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TENDER SPECIFICATION

TENDER NO. BHEL/NR/SCT/UNCHAHAHAR-IV/ENABLING/994

FOR

**“CONSTRUCTION & DEVELOPMENT OF 03 NOS. CLOSED STORAGE SHEDS
(SIZE: 900 SQM) INCLUDING INTERNAL / EXTERNAL ELECTRIFICATION
WORK COMPLETE AT 1X500 MW FGUTPP (STAGE-IV) UNCHAHAHAR.”**

PART II – PRICE BID



**Bharat Heavy Electricals Limited
(A Govt. Of India Undertaking)
Power Sector – Northern Region,
Plot No. 25 , Sector - 16A ,
Distt. Gautam Budh Nagar, NOIDA – 201 301.**

TENDER NO. BHEL/NR/SCT/UNCHAHAAR-IV/ENABLING/994



ISO 9001, ISO 14001,
OHSAS 18001 & SA 8000
certified company
SubContract and Purchase Deptt.

Bharat Heavy Electricals Limited
(A Govt. Of India Undertaking)
Power Sector – Northern Region,
Plot No. 25 , Sector - 16A ,
Distt. Gautam Budh Nagar, NOIDA – 201 301(INDIA)
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THIS TENDER SPECIFICATION ISSUED TO:

M/S-----



RATE SCHEDULE

Job: “Construction & Development of 03 nos. Closed Storage Shed (Size: 900 SQM) including Internal/ External electrification work complete at 1X500 MW FGUTPP (Stage-IV) Unchahar.”

S.No.	Description of Item	QTY	Total Amount “A” in Rupees (in figures and words)
1	Lumpsum price for complete scope of work for “Construction & Development of 03 Nos. Closed Storage Sheds (Size: 900 SQM) including Internal / External Electrification Work complete at 1x500 MW FGUTPP (Stage-IV) Unchahar.”	1 set	

Note:- The rates of different items for the entire scope shall be worked out & awarded as per '**Annexure I**'.

BOQ CUM RATE SCHEDULE

SCOPE OF WORK: CONSTRUCTION & DEVELOPMENT OF 01 NOS. CLOSED STORAGE SHED (SIZE: 900 SQM) WITH C&I ROOM, IN-CHARGE ROOM, COMMON HALL, COMPUTER ROOM, SIDE RACKS, PANTRY & TOILET AND 02 NOS. CLOSED STORAGE SHEDS (SIZE: 900 SQM EACH) WITH SIDE RACKS ONLY FOR STORAGE PURPOSE INCLUDING INTERNAL / EXTERNAL ELECTRIFICATION WORK COMPLETE AT 1X500 MW FGUTPP (STAGE-IV) UNCHAHAAR.

SL.NO	CODE NO.	DESCRIPTION OF WORK	UNIT	QTY.	FACTOR (F)	RATE (Rs.) = FACTOR (F) * A / 100000 (Rounded off to two places after decimal)	AMOUNT (Rs.) = RATE * QUANTITY
		CONSTRUCTION AND DEVELOPMENT OF 03 NO. CLOSED STORAGE SHEDS (SIZE: 900 SQM EACH) AT 1X500 MW FGUTPP, NTPC UNCHAHAAR (STAGE-IV).					
	C	CIVIL WORK					
1	C1	EARTH WORK IN EXCAVATION FROM 0 (ZERO) TO 2 M DEPTH IN ALL KINDS OF SOIL (EXCEPT SOFT ROCK AND HARD ROCK) FOR FOUNDATIONS, SEPTIC TANK, SOAK PIT, RAMPS ETC., AS DIRECTED BY BHEL ENGINEER INCLUDING REMOVING THE EXCAVATED MATERIALS UP TO A DISTANCE OF 50M, DEWATERING (BOTH GROUND WATER AS WELL AS RAIN WATER) AND KEEP THE AREA DRY TILL COMPLETION OF ALL THE WORKS, LABOURS, MATERIALS AND REQUIRED T&Ps ETC. COMPLETE.	CUM	1014	0.88		
2	C2	EARTH WORK IN EXCAVATION FROM 0 (ZERO) TO 2 M DEPTH FOR SOFT ROCK AND HARD ROCK (BY MANUAL CHISELING OR BY MECHANICAL MEANS BUT WITHOUT BLASTING) FOR FOUNDATIONS, SEPTIC TANK, SOAK PIT, RAMP ETC., AS DIRECTED BY BHEL ENGINEER INCLUDING REMOVING THE EXCAVATED MATERIALS UP TO A DISTANCE OF 50M, DEWATERING (BOTH GROUND WATER AS WELL AS RAIN WATER) AND KEEP THE AREA DRY TILL COMPLETION OF ALL THE WORKS, LABOURS, MATERIALS AND REQUIRED T&Ps ETC. COMPLETE.	CUM	254	1.445		
3	C3	EARTH WORK IN EXCAVATION FROM 2.0 M TO 4.0 M DEPTH IN ALL KINDS OF SOIL (EXCEPT HARD ROCK AND SOFT ROCK) FOR FOUNDATIONS, SEPTIC TANK, SOAK PIT, RAMPS ETC., AS DIRECTED BY BHEL ENGINEER INCLUDING REMOVING THE EXCAVATED MATERIALS UP TO A DISTANCE OF 50M, DEWATERING (BOTH GROUND WATER AS WELL AS RAIN WATER) AND KEEP THE AREA DRY TILL COMPLETION OF ALL THE WORKS, LABOURS, MATERIALS AND REQUIRED T&Ps ETC. COMPLETE.	CUM	37	1.18		
4	C4	EARTH WORK IN EXCAVATION FROM 2.0 M TO 4.0 M IN ALL KINDS OF SOIL INCLUDING SOFT & HARD ROCK (BY MANUAL CHISELING OR BY MECHANICAL MEANS BUT WITHOUT BLASTING) DEPTH FOR SEPTIC TANK AND SOAK PIT, WHEREVER REQUIRED INCLUDING REMOVING THE EXCAVATED MATERIALS UP TO A DISTANCE OF 50 M, DEWATERING (BOTH GROUND WATER AS WELL AS RAIN WATER) AND KEEP THE AREA DRY TILL COMPLETION OF ALL THE WORKS, LABOURS, MATERIALS AND REQUIRED T&Ps ETC. COMPLETE.	CUM	82	1.95		
5	C5	SUB GRADE PREPARATION: CUTTING LEVELLING, FILLING WITH EXCAVATED EARTH (IN LAYERS NOT EXCEEDING 150 MM THICK), WATERING AND CONSOLIDATION FOR PLINTH PROTECTION AREA BEFORE LAYING THE PCC WITH ALL T&Ps, LABOURS, MATERIALS ETC. COMPLETE.	SQM	345	0.30		
6	C6	DISPOSAL OF EXCAVATED EARTH / ROCK (NOT SUITABLE FOR BACK FILLING / EXTRA) BEYOND INITIAL LEAD OF 50 M AND UPTO A MAXIMUM LEAD OF 3 KM OR PART THEREOF INCLUDING LOADING, UNLOADING , TRANSPORTING AND SPREADING AS PER DIRECTION OF BHEL ENGINEER .	CUM	418	0.76		
7	C7	BACKFILLING OF FOUNDATION, FLOORS AND PLINTH IN LAYERS NOT EXCEEDING 150 MM THICK. INCLUDING WATERING AND CONSOLIDATING ETC. COMPLETE AS PER STANDARD SPECIFICATION AND INSTRUCTED BY BHEL ENGINEER.					
8	I	WITH GOOD EXCAVATED SOIL AVAILABLE FROM THE EARTH WORK.	CUM	967	0.60		
9	II	WITH GRANULAR MURUM IN LAYERS (THICKNESS OF EACH LAYER SHOULD NOT EXCEED 150 MM) BELOW FOUNDATIONS, AND RAMP AS PER STANDARD SPECIFICATION, RELEVANT DRAWINGS AND INSTRUCTED BY BHEL ENGINEER INCLUDING ROYALTY. CONTRACTOR HAS TO SUBMIT ROYALTY CERTIFICATE FROM CONCERNED STATE GOVT. MINING DEPARTMENT.	CUM	249	4.42		
10	III	WITH GOOD EARTH BROUGHT FROM OUTSIDE FROM CONTRACTOR'S OWN SOURCE INCLUDING ROYALTY ETC. ALL COMPLETE.	CUM	105	2.43		
11	C 8	PROVIDING & FILLING IN SOAK PIT WITH BRICK BATS 40-80MM INCLUDING SAND PACKING ETC. COMPLETE, AS PER STANDARD SPECIFICATION AND INSTRUCTED BY BHEL ENGINEER.	CUM	9	4.14		
12	C 9	PROVIDING STONE SOLING OF REQUIRED THICKNESS AS PER DRAWING / SPECIFICATIONS BELOW FLOORING, RAMP, COLUMN FOUNDATIONS OF STORAGE SHED ETC. BY USING 80 MM SIZE HARD BROKEN BLACK GRANITE/ QUARTZITE/ GNEISS/ TRAP STONE METAL INCLUDING GRANULAR MURRUM PACKING, WATERING & COMPACTION ETC COMPLETE. AS PER STANDARD SPECIFICATION AND INSTRUCTED BY BHEL ENGINEER.	CUM	844	5.335		

BOQ CUM RATE SCHEDULE

SCOPE OF WORK: CONSTRUCTION & DEVELOPMENT OF 01 NOS. CLOSED STORAGE SHED (SIZE: 900 SQM) WITH C&I ROOM, IN-CHARGE ROOM, COMMON HALL, COMPUTER ROOM, SIDE RACKS, PANTRY & TOILET AND 02 NOS. CLOSED STORAGE SHEDS (SIZE: 900 SQM EACH) WITH SIDE RACKS ONLY FOR STORAGE PURPOSE INCLUDING INTERNAL / EXTERNAL ELECTRIFICATION WORK COMPLETE AT 1X500 MW FGUTPP (STAGE-IV) UNCHAHR.

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13	C 10	PROVIDING AND LAYING OF PLAIN CEMENT CONCRETE OF MIX 1:4:8 USING PPC (POZZOLANA PORTLAND CEMENT), 20 MM DOWN SIZE HARD BROKEN GRANITE STONE AGGREGATE FOR FOUNDATION, FLOORING, COLUMN ETC. INCLUDING SHUTTERING, FINISHING, CURING, CONSOLIDATION ETC. COMPLETE AS PER STANDARD SPECIFICATIONS AND AS DIRECTED BY BHEL ENGINEER.	CUM	348	23.18		
14	C 11	PROVIDING AND LAYING OF 100 MM THICK PLAIN CEMENT CONCRETE OF MIX 1:3:6 USING PPC (POZZOLANA PORTLAND CEMENT), 20 MM DOWN SIZE HARD BROKEN GRANITE STONE AGGREGATE FOR PLINTH PROTECTION WITH TROWEL FINISH INCLUDING SHUTTERING, FINISHING, CURING, CONSOLIDATION ETC. COMPLETE AS PER STANDARD SPECIFICATIONS AND AS DIRECTED BY BHEL ENGINEER.	CUM	36	26.11		
15	C 12	PROVIDING AND LAYING OF RCC MIX 1:2:4 USING PPC (POZZOLANA PORTLAND CEMENT), 20 MM DOWN SIZE HARD BROKEN GRANITE STONE AGGREGATE INCLUDING MECHANICAL MIXING, VIBRATION, CURING, FORM WORK & CENTERING AS PER DRAWING AND SPECIFICATION AND DIRECTED BY BHEL ENGINEER BUT EXCLUDING COST OF REINFORCEMENTS.	CUM	224	40.12		
16	C 13	PROVIDING AND LAYING DPC (DAMP PROOF COURSE) 50MM THICK IN 1:2:4 CEMENT CONCRET LAYER USING PPC (POZZOLANA PORTLAND CEMENT), AND 6 MM DOWN AGGREGATE, INCLUDING FORMWORK, BITUMEN FELT USING CEMENT WITH WATER PROOFING COMPOUND ETC. COMPLETE	SQM	186	1.94		
17	C 14	PROVIDING, CUTTING, BENDING AND FIXING IN POSITION REINFORCEMENT OF VARIOUS DIA. USING HIGH TENSILE TMT STEEL (Fe - 500) FOR FOUNDATIONS, COLUMNS, BEAMS, FLOORS, SUNSHED, SLAB ETC. AS PER DRAWING AND SPECIFICATION AND AS DIRECTED BY BHEL ENGINEER INCLUDING COST OF ALL MATERIALS, LEADS, LIFT, LABOURS, MS BINDING WIRE 18/20 GAUGE, TACK WELDING AND SUPPORTING IF REQUIRED COMPLETE.	MT	20.9	393.18		
18	C 15	PROVIDING BRICK WORK IN CM 1:6 (1 CEMENT & 6 COARSE SAND) USING PPC (POZZOLANA PORTLAND CEMENT), AND LOCALLY AVAILABLE BURNT CLAY BRICKS (MIN STRENGTH 35 KG/CM2) AS PER DRAWING AND SPECIFICATION FOR FOUNDATION, SUPER STRUCTURE, SEPTIC TANK ETC. INCLUDING COST OF ALL MATERIALS, LABOUR, SCAFFOLDING, CURING, AT ALL ELEVATIONS AND LEVELS, RAKING OUT JOINTS ETC. COMPLETE AND AS DIRECTED BY ENGINEER. EXCLUDING PLASTERING & PAINTING.	CUM	171	31.485		
19	C 16	PROVIDING BRICK WORK IN CM 1:6 (1 CEMENT & 6 COARSE SAND) USING PPC (POZZOLANA PORTLAND CEMENT), AND FLY ASH LIME BRICKS (MIN STRENGTH 35 KG/CM2) AS PER DRAWING AND SPECIFICATION FOR FOUNDATION, WALL, SEPTIC TANK ETC. INCLUDING COST OF ALL MATERIALS, LABOUR, SCAFFOLDING, CURING, AT ALL ELEVATIONS AND LEVELS, RAKING OUT JOINTS ETC. COMPLETE AND AS DIRECTED BY BHEL ENGINEER. EXCLUDING PLASTERING & PAINTING.	CUM	416	30.30		
20	C 17	PROVIDING HALF BRICK WORK, PARTITION WALL IN CM 1:4 (1 CEMENT & 4 COARSE SAND) USING PPC (POZZOLANA PORTLAND CEMENT), AND LOCALLY AVAILABLE BURNT CLAY BRICKS (MIN STRENGTH 35 KG/CM2) AS PER DRAWING AND SPECIFICATION FOR FOUNDATION, WALL ETC. INCLUDING COST OF ALL MATERIALS, LABOUR, SCAFFOLDING, RAKING OUT JOINTS, CURING AS PER DRAWING AND DIRECTED BY BHEL ENGINEER.	SQM	3	3.83		
21	C 18	PROVIDING HALF BRICK WORK FOR PARTITION WALL IN CM 1:4 (1 CEMENT & 4 COARSE SAND) PPC (POZZOLANA PORTLAND CEMENT), AND FLY ASH LIME BRICKS (MIN STRENGTH 35 KG/CM2) AS PER DRAWING AND SPECIFICATION FOR FOUNDATION, WALL ETC. INCLUDING COST OF ALL MATERIALS, LABOUR, SCAFFOLDING, RAKING OUT JOINTS, CURING AS PER DRAWING AND DIRECTED BY BHEL ENGINEER.	M2	2	3.83		

BOQ CUM RATE SCHEDULE

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SL.NO	CODE NO.	DESCRIPTION OF WORK	UNIT	QTY.	FACTOR (F)	RATE (Rs.) = FACTOR (F) * A / 100000 (Rounded off to two places after decimal)	AMOUNT (Rs.) = RATE * QUANTITY
22	C 19	SUPPLY, FABRICATION AND ERECTION OF STRUCTURAL STEEL BEAMS (ISMB), PLATES, CHANNELS, JOISTS, GUSSET PLATES, BOLTS, NUTS ETC. COMPLETE AS PER DRAWINGS AND AS DIRECTED BHEL ENGINEER FOR ISMB-250 / ISMB - 200 COLUMNS FOR CLOSED STORAGE SHEDS INCLUDING PROVIDING AND FIXING FOUNDATION BOLTS TO FIX THE COLUMNS TO FOUNDATIONS, ALL MATERIALS, LABOUR, T&Ps ETC., ONE COAT OF PRIMER, FOLLOWED BY TWO COATS OF ENAMEL PAINT OF APPROVED MAKE, COLOUR AND QUALITY FOR FINISHED PRODUCTS AT SITE, PREPARATION OF DESIGN & DETAILED FABRICATION DRAWINGS AND GETTING APPROVED FROM BHEL COMPLETE AS PER IS CODES SPECIFICATIONS AND DIRECTION OF BHEL ENGINEER.	MT	2	435.465		
23	C 20	ERECTION, FIXING AND ALIGNMENT OF ISMB-200 / ISMB-250 COLUMNS FOR CLOSED STORAGE SHEDS INCLUDING ISSUANCE OF THESE COLUMNS FROM BHEL STROES / YRAD, LOADING & UNLOADING, TRANSPORTATION (AT SITE), FABRICATION (IF ANY), PROVIDING & FIXING IN POSITION WITH HOLDING DOWN BOLTS, LABOUR, T&Ps, CLEANING / SCRAPPING THE COLUMNS TO RECIEVE THE FRESH PRIPMER / PAINT, AND COST OF RED OXIDE PRIMER AND TWO COATS OF SYNTHETIC ENAMEL PAINTS (OVER PRIMER COAT OF RED OXIDE) OF APPROVED MAKE, COLOUR AND QUALITY AT SITE, AS PER SPECIFIATIONS, STANDARDS AND AS DIRECTED BY BHEL ENGINEER. NOTE: STRUTURAL STEEL COLUMNS SHALL BE PROVIDED BY BHEL AS FREE OF COST (FOC) ITEM. COLUMNS SHALL BE THOROUGHLY CLEANED, STRAIGHTENED AND RECTIFIED AS PER SITE REQUIREMENT AND AS DIRECTED BY BHEL ENGINEER.	MT	13.1	70.95		
24	C 21	ERECTION, FIXING, JOINTING AND ALIGNMENT OF TUBULAR TRUSSES (BY USING CLASS B, MEDIUM QUALITY PIPE) AND SIDE RUNNERS FOR SIDE CLADDING AS PER BHEL APPROVED DRAWING WITH WIND TIES (USING FLAT OF SIZE 40X5MM) TO BE PROVIDED ABOVE SHEETS AND PROVIDING & FIXING BASE PLATES WITH HOLDING DOWN BOLTS ON ISMB COLUMNS, GUSSETS, RIBS, PINS, SPLICES ETC. AS REQUIRED INCLUDING TRANSPORT, LOADING, UNLOADING FROM FABRICATION YARD / STORE TO SITE ETC. COMPLETE. RATE IS INCLUSIVE OF ALL MATERIALS, LOADING & UNLOADING, FABRICATION, FIXING IN POSITION, LABOUR, T&Ps AND COST OF RED OXIDE PRIMER AND TWO COATS OF SYNTHETIC ENAMEL PAINTS (OVER PRIMER COAT OF RED OXIDE) OF APPROVED MAKE, COLOUR AND QUALITY AT SITE. NOTE: TRUSSES / PIPE MATERIALS SHALL BE ISSUED BY BHEL AS FREE OF COST (FOC) ITEM.THE TRUSSES SHALL BE THOROUGHLY CLEANED, STRAIGHTENED AND SURFACE PREPARED FOR RECEIVING THE FRESH PRIMER / PAINT. THUS PREPARED TRUSSES SHALL BE THOROUGHLY CHECKED FOR THEIR CORRECTNESS AND RECTIFIED AS REQUIRED AND AS DIRECTED BY BHEL ENGINEER BEFORE ERECTION.	MT	44	70.95		
25	C 22	DESIGN, SUPPLY, FABRICATING AND ERECTION OF TUBULAR TRUSSES (BY USING CLASS B, MEDIUM QUALITY PIPE) AND SIDE RUNNERS FOR SIDE CLADDINGS AS PER APPROVED DRAWING WITH WIND TIES (USING FLAT OF SIZE 40X5MM) TO BE PROVIDED ABOVE SHEETS AND PROVIDING & FIXING BASE PLATES WITH HOLDING DOWN BOLTS ON ISMB COLUMNS, GUSSETS, RIBS, PINS, SPLICES ETC. AS REQUIRED INCLUDING TRANSPORT, LOADING, UNLOADING CHARGES FROM FABRICATION SHOP / YARD TO SITE ETC. COMPLETE. RATE IS INCLUSIVE OF ALL MATERIALS, LOADING & UNLOADING, FABRICATION, FIXING IN POSITION, LABOUR CHARGES, T&Ps AND COST OF RED OXIDE PRIMER AT FACTORY/ YARD AND TWO COATS OF SYNTHETIC ENAMEL PAINTS (OVER PRIMER COAT OF RED OXIDE) OF APPROVED MAKE, COLOUR AND QUALITY AT SITE, PREPARATION OF DETAILED DESIGN & FABRICATION DRAWINGS AND GETTING APPROVED FROM BHEL ETC. COMPLETE AS PER DIRECTIONS OF BHEL ENGINEER.	MT	15	444.33		

BOQ CUM RATE SCHEDULE

SCOPE OF WORK: CONSTRUCTION & DEVELOPMENT OF 01 NOS. CLOSED STORAGE SHED (SIZE: 900 SQM) WITH C&I ROOM, IN-CHARGE ROOM, COMMON HALL, COMPUTER ROOM, SIDE RACKS, PANTRY & TOILET AND 02 NOS. CLOSED STORAGE SHEDS (SIZE: 900 SQM EACH) WITH SIDE RACKS ONLY FOR STORAGE PURPOSE INCLUDING INTERNAL / EXTERNAL ELECTRIFICATION WORK COMPLETE AT 1X500 MW FGUTPP (STAGE-IV) UNCHAHR.

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26	C 23	DESIGN, SUPPLY, FABRICATING AND ERECTION OF STRUCTURAL STEEL STAGING (APPROX. Ht. 4.0M) FOR INSTALLATION OF PVC OVER HEAD WATER TANK (OHT) OF CAPACITY- 1000 LITRES AS PER BHEL DRAWING. RATE IS INCLUSIVE OF ALL MATERIALS, LOADING & UNLOADING, FABRICATION, FIXING IN POSITION, LABOUR CHARGES , T&Ps AND COST OF RED OXIDE PRIMER AND TWO COATS OF SYNTHETIC ENAMEL PAINTS (OVER PRIMER COAT OF RED OXIDE) OF APPROVED MAKE COLOUR AND QUALITY AT SITE.	MT	1	435.46		
27	C 24	PROVIDING AND FIXING 0.63 MM THICK PPGI SHEETS OVER THE ROOF OF SHED AND FOR SIDE CLADDING AS PER BHEL DRAWING INCLUDING PROVIDING AND FIXING SUITABLE FLASHING, TRIM CLOSURE CAPS, HIPS, RIDGES, VALLEYS, GALVANISED IRON J OR L HOOK, BOLTS / SELF TAPPING SCREWS, BITUMINOUS WASHERS, GI CRAMP BOLTS, NUTS, SCAFFOLDING ETC. COMPLETE, ALL AS PER LATEST IS 459, 3307 AND 730.	SQM	3537	4.085		
28	C 25	ERECTION AND FIXING THE PPGI SHEETS OVER THE ROOF OF SHEDS AND FOR SIDE CLADDIG AS PER BHEL APPROVED DRAWING INCLUDING ISSUANCE OF THESE SHEETS FROM BHEL STORES, LOADING, UNLOADING, TRANSPORTATION AT SITE, PROVIDING AND FIXING SUITABLE FLASHING, TRIM CLOSURE CAPS, HIPS, RIDGES, VALLEYS, GALVANISED IRON J OR L HOOKS, BOLTS / SELF TAPPING SCREWS, BITUMINOUS WASHERS, GI CRAMP BOLTS, NUTS, SCAFFOLDING, CLEANING AND NECESSARY RECTIFICATION WORK ETC. COMPLTE, ALL AS PER LATEST IS 459,3307 AND 730 AND AS DIRECTED BY BHEL ENGINEER. NOTE: THE GI SHEETS SHALL BE ISSUED BY BHEL AS FREE OF COST (FOC) ITEM . THESE SHEETS SHALL BE THOROUGHLY CLEANED, STRAIGHTENED AND RECTIFIED AS REQUIRED INCLUDING SCRAPPING THE DAMAGED PAINTS AND APPLYING FRESH PAINT TO MATCH THE EXISTING SURFACE WHEREVER REQUIRED AS PER I.S. CODE /CPWD SPECIFICATIONS AND DIRECTION OF BHEL ENGINEER.	SQM	800	0.52		
29	C 26	PROVIDING AND FIXING OF UV STABILISED TRANSLUCENT RMP/FRP (FIBRE GLASS REINFORCED PLASTIC) SHEETS - 2.00 MM THICK OF APPROVED MAKECONFIRMING TO IS 10192 AND IS 12866 INCLUDING COST OF GI J OR L HOOKS, BOLTS / SELF TAPPING SCREWS, NUTS, WASHERS, BITUMEN WASHERS, SCAFFOLDING ETC. COMPLETE SO AS TO MATCH WITH PPGI SHEETS FOR NATURAL LIGHTING.	SQM	201	5.68		
30	C 27	PROVIDING AND FIXING OF FALSE CEILING OF 12.5 MM THICK TAPERED EDGE GYPSUM PLAIN BOARD CONFIRMING TO IS:2095 PART I WITH 4MM THICK PANELS OF APPROVED QUALITY AND DESIGN OF SIZE 600x600 MM WITH SQUARE EDGES SUPPORTED BY ANODISED ALUMINIUM FRAMES OF TEES 35x23.5x1.5 MM THICK AS MAIN MEMBER AND 19x23.5x1.5 MM TEES AS CROSS SUPPORTING MEMBERS AND WALL ANGLES OF 23.5x23.5x1.5MM. THE MAIN RUNNERS SHALL BE SUSPENDED FROM ROOF AT 1200 MM CENTRE TO CENTRE BY MEANS OF MS RODS WITH GI 'J' THREADED HOOK FOR ADJUSTMENTS. THE CROSS RUNNERS SHALL BE FIXED TO MAIN RUNNER TO FORM 'A' GRID PATTERN OF 600x600MM AND PROVIDING 25 MM WIDE ALUMINIUM STRIP TEES OR MOULDED SECTIONS AT ALL JOINTS. THE RATE SHALL BE INCLUSIVE OF TWO COATS OF APPROVED OBD ON GYPSUM BOARD, SUPPLY & FIXING OF ALUMINIUM FRAME AND SCAFFOLDING ETC. COMPLETE.	SQM	190	4.76		
31	C 28	PROVIDING AND FIXING OF BEST QUALITY COUNTRY WOOD DOORS COMPRISING OF FRAME 95 X 70MM OF 1st CLASS HARD WOOD AND 38/40MM THICK FLUSH SHUTTERS OF SOLID CORE TYPE USING COMMERCIAL PLY INCLUDING HOLD FASTS, WIND APPLIANCES, HANDLES, TOWER BOLTS AND ALDROPS, MORTISE OR SUITABLE LOCKS ETC. AS PER THE STANDARD PRACTICE AND APPLYING TWO COATS OF SYNTHETIC ENAMEL PAINT OF APPROVED SHADE & COLOR OVER A COAT OF PRIMER AS DIRECTED BY BHEL ENGINEER.	SQM	17	14.11		
32	C 29	PROVIDING AND FIXING OF BEST QUALITY PVC PANELED DOORS OF THICKNSS 29MM, SINTEX/BAJAJ MAKE OR APPROVED EQUIVALENT FOR TOILETS INCLUDING ALL FITTINGS AND FIXTURES, MS ANGLE FRAME OF SIZE 40 X 40 X 6 MM ETC. ALL COMPLETE AS PER DRAWINGS AND SPECIFICATIONS.	SQM	2	18.45		

BOQ CUM RATE SCHEDULE

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33	C 30	PROVIDING AND FIXING OF 18 GAUGE M.S. SHEET DOOR WITH FRAME WORK 40 X 40 X 6 MM M.S. ANGLE INCLUDING LOCKING ARRANGEMENTS, HOLD FAST, APPLYING ANTICORROSSIVE PRIMER COAT OF RED LEAD PAINT AND 2 COATS OF SYNTHETIC ENAMEL PAINT OF APPROVED COLOUR COMPLETE AS DIRECTED BY BHEL ENGINEER.	SQM	3	17.40		
34	C 31	SUPPLYING, MANUFACTURING AND FIXING IN POSITION OF STEEL WINDOWS AND VENTILATORS INCLUDING FRAMES & IRON BARRED (GUARD BAR OF SQUARE SECTION @ 100 MM C/C) AND GLAZED WITH 4 MM PLAIN GLASS AS PER STANDARD SPECIFICATIONS & RELEVANT IS CODE AND INSTRUCTIONS OF BHEL ENGINEER. THE COST SHALL BE INCLUSIVE OF ALL ACCESSORIES FITTINGS, HOLD FASTS, PAINTING TWO COATS OF SYNTHETIC ENAMEL PAINT OF APPROVED COLOUR AND QUALITY OVER ONE COAT OF RED OXIDE PRIMER ETC. COMPLETE.			-		
35	A	STEEL WINDOWS	SQM	9	4.97		
36	B	STEEL LOUVERED VENTILATORS (TO BE FIXED IN SIDE CLADDING SHEETS)	SQM	27	4.97		
37	C31	PROVIDING AND LAYING OF IPS FLOORING 40MM THICK USING PPC (POZZOLANA PORTLAND CEMENT) WITH CEMENT CONCRETE 1:2:4 (USING 12 MM DOWN AGGREGATES) AS PER STANDARD PRACTICE / SPECIFICATIONS IN PANELS OF SIZE NOT EXCEEDING 2.0 x 2.0 SQ.M BY PROVIDING, FIXING GLASS STRIPS. INCLUDING CURING & CLEANING ETC. ALL COMPLETE.	SQM	2586	1.87		
38	C 32	PROVIDING 2 MM THICK NEAT CEMENT FINISH USING PPC (POZZOLANA PORTLAND CEMENT) OVER CONCRETE BASE FOR FLOORING, PAVING, PLASTERED SURFACE ETC. INCLUDING CURING & CLEANING AND SCAFFOLDING COMPLETE.	SQM	2731	0.22		
39	C 33	PROVIDING AND LAYING OF 5.5 MM THICK CERAMIC TILES OF APPROVED MAKE CONFIRMING TO IS: 15622, REQUIRED SIZE IN COLOURS WHITE, IVORY, GREY, FUME RED BROWN, LAID OVER THE BED OF CM - 1:4 (1 CEMENT & 4 COARSE SAND) USING PPC (POZZOLANA PORTLAND CEMENT). TILES FROM REPUTED MANUFACTURER LIKE JONSON / KAJARIA OR EQUIVALENT INCLUDING ALL MATERIALS COMPLETE AS PER STANDARD PRACTICE AND SPECIFICATION.			-		
40	I	FLOORING - 300MM X 300MM	SQM	77	4.86		
41	II	SKIRTING - 300MM X 150MM	SQM	7	4.69		
42	C 34	SUPPLYING AND FIXING OF WHITE GLAZED TILES OF REQUIRED SIZES LAID OVER THE BED OF CM - 1:4 (1 CEMENT & 4 COARSE SAND) USING PPC (POZZOLANA PORTLAND CEMENT). DADO IN TOILET & PANTRY ROOM UP TO 1.5 M ELEVATIONS INCLUDING PEREPARATION OF BASE LAYING UNDERBED, FINISHING AND ROUNDING CORNERS AND JUNCTIONS, CURING ETC. COMPLETE AS PER DRAWINGS AND SPECIFICATIONS.			-		
43	I	FLOORING (5.0MM TO 6.0MM THICK OF SIZE 300MM X 300MM)	M2	28	5.84		
44	II	DADO (5MM TO 6MM THICK OF SIZE 150MM X 150MM) - 1.5M HEIGHT FROM FINISHED FLOOR LEVEL	M2	32	4.69		
45	C 35	PROVIDING PLASTERING WITH CEMENT MORTAR -1:6 (1 CEMENT & 6 COARSE SAND) USING PPC (POZZOLANA PORTLAND CEMENT) OVER BOTH INTERNAL AND EXTERNAL FACES OF BRICKWORK AND CONCRETE SURFACES, PARTITION WALLS ETC. AT ALL LEVELS INCLUDING PREPARING THE SURFACE, RAKING JOINTS, SCAFFOLDING, CURING, COST OF ALL MATERIALS, LABOUR ETC. COMPLETE.			-		
46	I	EXTERNAL PLASTERING - 18MM THICK	M2	1659	1.17		
47	II	INTERNAL PLASTERING -12MM THICK	M2	2313	0.79		

BOQ CUM RATE SCHEDULE

SCOPE OF WORK: CONSTRUCTION & DEVELOPMENT OF 01 NOS. CLOSED STORAGE SHED (SIZE: 900 SQM) WITH C&I ROOM, IN-CHARGE ROOM, COMMON HALL, COMPUTER ROOM, SIDE RACKS, PANTRY & TOILET AND 02 NOS. CLOSED STORAGE SHEDS (SIZE: 900 SQM EACH) WITH SIDE RACKS ONLY FOR STORAGE PURPOSE INCLUDING INTERNAL / EXTERNAL ELECTRIFICATION WORK COMPLETE AT 1X500 MW FGUTPP (STAGE-IV) UNCHAHAAR.

SL.NO	CODE NO.	DESCRIPTION OF WORK	UNIT	QTY.	FACTOR (F)	RATE (Rs.) = FACTOR (F) * A / 100000 (Rounded off to two places after decimal)	AMOUNT (Rs.) = RATE * QUANTITY
48	C 36	PROVIDING & APPLYING COLOUR WASH -THREE COATS ON NEWLY PLASTERED EXTERNAL SURFACE OF SHED BY USING BEST SHALE LIME TO GIVE AN EVEN SHADE INCLUDING PREPARING THE SURFACE LIKE CLEANING AND BRUSHING & BROOMING OF WALLS AND IN ACCORDANCE WITH STANDARD SPECIFICATION. RATE INCLUDE COST OF ALL MATERIALS , COLOURING AGENT, BASE COAT OF WHITE WASH, APPROVED ADDESSIVE, SCAFFOLDING AT ALL LEVEL, BRUSH ETC. COMPLETE.	M2	1659	0.12		
49	C 37	PROVIDING & APPLYING WHITE WASH - THREE COATS ON NEWLY PLASTERED INTERNAL SURFACE OF SHED (EXCLUDING INNER WALLS OF OFFICE, C&I ROOM, PANTRY, TOILET, COMMON HALL, COMP. ROOM) BY USING BEST SHALE LIME TO GIVE AN EVEN SHADE INCLUDING PREPARING THE SURFACE LIKE CLEANING AND BRUSHING & BROOMING OF WALLS AND IN ACCORDANCE WITH STANDARD SPECIFICATION. RATE INCLUDE COST OF ALL MATERIALS , APPROVED ADDESSIVE, SCAFFOLDING AT ALL LEVEL, BRUSH ETC. COMPLETE.	M2	1784	0.08		
50	C 38	PROVIDING & APPLYING TO INTERIOR SURFACES OF STORE OFFICE AND C&I ROOM BY TWO COATS OF OIL BOUND DISTEMPER (OBD) OF APPROVED SHADE ,COLOR AND MAKE CONFIRMING TO IS : 428 TO OBTAIN AN EVEN FINISH AND UNIFORM COLOR OVER A COAT OF PRIMER AS PER MANUFACTURE RECOMMENDATION INCLUDING COST OF PAINT, SURFACE PREPARATION LIKE CLEANING, BRUSHING & BROOMING OF WALLS , SCAFFOLDING AT ALL LEVEL ETC, COMPLETE. SURFACE PREPARATION SHALL BE DONE BY APPLYING PUTTY/PLASTER OF PARIS (POP) INCLUDING COST OF MATERIAL, LABOUR ETC. COMPLETE.	M2	457	0.47		
51	C 39	PROVIDING AND FIXING OVER HEAD HYDRAULIC DOOR CLOSER (HEAVY DUTY, HAVING BRAND LOGO WITH ISI, IS : 3564, EMBOSSED ON THE BODY) OF APPROVED BRAND AND SIZE, WITH DOUBLE SPEED ADJUSTMENT ON NECESSARY DOORS WITH NECESSARY ACCESSORIES AND SCREWS ETC. COMPLETE AS DIRECTED BY BHEL ENGINEER.	NO.	7	6.07		
52	C 40	PROVIDING , SUPPLYING AND FIXING OF 20 GAUGE MS ROLLING SHUTTERS OF SIZE 5 M X 5 M OR 5M X 6M (APPROX.) AS PER I.S. SPECIFICATIONS, COMPLETE, MECHANICALLY OPERATED FROM IN AND OUTSIDE BOTH AS INSTRUCTED BY BHEL ENGINEER INCLUDING TWO COATS OF SYNTHETIC ENAMEL PAINT OF APPROVED COLOUR AND QUALITY OVER ONE COAT OF RED OXIDE PRIMER LOCKING ARRANGEMENT. RATE SHALL BE INCLUSIVE OF ALL THE ABOVE COMPLETE.	M2	87.6	16.23		
		SUB TOTAL- SECTION C				-	
	S	SANITARY WORKS- PRIOR APPROVAL OF SAMPLE AND BRAND BY BHEL ENGINEER IS NECESSARY BEFORE USE.					
53	S 1	PROVIDING AND FIXING WHITE GLAZED VITREOUS CHINA, HAND WASH BASIN OF 55 CM X 40 CM SIZE INCLUDING COLD WATER PILLER TAP, BRACKETS, STOP TAP, CHROMIUM PLATED BOTTLE TRAP AND NECESSARY PIPE CONNECTIONS INCLUDING UPVC WASTE PIPE AND TRAP UPTO THE OUT SIDE FACE OF THE WALL, MAKING GOOD THE DAMAGED SURFACE, TESTING ETC. COMPLETE.	NO	1	10.05		
54	S 2	PROVIDING AND FIXING EUROPEAN TYPE WHITE GLAZED VITREOUS CHINA W.C. PAN WITH UPVC SEAT AND LID WITH CHROMIUM PLATED BRASS HINGES AND RUBBER BUFFERS INCLUDING UPVC VENT PIPE (APPROX. 2M. HT. WITH COWL) ON THE OUTSIDE FACE OF WALL, 10 LITRE PVC LOW LEVEL FLUSHING CISTERN WITH ALL FITTINGS, PIPE AND STOP COCK, BRACKETS FOR FIXING CISTERN, 32 MM DIA. UPVC FLUSH PIPE WITH FITTINGS AND CLAMPS, 20 MM DIA. UPVC OVERFLOW PIPE, FLOAT VALVES, CUTTING AND MAKING GOOD TO THE WALLS AND FLOORS, TESTING ETC. COMPLETE.	NO	1	18.86		

BOQ CUM RATE SCHEDULE

SCOPE OF WORK: CONSTRUCTION & DEVELOPMENT OF 01 NOS. CLOSED STORAGE SHED (SIZE: 900 SQM) WITH C&I ROOM, IN-CHARGE ROOM, COMMON HALL, COMPUTER ROOM, SIDE RACKS, PANTRY & TOILET AND 02 NOS. CLOSED STORAGE SHEDS (SIZE: 900 SQM EACH) WITH SIDE RACKS ONLY FOR STORAGE PURPOSE INCLUDING INTERNAL / EXTERNAL ELECTRIFICATION WORK COMPLETE AT 1X500 MW FGUTPP (STAGE-IV) UNCHAHAAR.

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55	S 3	PROVIDING AND FIXING IN POSITION OF WHITE GLAZED EARTHENWARE FLAT BACK/CORNER TYPE LIPPED FRONT URINALS OF SIZE 430X260X350 MM / 340X460X265 MM OF APPROVED MAKE AND QUALITY WITH AUTOMATIC FLUSHING CISTERN (5 LITRES), WITH GI FLUSH PIPE AND SPREADERS WITH BRASS UNIONS, GI CLAMPS, CUTTING OF WALLS AND MAKING GOOD OF ALL DAMAGES AND FINISHING TO MATCH THE EXISTING WORK ETC. COMPLETE. RATE QUOTED SHALL INCLUDE COST OF ALL MATERIALS AND LABOUR FOR CARRYING, LAYING & FIXING AND ALL OTHER INCIDENTAL CHARGES ETC. COMPLETE.	NO	2	18.77		
56	S 4	PROVIDING AND FIXING IN POSITION OF HIGH CLASS BELGIUM OR SUPERIOR MAKE BEVELLED EDGE MIRROR OF SIZE 450MM X 550MM X 6MM WITH 16 MM DIA & 550 MM LENGTH NICKEL PLATED TOWEL ROD MOUNTED ON 6 MM THICK PLYWOOD OR PLASTIC FOLDER SHEET. RATE TO INCLUDE COST OF ALL MATERIALS, LABOUR FOR FIXING THE WOODEN PLUGS WITH CP BRASS SCREWS AND WASHERS ETC. COMPLETE.	NO	1	4.51		
57	S 5	PROVIDING AND FIXING IN POSITION OF 15 MM DIA CONCUSSION PUSH BUTTON TYPE BRASS/ GUN METAL SELF CLOSING TAP INCLUDING NECESSARY SOCKET, TESTING ETC. COMPLETE FOR URINALS AS PER DIRECTION OF BHEL ENGINEER.	NO	2	2.53		
58	S 6	PROVIDING AND FIXING IN POSITION OF 15 MM DIA NOMINAL SIZE SCREW DOWN TYPE CHROMIUM PLATES BRASS BIB COCKS OF STANDARD TYPE OF APPROVED MAKE AND QUALITY (LEADER MAKE OR EQUIVALENT) AS PER STANDARD SPECIFICATION. RATE INCLUDES JOINTING MATERIALS, SOCKETS, UNION NUT, TESTING, LABOURS FOR CARRYING AND FIXING ETC. COMPLETE	NO	3	2.71		
59	S 7	PROVIDING AND FIXING IN POSITION OF 25 MM DIA GUN METAL GATE VALVE . INCLUDING ALL NECESSARY FITTING & FIXTURE ETC. COMPLETE AS PER STANDARD SPECIFICATION.	NO	1	2.53		
60	S 8	PROVIDING AND FIXING IN POSITION OF 40 MM DIA GUN METAL GATE VALVE . INCLUDING ALL NECESSARY FITTING & FIXTURE ETC. COMPLETE AS PER STANDARD SPECIFICATION.	NO	1	3.45		
61	S 9	PROVIDING AND FIXING IN POSITION OF 15 MM DIA NOMINAL SIZE SCREW DOWN TYPE CHROMIUM PLATED BRASS STOP COCKS OF APPROVED MAKE AND QUALITY (LEADER MAKE OR EQUIVALENT) AS PER STANDARD SPECIFICATION. RATE INCLUDES COST OF JOINTING MATERIALS, SOCKETS, UNION NUT, TESTING, LABOURS FOR CARRYING AND FIXING ETC. COMPLETE	NO	4	1.54		
62	S 10	PROVIDING AND FIXING IN POSITION OF 100MM X 50MM HCI "NAHANI" TRAP (100 MM INLET & 100 MM OUTLET SAND CAST IRON S&S AS PER IS: 1729) WITH HCI GRATINGS, BENDS, CONNECTING PIECES OF CI PIPE UPTO OUTSIDE FACE OF THE WALL. MAKING GOOD THE DAMAGED SURFACE, TESTING ETC. COMPLETE AS PER STANDARD SPECIFICATIONS. RATE TO BE ALL INCLUSIVES.	NO	4	4.45		
63	S 11	PROVIDING AND FIXING IN POSITION OF 150 MM SALT GLAZED STONE WARE GULLY TRAP WITH HCI GRATINGS, BRICK MASONRY CHAMBER (WITH COMMON BURNT CLAY FPS BRICKS OF CLASS 7.5) AND WATER TIGHT CI COVER OF SIZE 300X300 MM OF APPROVED MAKE (WEIGHT OF COVER NOT LESS THAN 4.5 KG AND FRAME NOT LESS THAN 2.5 KG) AND QUALITY AS PER STANDARD SPECIFICATIONS. RATE TO BE ALL INCLUSIVE.	NO	2	9.15		
64	S 12	PROVIDING AND LAYING WITH REQUIRED GRADING & LEVELING IN TRENCHES / ON WALLS, MEDIUM GRADE (TYPE) GALVANISED IRON (GI) PIPE HAVING EMBOSSED ISI MARK ON IT , OF REQUIRED DIAMETER WITH SCREWED, SOCKETS, JOINTS, NECESSARY GALVANISED IRON FITTINGS SUCH AS SOCKETS, BACK NUTS, ELBOWS, BENDS, TEES, REDUCERS, ENLARGERS, PLUGS, CLAMPS ETC. INCLUDING ALL NECESSARY EXCAVATION, BACK FILLING, CUTTING AND MAKING GOOD THE WALLS, FIXING WITH CLAMPS, TESTING ETC. COMPLETE.					
65	I	40 MM DIA	RM	100	1.93		
66	II	25 MM DIA	RM	50	1.67		

BOQ CUM RATE SCHEDULE

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67	III	20 MM DIA	RM	25	1.31		
68	IV	15 MM DIA	RM	20	1.075		
69	S 13	PROVIDING AT WORKING SITE, CARRYING AND LOWERING INTO TRENCHES, LAYING TO PROPER ALIGNMENT, LEVEL AND GRADE, JOINTING WITH CM (1:1) AND TESTING OF JOINTS ETC. OF THE FOLLOWING SIZE OF SALT GLAZED STONEWARE PIPE INCLUSIVE OF ALL NECESSARY SPECIALS TARRED HEMP YARN AND ALL JOINTING MATERIALS COMPLETE AS PER STANDARD SPECIFICATIONS INCLUDING ALL NECESSARY EXCAVATION ,BACKFILLING, DISPOSAL OF SURPLUS EARTH, LEAD AND LIFT AS PER SITE CONDITIONS. RATE SHALL INCLUDE COST OF ALL MATERIALS, LABOUR CHARGES AND INCIDENTAL CHARGES ETC. COMPLETE.			-		
70	I	100 MM DIA STONEWARE PIPELINE INCLUDING ALL SPECIALS COMPLETE.	RM	50	1.16		
71	S 14	PROVIDING AND FIXING IN POSITION OF PVC OVERHEAD WATER TANK OF SYNTEX OR OTHER APPROVED MAKE OF 1000 LITRE CAPACITY WITH PROVISION FOR OVERFLOW ARRANGEMENT VALVES, INLET AND OUTLET ETC. COMPLETE. SUPPORTING STEEL STRUCTURE FOR FIXING THE TANK SHELL BE PAID IN THE RELEVANT ITEM.	NO	1	37.25		
72	S 15	CONSTRUCTION OF 230MM THICK BURNT CLAY / FLY ASH LIME BRICK CHAMBER (USING PPC (POZZOLANA PORTLAND CEMENT)) OF THE FOLLOWING DIMENSIONS (INNER DIMENSION) WITH 20 MM THICK INTERNAL & EXTERNAL CEMENT PLASTER OF MIX CM 1:5 (1 CEMENT & 5 COARSE SAND) , NEAT CEMENT FINISH , TOP CI - COVER AND CONNECTORS FOR SEWER LINES. RATE SHALL BE INCLUSIVE OF ALL NECESSARY EXCAVATION & FILLING, PCC-100 MM THICK OF 1:3:6 FOR BEDDING ON 100 MM THICK OVER SIZE SOLING WITH 80 MM METAL ETC. COMPLETE.			-		
73	I	600X450X450 WITH C.I COVER	NO	2	25.00		
74	II	900X600X450 WITH C.I. COVER	NO	3	32.35		
75	S16	PROVIDING AND FIXING OF PRECAST 80 MM THICK RCC COVER OF MIX 1:1.5:3 FOR MAN HOLES OF VARIOUS SIZES WITH REINFORCEMENT OF 10 MM DIA BOTH WAY TIED WITH TACK WELDING @ 150 MM C/C WITH 2 HOOKS OF 12 MM DIA BARS ETC.COMPLETE.			-		
76	I	750MM x 600MM	Nos.	2	5.97		
77	II	1050MM x 750MM	Nos.	3	6.80		
78	S17	PROVIDING AND FIXING PTMT TOWEL RAIL COMPLETE WITH BRACKETS FIXED TO WOODEN CLEATS WITH CP BRASS SCREWS WITH CONCEALED FITTINGS ARRANGEMENT OF APPROVED QUALITY AND COLOUR.			-		
79	I	600 MM LONG TOWEL RAIL WITH TOTAL LENGTH OF 645 MM , WIDTH 78 MM AND EFFECTIVE HEIGHT OF 88 MM, WEIGHING NOT LESS THAN 190 GMS	NO.	1	2.65		
80	S18	PROVIDING & FIXING OF PTMT LIQUID SOAP DISPENSER AT ALL WASH BASIN LOCATION.	NO.	1	1.07		
81	S19	PROVIDING & FIXING OF WOODEN FRAME OF BEST QUALITY COUNTRY WOOD (2.5" THICK & 3.0" WIDE) FOR INSTALLING PORTABLE 1.5T AIR CONDITIONER ON THE WALL OPENING (31"x22") / AS REQUIRED, SO AS TO MAKE A FRAME OF INSIDE CLEAR DIMENSION REQUIRED FOR INSTALLATION OF A.C. WITH COMPLETE FINISHING, PAINTING, HOLD FAST ETC. RATE TO INCLUDE ALL NECESSARY FITTING & FIXTURE, LABOUR, MAKING GOOD THE DAMAGED SURFACE ETC. COMPLETE. AS DIRECTED BY BHEL ENGINEER.	NOS.	6	16.67		
82	S20	PROVIDING & FIXING IN POSITION OF CI VENT PIPE OF DIA. 100 MM (APPROX. HT. 3 M) IN SEPTIC TANK. RATE TO INCLUDE ALL NECESSARY FITTING & FIXTURE, LABOUR ETC.	RM	4	6.35		

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83	S21	PROVIDING AND FIXING 18 MM THICK, 150 MM WIDE PELMET OF FLAT PRESSED 3 LAYER OR GRADED WOOD PARTICLE BOARD MEDIUM DENSITY GRADE I, IS : 3087 MARKED, INCLUDING TOP COVER OF 6 MM COMMERCIAL PLY WOOD CONFORMING TO IS: 303 BWR GRADE, NICKEL PLATED M.S. PIPE 20 MM DIA (HEAVY TYPE) CURTAIN ROD WITH NICKEL PLATED BRACKETS, INCLUDING FIXING WITH 25X3 MM M.S. FLAT 10 CM LONG FIXED TO PELMET WITH HOLLOCK WOOD CLEATS OF SIZE 100 MM X 40 MM X 40 MM ON BOTH INNER SIDE OF PELMET AND RAWL PLUGS 75 MM LONG ETC. LABOUR, MATERIALS ALL COMPLETE.	RM	12	1.97		
84	S22	PROVIDING AND FIXING OF AQUA-GUARD OR EQUIVALENT WATER PURIFIER (15 Litre), ALONG WITH ALL FITTINGS. RATE TO INCLUDE ALL NECESSARY FITTINGS & FIXTURES, LABOUR ETC.AS APPROVED & DIRECTED BY BHEL ENGINEER.	NOS.	1	81.90		
85	S23	PROVIDING AND FIXING OF 1 No. 18"X24" SIZE STAINLESS STEEL A ISI 304 (18/8) KITCHEN SINK AS PER IS : 13983 WITH ALL FITTINGS LIKE DRAIN PIPE, STOP VALVE ETC. RATE TO INCLUDE ALL NECESSARY FITTING & FIXTURE, LABOUR ETC. AS APPROVED & DIRECTED BY BHEL ENGINEER.	NOS.	1	26.24		
		SUB TOTAL- SECTION S			-		
		TOTAL (SECTION C + SECTION S)			-		
	E	INTERNAL ELECTRIFICATION FOR CLOSED STORAGE SHEDS, INCLUDING PROVIDING ALL MATERIALS, LABOURS, T&Ps (AS REQUIRED), COMPLYING WITH THE STATUTORY AND LOCAL AUTHORITIES REQUIREMENTS AS APPLICABLE TO MEET THE FUNCTIONAL REQUIREMENTS AND TO FULL SATISFACTION OF BHEL ENGINEER. PRIOR APPROVAL OF MATERIALS SAMPLE AND BRAND OF MATERIAL BY BHEL ENGINEER IS NECESSARY BEFORE USE.				-	
86	E1	SUPPLYING & INSTALLING & COMMISSIONING OF 415 V POWER DISTRIBUTION BOARD COMPLETE WITH: 1) INCOMING MCB TPH 100 AMPS. - 1 NO. 2) OUTGOING MCB TPH 32 AMPS. -3NOS. 3) RCCB DP 25/20 AMPS. - 2NOS. 4) OUTGOING MCB SP 6 AMPS - 6NOS. All RCCBs, MCBs SHALL BE MDS/INDO KOPP MAKE. DISTRIBUTION BOARDS SHALL BE SIEMENS / MDS / INDO KOPP MAKE WITH INTERNAL BUSBARS, INTERNAL WIRING, 2 NOS. EARTHING TERMINALS, EARTH CONNECTIONS, INCLUDING GLANDS, LUGS.	Set	3	180.80		
87	E2	PROVIDING SUITABLE FOUNDATION FOR MOUNTING 415 VOLT AC POWERDISTRIBUTION BOARD AS SPECIFIED ABOVE, INSTALLATION & COMMISSIONING OF PANEL.	NO	3	37.22		
88	E3	PROVIDING AND INSTALLING WIRING USING 2.5 SQ.MM FRLS PVC INSULATED COPPER CONDUCTOR THROUGH PVC CONDUIT OF REQUIRED SIZE WITH ACCESSORIES AND FIXTURES .WIRING SHALL BE CONCEALED TYPE FOR COMPUTER ROOM, OFFICE SHED & FOR REST OF SHEDS OPEN AND WHREVER REQUIRED IN PVC CONDUIT OF REQUIRED SIZE.	PER POINT	30	4.97		
89	E4	PROVIDING AND INSTALLING WIRING USING 4.0 SQ.MM FRLS PVC INSULATED COPPER CONDUCTOR THROUGH PVC CONDUIT OF REQUIRED SIZE WITH ACCESSORIES AND FIXTURES. WIRING SHALL BE CONCEALED TYPE FOR COMPUTER ROOM, OFFICE SHED & FOR REST OF SHEDS OPEN AND WHREVER REQUIRED IN PVC CONDUIT OF REQUIRED SIZE.	PER POINT	16	6.07		
90	E5	PROVIDING AND INSTALLING WIRING FOR MAINS USING 6.00 SQ.MM FRLS PVC INSULATED COPPER CONDUCTOR OF ISI MAKE. USING CONCEALED TYPE WIRING/PVC CONDUIT OF REQUIRED SIZE.	PER POINT	14	7.67		
91	E6	PROVIDING AND INSTALLING WIRING FOR MAINS USING 16.00 SQ.MM FRLS PVC INSULATED COPPER CONDUCTOR OF ISI MAKE USING CONCEALED TYPE WIRING/PVC CONDUIT OF REQUIRED SIZE.	PER POINT	11	15.64		

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92	E7	PROVING AND INSTALLATION OF WIRING FOR FANS/COOLERS USING 2.5 SQ.MM FRLS PVC INSULATED COPPER CONDUCTOR OF ISI MARK THROUGH PVC CONDUITS WITH ACCESSORIES AND FIXTURES. THIS INCLUDES LIGHT FITTINGS ETC. COMPLETE.	PER POINT	6	3.025		
93	E8	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 (ANCHOR OR EQUIVALENT) , INCLUDING TERMINATION, CONNECTION, ALL FITTINGS ETC. AS REQUIRED AND AS DEIRECTED BY BHEL ENGINEER.	NO	21	1.89		
94	E9	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 5/6 & 15/16 AMPS MODULAR SOCKET OUTLET AND 15/16 AMPS MODULAR SWITCH , (ANCHOR OR EQUIVALENT), INCLUDING TERMINATION, CONNECTION, ALL FITTINGS ETC. AS REQUIRED AS DEIRECTED BY BHEL ENGINEER.	NO	13	2.425		
95	E10	PROVIDING AND FIXING ORDINARY TUBELIGHT WITH FRAME OF STANDARD MANUFACTURER LIKE PHILIPS/BAJAJ OR EQUIVALENT AS APPROVED BY BHEL. THIS INCLUDES TUBE LIGHT FITTINGS ETC. COMPLETE.	NO.	80	1.93		
96	E11	PROVIDING AND FIXING EXHAUST FANS 12" DIAMETER WITH FRAME OF STANDARD MANUFACTURER LIKE CROMPTON GREEVES OR EQUIVALENT AS APPROVED BY BHEL.	NO.	3	10.27		
97	E12	PROVIDING AND FIXING HEAVY DUTY PLUG POINT 15 AMPS (ANCHOR MAKE OR EQUIV.) WITH ONE SWITCH FOR COMPUTER ,ONE FOR AC CONNECTION WITH BOARD ETC COMPLETE.	NO.	6	2.43		
98	E13	PROVIDING AND FIXING METAL CLAD PLUG AND MCB OF 30AMPS. (CROMPTON/MDS MAKE) FOR AIR CONDITIONER WITH BOARD ETC COMPLETE.	NO.	4	5.03		
99	E14	PROVIDING AND FIXING CEILING FAN 48" DIAMETER OF APPROVED COMPANY SUCH AS CROMPTON GREEVES OR EQUIVALENT AS APPROVED BY BHEL. THIS INCLUDES LIGHT FITTINGS ETC. COMPLETE.	NO	6	7.69		
100	E15	PROVIDING AND FIXING CALLING BELLS (WITH INDICATOR LIGHT), BELL PUSH OF APPROVED MAKE SUCH AS PHILLIPS/ ANCHOR OR EQUIVALENT ICLUDING WIRING, CONDUTING ETC. COMPLETE.	NO	2	0.345		
101	E16	PROVIDING EARTHING PITS WITH 2 " DIA , 4 M LONG GI PIPES WITH FLANGE & GI WIRES WITH CHARCOAL, SALT AND AS PER THE STANDARD PRACTICE FOR ELECTRICAL CONNECTION.RATE SHALL BE INCLUSIVE OF ALL MATERIALS, LABOURS, ETC COMPLETE.	NO	5	22.19		
102	E17	PROVIDING & FIXING ALUMINIUM DISPERSIVE LUMINAIRE ENAMELED GREEN AND WHITE WITH CAST ALUMINIUM FLANGE AND NIPPLE SUITABLE FOR USE WITH GLS LAMP, DOME 12" DIAMETER, WITH HANGING BRACKET AND 200W GLS LAMP OF CROMPTON OR EQUIVALENT BAJAJ/PHILIPS MAKE, COMPLETE.	NOS.	105	2.59		
103	E18	WIRING WITH 2.5 SQ MM ISI MARK COPPER WIRE FOR ABOVE IN PVC CONDUIT ALONG WITH GI EARTH WIRE INCLUSIVE OF ALL MATERIAL, LABOUR ETC. COMPLETE	PER POINT	115	4.38		
104	E19	SUPPLYING & FIXING WALL MOUNTING TYPE LIGHTING PANELS, EACH WITH. (1) INCOMING MCB TPN -32 AMPS - 1NO. (2) RCCB DP 32 AMPS - 3NOS (3) MCB SP 6AMPS - 30 NOS. ALL MCBS AND RCCBS SHALL BE OF MDS / INDO KOPP MAKE. LIGHTING PANEL SHALL BE SIEMENS/MDS/INDO KOPP MAKE WITH INTERNAL BUSBARS, 2 NOS. EARTHING TERMINALS, EARTH CONNECTIONS, INCLUDING GLANDS, LUGS & WIRING FROM MAIN DB.	Sets.	3	103.825		
105	E20	SUPPLY OF CABLES 3 -1/2 CORE X 185 SQMM ALUMINIUM ARMoured PVC INSULATED CABLE (THREE AND HALF CORE) CONFIRMING TO IS 1554 (PART-I)	RM	150	3.37		

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SCOPE OF WORK: CONSTRUCTION & DEVELOPMENT OF 01 NOS. CLOSED STORAGE SHED (SIZE: 900 SQM) WITH C&I ROOM, IN-CHARGE ROOM, COMMON HALL, COMPUTER ROOM, SIDE RACKS, PANTRY & TOILET AND 02 NOS. CLOSED STORAGE SHEDS (SIZE: 900 SQM EACH) WITH SIDE RACKS ONLY FOR STORAGE PURPOSE INCLUDING INTERNAL / EXTERNAL ELECTRIFICATION WORK COMPLETE AT 1X500 MW FGUTPP (STAGE-IV) UNCHAHR.

SL.NO	CODE NO.	DESCRIPTION OF WORK	UNIT	QTY.	FACTOR (F)	RATE (Rs.) = FACTOR (F) * A / 100000 (Rounded off to two places after decimal)	AMOUNT (Rs.) = RATE * QUANTITY
106	E21	INSTALLATION OF CABLES 3 -1/2 CORE X 185 SQMM ALUMINIUM ARMoured PVC INSULATED CABLE CONFIRMING TO IS 1554 (PART -I) INCLUDING LAYING OF CABLE BELOW GROUND , EXCAVATION OF TRENCH OF 600 MM DEPTH (MIN.) IN ALL KIND OF SOIL, TERMINATION OF CABLES CORES WITH CRIMP TYPE LUGS, PROVIDING SAND LAYER BELOW& ABOVE THE CABLE, BRICK LAYING BOTH SIDE & ABOVE THE CABLE AND BACK FILLING ETC. CABLES ARE TO BE LAID FROM TRANSFORMER SUB STATION TO 415 VOLT AC DISTRIBUTION BOARD.	RM	150	1.15		
107	E22	SUPPLY OF CABLES 3 -1/2 CORE X 95 SQMM ALUMINIUM ARMoured PVC INSULATED CABLE (THREE AND HALF CORE) CONFIRMING TO IS 1554 (PART -I)	RM	120	2.635		
108	E23	INSTALLATION OF CABLES 3 -1/2 CORE X 95 SQMM ALUMINIUM ARMoured PVC INSULATED CABLE CONFIRMING TO IS 1554 (PART -I) INCLUDING LAYING OF CABLE BELOW GROUND, EXCAVATION OF TRENCH OF 600 MM DEPTH (MIN.) IN ALL KIND OF SOIL, TERMINATION OF CABLES CORES WITH CRIMP TYPE LUGGS, PROVIDING SAND LAYER BELOW&ABOVE THE CABLE, BRICK LAYING BOTH SIDE & ABOVE THE CABLE AND BACK FILLING ETC. COMPLETE. CABLES ARE TO BE LAID FROM 415 VOLT AC DISTRIBUTION BOARD TO WALL MOUNTING PANELS AS DIRECTED BY BHEL ENGINEER.	RM	120	1.11		
109	E24	SUPPLY OF CABLES 3 -1/2 CORE X 35 SQMM ALUMINIUM ARMoured PVC INSULATED CABLE (THREE AND HALF CORE) CONFIRMING TO IS 1554 (PART -I)	RM	180	1.02		
110	E25	INSTALLATION OF CABLES 3 -1/2 CORE X 35 SQMM ALUMINIUM ARMoured PVC INSULATED CABLE CONFIRMING TO IS 1554 (PART -I) INCLUDING LAYING OF CABLE BELOW GROUND, EXCAVATION OF TRENCH OF 600 MM DEPTH (MIN.) IN ALL KIND OF SOIL, TERMINATION OF CABLES CORES WITH CRIMP TYPE LUGGS, PROVIDING SAND LAYER BELOW& ABOVE THE CABLE, BRICK LAYING BOTH SIDE & ABOVE THE CABLE AND BACK FILLING ETC. CABLES ARE TO BE LAID AS DIRECTED BY BHEL ENGINEER.	RM	180	1.075		
111	E26	SUPPLY OF CABLES 2 CORE X 10 SQMM ALUMINIUM ARMoured PVC INSULATED CABLE CONFIRMING TO IS 1554 (PART -I)	RM	300	0.42		
112	E27	INSTALLATION OF CABLES 2 CORE X 10 SQMM ALUMINIUM ARMoured PVC INSULATED CABLE CONFIRMING TO IS 1554 (PART -I) INCLUDING LAYING OF CABLE BELOW GROUND, EXCAVATION OF TRENCH OF 600 MM DEPTH (MIN.) IN ALL KIND OF SOIL, TERMINATION OF CABLES CORES WITH CRIMP TYPE LUGGS, PROVIDING SAND LAYER BELOW & ABOVE THE CABLE, BRICK LAYING BOTH SIDE & ABOVE THE CABLE AND BACK FILLING ETC COMPLETE. CABLES ARE TO BE LAID AS DIRECTED BY BHEL ENGINEER	RM	300	1.075		
TOTAL VALUE OF SECTION-E							
GRAND TOTAL (SECTION C + SECTION S + SECTION E)			"A"				

NOTES:	
1	Bidder's quoted price above shall be complete in all respect for the full scope defined in specification and in accordance with all terms & conditions of tender.
2	Contractor shall fully understand description and Specifications of items mentioned in BOQ.
3	Conditional price bids with any deviation / clarification etc are liable to be rejected. No cutting / erasing / over writing shall be done.
4	Quantities mentioned in rate schedules are approximate only and liable for variation on either side depending upon site / design requirement. The tentative contract value (CV) of entire scope of work shall be calculated as per finally quoted / accepted rates & the Quantities indicated in BOQ cum Rate Schedule .
5	Contractor's total quoted price as per rate schedule will be taken as tentative only. The contractor undertakes to execute actual quantities as per advice of BHEL Engineer and accordingly the final contract price shall be worked out on the basis of quantities actually executed at site and payments will also be regulated for the same.
6	In case of any mis-match in rate and amount on price discrepancy, the same will be dealt as per clause no. 1.4 of GCC.