

PROJECT: Refurbishment and Completion of the UP Baguio Cultural Hub (Bulwagan Juan Luna) Phase 2

LOCATION: UP-BAGUIO, GOVERNMENT CENTER ROAD, BAGUIO CITY

SUBJECT: BILL OF QUANTITIES/DETAILED ESTIMATES

Item	DESCRIPTION	Location on Plan	QUANTITY	UNIT	MATERIAL UNIT COST	LABOR UNIT COST	TOTAL DIRECT COST	PROFIT	VAT(5%)	TOTAL COST	TOTALS
01000	DIVISION 01 - GENERAL REQUIREMENTS										
	Mobilization and Demobilization		1.00	lot							
	Temporary Facilities		1.00	lot							
	Lifting Cost		1.00	lot							
	Scaffolding Rental		1.00	lot							
	Equipment and Tools		1.00	lot							
	Safety Provision (See Project Manual for Details)		1.00	lot							
	DIVISION 1 SUBTOTAL										
02000	DIVISION 02 - SITEWORK										
	Excavation										
	Fill including tamping at every 100mm soil fill										
	500mm Ø x 6000mm Bore piling	S1 Theater Lobby Foundation	37.00	holes							
	600mm Ø Concrete Culvert with excavation and fill restoration of stairs and pavers	Stormdrain	26.00	m³							
	Site Demolition										
	Door and Frame To Be Removed include hauling within the campus	S2 Level 1	9.00	pc							
	Window and Frame To Be Removed include hauling within the campus	S2 Level 1	8.00	pc							
	Finish Floor To Be Removed include disposal	S2 Level 1	243.00	m²							
	Floor Slab To Be Removed include disposal	S2 Level 1 & 2	515.00	m²							
	All types of Walls To Be Removed (i.e. CMU walls, wall tiles, existing wood panels etc.) include disposal of unusable materials and hauling within the campus of recyclable ones	S2 Level 1	140.00	m²							
	Existing Stone Masonry	S2 Level 1	28.00	m²							
	4" HSS Pipe	S2 Level 5	2.00	pc							
	Existing Steel beam alteration	S2 Stair Shafts	20.00	pc							
	DIVISION 2 SUBTOTAL										
03000	DIVISION 03 - CONCRETE										
	Concrete Forms and Accessories										
	12mm Phenolic Formwork + steel scaffolding Rental for Cast-in-Place Concrete	S1 theater Lobby floor and stair slab with integrated beams	446.00	m²							
	12mm Phenolic Formwork + steel scaffolding Rental for Cast-in-Place Concrete	S1 theater Lobby Stepped Staircase	17.00	m²							
	12mm Phenolic Formwork Rental for Cast-in-Place Concrete	S1 Concrete pile cap	43.00	m²							
	12mm Phenolic Formwork Rental for Cast-in-Place Concrete	S1 Concrete Beams	43.00	m²							
	12mm Phenolic Formwork Rental for Cast-in-Place Concrete	Elevator Lobby Tie Beam	4.00	m²							
	12mm Phenolic Formwork Rental for Cast-in-Place Concrete	Elevator Shaft Pile cap	12.00	m²							
	12mm Phenolic Formwork Rental for Cast-in-Place Concrete	Elevator Shaft Column	5.00	m²							
	12mm Phenolic Formwork Rental for Cast-in-Place Concrete	Elevator Structural Wall	7.00	m²							
	12mm Phenolic/Steel Formwork Rental for Cast-in-Place Concrete	S2 Stair Shaft Level 6 Stairs	6.00	m²							
	12mm Phenolic/Steel Formwork Rental for Cast-in-Place Concrete	Hardscape	216.00	m²							
	12mm Phenolic/Steel Formwork Rental for Cast-in-Place Concrete	Structural Wall S2 Level 1 & Level 2	62.00	m²							
	12mm Phenolic/Steel Formwork Rental for Cast-in-Place Concrete	Elevator RC Wall and RC pedestal column; elevator lobby pedestal column	30.00	m²							

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	4'X8'X12mm Atmospheric Corrosion Resistant Plates (COR-TEN Steel) include wastage into unit costs includes the following layered from bottom to top: Root resistant Water ptoofing layer covering all inner layer of the box 300mm Heavy Duty Polypropylene Drainage cells High tensile-strength nonwoven polypropylene fabric Geotextile Underlayment 38mmØ UuPVC drain pipe include concrete coring	Planter Boxes @ Multi Purpose Roof Top (See Plans for Planter Dimintions)	23	pcs								
	Steel Angle Bar L2X2X6mm @ 300 mm o.c (V), 1200 mm o.c (H)	Corten wall framing	23	pcs								
	Steel Angle Bar L2X2X6mm @ 300 mm o.c (V), 1200 mm o.c (H)	Corten canopy faming	24	pcs								
	Electric arc welding and cutting accessories, and consumables for welding work Weld Electrode E7018 3/16" x 14"; (fy: 415-570 MPa);	For Weathering(Cor-Ten) Steel Roof	1.00	lot								
	Wall Interior Framing											
	Steel Angle Bar L2X2X6mm @ 300 mm o.c (V), 1200 mm o.c (H)	S2 Level 3 Multi Purpose Hall	34	pcs								
	Railing											
	R1 Railing Assembly: Baluster: 16 mm Ø Plain round bar 100mm spacing OC (1.2m Rail Height) welded onto 35mm x 8mm flat bar top and bottom with grey epoxy primer and two coats epoxy finish, Handrail: 45 x 75mm Pressure Treated Timber on 34mmx6mm Stainless flat bar screwed from below with 6x25mm galvanized wood screw, recessed and screwed welded to baluster assembly bolted to wall / structure	Theater Lobby, L1-S2-Office and Lounge, Library, L1-S3-Office, L1-S3- Research Lab, Theatre Entry, Changing Room Lobby, L4.5-S3-Office, Multi Purpose Theater, L2-S2	193.00	lm								
	R2 Railing Assembly: Baluster: 16 mm Ø Plain round bar 100mm spacing OC (1.35m Rail Height) welded onto 35mm x 8mm flat bar top and bottom with grey epoxy primer and two coats epoxy finish, Handrail: 45 x 75mm Pressure Treated Timber on 34mmx6mm Stainless flat bar screwed from below with 6x25mm galvanized wood screw, recessed and screwed welded to baluster assembly bolted to wall / structure	S2 Multi Purpose Roof Top	151.00	lm								
	R3 Wall Mount Handrail Assembly: 2"x3"S4S Laminated Timber Handrail with 25mm flat [with grey epoxy primer and two coats epoxy finish] bar underneath, recessed and screwed welded to Stainless Steel Handrail Wall bracket	S2 Multi Purpose Roof Top	61.00	lm								
	R4 Railing Assembly baluster: 16 mm Ø Plain round bar @ 4" (0.9m Rail Height) welded onto 35mm x 6mm flat bar top and bottom with grey epoxy primer and two coats epoxy finish, handrail: 40 mm Ø Stainless brushed satin finish G40 welded to baluster assembly bolted to wall / structure	Stairs to Roof Top	54.00	lm								
	R5 Railing Assembly: Baluster: 25 mm Ø Plain round bar & 1000mm spacing OC (1m Rail Height) welded onto steel frame with grey epoxy primer and two coats epoxy finish, with 16 mm Ø horizontal Plain round bar spaced @ 300mm OC welded to baluster with grey epoxy primer and two coats epoxy finish, handrail: 50 mm Ø Steel Pipe welded to baluster with grey epoxy primer and two coats epoxy finish	Catwalk Railing	77.00	lm								
	Electric arc welding and cutting accessories, and consumables for welding work Weld Electrode E7018 3/16" x 14"; (fy: 415-570 MPa);		1.00	lot								
	Wood Staircase Framing											
	Steel Angle Bar L2X2X6mm spaced @ 400 mm o.c	Cantilevered Bleachers	44	pc								
	Electric arc welding and cutting accessories, and consumables for welding work Weld Electrode E7018 3/16" x 14"; (fy: 415-570 MPa);	Cantilevered Bleachers	1	lot								
	Existing Beams Rehabilitation											
	Removal of existing sand-cement plaster[All Column and Beam]	Structure 2 - Level 1 & 2	938.00	m²								
	L 3"x3"x6mm Angle Structural Metal Framing 6m include 3 coats of epoxy primer 3coats	Structure 2 - Level 1 & 2	184.00	pc								
	L 3"x3"x10mm Angle Structural Metal Framing 6m include 3 coats of epoxy primer 3 coats	Structure 2 - Level 1 & 2	121.00	pc								
	L 4"x4"x10mm Angle Structural Metal Framing 6m include 3 coats of epoxy primer 3 coats	Structure 2 - Level 1 & 2	301.00	pc								
	½" Ø Plain Round Bar (cross bracing) @ 6m include 3 coats of epoxy primer 3coats	Structure 2 - Level 1 & 2	95.00	pc								

	4mm Thk, Torch-on, Sheet Waterproofing membrane based on APP modified, reinforced bitumen, with sand broadcast surface,include laps and seams on Bituminous Primer	S3 Level 3 Toilets	9.00	m²								
	Polyester Fleece with Liquid Applied Membrane											
	4 coats Liquid Applied Roof Waterproofing with Fleece Reinforcement Mesh (quantity includes edge seams and overlaps)	S2 Multi Purpose Roof Top	841.00	m²								
	4 coats Liquid Applied Roof Waterproofing with Fleece Reinforcement Mesh (quantity includes edge seams and overlaps)	Stair Shaft Roof Top, Elevator Shaft Roof top	70.00	m²								
	4 coats Liquid Applied Roof Waterproofing with Fleece Reinforcement Mesh (quantity includes edge seams and overlaps)	S3 Roof top	117.00	m²								
	4 coats Liquid Applied Roof Waterproofing with Fleece Reinforcement Mesh (quantity includes edge seams and overlaps)	Cantilevered Staircase/Bleachers	178.00	m²								
	INSULATION											
	50mm x 1200mm x 15000mm Roof Thermal and Acoustic Glass Fiber Batt Insulation include attachments to roof sheathing	S1 Theater Lobby	381.00	m²								
	Prepainted Standing S-span 406mm feed width with 0.6mm nominal thickness; color Black includes insulation, accessories, flashings, clips, and gutter	S1 Theater Lobby	381.00	m²								
	50mm x 1200mm x 15000mm Roof Thermal and Acoustic Glass Fiber Batt Insulation include attachments to roof sheathing	S2 Pergola & Elevator Shaft	86.00	m²								
	Prepainted Standing S-span 406mm feed width with 0.6mm nominal thickness; color Black includes insulation, accessories, flashings, clips, and gutter	S2 Pergola & Elevator Shaft	86.00	m²								
	2mm Asphalt felt on wood and concrete termination	Elevator lobby level 6	14.00	m²								
	2mm Asphalt felt	S2 Exterior Wall Finish	1,222.00	m²								
	DIVISION 7 SUBTOTAL											
08000	DIVISION 08 - DOORS & WINDOWS											
	HDF DOORS (HIGH DENSITY FIBERBOARD)											
	HDF-01- 0600mm x 2100mm x 40mm HDF Honey Comb Core Flush Door, 90min Fire Rated with 2"x4" Wood Door Jamb - Single Rabbet include: 4pcs -3-1/2"x4"x 3mm Ball bearing Hinges 300mmx800mm Stainless Steel 304 Pushplate & Pull plate Key-in Lever type Lockset,Satin Finish,Industrial Heavy Duty			2	set							
	HDF-02- 0700mm x 2100mm x 40mm HDF Solid Core Single Flush Door w/ Louver, 90min Fire Rated with 2"x4" Wood Door Jamb - Single Rabbet include: 4pcs -3-1/2"x4"x 3mm Ball bearing Hinges 300mmx800mm Stainless Steel 304 Pushplate & Pull plate Key-in Lever type Privacy Lockset, Satin Finish, Industrial Heavy Duty			5	set							
	HDF-03- 0800mm x 2100mm x 40mm HDF Solid Core Flus Door, 90min Fire Rated with 2"x4" Wood Door Jamb - Single Rabbet include: 4pcs -3-1/2"x4"x 3mm Ball bearing Hinges 300mmx800mm Stainless Steel 304 Pushplate & Pull plate Key-in Lever type Lockset,Satin Finish,Industrial Heavy Duty			6	set							
	HDF-04- 0900mm x 2100mm x 40mm HDF Solid Core Single Flush Door 90min Fire Rated with 2"x4" Wood Door Jamb - Single Rabbet include: 4pcs -3-1/2"x4"x 3mm Ball bearing Hinges 300mmx800mm Stainless Steel 304 Pushplate & Pull plate Key-in Lever type Lockset,Satin Finish,Industrial Heavy Duty			9	set							
	HDF-05- 0900mm x 2100mm x 40mm HDF Solid Core Single Flush Door w/ Louver, 90min Fire Rated with 2"x4" Wood Door Jamb - Single Rabbet include: 4pcs -3-1/2"x4"x 3mm Ball bearing Hinges 300mmx800mm Stainless Steel 304 Pushplate & Pull plate Key-in Lever type Privacy Lockset, Satin Finish, Industrial Heavy Duty			8	set							

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	Steel-HSS Round Galvanized 1 1/2" Gauge 40 @ 6M include 1 coat epoxy primer + 2 coats epoxy finish spray applied	Glass Canopy Framing	15	pcs								
	Steel-HSS Round Galvanized 2" Gauge 40 @ 6M include 1 coat epoxy primer + 2 coats epoxy finish spray applied	Glass Canopy Mullion	143	pcs								
	Structure 2 Glass Canopy Architectural Louvers											
	1"x6"x1.0mm Light metal Tubular Section, include 1 coat epoxy primer + 2 coats epoxy finish spray applied		40.00	pcs								
	Wall Railing											
	50mm Expanded Polystyrene Panels (40mm styro thickness, incl.Accessories .Flat mesh, Angle mesh and U-mesh) include 25mm concrete render on both sides paper finish	Wall Type: IPW-18	343.00	m²								
	50mm Wall Thermal and Acoustic Glass Fiber Batt Insulation	Exterior and Interior Walls	2,583.00	m²								
	Paints and Coatings											
	*INCLUDE WASTAGE INTO MATERIAL UNIT COSTS											
	Semi-Gloss Latex Paint Finish (includes Preparation, 1 Coat Latex Primer, 2 Coats Finish Class AAA Finish) on prepared Walls	All Fibrecement Board, Gypsum Board-faced Walls	4,264.00	m²								
	Flat Latex Paint Finish (includes Preparation, 1 Coat Flat Primer, 2 Coats Finish) on Ceilings	Exterior Ceiling	291.00	m²								
	Acrytex Acrylic Solvent-based Coating (includes Preparation, 1 Coat Flat Primer, 2 Coats Finish) on Concrete Plaster Walls	Exterior Walls	2,066.00	m²								
	3mm Veneer Paint-base cementitious Plaster white	on concrete Columns and misc Concrete Areas Structure 1, 2, &, 3	825.00	m²								
	DIVISION 9 SUBTOTAL											
10000	DIVISION 10- SPECIALTIES											
	Phenolic Core Board Toilet Partition											
	* all partition accessories are STAINLESS STEEL, WALL BRACKETS, SELF CLOSING HINGES, INDICATOR LOCKSET, COAT HOOK,KNOB - HANDLE, TOP RAIL, L-BRACKET											
	PD-01 900Lx 1400 x12mm Thk Phenolic black-core compact board or equivalent [Stainless Steel Accessories Included]	Toilets	21.00	set								
	PD-02 1800x1400mm Toilet Stall 12mm THK Phenolic Black Core Compact Board or equivalent [Stainless Steel Accessories Included]	Toilets	1.00	set								
	PD-03 1800x1800mm Toilet Stall 12mm THK Phenolic Black Core Compact Board or equivalent [Stainless Steel Accessories Included]	Toilets	1.00	set								
	PD-07 1400x1400mm Toilet Stall 12mm THK Phenolic Black Core Compact Board or equivalent [Stainless Steel Accessories Included]	Toilets	1.00	set								
	Urinal Screen 0400 x 900 x 12mm Phenolic black-core compact board or equivalent Stainless Steel Accessories Included	Toilets	9.00	set								
	Fire Protection Specialties											
	Recessed Firehose Cabinet 610mmx860mm with Fire Extinguisher Assembly.with Stainless Steel Cover .8mm thick Brushed Satin Finish (include hose and accessories)		9.00	set								
	Electronic Safety and Security											
	Fire Extinguisher (Yellow Label) include attachment to wall		1.00	set								
	Fire Extinguisher (Green Label) include attachment to wall		13.00	set								
	Toilet Accessories											
	Stainless Steel Towel Dispenser	Toilets	6.00	pc								
	Stainless Steel Toilet Tissue Dispenser	Toilets	6.00	pc								
	Stainless Steel Waste Receptacle	Toilets	26.00	pc								
	36" Length Stainless Steel Grab Bar	Toilets	3.00	pc								
	42" Length Stainless Steel Grab Bar	Toilets	3.00	pc								

	6mm Glass Mirror FEP (600m x 1000mm)	Toilets	3.00	pc								
	6mm Glass Mirror FEP (1600m x 1000mm)	Toilets	2.00	pc								
	6mm Glass Mirror FEP (2400m x 1000mm)	Toilets	3.00	pc								
	6mm Glass Mirror FEP (3240mm x 1000mm)	Toilets	2.00	pc								
	Hand Dryer	Toilets	6.00	pc								
	Stainless Steel Soap Dispenser	Toilets	6.00	pc								
	600mm Towel Bar, Matt Nickel Finish	Changing Room Shower (Level 3)	1.00	pc								
	Square Glass Flat Shelf 580mm glass length	Changing Room Toilet (Level 3)	1.00	pc								
	Close Coupled Elongated Toilet, 3/4.5LPF Top Push	Toilets	27.00	pc								
	Rinsing Spray Stainless Steel 304	Toilets	27.00	pc								
	Urinal Wall Hung with Anti-Bac Glaze - include angle Lever Type 1LPF Flush Valve	Toilets	10.00	pc								
	Full Pedestal Lavatory 550mm x 460mm x 785mm with fixing bolt set	Changing Room Toilet (S3-Level 3) and PWD Toilets	3.00	pc								
	(1)Push Type Pop-Up, (1)Stainless P-Trap, (1) Angle Valve, (1)Flexible Hose	Toilets	27.00	pc								
	Mono Faucet, 10mm Spout L x 69mm Spout H x 98mm Faucet H	Toilets	21.00	pc								
	Multi-point Instant Water Heater, 4.5kW	Changing Room Shower (Level 3)	1.00	pc								
	Wash Basin, Above Counter 545mmL x 400mmW x184mmH	Toilets	18.00	pc								
	Mono Faucet,Extended	Toilets	18.00	pc								
	4 Lavatory Granite Countertop (2431mm x 550mm) include pedestal and carcass	Toilets (Level 2)	2.00	pc								
	3 Lavatory Granite Countertop (2431mm x 550mm) include pedestal and carcass	Toilets (Level 1)	2.00	pc								
	2 Lavatory Granite Countertop (1600mm x 550mm) include pedestal and carcass	Toilets (Level 3)	2.00	pc								
	0600mmW x600mm D x400mm H - 75mm Thk Reinforced Concrete Slopsink, Stainess Steel Finish 304 Gauge 11(3mm)(Incl. Accessories; Stainless Steel Hose bibb + Slop sink drain w/ strainer + waterproof Sealant on Edges)	Toilet (Level 2 & 3)	2.00	pc								
	0600mmW x800mm D x400mm H - 75mm Thk Reinforced Concrete Slopsink, Stainess Steel Finish 304 Gauge 11(3mm)(Incl. Accessories; Stainless Steel Hose bibb + Slop sink drain w/ strainer + waterproof Sealant on Edges)	Toilet (Level 2 & 3)	3.00	pc								
	DIVISION 10 SUBTOTAL											
14000	DIVISION 14 - CONVEYING EQUIPMENT											
	Elevators											
	Public Elevator 1 - 1000kg Rated Capacity,Machine Room Less Elevator One/Simplex Grouping Control , 7.2kW Motor Power Output , 1.0m/s Speed, 5 stops, 5 door openings, 14.85m Travel, Flat Belt Traction Media, 400 Power Supply (Main), 30kVA AVR Rating, Stainless Steel AISI 304, 50x40 Door Frames Landing Position Indicator: Combined with LOP Landing Operating Panel: Touch Sensitive LOP Version: Surface Mounted Shaft: 1900mmx1500mmx1100mmx4200mm (Width, Depth, Pit, Headroom) Floor Designations: 1,2,3,5 & 6 Car: 2100x900mm Door, Center-Opening, 1600x1400mm (Car Width, Depth) Side Walls, Rear Wall, Car Door & Front Finish: Stainless Steel AISI 304 Car Operating Panel Buttons: Touch Sensitive COP Version: Surface Mounted Ceiling: Stainless Steel LABOR, TAXES, IMPORTATION INCLUDED		1.00	lot								
	DIVISION 14 SUBTOTAL											
15000	DIVISION 15- MECHANICAL											
	*All Sanitary Pipe dimensions are interior, all PPR Pipes dimensions are exterior											
	*Allow for wastage and contingency cost to unit costs											
	Piping Accessories; Installation Accessories; Pipe Hanger and Wall Connection Accessories (ie U-Clamps, Expansion Bolts) INCLUDE LABOR		1.00	lot								

	Sanitary Waste and Vent Piping (All Series 1000)												
	150mmØ PVC Sanitary Pipe Series 1000		22.00	lm									
	100mmØ PVC Sanitary Pipe Series 1000		216.00	lm									
	80mmØ PVC Sanitary Pipe Series 1000		57.00	lm									
	50mmØ PVC Sanitary Pipe Series 1000		184.00	lm									
	Sanitary Vent Fittings (All Series 1000)												
	50 mmø-50 mmø Elbow 90 Deg Series 1000		90.00	pc									
	80 mmø-80 mmø Elbow 90 Deg Series 1000		7.50	pc									
	50 mmø-50 mmø-50 mmø Tee Sanitary Series 1000		57.00	pc									
	80 mmø-80 mmø-80 mmø Tee Sanitary Series 1000		5.00	pc									
	PPR PN20 Pipe (All PN20) - POTABLE & RECYCLED WATER												
	25mmØ PPR Pipe PN20		272.00	lm									
	32mmØ PPR Pipe PN20		93.00	lm									
	40mmØ PPR Pipe PN20		80.00	lm									
	PPR PN20 Fittings (All PN20) - POTABLE WATER												
	25 mmø-25 mmø Elbow PN20		50.00	pc									
	32 mmø-32 mmø Elbow PN20		2.00	pc									
	40 mmø-40 mmø Elbow PN20		3.00	pc									
	25 mmø-25 mmø-25 mmø Tee PN20		23.00	pc									
	32 mmø-32 mmø-25 mmø Tee PN20		4.00	pc									
	40 mmø-32 mmø-32 mmø Tee PN20		2.00	pc									
	25mmø Cap PN20		2.00	pc									
	32mmø Cap PN20		2.00	pc									
	PPR Pipe Accessory (All PN20) - POTABLE WATER												
	Globe Valve Threaded 25mmØ-25mmØ		5.00	pc									
	Check Valve Threaded 25mmØ-25mmØ		5.00	pc									
	PPR PN20 Pipe and Fittings (All PN20) - RECYCLED WATER												
	25 mmø-25 mmø Elbow PN20		53.00	pc									
	32 mmø-32 mmø Elbow PN20		3.00	pc									
	40 mmø-40 mmø Elbow PN20		7.00	pc									
	25 mmø-25 mmø-25 mmø Tee PN20		24.00	pc									
	32 mmø-32 mmø-25 mmø Tee PN20		2.00	pc									
	32 mmø-32 mmø-35 mmø Tee PN20		2.00	pc									
	40 mmø-32 mmø-32 mmø Tee PN20		2.00	pc									
	32mmø Cap PN20		2.00	pc									
	PPR Pipe Accessory (All PN20) - RECYCLED WATER												
	Globe Valve Threaded 25mmØ-25mmØ		5.00	pc									
	Check Valve Threaded 25mmØ-25mmØ		4.00	pc									
	PVC Sanitary and Vent Pipe Fittings (All Series 1000)												
	Sanitary Black												
	50 mmø-50 mmø Bend Long Sweep or 2 45 deg bends Series 1000		3.00	pc									
	100 mmø-100 mmø Bend Long Sweep or 2 45 deg bends Series 1000		20.00	pc									
	50 mmø Cap Series 1000		3.00	pc									
	100 mmø Cap Series 1000		15.00	pc									
	100 mmø-100 mmø-50 mmø Tee-Wye Reducing Sanitary Series 1000		15.00	pc									
	100 mmø-100 mmø-80 mmø Tee-Wye Reducing Sanitary Series 1000		2.00	pc									
	50 mmø-50 mmø-50 mmø Wye 45 Deg Series 1000		20.00	pc									
	100 mmø-100 mmø-100 mmø Wye 45 Deg Series 1000		32.00	pc									
	150 mmø-150 mmø-150 mmø Wye 45 Deg Series 1000		3.00	pc									

	100 mmø-50 mmø Reducer - PVC - Sch 40 - DWV: Standard		3.00	pc								
	150 mmø-100 mmø Reducer - PVC - Sch 40 - DWV: Standard		4.00	pc								
	Sanitary Grey											
	50mmø-50mmø P-Trap Series1000		32.00	pc								
	50 mmø-50 mmø Bend Long Sweep or 2 45 deg bends Series 1000		18.00	pc								
	80 mmø-80 mmø Bend Long Sweep or 2 45 deg bends Series 1000		2.00	pc								
	100 mmø-100 mmø Bend Long Sweep or 2 45 deg bends Series 1000		7.00	pc								
	50 mmø Cap Series 1000		10.00	pc								
	80 mmø Cap Series 1000		4.00	pc								
	100 mmø Cap Series 1000		7.00	pc								
	80 mmø-80 mmø-50 mmø Tee-Wye Reducing Sanitary Series 1000		13.00	pc								
	100 mmø-100 mmø-50 mmø Tee-Wye Reducing Sanitary Series 1000		3.00	pc								
	50 mmø-50 mmø-50 mmø Tee-Wye Sanitary Series 1000		58.00	pc								
	80 mmø-80 mmø-80 mmø Tee-Wye Sanitary Series 1000		2.00	pc								
	100 mmø-100 mmø-100 mmø Tee-Wye Sanitary Series 1000		5.00	pc								
	100 mmø-100 mmø-100 mmø Wye 45 Deg Series 1000		4.00	pc								
	80 mmø-50 mmø Reducer - PVC - Sch 40 - DWV: Standard		2.00	pc								
	100 mmø-80 mmø Reducer - PVC - Sch 40 - DWV: Standard		3.00	pc								
	Floor Drain Bronze Alloy Industrial Quality 150 x 150mm with Strainer - 50mm Drain	Toilets (Level 3)	18.00	pc								
	Roof Drain Bronze Alloy Industrial Quality 150 x 150mm with Strainer - 80mm Drain	Roof Drain	4.00	pc								
	Rainwater Piping (ALL Series 1000)											
	Downspout - 80mm x 3mtrs PVC Series 1000	Roof Drain	40.00	lm								
	Downspout - 100mm x 3mtrs PVC Series 1000	Roof Drain	42.00	lm								
	Downspout - 300mm x 3mtrs PVC Series 1000	Roof Drain	136.00	lm								
	100 mmø Cap Series 1000		4.00	pc								
	100 mmø Cap Series 1000		2.00	pc								
	300 mmø Cap Series 1000		5.00	pc								
	80 mmø-80 mmø PVC Elbow 90 Deg Series 1000		8.00	pc								
	100 mmø-100 mmø PVC Elbow 90 Deg Series 1000		2.00	pc								
	300 mmø-300 mmø PVC Elbow 90 Deg Series 1000		14.00	pc								
	80 mmø-80 mmø-80 mmø Tee-Wye Sanitary Series 1000		10.00	pc								
	300 mmø-300 mmø-300 mmø Tee-Wye Sanitary Series 1000		13.00	pc								
	100 mmø-100 mmø-80 mmø Tee-Wye Reducing Sanitary Series 1000		2.00	pc								
	300 mmø-300 mmø-80 mmø Tee-Wye Reducing Sanitary Series 1000		2.00	pc								
	300 mmø-300 mmø-100 mmø Tee-Wye Reducing Sanitary Series 1000		2.00	pc								
	80 mmø-50 mmø Reducer - PVC - Sch 40 - DWV: Standard		3.00	pc								
	600mm dia Concrete Stormwater Culvert	Library	54.00	pc								
	400mm dia Concrete Stormwater Culvert	Library	19.00	pc								
15400	PLUMBING SYSTEMS											
15410	Plumbing Fixtures and Equipment											
	Grease Trap 8L,Heavy Duty Linear Density Polyethylene		2.00	pc								
	FIRE SUPPRESSION SYSTEMS											
	DRY SYSTEM											
	100mmØ (4") cPVC Pipe		25.00	pc								
	32mmØ (1-1/4") cPVC Pipe		53.00	pc								

	Elbow 90° 32mm(1-1/4")cPVC Fitting		32.00	pc								
	Elbow 90° 100mm(4")cPVC Fitting		10.00	pc								
	Bushing Reducer 100mmØ-65mmØ(4"x2-1/2") cPVC Fitting		2.00	pc								
	Bushing Reducer 100mmØ-40mmØ(4"x1/2") cPVC Fitting	Air vent	3.00	pc								
	Bushing Reducer 32mmØ-25mmØ(1-1/4"x1") cPVC Fitting		13.00	pc								
	Reducing Tee 100mmØ-100mmØ(4"x4") cPVC Fitting		2.00	pc								
	Reducing Tee 100mmØ-32mmØ(1-1/4"x4") cPVC Fitting		12.00	pc								
	Siamese Fire Department Connection (Siamese Twin 2-Way) 4"Ø x2-1/2"Ø x2-1/2"Ø		2.00	pc								
	65mm(2-1/2") Fire Hose Valve		12.00	pc								
	Air Release Valve 100mmØ		3.00	pc								
	WET SYSTEM											
	Wet Pipe: 1/2 Pendent Type Sprinkler Head - Chrome Coated, UL Listed	Fire Sprinkler System	209.00	pc								
	Wet Pipe: 1/2 Upright - Chrome Coated,UL Listed	Fire Sprinkler System	144.00	pc								
	100mmØ (4") cPVC Pipe	Fire Sprinkler System	50.00	pc								
	65mmØ (2-1/2") cPVC Pipe	Fire Sprinkler System	35.00	pc								
	50mmØ (2") cPVC Pipe	Fire Sprinkler System	75.00	pc								
	40mmØ (1-1/2") cPVC Pipe	Fire Sprinkler System	4.00	pc								
	32mmØ (1-1/4") cPVC Pipe	Fire Sprinkler System	75.00	pc								
	25mmØ (1") cPVC Pipe	Fire Sprinkler System	197.00	pc								
	Flanged BI Pipes											
	25mmØ (1") Flanged BI Pipe S-40	Fire Sprinkler System	3.00	lm								
	32mmØ (1-1/4") Flanged BI Pipe S-40	Fire Sprinkler System	5.00	lm								
	65mmØ (2-1/2") Flanged BI Pipe S-40	Fire Sprinkler System	7.00	lm								
	Flanged BI Fittings											
	1-1/4"x1"Ø BI Tee Reducer	Fire Sprinkler System	13.00	pc								
	1" (25mm)Ø Flanged BI Elbow	Fire Sprinkler System	7.00	pc								
	1-1/4" (32mm)Ø Flanged BI Elbow	Fire Sprinkler System	13.00	pc								
	2-1/2" (65mm)Ø Flanged BI Elbow	Fire Sprinkler System	7.00	pc								
	2-1/2" (65mm) x 1-1/4" (32mm) Ø Flanged BI Bushing Reducer	Fire Sprinkler System	7.00	pc								
	Flange Adaptor 32mm(1-1/4")cPVC Fitting	Fire Sprinkler System	7.00	pc								
	Flange Adaptor 65mm(2-1/2")cPVC Fitting	Fire Sprinkler System	13.00	pc								
	Floor Control Valve Assembly											
	incl. accessories; Check valve + Supervisory switch + Presure gauge + waterflow switch + sight glass + test valve + section drain valve+ pipe & fittings		7.00	set								
	Air Release Valve 100mmØ		3.00	pc								
	cPVC Wet System Pipe Fitting											
	Cap 25mm(1")cPVC Fitting		5.00	pc								
	Cap 32mm(1-1/4")cPVC Fitting		3.00	pc								
	Cap 50mm(2")cPVC Fitting		3.00	pc								
	Cross 25mm(1")cPVC Fitting		4.00	pc								
	Cross 32mm(1-1/4")cPVC Fitting		13.00	pc								
	Cross 40mm(1-1/2")cPVC Fitting		2.00	pc								
	Cross 50mm(2")cPVC Fitting		15.00	pc								
	Cross 65mm(2-1/2")cPVC Fitting		3.00	pc								
	Elbow 90° 25mm(1")cPVC Fitting		229.00	pc								

	Elbow 90° 32mm(1-1/4")cPVC Fitting			14.00	pc								
	Elbow 90° 40mm(1-1/2")cPVC Fitting			2.00	pc								
	Elbow 90° 50mm(2")cPVC Fitting			15.00	pc								
	Elbow 90° 65mm(2-1/2")cPVC Fitting			17.00	pc								
	Bushing Reducer 32mm-25mm(1-1/4"-1")cPVC Fitting			60.00	pc								
	Bushing Reducer 40mm-25mm(1-1/2"-1")cPVC Fitting			5.00	pc								
	Bushing Reducer 40mm-32mm(1-1/2"-1-1/4")cPVC Fitting			4.00	pc								
	Bushing Reducer 50mm-25mm(2"-1")cPVC Fitting			29.00	pc								
	Bushing Reducer 50mm-32mm(2"-1-1/4")cPVC Fitting			4.00	pc								
	Bushing Reducer 50mm-40mm(2"-1-1/2")cPVC Fitting			2.00	pc								
	Bushing Reducer 65mm-25mm(2-1/2"-1")cPVC Fitting			4.00	pc								
	Bushing Reducer 65mm-32mm(2-1/2"-1-1/4")cPVC Fitting			5.00	pc								
	Bushing Reducer 65mm-40mm(2-1/2"-1-1/2")cPVC Fitting			2.00	pc								
	Bushing Reducer 65mm-50mm(2-1/2"-2")cPVC Fitting			12.00	pc								
	Bushing Reducer 100mm-40mm(4"-1/2")cPVC Fitting	Air vent		2.00	pc								
	Tee 25 mma-25 mma-25 mmø(1"x1"x1")cPVC Fitting			77.00	pc								
	Tee 32 mma-32 mma-32 mmø(1-1/4"x1-1/4"x1-1/4")cPVC Fitting			8.00	pc								
	Tee 40 mma-40 mma-40 mmø(1-1/2"x1-1/2"x1-1/2")cPVC Fitting			2.00	pc								
	Tee 50 mma-50 mma-50 mmø(2"x2"x2")cPVC Fitting			2.00	pc								
	Tee 65 mma-65 mma-65 mmø(2-1/2"x2-1/2"x2-1/2")cPVC Fitting			5.00	pc								
	Reducing Tee 32 mma-25 mma-25 mmø(1-1/4"x1"x1")cPVC Fitting			3.00	pc								
	Reducing Tee 32 mma-32 mma-25 mmø(1-1/4"x1-1/4"x1")cPVC Fitting			47.00	pc								
	Reducing Tee 40 mma-40 mma-25 mmø(1-1/2"x1-1/2"x1")cPVC Fitting			3.00	pc								
	Reducing Tee 40 mma-40 mma-32 mmø(1-1/2"x1-1/2"x1-1/4")cPVC Fitting			2.00	pc								
	Reducing Tee 50 mma-50 mma-25 mmø(2"x2"x1")cPVC Fitting			37.00	pc								
	Reducing Tee 50 mma-50 mma-32 mmø(2"x2"x1-1/4")cPVC Fitting			5.00	pc								
	Reducing Tee 50 mma-50 mma-40 mmø(2"x2"x1-1/2")cPVC Fitting			2.00	pc								
	Reducing Tee 65 mma-65 mma-25 mmø(2-1/2"x2-1/2"x1")cPVC Fitting			22.00	pc								
	Reducing Tee 65 mma-65 mma-32 mmø(2-1/2"x2-1/2"x1-1/4")cPVC Fitting			20.00	pc								
	Reducing Tee 100 mma-100 mma-50 mmø(4"x4"x2")cPVC Fitting			2.00	pc								
	Reducing Tee 100 mma-100 mma-65 mmø(4"x4"x2-1/2")cPVC Fitting			5.00	pc								
	Weld-On Fire Sprinkler Cement, One Step Cement, Heavy Bodied,ASTM F-493 Compliant			388.00	pint								
	Piping Accessories; Installation Accessories; Pipe Hanger and Wall Connection Accessories (ie U-Clamps, Expansion Bolts) include Labor			1.00	lot								
	Fire Pump												
	ATLANTA TS 25 in 1 Intergrated Direct Driven Horizontal Fire Pump, 50HP, 3550 rpm, 230 Volts, 60Hertz, 4" water outlet, complete with 5HP Jockey Pump, Electric Motor, Pressure Tank, Water Filling Tank, Control Panel, Base Stand, Water Flow Testing Pipe, Flow Meter, Drain Valve, Pump Water Filling Pipe, Temperature Guard System, Water Filling Inlet, Overflow Drain Outlet, Water Level Detector, Pressure Exhaust Valve, Pressure Check Valve, Pressure Gauge, Pressure Tank Pipe, Expansion Joint, Outlet Control Valve, Outlet Check Valve, Pump Exhaust Valve, Drain Valve, Differential Presssure Gauge, Coupling, and Bearing Frame			1.00	pc								
	15700 Heating and Ventilating Equipment												
	Inverter Duct Split Unit 12.0 TR, 3PH,380V, 60Hz	S2 Multi purpose Theater		4.00	unit								
	Inverter Ceiling Cassette Split Unit 5.0 TR, 220V, 1PH, 60Hz	S2 Level 2 Art Gallery		3.00	unit								
	Floor Standing FCU 3.0 TR, 220V, 1PH, 60Hz	S2 Level 1 Art Gallery		4.00	unit								
	Inverter Ceiling Cassette Split Unit 2.0 TR, 220V, 1PH, 60Hz	Meeting Room and Changing Room		2.00	unit								
	350mm dia. Duct Works Including Difussers and Grills (Spiral Duct)	Main Theater		4.00	unit								
	Installation of Indoor and Outdoor Unit,ACCU Brackets,Ducting,Piping And Mobilization/Preliminaries, includes installation of Copper refrigerant pipes and fittings, suction line closed cell rubber insulation, wires for control wirings, circuit breaker	All AC System		1.00	lot								
	Exhaust Fan, Condenser motor with thermal cut-off,17.7cm L x15 cm W x 17.7 cm H	Comfort Room Level 1,2 & 3		21.00	set								
	DIVISION 15 SUBTOTAL												

16000						
DIVISION 16- ELECTRICAL						
	*Allow for wastage and contingency cost to unit costs					
16110	RACEWAYS AND CONDUIT					
	LIGHTING AND POWER SYSTEM					
	1/2"Ø pvc pipe	1,950.00	pcs			
	1/2"Ø pvc adapter with locknut	2,062.00	pcs			
	1/2"Ø metal flex conduit	340.00	lm			
	1/2"Ø metal flex connector	340.00	pcs			
	3/4"Ø pvc pipe	285.00	pcs			
	3/4"Ø pvc adapter with locknut	219.00	pcs			
	1 1/2"Ø pvc pipe	13.00	pcs			
	1 1/2"Ø pvc adapter with locknut	8.00	pcs			
	1 1/2"Ø PVC elbow	8.00	pcs			
	2"Ø pvc pipe	25.00	pcs			
	2"Ø pvc adapter with locknut	8.00	pcs			
	2"Ø PVC elbow	8.00	pcs			
	1/2 "Ø metal clamp	2,315.00	pcs			
	3/4"Ø metal clamp	314.00	pcs			
	1 1/2"Ø metal clamp	85.00	pcs			
	2"Ø metal clamp	126.00	pcs			
	40 mm long tox w/ screw	5,880.00	pcs			
	pvc solvent cement (400cc)	7.00	can			
	Consumables (screws, bolt and nuts, drill bits, masonry bits)	1.00	lot			
	FEEDERLINE SYSTEM					
	3"Ø IMC pipe	15.00	pcs			
	3"Ø IMC elbow	8.00	pcs			
	3"Ø IMC locknut	8.00	pcs			
	3"Ø IMC bushing	10.00	pcs			
	3"Ø IMC coupling	6.00	pcs			
	2"Ø EMT pipe	12.00	pcs			
	2"Ø EMT elbow	4.00	pcs			
	2"Ø EMT set screw connector w/ locknut	14.00	pcs			
	2"Ø EMT set screw coupling	3.00	pcs			
	Anchor grip	131.00	pcs			
	Loop Hanger 3"	35.00	pcs			
	3" U-Bolt w/ nut and washer	90.00	pcs			
	2" U-Bolt w/ nut and washer	28.00	pcs			
	1 1/4"W x 1 1/4"H x 1/2"T x 3mm L Angle Bar	10.00	pcs			
	Consumables (screws, bolt and nuts, drill bits, masonry bits)	1.00	lot			
16120	CONDUCTORS AND CABLES					
	LIGHTING AND POWER SYSTEM					
	22 mm² thhn cu. Wire	1,664.00	lm			
	14 mm² thhn cu. Wire	195.00	lm			
	5.5mm² thhn cu. Wire	550.00	lm			
	3.5mm² thhn cu. Wire	16,548.00	lm			
	8 mm² tw cu. Wire	650.00	lm			
	2.0 mm² tw cu. Wire	1,740.00	lm			
	Electrical Tape	338.00	roll			
	Rubber Tape	5.00	roll			
	10' cable tie	240.00	pcs			
	ga 16 g.l. wire	145.00	kgs			
	FEEDERLINE SYSTEM					
	125 mm² thhn cu. Wire	90.00	lm			
	22 mm² thhn cu. Wire	130.00	lm			
	14 mm² thhn cu. Wire	50.00	lm			
	30 mm² tw cu. Wire	30.00	lm			
	8 mm² tw cu. Wire	90.00	lm			

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Hangers and Supports		1.00	lot						
Miscellaneous and Consumables		1.00	lot						
Others (Pls. Specify)									
Distribution System									
Wires									
Cat6/4p		1,650.00	lm						
Others (Pls. specify)									
Conduit									
20mmØ PVC Conduit (3/4")		338.00	pcs						
20mmØ PVC Adapter w/ Locknut		120.00	pcs						
Others (Pls. specify)									
Wiring Devices									
Telephone Floor outlet		3.00	sets						
Data Floor Outlet		1.00	sets						
Equipment/Devices									
24-Port Gigabit Smart PoE+ Switch with 4 Combo SFP Slots TL-SG2424P		1.00	sets						
Wireless Access Controller, 32AP Mgt Capacity		1.00	sets						
Wireless N300 High Power Access Point		2.00	sets						
Wireless N300 Ceiling Access Point		6.00	sets						
6 Lines by 2 Digital and 32 Analog Extension		1.00	unit						
Back up Battery with Battery Cable		1.00	sets						
AVR 500VA Servo Type		1.00	sets						
Electronic Type Lightning Arrestor (1 per Line needed)		2.00	pcs						
Kx DT 521 1Line LCD Digital Tel. unit for the operator		1.00	sets						
Single Line Analog Telephone		3.00	sets						
Pabx Installation Materials (4 pairs UTP cable, RJ45 connectors, Wiring block)		1.00	lot						
Configuration, Termination and Programming of Analog and Digital Side.		1.00	lot						
Boxes PVC									
Utility Box		50.00	pcs						
Junction Box		30.00	pcs						
Square Box		15.00	pcs						
Others (Pls. specify)									
CCTV System									
Wires									
Siamese rg6 coaxial cable with power for cctv		3,250.00	lm						
Others (Pls. Specify)									
Conduit									
3/4"Ø PVC Conduit		462.00	pcs						
3/4"Ø Adapter w/ Locknut		92.00	pcs						
Others (Pls. specify)									
Equipment/Devices									
16CH HD Digital Video Recorder 16 Cameras 1080P Res. @ 240 fps Video Recording and Viewing 720P res. @ 480 fps Video Recording and Viewing HDMI, VGA and BNC Video Output Remote Monitoring Capable		1.00	sets						
3TB Hard Disk Drive SATA		2.00	sets						
21 IR LEDs HD 1080P Dome Type Camera 2MP HD resolution, f3.6mm lens 1/2.7" CMOS sensor		16.00	sets						
21 IR LEDs HD 1080P Bullet Type Camera 2MP HD resolution, f3.6mm lens, IP66 1/2.7" CMOS sensor		4.00	sets						
23" LED TV		1.00	sets						
Automatic Voltage Regulator Servo Type 500VA		1.00	sets						
MPS 20AMP 12VDC CCTV Camera Power Supply		1.00	sets						
Pullboxes, Connectors, HDMI cables, and other consumables		1.00	lot						
Others (Pls. specify)									
Boxes									
Utility Box PVC		100.00	pcs						

	Junction Box PVC		90.00	pcs							
	Square Box PVC		60.00	pcs							
	Others (Pls. specify)										
	DIVISION 16 SUBTOTAL										
	TOTAL										

Printed name/signature

Tel.no./cellphone no./e-mail address

Date