

Name of Work: कालिंदी कुंज आवासीय योजना, खुर्जा में ग्रुप हाउसिंग भूखण्ड जीएच-04 पर बेसमेन्ट एवं स्टिल्ट + 07 मंजिल ग्रुप हाउसिंग भवनों का निर्माण कार्य।

<u>SPECIFICATION</u>			
Sl. No.	Item Description	Quantity	Units
1.000	Part-A (CIVIL WORK)		
1.010	Excavation in foundation in ordinary soil (Loam, clay or sand) including lift upto 1.50 M. and lead upto 30M. and including filling watering and ramming of excavated earth into the trenches or into the space between the building and the sides of foundation trenches or into the plinth and removal and disposal of surplus earth as directed by the Engineer-in charge up to a distance of 30M. from the foundation trenches. [Sl.No.-251(a)] SOR-2022	2720.00	CUBM
1.020	Cement Concrete with 4 cm gauge approved stone ballast, coarse sand & cement in the proportion of 1:4:8 including supply of all materials, labour, Tools & plants etc. required for proper completion of the work. SOR NO 281	325.00	CUBM
1.030	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement. 5.33.1 All works upto plinth level 5.33.1.3 Concrete of M35 grade with minimum cement content of 370 kg /cum	2035.30	CUBM



1.040	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.5.33.2.3 All works above plinth level upto floor V level Concrete of M35 grade with minimum cement content of 370 kg /cum	3888.01	CUBM
1.050	Mild steel (Tor steel or plain) or iron in plain work such as reinforced concrete or reinforced brick work (when not included in an overall rates) wrought to required shape as necessary including bending for proper completion of the work and including supply of steel its wastage bend hooks and authorised overlapping shall be measured up to floor two level. (DSR 5.22.1/2021)	13019.44	QTL
1.060	First class Brick Work in 1:4 cement & coarse sand of 2.20 F.M. mortar in foundation and plinth including supply of all materials, labour and T&P etc. required for proper completion of the work.[SOR-305(A)]	70.00	CUBM
1.070	M-150 Brick Work in 1:4 (one cement & four coarse sand) mortar in superstructure including necessary cutting & moulding of bricks as required including supply of all materials,Labour,T&P etc.required for proper completion of the work. [SI.No.305(A), 309, 310A] 2022(HALF BRICK)	636.00	CUBM
1.080	M-150 Brick Work in 1:4 (one cement & four coarse sand) mortar in superstructure including necessary cutting & moulding of bricks as required including supply of all materials,Labour,T&P etc.required for proper completion of the work. [SI.No.310+309]2022(one BRICK)	1461.00	CUBM
1.090	Centering and shuttering including strutting, propping etc. and removal of form for DSR NO Foudnation footing bases of cloumn etc for mass concrete5.9.1	5876.84	SQM

1.100	Suspended floors, roofs, landings, balconies and access platform DSR NO 5.9.3	33387.02	SQM
1.110	Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc.DSR NO5.9.2	439.16	SQM
1.120	12 mm thick plaster with cement and coarse sand of 2.20 fineness modules in 1:4 over brick work minimum thickness not to be less than 1cm. including supply of all materials, labour, tools & plants etc. required for proper completion of the work SOR NO 584 NEW ITEM	45954.18	SQM
1.130	6 mm cement plaster 1:3 (1 cement : 3 fine sand) finished with a floating coat of neat cement and thick coat of Lime wash on top of walls when dry for bearing of R.C.C Slabs and beams. [SI.No.-13.19 New Item]	17083.73	SQM
1.140	Add for extra labour and materials for plaster over rough face of one brick wall.SOR NO 596	13129.77	SQM
1.150	Providing wall putty on new surface with approved quality material of Berger/ J.K./Birla or similar make 2 coats. [SI.No.-15.26 New Item]	78725.00	SQM
1.160	Finishing wall with weather coat by premium acrylic exterior paint applied @ 1.67 ltr/10 sqm (Asian or Berger Brand) of approved make and quality on wall with two or more coat to give an even shade including a priming coat with cement primer of approved brand and manufacturer exterior primer applied @ 2.20kg/10 sqm after thoroughly brushing the surface free from mortar dropping and other foreign matters and sand papered smooth including supply of all materials, labour, Tools & plants etc. required for proper completion of the work. [SI.No.-15.23 New Item]	25883.00	SQM
1.170	Distemping (two coat) with oil bound distemper of approved brand and manufacture and of required shade on undecorated wall surface to give an even shade over and including a priming coat with cement primer of approved brand and manufacture such as Berger, J&N, Shalimar, Asian Paint after thoroughly brushing the surface free from mortar dropping and other foreign matters and also sand papered smooth including supply of all materials, labour, Tools & plan SOR NO 649+650	53342.00	SQM

1.180	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 20 mm thick bed of cement mortar 1:3 (1cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/sqm including grouting the joint with white cement & matching pigments TILE SIZE 600X600MM SOR NO 14.21NEW ITEM(b) 600X600	9365.00	SQM
1.190	Providing and laying Ceramic glazed wall tiles (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigments etc., complete. (DSR 11.38/2021) 300X300 in wc bath	2950.00	SQM
1.200	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. 11.56.1 Polished Granite stone slab colour of Black, Cherry/Ruby Red or equivalen	850.00	SQM
1.210	Extra for pre finished nosing to treads of steps of stone DSR NO 11.24	710.00	RMT
1.220	Supply and fixing of Kota stone in flooring 20 mm thick and joint filled with 1:2 cement and coarse sand with approved colouring materials to be given an even shade with 20 mm base coat (bedding) of 1:4 cement & coarse sand mortar and polished by hand or machine and finally finished with french manson polish or other approved polish including supply of all materials, labour, Tools & plants etc. required for proper completion of the work.new item 11.26.1	840.00	SQM

1.230	Earthwork in Cutting or in embankment in ordinary soil excavation to be done in form of regular pits not exceeding 1/2 M in depth and work embankment to be in 20cm layers including ramming and dressing the surface to required level and slopes and also including 1.5 M lift and 30M lead. The earth from cutting to be used in making embankment or to be deposited as spoil banks with 30m distance as directed by the Engineer incharge with 8Km cartage including.(PWD SI No. 253a+ 231(a)+261b)	100.00	CUBM
1.240	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum	8000.00	KG
1.250	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).DSR NO 10.28	8908.00	KG
1.260	PLAIN GLASS 5MM SOR 9.04 NEW ITEM	1253.67	SQM
1.270	PAINT ON IRON WORK SOR NO 644+645	580.00	SQM

1.280	2 cm. thick cement plaster in dado or skirting in 1:2 consisting of one part of cement & two parts of approved coarse sand laid in panels finished with 3 mm floating coat of neat cement or cement mixed with marble dust in ratio 5:1 including supply of all materials, labour, Tools & plants etc. required for proper completion of the work. Same as above item but 1.20cm. thick instead of 2cm thick item no. sor no. 597(A)	2122.00	SQM
1.290	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying :DSR 22.5	2122.00	SQM
1.300	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete. (PWD 21.12New Item)	50.00	NOS
1.310	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections sor 13.20	8000.00	METRE
1.320	Supply and fixing 35 mm. thick Commercial flush door shutters conforming of I.S. 2202 Part 1(1983) including fixing of wooden cleats and stoppers and including fixing and adjustment of hinges, bolts, locks, handles and springs (excluding cost of fittings)SOR NO 470	560.00	SQM
1.330	Providing and fixing wire gauge shutters using galvanized M.S. wire gauge of average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm, for doors, windows and clerestory windows with hinges and necessary screws : 9.27.1 35 mm thick shutters 9.27.1.1 with ISI marked M.S. pressed butt hinges bright finished of required siz	180.00	SQM

1.340	Providing and fixing 30 mm thick door shutter made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 71 mm width & 28mm thick as vertical & horizontal styles. Joints are made using solvent adhesive and GI 'C' sections (39mm x 19mm x 0.6mm thick) or M S pipe (40mm x 20mm) stiffener frame insert & telescopic polymeric 'L' corners .The panel shall be filled with 3mm thick high - pressure compact laminate as per manufacturer's specifications and directions of the Engineer-in-charge, cover moulding shall be provided for covering fixing screws and elegant look.(for W.C. bathroom door shutter).125 mm. (a)Non decorative SOR NO 9.39 NEW ITEM B	335.00	SQM
1.350	French spirit polishing : 13.68.1 Two or more coats on new works including a coat of wood filler DSR/2021	740.00	SQM
1.360	Approximate cost of ISI marked ALUMINIUM fitting with screws for door & windows etc. (for estimating purpose only) SOR NO 474	2336.00	NOS
1.370	Cement Concrete with 4 cm gauge approved stone ballast, coarse sand & cement in the proportion of 4:2:1 including supply of all materials, labour, Tools & plants etc. required for proper completion of the work SOR NO 279	5.00	CUBM
1.380	Neat Cement Punning (Item No. 13.18 DSR 2018)	2200.00	SQM
1.390	M S in heavy sizes such as trusses, built up gates, record racks, roof work, Gates etc. including rivetting or welding where necessary. SOR NO 503		
1.400	FOR DOORS FRAME AND RELLING	200.00	QTL
1.410	Design and supply install testing and commissioning 13 passenger 9 stop lift speed 1.0mtr/sec lift with single speed motor 415 volts 3 phase AC 50 Hz supply floor with AC carable voltage and variable frequency drive (VVVF drive) complete all standards assessories simplex automatic and manual dual controlled operation with/without attendant centre opening door drive (electric motor driven machenism)welding stainless steel doors(ARD) system 3D infra red sensor in full height of doors and built in announcing system without handset complete all as specified of cpwd approved make MR	2.00	NOS
1.420	Cinder filling under floor and any other sunken portion of building includeing wattering and ramming competion etc all compelete as per direction of EIC RATE APPROVED IN PMAY	522.66	CUM
2.000	Part-B (SANITARY WORK)		

2.010	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required: 17.1.1 White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	75.00	NOS
2.020	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :W.C. pan with ISI marked white solid plastic seat and lid DSR NO 17.78/2022	75.00	NOS
2.030	White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap DSR NO 17.7.2/2022	215.00	NOS
2.040	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required : Range of two half stall urinals with 5 litre P.V.C. automatic flushing cistern DSR NO 17.5.2/2021	1.00	NOS
2.050	PVC PIPE HEAV SIZE 6KG PRESSURE		
2.060	(A) 160 MM BDA APPROVED IN PMAY	150.00	RMT
2.070	(B) 110 MM	4100.00	RMT
2.080	(D) 75 MM	50.00	RMT
2.090	P/F 100 MM DIA NAHANI TRAPE	380.00	NOS
2.100	S/ F C P GRATING	380.00	NOS
2.110	P/F 110MM PVC TERMINAL GUARD	20.00	NOS
2.120	P/F C P BRASS LONG BODY BIB COCK DSR NO 18.51.1	846.00	NOS
2.130	P/F C P BRASS ANGLE VALVE DSR NO 18.53.1	776.00	NOS
2.140	P/F WATER TANK DSR 18.48	40000.00	LTR
2.150	P/F GUN MATEL GATE VALVE 25 MM DIA DSR NO 18.17.1	140.00	NOS
2.160	P/F GUN MATEL GATE VALVE 40 MM DIA DSR NO 18.17.3	140.00	NOS

2.170	MAKING WATER CONNECTION EXISTING PVC WATER LINE INCLUDEING MS CLAMP FERRUAL,NUT BOLT AND WASHERS ETC COMPLETE	70.00	NOS
2.180	NSR Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet : 100 mm diameter TAKEN WITH THE HELP OF DSR 18.22.1	140.00	No.
2.190	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. Dsr 17.73.2	140.00	nos
2.200	Providing and fixing 600x450 mm beveled edge 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 DSR NO 17.31	215.00	NOS
2.210	Providing and fixing 600x120x5 mm glass shelf with edges round off, supportedon anodised aluminium angle frame with C.P. brass brackets and guard railcomplete fixed with 40 mm long screws, rawl plugs etc., complete DSR 17.33	210.00	NOS
2.220	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink 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 : Kitchen sink without drain board610x510 mm bowl depth 200 mm DSR 17.10.2.1	70.00	NOS
2.230	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured):CIRCULAR DSR 9.24.2	70.00	NOS
2.240	P/F 15 MM DIA BALL VALVE DSR NO 18.18.1	72.00	NOS
2.250	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, 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 the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge		
2.260	18.8.1 15 mm nominal dia Pipes	4000.00	RMT
2.270	18.8.3 25 mm nominal dia Pipes	2625.00	RMT
2.280	18.9.5 40 mm nominal dia Pipes	600.00	RMT
2.290	CPVC UNION (MR)	72.00	NOS
2.300	P/F OF PVC FITTINGS		
2.310	110X110 MM PVC TEE	840.00	NOS
2.320	110X110X110 MM DOORS TEE	100.00	NOS
2.330	110 MM ELBOW	420.00	NOS
2.340	100 MM DOORS ELBOW	50.00	NOS

2.350	Constructing brick masonry chamber of internal size 455x610 mm and 45 cm deep for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 coarse sand(Zone-III) : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design. (DSR No. 19.30.1)	25.00	NOS
3.000	Part-C (ELECTRICAL ITEM)		
3.010	Wiring point for light with 1.5 Sqmm FRLSH PVC insulated multistrand copper conductor cable as earthwire drawn inside PVC conduit pipe partly concealed in the wall and partly laid in slab alongwith the reinforcement before concreting, complete with 14 SWG GI earth continuity wire, piano type switch & ceiling rose/angle/batten holder on 3 mm. thick phenolic laminated backelite sheet etc.complete in all respect,as directed. including matching colour wash (PWD SI N0-138(c))	1617.00	NOS
3.020	Wiring point for fan/fresh air fan with 1.5 Sqmm FRLSH PVC insulated multistrand copper conductor cable as earthwire drawn inside PVC conduit pipe partly concealed in the wall and partly laid in slab alongwith the reinforcement before concreting, complete with 14 SWG GI earth continuity wire, piano type switch & ceiling rose/angle/batten holder on 3 mm. thick phenolic laminated backelite sheet etc.complete in all respect,as directed. including matching colour wash (PWD SI N0-140(c))	672.00	NOS
3.030	Same as in item 143 (B) but in PVC conduit with 1.5 sq. mm.FRLSH PVC insulated multistrand copper conductor cable as earthwire drawn inside the conduit.143 C	672.00	NOS
3.040	Wiring point for call bell with 1.5 Sqmm FRLSH PVC insulated multistrand copper conductor cable as earthwire drawn inside PVC conduit concealed in wall and partly laid in slab alongwith the reinforcement before concreting, complete with 14 SWG copper with earth connectivity wire and piano type bell push or 2 pin socket etc, complete all respect including matching colour wash. (PWD SI N0-142(c))	70.00	NOS

3.050	Wiring point for Plug with 1.5 Sqmm FRLSH PVC insulated multistrand copper conductor cable as earthwire drawn inside PVC conduit pipe concealed in the wall complete and partly laid in slab alongwith the reinforcement before concreting] complete with 14 SWG GI earth continuity wire 5Amp piano type switch & socket on 3 mm. thick phenolic laminated bakelite sheet etc.complete in all respect, as directed.including matching colour wash. (PWD SI N0-141(c))	854.00	NOS
3.060	Wiring point for HPMV/ Power Plug with 2X2.50 Sqmm FRLSH PVC insulated multistrand copper conductor cable as earthwire drawn inside PVC conduit pipe concealed in the wall complete and partly laid in slab alongwith the reinforcement before concreting] complete with 14 SWG GI earth continuity wire, 15 amp. piano type switch & socket on 3 mm. thick phenolic laminated bakelite sheet etc.complete in all respect, as directed.including matching colour wash. (PWD SI N0-143(B}	672.00	NOS
3.070	S/Wiring of submain with Two numbers 2X4 sqmm +1X2.5 sqmFRLSH PVC insulated multistrand copper conductor cable as earthwire drawn inside 25mm dia heavy duty PVC conduit partly concealed in wall and partly laid in slab along with the reinforcement before concreting, complete with 14 SWG GI earth continuity wire including matching colour wash etc complete in all respect. (PWD SI N0 211B+211C)	10000.00	MTR
3.080	Supply and fixing of 76/63 mm deep M.S. junction boxfor the conduit laid in slab alongwith reinforcementbefore concreting and plastering complete in all respect SOR NO 287	1000.00	MTR
3.090	MISCLENIOUS ITEMSOF ELECTRICAL PANELS 7 NO. (MAIN PANEL, DG PANEL, 3 METER PANEL LIFT PANEL, FIRE PANEL, PLUMBING PANEL AND 180 KVA CAPACITOR PANEL) AS PER REQUIRED AS PER SITE DIRECTED BY EIC NSI	1.00	JOB
3.100	Supply and fixing hexagonal/Round G.P.fan box of approved make made up of 1.0 mm thick ISI Marked G.P.sheet spot welded Four to Eight holes of 25.4 mm for pipe entry of the box. Holes should be semi-shuttered type with 0.5 mm G.P. Sheet made upper & lower cover duly screwed fitted with 300 mm round zink coted M.S Bar X 12 mm & brand name should be embossed. Fixing with wiring conduit laid in the R.C.C. roof before concreting alongwith supply of all material, labour, T&P etc. required for proper completion of the work.SOR NO 1149	672.00	NOS

3.110	Supply and fixing of G.P. Modular switch box for 1 / 2Module of approved make made up of 1.0 mm thick ISIMarked G.P.sheet including adjustable Nakka and holesplugged with PVC Nylon Caps . Two or more holes for pipe entry of 25.4 mm on upper and lower sides of the box. Holes should be semi-shuttered type and fitted with heavy brass Earth Piller duly screwed & brand name should be embossed. Box flushed in wall including cutting of brick work, fixing it to the level with cement sand mortar, including matching colour wash with s/o all materials, labour and T&P required for proper completion of work as directed at site by the Engineer in charge. PWD SOR 1152 A		
3.120	Same as in item no 1152 (A) but for 3 Module SOR NO 1152B	140.00	Nos
3.130	Same as in item no 1152 (A) but for 6 Module SOR NO 1152D	364.00	Nos
3.140	Same as in item no 1152 (A) but for 8 Module SOR NO 1152E	140.00	Nos
3.150	Supply and burying earth for lighting conductor of 900mm x 900mm x 3mm copper plate vertically with its top at least 3 metres below ground level complete with 20mm dia G.I. pipe for watering funnel, 30cm square C.I.frame with hinged cover masonry housing alternate layers of charcoal/coke and salt at least 150mm thick all round etc. as per directions of Engineer-in-charge complete in all respect. SOR NO 709	20.00	NOS
3.160	S/F surface/flush mounting 6 ways TPN distribution board without MCB complete in all respect, as directed by the Engineer in charge. Cat-A (PWD S.I. No 1027A)	70.00	NOS
3.170	Supply and laying of aluminium conductor PVC insulated armoured served sheathed cables 1100 Volts grade at a depth of 750 mm below ground level over a cushion of 75 mm. thick sand all around and protected with burnt bricks on sides and on top. On surface the cable run shall be fixed on M.S. clamps etc. of suitable size or as directed by the Engineer-Incharge, complete in all respect. The armouring of the cable shall be properly connected with the earth conductor by clamps etc.		
3.180	95 sq. mm 3-1/2 core SOR NO 501(n)	700.00	MTR
3.190	As in item no. 221(B) but in 20 mm dia heavy duty (2 mm thick) PVC conduit with one no. 2.5 sq. mm. FRLSH PVC insulated multistrand copper conductor cable as earth continuity wire drawn in conduit SOR NO 221 C	2500.00	MTR
3.200	Supply and fixing 1.5 Sqmm single core copper conductor DSR NO 1.17.1	6800.00	MTR

3.210	Supply and laying of 12mm x 3mm G.I. strip from earth electrode directly in the ground as required complete in all respect.SOR NO 715	700.00	MTR
3.220	S&F of 6 Amp to 32 Amp. SPMCB (10 KA) C Curve CAT A SOR NO 1002	400.00	NOS
3.230	S&F of 100 Amp. T.P. Isolator SOR NO 1006 C	90.00	NOS
3.240	Supply and fixing of recess/ Surface/ Pendentmounting round 10 to 15 Watt LED Down Lighterhaving Powder coated die cast aluminium housingwith heat sink, diffuser/ Reflector and driver setcomplete in all respect.SOR NO 1402 CAT AA	350.00	NOS
4.000	Part-D (FIRE FIGHTING WORKS)		
4.100	SUB HEAD-1.0 [PUMPS]		
4.101	Supplying, installation, testing and commissioning of electric driven terrace pump suitable for automatic operation and consisting of following, complete in all respects, as required: (Terrace Pump) [DSR No.-18.4/2022]		
4.102	Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical confirming to IS : 1520.		
4.103	Suitable HP squirell cage induction motor TEFC type suitable for operation on 415 volts, 3 phase, 50 Hz, AC supply with IP55 class of protection for enclosure, horizontal foot mounted type with Class- 'F' insulation, conforming to IS-325.		
4.104	M.S.fabricated common base plate, coupling, coupling guard, foundation bolts etc.as required.		
4.105	Suitable cement concrete foundation duly plastered and with anti vibration pads.		
4.106	900 lpm at 35 m Head [DSR No.-18.4.1/2022]	2.00	Set
4.200	SUB HEAD-2.0 [CONTROL PANELS]		
4.201	Supplying,Installation,testing & commissioning of dust & vermin proof double door with canopy type taperd roof wall / floor mounted compartmentlised feeder pillar type cubical control Panel for fire fighting terrace pump of front area not less than 1.0 Sqmtr. and depth not less than 300 mm, made out of 2mm thick CRCA sheet with 100 Amp. 4 strip aluminium bus bars with front openable door & locking arrangement, interconnection, control wiring, intrigation with pressure switch i/c supplying & fixing following switchgears & control gears/starters etc. as required. [NRS-1]		
4.202	Incomming		
4.203	63 Amps. TP & N SFC with HRC fuses		
4.204	Voltmeter (0-500 Volt) with selector switch.		

4.205	Ammeter (0-60 Amps.) with selector switch & CTs.		
4.206	Set of 3 phase indication lamp		
4.207	Suitable HP fully automatic Star/Delta Starter with over load protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation.		
4.208	Selector switch for local/remote, auto/manual/off operation ON/OFF indication etc.	2.00	Set
4.209	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required. It should be complete as per specifications & directions of Engineer-in-charge. 3 X 10 sq. mm (22mm) [DSR-9.1 & 9.1.7/2022]	4.00	Each
4.210	3 core, 10 sq.mm. Aluminium Armoured [NSR-2]	20.00	Meter
4.300	SUB HEAD-3.0 [PIPES & ACCESSORIES]		
4.301	Providing laying, testing & commissioning of 'C' class heavy duty MS Pipe conforming to IS 1239/3589 i/c fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. in ground including welding, excavation & providing cement concrete blocks as supports, anticorrosive treatment with coaltar/asphalt tape as per IS 10221, refilling the trench etc. of following sizes complete as required. (For Underground) [DSR-18.6/2022]		
4.302	150 mm. Dia [DSR-18.6.2/2022]	50.00	Meter
4.303	100 mm. Dia [NSR-3]	20.00	Meter
4.304	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required. (Plant Room piping/Vertical Riser/Downcomer/Floor) [DSR-18.7/2022]		
4.305	25 mm dia [DSR-18.7.1/2022]	190.00	Meter
4.306	32 mm dia [DSR-18.7.2/2022]	30.00	Meter
4.307	40 mm dia [DSR-18.7.3/2022]	20.00	Meter
4.308	50 mm dia [DSR-18.7.4/2022]	30.00	Meter
4.309	65 mm dia [DSR-18.7.5/2022]	20.00	Meter
4.310	80 mm dia [DSR-18.7.6/2022]	120.00	Meter
4.311	100 mm dia [DSR-18.7.7/2022]	50.00	Meter
4.312	150 mm dia [DSR-18.7.8/2022]	80.00	Meter

4.313	Supplying and fixing single headed internal hydrant valve with instantaneous Gunmetal/Stainless Steel coupling of 63 mm dia with cast iron wheel ISI marked conforming to IS 5290 (Type-) with blank Gunmetal/Stainless Steel cap and chain as required : [DSR-18.9/2022]		
4.314	Single headed Gunmetal [DSR-18.9.1/2022]	18.00	Set
4.315	Supplying and fixing Single headed external yard hydrant valve with 1 No. 63 mm dia instantaneous FM Gunmetal/Stainless Steel coupling and cast iron wheel, ISI marked, conforming to IS 5290 (type A) with blank Gunmetal/Stainless Steel cap and chain as required : [DSR-18.10/2022]		
4.316	Single headed Gunmetal [DSR-18.10.1/2022]	2.00	Set
4.317	Supplying, fixing, testing and commissioning of butterfly valve of PN 1.6 rating with bronze/gunmetal seat duly ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095 of following sizes as required : [DSR-18.11/2022]		
4.318	50mm dia [DSR-18.11.2/2022]	2.00	Set
4.319	80 mm dia [DSR-18.11.4/2022]	2.00	Set
4.320	100 mm dia [DSR-18.11.5/2022]	2.00	Set
4.321	150 mm dia [DSR-18.11.6/2022]	2.00	Set
4.322	125 mm dia [DSR-18.14.6/2022]	2.00	Set
4.323	Providing, installation, testing and commissioning of stainless steel Y-strainer fabricated out of 1.6 mm thick stainless steel, Grade 304, sheet with 3 mm dia holes with stainless steel flange. [DSR-18.15/2022]		
4.324	150 mm dia [DSR-18.15.3/2022]	1.00	Each
4.325	Supplying and fixing 63 mm dia, 15 m long RRL hose pipe with 63 mm dia male and female couplings duly bound with GI wire, rivets etc. conforming to IS 636 (type-A) as required : [DSR-18.16/2022]		
4.326	Gun Metal [DSR-18.16.1/2022]	40.00	Set
4.327	36 m [DSR-18.17.2/2022]	18.00	Set
4.328	Supplying & fixing 63 mm dia gun metal short branch pipe with 20 mm nominal internal diameter size nozzle conforming to IS 903 suitable for instantaneous connection to interconnect hose pipe coupling as required : [DSR-18.18/2022]		
4.329	Gun metal [DSR-18.18.1/2022]	20.00	Set
4.330	Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required : [DSR-18.19/2022]		
4.331	2 way-100 mm dia M.S. Pipe. [DSR-18.19.1/2022]	1.00	Set

4.332	Supplying and fixing air vessel made of 250 mm dia, 8 mm thick MS sheet, 1200 mm in height with air release valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade as required. [DSR-18.20/2022]	2.00	Set
4.333	Providing, fixing, testing & commissioning of 15mm dia quartzoid bulb type sprinklers of rating 68 degree centigrade with required accessories : [DSR-18.21/2022]		
4.334	Upright Sprinkler [DSR-18.21.2/2022]	140.00	Each
4.335	Concealed sprinkler [DSR-18.21.4/2022]	25.00	Each
4.336	Providing & fixing of pressure switch in M.S. pipe line including connection etc. as required. [DSR-18.22/2022]	2.00	Each
4.337	Providing & fixing flow switch in following sizes M.S. pipe including connection etc as required. [DSR-18.23/2022]		
4.338	100mm dia [DSR-18.23.1/2022]	2.00	Each
4.339	80 mm dia [DSR-18.23.2/2022]	2.00	Each
4.340	Providing, installation, testing & commissioning of water curtain nozzle 15mm dia nickel chrome plated brass, BSPT, K-factor as per design consideration complete as required. [DSR-18.27/2022]	20.00	Each
4.341	Providing, installation, testing & commissioning of electric release trim assembly for deluge wall with two way solenoid valve, weather proof operation on 24 volts DC supply complete as required. [DSR-18.28/2022]	2.00	Each
4.342	Providing and fixing in position the industrial type pressure gauges with gun metal / brass valves complete as required. [DSR-16.8/2022]	26.00	Each
4.343	Providing and fixing standard fireman's axe with heavy insulated rubber handle conforming to IS:926 complete. [NSR-4]	18.00	Each
4.344	Providing & Fixing of MS door made up of 16 gauge MS Sheet capable of accommodating fire hose reel, landing valve, hose pipes, fittings, 1 No. CO2 & 1 No. Dry powder type portable fire extinguishers & accessories. The door shall have a front glass with lock and key arrangement & shall be painted with one coat of primer & two coat of finished stove enamelled post office red colour paint & "FIRE HOSE" written on front. (Approx. size of door: 2100 mm HEIGHT, WIDTH OF DOOR AS PER SHAFT SIZE) [NSR-5]	18.00	Each

4.345	Providing and fixing hose cabinet of size 750mmX600X250mm made of 16 gauge thick MS sheet with 4 mm thick float glass doors in front painted "FIRE" in red paint i/c necessary locking arrangement suitable to accommodate external hydrant with butterfly valve 2 nos. 15 mtr. long hose pipe. 1 no. brach pipe mounted on wall or raised brick platform & duly painted with post office red externally and white internally with synthetic enamel paint complete in all respects for external hydrant. as directed by Engineer-in-Charge. [NSR-6]	2.00	Each
4.346	80 mm dia [NSR-7]	4.00	Nos
4.347	Supply, fixing, testing and commissioning of screwed type brass/bronze lever operated ball valve of full flow with stainless steel ball (AISI 304 & spindle AISI 410) with setting & gland of superior quality having minimum working pressure of 16 kg/sqcm. [NSR]		
4.348	25 mm Dia [NSR-8]	2.00	Nos
4.349	Providing and fixing 25 mm dia inspection & testing assembly with gun metal ball valve, gun metal sight glass ,Reducer ,union, G.I PIPE. connection to drain pipe/riser. [NSR-9]	2.00	Set
4.350	Supply and fixing of 4 Nos G.I round bottom FIRE BUCKET of 9 LTR. Capacity field with sand including proper supporting /mounting arrangement MS Angle Iron Frame painted by fire red colour over 2 coats of red oxide paint and written with white paint FIRE complete in all respects as per direction of Engineer Incharge . [NSR-10]	4.00	Each
4.351	Providing, fixing water flow meter on test line complete with all accessories for flow indication , monitoring & testing of fire pumps with bypass arrangment including piping & bypass valves. [NSR]		
4.400	SUB HEAD-4.0 [FIRE EXTINGUISHER]		
4.401	Providing, storing, handling, shifting, installation, testing and commissioning of halon free portable fire Extinguishers as described below: Concealed work, including cutting chases and making good the walls etc. [NSR]		
4.402	Providing and fixing of 4.5 Kg. carbon-di-oxide type fire extinguishers consisting of welded M.S. cylindrical body, squeeze lever discharge valve fitted with pressure indicating guase ingernal discharge tube 30 cms long high pressure discharge hose, discharge nozzle, suspension bracket conforming ro IS:15683 finished externally with re enamel paint and fixed to wall with brackets complete with internal charge. [NSR-11]	20.00	Nos

4.403	Providing and fixing 6.0 Kg. ABC Powder type fire extinguishers consisting of welded M.S. cylindrical body, squeeze lever discharge valve fitted with pressure indicating guase internal discharge tube 30 cms long high pressure discharge hose, discharge nozzle, suspension bracket conforming to IS:15683 finished externally with re enamel paint and fixed to wall with brackets complete with inernal charge. [NSR-12]	20.00	Nos
4.404	Providing and fixing 9.0 Kg. ABC Powder type fire extinguishers consisting of welded M.S. cylindrical body, squeeze lever discharge valve fitted with pressure indicating guase internal discharge tube 30 cms long high pressure discharge hose, discharge nozzle, suspension bracket conforming to IS:15683 finished externally with re enamel paint and fixed to wall with brackets complete with inernal charge. [NSR-13]	2.00	Nos
4.405	Providing, fixing, testing and commissioning of 50 Litres (trolley mounted) Mechanical Foam type Fire Extinguisher. In HP Mild Steel Cylinders ISI marked TAC approved fitted with pressure indicating gauge, internal tube, squeeze lever type valve fully charged complete in all respects including wall suspension bracket / trolley mounted and confoming to IS:13386. [NSR-14]	2.00	Nos
4.406	Providing, fixing, testing and commissioning of CO2 type Fire Extinguisher of capacity 22.5 kg filled with Co2 Gas as per IS 15222 with controll discharge mechanism fitted with Hose, Horn & TROLLEY confirms to IS 2878 bearing ISI mark. Co2 Cylinder as per IS 7285. [NSR-15]	2.00	Nos
4.407	Providing and fixing 2 kg capacity clean agent-HFC 236FA Stored Pressure type fire extinguisher ISI marked under IS:15683 complete with imported Novec 1230 manufactured by 3M, with Zero Ozone Depeltion Potential and Very Low Global Warming Potential of 1 with 20 Years Blue Sky Warantee against any regulatory Bans and Restrictions. [NSR-16]	2.00	Nos
4.408	Providing and fixing Fire related signages printed on photoluminescent U1000 aluminium sheet of 1.0 mm (+-10%) containing Lumigen II as base chemical, covered under UV stablized coating and of appropriate size including fixing on wall, door, ceiling etc. with proper clamps, hangers, cleats, anchor fasteners etc. [NSR-17]	25000.00	Square Inch