Project Title : CONSTRUCTION OF PAGASA SYNOPTIC BUILDING, POWERHOUSE, OBSERVER'S QUARTER AND PERIMETER FENCE IN DIPOLOG
Location : DIPOLOG
Subject : BILL OF MATERIALS

					ESTIMATED DIRECT COST (EDC)				INDIRECT COST (IC)						
	ITEM / DESCRIPTION	QTY.	UNIT	UNIT COST	MATERIAL	LABOR	EQUIPMENT	DIRECT COST	OVERHEAD	CONTIGENCIES	MISCELLANEOUS	PROFIT	VAT-COMPONENT	TOTAL AMOUNT	UNIT COST
A	**CONSTRUCTION OF SYNOPTIC BUILDING**														
1	**General Requirements**														
	Permits, Clearances & Other Government Requirem	1	lot												
	Temfacil	1	lot												
	Mobilization and Demobilization	1	lot												
	Sub-Total														
2	**EXCAVATION**														
	Wall Foundation	7	Cu.M												
	Column Foundation	16	Cu.M												
	Sub-Total														
3	**BACK FILLING**														
	Filling materials((8mx12mx1.0m)+.20% compaction	115	Cu.M												
	Sub-Total														
4	**MASONRY/PLASTERING/CONCRETING**														
	CHB #4"	233	pcs												
	CHB #6"	1,617	pcs												
	CEMENT	496	bags												
	SAND	33	Cu.M												
	GRAVEL 3/4	30	Cu.M												
	Sahara water proofing	40	kg												
	10mm dia. Deformed steeel bars	324	pcs												
	12mm dia. Deformed steel bars	143	pcs												
	16mm dia. Deformed steel bars	170	pcs												
	8mm dia. RSB	69	pcs												
	TIE WIRE # 16	65	kg												
	Sub-Total														
5	**ROOFING**														
	1/4"thk x 1.5" x 20' Angular Bar	48	pcs												
	1/4"thk x 2" x 20' Angular Bar	22	pcs												
	GA 16 x 211 x4" x 20' C Purlin	30	pcs												
	Flat Bar 3/16" thk x 2" x 20'	8	pcs												
	12mm Round Bar	17	pcs												
	8" Length Turn - Buckle	16	pcs												
	Welding rod 1/18"	25	kg												
	Pre-painted Rib Type roofing Ga .5m x 10'	64	pcs												
	G.I. Ridge Roll GA 24 (pre-painted)	8	pcs												

	Tex Screw	1,000	pcs												
	G.I Hip Ron GA 24	13	pcs												
	Vulca Seal Sealant	1	gal												
	G I wire # 16	2	kg												
	Red Oxide metal Primer Paint	3	gals												
	Paint thinner	1	gal												
	Paint brush 2"	3	pcs.												
	Sub-Total														

6 CEILLING

	2" x 2" x 10" Ro.	178	pcs.												
	Hardiflex Lite w/ Hardi nail	37	pcs.												
	1" x 2" x 10' kd	41	pcs.												
	1" x 1" x 10' Quarter C	42	pcs.												
	1" x 1"x 10' KD S4S	48	pcs.												
	1" x 6" x 10' -do-	11	pcs.												
	1" x 6" x 14' -do-	2	pcs.												
	1" x 2" x 14' -do-	3	pcs.												
	carpenter glue	1	lit.												
	screen mesh 1/8	4	mtrs												
	common wire nail 3"	10	kg												
	common wire nail 2"	6	kg												
	finishing nails 2"	2	kg												
	finishing nails 1 1/2"	3	kg												
	finishing nails 1"	4	kg												
	concrete nail 3"	2	kg												
	Sub-Total														

7 DOORS AND WINDOWS

	tanquile panel door(0.90 m x 2.10m)	2	sets												
	w/ 2" x 5" yakal door jamb														
	tanquile panel door w/ 3 mm thik glass pane upper p	1	sets												
	Tanguile Panel Door (0.80m x 2.10 m)	1	sets												
	w/ 2" x 5" yakal door jamb														
	plastic door (0.65m x 2.10m)	1	set												
	Steel casement window w/3mm thk clear glass cove	2	sets												
	w/12mm sq. bar protective grills (2.10m x 1.30m														
	Steel casement window w/3mm thk clear glass cove	4	sets												
	w/12mm sq. bar protective grills (1.40m x 1.30m)														
	Steel casement window w/3mm thk clear glass cove	2	set												
	w/12mm sq. bar protective grills (0.70m x 1.30m)														
	Steel casement window w/3mm thk clear glass cove	1	sets												
	w/12mm sq. bar protective grills (0.70m x 0.50m)														
	Sub-Total														

8 DOOR ACCESSORIES

	loose pin hinges 4" x 4"	18	pcs												

	door lockset yale	5	sets												

Sub-Total

9 ELECTRICAL WORKS

(A).

I. Panel Board

	Panel Board NEMA Enclosure, Gray Coated, Surface Mounted, Gauge 16, Bolt-On, 1 main Circuit Breaker, 2 Pole w/ 8 branches, 8 - 2 pole 1 pc main 50AT, 60AF, 2 pole, 250VAC, 25 KAIC, Bolt-On, 6 pcs. 20AT, 60AF, 2pole 2 pcs. 30AT, 60AF, 2pole ALL SQUARE D	1.00	set												

II. Wires

	8.0mm² THHN Black (Philflex)	70.00	mtrs.												
	3.5mm² THHN Black (Philflex)	1.00	roll												
	2.0mm² THHN Black (Philflex) @ 150m/roll	2.00	rolls												
	5.5mm² THHN Green (Philflex) @ 150m/roll	35.00	mtrs.												
	2.0mm² THHN Green (Philflex) @ 150m/roll	1.50	rolls												

III. Pipes, Fittings, and Boxes

	25mmØ PVC Pipe @ 3m/length	8.00	pcs												
	20mmØ PVC Pipe @ 3m/length	2.00	pcs												
	15mmØ PVC Pipe @ 3m/length	70.00	pcs												
	25mmØ PVC adapter, locknut, and bushing	2.00	pcs												
	20mmØ PVC adapter, locknut, and bushing	2.00	pcs												
	15mmØ PVC adapter, locknut, and bushing	60.00	pcs												
	2 x 4 PVC Utility box	20.00	pcs												
	Octagonal Box (PVC)	20.00	pcs												

IV. Electrical Devices

	Single switch w/ Plate & Cover	3.00	sets												
	Duplex switch w/ Plate & Cover	4.00	sets												
	Duplex convenience outlet w/ Plate & Cover	11.00	sets												

V. Lighting Fixture

	Pinlight	7.00	pcs.												
	5W LED bulb	14.00	pcs.												
	Receptacle	7.00	pcs.												
	40w fluorescent lamp fixture	5.00	pcs.												

VI. Miscellaneous materials

	Electrical tape	25.00	rolls												

	Rubber tape	20.00	rolls												
	Masking tape, 1 inch	25.00	rolls												
	Mica Tube, 1/2" dia	5.00	mtrs												
	PVC Solvent Cement	1.00	lits												
	Gi Wire, guage 16	2.50	kg												
	Tox & Screw(100 pairs)	2.00	box												
	Hacksaw blades	1.00	kg												
	Drill Bits(assorted for Metal & masonry)	1.00	box												
	Hangers, brackets and fasteners	1.00	lot												
	VII. Perimeter Lights														
	Column Lights	3.00	sets												

 # PLUMBING

	8" x 8" wall tiles	240	pcs												
	floor tiles 8" x 8" non skid	70	pcs												
	plastic tile trim x 24 om	4	pcs												
	tile adhesive	3	bags												
	ABC grant 5kg/pack	2	packs												
	faucet w/ hose bibb	3	pcs												
	soap holder	1	pc												
	tissue holder	1	pc												
	PVC pipe 1/2 dia. X 10' moldex	20	pcs												
	PVC tee 1/2	8	pcs												
	PVC tee w/ thread 1/2	1	pc												
	PVc coupling 1/2	10	pcs												
	PVC elbow 1/2	11	pcs												
	G.I. Bushing 1/2 x 3/8	2	pcs												
	G.I. Nipple 3/8 x 2"	2	pcs												
	PVC male adaptor 1/2	6	pcs												
	shower valve	1	set												
	shower head	1	set												
	teflon tape	4	rolls												
	gate valve 1/2	1	pc												
	check valve 1/2	1	pc												
	water closet w/ tank and fixtures	1	unit												
	porcelaine lavatory (16" x 20")	1	set												
	PVC solvent	2	lit.												
	PVC pipe neltex 4" x 10' S1000	20	pcs												
	PVC pipe neltex 3" x 10" S600	24	pcs												

	PVC pipe neltex 2" x 10" S600	3	pcs												

	PVC pipe neltex elbow 3"	36	pcs												
	PVC 45 degree bend elbow 4"	6	pcs												
	PVC elbow 4"	3	pcs												
	PVC wye 4" neltex	1	pc												
	PVC wye 4" x 2" neltex	3	pcs												
	PVC 2" 1/8 bend	6	pcs												
	PVC tee 2"	2	pcs												
	PVC - elbow 2"	3	pcs												
	PVC - clean out 4"	1	pcs												
	PVC tee 4" x 2"	3	pcs												
	PVC tee 3"	1	pc												
	PVC p-trap 2"	1	pc												
	Floor drain stainless 4" x 4"	1	pc												

Sub-Total

 # PAINTING

	semi gloss latex	4	tlc												
	latex flat paint	4	t/cans												
	flat wall enamel paint	4	Gals												
	quick dry enamel paint	6	Gals												
	red oxide metal primer paint	2	Gals												
	QDE chors brown	1	gal												
	paint thinner	4	gals												
	latex t/t color r seinna	2	lit.												
	latex t/t color toludine red	1	lit.												
	latex t/t color lamp black	1	ml												
	t/t color in oil r. sienna	2	lit.												
	t/t color bulletin bed	1	lit.												
	t/t color lamp black	1	ml												
	valspar varnish	1	gal												
	patching compound	5	kg												
	sandpaper #80	2	metre												
	sandpaper #120 & 400	12	shts												
	concrete neutralizer	2	gals												
	paint brush 1"	2	pcs												
	paint brush 2"	2	pcs												
	paint roller w/ tray 7"	2	sets												
	paint roller foam 7"	2	pcs												
	printing rags	1	kg												

Sub-Total

 # FLOOR FINISHING

	Ceramic Tiles 12 x 12	670	pcs												
	Tile adhesive	15	bags												
	ABC Grout 2 kg/pck	10	packs												
	washed-out pebbles #15	10	t/cans												
	muriatic acid	1	gal												
	Brass strip	22	mtrs												

Sub-Total

 # WATER PROOFING OF CONCRETE GUTTER

	weathercote elastomeric paint	16	gals												
	water plug water profing	4	gals												
	paint brush 4"	4	pcs												

Sub-Total

 # ANTI TERMITES

	chlordane	6	gals												

Sub-Total

B FOR ELECTRICAL SERVICE ENTRANCE POST, SEPTIC

1 TANK, CATCH BASIN AND CONCRETE CANAL

	cement	63	bags												
	SAND	5	cu.m												
	GRAVEL 3/4	5	cu.m												
	12mm dia. Deformed steel bars	7	pcs												
	10mm dia. Deformed steeel bars	93	pcs												
	8mm RSB	6	pcs												
	6mm RSB	38	pcs												
	concrete hollow block 4"	630	pcs												
	tee wire #16	10	kg												

Sub-Total

2 FORMS AND SCAFFOLDING

	2" x 4" x 10" coco lumber	400	pcs												
	1/2" plywood	4	pcs												
	2" x 3" x 12' plywood	200	pcs												
	2" x 2" x 12' plywood	150	pcs												
	1/4" thik plywood ordinary	47	pcs												
	coal tar	4	gals												
	used oil	6	gals												
	3" common wire nail	1	kg												
	common nail assorted 4" & 2"	1	kg												
	1" common wire nail	5	kg												

Sub-Total

C CONSTRUCTION OF POWERHOUSE AND OBSERVER'S QUARTER

1 EXCAVATION WORK

	Wall Foundation	5	Cu.M											
	Column Foundation	10	Cu.M											
	EQUIPMENT	1	set											
	Sub-Total													

2 BACK FILLING MATERIALS

	Filling Materials (6mx11mx1m)+20%compaction)	79	Cu.M											
	Sub-Total													

3 MASONRY/PLASTERING WORKS/CONCRETING WORKS OF ALL

	(Column,Tie Beams, Lentel Beams and concrete deck in genhouse portion)													
	CHB #4"	200	pcs											
	CHB #6"	1,100	pcs											
	CEMENT	200	bags											
	SAND	17	Cu.M											
	GRAVEL 3/4	12	Cu.M											
	Sahara water proofing	60	kg											
	TIE WIRE # 16	17	kg											
	10mm dia. Deformed steeel bars	65	pcs											
	16mm dia. Deformed steel bars	110	pcs											
	Sub-Total													

4 ROOFING WORKS

	6mm X 38mm X 6.00m ANGULAR BAR	46	pcs											
	C -PURLINS GA 16 x 2" x 4" x 20'	26	pcs											
	12mm round bar	16	pcs											
	welding rod 1/8 size	20	kgs											
	Pre-painted Rib type GA 24 x 10'	40	pcs											
	TEK SCREW	400	pcs											
	G.I. Ridge Roll GA 24 (pre-painted)	8	pcs											
	Plain G.I. Sheets GA 24	4	pcs											
	Vulcaseal Sealant	3	lit											
	G.I. Flashing GA 24	6	pcs											
	Concrete nail 1"	1	kg											
	G.I. Gutter GA 24(pre-painted)	10	pcs											
	Black screw 2"	100	pcs											
	Black screw 1"	100	pcs											
	1" x 10" x 12' Hardi senepa	14	pcs											
	G.I. Tie Wire # 16	2	kg											
	Sub-Total													

5 PLUMBING

	2" x 10' S 1000 Neltex PVC pipe	3	pc												
	4 x 10 S 1000 Neltex PVC pipe	3	pcs												
	4" x 4" PVC Wye Neltex	1	pcs												
	2" x 4" -do-	3	pcs												
	2" x 4" PVC Tee Neltex	3	pcs												
	4" x 1/8 bend neltex	2	pcs												
	PVC # 4" elbow nyltex	1	pc												
	2" PVC Tee neltex	3	pcs												
	PVC #2" elbow	2	pcs												
	4" PVC clean out nyltex	1	pc												
	PVC P-TRAP #2"	1	pcs												
	paint roller foam 7"	2	pcs												
	paint brush 4"	2	pcs												
	welding rod	10	kg												
	Tile Cutting 4" size	1	pcs												
	Floor drain stainless	1	pcs												

Sub-Total

6 WATER LINE

	pvc water pipe s-blue	15	pcs												
	pvc elbow 1/2	20	pcs												
	pvc elbow 1/2 w/thread	3	pcs												
	PVC male adoptor 1/2	14	pcs												
	PVC coupling 1/2	10	pcs												
	PVC Tee 1/2	5	pcs												
	gate valve 1/2	2	pcs												
	swing valve 1/2	4	pcs												
	teflon tape	2	rolls												
	faucet	3	pcs												
	reducing bushing 1/2 x 3/8	1	pc												
	G.I. Nipple 3/8 x 2"	1	pc												

Sub-Total

7 DOWNSPOUT AND DRAINAGE SYSTEM

	3" X 10' pvc PIPE S 600	4	pcs												
	pvc ELBOW 3"	16	pcs												
	4 " X 10' pvc PIPE NELTEX S1000	7	pcs												
	PVC solvent	1	lit												

Sub-Total

8 DOORS AND WINDOWS

	steel Casement window w/glass pane 1.40m x 1.10m	6	sets												
	Plastic door/jamb (0.65m x 2.10m)	2	set												
	Steel Casement window 0.80m x 1.10m w/Glass pa	2	set												
	Steel Casement window .80m x 0.70m w/glass pane	2	set												

	Steel Casement Window .5m x .50m w/Glass pane	2	set												
	FLUSH- DOOR(.70m x 2.10m) w/ 2" x 4" door jamp	2	unit												
	FLUSH- DOOR(.80m x 2.10m) w/ 2" x 5" door jamp	2	unit												
	Loose pin hinges	12	pcs												

Sub-Total

9 ELECTRICAL WORKS

(A).

I. Panel Board

	Panel Board NEMA Enclosure, Gray Coated, Surface Mounted, Gauge 16, Bolt-On, 1 main Circuit Breaker, 2 Pole w/ 6 branches, 6 - 2 pole 1 pc main 60AT, 60AF, 2 pole, 250VAC, 25 KAIC, Bolt-On, 4 pcs. 20AT, 60AF, 2pole 1 pc. 30AT, 60AF, 2pole 1 pc. 50AT, 60AF, 2pole ALL SQUARE D	1.00	set												
	60AT, 2P, 230V Circuit Breaker in NEMA 4X enclosure	1.00	set												

II. Wires

	14mm² THHN Black (Philflex)	120.00	mtrs.												
	3.5mm² THHN Black (Philflex)	1.00	roll												
	5.5mm² THHN Black (Philflex)	30.00	mtrs.												
	2.0mm² THHN Black (Philflex) @ 150m/roll	2.00	rolls												
	8.0mm² THHN Green (Philflex) @ 150m/roll	60.00	rolls												
	3.5mm² THHN Green (Philflex) @ 150m/roll	15.00	mtrs.												
	2.0mm² THHN Green (Philflex) @ 150m/roll	1.50	rolls												

III. Pipes, Fittings, and Boxes

	32mmØ RSC @ 3m/length	2.00	lngth.												
	32mmØ PVC Pipe @ 3m/length	15.00	pcs.												
	32mmØ metallic service entrance cap	1.00	pc.												
	25mmØ PVC Pipe @ 3m/length	8.00	pcs												
	20mmØ PVC Pipe @ 3m/length	4.00	pcs												
	15mmØ PVC Pipe @ 3m/length	80.00	pcs												
	32mmØ PVC adapter, locknut, and bushing	2.00	pcs												
	32mmØ metallic adapter, locknut, and bushing	2.00	pcs												
	25mmØ PVC adapter, locknut, and bushing	2.00	pcs												
	20mmØ PVC adapter, locknut, and bushing	2.00	pcs												
	15mmØ PVC adapter, locknut, and bushing	60.00	pcs												
	2 x 4 PVC Utility box	16.00	pcs												
	Octagonal Box (PVC)	15.00	pcs												

IV. Electrical Devices

	Single switch w/ Plate & Cover	4.00	sets												

	Duplex switch w/ Plate & Cover	1.00	sets												
	Duplex convenience outlet w/ Plate & Cover	11.00	sets												
	ACU outlet w/ Plate & Cover	1.00	set												

V. Lighting Fixture

	5W LED bulb	8.00	pcs.												
	Receptacle	8.00	pcs.												
	40w fluorescent lamp fixture	5.00	pcs.												

VI. Miscellaneous materials

	Electrical tape	15.00	rolls												
	Rubber tape	10.00	rolls												
	Mica Tube, 1/2" dia	5.00	mtrs												
	PVC Solvent Cement	1.00	lits												
	Gi Wire, guage 16	2.50	kg												
	Tox & Screw(100 pairs)	2.00	box												
	Hacksaw blades	1.00	kg												
	Drill Bits(assorted for Metal & masonry)	1.00	box												
	Hangers, brackets and fasteners	1.00	lot												

 # Ceiling works

	2" X 2" X 10' metal furing	124	pcs												
	Quarter Moulding 2 1/2 x 2 1/2"	12	pcs												
	hardiflex ligth w/nails	26	pcs												
	1/4" thik plywood ordinary	3	pcs												
	2" C.W. NAIL	5	kg												
	3" C.W. NAIL	3	kg												
	solignum brown	1	gals												
	concrete nail 3"	1	kg												
	screen mesh 1/8 size	1	mtrs												

Sub-Total

 # TILE WORKS for comport room

	FLOOR TILES 12"x 12"(granite)	460	pcs												
	CEMENT	10	kg												
	ABC GROUT 2 kg/pck	10	pack												
	Tile Adhesive	32	bags												
	Tile trim	3	pcs												
	PVC solvent	2	lit												

Sub-Total

 # TILE WORKS for comport room

	WATER CLOSET W/ tank fitting	1	unit												
	FLOOR TILES 12"x 12"	45	pcs												
	WALL TILES 12"x 12"	180	pcs												

	Lavatory Sink 40x60m(stainless)	1	set												
	Lavatory Sink Ceramic 30cmx30cm	1	set												
	WHITE CEMENT	2	kg												
	ABC GROUT 2 kg/pck	10	pack												
	Tile Adhesive	4	bags												
	PVC solvent	1	lit												

Sub-Total

 # Painting

	Boysen Paint semi Gloss latex	3	t/can												
	Latex white flat	3	t/can												
	Boysen Paint Flat wall Enamel	4	gals												
	Quick dry enamel	4	gals												
	Paint Thinner	3	gals												
	Calsoumine	10	kg												
	Patching Compound	5	kg												
	redoxide metal primer paint	3	gals												
	Acri color raw Sienna	2	can/lit												
	Acri color Tadoline red	1	can/lit												
	Acri color Imap black	1	c/80L												
	Tinting color in oil raw seana	1	can/lit												
	Tinting color in oil bulletin red	1	can/lit												
	Tinting color in oil lamp black	1	can/lit												
	sand paper # 80	2	mtrs												
	sand paper assorted # 120 and 400	10	shts												
	paint brush 1"	4	pcs												
	paint brush 2"	4	pcs												
	paint roller w/tray	4	set												

Sub-Total

 # FORMS AND SCAFFOLDINGS

	1/4" thik plywood ordinary	10	PCS												
	1/2" plywood	4	pcs												
	2 x 4 x12 coco lumber	100	pcs												
	2 x 2 x 12 coco lumber	100	pcs												
	3" common wire nail	10	kg												
	4" common nail	7	kg												
	2" common nail	4	kg												
	1" common nail	4	kgs												
	cool tar	2	gals												
	used oil (soil poisoning)	2	gals												

Sub-Total

D CONSTRUCTION OF PERIMTER FENCE

1 EARWORK

	Excavation works	58	Cu.M												

Sub-Total

2	CEMENT	216	BAGS												
	SAND	18	CU.M.												

	GRAVEL 3/4	9	CU.M.												
	DEF. STEEL BAR 10MM	192	PCS												
	DEF. STEEL BAR 12MM	192	PCS												
	CONC. HOLLOW BLOCKS 4"	1930	PCS												
	PLAIN ROUND BAR 10mm	81	PCS												
	DEF. STEEL BAR 8MM	153	PCS												
	G.I. PIPE 1 1/4" DIA. X 6M SCH. 40	81	PCS												
	BARBED WIRE 150m/roll	5	roll												
	CYCLONE WIRE 4'x 10m , 2"x 2"	18	ROLL												
	WELDING ROD	18	KLS												
	CUTTING DISC 4"	36	PCS												
	HACKSAW BLADE	18	PCS												
	TIE WIRE # 16	18	KLS												
	RED OXIDE PRIMER PAINT	9	GAL												
	QDE PAINT, SILVER ALUMINUM	9	GAL												
	FLAT LATEX PAINT, WHITE	7.2	GAL												
	GLOSS LATEX PAINT, WHITE	7.2	GAL												
	PAINT ROLLER 7"	18	PCS												
	PAINT BRUSH 3"	18	PCS												
	MARINE PLYWOOD 1/4"	18	PCS												
	LUMBER 2"x 2"x 12'	180	PCS												
	COM. WIRE NAIL (ASSORTED)	36	KLS												

Sub-Total

3 STEEL GATE

	50 x50mm Angle Bar	12	PCS												
	2" x 4" x1.5mm x 6m Tubular (see plan)	4	PCS												
	G.I. PIPE 1 1/4" DIA. X 6M SCH. 40	6	PCS												
	Pillow Block Hinges (std. See plan)	8	PCS												
	Stainless barrel bolts (see Det. Plan)	2	pcs												
	3 mm Thk Steel Plate (see Det. Plan)	2	pcs												
	Consumables (electrodes,disc,paints &etc)	1	lot												
	Consumables (electrodes,disc,paints &etc)	1	lot												

Sub-Total

	FLAG POLE														
	Cement	6	bgs												
	sand	1	cu.m.												
	Crust gravel 3/4" class A	1	cu.m.												
	RSB 10mm dia. X 6.0m	1	pc												

	RSB 12mm dia. X 6.0m	5	pcs												
	Tie wire #16	1	kg												
	G.I. Pipe 2" Dia.	1	pc												
	Sub Total														

E **EQUIPMENT RENTAL**

	Welding Machine	1 unit	20 days												
	Two Units One Bagger Concrete Mixer	1 unit	15 days												
	One Unit Bar Cutter	1 unit	15 days												
	One Unit Concrete Vibrator/Compactor	1 unit	7 days												
	Sub-Total														

Total