PROJECT: ESTABLISHMENT OF (2) TWO STOREY RADIATION PROTECTION SERVICES FACILITY (C.Y. 2020)

LOCATION: PNRI Compound, Commonwealth Avenue, Diliman, Quezon City

OWNER : Philippine Nuclear Research Institute (PNRI)
SUBJECT : DETAILED COST ESTIMATE

				MATER	AL COST	LABOR	COST	ESTIMATED	MARK	K-UPS IN PER	CENT	TOTA	L MARK-UP		TOTAL	TOTAL
Item No.	ITEM/DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	DIRECT COST	CONT.	ОСМ	PROFIT	%	VALUE	VAT	INDI. COST	COST
Α	GENERAL REQUIREMENTS															
1	Mobilization/Demobilization	1	lot													
2	Bonds/Insurance	1	lot													
3	Temporary Facilities	1	lot													
4	As-Built plan	1	lot													
5	Project Billboard	1	lot													
	TOTAL COST OF GENERAL REQUIREMENTS															
В	ARCHITECTURAL AND CIVIL WORKS															
B.1	Fabrication and installation of steel door & roll-up															
	door at old RPS Bldg.															
1	Chipping/removal of existing wooden door & jamb	1	lot													
2	Chipping, widening and plastering of concrete wall	1	lot													
	opening for the roll-up door including painting															
3	Chipping, widening and plastering of concrete wall	1	lot													
	opening for the steel door including painting															
4	Cleaning and disposal of concrete debris & doors	1	lot													
5	(1.50m x 2.20m) Galvalum Roll-up door motorized	1	set													
	operated w/ complete accessories															
6	(0.90m x 2.10m) steel door G.A 16 fire rated w/ insulation	1	set													
	epoxy painted.															I
7	Stainless steel door lockset (YALE)	1	set													
8	3 1/2" x 3 1/2" Stainless steel door hinges	5	pcs													1
	Sub-total															
B.2	Upgrading of existing perimeter fence along															
	technohub area.															
1	Chipping of existing reinforced concrete columns (21 unit)	1	lot													
2	Reinforeced concrete works															<u> </u>
2.1	Site mix concrete (1:2:3 mixture)	5	cu.m													<u> </u>
2.2	16mmØ x 6.00m def.bar	92	pcs													<u> </u>
2.3	10mmØ x 6.00m def. bar	60	pcs													I

2.4	G.A 16 G.I Wire	10	kgs									
2.5	1.22m x 2.44m x 12mm ordinary plywood	16	pcs									
	Asstd. Coco lumber	500	bd.ft									
2.7	Asstd. C.W Nail	10	kgs									
3	Fabrication and installation of steel cyclone wire fence											
	2"Ø x 20ft. Sch. 40 G.I pipe	45	pcs									
	1 1/2"Ø x 20ft. Sch. 40 G.I pipe	21	pcs									
	2" x 2" G.A 10 G.I cyclone wire x (5ft)	126	Lm									
	10mmØ x 6.00m plain round bar	180	pcs									
3.5	Steel neutralizer	2	gal									
3.6	Welding rod (fuji brand)	4	box									
	4"Ø cutting discc	15	pcs									
	4"Ø grinding disc	10	pcs									
3.9	12"Ø cutting disc	2	pcs									
3. 10	G.I Barb wire G.A 10	16	rolls									
3.11	Steel scaffoldings (rental)	1	lot									
	Epoxy primer paint	2	gal									
3.13	Epoxy top coat paint	4	gal									
	Epoxy thinner	2	gal									
3.15	Paint brush and roller	1	lot									
	Sub-total											
B.3	Installation of roofing on existing concrete roofdeck											
	of trenches.											
B.3.1	STRUCTURAL ROOF FRAME											
1	2" x 2" x 3/16" x 20' angular bar	120	pcs									
2	1 1/2" x 1 1/2" x 3/16 x 20 angular bar	102	pcs									
3	1/2" x 12" x 12" steel plate	46	pcs									
4	1/2" x 3" dyna bolt	290	pcs									
5	1/2" dia. Mason BIT (U.S.A)	5	pcs									
6	Welding Rod "Fuji"	5	box									
7	G.A. 16 x 2"x 4"x 20" B.I. C-Purlins	116	pcs									
8	12mm dia. x 6.00mm plain round bar (SAGROD)	32	pcs									
	4" dia. Cutiing Disc "TYROLIT"	15	pcs									
10	· · · · · · · · · · · · · · · · · · ·	10	pcs									
	4" dia. Grinding Disc "TYROLIT"				·	1	1	1		1	1	
	4" dia. Grinding Disc "TYROLIT" 12" dia Cutiing Diisc "TYROLIT"	2	pcs									
11			pcs tin									
11 12	12" dia Cutiing Diisc "TYROLIT"	2										
11 12 13	12" dia Cutiing Diisc "TYROLIT" Red Oxide Paint "Boysen"	3	tin									

16 -									
+	Turco Rust Converted	4	gal						
	Q. D. E. Paint - choco brown "Boysen"	6	gal						
18	1/2" x 12" x 8' ficem board	29	pcs						
19	1/2" x 4" x 8' ficem board	9	pcs						
20 <sub>l</sub>	Flat Wall Enamel Paint "Boysen"	3	gal						
21	Assorted Sand Paper (12' x 12")	10	pcs						
22	Vulca Seal Rubber Sealant	2	gal						
23 <sub> </sub>	Black Screw 3"	750	pcs						
24	Miscellaneous	1	lot						
B.3.2	ROOFING WORKS								
1 -	1.09 x 22.50 m x 0.4mm thk pre-painted "Rib Type"	21	pcs						
Į.	Long span roofing (green)								
2	Metal Texscrew 3 1/2" w/ rubber O-ring	2200	pcs						
	Side flashing green	30	pcs						
	0.60m x 2.44m x 0.4mm thk pre-painted								
4	Silicon Sealant	8	tubes						
	Sub-total								
B.4	Additional height concrete CHB fence fronting								
	new RPS bldg.								
1 (	6" x 8" x 16" ordinary CHB	180	pcs						
2	Portland Cement	32	bags						
3	White sand	5	cu.m						
4	Site mix concrete (1:2:3 mixture)	2	cu.m						
5	16mmØ x 6.00m def.bar	27	pcs						
6	10mmØ x 6.00m def.bar	24	pcs						
7	G.A 16 G.I wire	6	kgs						
8	1.22m x 2.44m x 12mm ordinary plywood	6	pcs						
9	Asstd. Coco lumber	200	bd.ft						
10	Asstd. C.W nail	5	kgs						
11	Chipping of existing columns (6 units)	1	lot						
12	(3 coats of elastomeric paint)	160	sq.m						
13	Asstd. Paint brush & rollers	1	lot		 			·	
14	Concrete Neutralizer	1	lot						
15	BarbWire G.A. 10	1	rolls						
16	12mmØ Plain Round Bar	4	kgs						
17	Welding Rod	2	kgs	 					
18	Painting	1	lot						
	Sub-total								

B.5	Fabrication and installation of removable steel								
	cyclone wire fence fronting new SSDL Bldg.								
	2"Ø x 20ft. Sch. 40 G.I Pipe	2	pcs						
	1 1/2"Ø x 20ft. Sch. 40 G.I Pipe	22	pcs						
	2" x 2" G.A 10 G.I cyclone wire x (4ft)	32	m						
4	10mmØ x 6.00m plain round bar	16	pcs						
	Welding rod	1	box						
	Steel hook	32	set						
	Portland cement	8	bags						
	3/4" thk crash gravel	1	cu.m						
9	White sand	1	cu.m						
10	Epoxy primer paint	2	gal						
	Epoxy top coat	4	gal						
	Epoxy thinner	2	gal						
	Paint brush & rollers	4	pcs						
14	Chipping/excavation work (16 units)	1	lot						
	12"Ø cutting disc	1	pcs						
	4"Ø grinding disc	4	pcs						
	4"Ø cutting disc	8	pcs						
	Sub-total Sub-total								
B.6	Fabrication and installation of fire exit steel stair								
	at New RPS Bldg.								
1	Removal/Relocation/Re-installation of existing steel ladder	1	lot						
2	New fire exit steel stair								
2.1	2" x 2" x 3/16" x 20' Angular bar	14	pcs						
2.2	3" x 3" x 1/4" x 20' angular bar	7	pcs						
2.3	1/8" checkered plate G.I	4	pcs						
2.4	2" x 2" x 1.5mm thk x 20' square tubular,	6	pcs						
	Stainless steel pipe type 304								
2.5	2"Ø x 1.5mm thk x 20' stainless steel pipe	2	pcs						
	mirrorized type 304								
2.6	3/8" x 3" Dyna bolt	12	pcs						
2.7	Welding rod (Steel)	12	kgs						
2.8	Welding rod (Stainless)	6	kgs						
2.9	1 1/2" x 1 1/2" x 1.5mm thk x 20' square tubular	2	pcs						
	stainless steel pipe (mirrorized)								
2. 10	(3" x 10" x 20' x 1/4" thk) channel bar	4	pcs						
2.11	12mmØ x 4" Dyna expansion bolt	30	pcs						
2.12	4"Ø cutting disc	10	pcs						

				ı	1	1	1	1	1	1	ı	1	
2.13	12"Ø cutting disc	2	pcs										
2.14	4"Ø grinding disc	6	pcs										
2.15	Epoxy metal primer paint	2	gal										
2.16	Epoxy metal top coat paint	3	gal										
2.17	Epoxy thinner	2	gal										
2.18	Paint brush and rollers	1	lot										
2.19	Polishing disc	5	pcs										
2. 20	Yale door lockset	1	рс										
2.21	Stanley heavy duty door closer	1	set										
2.22	(10" x 18" x 3/8") Steel plate	2	pcs										
2.23	Convertion of existing steel door to ordinary flush door	1	lot										
2.24	Stainless steel cap	32	pcs										
	Sub-total												
B.7	Fabrication of shelves & tables												
1	(1.20m x 0.70m x 0.77m) Wooden working table,	3	set										
	Ducco finish w/ HPL top finish												
2	(2.30m x 0.57m x 0.77m) wooden long working table	1	set										
	Ducco finish w/ HPL top finish												
3	(3.30m x 0.68m x 0.70m) long wooden shelve,	1	set										
	Ducco finish w/ HPL top finish												
4	(1.22m x 0.55m x 0.77m) wooden working table	1	set										
	Ducco finish w/ HPL top finish												
5	(1.22m x 0.57m x 0.77m) wooden working table	1	set										
	Ducco finish w/ HPL top finish												
6	(2.22m x 0.57m x 0.77m) wooden long working table	1	set										
	Ducco finish w/ HPL top finish												
	(0.60m x 0.40m x 0.32m) wooden side table	1	set										
	Ducco finish w/ HPL top finish												
8	Step Ladder Ducco Finish	2	set										
	Sub-total												
B.8	Repair of ground floor and second floor comfort												
	room at New RPS Bldg.												
1	Removal and re-installation of all shaking water closet	1	lot										
	including fixing of waterline and accessories												
2	Repair/fixing of lavatory water supply line and accessories	1	lot										
3	Repair of all leaking waterline and sewerline pipes or replacement if necessary	1	lot								 		 _
4	Waterproofing Works of embedded sewerline pipes	1	lot										
5	Miscellaneous work	1	lot										
	Sub-total												

B.9	Fabrication of Trefoil couch								
1	(0.90m/0.60m x 0.50m x 0.45m) Steel tubular frame w/	3	set						
-	foam and upholstery finish w/ ball caster		001						
2	(0.60mØ x 0.45m) Center table w/ 3/8" thk bronze glass	1	set						
	· · · · · · · · · · · · · · · · · · ·	- '	361						
	on top w/ stainless steel frame support w/ rubber tip								
	Sub-total								
B.10	Provision of stainless steel PWD ramp at front of								
	New RPS Bldg.								
1	6" thk ordinary CHB	150	pcs						
2	Portland cement	25	bags						
3	(3/4" crashed gravel) (1:2:3 concrete mixture) Jobsite mix	3	cu.m						
4	White sand	3	cu.m						
5	Washed out pebbles finish	9	sq.m						
6	10mmØ x 6.00m def.bar	53	pcs						
7	G.A 16 G.I wire	4	kgs						
8	2"Ø x 1.5mm thk x 20' mirrorized	12	pcs						
	Stainless steel pipe type 304								
9	Welding rod (Stainless)	6	kgs						
10	4"Ø cutting disc	8	pcs						
11	4"Ø grinding disc	6	pcs						
12	Polishing disc	8	pcs						
13	Wall tiles & Adhesive (Same as Existing Column Tiles)	7	sq.m						
14	Garden soil w/ Simple Landscape	2.5	cu.m						
15	Filling materials	6	cu.m						
16	Painting	1	lot						
17	Road restoration	1	lot						
18	Excavation / demolition	1	lot						
-	2"Ø stainless steel elbow	14	pcs						
20	12"Ø cutting disc	1	рс						
	4"Ø stainless steel base plate	32	pcs						
	3/8"Ø x 2" stainless steel expansion bolt	96	pcs						
	4"Ø stainless steel cap	32	pcs						
24	Removal Restoration of Existing Aluminum Glass Wall	1	lot						
25	Installation of New Frameless Door (1.00m x 2.10m x 1/2" thk Tempered Glass w/ lock & Complete Accessories) Analok Alum. & Bronze Glass	1	set						
	Sub-total								

B.11	Construction of radwaste receiving area									
	SITE WORKS:									
		40								
	Excavation of foundation (Soil w/ adobe rock)	19	cu.m							
_	Gravel Bedding	6	cu.m							
	Backfilling and compaction	19	cu.m							
	Removal/Cutting of one (1) Mango tree (Medium size)	1	lot							
	Cleaning and disposal of waste materials	1	lot							
6	Demolition of existing concrete wall and disposal	1	lot							
	Sub-total									
-	CONRETE AND REBAR WORKS:									
-	3,000 Psi Concrete (1:2:3 mixture) Jobsite Mix	25.00	cu.m							
2	16mmØ x 6.00m def. bar	103	pcs							
3	12mmØ x 6.00m def. bar	12	pcs							
_	10mmØ x 6.00m def. bar	215	pcs							
5	G.A 16 G.I wire	20	kgs							
B.11.3	FORMWORKS AND SCAFFOLDING:									
	Asstd. Coco lumber	948	bd.ft							
-	1/2" x 4' x 8' Ordinary plywood	20	pcs							
	Asstd. C.W Nail	15	kgs							
4	G.A 16 G.I Wire	10	kgs							
B.11.4	MASONRY WORKS; (Including finish plastering)									
	6" x 8" x 16" Ordinary CHB	1,527	pcs							
2	10mmØ x 6.00m def. bar	77	pcs							
3	White sand	26	cu.m							
4	G.A 16 G.I Wire	7	kgs							
5	Portland cement	255	bags							
B.11.5	CARPENTRY WORKS:									
	5.5mm thk ficem board Exterior Celing with 1" x 2" metal	59	sq.m							
	furring frame @0.30m O.C w/ steel hangers									
2	10mm thk gypsum board interior ceiling with 1" x 2" metal	92	sq.m							
	furring frame @0.30m O.C w/ steel hangers									
					_				-	
B.11.6	METAL WORKS:									
	(3.30m x 4.30m) Steel cyclone wire folding gate	2	sets							
	G.A 10 x 2" x 2" x 6' Cyclone wire	34	mtrs							
3	2"Ø x 20' Sch. 40 G.I Pipe	12	pcs							

					I		1	1			I	
	4"Ø x 20' Sch. 40 G.I Pipe	8	pcs									
	Welding rod	2	box									
	1/4" x 1" x 20' Flat bar	18	pcs									
	12"Ø cutting disc (Tyrolite)	2	pcs									
	4"Ø Grinding disc (Tyrolite)	4	pcs									
	4"Ø Cutting disc (Tyrolite)	6	pcs									
10	1/2" x 10" x 10" steel plate	8	pcs									
11	(0.50m x 2.00m) G.A 16 Metal louver window	1	sets									
12	(0.40m x 1.50m) 1" x 1" Square tubular celing ventillation	6	sets									
	with G.I screen inside											
13	1"Ø x 20' Sch. 40 G.I Pipe	6	pcs									
14	(6.70m x 4.30m) Heavy duty aluminum roll-up door	1	set			-						
	(motorized) w/ lock & complete accessories											
15	(1.00m x 2.10m) Steel door w/ insulation	1	set	 								
B.11.7	STRUCTURAL STEEL TRUSS:											
1	2" x 2" x 1/4" x 20' Angular bar	50	pcs									
2	1 1/2" x 1 1/2" x 3/16" x 20' Angular bar	62	pcs									
3	G.A 16 x 2" x 4" x 20' metal C-purlins	54	pcs									
4	12mmØ x 6.00m plain round bar (SAGROD)	10	pcs									
5	16mmØ x 6.00m plain round bar (Cross bracing)	16	pcs									
6	16mmØ Turn buckle	16	pcs									
7	Welding rod	3	box									
8	12"Ø cutting disc	2	pcs									
9	4"Ø cutting disc	5	pcs									
10	4"Ø Grinding disc	3	pcs									
B.11.8	ROOFING WORKS:											
1	0.40mm thk x 1.09m x 5.30m Pre-painted long span	32	pcs									
	roofing "rib-type" Green											
2	0.40mm thk 0.60m x 2.44m Pre-painted plain sht.	10	pcs									
	green (Side flashing)											
	12mm thk polyethelene foam insulation w/ aluminum	4	roll									
	foil on both side											
4	1" x 1" x 3' G.I screen wire	200	lm									
	Rugby rubber sealant	2	Gal									
	Metal texscrew	1,050	pcs									
	Blind rivets	3	box									
8	Silicon sealant	5	pcs									
	Miscellaneous	1	lot									
<u> </u>	I I I I I I I I I I I I I I I I I I I	<u> </u>	iot						<u> </u>			

						1	I	<u> </u>	1	<u> </u>	1	
B 11 0	PAINTING WORKS:											
	Concrete wall 3 coats latex paint w/ skim coat	190	sq.m									
	surface preparation	190	Sq.III									
		00										
	Gypsum board ceiling (Interior) 3 coats latex paint	92	sq.m									
	Ficem board ceiling (Exterior) 3 coats latex paint	58	sq.m									
_	ABC Skim coat powder	18	bags									
5	Turco rust converter	1	tin									
	Epoxy primer paint "boysen"	2	gal									
	Red oxide paint "boysen"	2	tin									
	Epoxy top coat paint "boysen"	1	tin									
9	Epoxy thinner	2	gal									
10	Paint thinner	1	tin									
11	Asstd. Paint brush	6	pcs									
12	Asstd. Paint roller	6	pcs									
13	Asstd. Sand paper	40	pcs									
14	Fascia board (Q.D.E 3 coats)	20	sq.m									
B.11.10	INSTALLATION OF SHED ROOFING FOR ELECTRICAL PANEL BOARD											
	2"x2"x3/16"x20' Angular Bar	1	рс									
2	2"x3"x20' G.A 16 Metal C-Purlins	1	рс									
3	1"x1"x3/16"x20' Angular Bar	1	рс									
4	Welding Rod	2	kg									
5	10mmØ x 3" Dyna Bolt w/ Expansion Shield	6	pcs									
6	12mm x 1.22m x 2.44m Ficem Board	1	рс									
7	1.09m x 1.00m x 0.40mm thk Rib-Type Pre-Painted long span Roofing "Green"	1	рс									
8	1.22m x 2.44m x 0.40mm thk Pre-Painted plain sheet "Green"	1	рс									
9	0.60m x 2.44m x 0.40mm thk Pre-Painted Side Flashing	1	рс									
10	3 1/2" Metal Texscrew	12	рс									
11	Black Screw	30	рс									
12	Portland Cement	4	kg									
13	Sahara Waterproofing Compound	1	bag									
14	Red Oxide Paint	1	lit									
15	Paint Brush	1	рс									
16	Latex Paint	1	рс									
17	4" Ø Concrete Cutter	1	рс									
18	Torco	1	lit									
	Sub-total											

B 12	Demolition of existing concrete post at the back	1	lot							
	of old RPU Bldg.		101							
	Sub-total									
B.13	Concreting and leveling of floor of gas tank room									
1	Portland cement	3	bags							
2	3/4 crashed gravel	1/4	cu.m							
3	White sand	1/4	cu.m							
4	1/8"Ø x 4" x 4" (4' x 8') Steel matting	1	рс							
	Sub-total									
B.14	Provision of 4 sets CCTV Pedestal Pole									
1	Excavation and Demolition of Concrete Floor	1	lot							
2	Restoration of Concrete Floor	1	lot							
3	(1:2:3 mixture) Jobsite mix concrete	1	cu.m							
4	16mmØ x 6.00m def.bar	8	pcs							
5	10mmØ x 6.00m def.bar	5	pcs							
6	16mmØ x 300mm Anchor bolt w/ nut & washer	16	pcs							
7	(0.30m x 0.30m x 12mm thk ) B.I Base plate	4	pcs							
8	(0.15m x 0.10m x 12mm thk) B.I Bracket	16	pcs							
9	3"Ø x 20' Sch. 40 G.I Pipe	3	pcs							
10	3"Ø G.I cap	4	pcs							
11	Welding Rod	4	kgs							
12	G.A 16 G.I wire	4	kgs							
13	1/2" x 4' x 8' Ordinary Plywood	2	pcs							
14	2" x 2" x 12' Coco lumber	12	pcs							
15	Excavation of foundation	1.5	cu.m							
	Gravel bedding	0.10	pcs							
	Asstd. C.W nail	3	kgs							
	Epoxy Primer	1	gal							
	Epoxy Top Coat Paint	2	gal							
	Epoxy thinner	1	gal							
	Turco rust converter	1	lit							
	Paint brush (2")	2	pcs							
	4"Ø cutting disc "tyrolite"	6	pcs							
24	4"Ø grinding disc "tyrolite"	2	pcs							
	Sub-total									

D 45	New Companie Bethaner								
	New Concrete Pathway								
1	(1:2:3 Concrete mixture) Jobsite mix	1.92	cu.m						
2	10mmØ x 6.00m def.bar	22	pcs						
3	G.A 16 G.I wire	2	kgs						
4	Gravel bedding	1	cu.m						
5	Site clearing, Demolition, leveling, Excavation	1	lot						
	and compaction								
6	Cutting and extraction of mango tree (Medium) including	1	lot						
	chopping and disposal								
	Sub-total								
B.16	Installation of new stainless steel railing								
1	2" x 2" x 20' x 1.5mm thk Square tubular stainless	16	pcs						
	steel pipe, mirrorized type 304								
2	1" x 1" x 20' x 1.5mm thk Square tubular stainless	17	pcs						
	steel pipe, mirrorized type 304								
3	2"Ø x 20' x 1.5mm thk stainless steel pipe	5	pcs						
	mirrorized, type 304								
4	2"Ø stainless steel elbow, mirrorized type 304	3	pcs						
5	Stainless steel capping	37	pcs						
6	Stainless steel plate	37	pcs						
7	Stainless steel expansion bolt	111	pcs						
8	Concrete restoration	1	lot						
9	Welding rod (Stainless)	6	kgs						
10	4"Ø cutting disc	8	pcs						
11	4"Ø grinding disc	8	pcs						
12	Polishing disc	8	pcs						
13	12"Ø Cutting disc	1	рс						
14	Miscellaneous	1	lot						
	Sub-total								
B.17	Repair and Upgrading of RPSS Stairs and tile flooring								
1	Silicon Sealant	2	tubes						
2	Aluminum Clip w/ stainless screw	1	lot						
3	Grinding and polishing of stainless pipe	1	lot						
4	(0.60m x 0.60m) Granite tiles w/ adhesive, replace broken	10	pcs						
5	(0.20m x 0.40m) Ceramic tiles w/ adhesive	1	рс						
6	(0.55m x 1.00m x 3/8" thk) Acrylic glass	4	pcs						
7	(0.55m x 0.60m x 3/8" thk) Acrylic glass	2	pcs						
8	Miscellaneous	1	lot						
	Sub-total								
	TOTAL COST OF ARCHITECTURAL & CIVIL WORKS								

С	ELECTRICAL WORKS									
C 1	Supply and installation of Electrical Panelboard and feederline									
1.1	Panelboard, 70A, 3P, 230V 30 KAIC, Main CB, Industrial Type with Branches Circuit Breaker: 1 set 30A, 2P, 230V CB, Bolton Type, 1 set 30A, 3P, 230V CB, Bolt-on Type, 5 sets 20A, 2P, 230V CB, Bolt-on Type, 3 sets 15A, 2P, 230V CB, Bolt-on Type with ground terminal	1	lot							
1.2	Pullboxes pre-painted with cover (200mmx200mmx100mm)	4	sets							
1.3	25 mm diameter uPVC pipe	12	pcs.							
1.4	25 mm diameter uPVC adapter with locknut	10	pcs.							
1.5	14 mm² THHN/THWN Cable	108	m							
1. 6	5.5 mm <sup>2</sup> THHN/THWN wire	36	m							
1. 7	Miscellaneous (concrete wall/pathway chipping, restoration, anchor bolts, toxs and screws) incl. Excavation	1	lot							
	i									
C.2	Supply and installation of distribution circuits									
	5.5 mm <sup>2</sup> THHN/THWN wire	1	eoll							
2.2	3.5 mm <sup>2</sup> THHN/THWN wire	1	roll							
2.3	2.0 mm <sup>2</sup> THHN/THWN wire	50	m							
2.4	15 mmø uPVC pipe	48	pcs.							
2.5	15 mmØ uPVC adapter with locknut	45	pcs.							
2.6	4" Ø octagonal box with cover	14	pcs.							
2.7	2"x4" Utility Box	6	pcs.							
2.8	Single Convenience Outlet with ground, WEG Panasonic	3	sets							
2.9	Duplex Convenience Outlet with ground, WEG Panasonic	7	pcs.							
2.10	3 Gang Switch with cover, WEG Panasonic	2	sets							
2.11	Pinlight, 6"Ø with 25W LED Bulb	4	sets							
2.12	Fluorescent Fixtures, Double, 40W, Mirrorized with louver, LED	10	sets							
2.13	Industrial Type Exhaust Fan, 12" diameter with shutter	1	set							
2.14	Mica tube, 1" diameter	5	m							
2.15	ECB with 20A, 2P, 230V Bolton-on type circuit breaker, NEMA 3	1	set							
2.16	Ceiling Fan, 360 degrees rotation with control box	2	sets							
2.17	Miscellaneous (support for uPVC pipes, metal clamps, U-bolts, screws, pvc solvent)	1	lot							
	Sub-total									

2007   Montes 227, 2007, LED Carenar, Streening Europh   1   5   5   5   5   5   5   5   5   5	C.3	Supply and installation of DVR CCTV System and provision of electrical power supply for the perimeter CCTV cameras.								
CCTV Controllaced Distributed Power Supply, 18 Channels, 12   set   se	3.1	Digital Video Recorder (DVR), 16 Channels, 2TB SATA Hard Drive, Hikvision brand, Model DS-7216HUHI-F2-N	1	set						
March   Marc	3.2	CCTV Monitor, 32 ", 230V, LED Screen, (Samsung Brand)	1	set						
CTV Carmera, 3MP, 1609 Eullet and Outcoor Type   8	3.3		1	set						
10	3.4	CCTV Camera, 2MP,1080 Bullet and Indoor Type	1	sets						
3.7	3.5	CCTV Camera, 3MP,1080 Bullet and Outdoor Type	8	sets						
3.00 More (1.7) diameter, RSC elbow   1	3.6	50mm (2") diameter, RSC Pipe	10	pcs.						
3.0   Morm (1.5) diameter, RSC Deple   16   Dec.   22   Dec.   23   Dec.   24   Dec.   25   Dec.   2	3.7	50 mm (2") diameter RSC Locknut and Bushing	5	sets						
3.00 mm (1.5") diameter, RSC Pipe   22 pets   22 pets   22 pets   23 pets   24 pets   25 pets	3.8	50mm (2") diameter, RSC elbow	1	pc.						
3.12   25mm (17) diameter, RSC Pipe	3.9	40mm (1.5") diameter, RSC Pipe	16	pcs.						
3.12   2.5 mm (1") diameter, uPVC Pipe	3.10	40 mm (1.5") diameter RSC Locknut and Bushing	2	sets						
3.13         50mm (1.5°) diameter, uPVC Pipe         7         pcs.         Image: control of the	3.11	25mm (1") diameter, RSC Pipe	22	pcs.						
3.15   Shmm (1.5") diameter, uPVC Pipe	3.12	25 mm (1") diameter RSC Locknut and Bushing	4	sets						
3.15   40mm (1.5") diameter, uPVC Pipe	3.13	50mm (1.5") diameter, uPVC Pipe	7	pcs.						
3.16   Mmm (1.5") diameter, uPVC adapter	3.14	50mm (1.5") diameter, uPVC adapter	2	sets						
3.17   20 mm (3/4") diameter (µPVC Pipe   17   pcs.	3.15	40mm (1.5") diameter, uPVC Pipe	11	pcs.						
3.18   20 mm (34") diameter uPVC adapter	3.16	40mm (1.5") diameter, uPVC adapter	2	sets						
3.9   20mm (3/4") diameter, RSC Pipe (electrical)   35   pcs.   5   set	3.17	20 mm (3/4") diameter , uPVC Pipe	17	pcs.						
3.21   411/16" x 4 11/16" Square Box with cover   5   set	3.18	20 mm (3/4") diameter uPVC adapter	4	sets						
3.22         5.5 mm² THHN/THWN wire         2         rolls         Image: Control of the control	3.19	20mm (3/4") diameter, RSC Pipe (electrical)	35	pcs.						
RG 59 Siamese Coaxial Cable (300m/roll), 750hms impedance, solid copper core/inner conductor and 95% copper   4   rolls	3.21	4 11/16" x 4 11/16" Square Box with cover	5	set						
Impedance, solid copper core/inner conductor and 95% copper   4   rolls	3.22	5.5 mm <sup>2</sup> THHN/THWN wire	2	rolls						
3.25         Metal Box, 150mmx150mmx100mm, Pre-painted with cover         9         sets	3.23	impedance, solid copper core/inner conductor and 95% copper	4	rolls						
3.26   Duplex Convenience Outlet with ground, WEG Panasonic   4   sets   5   pcs.   5	3.24	Pull Box, 300mmx300mmx150mm, Pre-painted with cover	7	sets						
3.27         surface type utility box, uPVC         5         pcs. <td>3.25</td> <td>Metal Box, 150mmx150mmx100mm, Pre-painted with cover</td> <td>9</td> <td>sets</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	3.25	Metal Box, 150mmx150mmx100mm, Pre-painted with cover	9	sets						
3.28         Liquid tight flexible conduit, 20mm. Diameter (UL360)         2         m </td <td>3.26</td> <td>Duplex Convenience Outlet with ground, WEG Panasonic</td> <td>4</td> <td>sets</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	3.26	Duplex Convenience Outlet with ground, WEG Panasonic	4	sets						
3.29         Single power supply for CCTV camera, 230VAC Input Voltage, Hikvision Brand         6         units         9 <td>3.27</td> <td>surface type utility box, uPVC</td> <td>5</td> <td>pcs.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	3.27	surface type utility box, uPVC	5	pcs.						
3.29       12V DC, 2A Output Voltage, Hikvision Brand       6       units       1       gal       gal       1       gal       1       gal       gal <t< td=""><td>3.28</td><td>Liquid tight flexible conduit, 20mm. Diameter (UL360)</td><td>2</td><td>m</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	3.28	Liquid tight flexible conduit, 20mm. Diameter (UL360)	2	m						
3.31 Epoxy top coat "Boysen"	3.29		6	units						
3.32 Epoxy thinner "Boysen" 1 gal	3.30	Epoxy primer "Boysen"	1	gal	 					
3.33         Paint brush & roller         1         lot	3.31	Epoxy top coat "Boysen"	1	gal						
3.34 Miscellaneous 1 (RSC, uPVC pipes unistrut supports) 1 lot	3.32	Epoxy thinner "Boysen"	1	gal						
	3.33		1	lot						
	3,34	Miscellaneous 1 (RSC, uPVC pipes unistrut supports)	1	lot						
Sub-total		Sub-total	•							

C.4	Rearrangement/relocation/installation of existing CCTV, DVR and power supply convenience outlets at the CCTV monitoring station, and installation of new CABINET/shelves for two DVR units.									
4.1	Cabinet/shelves for two DVR made of aluminum frame and acrylic sidings but with no cover. (1/2" thick for sidings and back cover)	1	lot							
4.2	Duplex Convenience Outlet with ground, WEG Panasonic	2	рс							
4.3	surface type utility box, uPVC	2	рс							
4.4	Plastic Moulding, 20mm width, 3m length	1	pc.							
4.5	Miscellaneous (Installation of monitors support, screws, relocation of existing CCTV centralized power supply, etc.)	1	lot							
	Sub-total									
C 5	Supply and installation of one (1) unit LED spotlight, 12W Angle Adjustable (Cylindrical Type) for Signage, two (2) units biometrics door access and one (1) set Push Button/Door Chime									
5.1	LED Spotlight, Angle adjustable, 12W (cylindrical type)	1	set							
5.2	Panasonic Push Button and Door Chime	1	set							
5.3	Biometrics fingerprint Door Access	2	sets							
	20 mm (3/4") diameter , uPVC Pipe	7	pcs.							
5.5	20 mm (3/4") diameter uPVC adapter	4	sets							
5.6	3.5 mm <sup>2</sup> THHN/THWN wire	42	mtrs.							
5.7	2"x4" Utility Box	2	pcs.							
5.8	Metal Box Cabinet for Biometric Door Access and Push Button, Outdoor Type (300mmx300mmx150mm), pre-painted	2	set							
5.9	Miscellaneous (wires and metallic flexible hose)	1	lot							
	Sub-total									
C.6	Supply and installation of Aircon Unit									
6.1	Split Type Aircon, 3Hp, Inverter type, Panasonic Brand, Model CS/U-S28RKV or equivalent , Cooling Capacity 26,600 BTU/hr, EER-9.85, Kcal/hr-28,080	1	lot							
6.2	2.0 hp Inverter Window Type (Panasonic or Equivalent)	2	set							_
	Sub-total									
	TOTAL COST OF ELECTRICAL WORKS									
	OVERALL GRAND TOTAL									

UNIT COST



1			







