any means (manual/ mechanical), watering, pesticides, fertilizers, anti termite treatment, maintaining, replanting (if plant will be died) up till maintenance period, pesticides etc. Pesticides (Neem cake or similar as specified and approved by Engineer-in-charge) shall be used in recommended proportion. Rate shall be also inclusive of tripod type tree guard/ tree stakes be made out of 3 no 50mm dia and approximate 2.5 mt long (2.0 mt above ground and 0.50 mt below ground) Eucalyptus/ Cedar stakes and tied to stem of planted tree with rubber tie/ patta of size 30mm x 10mm in twisted pattern as per drawing. Tree guard stack shall be painted with bituminous paint at below ground portion plus 150mm above ground portion. Tree guard shall be installed vertically out side the root ball properly so tree grown in upright position. Tree guard shall be maintained up to the tree become well set and as directed by architect and Engineer-in-charge. After completion of maintenance period, tree guard shall be property of Contractor.</p>				

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
	Rates of mortality up to the maintenance period to be inclusive, in that condition contractor has to replace the plant of the same specification without any extra cost. The cost of excavation or tree pit shall be paid in the relevant tender item. Tree varieties shall be as per the proposed planting palleted. Rates are inclusive of maintenance for a period of 3 years from the date of substantial handover.				
	1. At the time of procurement, Tree stock shall be container-grown, or bur lapped with geo fabric and grown in sandy beds as per the technical specification. 2. Trees shall have a minimum girth as mentioned in the planting palleted/as per drawing. 3. The tree trunk shall be free of any damage caused by insect, fungal or viral infestation and free from any physical damage or scarring. 4. The tree trunk shall be straight and vertical. There should not be any abrupt changes in girth of the trunk. 5. The form or shape of the crown shall be typical for the specimen of the species. The crown shall not be significantly deformed by wind, pruning practices, pests or other factors. 6. Trees shall be single stemmed unless otherwise specified. 7. Main branches shall be well spaced with a minimum of four branches at planting. 8. The size, colour and appearance of leaves shall be typical for the time of year and stage of growth of the tree species. Leaves shall not be damaged or discoloured. 9. The root system shall be free of injury from biotic (insects, pathogens) infestation and shall be uniform throughout the soil mix or growth media. Container grown nursery stock shall have a well-established root system reaching the sides of the container to maintain a firm ball when the container				
78	Tree Plantation - Category T1 (As per drawing)	Each	5	3,712	18,557.5
79	Tree Plantation - Category T2 (As per drawing)	Each	5	3,350	16,748.4
Total Carried Over to Summary					9,49,639.2
DISMANTLING AND DEMOLISHING					
80	Dismantling of existing PCC work of any grade in any type of elements, including tools, plants and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material at non objectional place and stacking the serviceable material with all lifts and leads as directed by engineer in charge.	Cum	5	1,078	5,387.8
81	Dismantling of existing RCC work of any grade in any type of elements by mechanical or manual means as suggested by Engineer in charge, including cutting reinforcement, including tools, plants and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material at non objectional place and stacking the serviceable material with all lifts and leads as directed by engineer in charge.	Cum	49	1,526	74,781.4
82	Dismantling of existing any type of masonry work in type of structure in any thickness, with or without plastered or any type of wall lining work, in any type of mortar including tools, plants and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material at non objectional place and stacking the serviceable material with all lifts and leads as directed by engineer in charge.	Cum	5	1,019	5,093.5
83	Dismantling of existing any type of Steel Structures/ Metal works for all level including dismantling, cutting, dismembering all elements of structure by any means as suggested by engineer in charge, earth work, base concrete and making good the disturbed ground, stacking useful materials and disposing off the unserviceable materials at non objectional place with all lead and lift and as directed by Engineer in charge.	Kg.	100	4	367.0
84	Removal of existing kerb stones of any type, any size, any thickness in required depth including removing kerb with base PCC including excavation etc, disposal unserviceable material with all lifts and up to any lead at non objectional place and stacking the serviceable material including loading, unloading for all lead and lift and as directed by Engineer-in-charge.	Rmt	10	45	448.9
85	Dismantling/ removing tiled, paved floors, stone floors with all required sub layers including disposal unserviceable material with all lifts and up to any lead at non objectional place and stacking the serviceable material including loading, unloading for all lead and lift and as directed by Engineer-in-charge.	Sqm	324	188	60,980.0
86	Dismantling of Fencing (Dismantling of barbed wire fencing/ wire mesh fencing, including posts, foundation concrete, back-filling of pit by manual means, including disposal of dismantled material with all lifts and up to a lead of 1000 metres, stacking serviceable material and unserviceable material separately.)	Rmt	10	40	398.5

SR.NO	DESCRIPTION	UNIT	Total Quantity	Rate (In Rs.)	TOTAL AMOUNT (in Rs)
	Transplantation of trees Transplantation of trees with in a distance of all lead including excavation around existing tree, pruning of branches, lifting, loading and transportation of existing tree, digging pits for placing tree at new place, adding manure, sand, fertilizer, hormones and bio fertilizer to it. Levelled and neatly dressed and disposal of surplus materials from old existing and new sites to designated place. Each tree should be firmly secured to the stake so as to prevent excessive movement, flooding with water, treatment of roots, rope and gunny bags as per direction of the Engineer in charge. T&P and all required materials shall be arranged by the contractor and nothing extra shall be paid on this account. Contractor shall take prior approval before execution. Location of transplantation shall be as instructed by Engineer in charge.				
87	Girth of trees upto 150cm.	Each	2	10,128	20,255.7
88	Girth of trees beyond 150cm	Each	2	21,851	43,702.5
	Total Carried Over to Summary				2,11,415.3
	Total Civil Amount				75,96,879.1
A2	Plumbing Work				
89	Providing and fixing on wall face C.I. Rain water pipe including filling the joints with spun yarn soaked in neat cement slurry and cement mortar 1:2 (1-Cement : 2-fine sand) (A) 75 mm dia.	Rmt	6	286	1,718.8
90	Providing and fixing M.S Holder bat clamps of approved design to C.I. or S.C.I. pipes embedded in and including cement concrete blocks 100mm x 100mm x 100mm. size of 1:2:4 (1-Cement : 2-coarse sand :4- graded stone aggregate of 20mm nominal size) and cutting holes and making good the wall etc. complete. (A) 75mm dia.	Each	5	115	575.1
91	Providing and fixing for wall plugs and standard holder bat clamps comprising of two semicircular haves of flat iron and cast iron base screwed on wooden plugs. (B) 80 mm dia.	Each	10	66	663.5
	Total Plumbing Amount				2,957.4
	Total Amount (Civil + Plumbing) In Rs.				75,99,836.5

**WORK OF CONSTRUCTION OF SOUVENIR SHOP AND TICKET BOOTH NEAR FLOWER PARK AREA, INCLUDING CIVIL, PLUMBING,
ELECTRICAL, ELV, FFTG & HVAC FOR SRFDCL
SUB SECTION**

Electrical, ELV & HVAC Works

Sr. No.	Description	Unit	Total Quantity	Rates (in Rs.)	Total Amount (in Rs)
B	Electrical, ELV & HVAC Works				
B1	Electrical Work				
	Distribution Board				
1	Providing and erecting Double Door (IP 43) single phase incoming and horizontal single phase outgoing Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for 12 way SPN DB	Nos.	1	1,493	1,493.0
2	Providing and erecting Double Door (IP 43) single phase incoming and horizontal single phase outgoing Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for 16 way SPN DB	Nos.	2	1,681	3,362.0
3	Providing and erecting following way double door horizontal type three pole and neutral Sheet Steel MCB distribution board 415 V on surface, recess, complete with tinned copper busbar, neutral bus bar, earth bus bar, din bar, interconnections, powder painted including earthing etc. as required. 4 way TPN DB	Nos.	1	2,339	2,339.0
4	Providing and erecting Double Door (IP 43) Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for three phase incoming and single phase horizontal type outgoing Per phase isolation type (PPI) sheet steel double door 8 way TPN DB	Nos.	1	3,413	3,413.0
5	MCB 's and its Accessories Supply installation testing and commissioning of Surge Protection Devices (SPD) in existing distribution boards. 1.2KV Protection level, Class 's', (Imax-15-20KA, 8/20µS) Double Pole. Complete as required.	Nos.	3	2,973	8,919.0
6	Supply installation testing and commissioning of Surge Protection Devices (SPD) in existing distribution boards. 1.2KV Protection level, Class 's', (Imax-15-20KA, 8/20µS) Four Pole. Complete as required.	Nos.	2	5,793	11,586.0
7	Supply installation, testing and commissioning of din rail mounted, single phase 230V AC, over voltage protection release. Complete as required.	Nos.	6	1,655	9,930.0
8	Providing and erecting Miniature circuit breaker single pole 6A to 32A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark. Cat.III	Nos.	34	112	3,808.0
9	Providing & erecting 240 V MCB double pole switch for motor & inductive load (C Curve) having 10 KA breaking capacity & confirms to IS : 8828 in existing box having following capacity. 6 to 32 Amp. Cat-III	Nos.	4	300	1,200.0
10	providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 100 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on single phase 240 V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component. for following Max. rating erected as directed 25 Amp DP Cat.III	Nos.	1	1,992	1,992.0

Sr. No.	Description	Unit	Total Quantity	Rates (in Rs.)	Total Amount (in Rs)
11	providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 100 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on single phase 240 V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component. for following Max. rating erected as directed 40 Amp DP Cat.III	Nos.	3	2,267	6,801.0
12	Supplying & erecting approved make RCCB + MCB (Electro magnetic type only) working on residual current device having 10 KA short circuit breaking capacity and 30 mAmp. Sensitivity & 30 mili sec. tripping time conforming to IS 12640 test knob facility trip free mechanism operating for rated leakage at nominal ten volt, complete erected including all materials lugs screws etc. completed. 32/40 Amp DP	Nos.	1	1,944	1,944.0
13	Supplying & erecting approved make RCCB + MCB (Electro magnetic type only) working on residual current device having 10 KA short circuit breaking capacity and 100 mAmp. Sensitivity & 30 mili sec. tripping time conforming to IS 12640 test knob facility trip free mechanism operating for rated leakage at nominal ten volt, complete erected including all materials lugs screws etc. completed. 32 Amp DP	Nos.	2	2,901	5,802.0
14	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity 6 to 32 Amp. Cat-III	Nos.	2	596	1,192.0
15	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity 40 Amp. Cat-III	Nos.	1	669	669.0
16	SITC Half / One Module Blanking Plate of Standard Size.	Nos.	10	9	90.0
17	Sheets steel powder coated enclosure suitable for incorporating One/Two nos. MCB.	Nos.	1	177	177.0
18	Sheets steel powder coated enclosure suitable for incorporating three/four nos. MCB.	Nos.	1	567	567.0
19	Caution Board : Providing and erecting metallic vitrified danger notice board as per language suggested by engineer incharge for MEDIUM VOLTAGE installation to be erected as per IS-2551.	Nos.	2	70	140.0
20	Supplying,installation,testing and commissioning of Astronomical time switch of following configuration to be mounted in feeder pillars / Lighting DBs for automatic switching On & OFF of street lights at sun set & sun rise or twilight(Auto ON, Auto OFF, Auto modes) with manual override facility with 12/24 hour display format with suitable 12/24 hours battery back up and indication for relay status i/c programming at site complete as required. 1 output per phase and suitable for single phase supply	Nos.	1	3,635	3,635.0
21	Supplying & erecting power contactor ,AC3 duty for time switch complete erected as per direction Cat III	Nos.	1	1,884	1,884.0
22	Providing & erecting Medium Voltage Danger Notice Board sticker as per language suggested by engineer incharge of standard size as per IS-2551	Nos.	5	26	130.0
Sub-Total					71,073.0
MV Cabling					
					-
23	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cables. 4 core 10 Sq. mm	Meter	100	677	67,700.0
24	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cable. 3 core 6 Sq. mm	Meter	100	396	39,600.0
25	Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cable. 3 core 2.5 Sq. mm	Meter	70	215	15,050.0

Sr. No.	Description	Unit	Total Quantity	Rates (in Rs.)	Total Amount (in Rs)
				-	
	Total Carried Over to Summary				1,22,350.0
	Cable Termination				
				-	
26	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc and solder less crimping type copper lugs for following size of cables. 4 core 10 Sq. mm	Nos.	2	79	158.0
27	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc and solder less crimping type copper lugs for following size of cables. 3 core 6 Sq. mm	Nos.	2	63	126.0
28	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc and solder less crimping type copper lugs for following size of cables. 3 core 2.5 Sq. mm	Nos.	1	58	58.0
29	Solder less crimping type Copper lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner.	Nos.	27	8	216.0
	Total Carried Over to Summary				558.0
	Cable Tray and Raceway				
				-	
30	Providing and fixing approved make Ladder type cable tray. Made from M.S sheet with all accessories like coupler, GI nut bolts,bend, tee, reducer etc . The cable tray should be bended as per IS 2062/1079 shall be fabricated of double bended channel section longitudinal members with single bended Channel section. Rungs of members welded to the base of the longitudinal members at 250 mm c/c spacing . as per IS and shall be coated with hot dip galvanizing as per IS 2629/4759. with coupler plate / Fish plate and GI hardware like nut - bolt and washers etc. erected on existing support as per Specification and as per instruction of engineer in charge.. 150 X 100 X 1.6 mm Thick	Meter	20	602	12,040.0
31	Providing , erecting , fabricating the M.S. structure as per requirement on site incorporating proper size of M.S. angles,square,round, flats, bars, channels, sections complete with cutting, welding, grinding & finishing duly painted with one coat of red oxide with erection on site as per direction of engineer in charge with necessary grouting, cementing, plastering & finishing complete. including applying zinc chromate yellow oxide and two to three coats of required enamel paints with anchor fasteners etc.	Kg	10	78	780.0
32	Supplying,fabricating and installation of various sizes junction boxes made out CRCA sheet with all necessary accessories & hardware etc All the necessary fabrication required will be included in the scope of contractor. Scope also includes two coat of primer and two coat of painting of each items on all the sides complete in all respect.	Kg	10	181	1,810.0
	Total Carried Over to Summary			-	14,630.0
	Internal Wiring				
				-	
33	Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length , in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete Cat. III	Nos.	20	449	8,980.0

Sr. No.	Description	Unit	Total Quantity	Rates (in Rs.)	Total Amount (in Rs)
34	Point wiring for Tissino / Modular secondary light point with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires, in below type of pipe to be erected complete with earth continuity and necessary connection with primary light with accessories erected on Metal / PVC / wooden box covered with 3 mm thick PC(Polycarbonate) / Acrylic sheet for open / concealed wiring. with necessary Lamp holder / ceiling rose / H.D.Connector as directed. Maximum up to 6 mtrs length, excess will be considered as Mains for Secondary Point. with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete	Nos.	16	168	2,688.0
35	Point wiring for FAN with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of .ISI marked 1.1 KV Grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected with 6A Modular type switch and hum free EME step type electronic fan regulator mounted and accessories with earth continuity of following type erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected. with necessary ceiling rose / H.D.Connector as directed. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete Cat. III	Nos.	7	638	4,466.0
36	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. For 6 amp plug and 6 amp switch with 2-1.5 sq. mm Cu. Mains from mcb db board with HMS Rigid PVC pipe and accessories erected concealed in wall/ceiling complete.	Nos.	24	633	15,192.0
37	Supply installation testing and commissioning of 16A Plug and 16 amp switch with 2-2.5 sq.mm Cu. Wire with 1.5 sq.mm (green) earthing wire from mcb d b board. with HMS class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete.	Nos.	8	930	7,440.0
38	Point wiring for on board Looped Plug with 6A Modular type switch & 5 pin socket erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate modules erected on / in wall / ceiling with following type accessories Cat III	Nos.	4	258	1,032.0
39	Providing following type of Modular Type Accessories mounted with PVC / metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate , modules erected with necessary connections as per site situation directed by Engineer In charge. 6 Amp. SP one way switch (Cat-III)	Nos.	4	152	608.0
40	Providing following type of Modular Type Accessories mounted with PVC / metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate , modules erected with necessary connections as per site situation directed by Engineer In charge. 6 Amp round pin socket (Cat-III)	Nos.	4	152	608.0
41	Providing following type of Modular Type Accessories mounted with PVC / metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate , modules erected with necessary connections as per site situation directed by Engineer In charge. 16 Amp. SP one way switch (Cat-III)	Nos.	4	181	724.0
42	Providing following type of Modular Type Accessories mounted with PVC / metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate , modules erected with necessary connections as per site situation directed by Engineer In charge. 6/16Amp. Universal socket (Cat-III)	Nos.	4	200	800.0
43	Supply installation testing and commissioning of IP 66 rated made of polycarbonate outdoor box along with Adptor , PVC membrane & Moulded type 6/16A socket & 20A switch shrouded with shuttered including connections earthing etc. with 4.0 sq.mm wire for phase and neutral & 2.5 sq.mm earth wire & MMS class Rigid PVC complete as required.	Nos.	5	4,176	20,880.0

Sr. No.	Description	Unit	Total Quantity	Rates (in Rs.)	Total Amount (in Rs)
44	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size With HMS Rigid PVC pipe and accessories 2 wire 1.5 sq. mm	Meter	250	84	21,000.0
45	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size With HMS Rigid PVC pipe and accessories 2 wire 2.5 sq. mm	Meter	250	100	25,000.0
46	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) With medium class Rigid PVC pipe and accessories (a) 2 wire 1.5 sq. mm	Meter	250	63	15,750.0
47	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (A) With medium class Rigid PVC pipe and accessories (b) 2 wire 2.5 sq. mm	Meter	250	83	20,750.0
48	Providing and erecting ISI mark Medium class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed 25 mm	Meter	70	33	2,310.0
49	Providing and erecting ISI mark Heavy class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed 25 mm	Meter	70	37	2,590.0
50	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size in existing pipe 2 wire 1.5 sq. mm	Meter	100	46	4,600.0
51	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size in existing pipe 2 wire 1.5 sq. mm	Meter	100	63	6,300.0
Total Carried Over to Summary					1,61,718.0
Light fixture & Fans					
Supplying, erecting, connecting, testing and commissioning of following type internal/external Light Fixture with all necessary Hardware, Internal Wiring with Lamp,Ballast , driver, etc. all required accessories. Light fixture should be approved by ERDA.					
52	Any kind of LED Internal light fixture with basic rate of Rs.1500/- (Type A)	Meter	10	1,894	18,940.0
53	Any kind of LED Internal light fixture with basic rate of Rs.2000/- (Type B)	Nos.	13	2,525	32,825.0
54	Any kind of LED Internal light fixture with basic rate of Rs.4500/- (Type C)	Nos.	27	5,681	1,53,387.0

Sr. No.	Description	Unit	Total Quantity	Rates (in Rs.)	Total Amount (in Rs)
55	Any kind of LED Internal light fixture with basic rate of Rs.10000/- (Type D)	Nos.	12	12,625	1,51,500.0
56	Supply, Installation, Testing and Commissioning of suitable sweep, BEE 5 Star rated, Ceiling fan with Brush Less Direct Current (BLDC) permanent ferrite magnet Motor, class of insulation: B, Rust free 3 nos. Aluminium blades, 2 nos. canopies, shackle kit with earthing provision, copper winding, Power factor not < 0.9, Service Value (CMM/W) minimum 6.85, Air delivery minimum 215 CMM, 350 RPM, 230v (tolerance as per IS : 374-2019), THD < 10%, with remote unit for Speed Control and all remaining accessories including safety pin, nut bolts, washers, temperature rise = 75 degree C (Max.), suitable for 140 to 285 Voltage and rectifier circuit with surge, over current and overload protection , 50 Hz, Single phase AC Supply, earthing etc. Complete as required. [Make shall be approved by Engineer in Charge] (A)900 mm sweep (36")	Nos.	7	2,800	19,600.0
57	Supply, Installation, Testing and Commissioning of suitable sweep, BEE 5 Star rated, Ceiling fan with Brush Less Direct Current (BLDC) permanent ferrite magnet Motor, class of insulation: B, Rust free 3 nos. Aluminium blades, 2 nos. canopies, shackle kit with earthing provision, copper winding, Power factor not < 0.9, Service Value (CMM/W) minimum 6.85, Air delivery minimum 215 CMM, 350 RPM, 230v (tolerance as per IS : 374-2019), THD < 10%, compatible with electronic regulator unit for Speed Control and all remaining accessories including safety pin, nut bolts, washers, temperature rise = 75 degree C (Max.), suitable for 140 to 285 Voltage and rectifier circuit with surge, over current and overload protection , 50 Hz, Single phase AC Supply, earthing etc. Complete as required.[Make shall be approved by Engineer in Charge] (A) 1200 mm Sweep (48")	Nos.	2	2,629	5,258.0
58	Supplying and erecting 19 / 20 mm. nominal bore Medium Class M.S. Pipe down rod erected duly painted for fan complete with proper insulation without leakage and earthing	Meter	7	108	756.0
59	Supplying & erecting fan hook box of 10 mm M.S. round bar bounded to the RCC bars up to 50mm length each side and pierced through a 16 Gauge M.S. box / Heavy Duty PVC box complete erected concealed in Ceiling with necessary finishing.	Nos.	7	108	756.0
60	Providing Fan clamp of 30 x 5 mm flat of required length & 10 mm M.S. Bolt & Nuts erected with necessary hook of 10 mm M.S. Round Bar.	Nos.	7	99	693.0
61	Providing 2.5mm.thick laminated acrylic sheet to cover the fan hook or Fan box.	Nos.	7	18	126.0
Total Carried Over to Summary				-	3,83,841.0
Earthing				-	
62	Supply, Installation & testing of Earthing Station, consist of 3Mtr Copper Bonded Rod of minimum 17mm diameter with minimum 25Kg Resistance lowering compound Earthing. Copper Bonded Earth Rod made from high tensile low carbon steel and each rod should molecularly bonding 99.9% pure electrolytic copper to the low carbon steel core in accordance with national and international standards such as BS6651, BS7430 and UL467. comprises specifically selected compounds, which possess excellent electrical conductivity. Scope includes heavy duty earth chamber with load bearing capacity to ensure the safety of earthing system. Complete as required.	Nos.	6	7,550	45,300.0
63	Providing and erecting required size Copper strip for earthing of H.T. OCB / ACB/ Transformer, LT panel board, Motors etc. using copper clamp.	Kg.	40	795	31,800.0
64	Providing and erecting Annealed bare Copper wire 8 to 16 SWG.	Kg.	10	795	7,950.0
Total Carried Over to Summary				-	85,050.0
Miscellaneous				-	
				-	

Sr. No.	Description	Unit	Total Quantity	Rates (in Rs.)	Total Amount (in Rs)
65	Providing & laying approved make Double walled corrugated pipes (DWC) of polyethylene(conforming to IS 14930 II)with necessary connecting accessories of same material at required depth in existing trench for laying of cable. below ground / road surface for enclosing cable 63mm outer dia	Meter	250	74	18,500.0
Total Carried Over to Summary					18,500.0
External Lighting					
66	Post top lantern Supply, erecting,testing, commissioning of 4 Mtr. GI pole of 139 X 4.00 mm thk. With 400 X 12 mm round flange with integral type junction box with necessasory reducer / coupler for fixing of light fixtures (post top lantern) & Hinged access door with allen key & gasket require to access the integral junction box, with one coat of zinc oxide complete in all respect as per Drawing. Rate shall be including PU paint of shade as per drawing or as directed by Architect and rate shall be inclusive of RCC foundation work with earthing complete in all respect as per requirement as per site condition with cost of the chemical grouted Anchor fastener/foundation bolt and spiral earthing approx 2 mtr length of GI wire. (As Per Typical Draiwng of Post Top) (Sample to be approved) (1) integrated junction box having with necessary 6 way connector, 1 No.2A SP MCB with din rail channel, 8mm thk. Hylem sheet, 12x2 mm thk. GI Patti Clamp, with necessary required hardware, necessary welding & Fabrication work (if required) complete in all respect.(2) 40 mm diameter GI pipe for each cable entry.(3) Wiring up to the light fixture from the junction box using 3nos. x 1.5 sq.mm.flexible FRLS copper wires of specified make for each fixture. (4) Concrete foundation with base plate.(5) Excavation for erection of poles as per drawing complete in all respect.(6) Pole Numbering to be carried out by contractor as instructed by Site in charge as per Client's requirement.	Nos.	4	22,903	91,612.0
67	Post top - Light Fixture Supplying, erecting, connecting, testing and commissioning of following type external Street Light Fixture with all necessary Hardware, Internal Wiring with Lamp, Ballast etc. all required accessories Complete in all respect. Supply, installation, testing and commissioning any kind of External light fixtures Type - E with Basic rate of Rs 21000/-	Nos.	4	26,513	1,06,052.0
Total Carried Over to Summary					1,97,664.0
UPS					
68	Supply (FOR Site), Testing & Commissioning of ON LINE Rack Mounted UPS system with 5 mins battery backup with inbuilt battery rack complete in all respect. 1 KVA UPS 1 ph in 1 ph	Nos.	1	31,941	31,941.0
Total Carried Over to Summary					31,941.0
Total Electrical Work Amount (In Rs.)					10,87,325.0
B2 ELV Works					
ICT (Telephone and Data) Networking Infra					
69	Conduits & Accessories Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as per technical specification etc. as required. 25 mm	Meter	50	133	6,628.1
70	Providing and erecting ISI mark Medium class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed (b) 25 mm	Meter	200	30	5,951.8

Sr. No.	Description	Unit	Total Quantity	Rates (in Rs.)	Total Amount (in Rs)
71	Providing & laying approved make Double walled corrugated pipes (DWC) of polyethylene(conforming to IS 14930 II)with necessary connecting accessories of same material at required depth in existing trench for laying of cable. below ground / road surface for enclosing cable (A)50 mm outer dia	Meter	50	56	2,795.5
72	CAT6 UTP Cables & Components SITC of CAT6 UTP 23AWG Solid: Per Meter (Including Five year free maintenance with guarantee)	Meter	750	39	29,082.6
73	SITC of Face Plate - Single (Keystone Jack,square) (Including Five year free maintenance with guarantee)	Nos.	10	91	909.0
74	SITC of Face Plate - Dual (Keystone Jack,square) (Including Five year free maintenance with guarantee)	Nos.	10	90	901.8
75	SITC of Jack Cat 6 Keystone UTP (Including Five year free maintenance with guarantee)	Nos.	30	144	4,328.6
76	SITC of Patch Panel Cat 6 UTP Keystone Type- 24 Port-Fully Loaded (Including Five year free maintenance with guarantee)	Nos.	2	3,929	7,858.2
77	SITC of CAT6 UTP 24AWG PATCH CORD:1M,Plug 30U' Snag less (Including Five year free maintenance with guarantee)	Nos.	30	157	4,696.5
78	SITC of CAT6 UTP 24AWG PATCH CORD:2M,Plug 30U' Snag less (Including Five year free maintenance with guarantee)	Nos.	30	179	5,383.7
79	Networking Enclosures & Accessories Providing & Erecting Netwrok rack with following capacity with Necessary cooling fan,Cable manager,6A PDU,equipment rack with necessary mounting accessories. 15 U	Nos.	2	16,665	33,330.0
80	SITC of 24 x 10/100/1000BASE-T PoE ports, 4 x Gigabit RJ45/SFP Combo ports, Advanced L2 switching and security features, L2+ Static Routing, Optional "standard mode" or "surveillance mode" management user interface, 193 W PoE budget [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	Nos.	2	31,997	63,993.6
81	SITC of Maximum distance of up to 10 km Hot-pluggable Single-mode fiber 1000BASE-LX (IEEE 802.3z standard) Duplex LC connector MSA, RoHS-compliant (Including Five year free maintenance with guarantee)	Nos.	2	4,802	9,603.1
Total Carried Over to Summary					1,75,462.4
IP Based CCTV & Surveillance System.					
82	Supply, Installation, Testing & Commissioning of True Day Night Bullet Camera 2MP, Full HD, 1/2.8 type CMOS image sensor, Autoiris Varifocal lens 2.8 - 12mm motorized focus lens , Aperture Ratio F1.4, Wide Dynamic Range - 120dB, H.265 / H.264 & MJPEG dual-stream encoding, 25/30fps@1080P (1920 x1080), IR LEDs length minimum 30 m, Motion Detection , Tampering ,Defocus detection , Hallway View, Micro SD Card - 128GB capacity, IP66 rated, IK 10 as per technical specification as per technical specification etc. as required.	Nos.	8	14,879	1,19,035.7
83	Supply, Installation, Testing & Commissioning of Vandal reistant True Day Night Veri-Focal Dome Camera 2MP, Full HD, 1/2.8 type CMOS image sensor, 2.8 -12mm motorized focus lens, Aperture Ratio F1.8, Wide Dynamic Range - 120dB, H.265 / H.264 & MJPEG dual-stream encoding, 25/30fps@1080P (1920 x1080), IR LEDs length minimum 20 m, Motion Detection , Tampering ,Defocus detection , Hallway view ,Micro SD Card - 128GB capacity, IP66 rated, IK 10 and as per technical Specification ,as per technical specification etc. as required.	Nos.	4	13,978	55,910.7

Sr. No.	Description	Unit	Total Quantity	Rates (in Rs.)	Total Amount (in Rs)
84	Supplying, installation, testing and commissioning of 16 Channel upto 12 MP resolution supported, Incoming Bandwidth: Min. 512 Mbps , Outcoming Bandwidth: Min. 512 Mbps, Upto 12MP Recording resolution, Display Interface : 2 HDMI port; atleast one supporting 4K resolution, RAID : RAID0, RAID1, RAID5, RAID6, RAID10, Minimum 8 SATA interfaces supporting hot-plug, Up to 18TB for each HDD, 2 X RJ45 10M/100M/1000M self-adaptive Ethernet interface, as per technical specification etc. as required.	Nos.	1	38,326	38,325.9
85	Supply, Installation, Testing & Commissioning of 10 TB Enterprise Level SATA-II Harddisk for Recording Storage, as per technical specification etc. as required.	Nos.	4	17,585	70,339.3
86	Supplying, installing, testing and commissioning of 65-inch, LED Panel, 16:9 Aspect ratio, 350 cd/m2 Brightness, Anti-glare panel surface with viewing angle 176 degree, 4K pixels resolution, Video Input Interfaces : HDMI Type A Connector x 2, Mini D-sub 15-pin x 1, 20 Watt Built in Speakers with wall mount bracket as per technical specification etc. as required.	Nos.	1	62,223	62,223.2
Total carried forward to Summary					3,45,834.8
Total ELV Work Amount (In Rs.)					5,21,297.2
B3	HVAC				
87	Providing and erecting Inverter based approved make split air-conditioning unit consisting of condensing unit with variable speed fan motor, inverter type hermetically sealed rotary compressor with accessories etc. duly connected separately erected evaporating unit and blower motor with its accessories by means of extra supplied proper insulated copper tubing, drain PVC pipes suitable for (cost includes Eco Friendly green gas charging and 15A plug top & Remote Control & MS Stand) with necessary core cutting. (1) For ISEER Range (KWH/KWH)(3.1 to 3.99) (C) for 1.7 to 2 ton capacity	Ea.	4	51,667	2,06,668.0
88	Providing and erecting Inverter based approved make split air-conditioning unit consisting of condensing unit with variable speed fan motor, inverter type hermetically sealed rotary compressor with accessories etc. duly connected separately erected evaporating unit and blower motor with its accessories by means of extra supplied proper insulated copper tubing, drain PVC pipes suitable for (cost includes Eco Friendly green gas charging and 15A plug top & Remote Control & MS Stand) with necessary core cutting. (1) For ISEER Range (KWH/KWH)(3.1 to 3.99) (D) for 2.2 to 2.5 ton capacity	Ea.	1	86,490	86,490.0
89	Supplying and erecting insulated pair of soft copper tubing open or concealed including power and control cable, necessary PVC drain pipes for Split AC machine up to 4 TR capacity	Rmt.	36	966	34,776.0
90	Maintenance Works Annual Maintenance Contract (AMC) All inclusive comprehensive annual maintenance contract for the entire HVAC System supplied by the HVAC contractor inclusive of all parts and labor for all equipments supplied. This contract will commence for 4 years after DLP of 1 Years & as per specifications. 1st Year	Job.	1	18,217	18,217.0
91	Maintenance Works Annual Maintenance Contract (AMC) All inclusive comprehensive annual maintenance contract for the entire HVAC System supplied by the HVAC contractor inclusive of all parts and labor for all equipments supplied. This contract will commence for 4 years after DLP of 1 Years & as per specifications. 2nd Year	Job.	1	18,217	18,217.0
92	Maintenance Works Annual Maintenance Contract (AMC) All inclusive comprehensive annual maintenance contract for the entire HVAC System supplied by the HVAC contractor inclusive of all parts and labor for all equipments supplied. This contract will commence for 4 years after DLP of 1 Years & as per specifications. 3rd Year	Job.	1	18,217	18,217.0

Sr. No.	Description	Unit	Total Quantity	Rates (in Rs.)	Total Amount (in Rs)
93	Maintenance Works Annual Maintenance Contract (AMC) All inclusive comprehensive annual maintenance contract for the entire HVAC System supplied by the HVAC contractor inclusive of all parts and labor for all equipments supplied. This contract will commence for 4 years after DLP of 1 Years & as per specifications. 4th Year	Job.	1	18,217	18,217.0
Total HVAC Work Amount (In Rs.)					4,00,802.0
Total Electrical, ELV & HVAC Works (In Rs.)					20,09,424.2
Total Amount (Electrical, ELV ,HVAC Works) In Rs.					20,09,424.2

**WORK OF CONSTRUCTION OF SOUVENIR SHOP AND TICKET BOOTH NEAR FLOWER PARK AREA, INCLUDING CIVIL, PLUMBING,
ELECTRICAL, ELV, FFTG & HVAC FOR SRFDCL
SUB SECTION**

FFTG Works

Sr. No.	Description	Unit	Total Quantity	Rates (in Rs.)	Total Amount (in Rs)
C	Fire Fighting Works				
	Fire Extinguishers				
1	Supply, installation, testing and commissioning of Carbon Dioxide (Co2) type Fire Extinguisher of 4.5 kg confirm to IS:15683, stored pressure, squeeze type with ISI marked fitted with required accessories including wall suspension brackets. Make : Kanex / Safex / Ceasefire	Nos.	2	5,924	11,848.0
2	Supply, installation, testing and commissioning of ABC (MAP 90%) type 6 kg Fire Extinguisher stored pressure, squeeze type confirm to IS:15683, with ISI marked fitted with required accessories including wall suspension brackets. Make : Kanex / Safex / Ceasefire	Nos.	2	3,601	7,202.0
	Total carried forward to Summary				19,050.0
Total Amount (FFTG Works) In Rs.					19,050.0