



NAYA RAIPUR DEVELOPMENT AUTHORITY

**Tender Document for the
Construction and Development of phase-I Part of Christel
House School at Sector 25 of Naya Raipur
2nd Call**

(Following Three-Envelope Tender Procedure)

**Schedule – A
Price Tender
To be submitted in ENVELOPE-3**

NIT No.: 28/CH/EEC-III/CE(E)/NRDA/2015-16,

Dated: 05.08.2015

Issued by: Chief Executive Officer,
Naya Raipur Development Authority (NRDA)
1st Floor, Utility block, Capitol Complex, Sector- 19,
Naya Raipur- 492 002, Chhattisgarh
Tel No: + 91 771 2511500; Fax No.: +91 771 2511400.
Website: www.nayaraipur.gov.in

Tender Document Contains

- (a) Only schedule "A" and Section-I of schedule "D" are to be filled & signed by the tenderer
 (b) All the certificates as per pre qualification criteria shall be appended with relevant forms of schedule "D"

1. PART ONE (NRDA F-1)-(Attached herewith, to be submit along the tender)

Part (A)

- a) Press Notice
 b) Detailed NIT

Part (B)

a) Schedule-A

- (i) Cost Abstract
 (ii) Bill of Quantities

- b) Schedule-B –NIL
 c) Schedule-C –NIL
 d) Schedule-D

Section-I..... Technical tender forms

- (i) Letter of Technical Tender
 (ii) Tenderer's Information Sheet
 (iii) Annual Turnover
 (iv) Specific Construction Experience
 (v) Declaration
 (vi) Check list for Technical tender evaluation

Section –IIScope of work

Section –III..... Technical specifications of work

Section –IV..... Special Conditions of Contract

Section –V..... List of approved makes

Section –VI..... Drawings

- e) Schedule-E
 f) Schedule-F

2. PART TWO (NRDA F-2/3)-Standard form (Not Attached herewith, and not to be submitted along the tender)

Important note: - Link site <http://nayaraipur.com/documents/gcc.pdf>

1. General Guidelines
2. Tender
3. General rules and directions
4. Conditions of contract
5. Clauses of contract
6. Model rules relating to labour, water supply and sanitation in labour camps safety code
7. Contract forms
 - (a) Draft Format for Performance Security
 - (b) Earnest Money Deposit Form (Bank Guarantee)
 - (c) Format of Contract Agreement
 - (d) Draft Format for Performance Guarantee for Water Proofing and Anti-termite Works
 - (e) Indemnity Bond
 - (f) Indenture Bond
 - (g) Notice for Appointment of Arbitrator
8. Proforma of schedules (Schedule 'A' to Schedule 'F')

Naya Raipur Development Authority (NRDA) Raipur, Chhattisgarh

Document details

Name of work : "Construction and Development of phase-I Part of Christel House School at Sector 25 of Naya Raipur".

Name of Tenderer:

Details

- a) Cost of Tender Document : Rs
- b) EMD : Rs

Signature of Tenderer

Date: _____

Signature of Contractor.....

Signature of NRDA.....

COST ABSTRACT**Construction and development of Phase 1 part of Christel House School at Serctor 25 of Naya Raipur.**

Sr. No	Component of Work	Amount in INR	Amount in Words (In INR)
A	Civil Works	Rs. -	
B	Plumbing Works	Rs. -	
C	External Development	-	
D	Electrification Works	Rs. -	
	Total Project Cost (INR)	Rs. -	

Bill of Quantities						
Construction and development of Phase 1 part of Christel House School at Serctor 25 of Naya Raipur						
A CIVIL WORKS						
S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
1	Excavation in all types and sizes of foundations, trenches and drains or for any other purpose with all lead and lift including seperation of usefull soil for refilling and stacking & levelling of same, and disposal of surplus excavated stuff and spoils beyond NRDA boundries or as directed by Engineer In-charge including souring, dewatering, surface dressing, etc., complete as per direction of Engineer In-charge.					
	In all types of soil	Cum	1794.85			Rs. -
2	Backfilling: Filling from available excavated stuff (Excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering from deposited stack spoils	Cum	1300.23			Rs. -
3	Providing and filling in plinth with sand/ Crusher dust under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete.	Cum	1119.57			Rs. -
4	Anti termite treatment					
i	Supplying chlorpyriphos/ Lindane emulsifiable concentrate of 20% in sealed containers including delivery as specified.	litre	1097.09			Rs. -
ii	Diluting chemical emulsion (Chlorpyriphos/ lindane) in water as per manufacturers recommendation and injecting for pre-constructional curative cum preventive anti-termite treatment:(Five year service guarantee bond to be signed by contractor)					
	Surface treatment by spreading emulsion under floor , over the plinth area before laying base concrete @ 5 litres / sqm.	sqm	945.00			Rs. -

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
iii	Treatment of inside of plinth masonry wall on using diluted chemical emulsion @ 1.5 litre per hole, including drilling 12 mm diameter holes in plinth wall below plinth protection at the intervals of 300 mm and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand).	metre	1087.07			Rs. -
iv	Treatment of outer side of plinth masonry wall using diluted chemical emulsion @ 1.5 litre per hole, including drilling 12 mm diameter holes in plinth wall at the junction of floor at the intervals of 300 mm and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand).	metre	602.80			Rs. -
5	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:					
a	Foundations, footings, base of columns and plinth beam in any shape and size.	sqm	2163.00			Rs. -
b	Columns, beams & walls- circular or any other geometrical shape other than square and rectangular in all sizes	sqm	1486.00			Rs. -
c	Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)	sqm	3543.00			Rs. -
d	Beams, lintels, cantilevers & walls	sqm	3330.00			Rs. -
e	Vertical and horizontal fins individually or forming box, louvers bands, almirah shelves and likes.	sqm	233.00			Rs. -
f	Weather shade, chhajja, Cornices and mouldings	sqm	34.00			Rs. -
g	Stair cases of all types excluding spiral and folded plate type, including risers and landings	sqm	149.33			Rs. -

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
6	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work					
a	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).	Cum	129.65			Rs. -
7	Providing and laying design mix reinforcement cement concrete with crushed graded stone aggregate 20mm nominal size using batching plant, transit mixer and concrete pump, in all works upto floor five level excluding cost of reinforcement and form work.					
a	M-25 (using minimum cement content 410 kg/cum concrete)	Cum	1702.01			Rs. -
8	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire all complete:					
a	Thermo-Mechanically treated Bars	Kg	199247.83			Rs. -
9	Water proofing material: Providing and mixing water proofing material in PCC/ RCC work in the proportion recommended by the manufacturer.	kg	1702.01			Rs. -
10	Applying a coat of hot bitumen VG-10 using @ 1.7kg/ sqm on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	sqm	196.93			Rs. -
11	Plinth protection: Making 50mm thick plinth protection of plain cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded crushed stone aggregate 20mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with sand including finishing the top smooth.	Sqm	293.76			Rs. -

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
12	Providing and laying integral cement based water proofing treatment on roofs, balconies, terraces etc with average thickness of 120mm and minimum thickness at khurra as 65 mm, consisting of following operations including surface preparation:					
	i) Applying a slurry coat of neat cement using 2.75 kg/sqm. of cement mixed with water proofing compound conforming to IS. 2645 over the RCC slab including adjoining walls upto 300mm height.					
	ii) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) mixed with water proofing compound conforming to IS : 2645 over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) mixed with water proofing compound conforming to IS : 2645 to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.					
	iii) After two days of proper curing applying a second coat of cement slurry using 2.75kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645.					
	iv) Finishing the surface with 20 mm thick joint less cement mortar of mix 1:4 (1 cement :4 coarse sand) mixed with water proofing compound conforming to IS : 2645 including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3mm deep.	sqm	1728.00			Rs. -
13	Providing and laying AAC Autoclaved aerated concrete block confirming to IS: 2185 (Part-3)-1984) in block masonry with AAC blocks of width 100/ 200mm height 200/250/300mm, length 400/500/600 mm (approved sizes) with cement mortar 1 :6 (1 Cement :6 coarse sand) in superstructure. AAC blocks should have specific gravity 0.6 to 0.65 and crushing strength should not be less than 3 N/ sqmm (testing as per IS: 6441 - 1972). (for foundation,plinth & Superstructure)					
a	Cement Mortar 1:6 (1 cement : 6 coarse sand)	cum	1643.00			Rs. -
14	Brick/block work in Super structure					
a	Extra for brick/Block work in superstructure:					
	Above plinth and upto floor five level.	cum	1146.40			Rs. -

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
15	Half brick thick brick masonry: Providing and laying AAC Autoclaved aerated concrete block confirming to IS: 2185 (Part-3)-1984) in block masonry with AAC blocks of widthof 100mm thick (approved sizes) with cement mortar 1 :6 (1 Cement :6 coarse sand) in Superstructure. AAC blocks should have specific gravity 0.6 to 0.65 and crushing strength should not be less than 3N/ sqmm (testing as per IS: 6441 - 1972). (in superstructure above plinth level upto plinth level)					
a	Cement Mortar 1:3 (1 cement : 3 coarse sand)	sqm	334.00			Rs. -
16	Extra for providing and placing in position hopping 25x1.60 mm or 2 Nos6mm dia MS bars reinforcement at every ninenth course of half brick masonry.	sqm	334.00			Rs. -
17	Providing and fixing PVC membrane foil coated (laminated) flush door shutters, made with core of block board with frame of first class hardwood, coated with 0.30mm membrane pasted with resin using vacuum treatment process complete all but excluding hinges.					
	35 mm. thick (single leaf)	Sqm	117.08			Rs. -
	S.S. Door Fixtures					
18	Providing and fixing antique/ SS finished brass parliamentary hinges with antique/ SS polished MS screw complete:					
a	150x125x27x5mm	each	111.00			Rs. -
19	Providing and fixing antique/ SS finished brass sliding door bolt with necessary bolts, nuts and antique/ SS polished MS screw complete:					
a	300x16 mm	each	37.00			Rs. -
20	Providing and fixing antique/ SS finished brass door latch with antique/ SS polished MS screw complete:					

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
a	300x16x5mm	each	37.00			Rs. -
21	Providing and fixing factory made UPVC door frame made of UPVC profile section having an overall dimension as below (tolerance ± 1 mm) with wall thickness $2.0\text{mm} \pm 0.2\text{mm}$, corners of the door frame to be jointed with galvanized brackets and stainless steel screws, joints mitred and plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19mm and $1\text{mm} \pm 0.1\text{mm}$ wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturers specification and direction of Engineer-in-charge					
a	Extruded section Profile size 48x40 mm.	meter	103.95			Rs. -
22	Providing and fixing 30mm thick factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm for styles and 15x15mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture . M.S. frame covered with 5mm thick heat moulded PVC 'C' channel of size 30mm thickness, 70mm width out of which 50mm shall be flat and 20mm shall be tapered in 45degree angle on either side forming styles; and 5mm thick, 95mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided either side of the panel. 10mm (5mm x 2) thick, 20mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail. paneling of 5mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7mm (5mm+2mm) thick x 15mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per Manufacturer's specification including 3 nos ISI marked stainless steel hinges of size 100x58x1.9 mm complete. (for W.C. and bathroom door shutter).					
a	PVC door shutter	Sqm	33.08			Rs. -
23	MS Grill: Providing and fixing M.S. grill of approved pattern made of M.S. flats or square or round bars welded to steel frame of windows etc. including applying a priming coat welded to frame with all necessary fitting complete including applying a priming of red oxide zinc chromate primer.					

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
	Wt: @35kg/sqm	kg	5925.15			Rs. -
	(Door and Windows)					
24	Providing and fixing in position doors, windows and ventilators frames made of cold rolled pressed steel sheet framed profiles made from commercial M.S. Sheets conforming to I.S. 513 of 1973 and as per general specifications of I.S 4351 including hinges jamb, lock jamb, steel butt hinges, base tie, joints mitred and welded with 10cm long legs of size 15x3mm M.S. flat, embedded in cement concrete blocks 15x10x10cm size of grade M-10 or rawl plugs and screws or with fixing clips or with bolts and nuts including neatly compacted filling M-10 cement concrete in profile section applying a priming coat of red oxide zinc chromate primer.					
	Single rebate/ mullion 100mmx50mm size, 1.6mm thick sheet.	meter	222.40			Rs. -
25	Providing and fixing float glass panes with steel glazing clips and special metal sash putty of approved make in steel doors, windows, ventilators:					
a	5mm thick	Sqm	123.12			Rs. -
	<u>SS Railing in Stair Case</u>					
26	Providing stainless steel railing/ grill made of S.S. flats, hollow S.S. pipe or square/ rectangular sections of approved design fixing in stair case, balcony or other places with metal fasteners and stainless steel bolts etc complete.					
a	SS Grade 304	Kg	600.00			Rs. -
27	Designing, providing and fixing aluminium frame work made of special aluminium section on building face with M.S. angle iron brackets fixed on RCC structure with S.S. hold fasteners, including providing and fixing two sided structural adhesive tape of appropriate grade (NORTON or equivalent), on aluminium sections for fixing aluminium/ glass panel, sealing on periphery of frame work, by providing EPDM gasket, silicon weather sealant between aluminium frame and building structure including hire charges of double scaffolding complete.					

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
	Wt: @4kg/sqm	kg	492.48			Rs. -
28	15mm thick cement plaster on the rough side of single or half brick wall of mix:					
a	In Cement Mortar 1:4 (1 cement : 4 fine sand)	Sqm	4100.55			Rs. -
29	12mm thick cement plaster of mix:					
a	In Cement Mortar 1:4 (1 cement : 4 fine sand)	Sqm	4100.55			Rs. -
30	6mm thick cement plaster of mix: (ceiling)					
a	In Cement mortar 1:3 (1 cement : 3 fine sand)	Sqm	3521.87			Rs. -
31	Providing and fixing chicken mesh weighting not less than 250 gms/ sqm as per IS : specification in the required width with 10mm long steel nails on vertical and horizontal surface near R.C.C. and brick walls junctions including scaffolding and all lead and lifts etc. complete before plastering upto 10mts in height.	Sqm	660.48			Rs. -
32	Providing and laying ceramic glazed floor tiles conforming to IS : 15622 of approved size, make, colour, shade laid on 20 mm thick Cement Mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement mixed with matching pigment etc., complete.					
a	Size 300x300mm	Sqm	126.95			Rs. -

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
33	Providing and fixing ceramic glazed wall tiles conforming to IS : 15622 of approved make, colours, shades and size on wall and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with matching pigment complete.					
a	Size upto 200x300mm	Sqm	324.45			Rs. -
34	Chequerred precast cement concrete tiles 22mm thick in footpath & courtyard jointed with neat cement slurry mixed with pigment to match the shade of tile including cleaning of joint etc complete on 20 mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand) :					
	Light shade using white cement					
	Ramp	Sqm	96.00			Rs. -
35	25 mm thick KOTA stone slab flooring over 20mm (average) thick base of cement mortar 1:4 laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including grinding rubbing and polishing etc. complete (Area of slab to be over 0.20 sq.m and upto 0.50 sq.m)	Sqm	3034.47			Rs. -
36	KOTA stone slab 25mm thick in risers and treads of steps, skirting dado and pillar laid in 12mm (Average) thick cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete. (single stone is to be used for riser and treads of steps and the width of stone for skirting and dado shall be equal to the height of skirting/ dado up to length of 1.0 M.)	Sqm	65.52			Rs. -
37	Extra for nosing in steps and treads of kota stone slab.	metre	112.32			Rs. -
38	Providing and laying ULTRA wall tiles or equivalent approved make floor tiles (thickness to be specified by the manufacturer) of approved colour, shade, laid on 20 mm thick Cement Mortar 1:4 (1 cement : 4 coarse sand) including jointing with laticecrete or equivalent ioitina material of matchina pigment etc.. complete.	Sqm	71.76			Rs. -

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
39	Painting exterior surface with PREMIUM ACRYLIC SMOOTH exterior paint of required shade as per manufacturer's specifications to give protective and decorative finish including cleaning washing of surface etc. complete with:	Sqm	6622.42			Rs. -
40	White washing with whiting to give an even shade.					
a	On new work (Three or more coats)	Sqm	4100.55			Rs. -
41	Distempering with acrylic washable distemper to give an even shade.					
b	On new work (Two or more coats)	Sqm	8201.09			Rs. -
42	Painting on new work (two or more coats) to give an even shade with:					
a	Premium synthetic enamel paint (2nd top most approved branded quality) to give an even shade.	sqm	117.08			Rs. -
43	Footpaths and Separators (Construction of footpath/separator by providing a 150 mm compacted granular sub base as per clause 401 and 75 mm thick cement concrete base with PCC grade M-15, overlaid with pre-polished cement concrete floor tiles conform to IS 1237:1980 (Reaffirmed in 1996) for heavy duty tiles (Exterior Grade) of 22-25mm thick fixed in 20mm thick cement mortar 1:3 including provision of all drainage arrangements but excluding kerb channel excluding cost of GSB.) as per clause 410. (Ultra / Equivalent)	sqm	450.00			Rs. -
44	Cast in Situ Cement Concrete M20 kerb (Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in PCC M20 grade on PCC M10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per clause 409)	Rmt	300.00			Rs. -

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
45	Perforated with non woven tissue (for Acoustics), Coil Coated, Tile Ceiling System:Providing & fixing of Flexalum® Lay-in Plain Tile False Ceiling on 24mm 'T' Framework of module 600mm x 600mm. Panels shall be manufactured by Hunter Douglas of size 575mm x 575mm made out of 0.6mm thick Aluminium alloy. Tiles to be stove enamelled on a continuous application for pre-treatment. The coils to go through 4 stages of pre-treatment, three times oven baked through conversion coating, priming and finish coat ensuring superior adhesion, high corrosion resistance and good colour stability. The coils to be painted on both sides after degreasing. Inside surface to have a primer of 5 microns and a coat of natural colour of 5 microns, exposed surface to have a primer of 5 microns, binder of 5 microns and topcoat of approved colour of 15 microns. The Tile will be manufactured on advanced equipment, which includes several levelling. The tile end shall be raised upward by 38mm and bend outward to lay the tile in framework. Grid system for fixing ceiling tiles shall comprise of Tees. The 24mm main tee runners shall be suspended at an interval of 1200mm centre to centre. The 24mm cross tee runner shall be suspended at 600mm centre to centre and further supported with 24mm cross tee at 600mm centre to centre with interlocking arrangements to form grid of 600mm x 600mm. The main tee shall be supported by means of 4mm G.I. rod from slab/roof. The suspension shall be provided at 1200 to 1500mm centre to centre. Mode of Measurements: Measurements shall be wall to wall without any deductions for lights, diffusers, columns etc. (Make: M/s Hunter Douglas India Pvt. Ltd./ Equivalent)	Sqm	850.00			Rs. -
46	Construction of embankment / sub grade with Material Obtained from Borrow Pits (Construction of embankment with approved material/selected soil having C.B.R. > 5 (unless specified otherwise in the contract) obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement of table 300-2)	Cum	281.25			Rs. -
47	Construction of granular sub-base by providing close graded Material, , carriage of mixed Material to work site, spreading in uniform layers with motor grader on prepared surface watering, rolling and compacting with vibratory power roller at OMC to achieve the desired density, complete as per clause 401					
	By Plant Mix Method					

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
	for grading -III material	Cum	140.63			Rs. -
48	<p>Precast interlocking concrete paver blocks: Providing & laying factory made confirm technical specification of Bureau of Indian Standards 15658 of 2006 of heavy duty pavers resulting in consistent and uniform quality, rubber moulded, white cement based, pigmented block lacquer coating and cured through drying process mechanically vibrated and compacted precast interlocking premium concrete paver blocks in M40 grade, 60mm thickness of approved size, design and colour with providing and laying in position over 40 mm thick average complete coarse sand bed with joints of 3mm thick filled by fine sand including leveling with surface vibrator, temping and sweeping etc. complete. Coloured pigment precast interlock concrete blocks. as per direction of engineer in charge. (Ultra / Equivalent)</p>	sqm	562.50			Rs. -
	Expansion Joints					
49	Providing and fixing of expantsion joint system related with Floor loaction as per drawings and direction of Engineer-in-Charge. The joint system will be of extruded aluminium base members, self aligning/self centering arrangement and support plates etc as per ASTM B221-02. The system shall be shuch that it provides floor to floor/ floor to wall expansion control system for various vertical locations in load application areas that accomodates multi directional seismic movement without stress to its components. System shall consist of metal profiles with a universal aluminium base member designed to accomodate various project conditions and finish floor treatments. The cover plate shall be designed of width and thickness required to satisfy projects movement and loading requirements and secured to base members by utilising manufacturer's pre-engineered self centering arrangement that freely rotates/ moves in all directions. The Self-centering arrangement shall exhibit circular sphere ends that lock and slide inside the corresponding aluminium extrution cavity to allow freedom of movement and flexure in all directions including vertical displacement. provision of Moisture Barrier Membrane in all joint system to have water tight joint is mandatory requirement all as per the manufacturer's design and as approved by the Engineer-in-charge. (Material shall confirm to ASTM 6063.)					
	Floor joint of 100 mm gap	Metre	50.00			Rs. -
50	Providing and fixing of expansion joint system related with wall joint (external/internal) location as per drawings and direction of Engineer-in-Charge. The joints shall be extruded Aluminium base members, self aligning/centering arrangement and support plates as per ASTM B221-02. The material shall be such that it provided Expansion Joints System suitable for vertical wall to wall/wall to corner application, both new and existing construction in office buildings & complexes with no slipping down tendency amongst the components of the Joint System. The joint System shall utilize light weight aluminium profiles exhibiting minimum exposed Aluminium surfaces Mechanically snap locking the multicellular to facilitate movement. (Materials shall confirm to ASTM 6063)					

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
	Wall joint of 100 mm gap	Metre	18.00			Rs. -
51	Providing and fixing of expansion joint system of approved make and manufacturer for various roof locations as per approved drawings and direction of Engineer-in-Charge. The joint shall be extruded aluminium base members with self aligning and self centering arrangement support plates as per ASTM B221-02. the system shall be such that it provides water tight roof to roof/ roof to corner joint cover expansion control system that is capable of accomodating multidirectional seismic movement without stress to the components. The system shall consist of metal profile that incorporates a universal aluminium base member designed to accomodate various project conditions and roof treatments. The cover shall be designed of width and thickness required to satisfy movement and loading requirements and secured to base members by utilizing manufacturer's pre-engineered self centering arrangement that freely rotates/ moves in all directions. The Self-centering arrangement shall exhibit circular sphere ends that lock and slide inside the corresponding aluminium extrusion cavity to allow freedom of movement and flexure in all directions including vertical displacement. The Joint System shall resist damage or deterioration from the impact of falling ice, exposure to UV, airborne contaminations and occasional foot traffic from maintenance personnel. Provision of Moisture Barrier Membrane in joints to have watertight joint is mandatory requirement. (Material shall confirm to ASTM 6063.)					
	Roof joint of 100 mm gap	Metre	25.00			Rs. -
52	Providing and fixing Stainless Steel (SS-304 alloy) graded un-perforated modular ceiling tile clip-in type, comprising of 600 mm x 600 mm x 0.5 mm 600mmx1200x0.5mm, the tile ends to be raised with pipes and stops to ensure positive engagement into the carrier to enable for demounting of individual tiles, side of the tiles to be sufficiently to insure a minimal deflection across the length of the tile. Tiles will have brush steel/Mat finish. The tiles to be clipped into clip profile of 0.5 mm thick G.I. clip. Suspension system shall be consist of G.I. rod 4 mm dia, GI Hold on hanger 1.15 mm thick of height 95 mm * 12 mm, GI Sil Carrier 0.45 mm thick 25mm * 2440mm, GI Pressure clip 1.20 mm thick 35 mm * 30 mm, Powder coated Spring steel clip 0.50 mm thick and Powder coated 0.5 mm thick GI Edge Profile. The clip profile shell be supported from structural slab by means of rigid suspension of 4mm G.I. rod, Hold on clamp with clip for level adjustments. Some tiles to be replaced by Ventilation Grills / Light fixture but not supported from the grid joints of the main tee etc complete as directed by Engineer-In-Charge. . (Make : Hunter Douglas/ Equivalent)	Sqm	200.00			Rs. -
Subtotal of Civil Works						-

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
B	Plumbing Works					
53	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes on wall surface, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.					
a	15 mm nominal dia .Pipes.	metre	60.00			Rs. -
b	20 mm nominal dia .Pipes.	metre	60.00			Rs. -
c	25 mm nominal dia .Pipes.	metre	72.00			Rs. -
d	32 mm nominal dia .Pipes.	metre	42.00			Rs. -
54	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete.					
a	75 mm dia pipe	metre	20.00			Rs. -
b	110 mm dia (for Sewerage)	metre	32.00			Rs. -
c	110 mm dia (for Rainwater)	metre	176.00			Rs. -

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
d	110 mm dia (for Vent pipe)	metre	48.00			Rs. -
55	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.					
	Coupler					
a	75 mm	Nos.	4.00			Rs. -
b	"P" trap 110mmx110mm long	Nos.	11.00			Rs. -
c	110 mm	Nos.	11.00			Rs. -
d	Multi floor trap 110	Nos.	22.00			Rs. -
e	Nahani trap 110x75mm	Nos.	48.00			Rs. -
56	Providing and fixing water closet squatting pan (Indian type W.C. pan), 100mm sand cast Iron P or S trap, 10 litre low level P.V.C. flushing cistern (same colour) conforming to IS : 7231, with flush bend and other fittings and fixtures complete including cutting and making good the walls and floors wherever required					
a	White Orissa pattern W.C. pan of size 580x440 mm	each	18.00			Rs. -
57	Providing and fixing white vitreous china urinal basin with waste fitting as per IS : 2556, and other couplings in C.P. brass complete:					

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
b	Flat back type urinal of size 460x380x250mm	each	12.00			Rs. -
58	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings :					
a	White Size 550x400 mm	each	12.00			Rs. -
59	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :					
a	20 mm nominal bore	each	24.00			Rs. -
60	Providing and fixing 15 mm nominal bore Brass bib/stop cock of approved quality and weighting not less than 400 grams):					
a	Bib cock (250 grams)	each	60.00			Rs. -
b	Stop cock (350 grams)	each	6.00			Rs. -
61	Providing and fixing 15 mm nominal bore C.P. brass fittings of approved make and conforming to IS:8931 including C.P. brass extension if required:					
a	Long nose bib cock (500gms)	each	2.00			Rs. -
b	Bottle trap set with extension pipes	each	2.00			Rs. -

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
62	Providing and fixing stainless steel drain jali of approved make/quality.	each	2.00			Rs. -
63	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink with drain board as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required :					
a	1040x510 mm bowl size 460x410x200 mm	each	2.00			Rs. -
64	Providing and fixing flexible P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.					
a	32 mm dia	each	6.00			Rs. -
65	Providing and fixing 600x450 mm beveled edge 4mm mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	Each	11.00			Rs. -

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
66	Providing and fixing 600x120x5mm glass shelf with edges rounded off supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete	each	11.00			Rs. -
67	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc. :					
a	For 100 mm dia pipe	each	20.00			Rs. -
68	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	litre	6000.00			Rs. -
69	Constructing masonry Chamber 30x30x50 cm, inside with modular Fly ash bricks of 35 kg/ cm ² in cement mortar 1:4 (1 cement : 4 coarse sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick finished with a floating coat of neat cement complete as per standard design :	each	6.00			Rs. -
	Constructing brick masonry manhole with Fly ash bricks crushing strength not less than 35kg/cm ² in cement mortar 1:4 (1 cement : 4 coarse sand), R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation in cement concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design :					
70	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :	each	6.00			Rs. -
71	Extra for depth for manholes					
a	Size 90x80 cm	metre	6.00			Rs. -

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
72	Providing and fixing vitreous china water closet (European type W.C. pan) with white ISI marked plastic seat and lid, 10 litre low level white P.V.C. flushing cistern (same colour), conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required :					
a	White wall hung type	each	2.00			Rs. -
	HAND APPLIANCES					
73	Providing and fixing CO ₂ type fire extinguishers with steel cylinder with a discharge valve and conforming to IS:15683. Extinguishers shall be painted with rex enamel paint and fixed to wall with brackets capacity 4.5 Kg.	Each	8.00			Rs. -
74	Providing and fixing water CO ₂ gas fire extinguishers with steel cylinder with a discharge valve and conforming to IS:940. Extinguishers shall be painted with rex enamel paint and fixed to wall with brackets capacity 9 litre.	Each	8.00			Rs. -
75	Providing and fixing ABC powder type fire extinguisher suitable for inverted operation and fabricated from 1.6 mm M.S. sheet internally protected with anticorrosive treatment and hydraulically tested to a pressure of 25 Kg/Sqcm. Extinguishers externally painted with red enamel and fixed to wall with brackets complete with internal charge and spanner (Conforming to IS:13849 capaicity 5 Kg.).	Each	8.00			Rs. -
	SubTotal Plumbing Works					-

Bill of Quantities						
Construction and development of Phase 1 part of Christel House School at Serctor 25 of Naya Raipur						
External Development						
S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
A COMPOUND WALL						
1	Surface dressing of the ground including removing vegetation and making up undulations and in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area).	Sqm	835.50			Rs. -
2	Excavation in all types and sizes of foundations, trenches and drains or for any other purpose with all lead and lift including seperation of usefull soil for refilling and stacking & levelling of same, and disposal of surplus excavated stuff and spoils beyond NRDA boundries or as directed by Engineer In-charge including souring, dewatering, surface dressing, etc., complete as per direction of Engineer In-charge.					
	In all types of soil	Cum	611.24			Rs. -
3	Back filling from available excavated stuff (Excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 M. and lift upto 1.5 M.	cum	454.00			Rs. -
4	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of form work.					

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	Cum	47.59			Rs. -
	Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc complete.	Cum	63.45			Rs. -
5	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of form work.					
	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	Cum	6.39			Rs. -
6	Providing and laying design mix reinforcement cement concrete with crushed graded stone aggregate 20mm nominal size using batching plant, transit mixer and concrete pump, in all works upto floor five level excluding cost of reinforcement and form work.					
	M-20 (using minimum cement 390 kg/cum concrete)	Cum	220.31			Rs. -
7	Reinforcement :Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire all complete:					
	Thermo-Mechanically treated bars	kg	27203.13			Rs. -

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
8	Random rubble masonry with hard stone in superstructure above plinth level and upto floor five level in cement mortar (1 cement : 6 coarse sand) including leveling up with cement concrete 1:6:12 (1 Cement : 6 Coarse Sand : 12 stone aggregate 20mm nominal size) at window sills, ceiling level and like.	Cum	422.58			Rs. -
	Extra for random rubble masonry with hard stone in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth:	Cum	2,515.00			Rs. -
9	Pointing on stone work with cement Mortar 1:3 (1 cement : 3 fine sand)					
a	Ruled pointing	Sqm	1878.12			Rs. -
10	Centring and shuttering at all levels including strutting, propping etc. and removal of form for :					
a	Foundations, footings, base of columns and plinth beam in any shape and size.	Sqm	1675.70			Rs. -
b	Beams, lintels, cantilevers & walls	Rm	83.55			Rs. -
11	Providing and fixing in position G.I. barbed wire (93.8gram/m) to concrete/ wooden/ angle iron posts (straight or diagonal) including securing and screwing with G.I. tying wire, G.I. staples, G.I. U-nails or steel pins etc., complete(Cost of posts, strut to be paid for separately)	metre	1671.00			Rs. -

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
12	Providing and fixing M.S. grill of approved pattern made of M.S. flats or square or round bars welded to steel frame of windows etc. including applying a priming coat of red oxide zinc chromate primer..					
a	Angle 65x65x6 @ 5.8kg/m	kg	736.02			Rs. -
13	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of red oxide zinc chromate primer.					
a	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	Kg	590.00			Rs. -
14	Painting on new work (two or more coats) to give an even shade with:					
a	Satin synthetic enamel paint (top most approved branded quality)	sqm	48.46			Rs. -
	Subtotal of Compound Wall					Rs. -
B	Landscaping and horticulture					
1	Providing and planting following herbs in garden including preparation of soil, earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20% : 1 part of stacked volume of manure after reduction by 8%) watering ,dressing including removal of rubbish and surplus earth, prepration of base plantation, providing and spreading different fertilizers, soil and sand if any with all leads and lifts including cost of manure, sludge or extra good earth if needed and as per instruction of Engineer in charge including maintenance of one year.					
a	Carpet grass	sqm	1000.00			Rs. -

S.No.	Description	Unit	Quantity	Rate [In INR]	Rate in words (in INR)	Amount [In INR]
b	Dhoob grass	sqm	434.00			Rs. -
2	Planting of Trees and their Maintenance for one Year (Planting of trees by the road side (Avenue trees) in 0.60 m dia holes, 1 m deep dug in the ground, mixing the soil with decayed farm yard/sludge manure, planting the saplings, backfilling the trench, watering, fixing the tree guard and maintaining the plants for one year)	Each	220.00			Rs. -
	Subtotal of Landscaping and Horticulture					Rs. -
	Subtotal of External Development Work					-

Bill of Quantities

Construction and development of Phase 1 part of Christel House School at Serctor 25 of Naya Raipur

C ELECTRICAL WORKS

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
1	Supplying and laying following sizes one number XLPE, steel armoured, aluminium conductor power cable of 11 KV grade in existing RCC/ HUME/ STONEWARE/ METAL pipe as required for completeness as per attached specification/ drawing, CSPDCL standards and direction of EIC.					
a	3Cx95 sqm	Mtr	800.00			Rs. -
2	Supply,Installation,testing and commissioning of 11 kV (E) XLPE cable,steel armoured, aluminium conductor in ground including excavation, sand cushioning, protective covering , refilling the trench along with accessories, hardwares etc. required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	3Cx70 sqmm	Mtr	25.00			Rs. -
3	Supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminum conductor cable of 11 KV grade as required :					
a	95 sqmm	Each	1.00			Rs. -
4	Supply and making outdoor cable end termination with heat shrinkable jointing kit for following sizes of 11kV(E) XLPE cable along with accessories, hardwares etc. required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
a	3x70 sqmm	Each	2.00			Rs. -
b	3x95 sqmm	Each	2.00			Rs. -
5	Supplying and making straight through cable jointing with heat shrinkable jointing kit complete with all accessories including ferrules suitable for following size of 3 core, XLPE aluminum conductor cable of 11 KV grade as required :					
a	95 sqmm	Each	1.00			Rs. -
6	Supplying and laying following sizes one number PVC insulated, PVC sheathed, steel armoured, aluminium conductor power cable of 1.1 KV grade direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.					
a	3.5CX185 sqmm	Mt	50.00			Rs. -
7	Supplying and making outdoor end termination with cast resin compound including aluminum lugs and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor power cable of 1.1 KV grade as required.					
a	3.5Cx185 sqmm	Each	4.00			Rs. -
8	Supply and fixing of cable route markers of 100x100x5m GI plate with inscripton there on, bolted/welded to 35x35x6mm angle iron of 600mm long and fixing the same in the ground as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.	Each	5.00			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
9	Supply,Installation,testing and commissioning of floor mounted Moterized type RMU comprising of 2 Nos12 kv 630 Amp LBS and one no. 12 kv 630 Amp VCB for transformer with accessories, hardwares etc. required for completeness and as per attached specification, direction of Engineer.	Each	1.00			Rs. -
10	Supply,Installation,testing and commissioning of outdoor AI winding ONAN type transformer, having continuous rating,11/0.433 kV,3 ph,50 Hz, DY-11 vector group,offload tap changer in steps of 2.5% From -7.5% to +5%, with oil consevator,silica gel breather, having cable boxes on either side,mounted on brick/RCC plinth with fittings as per IS 2026 etc required for completeness and as per specification, direction of Engineer, CSPDCL standards and Electrical Inspectorate standards					
a	200 kVA	Each	1.00			Rs. -
11	Excavation of 1500x1500x1500mm pit, filling with sand for 100mm depth, laying bed concrete with CC (1:4:8)using 40 mm HBG metal for 100mm deep, construction of transformer plinth with footing of 1500x 1500x1200 mm and 900x900x450 mm size, column of 225x225x 2600 mm, beam of 225x225x 2750 mm size ,slab of of 1500x1500x100 mm size ,with relief steel rod of 12 mm (76 kg), refilling the hollow portion with excavated soil, 20mm thick plastering of column and beam with CM of 1:5 etc. required for completeness and as per attached specification, direction of Engineer, CGPWD standards .	Sets	1.00			Rs. -
12	Supply and fixing of Danger Notice Board as per BIS-2551,made out of 2 mm thick sheet steel, vitreous enamelled ,white on both from and back, with letters,figures and the conventional skull and bones in signal red colour of BIS- 5 on from side and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	For 11 kV of 250x200 mm size	Each	10.00			Rs. -
b	For 1.1 kV of 200x150 mm size	Each	20.00			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
13	Supply and laying of 25x6 mm GI strip along with cable and making connections firmly with accessories, hardwares etc. required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards and connection	Each	600.00			Rs. -
14	Supply and making of Earth Pits of 4500mm long ,40mm dia G.I. pipe, providing masonry enclosure, hinged cover plate with locking arrangement and watering pipe, refilling with charcoal, salt and excavated soil with accessories, hardwares etc required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards.	Nos.	2.00			Rs. -
15	Earth work in excavation for pipe trench in ordinary soil are as including dressing, watering and ramming and disposal of excavated earth lead up to 50meter sand lift up to 1.5m, disposal earth to be leveled, neatly dressed.					
a	225 mm dia	cum	450			Rs. -
16	Filling available excavated earth in trenches, plinth sides of foundation in layers not exceeding 20cm. in depth including consolidation of each layer by ramming watering, lead upto 50m and lift up to 1.5m in all kinds of soils	cum	418.20			Rs. -
17	Providing and Laying non-pressure (NP3) RCC socket & spigot pipes with rubber gasket joint including testing of joints. [Conforming to IS; 458-1988, ISI marked laying as per IS 783:1985)					
a	225 mm dia	mtr	800			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
18	Supplying and laying following sizes one number PVC insulated, PVC sheathed, steel armoured, aluminium conductor power cable of 1.1 KV grade in existing RCC/ HUME/ STONEWARE/ METAL pipe as required. etc. required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	3.5x 25 sqmm	mtr	250.00			Rs. -
b	4 x 10 sqmm	mtr	300.00			Rs. -
c	2x 6 sqm	mtr	50.00			Rs. -
d	2x 10 sqm	mtr	50.00			Rs. -
19	Supply and making of end termination with brass compression gland and aluminum lugs for following sizes armoured aluminium conductor power cable of 1.1KV grade along with accessories, hardwares etc. required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	3.5x185 sqmm	Nos.	4.00			Rs. -
b	3.5x 25 sqmm	Nos.	4.00			Rs. -
c	4 x 10 sqmm	Nos.	5.00			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
20	Fabrication, supply, installation, testing and commissioning of cubicle type compartmentalized pedestal/ floor mounted Power Supply Panel Board of approved size and 450mm deep made out of 2 mm thick CRCA sheet steel with suitable size compartments, Al. bus bars, switchgears, voltmeters, ameters with selector switches etc including powder coating painting with accessories, hardwares etc. required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards. The panel board shall house : 1 No 4 pole 400A MCCB, 35kA as Normal Supply Incomer; 4 Pole400A Al. busbar ; 3 Nos. Current transformer of 400/5A; 1 No Ammeter with selector switch: 1 No 0-500V Voltmeter with selector switch; 3 Nos. LEDs: 4 Nos 4 pole, 63A MCCB, 35kA as outgoing feeders: 2 No 4 pole, 200A MCCB, 35kA as outgoing feeders:	Each	1.00			Rs. -
21	Supply and fixing on surface/ recess horizontal type, double door, 415 V TP & N, MCB D.B. of sheet steel phosphatized and powder coating painted complete with loose wire box, terminal blocks, tinned copper busbar, neutral link, earth bar, din bar, detachable gland plate, duly prewired with suitable size FRLS PVC insulated copper conductor up to terminal blocks including interconnections, earthing, accessories, hardwares etc. required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards. 8 way (4 + 24), Double door					
a	1 No. 63A 4pole, 415V, 300mA sensitivity RCCB as Incomer; 18 Nos. 6-32A SP MCB C series 10kA as out going feeder.	Each	2.00			Rs. -
22	Point Wiring for light/ fan/ exhaust fan/ call bell point with 1.5 sqmm FRLS PVC insulated stranded copper conductor single core cable in concealed PVC conduit, 6A piano type switch, phenolic laminated sheet, suitable size M.S. box and earthing the point with same size cable along with accessories, hardwares etc required for completeness and as per direction of Engineer, CGPWD standards, Electrical Inspectorate standards.					
a	Short Point	Nos	150.00			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
b	Medium Point	Nos	100.00			Rs. -
c	Long point	Nos	60.00			Rs. -
23	Point wiring for light plug point with 2.5 sq mm FRLS PVC insulated stranded copper conductor single core cable in concealed PVC conduit, 6 A piano type switch and 3 pin 6 A socket outlet with suitable size M.S. box, phenolic laminated sheet, earthing the switch box and socket outlet with same size cable along with accessories, hardwares etc. as required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	Short Point	Nos	20.00			Rs. -
b	Medium Point	Nos	10.00			Rs. -
c	Long point	Nos	10.00			Rs. -
24	Point wiring for Power plug point with 4 sq mm FRLS PVC insulated stranded copper conductor single core cable in concealed PVC conduit 16 A piano type switch and 6 pin 6/16 A socket outlet with suitable size M.S. box, phenolic laminated sheet, earthing the switch box and socket outlet with same size cable along with accessories, hardwares etc. required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	Short Point	Nos	45.00			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
b	Medium Point	Nos	25.00			Rs. -
c	Long point	Nos	15.00			Rs. -
25	Point Wiring for light/ fan/ exhaust fan/ call bell point with 1.5 sqmm FRLS PVC insulated stranded copper conductor single core cable in concealed PVC conduit, with 6 A modular switch ,modular base and cover plate with suitable size GI. box and earthing the point with same size cable along with accessories, hardwares etc required for completeness and as per direction of Engineer, CGPWD standards ,Electrical Inspectorate standards.					
a	Short Point	Nos	20.00			Rs. -
b	Medium Point	Nos	15.00			Rs. -
c	Long point	Nos	10.00			Rs. -
26	Point wiring for light plug point with 2.5 sq mm FRLS PVC insulated stranded copper conductor single core cable cable in concealed PVC conduit along with 6 A modular switch and 3 pin 6 A modular socket outlet, modular base and cover plate with suitable size GI. box, earthing the switch box and socket outlet with same size cable along with accessories, hardwares etc. required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	Short Point	Nos	10.00			Rs. -
b	Medium Point	Nos	5.00			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
c	Long Point	Nos	2.00			Rs. -
27	Point wiring for Power plug point with 4 sq mm FRLS PVC insulated stranded copper conductor single core cable cable in concealed PVC conduit along with 16 A modular switch and 6 pin 6/16 A modular socket outlet, modular base and cover plate with suitable size Gl. box earthing the switch box and socket outlet earthing with same size cable along with accessories, hardwares etc. required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	Short Point	Nos	20.00			Rs. -
b	Medium Point	Nos	5.00			Rs. -
c	Long Point	Nos	5.00			Rs. -
28	Supply and fixing of 2 pole and earth, 240 V, industrial type socket outlet for AC units, enclosed metal top plug with SP MCB in sheet steel enclosure, on surface or in recess, with chained metal top metal cover for the socket and complete with connections, testing, commissioning etc required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	20 A with C series MCB	Each	10.00			Rs. -
b	32A with C series MCB	Each	5.00			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
29	Circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in concealed PVC conduit along with accessories, hardwares etc. required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	3 x 2.5 sqmm in 20mm conduit	Rmt	100.00			Rs. -
b	3 x 4sqmm in 25mm conduit	Rmt	100.00			Rs. -
c	3 x 6 sqmm in 32 mm conduit	Rmt	125.00			Rs. -
30	Supply and fixing of metal box of following sizes in recess with suitable size phenolic laminated sheet cover in FRLSont including painting, accessories, hardwares etc required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	100mm x 100mm x 60mm deep	Each	200.00			Rs. -
31	Supply and fixing of GI box of following sizes in recess with modular base & cover plate for modular switches including accessories, hardwares etc required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	125mmx75mm	Each	250.00			Rs. -
32	Supply and fixing of following sizes PVC conduit in concealed manner along with accessories, hardwares etc required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
a	20mm	Rmt	50.00			Rs. -
b	25mm	Rmt	100.00			Rs. -
c	32mm	Rmt	150.00			Rs. -
33	Supply and fixing of following Piano type switches and accessories of approved make and type such as switch, socket etc on the existing switch box/ cover including connections along with accessories, hardwares etc required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	3 pin 5/6 amp socket outlet	Each	90.00			Rs. -
b	6 pin 15/16 amp socket outlet	Each	40.00			Rs. -
c	Fan Regulator Electronic, step type moving all round	Each	85.00			Rs. -
d	Ceiling Roses	Each	100.00			Rs. -
e	Batten/angle Holders	Each	50.00			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
34	Supply and fixing of following modular type switches and accessories of approved make and type such as switch, socket etc on the existing modular plates & switch box including connections along with accessories, hardwares etc required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	3 pin 5/6 amp socket outlet	Each	5.00			Rs. -
b	6 pin 15/16 amp socket outlet	Each	5.00			Rs. -
c	Fan Regulator Electronic, step type moving all round	Each	10.00			Rs. -
35	Supply and fixing of round/hexagonal fan box (125mm dia) depth 75mm (max.) with 12mm dia steel bar hook, 1.6mm thick MS sheet cover, in RCC slab along with accessories, hardwares etc as required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.	Each	80.00			Rs. -
36	Supply, installation, testing and commissioning of following sizes ceiling fan of approved make and type including down rods of 30 cm, wiring with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, earthing, connections along with accessories, hardwares etc required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	1050mm sweep	Each	16.00			Rs. -
b	1200mm sweep	Each	52.00			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
c	1400mm sweep	Each	12.00			Rs. -
37	Supply, installation, testing and commissioning of following sizes exhaust fan (heavy duty) of approved make and type in existing opening in wall including earthing, connections along with accessories,hardwares etc as required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	225 mm sweep	Each	10.00			Rs. -
38	Suppy & Installation of 600mm x 600mm Surface mounting LED luminaire etc as required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	36 W	Each	160.00			Rs. -
b	Baton type 18w Integral sleek extruded aluminium LED channel with white acrylic cover	Each	10.00			Rs. -
39	Suppy & Installation of Surface mounted die-casted sleek down lights for soft down lighting. Lumen output \geq 1177 Lumens. Colour temperature near to 6500k. Power Factor $>$ 0.9. Nominal Voltage 230v. Construction in die-cast aluminum frame. Fixture holding system using ss spring. Polyester powder coated. Constant current external LED driver is provided with high power factor and controlled current harmonic Distortion along with accessories, hardwares etc as required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	1x18W	Each	71.00			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
40	Supply, fixing, testing and commissioning of following size lamp/tube of approved make on existing luminaires and as per direction of Engineer					
a	36/40 watt fluorescent	Each	1.00			Rs. -
b	11 watt CFL built in choke	Each	1.00			Rs. -
c	18 watt CFL built in choke	Each	1.00			Rs. -
d	65 watt CFL built in choke	Each	1.00			Rs. -
41	Supply ,laying and connection of 8 SWG GI wire on surface or in reces along with accessories, hardwares etc.required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards	Rmt	600.00			Rs. -
42	Supply,laying and connection of 6 SWG GI wire 0.50 m below including excavation, sand cushioning, and refilling the trench along with accessories, hardwares etc. required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards	Rmt	550.00			Rs. -
43	Earthing with G.I. earth plate of 600 mm X 600 mm X 6 mm thick providing masonry enclosure with cover plate having locking arrangement and watering pipe, with charcoal and salt along with accessories, hardwares etc required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards.	Each	10.00			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
44	Supply,installation, testing and commissioning of Distribution box, junction box, jacket/plug outlet completely wired in concealed conduit along with telephone sets of approved make and type with accessories,hardwares etc required for completeness and as per direction of Engineer and BSNL standards.	LS	1.00			Rs. -
45	Supply of hot dipped galvanized octagonal poles made out of 4mm thick steel plates,having base plate of 275x275x16mmmm, window and flush cover with locking arrangement at suitable height from base for cable terminal block, suitably reinforced with welded steel section,complete with template, foundation bolts, accessories,hardwares etc required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	9 m high, minm dia 155 at bottom and 70 mm at top	Each	10.00			Rs. -
46	Designing and providing suitable RCC foundation for octagonal poles including steel reinforcement (90kg/cm minm),form work, embedding 2 Nos 50 mm dia PVC pipe for cable entry in each foundation, excavation,disposal of surplus soil,curing etc required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.	Cum	6.00			Rs. -
47	Erection of GS Octagonal pole on existing cement concrete foundation having grouted bolts and nuts, aligning in true vertical position and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	9m high	Each	10.00			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
48	Supply and fixing of street light bracket on existing poles made out of 50mm dia GS pipe welded to 300 mm long GS pole canopy of suitable dia at an angle of 102.5 including GS triangular stiffner of 150x150x5 mm thick,complete with arrangement for tightening the bracket with poles,painting with one coat of approved primer,accessories,hardwares etc as required for completeness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	Single over hang of 1m long	Each	10.00			Rs. -
49	Supply,installation,testing and commissioning of following 230 Volt LED Street Lighting fitting with gear box,igniter and IP66 Protection .					
a	120 W	Each	10.00			Rs. -
50	Supply,installation,testing and commissioning of 3 Nos 1.5 sqmm FRLS PVC insulated stranded Cu. SC cable through poles from JB/TB to fixtures with accessories,hardwares etc required for complete-ness and as per direction of Engineer, CGPWD standards and Electrical Inspectorate standards.	Rmt	100.00			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
51	Design , Fabrication, supply, installation, testing and commissioning of pedestal mounted lighting Feeder Pillar made out of 2 mm thick CRCA sheet steel,suitably reinforced in cubicle,FRLSee standing, dust/vermin/weather proof with bus bars,switch gears,earth bus etc including powder coated painting along with accessories,hardwares etc. required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards. The panel board shall house :1 No 4 pole 63A MCCB, 35kA as Incomer; 1No. 70A FP AC23 contactor, AOM switch, 0-24 hrs Timer 4 Pole 100A Aluminium busbar ;6 Nos 20A FP MCB as outgoing feeders:	Set	1.00			Rs. -
52	Point Wiring for twin control of light with 1.5 sqmm FRLS PVC insulated stranded Cu. SC cable in concealed PVC conduit,with 6A piano type switch, phenolic laminated sheet, suitable size M.S. box and earthing the point with same size cable along with accessories, hardwares etc required for completeness and as per direction of Engineer,CGPWD standards Electrical Inspectorate standards.	Each	8.00			Rs. -
53	Point Wiring for twin control of light with 1.5 sqmm FRLS PVC insulated stranded copper conductor single core cable in concealed PVC conduit, with 6A modular switch, modular base and cover plate, suitable size GI box and earthing the point with same size cable along with accessories,hardwares etc required for completeness and as per direction of Engineer, CGPWD standards Electrical Inspectorate standards.	Each	8.00			Rs. -
54	Supplying and laying double wall HDPE pipe having corrugation on the outer wall and plan surface on inner wall in ground below road, path etc at a depth not less than 40 cm including excavation, dismantling of road if required and refilling the trench etc. as required.					
a	40 mm	Rmt	500.00			Rs. -
b	90 mm	Rmt	50.00			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
55	Supplying and making end termination with brass compression gland and aluminum lugs for following sizes armoured aluminium conductor power cable of 1.1KV grade along with accessories, hardwares etc. as required for completeness and as per attached specification, direction of Engineer, CGPWD standards and Electrical Inspectorate standards.					
a	3.5x25 sqmm	Each	6.00			Rs. -
b	4x10 sqmm	Each	2.00			Rs. -
c	2x10 sqmm	Each	4.00			Rs. -
	Sub total of Electrical Works					-