

SUMMARY SHEET**ESTIMATE FOR CONSERVATION WORK OF RAJA GOKULDAS DHARAMSHALA**

	PHASE -I	TOTAL
1	CONSERVATION & LANDSCAPE WORK (Conservation of Gokuldas Dharmshala and Old structure back court ,Landscape of front court of Dharamshala)	3,37,67,013.12
2	ELECTRICAL WORK (Dharmshala Block Only Conduiting and point wiring)	19,36,634.40
3	AIR CONDITIONING WORK (Dharmshala Block Only)	35,57,392.00
	TOTAL PHASE-I	3,92,61,039.52
	CONTENGENCIES @ 5%	19,63,051.98
	GRAND TOTAL	4,12,24,091.50

SUMMARY OF COST		
ESTIMATE FOR CONSERVATION WORK OF RAJA GOKULDAS DHARAMSHALA		
Phase -1		
S.NO	DESCRIPTION	AMOUNT (IN RS.)
A	Conservation Works (Dharmshala & Old structure Back Court)	
1	Removal and Dismantalling Works	16,23,777.67
2	Traditional Massonry Work	21,76,505.00
3	Consolidation Work	5,14,180.00
4	Traditional Roofing and Water proofing works	75,43,207.50
5	Repair and New Door Window Works	31,87,890.00
6	Flooring and Plinth Protection Work	40,01,020.00
7	Finishing Works Including Plaster, stucco and Lime Kara	1,13,39,764.00
8	Misc.Work Including Parapet /chajja/Chatra /Jharokha works	19,86,869.10
9	Repair of traditional watch	2,00,000.00
10	Scaffolding and support frame work	3,02,683.50
	Landscape work (Front Court)	
1	Civil works Pathway and Drains	8,25,931.73
2	Horticulture	65,184.62
	SUB TOTAL A(CIVIL)	3,37,67,013.12
B	Electrical Works (Dharmshala Block Only)	
1	Internal Electrical Instalations (Conduiting and Point Wiring)	19,36,634.40
2	HVAC (Supply and low side)	35,57,392.00
	SUB TOTAL B(ELECTRICAL)	54,94,026.40
	TOTAL (A+B)	3,92,61,039.52
C	CONTINGENCY @ 5%	19,63,051.98
	GRAND TOTAL	4,12,24,091.50

ESTIMATE FOR CONSERVATION WORK OF RAJA GOKULDAS DHARAMSHALA

NOTES:

- 1 Item include all leads /lift and cariage etc,from work area to site yard including proper stacking of the re usable materials.
- 2 All Item of works are considered inclusive of scaffolding /shuttering /support structure/electricity and water etc as required / instructed by Site Engineer /Consultants .
- 3 All demolition /dismantalling work done carefully as per direction of engineer in charge and includes cost of safety measure /use of specified equipment for workers of building applicable to complete the work .

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
1.0		REMOVAL & DISMANTLING				
1.1	MP UADD SOR 15.2.1	Demolishing cement concrete(below any finishing layer sand stone/ basalt stone / ceramic /vinayal flooring) ,steps,blockadge manually including disposal of material within 50 mtr lead as per direction of Engineer - in charge. 15.2.1 1:3:6 or richer mix	192	CUM	427.50	82,080.00
1.2	MP UADD SOR 15.7.4	Demolishing moduler/ lakhori/traditional (of any brick size) brick work manually in lime /cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead 15.7.4 In cement mortar	210	CUM	360.90	75,789.00
1.3	MP UADD SOR 15.25	Dismanteling basalt ashlar stone /sand stone slab/floor /pavement / by manual means including stacking of the serviceable material and disposal of unserviceable material up to a lead of 50 mtr .	940	SQM	46.80	43,992.00
1.4	Non Schd.1	Carefully scrapping and removing multiple layers of white wash enamel paint, distemper, oil paint, algae, etc. from plain plaster and surfaces gently with care to keep old designs intact, as per prescribed process and specifications. Item includes cost of safety measures/ use of specified equipments for workers required to complete the work. (Overall length and width will be measured for the purpose of payment)	500	SQM	110.00	55,000.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
1.5	Non Schd.2	Carefully dismantling old lime plaster/ cement plaster from walls of the heritage structure without damaging the stone work/ brick work/ historic fabric of the building including raking out of joints and cleaning the surface thoroughly. Item includes cost of safety measures/use of specified equipments for workers required to complete the work and disposal of rubbish to the dumping ground/ workyard within the site by manual means including all leads, lifts and carriage as per direction of Consultants/Engineer-in-charge. (Overall length and width will be measured for the purpose of payment)	4300	SQM	161	6,92,300.00
1.6	MP UADD SOR 15.13	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead.				
	15.13.1	Of area 3 sq. metres and below	115	EACH	24.30	2,794.50
1.7	MP UADD SOR 15.39.3	Dismantling wooden boardings in lining of walls and partitions excluding supporting members but including stacking within 50 meters lead : (Note- partition/ jali /railing /wall pannels with frame including removal of blockage from window /doors made on existing windows and doors with woolden block boards/plywood etc without damaging the historic fabric of the building) 15.39.3 Thickness above 25 mm up to 40 mm	44	SQM	16.20	712.80
1.8	MP UADD SOR 15.23.1	Dismantling tile work in floor sand roof s laid in cement mortar including stacking material within 50 meters lead. 15.23.1 For thickness of tiles upto 25 mm	360	SQM	16.20	5,832.00
1.9	NON SOR	Dismantling marble flooring / sand stone flooring laid in cement mortar including stacking of serviceable materials and disposal of unserviceable materials within any lead. (Note- Removal of sand stone floorings from courtyard and structure to be re-constructed)	17	SQM	46.80	795.60
1.10	JOB WORK	Removal of all electrical wires, nails, screws, additional clamps on walls, casing/exposed pvc conduits, additional clamps on chajja, electrical fixtures, lights, boxes, cartons, benches, drums, plumbing (internal & external), taps, G.I. pipes, etc. from the site and stacking serviceable materials, as directed by Engineer-in-charge/ Consultants, and including all leads, lifts and carriage. Item includes cost of safety measures/use of specified equipments for workers required to complete the work.	1	JOB WORK	50000	50,000.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
1.11	JOB WORK	Removal of all old plumbing (internal & external) including W.C., washbasins, urinals, taps, water cooler, C.I./GI./ PVC/CPVC, asbestos pipes (all size and dia) external/ internal area from the site and stacking serviceable materials, as directed by Engineer incharge/ Architect, and including all leads, lifts and carriage. All complete. Item includes cost of safety measures/use of specified equipments for workers required to complete the work.	1	JOB WORK	50000	50,000.00
1.12	Non Sched. 54	De-vegetation from the monuments by chemical injection of Round Up (arsenic base) compound and subsequently uprooting by physical means without damaging the historic fabric and structure of the building under strict supervision of conservation architect/site-in-charge.	43	SQM	633	27,219.00
1.13	Non Sched. 55	Carefully removing multiple layers of white wash enamel paint from stone/ decorative columns/ vertical surfaces, gently, with care to keep old designs intact as per prescribed process and specifications. Item includes cost of shuttering/ scaffolding/ safety measures/ use of specified equipments for workers required to complete the work. (Overall length and width will be measured for the purpose of payment)	36	SQM	350	12,600.00
1.14	Non Sched. 56	Carefully removing multiple layers of geru, white wash enamel paint/ distemper from original stone/ plinth/ vertical surfaces, gently with care to keep old designs intact as per prescribed process and specifications.	115	SQM	90	10,350.00
1.15	MP UADD SOR 2012 2.31	Clearing jungle including uprooting of rank vegetation, grass, bush wood, trees and saplings of girth upto 30cm measured at a height of 1m above ground level and removal of rubbish upto a lead of 50 mts.	1530	SQM	3.07	4,695.57
2.0		MALBA REMOVAL				
2.1	NON SOR-74 (Derived by mp sor 2014)	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground(upto 15 km) or as approved by Engineer-in-charge, beyond 100 m initial lead, for all leads including all lifts involved. The rates will be applicable to net quantities after deduction of prescribed percentage for voids mentioned in the specification under subhead "Carriage of materials".	1325	CUM	339.09	4,49,294.25
3.0		ROOF DISMANTLING				

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
3.1	MP UADD SOR 15.23.2	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 meters lead. 15.23.2 for thickness of tiles/mosaic layer up to 40 mm(for mosaic tiling work)	220	SQM	18.90	4,158.00
3.2	MP UADD SOR 15.19	Dismantling steel work manually/by mechanical means in built up sections without dis membering and stacking within 50 meters lead as per direction of Engineer-in-charge.	7100	KG	0.90	6,390.00
3.3	MP UADD SOR 15.1	Demolishing lime concrete manually/by mechanical means and disposal of material within 50 meters lead as per direction of Engineer in charge.	40	CUM	149.40	5,976.00
3.4	MP UADD SOR 15.26	Demolishing brick tile covering(Note- brick tile on edge and vaulted) interrating including stacking of serviceable material and disposal of unserviceable material within 50 meters lead.	780	SQM	18.00	14,040.00
3.5	MP UADD SOR 15.27	Demolishing mud phaska in terracing and disposal of material within 50 meters lead.	30	CUM	160.20	4,806.00
3.6	NON SOR-76	Careful removal of stone tiles/ stone patia from roof of the building and stacking of serviceable material at workyard (without damaging the stone tiles/ trusses/ historic fabric of building) and disposal of unserviceable materials within 100 metres lead as per direction of Engineer-in-charge. Item includes cost of shuttering/ scaffolding/ safety measures/ use of specified equipments for workers of building required to complete the work .	175	SQM	46.80	8,190.00
3.7	Non Schd.-3	Careful demolishing of traditional clay tile (khaprail /khapra) from attic roof including stacking of serviceable material and disposal of unserviceable material within 100 metres lead.Item includes cost of shuttering /scaffolding /safety measure /use of specified equipment for workers of building required to complete the work . (FOR OLD STRUTURE BACK COURT)	210	SQM	60	12,600.00
3.8	MP UADD SOR 15.14.1	Dismantling wood work in frames,trusses,purlins and rafters upto10 meters span and 5 meters height including stacking the material within 50 meters lead: Of sectional area 40 square centimeters and above.	5.5	CUM	756.90	4,162.95
4.0		MASONRY WORK				

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
4.1		Traditional brick masonry with special brick size in lime mortar in proportion similar to the existing traditional lime mortar (lime putty -surkhi 1:2) after removing the damaged and out of plumb masonry from the historic structure, as directed by Engineer-in-charge/ Consultants, and including all leads, lifts and carriage.				
	Non Schd.5	Brick work for superstructure for all heights.	218	CUM	7020	15,30,360.00
	Non Schd.6	Brickwork in ornamented pillars.	3	CUM	7715	23,145.00
	Non Schd.7	Brick masonry for arches with special size traditional bricks.	18	CUM	8400	1,51,200.00
4.2	Non Schd.8	Ornamental traditional brick masonry in mouldings and cornices (upto 30 cm in projection and 30 cm in depth as per traditional practice) in lime mortar similar to the existing traditional lime mortar (lime putty- surkhi 1:2) after removing the damaged and out of plumb masonry from the vertical surfaces, as directed by Engineer-in-charge/ Consultants, and including all leads, lifts and carriage.	350	RMT	1300	4,55,000.00
4.3	NON SOR -77	Random rubble masonry with hard stone in foundation and plinth including levelling up with lime concrete 1:2:2 (1 lime : 2 sand : 2 graded stone aggregate 20 mm nominal size) upto all level with Lime mortar 1:2 (1 lime : 2 surkhi/ sand)	4	CUM	4200.00	16,800.00
		CONSOLIDATION WORK				
4.4	Non Schd.9	Stitching of cracks in brick masonry using brick and lime mortar 1:1 (1 lime: 1 Surkhi) matching/ toothing with traditional lime mortar and bricks as existing size and type joinery courses in the historic structure after raking, cleaning and washing the cracks, as directed by Engineer-in-charge/ Consultants, and including all leads, lifts and carriage.	20	CUM	11250	2,25,000.00
4.5	Non Schd.10	Stitching of Modular brickwork by inserting sand stone/ basalt stone plate as approved, of size 600 X 300 X 100 MM at identified locations by engineer-in-charge/ Consultants and grouting the area with rich lime mortar 1:1 (1 lime: 1 Surkhi) including preparing like cutting out brickwork, teething, cleaning, grouting etc. for all heights and stacking of malba within 100 metre lead.	40	N.O.S	1350	54,000.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
4.6	Non Sched.11	Consolidation of Lime plaster with grouting , after removal of loose materials after raking, cleaning and washing the surface , as directed by Project Manager, and filling the gaps with with rich lime mortar 1:1 (1 lime: 1 Surkhi) tightly and using pressure grouting technique if required. (plan area of patch work to be measure for the purpose of payment)	365	SQM	500	1,82,500.00
4.7	Non Sched. 57	Underpinning brickwork in matching/ best lime mortar with the brick courses of the historic structure in traditional brick masonry with special brick for superstructures by joining old brickwork with new brickwork. Grooves shall be cut 5cm deep in alternate course of old brickwork, as directed by Engineer-in-charge/ Architect, and including all leads, lifts and carriage.	8	CUM	6585	52,680.00
5.0		ROOFING				
5.1	MP UADD SOR 10.1	Structural steel work in single section fixed with or without connecting plate including cutting,hoisting,fixing in position and applying a priming coat of approved steel primer all complete.	7870	KG	53.10	4,17,897.00
5.2	Non Sched.13	Providing, hoisting and laying of stone base plate of size (450X 600X 150 MM) under I sections/ wooden beams on the end wall for placing the structural steel/ wooden beam, as per the specifications.	216	NO.S	1540	3,32,640.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
5.3	Non Schd.16	Construction of brick vaulted roof as per old design of thickness of 230 mm(or as per site/design) and bearing of 250 mm using special size bricks in lime surkhi mortar 1: 2 (1 lime : 2 surkhi) including scaffolding/ shuttering/ centering and form work for temporary support structure required for the construction as directed by conservation consultants/ site- in-charge at all heights, including all leads and lifts. (Plan area of internal walls of constructed vault to be measured for the purpose of payment)	500	SQM	2205	11,02,500.00
5.4	Non Schd.17	Lime concrete (for terraces as a filler between vaults) in the ratio of 1:1:1:4 (1 Lime: 1 Surkhi : 1 Coarse sand : 4 graded brick aggregate 40 mm nominal size). Item includes cost of shuttering/ scaffolding/safety measures/ use of specified equipments for workers required to complete the work	130	CUM	5355	6,96,150.00
5.5	Non Schd. 15	Lime plaster 20 mm thick 1:1 (1 slaked Lime: 1 surkhi) over the stone slab of desired level of APP sheet including organic additives like sugarcane molasses, extracts of beil, methi, etc. as per traditional practices. Item includes cost of shuttering/ scaffolding/ safety measures/use of specified equipments for workers required to complete the work.	440	SQM	363	1,59,720.00
5.6	Non Schd. 18	Relaying of old /staked stone tiles/broken stone slab to the roof after cleaning and removal of cement /lime mortar /whitewash/paint etc with lime mortar and pointing of joints .Item includes cost of shuttering /scaffolding /safety measure /use of specified equipment for workers of building applicable to complete the work.	175	SQM	294	51,450.00
5.7	Non Schd. 14	Providing and fixing 1st class well seasoned and chemically treated teak wood work in beams, ties, karis (purlins) and columns, section of various sizes as per drawing/ available at site including carving and moulding as per existing/ as per drawing/ length as per design and traditional wooden joinery of members, and fixed in position in traditional detail/manner as directed by Engineer-in-charge/ Consultants. All members to be finished from all sides with Redoxide of appropriate shade as approved by the Engineer-in-charge/ Consultants. Item also include all leads, lifts and carriage upto all heights including necessary framework/ scaffolding etc. required to complete the task. Contractor to ensure that moisture content of wood is well within IS codes and any timber found unseasoned shall be rejected. All timber to be free of knots, cracks etc. Item also includes Anti termite treatment of wood before fixing the frame at site.	12	CUM	180740	21,68,880.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
5.8.1	NON SOR DSR 2016 22.20.1	providing and laying APP modified pree fabricated 5 layers 3 mm thick water proffing membrane ,black finished reinforced with non woven polyster matt consisting of a coat of bitumin primer for botumen membrane @.4 ltr /sq mtr by the same membrane manufacture of density at 25 degree centigrade ,0.87-0.89 kg/ltr and viscosity of 70-160 cps .the laying of membrane shall be got done through authorised applicator of the manufacturer of membrane 22.20.1 3 mm thick	630	SQM	375.39	2,36,495.70
5.8.2	NON SOR DSR 2016 22.21	Extra for covering top of membrane with Geotextile, 120 gsm non woven, 100% polyester of thickness 1 to 1.25 mm bonded to the membrane with intermittent touch by heating the membrane by Butane Torch as per manufactures recommendation.	630	SQM	68.99	43,460.55
5.9	Non Schd..20	Providing and laying of 150 to 200 mm thick lime dhar on roofing as per traditional practice in 1:2:2:2 (1 lime: 2 sand: 2 old lime powder: 2 brick aggregate 12 mm to 40 mm nominal size) using methi, gur, hemp, belgiri etc. including beating and temping as per specifications. Ramming for minimum 10 days and curing for min 30 days, as directed by Engineer-in-charge/ Consultants, and including all leads, lifts and carriage.	780	SQM	1257	9,80,460.00
5.10	NON SOR DSR 2016 12.16.1	10 cm thick (average) mud phaska of damped brick earth on roofs laid to slope consolidated and plastered with 25 mm thick mud mortar mixed with bhusa @ 35 kg per cum of earth and gobri leaping with mix 1:1 (1 clay : 1 cow dung) and covered with flat tile bricks, grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement and finished neat: 12.16.1 With common burnt clay F.P.S.(non modular) brick tile of class designation 10	675	SQM	537.03	3,62,495.25
5.11	NON SOR -75	Providing gola 75mm x 75mm in lime concrete 1:2:2:2 (1 lime: 2 surkhi: 2 old lime powder: 2 brick aggregate 12mm to 200mm nominal size) using methi, gur, hemp, belgiri etc. including beating and temping as per specification.	400	MTR	123.00	49,200.00
5.12	Non Schd..21	Anti-termite treatment of wooden ceiling and existing vertical wooden member (as per prescribed process and specification by using cloropyriphos 20% E.C. or equivalent) including removal of old paint layer and polishing of wooden planks of flooring/ roofing (old planks which have to be reused). Item includes cost of safety measures/ use of specified equipments for workers of building required to complete the work .	68	SQM	68	4,624.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
5.13	Non Sched..22(Punjab SOR 13.05.2)	Making Khurra for 450X 450 mm with 18 mm lime mortar as a base, over additional layer of APP waterproofing layer and sealing all edges,including stone slab of size 600x450x.075 mm (as per detail) complete in all respect .	8	EACH	1640.00	13,120.00
5.14	Non Sched..23((Punjab SOR 13.13)	Providing and fixing traditional water spout as per traditional design with overhang of not less than 600 mm and made from single piece stone as per drawing.	20	EACH	1790.00	35,800.00
5.15	Non Sched..24	WATER DOWN DRAIN PIPE - Providing and fixing CI PIPE of 150 mm dia with all fixing accessories including clamps, angle, screw, nut bolt and required cutting and chiseling etc. as per the instruction of site engineer/ architect. Item includes cost of shuttering/scaffolding/safety measures/ use of specified equipments for workers of building required to complete the work .	45	MTR	1150	51,750.00
5.16	Non Sched..53	Providing and laying twin layer brick tiles over wooden planks, as directed by Engineer incharge/ Consultants , and including all leads, lifts and carriage. All complete.	570	SQM	758	4,32,060.00
5.17	Non Sched.-50	Providing and fixing new terracotta roof tiles (combination including of slate and ridge tile) of size 320x400 x275 mm to exactly match size, thickness, shape, glaze properties, colour and design including of the exact shade and colour to match the original historic tiles on site. The tiles to be 20mm thick, fixed using non corrosive Stainless Steel / Brass counter sunk screws (2 nos. per tile) as per original detail. Item to include glazed decorative moulded ring of the same size, design and colour as per the original rings installed on site. The decorative rings to be fixed using lime mortar as per original detail. Sample of tiles to be shown to the Architect or Engineer in Charge for necessary approvals before ordering bulk quantities for fixing the same on site. Item to include all necessary testing, sampling, tools, hardware, Battens, scaffolding etc. complete	505	SQM	801	4,04,505.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
6.0		REFIX /REPAIR DOORS/WINDOW /VENTILATORS AND OTHER WOODEN ITEMS				0.00
6.1	Non Sched..25	Repairing of frame and re-fixing the frames of doors, windows, clerestory windows, ventilators, other frames and wrought frame wherever frame is damaged/ broken/ deteriorated has to be replaced with 1st class, well seasoned, chemically treated, teak wood, as per traditional wooden joinery of members, and fixed in position with the help of holdfasts/ traditional holdfast/ handmade nails etc. Item inclusive of carving/ ingraving of patterns on frames wherever missing/ damaged/ later additions are to be replaced as per original detail/ drawing and removal of multiple layer of paint/ enamel paint (which has been done repeatedly on the frame) as prescribed process and specifications and finish with primer and Redoxide as of appropriate shade as approved by the Engineer-in-charge. It will include all leads, lifts and carriage upto all heights. Item also includes anti-termite treatment of wood before fixing the frame at site, coating/ painting of section of embedded timber coming in contact with masonry, with tar application/ solignum. Measurement of final finished product will be used for the purpose of volume calculation and for payments.	9	CUM	38640	3,28,440.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
6.2	Non Schd..26	<p>Repair and refixing of doors, windows and ventilator shutters wherever shutter is damaged/ broken/ deteriorated has to be replaced with 1st class well seasoned, and chemically treated, teak wood, single/ double leaves, 40-50 mm thick fully/ partially glazed openable shutters, panneling of doors in wood/ glass using 6 mm thick Clear float Glass of Saint Gobain or equivalent make, for doors/ windows/ ventilator as per the existing original design and pattern/or design as per drawing instructed by the Consultants including all necessary fittings/ hardware like screws, nails, metal spikes, ornamented nails, metal patterns of flower, metal ribets, parliamentary hinges, tower bolts, handles, traditional handmade MS nails, traditional locking system, decorative features (butt hinges/ tower bolt/ handle/ door Aldrop/lock) of the same design, size and weight, etc. Item to also includes making of all the mouldings and design of the panels wherever missing/ damaged/ latter additions are to be replaced as in the original detail with all beading, patti, carving, marking, as per size given/ original existing detail/ drawing of shutter / panel and removal of multiple layer of paint/ enamel paint (which has been done repeatedly on the shutter) as prescribed process and specifications and finish with primer and Redoxide as approved by the Engineer-in-charge/ Consultants .Item also includes anti-termite treatment of wood including all leads, lifts and carriage upto all heights. Mode of Measurement: Area of the door/window which has to be changed or made new in the entire door shall only be paid. Contractors to not charge the entire area of the shutter unless the entire shutter is made new. The area of the shutter includes the entire opening with all the leaves.</p>	195	SQM	6250	12,18,750.00
7.0		NEW DOORS/WINDOW /VENTILATORS				

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
7.1	Non Schd..27	<p>Providing and fixing 1st class well seasoned and chemically treated Teak woodwork in frames of doors, windows, clerestory windows, ventilators, other frames and wrought frame of approved size , as per traditional wooden joinery of members, and fixed in position in traditional detail/manner with the help of holdfasts/ traditional holdfast/ handmade nails etc. Item is inclusive of carving/ ingraving of patterns on frames as per existing patterns on original frames/ detail drawing and finish with primer and redoxide as approved by the Engineer-in-charge/ Consultants. Item also includes all leads, lifts and carriage upto all heights, including necessary framework/scaffolding etc. required to complete the task. Contractor to ensure that moisture content of wood is well within IS codes and any timber found unseasoned shall be rejected. All timber to be free of knots, cracks etc..Item also includes anti-termite treatment of wood before fixing the frame at site, coating/painting of section of embedded timber coming into contact with masonry with tar application/ solignum. Measurement of final finished product will be used for the purpose of volume calculation and for payments.</p>	4.0	CUM	187425	7,49,700.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
7.2	Non Sched..28	Providing and fixing new doors, windows and ventilators shutters of 1st class well seasoned and chemically treated teak wood single/ double leaves 40-50 mm thick fully/partially glazed openable shutters, paneling of door in wood/ glass using 6 mm thick clear float glass of Saint Gobain or equivalent make, for doors/ windows/ ventilators as per the existing original design and pattern/ or design as per drawing/ as instructed by the Consultants including all necessary fittings/ hardwares like screws, nails, metal spikes ,ornamented nails, metal patterns of flower, metal ribets, parliamentary hinges, tower bolts, handles, traditional MS handmade nails, traditional locking system (hook and chain), decorative features (butt hinges/ tower bolt/ handle/ door Aldrop/ lock) of the same design, material, size and weight, etc . Item to also include making of all the mouldings and design of the panels as in the original detail with all beading, patti, carving, marking, as per original existing designs and size of shutters. Shutters/ panels should be finished from all sides with wooden polish of appropriate shade as approved by the Engineer-in-charge/ Consultants. Item also include all leads, lifts and carriage upto all heights including necessary framework/scaffolding etc. required to complete the task. Contractor to ensure that moisture content of wood is well within IS codes and any timber found unseasoned shall be rejected. All timber to be free of knots, cracks etc. Item also includes anti-termite treatment of wood before fixing the frame at site, coating/ painting of section of embedded timber coming into contact with masonry with tar application/ solignum. Overall Length and width of the shutter/ panel will be measured of final finished product for the purpose of area calculations & payments.	110	SQM	8100	8,91,000.00
8.0		FLOORING				0.00
8.1	Non Sched .29	Providing and laying hand dressed sand stone flooring of size 300x450x100 mm or as approved over 20 mm (average) thick base of lime Mortar 1:2 (1 Slaked lime:2 coarse sand) including flush pointing with Lime Mortar with an admixture of pigment to match the shade of stone, joints between stones should be less than 12 mm, pattern & design as per Consultants ural drawing.	1300	SQM	2300	29,90,000.00
8.2	Non Sched..30	Restoration/ repairing of sand stone flooring of existing floors including replacement/ patch work of damaged stone by using original size stone, wherever required. Item inclusive of removal of damaged stone and base work and fixing of new stone as per site .	100	SQM	1855	1,85,500.00
8.3	Non Sched..31	Sub-base for flooring : sub-base of 5 0mm thick bed of local sand/ morum/ hard copra evenly spread and rammed brick ballast bed 150 mm thick with lime mortar in equal proportion, as directed by Engineer-in-charge/ Consultants, and including all leads, lifts and carriage.	1300	SQM	348	4,52,400.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
8.4	Non Schd..32	Plinth Protection- Providing and laying of the modular brick tile on edge flooring on 20mm thick lime concrete leveling course laid over the sub- base of 50mm thick bed of local sand evenly spread and rammed with joints finished and flushed with bricks of class designation 150, on a bed of 12 mm lime surkhi mortar (1:2), including filling the joints with same mortar over the sub-base 150 mm thick of brick ballast (40 mm nominal size), filled with lime mortar 1:2 of equal quantity levelled and compacted as per the instruction of site engineer/ architect.	320	SQM	1166	3,73,120.00
9.0		FINISHING				0.00
9.1	Non Schd..35	Lime plaster 15 mm to 40 mm thickness on flat wall/ vertical surfaces. Providing and application of lime–surkhi Plaster 1:1 (1 slaked Lime: 1 surkhi) on wall surfaces of thickness between 15 mm to 40 mm including organic additives like sugarcane molasses, extracts of beil, methi, etc. as per traditional practices. The preparation of mortar is to be done following traditional practices includes using chakki/garat (wet grinding of lime and sand by heavy stone mill / chakki/garat), application of mortar in 3 layers with last layer 6 mm thick, with a gap of minimum 3 days and not more than 10 days from previous layer. The item rate includes application of loi, tampering, beating, reworking of plaster till the shrinkage of cracks disappear and desired finish has been achieved and curing has been done for 10 days. Item also includes all leads and lifts, establishing workyard/ chakki, scaffolding, formwork tools and implementation etc.	3440	SQM	721	24,80,240.00
9.2	Non Schd..36	Lime plaster 5 to 10 MM thickness on ceiling and curved surfaces. Providing and application of Lime – surkhi Plaster 1:1 (1 slaked Lime: 1 surkhi) on wall surfaces of thickness between 5 to 10 MM including organic additives like sugarcane molasses, extracts of beil,maithi, etc. as per traditional practices. The preparation of mortar is to be done following traditional practice includes using chakki/garat (wet grinding of lime and sand by heavy stone mill / chakki/garat), application of mortar in single layers, with a gap of minimum 3 days and not more than 10 days from previous layer. The item rate includes application of Loi, tampering, beating, reworking of plaster till the shrinkage cracks disappear and desired finish achieved and curing for 10 days. Item also includes all lead and lift, establishing work yard / chakki, scaffolding, formwork tools and implements etc.	750	SQM	861	6,45,750.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
9.3	Non Schd..37	Decorative plaster work in lime surkhi mortar (1:2) as per traditional practice and design, the mortar should be prepared by the grinding mill only. The thickness varying from 10 mm to 100 mm as per design, as directed by Engineer-in-charge/ Consultants, and including all leads, lifts and carriage. All complete.	860	SQM	1213	10,43,180.00
9.4	Non Schd..38	Providing new decorative Stucco work in lime, sand, Surkhi mortar, (1:2:1) 20 mm - 40mm thick as per existing design work/ traditional practices by skilled craftsman, the stucco work should be done as per restoration nature, the mortar should be prepared by grinding mill adding gur, methi & gugal. Sample of the design and details of the decorative stucco work to be shown to the consultants for necessary approvals before finalizing and finishing the same in Lime and Sand plaster in proportions 1:2 with the same, not more than 10 mm in thickness and a final coat of 5 mm Thick lime putty. Item to be paid only for the part of the design made in new plaster and not the entire panel. Item to include curing for 21 days using water pumps or any other necessary methods to avoid any surface cracks. In case of development of surface cracks, the same to be redone as part of rectification works to achieve the necessary level of finish as directed by Consultants or Engineer-in-charge. Item to include all necessary tools, scaffold if required etc. complete	443	SQM	2345	10,38,835.00
9.5	Non Schd..39	Providing & applying Lime kara 1:2 (1lime cream : 2 Zikki powder) grinding mortar with grinding mill/ manually on lime base, on all flat surface in two coats. First coat applying 3 mm to 4 mm thick and curing properly at least 7 days, second finishing coat done after 7days of previous coat as per traditional practice (thickness not more than 6 mm.)	3440	SQM	938	32,26,720.00
9.6	Non Schd..40	Providing & applying Lime kara 1:2 (1lime cream : 2 Zikki powder) grinding mortar with grinding mill/manually (on lime sand/sand plaster base) on ceiling/ curved lime plaster in two coats. First coat applying 3 mm to 4 mm thick and curing properly at least 7 days, second finishing coat done after 7days of previous coat as per traditional practice (thickness not more than 6 mm.)	750	SQM	1072	8,04,000.00
9.7	Non Schd..41	Providing lime kara on decorative/ ornamental surfaces or embellishments as per decorative/ ornamental designs as per old existing carving on surface highly precise	1303	SQM	1553	20,23,559.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
9.8	Non Schd..58	Overlapped/extruded pointing in lime mortar 1:1 (1 Lime : 1 sand) including raking out deteriorated joints in lime/ cement plaster as per prescribed process and specification . (proportion of mortar may change/vary from location to location within the site) as directed by conservation architect/site-in-charge and edging of existing plaster around the edge. Item includes cost of shuttering/scaffolding/safety measures/use of specified equipment for workers required to complete the work.	115	SQM	340	39,100.00
9.9	Non Schd..59	Cleaning/ polishing/ treatment of decorative marble stone sculpture surface to clean the yellowness, blackness, algae growth, dust, dirty oil accretions, lime and gypsum deposits, soot, graffiti, joining of gaps, taking out nails and other additions, filling of holes/ voids in marble and application of preservatives coating to prevent superficial decay, under the strict supervision of archaeological chemist or art conservator. (Elevation area of surface will be measured for payment Purpose)	15	SQM	672	10,080.00
9.10	Non Schd..60	Repairing of sand stone staircase including straightening of iron flats .and fixing/ cleaning of stone tread/ riser surface, plastering/ stone patchwork wherever required and painting of iron flats with appoxy paint. (Plan area of stair will be measured for payment Purpose)	25	SQM	1132	28,300.00
10.0		OTHER WORKS				
10.1	Non Schd..43	Providing & fixing new sandstone chajjas (of approved quality). (As per existing size length x width 600 to 750 and thikness 50-75 mm) by replacing damaged/ missing stone chajja, wherever required as per old existing design, including cost of dismantling/ making of wall/ parapet where chajja is inserted/ fixed following existing design & construction details. Item includes cost of safety measures/ use of specified equipment for workers of building required to complete the work at all heights & including all leads and lifts.(External edge of the chajja will be measured for payments.)	30	MTR	2410	72,300.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
10.2	Non Schd..44	Repair of existing sandstone chajja (of approved quality) (As per existing size length x width 600 to 750 and thikness 50-75 mm) by replacing damaged/ missing stone chajja, wherever required as per old existing design, including cost of dismantling/ making of wall/ parapet where chajja is inserted/fixed following existing design & construction details. Item includes cost of safety measures/ use of specified equipments for workers of building required to complete the work at all heights & including all leads and lift.	43	MTR	1175	50,525.00
10.3	Non Schd..45	Cleaning, removal of multiple layer of paint and re-painting of existing main gate and MS railing along with statue (with two coat of enamel paint over base coat of primer) and anti-rust treatment of old grill, metal balustrade and jaali work of railing etc.	20	SQM	99	1,980.00
10.4	JOB WORK	Restoration of existing sandstone at "Octagonal chattri of size 4.6 x 4.6 Mtr " at front facade of the building with same Design , Pattern & size as existing/as per the original details . Item to include fabricating the damaged balusters/ piers, decorative brackets, parapet, thambli, dasa, chattri, jaali, arches etc. as per the original details and design on site, including preparing necessary base for fixing the missing elements or fixing the same elements after repair using SS dowels (or approved fixing accessories) , filling all the gaps and repair all major/ minor cracks above arch level in lime mortar including cornice of chattri by SS dowels/manual stitching/ realignment/ using adhesive for very minor cracks as directed by the Consultants or Engineer-in-charge. Item to include, getting approval of samples of any missing elements from the Engineer-in-charge before fixing the same on site. Item to include all necessary tools, hardware etc. Mode of Measurement: The item to be paid as per the complete jharokha including from top point of pinnacle to last point of hanging kiosk as one job . .(type-1)	2	JOB	300000	6,00,000.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
10.5	JOB WORK	Restoration of existing sandstone " Octagonal chatri of size 1.8 x1.8 Mtr " at front facade of the building with same Design , Pattern & size as existing/as per the original details . Item to include fabricating the damaged balusters/ piers, decorative brackets, parapet, thambli, dasa, chattri, jaali, arches etc. as per the original details and design on site, including preparing necessary base for fixing the missing elements or fixing the same elements after repair using SS dowels (or approved fixing accessories) , filling all the gaps and repair all major/ minor cracks above arch level in lime mortar including cornice of chattri by SS dowels/manual stitching/ realignment/ using adhesive for very minor cracks as directed by the Consultants or Engineer-in-charge. Item to include, getting approval of samples of any missing elements from the Engineer-in-charge before fixing the same on site. Item to include all necessary tools, hardware etc. .(type-2)	2	JOB	150000	3,00,000.00
10.6	JOB WORK	Restoration of existing "balcony of size 2.2 x4.4 mtr " in sandstone & lime mortar" at front facade on site of the same design & size as per the original . Item to include fabricating the damaged balusters/ piers, decorative bracket , parapet, thambli, dasa, chattri, arches etc. as per the original details and design on site, including preparing of necessary base for fixing the missing elements or fixing the same element after repair using SS dowels, filling all gaps and repairing all major/ minor crack by SS dowel/ realignment/ using adhesive ,and lime plaster and finish with lime kara (lime mortar part) as directed by the ConsultantS or Engineer-in-charge. Item to include, getting approval of samples of any missing elements from the Consultants before fixing the same on site. Item to include all necessary tools. hardware etc. Mode of Measurement: The item to be paid as per the complete on balcony including from top point of pinnacle to last point of hanging kiosk as one job .	1	JOB	300000	3,00,000.00
10.7	Non Sched.46	Supplying and fixing rough dressed stone ' dasa ' stone /parapet cover of size width 600x thickness 100 mm ,with all carving and detail etc. in lime mortar 1:1 including pointing with admixture of pigment matching with the stone shade .Patch work as required including all lead ,lift upto all height.	8	MTR	1680	13,440.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
10.8	JOB WORK	Repairing of existing staircase as per old design intact, including removal of multiple layer of enamel paint from the surface, masonry work wherever required and finish with polishing as per the prescribed process and specification and polishing of fixture. Item includes cost of opening of wall ,re building (if required) shuttering/scaffolding/safety measures/use of specified equipments for workers of building required to complete the work.	1	JOB	10000	10,000.00
10.9	JOB WORK	Providing and fixing Traditional Watch including all assembling and fixing mechanism as approved by engineer-in-charge .	1	No.s	200000	2,00,000.00
10.10	JOB WORK	Providing and fixing of trap doors as per design with all fittings/ fixing/assembly/ finishing/ operation accessory including all leads lift and scaffolding .	1	No.s	25000	25,000.00
10.11	DSR 2016 7.33.1	Providing and fixing stone jali 40 mm thick throughout in cement mortar 1:3 (1 cement : 3 coarse sand), including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment, matching the stone shade, jali slab without any chamfers etc. 7.33.1 Red sand stone	12	SQM	5904.68	70,856.10
10.12	Non Sched.61	Restoration of existing traditional brick and lime massonry "Jaali" in the same design,pattern & size as per the original in building as directed by the Architect or Engineer in Charge. Item to include getting samples of jaali (if any part is damage) from the Architect before fixing the same on site. Item to include all necessary tools, hardware, etc All complete. Mode of Measurement: The item to be paid as per the elevation area of the jali restored/ or constructed new only, and not the entire area of the jaali .	53	SQM	2130	1,12,890.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
10.13	JOB WORK	Repair of existing Wooden clock shaft of size 1.2x.8 mtr including providing and fixing all required hardware, wooden pannel ,nails ,wedge etc. Item include removal of multiple layer of enamel paint from the surface of clock shaft /fixture as per prescribed process and specification and re polishing with approved polishing .Item also includes cost of shuttering /scaffolding /safety measure /use of specified equipment for workers of building required to complete the work .	1	JOB	25,000.00	25,000.00
10.14.1	NON SOR	Cleaning and polishing existing finials over chatri /Balcony using with light dry dusting and removal of surface crusts , bubbling , loose/ flaking paint using careful sand papering with fine wet and dry carborundum paper and wiping clean with proper care as per prescribed process and specification . Item also includes cost of shuttering /scaffolding /safety measure /use of specified equipment for workers of building required to complete the work .	92	EACH	980.00	90,160.00
10.14.2	Non Sched.47	Repair ,Cleaning and Re-fixing of hanging decorative stone brackets as per old design including patch repair(if any) and chemical wash(amonia or as approved) with complete length of support stone as per old design ,materials and specification .Item includes cost of shuttering /scaffolding /safety measure /use of specified equipment for workers of building required to complete the work .	138	EACH	131	18,078.00
10.15	JOB WORK	Repairing and cleaning of existing "jharokha" of front facade as per old design intact ,including repair of damaged member i.e base , decorative columns , chatri etc with traditional brick massonry with lime mortar and finish with lime kara werever required ,and refixing of new elements which is missing as directed by the Consultants or Engineer in Charge. .Item includes cost of shuttering /scaffolding /safety measure /use of specified equipment for workers of building required to complete the work .	2	JOB	12,000	24,000.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
10.16	Non Sched.42	Construction of Parapet, with new or salvaged materials, in brickwork as per original designs existing at site / designs provided by site engineer , of height upto 800 MM and width upto 450 MM including decorative brickwork , at desired location, Item includes lime concrete coping (1:1 lime surkhi mortar with 10MM brick aggregate)/brick coping on top of the parapet, 6mm thick lime surkhi plaster 1:1(1 lime :1 surkhi) and lime Kara (not more than 3 mm thick) on all surfaces, all sides, curved and decorative elements, pillars, balustrade, Copings, handrail etc. as per decorative ornamental designs. Item also includes cost of shuttering /formwork/ scaffolding /safety measure /use of specified equipment for workers of building required to complete the work. Design of Parapet may change at each level of building and is part of the Item. (Running length of the parapet at the interior base towards terrace side will be measured for payment of this item)	96	MTR	2840	2,72,640.00
11.0		SCAFFOLDING & SUPPORT FRAME				0.00
11.1	NON SOR	Providing and fixing double scaffolding system (cup lock type) on the exterior side of building/structure, upto 25 metre height, above ground level, including additional rows of scaffolding in stepped manner as per requirement of site, made with 40mm dia M.S. tube, placed 1.5 metre centre to centre, horizontal & vertical tubes joint with cup & lock system with M.S. Tubes, M.S. tube challis, M.S. clamps and staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for execution of work of cleaning and/ or pointing and/ or applying chemical and removing it thereafter. The scaffolding system shall be stiffened with bracings, runners, connecting with the building etc, wherever required, if feasible, for inspection of work at required locations with essential safety features for the workmen etc., complete as per directions and approval of Engineer-in-charge. Note:- (1) The elevational area of the scaffolding shall be measured for payment purpose. (2) The payment will be made once only for execution of all items for such works.	2100	SQM	144.14	3,02,683.50
		LANDSCAPE				0.00

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
12.1	Non Schd.70	PATHWAY WITH TOE WALL -Providing and laying of the modular brick tile on edge flooring on 20mm thick lime concrete leveling course laid over the sub- base of 50mm thick bed of local sand evenly spread and rammed with joints finished and flushed with bricks of class designation 150, on a bed of 12 mm lime surkhi mortar (1:2), including filling the joints with same mortar over the sub-base 150 mm thick of brick ballast (40 mm nominal size), filled with lime mortar 1:2 of equal quantity levelled and compacted Item also inclusive of toe wall in stone masonry of 460x250 and 300 x230 mm height with pcc sub base of 1:4:8 100 mm thick both side of pathway as per the instruction of site engineer/architect. (plan area including toe wall top will be measured for payments)	206	SQM	1760	3,62,560.00
12.2.	MP UADD SOR 6.1.1	Brick work with well burnt chimney bricks in bull spatent trench kiln manufactured by ghol process, crushing strength not less than 40kg/sq cm and water absorption not more than 15% in foundation and plinth. Cement mortar 1:4 (1 cement : 4 coarse sand)	10	CUM	3995.10	39,951.00
12.3	MP UADD SOR 4.1.6	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level Cement concrete grade M-7.5(Nominal Mix)with 40 mm maximum size of stone aggregate	41	Cu M	2890.80	1,18,522.80
12.4	MP UADD SOR 20.1.2	Centering and shuttering including strutting, propping etc. and removal of form for all heights :Walls(anythickness)including attached pilasters,butteresses,plinth and string courses etc	180	SQM	194.40	34,992.00
12.5	MP UADD SOR 2.8.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m..All kinds of soil	195	CUM	116.10	22,639.50

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
12.6	Non Schd.71	DRIVEWAY - Providing and laying 125 to 150 mm thick M-25 RMC concrete for stamp concreting work to walkways in position ready mixed concrete as per mix design of specified grade for cement concrete work including work including pumping of concrete to site of laying, finishing laid over p.c.c sub base.including cost of color hardener to the concrete(as approved colour), admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength, durability. Item also include cost of stamping/texture /imprint and cutting Contraction joints as required or as per direction of the Engineer - in - charge. M-25 grade cement concrete (Stamped concrete, often called textured or imprinted concrete, is concrete that replicates stones such as slate and flagstone, tile, brick and wood.)	31	CUM	6600	2,04,600.00
12.7	DSR 2016 4.5.1	KERBSTONE SIDE OF DRIWAY -Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand) including the cost of required centering, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete.Cement concrete grade M-15 (Nominal Mix) with 20 mm maximum size of stone aggregate	7	CUM	6095.21	42,666.44
13.1	LAND. DSR 2016 2.1	Trenching in ordinary soil up to a depth of 60 cm including removal and stacking of serviceable materials and then disposing of surplus soil, by spreading and neatly leveling within a lead of 50 m and making up the trenched area to proper levels by filling with earth or earth mixed with sludge or/and manure before and after flooding trench with water (excluding cost of imported earth, sludge or manure).	52	CUM	41.27	2,145.78
13.2	LAND. DSR2016 2.2	Supplying and stacking of good earth at site including royalty and carriage up to 5 km (earth measured in stacks will be reduced by20% for payment).	78	CUM	299.30	23,345.01
13.3	LAND. DSR2016 2.3	Supplying and stacking sludge at site including royalty and carriage up to5 km (sludge measured in stacks will be reduced by 8% for payment).	52	CUM	212.00	11,023.74
13.4	LAND. DSR2016 2.4	Supplying and stacking at site dump manure from approved source, including carriage up to 5 km (manure measured in stacks will be reduced by 8% for payment) Screened through sieve of I.S. designation 4.75 mm	31	CUM	188.24	5,835.29

Item	Ref.	Description	Qty	Unit	RATE	AMOUNT
13.5	LAND. DSR2016 2.5	Rough dressing the trenched ground including breaking clods.	1040	SQM	0.81	842.40
13.6	LAND. DSR2016 2.6	Uprooting weeds from the trenched area after 10 to 15 days of its flooding with water including disposal of uprooted vegetation.	1040	SQM	2.61	2,714.40
13.7	LAND. DSR2016 2.7	Fine dressing of the ground	1040	SQM	1.94	2,012.40
13.8	LAND. DSR2016 2.8	Spreading of sludge, dump manure and / or good earth in required thickness as per direction of Officer-in-charge (Cost of sludge, dump manure and / or good earth to be paid separately).	160	CUM	27.86	4,456.80
13.9	LAND. DSR2016 2.9	Mixing earth and sludge or manure in the required proportion specified or directed by the Officer-in-charge.	160	CUM	19.22	3,074.40
13.1	LAND. DSR2016 2.10.1	Grassing with selection No.1 grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn, free from weeds and fit for mowing including supplying good earth, if needed (the good earth shall be paid for separately).In rows 5 cm apart in both directions	1040	SQM	9.36	9,734.40
Grand Total						3,37,67,013.12

Estimate for Electrical Works of Raja Gokuldas Dharmshala, Jabalpur

S.NO	REF NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
		SUB-HEAD I: INTERNAL WIRING				
		All wiring Item FRLS including provision of conduit, conduit accsories , circuit wiring, switch, box and all fitting completed as required.				
1	(1.10.3)	Wiring for light point / fan point /exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC Conduit, with modular switch,modular plate ,suitable GI Box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
		a) Group C	230	Point	646.20	1,48,626.00
2	-1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed PVC conduit 2 way modular switch,modular plate,suitable GI box and earthing the point with 1.5 sq.mm .FRLS PVC insulated copper conductor single core cable etc as required.	15	Point	693.00	10,395.00
3	-1.12	Wiring for light /power plug with 2x4 sq.mm FRLS PVC insulated copper conductor single core cable in surface /recessed PVC conduit along with 1 No 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	2000	Meter	145.80	2,91,600.00
4	-1.13	Wiring for light /power plug with 4x4 sq.mm FRLS PVC insulated copper conductor single core cable in surface /recessed PVC conduit along with 2 No 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	500	Meter	247.50	1,23,750.00
					0.00	0.00
5		Wiring for circuit/submain wiring alongwith earth wire with the following sizes of FR PVC insulated copper conductor single core cable in surface/recessed PVC Conduit as required.			0.00	0.00
(i)	(1.14.1)	2x1.5 sq.mm + 1x1.5 sq.mm earth wire	900	Meter	95.40	85,860.00
(ii)	(1.14.2)	2x2.5 sq.mm + 1 x 2.5 sq.mm earth wire	2300	Meter	117.90	2,71,170.00
(iii)	(1.14.3)	2 x 4 sq.mm + 1 x 4 sq.mm earth wire	200	Meter	145.80	29,160.00
(iv)	(1.14.4)	2x6 sq.mm + 1x6 sq.mm earth wire	130	Meter	198.90	25,857.00
(v)	(1.14.8)	4x4 sq.mm + 2x4 sq.mm earth wire.	180	Meter	247.50	44,550.00
(vi)	(1.14.10)	4x10 sq.mm + 2x10 sq.mm earth wire.	150	Meter	537.30	80,595.00
(vii)	(1.14.11)	4x16 sq.mm + 2x16 sq.mm earth wire	150	Meter	794.70	1,19,205.00
					0.00	0.00
5	(1.31)	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch ,connection etc as required.	80	Each	248.40	19,872.00

6	(1.32)	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 6 pin 15/16 and 5/6 amps modular socket outlet with shulter and 15/16 amps modular switch connection, etc as	80	Each		272.70	21,816.00
7	(1.38)	Supplying and fixing call bell/ buzzer suitable for single phase ,230 volts ,complete as required.	5	Each		54.90	274.50
8		Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as				0.00	0.00
(i)	(1.21.2)	25 mm	1200	Meter		58.50	70,200.00
(ii)	(1.21.3)	32 mm	300	Meter		76.50	22,950.00
9	ELE NS 1	S/F Wooden conduit · Supplying and fixing of following sizes of wooden conduit along with accessories in surface/recess including, fixing cap with nails, clips, cutting the wall wherever necessary and making good the same in case of recessed conduit as required.				0.00	0.00
		50 MM WIDE	300	MTR		49.50	14,850.00
10	NS	Vintage style electrical toggle Bakelite switch in round shape on ceramic/PVC based.(black colour base) as per direction of architect .SSK or Equivalent brand				0.00	0.00
	ELE NS 31	5/6 amps switch	50	No.s		585.00	29,250.00
	ELE NS 32	6 pin 15/16 amp socket outlet	40	No.s		675.00	27,000.00
11	(2.18)	Supplying and fixing 20 amps, 240 volts SPN industrial type, socket outlet with 2 pole and earth metal enclosed plug top along with 20 amps 'C' Curve, SP, MCB in sheet steel encloser on surface or in recess with chained metal cover for the socket outlet and complete with conncections, testing & commissioning etc as	30	Each		781.20	23,436.00
12	(NS)	Supplying and fixing of 1no 16 Amp moulded switch and 2 nos 6amp moulded socket in protection with box and including with 3x2.5sqmm. (P+N+E) FRIS. PVC insulated copper conductor wire in surface / recessed in IS embossed black enameled 2mm thick PVC conduit and earthing the 3rd pin complete as per specification and as required. (2 set per circuit shall be wired) -	10	Each		1800.00	18,000.00
13	(NS)	Supplying & fixing 75mm x 75mm x 10 mm zinc passivated box with mould cord outlet complete with RJ 45 sockets as required for computer data point.	10	Each		405.00	4,050.00
14	(NS)	Supplying & laying CAT 6 for LAN wiring in PVC conduit / Cable Tray complete as required.	2000	Each		63.00	1,26,000.00
						0.00	0.00
		SUB-HEAD II:- DISTRIBUTION BOARDS				0.00	0.00

1	(2.8)	Supplying and fixing following way prewired TP & N, MCB distribution board of sheet steel for 415 volts on surface /recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FRLS PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator).			0.00	0.00
	(2.8.6)	6 way (4+18) Double door	3	Each	8546.40	25,639.20
	(2.8.7)	8 way (4+24) Double door	6	Each	9360.00	56,160.00
2	(2.7)	Supplying and fixing following way, single pole and neutral, prewired, sheet steel, MCB distribution board, 240 volts, on surface /recess, complete with loose wire box, terminal blocks, duly prewired with suitable size FRLS PVC insulated copper conductor upto terminal blocks, tinned copper bus bar, neutral link, earth bus, din bar, detachable gland plate, interconnections, powder painted including earthing etc as required. (But without			0.00	0.00
	(2.7.4)	4 way (2+4) Double door	3	Each	2257.20	6,771.60
3	2.9	Supplying and fixing following way prewired vertical type 415 volts TP&N MCB distribution board surface/recessed of sheet steel dust protected duly powder painted inclusive of 200amps tinned copper bus bar common neutral link earth bar din bar for mounting MCB's terminal connectors for all incoming and outgoing circuits duly prewired with FRLS PVC insulated copper conductor upto the terminal connector/ neutral link earthing etc. as required (But without MCB/MCCB) (Note: VTPN DB is normally used where 3 phase outlets are required).			0.00	0.00
	2.9.5	4 way double door	2	Each	7110.90	14,221.80
4		Supply and fixing 5 amps to 32 amps rating,240/415 volts.'C' curve miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and commissioning etc.as required			0.00	0.00
	(2.10.1)	a) Single pole	400	Each	144.00	57,600.00
	(2.10.5)	b) Triple pole	RO	Each	585.00	
5	2.12	Supply and fixing following rating,double pole,240 volts,MCB in the existing MCB DB complete with connection ,testing and commissioning etc. as required.			0.00	0.00
	(2.12.1)	a) 40 amps	4	Each	196.20	784.80
6		Supply and fixing following rating,four pole,415 volts,MCB in the existing MCB DB complete with connection ,testing and commissioning etc. as required.			0.00	0.00
	(2.13.2)	a) 63 amps	20	Each	603.00	12,060.00
	(2.13.3)	b) 100 amps	5	Each	765.90	3,829.50
7		Supply and fixing following rating,double pole (single phase and neutral),240 volts,RCCB having a sensitivity current upto 300 amp in the existing MCB DB complete with connection ,testing and commissioning etc. as required.			0.00	0.00
	(2.14.1)	a) 25 amps	10	Each	1480.50	14,805.00

	(2.14.2)	a) 40 amps	50	Each	1530.00	76,500.00
					0.00	0.00
		SUB-HEAD III :- WIRING FOR TELEPHONE			0.00	0.00
					0.00	0.00
1		Supplying and fixing of following size/modules, GI box along with modular base & cover plate for modular switches in recess etc as required.			0.00	0.00
	(1.27.1)	a) 75 mm x 75 mm x 60 mm deep	50	Each	153.00	7,650.00
2		Supplying and drawing following pair, 0.5.mm dia FR PVC insulated annealed copper conductor, unarmoured telephone cable in the existing surface/ recessed steel/ PVC conduit as required.			0.00	0.00
a)	(1.18.2)	2 Pair	1500	Meter	18.00	27,000.00
3	(1.19)	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	100	Meter	22.50	2,250.00
4		Supplying and fixing following modular switch/ socket on the existing modular plate and switch box including connections but excluding plate etc .as required.			0.00	0.00
	(1.24.6)	a) Telephone socket outlet	10	Each	81.00	810.00
	(1.24.7)	a) TV socket outlet	6	Each	81.00	486.00
5		Supplying and fixing of the following sheet steel clad wall / recess mounting telephone tag blocks of krone make constructed from 14 SWG sheet steel finished with red oxide coating of two coats of paint with hinged gasketted powder coated door and complete.			0.00	0.00
	(NS)	a) 10 pairs	2	Each	1350.00	2,700.00
	(NS)	b) 50 pairs	6	Each	3150.00	18,900.00
		GRAND TOTAL				19,36,634.40

Estimate for Air Conditioning Works of Raja Gokuldas Dharmshala, Jabalpur

Providing and installation of air conditioning system with VRF system

S.No.	Description of Items.	Unit	Qty.	RATE	AMOUNT
1	Supply of Variable refrigerant flow(VRF) modular type air-conditioning system suitable to operate from 410+10% volt, 50 Hz, 3 phase AC power supply for cooling & heating by using 100% inverter driven capacity control compressors (Hermetically sealed 3-D scroll type-All compressors are Inverter Based) complete with individual controller and fittings with necessary wiring, connection & termination, painted MS frame for outdoor unit etc. as per quantity given below including full charging of R-410A refrigerant gas complete as per specifications.				
A)	Outdoor Units				
a	12 HP	No	2	288000	576000
b	8 HP	No	2	216000	432000
				0	0
B)	Indoor units (Nominal capacity)				
	Supply of Floor Standing type air-conditioning system of following capacity suitable to operate from 230+10% volt, 50 Hz, 1 phase power supply with fittings etc.				
a	2.0 TR	Nos	12	93600	1123200
	Supply of Wall Mounted(Split) type air-conditioning system of following capacity suitable to operate from 230+10% volt, 50 Hz, 1 phase power supply with fittings etc.				
a	.8 TR	Nos	14	21600	302400
C)	Refrigerant 'Y' Joint Required for distribution of refrigerant in copper piping etc complete as per specifications	Lot	1	72000	72000
D)	Wireless Remote Control	Nos	26	2160	56160
INSTALLATION/Low Side Work					
1.	Inverter based VRF System				
	Installation, Testing & Commissioning of Variable refrigerant flow(VRF) modular type air-conditioning system suitable to operate from 410+10% volt, 50 Hz, 3 phase AC power supply for cooling & heating by using 100% inverter driven capacity control compressors (Hermetically sealed 3-D scroll type-All compressors are Inverter Based) complete with individual controller and fittings with necessary wiring, connection & termination, painted MS frame for outdoor unit etc. as per quantity given below including full charging of R-410A refrigerant gas complete as per specifications.				
A)	Outdoor Units				
a	12 HP	No	2	12000	24000
b	8 HP	No	2	8000	16000
B)	Indoor units (Nominal capacity)				

	Installation, Testing & Commissioning of Floor Standing type air-conditioning system of following capacity suitable to operate from 230+10% volt, 50 Hz,1 phase power supply with fittings etc.				
a	2.0 TR	Nos	12	3000	36000
	Installation, Testing & Commissioning of Wall Mounted(Split) type air-conditioning system of following capacity suitable to operate from 230+10% volt, 50 Hz,1 phase power supply with fittings etc.				
a	.8 TR	Nos	14	2700	37800
C)	I/T/C of Refrigerant 'Y'Joint Required for distribution of refrigerant in copper piping stc complete as per specifications	Lot	1	34500	34500
2	Refrigerant Piping (VRV/VRF Units)				
	Supply & Installation of interconnecting following sizes of one end expanded refrigerant copper pipe work of following outer diameter, insulated with 19 mm thick closed cell electrometric Nitrile rubber tubular insulation between each set of indoor & outdoor units with outer mechanical protection of alluminum cladding for all exposed pipes as per specification. The pipe dia upto 19mm shall be soft seamless & not be less than 22SWG of copper & above 19mm dia shall be hard seamless & shall not be less than 16SWG of copper. All piping inside the room shall be properly fixed/supported with suitable size of clamp/ M.S. hanger and all external piping shall run in M.S. painted cable tray etc. as reqd.				
2.1	34.9 mm dia	Rm	100	972	97200
2.2	28.8 mm dia	Rm	100	900	90000
2.2	19.1 mm dia	Rm	100	792	79200
2.3	15.9 mm dia	Rm	200	705.6	141120
2.4	12.7 mm dia	Rm	110	662.4	72864
2.5	9.5 mm dia	Rm	200	568.8	113760
2.6	6.4 mm dia	Rm	110	468	51480
				0	0
3	Covered cable tray with GI Sheet cover for exposed piping	Rm	60	540	32400
4	Drain Piping			0	0
	Providing & fixing of rigid UPVC Pipe of 6kg/sqcm working pressure complete with fittings, supports as per specifications and duly insulated with 6mm thickness of closed cell nitrile rubber of 32kg/cum density as per direction of Engineer-in-charge & specifications enclosed as reqd. The termination to the drain point should be included in the rates.			0	0
4.1	32 mm dia	Rm	200	100.8	20160
4.2	25 mm dia	Rm	55	93.6	5148
5	Providing & fixing of control wiring/power cabling with following sizes of copper conductor armoured cable between indoor and outdoor units directly on surface of wall/ existing channel/c making connection etc. as reqd.			0	0
	2 x 1.5 sq.mm FRLS / Sheilded wire	Rm	1000	108	108000
6	Lifting , Shifting, positing , ODU's & IDU's as per approved drawings & RCC structure for all ODU units in Terrace area	Lot	1	36000	36000
	GRAND TOTAL				3557392