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## Abstract of Work (Samajwadi Awas Yojna)

1.0 **Name of Work :-** Engineering, Procurement and Construction (EPC) of multi-storeyed residential flats including basement, based on R.C.C. Framed Structure/R.C.C. monolithic shear wall concept using aluminium form work in Sector-20, Vrindavan Yojna No.4, Lucknow including soil testing, structural design, construction of boundary wall, swimming pool, community centre/club, Transformer & DG set for power backup (only for lifts, water supply and common area) and all internal development etc. as per drawing & design complete in all respect ready to move in for living condition.

The scope of work consists of survey as required and soil testing to ascertain type and depth of foundation of building & supply of vetted (from any Indian Institute of Technology) structural designs and detailed structural drawings, supply of all material, labour, T&P, machinery etc required for proper completion of the project. The concept architectural drawings are enclosed with BID Document and detailed architectural drawings shall be provided as and when needed, by the UP Awas Evam Vikas Parishad.

1.1 Flat Details : (Affordable)			
Sl. No.	Flat Type	Number of Flats	Scope of work
1	1BHK (stilt+12)	288	Stilt+12 Floors + Mumty + water storage tank +Machine room + parapet walls etc
2	1BHK (stilt+12)	192	Stilt+12 Floors + Mumty + water storage tank +Machine room + parapet walls etc
3	2BHK (stilt+13)	468	Stilt+13 Floors + Mumty + water storage tank +Machine room + parapet walls etc
4	2BHK Study Space (Basement+ stilt+13)	468	Basement+ Stilt+ 13 Floors + Mumty + water storage tank +Machine room + parapet walls etc
5	2BHK Study Space (Basement+ stilt+12)	240	Basement+ Stilt+12 Floors + Mumty + water storage tank +Machine room + parapet walls etc
	S.F.S Yojna		
	2BHK+ STUDY SPACE (Basement + stilt +13 stories	208	Basement+ Stilt+13 Floors + Mumty + water storage tank +Machine room + parapet walls etc
	2BHK+ STUDY SPACE (Basement + stilt +13 stories	156	Basement+ Stilt+13 Floors + Mumty + water storage tank +Machine room + parapet walls etc

1.2 Brief Description of Major Items of work under scope of work		
SN	Item of work	Brief Description of Work
1	Civil Work	
a	Survey & Soil Testing	Carrying out survey as required & soil testing to ascertain the soil condition, type and depth of foundation of the building level of general soil
b	Excavation, Backfilling, earth filling upto plinth and Disposal of surplus Earth	Excavation up to the desired depth, back filling in layers as per specification and disposal of surplus earth shall include royalty and all other applicable taxes, octories etc. no payment or claim of whatsoever nature shall be entertained on this account. The surplus earth shall have to be disposed true to line and level as per directions of Engineer in Charge with in 12.00 kilometer distance. This shall be included in the scope of work. Filling of earth including 15 cm sand filling upto plinth shall have to be

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dl	c	Foundation Basement and stilt	Foundation shall be constructed as per architectural drawings, and vetted structural design and structural drawings. The work shall be completed in all respect. All items of work to construct the foundation such as excavation upto the desired level, dewatering, earth/sand filling, laying of lean concrete reinforcement work, foundation casting, RCC work in structural elements of foundation with RCC walls, RCC raft or strip foundation as per structural requirement and relevant code using aluminum form work, Brick work and plaster, back filling & earth filling if required, water proofing etc. as per structural design and drawings & as per relevant specification are included in the scope of work along with supply of all relevant material, labour, T&P, shuttering scaffolding etc complete in all
	d	Earth filling in plinth and sand filling in plinth	Earth filling upto plinth level leaving margin for 15 cm sand filling and lean concrete is to be done inside of plinth in 15 cm layer including proper ramming, compaction, watering etc. complete. The earth filling is also to be done all around the periphery of houses in 2.0 m width for apron in the manner as stated above 15 cm sand filling is also to be done inside the plinth including proper ramming and compaction. The cost include bringing of earth and sand to site and filling by head load complete.
	2	<b>Super Structure :</b>	
	a	Structural Work & Slab	The work is to be carried out on RCC Column Beam Framed Structure/R.C.C. monolithic Shear wall technology using aluminum form work. All items of work related to construct the super structure such as RCC in structural element, Reinforcement work, Filler walls, plaster etc as per Design and drawings are included in the scope of work along with supply of all relevant material, labour, T&P, Shuttering, scaffolding etc complete in all respect and as per relevant specification as per design & drawing.
	B	<b>Door/Window Frames</b>	
	b.1	Outer door & Balcony doors	Made of 35x35x5 mm M.S. angle double rebate with 100 mm ISI M.S. hinges as per requirement. The scope of work to include supply of all relevant materials, its joinery and one coat of red oxide primer including two to three coats of enamel paint of approved colour and fixing it in position with fasteners and complete in all respect.
	b.2	Internal Doors & Toilet doors	Made of 35x35x5 mm M.S. angle single rebate with 100 mm ISI M.S. hinges as per requirement. The scope of work to include supply of all relevant materials, its joinery and one coat of red oxide primer including two to three coats of enamel paint of approved colour and fixing it in position with fasteners and complete in all respect.
	b.3	Windows & Ventilators	Made of Anodized (15 micron) Aluminum double track conforming to IS code as per design and drawing. The scope of work to include supply of all relevant materials, fasteners of required dia and size, including filling up to the gaps junction, i.e. at top, bottom and sides of Aluminum section shall be rust free straight, mitered and jointed mechanically wherever required including cleat angle Its joinery and fixing it in position and complete in all respect.
Note:- For double leaf door and windows shutters additional hinges shall be provided as per requirement for which no extra amount is payable.			
	C	<b>Door shutters</b>	
	c.1	Main door	30 mm thick ISI water proof, phenol bonded, termite proof, flush door shutter single leaf/double leaf (confirming to IS 2202 part I 1983) with enamel paint two or more coats of approved quality and approved design with Aluminum fittings and fixtures including sliding bolts, tower bolts, handles, door stoppers, MS hinges ISI marked and necessary screws, bolts, nuts etc complete in all respect as per specification.
	c.2	All other Internal Doors and Toilet Doors	25 mm thick ISI water proof, phenol bonded, termite proof, flush door shutter single leaf/double leaf (confirming to IS 2202 part I 1983) with enamel paint two or more coats of approved quality and approved design with Aluminum fittings and fixtures including sliding bolts, tower bolts, handles, door stoppers, MS hinges ISI marked and necessary screws, bolts, nuts etc complete in all respect as per specification.
	D	<b>Glazed Window and Ventilator Shutters</b>	
	d.1	Windows and ventilators	All windows and ventilators in each flats to be provided with Anodized Aluminum fully glazed shutter made of approved quality Anodized Aluminum strictly as per architectural drawings. Plain glass 4 mm thick of approved brand is to be fixed with required Aluminum beading, rubber gasket, Spring as per drawing. The scope of the work include supply of all material, labours T&P along with fixing in frame with Aluminum fittings and fixture. I.S.I. including I.S.I marked Tower Bolt handle, I-Hook, Aluminum hinges and necessary screw etc. complete in all respect as per specification.
	E	<b>Flooring</b>	
	e.1	On All Floor Area's of flat but excluding balcony kitchen and Toilet floor	Ceramic tiles in flooring and in skirting (100mm wide) 6-8mm thick, joint free of approved brand & shade laid over 1:4 Cement and Coarse sand mortar of 20 mm thick or by approved tile adhesive with cement slurry and joints to be properly filled by approved grouting material finished complete in all respect as per drawing and approved pattern (To be approved by UPAVP) laid to line and level.

e.2	Kitchen & Balcony, Floors	Anti skid ceramic tiles in flooring and in skirting (100mm wide) 6-8 mm thick joint less, size 300x300mm or more (To be approved by UPAVP) of approved brand & shade laid over 1:4 Cement and Coarse sand mortar of 20 mm thick or by approved tile adhesive with cement slurry and joints to be properly filled by approved grouting material finished complete in all respect as per drawing and approved pattern laid to line and level. Floor below kitchen sinks is to be sunken 40 mm from general floor level.
e.3	WC, Bathroom & Toilet Floors	Anti skid ceramic tiles in flooring 6-8 mm thick joint less, size 300x300mm or more (To be approved by UPAVP) of approved brand & shade laid over 1:4 Cement and Coarse sand mortar of 20 mm thick or by approved tile adhesive with cement slurry and joints to be properly filled by approved grouting material finished complete in all respect as per drawing and approved pattern laid to line and level.
e.4	Common Areas at all Floor	Anti Skid 6-8 mm thick joint less tiles of approved brand and shade laid over 1:4 cement and coarse sand mortar of 20 mm thick or by approved tile adhesive with cement slurry and joints to be properly filled by approved grouting materials. Finished complete in all respect as per drawings and approved pattern, approved by UPAVP laid to line and level.
e.5	Risers, Treads, landing of stairs in staircase	Average 18 to 20 mm thick thapi Kota stone flooring in floor and in skirting as per design laid over 20 mm thick 1:4 cement and coarse sand mortar including joints with cement slurry mixed with pigment to match the shade including rubbing & polishing and making half round moulding in treads etc true in line and level as per directions of Engineer In charge. Kota stone nosing to be moulded in approved shape on treads true to level and alignment.
e.6	Apron around building	As required as per site condition.
e.7	Basement & Stilt Floor	50 mm thick tremix vacuum dewatered concrete floor including use of approved hardening compound and finished with necessary brooming as required and directed by E/I.
F	<b>Wall Cladding</b>	

f.1	Wall area inside Toilets, Bathroom & WC	Ceramic tiles in all wall in Toilet & Bathroom up to 1.50 meter height, WC up to 0.60 meter height size 200 x 300mm (To be approved by UPAVP) of approved brand & shade laid over 1:3 Cement and Coarse sand mortar or by approved tile adhesive with cement slurry and joints to be properly filled by approved grouting material finished complete in all respect as per drawing and approved pattern laid to line and level.
f.2	Wall area in Kitchen over Kitchen Platform and facing sink & Lift Entrance	Ceramic tiles in wall (Height 600 mm from Kitchen platform top) 6-8 mm thick, size 200x300 mm or more (To be approved by UPAVP) of approved brand & shade laid over 1:3 Cement and Coarse sand mortar or by approved tile adhesive with cement slurry and joints to be properly filled by approved grouting material finished complete in all respect as per drawing and approved pattern laid to line and level, Lift Entrance face Cladding with 15-18 mm Thick Baroda Green Stone (as per drawing).

G	<b>Railings</b>	
g.1	Stairs	M.S. Railing made of 25mm sqr tube 14gauge and standard D section (thickness not less than 14gauge) and three rows of 30x4 mm M.S. flat required as per drawing for proper fabrication, erection and fixing on steps true to line and level as per architectural drawing complete in all respect along with 1 coat of red oxide zinc cromate primer along with 2 or more coats of enamel paint of approved make and shade scope includes fixing of railing on Treads/landing with suitable system including making hole etc complete.
g.2	All Balconies + Other railings	M.S. Railing made of 25mm sqr tube 14gauge and standard D section (thickness not less than 14gauge) and rows of 30x4 mm M.S. flat required as per drawing for proper fabrication, erection and fixing true to line and level including with 1 coat of red oxide zinc cromate primer along with 2 or more coats of enamel paint of approved make and shade scope. The design will strictly be followed as per architectural drawing complete in all respect.
H	Kitchen Platform	15-18 mm thick Baroda green stone top of approved quality and shade over 20 mm thick base of 1:4 cement and coarse sand mortar laid and jointed with cement slurry with pigments of approved colour and shade including polishing and full round moulding at edges and strip on front side of platform with necessary hole for gas pipe etc complete in all respect. The scope of work also to include construction of necessary RCC platform 50mm thick with all works associated complete in all respect. The floor area below platform may have to be raised 50 mm or more as directed by E/I.

I	<b>Water Proofing and antitermite treatment</b>	
i.1	All Terraces and other places	Water proofing by avg 100 mm thick Brick Coba treatment as per standard specification. The executed work shall have warranty of 10 Years. The Firm has to submit affidavit on Rs 100 Stamp Paper for 10 Years Warranty for precautionary measure 50 mm dia PVC spout have to fixed for drainage purpose.
i.2	Toilet sunk depth more than 250 mm	The area shall be free from any type of seepage. The System of water proofing shall be approved by UP AVP depending upon site condition. The executed work shall have warranty of 10 Years. The Firm has to submit affidavit on Rs 100 Stamp Paper for 10 Years Warranty. For precautionary measure 50 mm dia PVC spout have to fixed for drainage purpose.
J	<b>Finishing</b>	

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j.1	Basement, Stilt Walls & Ceiling	Finishing wall with Asian Apex Ultima two or more coats over and including one coat primer of approved brand and shade on undecorated wall surface to give an even shade after thoroughly brushing the surface free from mortar droppings and other foreign matter and also including making the surface perfectly even with putty and sand paper smooth etc complete as per drawing and design.
j.2	On Ceiling of Flats	Surface to be prepared with Birla Putty/J.K. wall putty after thoroughly cleaning the concrete surface/ plastered surface to give an smooth surface, its cutting, rubbing and applying 2 or more coats of oil bound distemper over one coat of cement primer to give even and smooth finished surface as per directions of E/I.
j.3	On walls of flats (Internal)	Surface to be prepared true to plumb, line and level with after required cutting, grinding and thoroughly cleaning concrete surface and applying 2 or more coats of oil bound distemper over one coat of cement primer to give even and smooth finished surface as per directions of E/I.
j.4	On All external surfaces not mentioned specifically	Finishing wall with Asian Apex Ultima two or more coats over and including one coat primer of approved brand and shade on undecorated wall surface to give an even shade after thoroughly brushing the surface free from mortar droppings and other foreign matter and also including making the surface perfectly even with putty and sand paper smooth etc complete as per drawing and design.
j.5	Plaster	If Plaster any where required shall be 12mm thick of mortar 1:4 (cement & C/sand) for outer surface and 1:4 (cement & C/sand) for inner surface.
K	Expansion Joints :	All Expansion joints to be constructed as per structural designs and IS code. The same should be covered / treated to prevent water ingress in line with IS Code / Specification / CPWD Specifications complete in all respect as per direction of E/I
L	RCC Water storage Tank on terrace :	Each tower shall have water storage tanks (domestic + fire) requirement of required capacity according to design and drawing as directed by E/I on the terrace. The same is to be constructed as per approved design, drawing. The glazed ceramic tiles shall be laid on inner walls and floor of tank as per specifications, complete in all respect. The water level indicator has to be provided in the water tank. Tank should be made water proof by suitable means. The tank should be covered with R.C.C cover having C.I. manhole of suitable size with provision for maintenance including supply & fixing of foot steps. The tank should have provision of inlet and outlet connections as required. Outside should be painted with apex Connection from municipal main pipe/main distribution system of CWR with suitable size of CPVC pipe as per design and specification and including necessary provision of sensor based filling system and 75 mm dia over flow pipe shall be done and is included in scope of work complete as per direction of Engineer in charge.
M	Water Supply :	
m.1	Internal areas (Inside the flats or inside the block)	Concealed CPVC pipe as per ASTM pipes shall be used for water supply in flats. Minimum diameter shall not be less than 15 mm. The scope of work to include supply of CPVC pipe along with plain and brass threaded fittings having thermal stability for hot and cold water including jointing of pipes, fixing of pipes with clamps @ 1 m c to c chase cutting and repairing complete with all respect with all related materials, labour and testing etc complete as per direction of E/I. The necessary ball valve, regulation valves, and other flow controlling and regulating devices as required at intermediate floor shall have to be installed complete in all respect as per requirement to ensure proper pressure at all floors and also as per design and drawing. Check valve shall be provided as connection point of each flat to ensure that supplying is closed in case its required for repair etc.
m.2	External Areas (Out side the block or in service shafts)	CPVC as per ASTM pipes shall be used for water supply in flats. Minimum diameter shall not be less than 20 mm. The scope of work to include supply of CPVC pipe along with plain and brass threaded fittings having thermal stability for hot and cold water including jointing of pipes, fixing of pipes with clamps @ 1 m c to c chase cutting and repairing complete with all respect with all related materials, labour and testing etc complete as per direction of E/I. The necessary ball valve, regulation valves, and other flow controlling and regulating devices as required at intermediate floor shall have to be installed complete in all respect as per required and also as per design and drawing pipes laid horizontally/vertically shall have to laid on mild steel brackets made on ISA 50x50x5 duly primered and painted pipe supported with adequate capacity dash fastener strip with rubber gasket at required distance complete in all respect and direction of E/I.
N	Sewerage (sanitary) :	
n.1	Internal areas (Inside the flats or inside the block and in all toilets, kitchen & washing area)	PVC SWR Ring fit Type-B (as per IS 13592 with latest amendments) of approved brand soil waste and ventilation pipe 90 mm to 150mm Dia complete with all necessary fittings such as bends, connectors, sockets, elbows, tees, reducer, cross and other fittings and accessories as required for proper completion of work complete in all respect as per drawing and design. SWR nahani trap, P-Trap, Gully Trap shall have to be provided as and where required as per design, drawing and directions of Engineer In Charge. The scope of work to include supply of SWR pipe along with above mentioned required fittings.

n.2	External Areas (Out side the block or in service shaft as per drawing and design)	PVC SWR Ring fit Type-B (as per IS 13592 with latest amendments) of approved brand soil waste and ventilation pipe 90 mm to 300mm Outer Dia complete with all necessary fittings such as bends, connectors, sockets, elbows, tees, reducer, cross and other fittings and accessories as required for proper completion of work complete in all respect as per drawing and design. PVC SWR nahani trap, gully trap and brick manhole of suitable size shall have to provide as and where required as per design, drawing and directions of Engineer In Charge. Pipes laid vertically shall be properly fixed with necessary fixing arrangement.
n.3	Rain Water Drainage Pipe	PVC SWR Ring fit Type-B (as per IS 13592 with latest amendments) of approved brand soil waste and ventilation pipe 110 mm to 150mm Dia complete All necessary fittings and accessories as required for proper completion of work complete in all respect as per drawing and design. And also including making khurra as required of size 450x450 mm with 1:2.4 cement coarse sand and stone grit neat coat of cement with suitable water proofing complete.
O	Sanitary Fittings.	
o.1	ORRISA PAN	Orrisa pan ISI marked size 580 mm of approved quality & make including 10 liter capacity ISI low level PVC cistern, /SWR P-Trap, flush pipe 40 mm dia of CP, PVC connection of heavy duty, one no C.P. angle valve, one no C.P. bib cock, CP flange, CP extension (heavy duty) & fixing to be done in concrete 1:2.4 (1 cement:2 Coarse sand :4 stone grit 20mm) along with all other consumables necessary for fixing etc. complete as per design and drawings. (as per detailed specifications, drawings & design).
o.2	EUROPEAN TYPE W.C	European type WC pan floor mounted with seat cover ISI marked size 580 mm of approved quality including 10 liter capacity low level PVC cistern of approved make, PVC connection of heavy duty, one no C.P. angle valve, one no two way C.P. bib cock, CP flange, CP extension (Heavy Duty) along with provision of C.P. health faucet with PVC Flexible pipe & fixing to be done in concrete 1:2.4 (1 cement:2 coarse sand: 4 stone grit 20mm) along with all other consumables necessary for fixing etc. complete as per design and drawings. (As per detailed specifications, drawings & design).
o.3	WASHBASIN	Wash basin (without pedestal) of size 550 x 400 mm of approved quality and make including, CI bracket-1 pair, with necessary arrangement of CP brass waste jali (half threaded) with brass coupling, 15 mm C.P. mixer with 2 no. of CP angle valve, C.P flange, C.P extension as required, PVC connection of heavy duty and including heavy duty waste pipe etc complete as per drawing & design. (As per detailed specifications, drawing & design).
o.4	Kitchen sink	Steel sink (without drain board) of standard size 610x450x250mm., 1mm thick of approved quality and make including 40mm dia PVC heavy duty waste pipe of appropriate length, CI bracket -1 pair, CP waste jali full threaded, two nos long body bib cock, CP extension and CP flange etc complete as per design and drawings. (as per detailed specifications, drawings & design)
o.5	CP angle valve for gyser in toilet.	CP angle valve, CP flange, C.P. extension of approved make and complete as per design and drawings. (as per detailed specifications, drawings & design).
o.6	Towel Rail	C.P. towel rail of size 600x20 mm of approved brand and design complete as per drawing and design.
o.7	For Bath	Hot & cold water C.P.bib cock with separte 100 mm CP shower with CP arm of approved brand & model. (as per detailed specifications, drawings & design)
o.8	Gully Trap and Chamber	Gully traps of suitable size with chamber complete covered with CI grating to be provided as required. This should be suitably connected with M.H. as per drawing design and level.
o.9	CP.Jali	Hinged stainless steel grating 4 mm thick with stainless steel frame and hinges including fixing to the floor with cement mortar 125 mm dia heavy quality for nahani trap as per drawings & design. (as per detailed specifications, drawings & design.)
o.10	Filling in sunken area	The sunken areas have to be filled with mixture of Pea gravel /coarse sand and thermo balls.
P	Block Floor, Flat Number and display board for common facility	The block shall have to be numbered on plastic sheet of suitable size. The Floor to be prominently numbered, the flats shall to be numbered as per numbering plan. The Numbering pattern, Design, plan and details shall be provided by UP Housing & Development Board.
Q	Signage Parking and Gang way/Drive way marking in stilt floor level/ground level	2.5 mm thick making strip of specified shade/colour using hot thermi plastic material for signage as per architectural drawing complete in all respect as per direction of E/I. The parking number showing that the parking is reserved for particular flat number shall also be indicating the numbering.
R	Letter Box	A designed M.S. powder coated elegant letter box with locking arrangement (As per drawing and design approved by UPAVP) for each flat with name of flat owner on it shall have to provided and fixed as per direction of E/I.

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S	Fire fighting system	Contracting agency shall make all provisions for fire fighting requirements as per provisions of NBC and also as per architectural drawing and designs, including fire fighting NOC from concerning department.
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## 2. INTERNAL ELECTRIFICATION

S.NO	DESCRIPTIONS OF WORK	ITEM OF WORK	REMARKS
		<b>WIRING</b>	
1		Wiring point for light point with 1.0 sq.mm. FR PVC insulated multistrand single core copper conductor cable in Heavy duty conduit pipe partly concealed in the wall and partly laid in slab along with the reinforcement before concreting complete with 1.5 sq.mm. FR PVC insulated multistrand single core copper conductor cable as earth wire drawn in side piano type switch and ceiling rose/ angle/ batten holder complete in all respect. as directed including matching colour wash.	All work shall be carried out as per latest U.P. PWD Specification & drawing & design
2		Wiring point for Two Way light point with 1.0 sq.mm. FR PVC insulated multistrand single core copper conductor cable in Heavy duty conduit pipe partly concealed in the wall and partly laid in slab along with the reinforcement before concreting complete with 1.5 sq.mm. FR PVC insulated multistrand single core copper conductor cable as earth wire drawn in side. Two number piano type switch and ceiling rose/ angle/ batten holder complete in all respect. as directed including matching colour wash.	
3		Wiring point for fan/ fresh air fan (light duty exhaust fan) with 1.0 sq.mm. FR PVC insulated multistrand single core copper conductor cable in Heavy duty conduit pipe partly concealed in wall and partly laid in slab along with the reinforcement before concreting complete with 1.5 sq.mm. FR PVC insulated multistrand copper conductor cable as earth wire drawn in side the conduit piano switch and ceiling rose complete in all respect including matching colour wash.	
4		Wiring point for 5A plug 1.0 sq.mm. FR PVC insulated multistrand single core copper conductor cable in Heavy duty conduit pipe partly concealed in wall and partly laid in slab along with the reinforcement before concreting complete with 1.5 sq.mm. FR PVC insulated multistrand copper conductor cable as earth wire drawn in side the conduit and piano type switch and flush type socket etc. complete in all respect including matching colour wash.	
5		Wiring point for call bell with 1.0 sq.mm. FR PVC insulated multistrand single core copper conductor cable in Heavy duty conduit pipe partly concealed in wall and partly laid in slab along with the reinforcement cement before concreting complete with 1.5 sq.mm. FR PVC insulated multistrand copper conductor cable as earth wire drawn in side the conduit and piano type bell push or two pin socket etc. complete in all respect including matching colour wash.	
6		Supply and fixing of power plug with 16A/240V piano type switch with 16A/250V flush type Switch 5 pin socket in suitable M.S. box.	
7		Supply and fixing of sheet steel enclosure surface / flush mounting fitted with 20 Amp. 2 pin and earth metal clad scraping earth plug and socket complete with enclosure for S.P. MCB with neutral link and earth terminal.	
8		S/F surface/ flush mounting 6 way TPN distribution board without MCB complete in all respect and as directed at site.	
9		S/Fixing of 63Amp 4 P. isolator. Complete with connection	
10		S/F of 6/10/16/20/25/32 Amp. MCB (10KA). Complete with connection	
11		S/F hexagonal fan box with hexagonal side of approx 80 mm in length fabricated from 16 SWG MS sheet incorporating 12 mm dia M.S. round bar duly bent for supporting fan hanger duly painted with red oxide and screwing arrangement with wiring conduit laid in the RCC roof before concreting alongwith supply of all material, labour T&P etc. required for proper completion of the work.	
12		Supply and fixing of single light wall bracket made of brass fixed on matching M.D.F. E.G. Board base etc. complete in all respects.	
13		S/F of Call bell of approved make on polished MDFEG/Teak ply board including making connections etc. Complete in all respects.	
14		S/F of round/hexagonal fan box cover of 3mm thick Bakelite sheet on existing fan box with the help of brass M/C screw and cup washer. Complete as per direction of E/I.	
15		S/F of round Junction box cover of 3mm thick Bakelite sheet on existing Junction box with the help of brass M/C screw and cup washer. Complete as per direction of E/I.	

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16	SWiring of sub main with 2 No. 2.5 sq.mm. FR PVC insulated 1100V grade multistrand single core copper conductor cable in 20 mm or more dia heavy duty (2 mm thick) Heavy duty conduit pipe partly laid in slab along with reinforcement before concreting and partly concealed in wall with 1 No. 1.5 sq.mm. FR PVC insulated 1100V. grade multistrand single core copper conductor cable as earth continuity wire drawn in side the conduit complete in all respects. including matching colour wash.
17	SWiring of submain with 2 No. 4 sq.mm. FR PVC insulated 1100V. Grade multistrand single core copper conductor cable in 20 mm or more dia heavy duty (2 mm thick) Heavy duty conduit pipe partly concealed in wall and partly laid in slab along with reinforcement before concreting with 1 No. 2.5 sq.mm. FR PVC insulated multistrand copper conductor cable as earth continuity wire drawn in conduit including matching colour wash etc. complete in all respect.
18	SWiring of submain with 2 No. 6 sq.mm. FR PVC insulated 1100V. Grade multistrand single core copper conductor cable in 20 mm or more dia heavy duty (2 mm thick) Heavy duty conduit pipe partly concealed in wall and partly laid in slab along with reinforcement before concreting with 1 No. 4 sq.mm. FR PVC insulated multistrand copper conductor cable as earth continuity wire drawn in conduit including matching colour wash etc. complete in all respect.
19	SWiring of submain with 4 No. 10 sq.mm. FR PVC insulated 1100V. Grade multistrand single core copper conductor cable in 32 mm dia heavy duty (2 mm thick) Heavy duty conduit pipe partly concealed in wall and partly laid in slab along with reinforcement before concreting with 2 No. 10SWG Copper. as earth continuity wire drawn in conduit including matching colour wash etc. complete in all respect.
20	S/F of 16 SWG ( 1.5 mm thickness) size 200x250x65 mm M.S. switch box of standard make as approved.
21	Supply and fixing of ceiling fitting with LED light fixed on matching M.D.F.E.G. board base including connection with existing outlet. The base of ceiling fitting shall be fabricated from 22 gauge CRCA sheet in square shape finished with black matt surface complete with 3 mm thick export quality a crylicmoulded cover and heavy duty brass holder of approved make complete in all respect.
	<b>Lightening Arrester</b>
1	Supply and burying earth electrode for lightening conductor of 600mmx600mm G.I. plate vertically for earthing with its top at least 3 meters below ground level complete with 20 mm 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 allround etc. as per directions of Engineer in charge complete in all respects.
2	Supply and Fixing of vertical down conductor of 32mmx6mm G.I. strip etc. on approved clamps on surface for lighting conductor complete in all respects.
3	Supply and Fixing of horizontal air termination (roof conductor) of 25mmx3mm G.I. clamps on surface all around parapet mummy and upto earthing complete in all respects as per direction of engineer in charge
4	Supply and Fixing of vertical air termination finel rod comprising of 300mm longx25mm dia G.I. rod with one pointed prong and 100mm diax3mm thick base plate etc. complete in all respects.
5	Supply and Fixing of testing joint of G.I. strip 32mmx6mm and 150mm long with finned of brass bolts and nut etc. complete in all respects
6	Supply and Fixing of 8 SWG G.I. wire along with earth clips as directed by the Engineer in charge in charge with supply of all material, labour and T&P required for proper complete of work.
	<b>Earthing &amp; Service Connection</b>
1	Supply & Laying of 2 nos 120 sqm 3.5 core aluminium conductor PVC insulated armored served sheathed cable( from felderpillar to metering pannel) 1100 volts grade at a depth of 750 mm below ground level over a cushion of 75mm thick sand all around and protected with burnt brick on sides and on surface the cable run shall be fixed on M.S. clamps etc. of suitable size or as directed by the Engineer in charge complete in all respects. The around of the cable shall be properly connected with lugs the earth conductor by clamps etc. One no cable shall be laid for stand by 120 sqm x 3.5 core complete.
2	Supply and burring of 600mmx600mm x6.0mm G.I. plate vertically for earthing with its top at least 3 metres below ground level complete with 20mm dia G.I. pipe and funnel for watering and one earthing lead of one no. 8 to 10 SWG G.I. wire with in 15mm dia G.I. pipe up to switch board (from apron to switch board the cost of C.I. frame with hinged cover masonry housing alternate layers of charcoal/coke and salt at least 1500mm thichairound complete in all respects

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3	Supply and Fixing of cage fabricated with 3mm thick expand metal fixed on 50mmx50mmx6mm angle iron frame. The vertical members shall be grouted in floor and horizontal members in the wall. The cage shall have suitable size one leaf door with locking device door frame fabricated with 35 mmx35mmx5mm angle iron and 3mm expanded metal duly fixed with the cage member with hinges etc. The cage shall be painted with red oxide primer and synthetic enamel paint. The job including all materials, labour, T&P etc. as per direction of E/I
4	Supply and fixing of 4no 10 sqmm FR PVC insulated 1100V Grade multistrand single core copper conductor cable in 32 mm dia heavy duty (2 mm thick) Heavy duty conduit pipe partly concealed in wall and partly laid in slab along with reinforcement before concreting with 2 No. 10SWG Copper as earth continuity wire drawn in conduit including matching colour wash etc. complete in all respect from bus bar / meter to each flat individually for connection in the flat. This wire should be connected to main switch board of the flat suitably as per direction of engineer in charge.
5	Supply and fixing of rubber mat 2000mmx1000mmx10mm (ISI) as required.
6	Supply and drawing following pair 0.61 mm F.R. PVC insulated copper conductor unarmored telephone cable in the existing surface/recessed Heavy duty conduit pipe as required.
a	1 Pair
B	2 Pair
c	4 Pair
d	20 Pair
e	50 Pair
7	S/F/T/C of following size kron block/tag block in M.S. hinges type box of 16swg thick duly painted with kron block as required
a	2 Pair
b	4 Pair
c	10 Pair
d	20 Pair
e	50 Pair
8	Supply and drawing following size co-Arial T.V. cable 0.7mm solid copper conductor PE insulated shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/recessed Heavy duty conduit pipe as required.
a	RG-6
b	RG-11
9	TAP OFF box+spliter for RG 11 TV cable
a	2 Way
b	4 Way
10	Supply and fixing following size G.I. box along with base & cover plate per switches in recess etc as required.
a	2 module
b	4 module
c	6 module
11	S/F of following socket on the existing plate and switch box including connection as required.
a	Telephone socket outlet
b	T.V. antenna socket outlet

- All works to be carried out as per detailed architectural drawings, and vetted structural design and drawings. The work shall be completed in all respect.
- All works to be carried out as per detailed specifications, U.P.H.D.B. specifications UP PWD specifications, CPWD specification, Relevant IS code and directions of Engineer In Charge in sequence of preference The work shall be completed in all respect.
- The scope of work includes supply of all related material, labour, T&P, scaffolding, shuttering etc for proper completion of works. No claim shall be entertained on account of any material, labour, T&P, Fixture etc not mentioned specifically in the brief scope of work. All works related for proper completion in finished stage shall deemed to be included in the scope of work. The scope of work shall also include submission of detailed estimate matching to finally modified and approved executional drawings of project.

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In water supply system full turn C.P. fitting and in electrical works piano type switch/flush type socket will be used in Samajwadi Awas Yojna Flats.

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5. The junction of different material elements such as RCC member meeting with Brick work shall be plastered with properly fixing murga jali, minimum width of jali shall not be less than 450mm.
6. Rates are including of all architectural element shown in drawing presently and may change afterwards due to any reason for which no claim whatsoever shall be entertained.
7. Any Item or item of work which is not included in A.O.W. shall be deemed treated as to be included for regular and permanent functioning of water supply system, and sanitary system, and electrical system in all points of the block and duly connected with municipal service line. Intermediate manhole of required size have to be constructed and included in scope of work.
8. All necessary no objection certificates shall be arranged by the firm after completion of the project such as fire department, directorate of electrical safety & security etc.
9. 20 Nos. lift (capacity 10 passenger) and 19 Nos. Strecher / freight lift IN 1BHK+2BHK cluster of approved manufacturer including construction of lift wall and machine room as per architectural design and drawing also included in scope of work.
10. Number of electrical fittings in each block as per approved electrical fitting drawings.
11. Supply and installation of DG Set for power backup in circulation area of towers, lift, street light and firefighting/water supply pumps included in scope of work as per design.

### Abstract of Work (Self Financing Scheme)

1.0	<b>Name of Work :-</b> Engineering, Procurement and Construction (EPC) of multi-storeyed residential flats including basement, based on R.C.C. Framed Structure/R.C.C. monolithic shear wall concept using aluminum form work in Sector-20, Vrindavan Yojna No.4, Lucknow including soil testing, structural design, construction of boundary wall, swimming pool, community centre/club, Transformer & DG set for power backup (only for lifts, water supply and common area) and all internal development etc. as per drawing & design complete in all respect ready to move in for living condition.		
	The scope of work consists of survey as required and soil testing to ascertain type and depth of foundation of building & supply of vetted (from any Indian Institute of Technology) structural designs and detailed structural drawings, supply of all material, labour, T&P, machinery etc required for proper completion of the project. The concept architectural drawings are enclosed with BID Document and detailed architectural drawings shall be provided as and when needed, by the UP Avas Evam Vikas Parishad.		
1.1	<b>Flat Details : (Affordable)</b>		
	Sl. No.	Flat Type	Number of Flats
			Scope of work
	1	1BHK (stilt+12)	288
			Stilt+12 Floors + Mumty + water storage tank +Machine room + parapet walls etc
	2	1BHK (stilt+12)	192
			Stilt+12 Floors + Mumty + water storage tank +Machine room + parapet walls etc
	3	2BHK (stilt+13)	468
			Stilt+13 Floors + Mumty + water storage tank +Machine room + parapet walls etc
	4	2BHK Study Space (Basement+ stilt+13)	468
			Basement+ Stilt+13 Floors + Mumty + water storage tank +Machine room + parapet walls etc
	5	2BHK Study Space (Basement+ stilt+12)	240
			Basement+ Stilt+12 Floors + Mumty + water storage tank +Machine room + parapet walls etc
		S.F.S Yojna	
		2BHK+ STUDY SPACE (Basement + stilt +13 stories	208
			Basement+ Stilt+13 Floors + Mumty + water storage tank +Machine room + parapet walls etc

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