



TECHNICAL SPECIFICATIONS

Implementation of Rizal Park Complex Comprehensive Tourism Plan (Improvement of Open Air Auditorium)

Central Section, Rizal Park, Ermita, Manila

No.	Description
I. Waterproofing	
	Water Proofing (Area = 1,017.00 Square Meter)
	Sintec URTOP MP 1.5mm Thermoplastic Polyolefin Polyester Reinforce (2.1m x 20m/roll)
	Angle Bar (50mm x 50mm x 6mm thick)
	Sleeve Type Anchor Bolt
	Vulca Seal
II. Rain Water Collector System	
	Fabricated Metal Roofing Accessory, G.26, Gutters
	Replacement of Damage Rain Water Down Pipe (Near Chinese & Chese Plaza)
	Sanitary Pipes 200mm dia PVC Series 1000
	Coupling 8" (Fabricated Fittings)
	PVC ELBOW 8 X 90° SANITARY ORANGE
	Gutter Bracket
	Solvent Cement 400cc
	Replacement of Existing Downspout (Stage)
	Sanitary Pipes 200mm dia PVC Series 1000
	Clean Out 8" Adapter and Plug
	Coupling 8" (Fabricated Fittings)
	PVC ELBOW 8 X 90° SANITARY ORANGE
	End Cap 8"
	Sanitary Tee Reducer 8" x 6" (Molde Fitting with reducer)
	Sanitary Tee 8"
	Solvent Cement 400cc
	Gutter Bracket
	Water Tank (Rain Water Collector System)
	Fiberglass Reinforced Polyster Panels Modular Type Tank, Capacity= 6000L
III. Rehabilitation of Drainage System	
A. Drainage line for 610mm diameter Concrete Pipe	
	4" Gravel Fill
	Pipe Culverts 610mm dia Class IV RCPC
	Embankment from roadway excavation - Common Soil
	Catch basins 610mm dia
	Portland Cement Concrete Pavement (Unreinforced) 0.15m thick 7 days
B. Drainage line for Steel Trench Drain	
	Reinforced Concrete Pipe, Size:12" (300mm) , Class II
	Embankment from roadway excavation - Common Soil
	Portland Cement Concrete Pavement (Unreinforced) 0.15m thick 7 days
	Hot Dip Galvanized , complete with Frames and dowel bar and lateral ties (Grating Size 400mm x 400mm)
	Hot Dip Galvanized , complete with Frames and dowel bar and lateral ties (Grating Size 200mm)
IV. Stage Apron	
	Line Canal
	CHB Wall
	150mm CHB Non-Load Bearing (including Reinforcing Steel)
	Cement Plaster Finish
	Floor Slab
	Hot Dip Galvanized , complete with Frames and dowel bar and lateral ties (Grating Size 600mm)
V. Installation of Drywall and Soundproofing (Between Stage & Backstage)	
	Structural Steel Framing
	B.I. (Black Iron) Tubular150mm x 50mm x 1.5mm thick x 6 meters
	Base Plate 6" x 10"
	Anchor Bolts
	Paint Metal Epoxy
	Double Wall 6.0mm Fiber Cement Board on Metal Frame
	Painting Works (Wood)
	Soundproofing
	Supply & Installation of Rockwool Blanket Insulation 50kg/cum
	(50mm x 0.6m x 5m, 1-Side Foil)

No.	Description
VI. Rehabilitation/Improvement of Rooms	
A. Rehearsal Room	1.2m x 2.4m Frameless Mirror Unglazed Tiles (Ceramic Tiles) 40mm diameter Stainless Steel Railing x 6m Lighting w/ Louver Housing (T5)
B. Meeting Room	Unglazed Tiles (Ceramic Tiles) 1.2m x 1.5m Back Painted Glass Laminated MDF Cabinet (0.85m x 2.40m x 0.60m) Laminated MDF Cabinet (0.85m x 4.20m x 0.60m) 5.2 Supply & Installation of Acoustic Panel and T- Runner w/ Accessories 5.2.1 Materials Cost 600mm x 600mm Acoustic Panel 5.3 Painting Works (Wood) Provision For LED Screen + 1 1/2" PVC Pipe w/ Outlet LED Light Panel LED Panel 40W - 6W6 CW BY
C. Piano Recording Room	Supply & Installation of Acoustic Panel and T- Runner w/ Accessories 1.1 Materials Cost 600mm x 600mm Acoustic Panel Painting Works (Wood) 2m x 1.2m Frameless Tempered Fixed Glass Panel 12mm thk. CHB Wall 100mm CHB Non-Load Bearing (including Reinforcing Steel) Cement Plaster Finish Led Light Panel LED Panel 40W - 6W6 CW BY Down Light DL 12 - 120 - 06w CW
D. Enhancement of Shower Room 1 & 2	Additional CHB Wall 100mm CHB Non-Load Bearing (including Reinforcing Steel) Cement Plaster Finish (0.16 m thickness) Unglazed Tiles (Ceramic Tiles) 0.60m x 0.60m S/S Grabrail for PWD Cubicle Shower Room 1 pc. Water Closet Including bidet, Fittings and Acc. (Rectangular) American Std or Equivalent) S/S Shower Mixer w/Telephone Shower Supply & Installation of HPL Phenolic Toilet door including toilet accessories (toilet roll holder, hook, handle) Lavatory Including Fittings and Acc. (Round) American Std or Equivalent) 1.10m x 2.50m Mirror Synthetic Granite Counter Top Lighting Fixtures Exhaust Fan " Down Light DL 12 - 120 - 06w CW LED Panel 40W - 6W6 CW BY Ceiling 4.5mm thk. Fiber Cement Board, 4' x 8' fiber cement board on metal frame at ceiling Painting Works (Wood)
E. Enhancement of Dressing Room 1 & 2	600mm x 600mm Unglazed Tiles (Ceramic Tiles) Mirror (2.00m x 0.80m) Laminated MDF Cabinet (0.85m x 4.20m x 0.60m) CHB Wall 100mm CHB Non-Load Bearing (including Reinforcing Steel) Cement Plaster Finish (0.16 m thickness) Painting Works (Wood) LED Panel 40W - 6W6 CW BY
F. Office Room	4.5mm thk. Fiber Cement Board, 4' x 8' fiber cement board on metal frame at ceiling Painting Works (Wood) 600mm x 600mm Unglazed Tiles (Ceramic Tiles) Restoration of Window Opening 100mm CHB Non-Load Bearing (including Reinforcing Steel)
G. AV Control Room	Waterproofing of Roof Deck Sintec URTOP MP 1.5mm Thermoplastic Polyolefin Polyester Reinforce (2.1m x 20m/roll) Angle Bar (50mm x 50mm x 6mm thick) Sleeve Type Anchor Bolt Vulca Seal Restoration 4.1 Roof Slab Portland Cement Concrete Pavement (Reinforced) 0.15m thick 14 days 4.2 CHB Wall 100mm CHB Non-Load Bearing (including Reinforcing Steel)

No.	Description
	Cement Plaster Finish (0.16 m thickness)
VII. Provision for Supply & Installation of Doors & Windows	
A. Doors	
	Backstage Access (Door 1)
	2pcs. 1m x 2.05m x 10mm Clear Tempered Glass Frameless Double Action Floor Hinge w/ Transom Window
	Dressing Room 1 & 2 (Door 2)
	D-2 DOUBLE PLAIN STEEL DOOR
	1000mm+1000mm Width x 2050mm Height
	Jamb: 2x4 Single Rabbet, gauge 16
	Panel: 44mm Thickness, gauge 18
	Hinges: Stainless steel flag hinges mounted in 3mm steel plates
	Lockset: None
	Coating: Epoxy primer gray
	Door Configuration: To Be Determined
	Included: Flush bolt (top & bottom)
	Rehearsal Room and Stair 2 (Door 3)
	D-3 DOUBLE STEEL DOOR W/ VIEW GLASS PANEL
	Size: 1000mm+1000mm Width x 2050mm Height
	Jamb: 2x4 Single Rabbet, gauge 16
	Panel: 44mm Thickness, gauge 18
	Hinges: Stainless steel flag hinges mounted in 3mm steel plates
	Lockset: None
	Coating: Epoxy primer gray
	Door Configuration: To Be Determined
	Included: Flush bolt (top & bottom)
	Optional: SS Pull handle
	Piano Recording Room (Door 4)
	0.90m x 2.05m Plain Solid Door with Acoustic Panel with Viewing Panel
	Shower Room 1 & 2 (Door 5)
	0.80m x 2.05m Sliding Louvered Wooden Door Painted
	AV Control Room (Door 6)
	D6 PLAIN STEEL DOOR
	Size: 900mm Width x 2050mm Height
	2x4 Single Rabbet, gauge 16
	44mm Thickness, gauge 18
	Hinges: Stainless steel flag hinges mounted in 3mm steel plates
	Lockset: None
	Coating: Epoxy primer gray
	Door Configuration: To Be Determined
	Coating: Epoxy primer gray
	Stair # 1 & 2 and Command Center and Office Room (Door 7)
	D-7 STEEL DOOR W/ VIEW GLASS PANEL
	900mm Width x 2050mm Height
	Jamb: 2x4 Single Rabbet, gauge 16
	Panel: 44mm Thickness, gauge 18
	Hinges: Stainless steel flag hinges mounted in 3mm steel plates
	Glass: Clear 150mmW x 800mmH x 6mmT
	Lockset: None
	Coating: Epoxy primer gray
	Door Configuration: To Be Determined
	Janitor & Electrical Room (Door 8)
	D8 FULL LOUVER STEEL DOOR
	Width x 2050mm Height
	Jamb: 2x4 Single Rabbet, gauge 16
	Panel: 2"x4" GI Tubular
	Louver: Z profile blades 0.9 mm thickness galvanized steel
	Hinges: Stainless steel flag hinges mounted in 3mm steel plates
	Lockset:None
	Coating: Epoxy primer gray
	Door Configuration: Pull Orientation
	Backstage
	D-9 FIRE-EXIT STEEL DOOR
	Size: 900mm Width x 2050mm Height
	Jamb: 2x4 Single Rabbet, gauge 16
	Panel: 44mm Thickness, gauge 18
	Lockset: Panic exit device
	Hinges: Stainless steel flag hinges mounted in 3mm steel plates
	Coating: Epoxy primer gray
	Door Configuration: To Be Determined

No.	Description
	5.00m x 3.05m Top Track Operable with Sound Insulation Panel (Door 10)
	1.20m x 3.05m Top Track Operable with Sound Insulation Panel (Door 11)
B. Windows	
	Staircase 1 & 2 Landing (Window 1)
	Fixed Awning window with Screen
	(6mm Tempered Frosted, Powdered Coated Black, Hardmesh Security Screen)
	Dressing Room (Window 2)
	Awning Window w/ Screen
	(6mm Tempered Frosted, Powdered Coated Black, Hardmesh Security Screen)
	Shower Room 1 & 2 (Window 3)
	Awning Window w/ Screen
	(6mm Tempered Frosted, Powdered Coated Black, Hardmesh Security Screen)
	AV Control Room (Window 4)
	Fixed Awning window with Screen
	(6mm Tempered Frosted, Powdered Coated Black, Hardmesh Security Screen)
	Office Room & Command Center (Window 5)
	Casement Window w/ Screen
	(6mm Tempered Clear Glass, Powdered Coated Black, Hardmesh Security Screen)
	Backstage Area (Window 6)
	Fixed Glass Window (w/ Tint)
	(6mm Tempered Frosted Glass, Powdered Coated Black)
	Rehearsal Room (Window 7)
	Fixed Casement Window with Screen
	(6mm Tempered Frosted, Powdered Coated Black, Hardmesh Security Screen)

VIII. Supply, Delivery and Installation of Aircondition Units and Duct Works

- A. AV Control Room

 - 1.0 HP Wall Mounted, Set Model: FP53AST010KEIV-F4
 - Refrigerant Copper Pipe, Soft Drawn, 6.4mm Ø
 - Refrigerant Copper Pipe, Soft Drawn, 9.5mm Ø
 - Closed Cell Rubber Insulation, 19 mm thickx 6.4 mm Ø
 - Closed Cell Rubber Insulation, 19 mm thickx 9.5 mm Ø
 - PVC Pipe (blue), 20 mm Ø, Condensate Drain
 - Drain Pipe Insulation, 19mm thick Closed Cell Rubber , 20 mm Ø
 - Mapp Gas
 - P.E. Tape White
 - Aero Tape, 1/8" Thick x 30 feet
 - Hunger and Supports
 - Circuit Breaker, 20 Amp.
 - THHN Wire 2.0 m²
 - Communication Wire
- B. Men's Dressing Room

 - 1.5 HP Wall Mounted, Set Model: FP53AST015KEIV-F4
 - Refrigerant Copper Pipe, Soft Drawn, 6.4mm Ø
 - Refrigerant Copper Pipe, Soft Drawn, 12.7mm Ø
 - Closed Cell Rubber Insulation, 19 mm thickx 6.4 mm Ø
 - Closed Cell Rubber Insulation, 19 mm thickx 12.7 mm Ø
 - PVC Pipe (blue), 20 mm Ø, Condensate Drain
 - Drain Pipe Insulation, 19mm thick Closed Cell Rubber , 20 mm Ø
 - Mapp Gas
 - P.E. Tape White
 - Aero Tape, 1/8" Thick x 30 feet
 - Hunger and Supports
 - Circuit Breaker, 20 Amp.
 - THHN Wire 2.0 m²
 - Communication Wire
- C. Ladies' Dressing Room

 - 2.0 HP Wall Mounted, Set Model: FP53AST020KEIV-F4
 - Refrigerant Copper Pipe, Soft Drawn, 6.4mm Ø
 - Refrigerant Copper Pipe, Soft Drawn, 12.7mm Ø
 - Closed Cell Rubber Insulation, 19 mm thickx 6.4 mm Ø
 - Closed Cell Rubber Insulation, 19 mm thickx 12.7 mm Ø
 - PVC Pipe (blue), 20 mm Ø, Condensate Drain
 - Drain Pipe Insulation, 19mm thick Closed Cell Rubber , 20 mm Ø
 - Mapp Gas
 - P.E. Tape White
 - Aero Tape, 1/8" Thick x 30 feet
 - Hunger and Supports
 - Circuit Breaker, 20 Amp.
 - THHN Wire 2.0 m²
 - Communication Wire
- D. Piano Recording Room

 - 2.5 HP Wall Mounted, Set Model: FP53AST025KEIV-F4
 - Refrigerant Copper Pipe, Soft Drawn, 6.4mm Ø
 - Refrigerant Copper Pipe, Soft Drawn, 12.7mm Ø
 - Closed Cell Rubber Insulation, 19 mm thickx 6.4 mm Ø
 - Closed Cell Rubber Insulation, 19 mm thickx 12.7 mm Ø
 - PVC Pipe (blue), 20 mm Ø, Condensate Drain
 - Drain Pipe Insulation, 19mm thick Closed Cell Rubber , 20 mm Ø

No.	Description
	Mapp Gas P.E. Tape White Aero Tape, 1/8" Thick x 30 feet Hunger and Supports Circuit Breaker, 20 Amp. THHN Wire 2.0 m ² Communication Wire
E.	Meeting Room
	2.5 HP Wall Mounted, Set Model: FP53AST025KEIV-F4 Refrigerant Copper Pipe, Soft Drawn, 6.4mm Ø Refrigerant Copper Pipe, Soft Drawn, 12.7mm Ø Closed Cell Rubber Insulation, 19 mm thickx 6.4 mm Ø Closed Cell Rubber Insulation, 19 mm thickx 12.7 mm Ø PVC Pipe (blue), 20 mm Ø, Condensate Drain Drain Pipe Insulation, 19mm thick Closed Cell Rubber , 20 mm Ø Mapp Gas P.E. Tape White Aero Tape, 1/8" Thick x 30 feet Hunger and Supports Circuit Breaker, 20 Amp. THHN Wire 2.0 m ² Communication Wire
F.	Rehearsal Room
	2.0 HP Wall Mounted, Set Model: FP53AST020KEIV-F4 Refrigerant Copper Pipe, Soft Drawn, 6.4mm Ø Refrigerant Copper Pipe, Soft Drawn, 12.7mm Ø Closed Cell Rubber Insulation, 19 mm thickx 6.4 mm Ø Closed Cell Rubber Insulation, 19 mm thickx 12.7 mm Ø PVC Pipe (blue), 20 mm Ø, Condensate Drain Drain Pipe Insulation, 19mm thick Closed Cell Rubber , 20 mm Ø Mapp Gas P.E. Tape White Aero Tape, 1/8" Thick x 30 feet Hunger and Supports Circuit Breaker, 20 Amp. THHN Wire 2.0 m ² Communication Wire
G.	Backstage Area
	3.0 HP Wall Mounted, Set Model: FP53AST025KEIV-F4 Refrigerant Copper Pipe, Soft Drawn, 6.4mm Ø Refrigerant Copper Pipe, Soft Drawn, 15.9mm Ø Closed Cell Rubber Insulation, 19 mm thickx 6.4 mm Ø Closed Cell Rubber Insulation, 25 mm thickx 12.7 mm Ø PVC Pipe (blue), 25 mm Ø, Condensate Drain Drain Pipe Insulation, 19mm thick Closed Cell Rubber , 25 mm Ø Mapp Gas P.E. Tape White Aero Tape, 1/8" Thick x 30 feet Hunger and Supports Circuit Breaker, 20 Amp. THHN Wire 2.0 m ² Communication Wire
H.	Office Room
	2.0 HP Wall Mounted, Set Model: FP53AST020KEIV-F4 Refrigerant Copper Pipe, Soft Drawn, 6.4mm Ø Refrigerant Copper Pipe, Soft Drawn, 12.7mm Ø Closed Cell Rubber Insulation, 19 mm thickx 6.4 mm Ø Closed Cell Rubber Insulation, 19 mm thickx 12.7 mm Ø PVC Pipe (blue), 20 mm Ø, Condensate Drain Drain Pipe Insulation, 19mm thick Closed Cell Rubber , 20 mm Ø Mapp Gas P.E. Tape White Aero Tape, 1/8" Thick x 30 feet Hunger and Supports Circuit Breaker, 20 Amp. THHN Wire 2.0 m ² Communication Wire
I.	Back Stage Ventilation and Installation
	30" dia. Low Speed / Low Noise Wall Mounted Propeller Fan (Belt Driven) c/w 0.5HP Motor and Weather Hood Basement Roof Top Exhaust Ventilator Wall Mounted Propeller Fan Air Supply Grilles Angular Bar Frame Motor Controller

No.	Description
	Max. 10 Meters Electrical Works (Motor Controller, Circuit Breakers, PVC Pipes and Wires - Load Side only)
I. Ventilation and Duct Works	
	Basement Ductworks (G.I. Sheets, Hangers, Air Grilles & Consumables)
	Basement Roof Top Exhaust Ventilator
	Motor Controller
	Maintenance Breaker Switch Box
	Max. 10 Meters Electrical Works (Motor Controller, Circuit Breakers, PVC Pipes, PVC Flexible Hose and Wires - Load Side only)
IX. Painting Works	
	Scrapping of Existing Paint
	Masonry/Concrete
	Basement
	Equipment Storage
	Rehearsal Room
	Men's Shower Room
	Men's Dressing Room
	Ladies Shower Room
	Ladies Dressing Room
	Meeting Room 1
	Meeting Room 2
	Backstage
	HE CR
	SHE CR
	Janitor Room
	Electrical Room
	Server Room
	Command Center
	Office Room
	Control Room
	Exterior Wall
	Steel Trusses
	EPOXY PRIMER
	EPOXY ENAMEL
	POLYTUFF
	EPOXY REDUCER
	RUST CONVERTER
	SANDING DISK
	PAINT BRUSH 1 1/2"
	BABY ROLLER
	Rubberized Floor Paint
	Front Stage
	Backstage
X. Mechanical Works	
	Ventilation - HVLS Series Ceiling Fan, Aviation Aluminum Extruded Anodized (Airfoil Style), # of Airfoil: 8, 80RPM (VFD Controllor) 3730CMM, 220V 1PH 60HZ Motor: Brushless Rare Earth, Permanent Magnet SKF Explorer Reinforced, IP20 14ft. diameter (4.2m) IND42-1PH (I-MXA-VNA-00037)
	Wires (4G x 2.5mm ² Control Cable)
XI. Landscaping Works	
XII. Provision for Steel Basket (3 units)	
	Flat Bar 50mm x 3mm thick x 6m
	B.I. (Black Iron) Tubular 25mm x 25mm x 1.5mm thick
	B.I. (Black Iron) Tubular 50mm x 50mm x 1.5mm thick
	Paint Metal Epoxy
XIII. Provision of Scaffolding Rental	
	Rental per set
	6 H - Frame (1.70 x 1.20)
	12 Cross Braces (1.80m)
	2 Catwalk 0.50m x 1.80m
	Joint Pin
	Adjustable U- Head
	8 pcs. x 1 1/4" x 600mm

No.

Description

Adjustable Base Jack
8 pcs. x 1 1/4" x 600mm

XIV. Pest Control

Comprehensive termite control program includes the following: (2 year warranty) supply of chemicals, supply of materials and equipments labor and supervision
General Pest Control Maintenance Program (6 months contract) supply of chemicals, supply materials and equipment labor and supervision

XV. Light Equipment

4 bulb LED Molefay

4-Eyes "MOLEFAY" design Ø High-Power WW LED COB Lamps: 4 x 100W (400w) 3000 to 3200°K Ø Beam Angle: >90 degree Wide Flood Ø DMX operation - with 1 channel (4 ch. Optional) Ø Wireless DMX ready – using special 3-Pin XLR socket with 5vdc Ø Horizontal adjustment of 2-Beam columns Ø Auto operation with built-in control Ø Master-Slave operation Ø Powercon IN & OUT for mains Ø Power: 90 – 255 VAC - 50/60 Hz, @450 watts

Jolly 1218 RGBW LED Par

Angle 15°/25°/45°optional • Lamp 18pcs LED, RGBW, 15W • Color Temperature 6000-6500K • Power 100-250V 50/60Hz 250w • Channel 8/14 ch • Color RGBW • Strobe 1-25/S • Linear Dimmer • LED Display • L322mm x W293mm x H134mm • Weight 5.5 kgs • IP65

COB DMX200 Daylight Tungsten LED Par with Barn Door

Light Source 200w Warm+cool white • 200w Rated Power • Beam Angle 45 degrees • Dimming 0 to 100% linear Dimming • 5 DMX Channel • Control Mode DMX512 self propelled master slave voice activated • LCD Display • AC90 to 240V 50-60hz

Solar Flare

Lighting Control Console

40 electronically-labelled playback faders
15.6" main touch screen
7" secondary touchscreen
20 macro / executor buttons
3 optical attribute encoders
4 optical playback pots
UPS battery backup
Built-in 4-port managed gigabit network switch
Ethercon for all ethernet connections
OpticalCon stage link output
16 universes of ArtNet or S-ACN, expandable with Titan Net Processors
8 Physical DMX outputs on 5-pin XLR

2500w Follow Spot with stand and dustcover

DMX Splitter, Cables and Connectors

XVI. Equipment Audio

Front of House Speakers (suspended from roof)

120,000.00 1,440,000.00
Frequency response (-5 dB standard) 67 Hz - 18 kHz
Frequency response (-5 dB CUT mode) 100 Hz - 18 kHz
Max. sound pressure1
- with D20/30D 139 dB
- with D40/D80/40D 142 dB
Configuration High performance 3-way passive line array loudspeaker
Nominal impedance 8 Ω
Power handling capacity (RMS/peak 10 ms) 500/2000 W
Nominal dispersion angle (horizontal) 80°2
Splay angle settings 0° - 14° (1° increment)
Components
- 2 x 10" driver / 1 x 8" driver
- 2 x 1.4" exit compression driver passive crossover network
Connections
- 2 x NLT4 F/M
- optional 2 x NL4
Dimensions (H x W x D) - 310 x 700 x 460 mm
Weight 34 kg

Subwoofer (under stage)

Frequency response (-5 dB standard) 37 Hz - 90 Hz
Frequency response (-5 dB INFRA mode) 32 Hz - 68 Hz
Max. sound pressure1
- with D20/30D 140 dB

No.	Description
	<p>-with D40/D80/40D 143 dB</p> <p>Configuration</p> <p>High performance subwoofer intended for ground stacked applications</p> <p>Nominal impedance 4 Ω</p> <p>Power handling capacity (RMS/peak 10 ms) 1000/4000 W</p> <p>Components - 2 x 18" driver with neodymium magnet</p> <p>Connections - 2 x NLT4 F/M</p> <p>Front fill speakers (under stage)</p> <p>Frequency response (-5 dB standard) 54 Hz - 19 kHz</p> <p>Frequency response (-5 dB CUT mode) 100 Hz - 19 kHz</p> <p>Max. sound pressure1</p> <p>- with 10D 134 dB</p> <p>-with D20/30D 137 dB</p> <p>-with D40/D80/40D 139 dB</p> <p>High performance 2-way passive line array loudspeaker</p> <p>Nominal impedance 8 Ω</p> <p>Power handling capacity (RMS/peak 10 ms) 400/1600 W</p> <p>Nominal dispersion angle (horizontal) 80°</p> <p>Splay angle settings 0° - 14° (1° increment)</p> <p>Components</p> <p>- 2 x 8" driver with neodymium magnet</p> <p>- 1.4" exit compression driver passive crossover network</p> <p>4-Channel Amplified Controller</p> <p>Output power (no limiter 200 ms sine bursts,1 kHz, < 1% THD, all channels):</p> <p>4 x 3300 W at 2.7 ohms</p> <p>4 x 2600 W at 4 ohms</p> <p>4 x 1400 W at 8 ohms</p> <p>Amplification class: High-efficiency Class D</p> <p>Maximum output voltage: 157 V (peak voltage)</p> <p>Architecture: 4 in x 4 out</p> <p>Frequency range: 20 Hz - 20 kHz (+/- 0,1 dB, 8 ohms, 60 W output power)</p> <p>Distortion THD+N: < 0.05% (20 Hz - 10 kHz, 8 ohms, 60 W output power)</p> <p>Output dynamic range: > 114 dB (20 Hz - 20 kHz, 8 ohms, A-weighted)</p> <p>Noise level < -72 dBV (20 Hz - 20 kHz, 8 ohms, A-weighted)</p> <p>Amplification gain: 32 dB</p> <p>Channel separation: > 85 dB (1 kHz, 4 ohms)</p> <p>Output delay: adjustable from 0 to 1000 ms</p> <p>LA8 Amplifiers</p> <p>4-channel amplifier</p> <p>Universal switched mode power supply, 120 / 230 V (or 100 / 200 V for Japan)</p> <p>4 x 1100 W / 8 Ω at 1% THD, all channels driven (4 x 1300 W peak)</p> <p>4 x 1800 W/4 or 2.7 Ω at 1% THD, all channels driven (4 x 2500 W peak)</p> <p>Amplifier gain = 32 dB</p> <p>Frequency response: 10 Hz – 30 kHz, -1.5/+0 dB at 8 Ω</p> <p>Output noise: -67 dBV (20 Hz – 20 kHz, A-weighted)</p> <p>Output dynamic range: 107 dB (20 Hz – 20 kHz, A-weighted)</p> <p>Max input level: +22 dBu (balanced, THD 1%)</p> <p>Channel separation: > 85 dB (1 kHz)</p> <p>Input impedance: 22 kΩ, balanced</p> <p>AES/EBU input board: refer to the LA-AES3 spec sheet</p> <p>Dimensions</p> <p>H x W x D: 88 (2U) x 483 x 420 mm 3.5 (2U) x 19 x 16.5 in</p> <p>Weight (net): 12.2 kg 26.9 lbs.</p> <p>Finish: black and anthracite gray</p> <p>Loud Speaker Management System 3in / 6 out</p> <p>Number of Channels:6</p> <p>EQ:31-band (Graphic), 12-band (Parametric)</p> <p>Compressor:Yes</p> <p>Feedback Eliminator:Yes</p> <p>Analog Inputs:3 x XLR, 1 x XLR (RTA Mic)</p> <p>Analog Outputs:6 x XLR</p>

No.	Description
	<p>Computer Connectivity:1 x USB-B</p> <p>Rack Spaces:1U</p> <p>Height:1.75"</p> <p>Depth:8"</p> <p>Width:19"</p> <p>Floor Monitors</p> <p>15" Neodymium Woofer</p> <p>1" Kapton Dome Neodymium Tweeter</p> <p>60 x 60° Dispersion</p> <p>700W Digital Amplifier</p> <p>DSP Processing</p> <p>XLR and 1/4" Inputs and XLR Output</p> <p>AC Input and Output Connectors</p> <p>Integrated Handle and Pole Socket</p> <p>Digital Mixer</p> <p>Type: Digital Mixer</p> <p>Channels: 40</p> <p>Inputs - Mic Preamps: 32 x XLR</p> <p>Phantom Power: 48V, Switchable per Input</p> <p>Inputs - Line: 1 x Dual RCA Stereo (aux)</p> <p>Inputs - Other: 6 x 1/4" TRS (aux)</p> <p>Outputs - Main: 16 x XLR, 2 x XLR (monitor), 2 x 1/4" (monitor)</p> <p>Outputs - Other: 6 x 1/4" TRS (aux), 1 x Dual RCA Stereo (aux)</p> <p>Outputs - Digital: 1 x XLR (AES/EBU)</p> <p>Busses/Groups: 25 time-aligned/phase-coherent mix buses, 8 DCA groups</p> <p>Talkback: 1 x XLR</p> <p>MIDI I/O: In/Out/USB</p> <p>Data I/O: 1 x EtherCon (Ultranet), 2 x EtherCon (AES50), 1 x Ethernet</p> <p>Headphones: 2 x 1/4" TRS (stereo)</p> <p>USB: 1 x Type B, 1 x Type A</p> <p>Computer Connectivity: USB, Ethernet</p> <p>Faders: 16 x Input Faders, 8 x Bus Faders, 1 x Main Fader</p> <p>A/D Resolution: 24-bit/48kHz</p> <p>EQ Bands: 4-band EQ</p> <p>Effects: 8 x Stereo FX Engines</p> <p>Signal Processing: Gate, Compressor</p> <p>Features: 100-band RTA, 100 scenes, 100 Snippets, 32-bit/48kHz SD Card recording</p> <p>DAW Control: Yes</p> <p>Screen: 7" TFT Display</p> <p>Storage: 2 x SD card slots</p> <p>Power Source: Standard IEC AC cable</p> <p>32-Input / 16-Output Stage Box</p> <p>32 microphone preamplifiers with switchable 48 V phantom power</p> <p>16 electronically balanced low impedance line level outputs</p> <p>Two AES-3 ports (AES/EBU),e.g. for directly connecting PA system controllers with digital inputs</p> <p>Remote operation up to 100 m via CAT5/5e cable</p> <p>Rugged 3U rackmount chassis for durability in portable applications</p> <p>Auto-ranging universal switch-mode power supply</p> <p>Mute-All-Inputs function for quietly patching any inputs on stage</p> <p>Dual Channel Digital Wireless Receiver with 2 Handheld Transmitters</p> <p>Extended 20 Hz to 20 kHz frequency range (microphone dependent)</p> <p>118 dB dynamic range</p> <p>Digital predictive switching diversity</p> <p>44 MHz tuning bandwidth (region dependent)</p> <p>32 available channels per frequency band (region dependent)</p> <p>Up to 10 compatible systems per 6MHz TV band; 12 systems per 8 MHz band</p> <p>Easy pairing of transmitters and receivers over IR scan and sync</p> <p>Portable Receiver & Plug-On Transmitter Options</p> <p>Wired microphones</p> <p>Type: Dynamic</p> <p>Frequency Response: 50 to 15,000 Hz</p> <p>Polar Pattern: Cardioid</p> <p>Sensitivity (at 1,000 Hz Open circuit voltage): –54.5 dBV/Pa (1.85 mV), 1 Pa = 94 dB SPL</p> <p>Impedance: Rated impedance is 150 Ω (300 Ω actual) for connection to microphone inputs rated low impedance</p> <p>Polarity: Positive pressure on diaphragm produces positive voltage on pin 2 with respect to pin 3</p> <p>Case: Dark gray, enamel-painted, die cast metal; matte-finished, silver colored, spherical steel mesh grille</p> <p>Connector: Three-pin professional audio connector (male XLR type)</p> <p>Pencil condenser microphones</p>

No.	Description
	Small-diaphragm pencil condenser microphones Packaged as a stereo pair (matched within ±0.5dB sensitivity of each other) Cardioid pickup pattern Up to 134dB SPL Gold-plated XLR connectors Protective carry case, shock-mounted mic clips and windscreens included
	Mic stand with boom
	DI Box
	Equipment Rack
	Full Duplex Wireless Intercommunication System
	Up to 1300ft Radius Communication Range POE Power Supply / NP-F Type Battery 450 meters Line-of-Sight Usage Grouping Talk 1.9GHz Frequency Multi-Device Cascade Connection With Professional Headphones Sidetone Function Removable Li-ion Batteries 3.55mm Headset Interface/USV-Type C Interface/Headset Interface With 1 Station, 8 Beltpack, Charging Base, High Gain Antenna, Extra Battery for Beltpacks, Cables

Prepared By:

Checked By:

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Planning Assistant

JOSE ANGELO C. CACAL
Architect II

Noted By:

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Planning Officer V

BILL OF QUANTITIES

Implementation of Rizal Park Complex Comprehensive Tourism Plan (Improvement of Open Air Auditorium)

Central Section, Rizal Park, Ermita, Manila

No.	Description	Qty.	Unit	Unit Cost	Amount
I.	Waterproofing				
1	Removal of existing Waterproofing Membrane	500.00	m2		
2	Provision For 2" Concrete Floor Topping	500.00	m2		
3	Water Proofing (Area = 1,017.00 Square Meter)				
	Sintec URTOP MP 1.5mm Thermoplastic Polyolefin Polyester Reinforce (2.1m x 20m/roll)	27.00	roll		
	Angle Bar (50mm x 50mm x 6mm thick)	48.00	pcs.		
	Anchor Bolt	288.00	pcs.		
	Vulca Seal	1.00	gal.		
II.	Rain Water Collector System				
1	Fabricated Metal Roofing Accessory, G.26, Gutters	16.00	l.m.		
2	Replacement of Damage Rain Water Down Pipe (Near Chinese & Chese Plaza)				
	Sanitary Pipes 200mm dia PVC Series 1000	15.00	pcs.		
	Coupling 8" (Fabricated Fittings)	14.00	pcs.		
	PVC ELBOW 8 X 90° SANITARY ORANGE	5.00	pcs.		
	Gutter Bracket	10.00	pcs.		
	Solvent Cement 400cc	1.00	pcs.		
3	Replacement of Existing Downspout (Stage)				
	Sanitary Pipes 200mm dia PVC Series 1000	8.00	pcs.		
	Clean Out 8" Adapter and Plug	2.00	pcs.		
	Coupling 8" (Fabricated Fittings)	10.00	pcs.		
	PVC ELBOW 8 X 90° SANITARY ORANGE	10.00	pcs.		
	End Cap 8"	1.00	pcs.		
	Sanitary Tee Reducer 8" x 6" (Molde Fitting with reducer)	2.00	pcs.		
	Sanitary Tee 8"	5.00	pcs.		
	Solvent Cement 400cc	1.00	pcs.		
	Gutter Bracket	5.00	pcs.		
4	Water Tank (Rain Water Collector System)	3.00	units		
III.	Rehabilitation of Drainage System				
A.	Drainage line for 610mm diameter Concrete Pipe				
1	Concrete Cutting	166.00	l.m.		
2	Removal of Actual Structures/Obstruction 0.15 m thick PCCP (Unreinforced)	166.00	m2		
3	Excavation	332.00	m3		
4	4" Gravel Fill	16.60	m3		
5	Pipe Culverts 610mm dia Class IV RCPC	166.00	l.m.		
6	Embankment from roadway excavation - Common Soil	285.06	m3		
7	Catch basins 610mm dia	4.00	units		
8	Portland Cement Concrete Pavement (Unreinforced) 0.15m thick 7 days	166.00	m2		
B.	Drainage line for Steel Trench Drain				
1	Concrete Cutting	72.40	m2		
2	Removal of Actual Structures/Obstruction 0.15 m thick PCCP (Unreinforced)	29.00	m2		
3	Excavation	22.48	m3		
4	Reinforced Concrete Pipe, Size:12" (300mm) , ClassII	54.00	m2		
5	Embankment from roadway excavation - Common Soil	9.77	m2		
6	Portland Cement Concrete Pavement (Unreinforced) 0.15m thick 7 days	63.00	m2		
7	Hot Dip Galvanized , complete with Frames and dowel bar and lateral ties (Grating Size 400mm x 400mm)	2.00	units		
8	Hot Dip Galvanized , complete with Frames and dowel bar and lateral ties (Grating Size 200mm)	60.00	l.m.		

No.	Description	Qty.	Unit	Unit Cost	Amount
IV.	Stage Apron				
1	Removal of Structures and Obstruction (Front Stage)	1.00	l.s		
2	Plastering of Existing Retaining Wall				
	Cement Plaster Finish (0.16 m thickness)	48.40	m2		
3	Line Canal				
	Excavation	29.04	m3		
	CHB Wall				
	150mm CHB Non-Load Bearing (including Reinforcing Steel)	96.80	m2		
	Cement Plaster Finish	96.80	m2		
	Floor Slab				
	Hot Dip Galvanized , complete with Frames and dowel bar and lateral ties (Grating Size 600mm)	29.00	l.m.		
	Portland Cement Concrete Pavement (Unreinforced) 0.15m thick 7 days	29.04	m2		
4	New Slabs and Steps @ Center Stage				
	Structural Concrete (Class A, 28 days)	16.50	m3		
5	Improvement of Steps (Area - 15.60m2)				
	Polished Pebble Wash Flooring @ 2cm thickness	1	m3		
	Cement	5.00	bags		
V.	Installation of Drywall and Soundproofing (Between Stage & Backstage)				
1	Removal of Structures and Obstruction (Wood)	1.00	l.s.		
2	Structural Steel Framing				
	B.I. (Black Iron) Tubular 50mm x 50mm x 1.5mm thick x 6 meters	57.00	pcs.		
	Welding Rod	3.00	boxes		
	Base Plate 6" x 10"	62.00	pcs.		
	Anchor Bolts	248.00	pcs.		
	Paint Metal Epoxy	3.00	gals.		
	Equipment Rental				
	1 - Welding Machine @ P /per day	30.00	days		
3	Double Wall 6.0mm Fiber Cement Board on Metal Frame	205.00	m2		
4	Painting Works (Wood)	410.00	m2		
5	Soundproofing				
	Supply & Installation of Rockwool Blanket Insulation 50kg/cum (50mm x 0.6m x 5m, 1-Side Foil)	140.00	pcs.		
6	Stage Leg				
	B.I. (Black Iron) Tubular 50mm x 50mm x 1.5mm thick x 6 meters	12.00	pcs.		
	Anchor Bolts	72.00	pcs.		
VI.	Rehabilitation/Improvement of Rooms				
A.	Rehearsal Room				
1	1.2m x 2.4m Frameless Mirror	30.00	pcs.		
2	Unglazed Tiles (Ceramic Tiles)	93.70	m2		
3	40mm diameter Stainless Steel Railing x 6m	4.00	pcs.		
4	Lighting w/ Louver Housing (T5)	16.00	pcs.		
B.	Meeting Room				
1	Unglazed Tiles (Ceramic Tiles)	30.38	m2		
2	1.2m x 1.5m Back Painted Glass	6.00	pcs.		
3	Laminated MDF Cabinet (0.85m x 2.40m x 0.60m)	1.00	units		
4	Laminated MDF Cabinet (0.85m x 4.20m x 0.60m)	1.00	units		
5	Replacement of Existing Ceiling				
	5.1 Removal of Existing Ceiling	1.00	l.s.		
	5.2 Supply & Installation of Acoustic Panel and T- Runner w/ Accessories				
	5.2.1 Materials Cost				
	600mm x 600mm Acoustic Panel	29.75	m2		
	Consumables (5% of Material Cost)	1.00	lot		
	5.2.2 Labor Force: Consisting of Two (2) Working Days				
	1 - Foreman @ P per day	2.00	days		
	4- skilled @ P per day = Php	2.00	days		
	2- unskilled @ P per day = Php	2.00	days		
	5.2.3 Equipment Cost				
	Minor Tools (10% of Labor Cost)	1.00	lot		
	5.3 Painting Works (Wood)	29.75	m2		
6	Provision For LED Screen + 1 1/2" PVC Pipe w/ Outlet	1.00	lot		
7	LED Light Panel				
	LED Panel 40W - 6W6 CW BY	6.00	pcs.		

No.	Description	Qty.	Unit	Unit Cost	Amount
C. Piano Recording Room					
1	Supply & Installation of Acoustic Panel and T- Runner w/ Accessories				
	1.1 Materials Cost				
	600mm x 600mm Acoustic Panel	52.00	m2		
	Consumables (5% of Material Cost)	1.00	lot		
	1.2 Labor Force: Consisting of Three (3) Working Days				
	1 - Foreman @ P [REDACTED] per day	3.00	days		
	4- skilled @ P [REDACTED] per day = Php [REDACTED]	3.00	days		
	2- unskilled @ P [REDACTED] per day = Php [REDACTED]	3.00	days		
	1.3 Equipment Cost				
	Minor Tools (10% of Labor Cost)	1.00	lot		
2	Painting Works (Wood)	52.00	m2		
3	2m x 1.2m Frameless Tempered Fixed Glass Panel 12mm thk.	1.00	pc.		
4	CHB Wall				
	100mm CHB Non-Load Bearing (including Reinforcing Steel)	10.00	m2		
	Cement Plaster Finish	20.00	m3		
5	Led Light Panel				
	LED Panel 40W - 6W6 CW BY	6.00	pcs.		
	Down Light DL 12 - 120 - 06w CW	6.00	pcs.		
D. Enhancement of Shower Room 1 & 2					
1	Removal of Actual Structures/Obstruction (Tiles) & Fixture	206.40	m2		
2	Additional CHB Wall				
	100mm CHB Non-Load Bearing (including Reinforcing Steel)	19.75	m2		
	Cement Plaster Finish (0.16 m thickness)	39.50	m2		
3	Unglazed Tiles (Ceramic Tiles) 0.60m x 0.60m	226.15	m2		
4	S/S Grabrail for PWD Cubicle	2.00	sets		
5	Shower Room				
	1 pc. Water Closet Including bidet, Fittings and Acc. (Rectangular) American Std or Equivalent)	6.00	units		
	S/S Shower Mixer w/Telephone Shower	8.00	units		
	Supply & Installation of HPL Phenolic Toilet door including toilet accessories (toilet roll holder, hook, handle)	6.00	units		
	Lavatory Including Fittings and Acc. (Round) American Std or Equivalent)	6.00	units		
	1.10m x 2.50m Mirror	1.00	pc.		
	Synthetic Granite Counter Top	6.00	m2		
6	Lighting Fixtures				
	Exhaust Fan "	4.00	units		
	Down Light DL 12 - 120 - 06w CW	14.00	pcs.		
	LED Panel 40W - 6W6 CW BY	8.00	pcs.		
7	Ceiling				
	4.5mm thk. Fiber Cement Board, 4' x 8' fiber cement board on metal frame at ceiling	43.00	m2		
6	Painting Works (Wood)	43.00	m2		
E. Enhancement of Dressing Room 1 & 2					
1	Removal of Actual Structures/Obstruction (Tiles) & Counter	132.67	m2		
2	Unglazed Tiles (Ceramic Tiles)	132.67	m2		
3	Mirror (2.00m x 0.80m)	8.00	unit		
4	Laminated MDF Cabinet (0.85m x 4.20m x 0.60m)	2.00	units		
5	CHB Wall				
	100mm CHB Non-Load Bearing (including Reinforcing Steel)	9.60	m2		
	Cement Plaster Finish (0.16 m thickness)	19.20	m2		
	Painting Works (Wood)	19.20	m2		
6	LED Panel 40W - 6W6 CW BY	12.00	pcs.		
7	Supply & Installation of Acoustic Panel and T- Runner w/ Accessories				
	7.1 Materials Cost				
	600mm x 600mm Acoustic Panel	95.00	m2		
	Consumables (5% of Material Cost)	1.00	lot		
	7.2 Labor Force: Consisting of Four (4) Working Days				
	1 - Foreman @ P [REDACTED] per day	4.00	days		
	4- skilled @ P [REDACTED] per day = Php [REDACTED]	4.00	days		
	2- unskilled @ P [REDACTED] per day = Php [REDACTED]	4.00	days		
	7.3 Equipment Cost				
	Minor Tools (10% of Labor Cost)	1.00	lot		
8	Painting Works (Wood)	95.00	m2		
9	Stainless Curtain Rod w/ accessories	3.00	pcs.		

No.	Description	Qty.	Unit	Unit Cost	Amount
F. Office Room					
1	Removal of Existing Ceiling (Wood)	1.00	l.s.		
2	4.5mm thk. Fiber Cement Board, 4' x 8' fiber cement board on metal frame at ceiling	1.00	m2		
3	Painting Works (Wood)	25.67	m2		
4	Unglazed Tiles (Ceramic Tiles)	25.67	m2		
5	Restoration of Window Opening				
	100mm CHB Non-Load Bearing (including Reinforcing Steel)	4.00	m2		
G. AV Control Room					
1	Removal & Hauling of Existing Top Soil	1.00	lot		
2	Waterproofing of Roof Deck				
	Sintec URTOP MP 1.5mm Thermoplastic Polyolefin Polyester Reinforce (2.1m x 20m/roll)	1.00	roll		
	Angle Bar (50mm x 50mm x 6mm thick)	2.00	pcs.		
	Sleeve Type Anchor Bolt	12.00	pcs.		
	Vulca Seal	0.25	gal.		
3	Removal of Existing Concrete Wall	15.00	m2		
4	Restoration				
	4.1 Roof Slab				
	Portland Cement Concrete Pavement (Reinforced) 0.15m thick 14 days	3.50	m2		
	4.2 CHB Wall				
	100mm CHB Non-Load Bearing (including Reinforcing Steel)	21.00	m2		
	Cement Plaster Finish (0.16 m thickness)	42.00	m2		
VII. Provision for Supply & Installation of Doors & Windows					
A. Doors					
1	Backstage Access (Door 1)				
	2pcs. 1m x 2.05m x 10mm Clear Tempered Glass Frameless Double Action Floor Hinge w/ Transom Window	2.00	units		
2	Dressing Room 1 & 2 (Door 2)				
	D-2 DOUBLE PLAIN STEEL DOOR Size: 1000mm+1000mm Width x 2050mm Height Jamb: 2x4 Single Rabbet, gauge 16 Panel: 44mm Thickness, gauge 18 Hinges: Stainless steel flag hinges mounted in 3mm steel plates Lockset: None Coating: Epoxy primer gray Door Configuration: To Be Determined Included: Flush bolt (top & bottom)	2.00	units		
3	Rehearsal Room and Stair 2 (Door 3)				
	D-3 DOUBLE STEEL DOOR W/ VIEW GLASS PANEL Size: 1000mm+1000mm Width x 2050mm Height Jamb: 2x4 Single Rabbet, gauge 16 Panel: 44mm Thickness, gauge 18 Hinges: Stainless steel flag hinges mounted in 3mm steel plates Lockset: None Coating: Epoxy primer gray Door Configuration: To Be Determined Included: Flush bolt (top & bottom) Optional: SS Pull handle	2.00	units		
4	Piano Recording Room (Door 4)				
	0.90m x 2.05m Plain Solid Door with Acoustic Panel with Viewing Panel	1.00	units		
5	Shower Room 1 & 2 (Door 5)				
	0.80m x 2.05m Sliding Louvered Wooden Door Painted	2.00	units		

No.	Description	Qty.	Unit	Unit Cost	Amount
6	AV Control Room (Door 6)				
	D6 PLAIN STEEL DOOR Size: 900mm Width x 2050mm Height Jamb: 2x4 Single Rabbet, gauge 16 Panel: 44mm Thickness, gauge 18 Hinges: Stainless steel flag hinges mounted in 3mm steel plates Lockset: None Coating: Epoxy primer gray Door Configuration: To Be Determined Coating: Epoxy primer gray	1.00	sets		
7	Stair # 1 & 2 and Command Center and Office Room (Door 7)				
	D-7 STEEL DOOR W/ VIEW GLASS PANEL Size: 900mm Width x 2050mm Height Jamb: 2x4 Single Rabbet, gauge 16 Panel: 44mm Thickness, gauge 18 Hinges: Stainless steel flag hinges mounted in 3mm steel plates Glass: Clear 150mmW x 800mmH x 6mmT Lockset: None Coating: Epoxy primer gray Door Configuration: To Be Determined	4.00	units		
8	Janitor & Electrical Room (Door 8)				
	D8 FULL LOUVER STEEL DOOR Size: 900mm Width x 2050mm Height Jamb: 2x4 Single Rabbet, gauge 16 Panel: 2"x4" GI Tubular Louver: Z profile blades 0.9 mm thickness galvanized steel Hinges: Stainless steel flag hinges mounted in 3mm steel plates Lockset:None Coating: Epoxy primer gray Door Configuration: Pull Orientation	3.00	units		
9	Backstage				
	D-9 FIRE-EXIT STEEL DOOR Size: 900mm Width x 2050mm Height Jamb: 2x4 Single Rabbet, gauge 16 Panel: 44mm Thickness, gauge 18 Lockset: Panic exit device Hinges: Stainless steel flag hinges mounted in 3mm steel plates Coating: Epoxy primer gray Door Configuration: To Be Determined	1.00	units		
	5.00m x 3.05m Top Track Operable with Sound Insulation Panel (Door 10)	1.00	units		
	1.20m x 3.05m Top Track Operable with Sound Insulation Panel (Door 11)	1.00	units		
B.	Windows				
1	Staircase 1 & 2 Landing (Window 1)				
	Fixed Awning window with Screen (6mm Tempered Frosted, Powdered Coated Black, Hardmesh Security Screen)	10.56	m2		
2	Dressing Room (Window 2)				
	Awning Window w/ Screen (6mm Tempered Frosted, Powdered Coated Black, Hardmesh Security Screen)	1.20	m2		
3	Shower Room 1 & 2 (Window 3)				
	Awning Window w/ Screen (6mm Tempered Frosted, Powdered Coated Black, Hardmesh Security Screen)	3.00	m2		

No.	Description	Qty.	Unit	Unit Cost	Amount
4	AV Control Room (Window 4)				
	Fixed Awning window with Screen (6mm Tempered Frosted, Powdered Coated Black, Hardmesh Security Screen)	5.30	m2		
5	Office Room & Command Center (Window 5)				
	Casement Window w/ Screen (6mm Tempered Clear Glass, Powdered Coated Black, Hardmesh Security Screen)	13.20	m2		
6	Backstage Area (Window 6)				
	Fixed Glass Window (w/ Tint) (6mm Tempered Frosted Glass, Powdered Coated Black)	17.60	m2		
7	Rehearsal Room (Window 7)				
	Fixed Casement Window with Screen (6mm Tempered Frosted, Powdered Coated Black, Hardmesh Security Screen)	6.60	m2		
VIII.	Supply, Delivery and Installation of Aircondition Units and Duct Works				
A.	AV Control Room				
1	1.0 HP Wall Mounted Split Type	1	sets		
2	Copper Tubing with Rubber Insulation and Tape	4	meters		
3	Communication Wire	4	meters		
4	PVC Pipe for Condensate Drain	1	pc.		
5	Metal L-Type Bracket for Condenser	2	pcs.		
6	THHN Wire 2.0 m2	4	meters		
7	Himel Breaker with Switch Box	1	pcs.		
B.	Men's Dressing Room				
1	2.0 HP Wall Mounted Split Type	2	sets		
2	Copper Tubing with Rubber Insulation and Tape	8	meters		
3	Communication Wire	8	meters		
4	PVC Pipe for Condensate Drain	2	pc.		
5	Metal L-Type Bracket for Condenser	4	pcs.		
6	THHN Wire 2.0 m2	8	meters		
7	Himel Breaker with Switch Box	2	pcs.		
C.	Ladies' Dressing Room				
1	2.5 HP Wall Mounted Split Type	2	sets		
2	Copper Tubing with Rubber Insulation and Tape	8	meters		
3	Communication Wire	8	meters		
4	PVC Pipe for Condensate Drain	2	pc.		
5	Metal L-Type Bracket for Condenser	4	pcs.		
6	THHN Wire 2.0 m2	8	meters		
7	Himel Breaker with Switch Box	2	pcs.		
D.	Meeting Room				
1	2.5 HP Wall Mounted Split Type	1	sets		
2	Copper Tubing with Rubber Insulation and Tape	4	meters		
3	Communication Wire	4	meters		
4	PVC Pipe for Condensate Drain	1	pc.		
5	Metal L-Type Bracket for Condenser	2	pcs.		
6	THHN Wire 2.0 m2	4	meters		
7	Himel Breaker with Switch Box	1	pcs.		
E.	Piano Recording Room				
1	2.5 HP Wall Mounted Split Type	1	sets		
2	Copper Tubing with Rubber Insulation and Tape	4	meters		
3	Communication Wire	4	meters		
4	PVC Pipe for Condensate Drain	1	pc.		
5	Metal L-Type Bracket for Condenser	2	pcs.		
6	THHN Wire 2.0 m2	4	meters		
7	Himel Breaker with Switch Box	1	pcs.		

No.	Description	Qty.	Unit	Unit Cost	Amount
F.	Rehearsal Room				
1	2.5 HP Wall Mounted Split Type	3	sets		
2	Copper Tubing with Rubber Insulation and Tape	12	meters		
3	Communication Wire	12	meters		
4	PVC Pipe for Condensate Drain	3	pc.		
5	Metal L-Type Bracket for Condenser	6	pcs.		
6	THHN Wire 2.0 m2	12	meters		
7	Himel Breaker with Switch Box	3	pcs.		
G.	Backstage Area				
1	3 HP Wall Mounted Split Type	4	sets		
2	Copper Tubing with Rubber Insulation and Tape	16	meters		
3	Communication Wire	16	meters		
4	PVC Pipe for Condensate Drain	4	pc.		
5	Metal L-Type Bracket for Condenser	8	pcs.		
6	THHN Wire 2.0 m2	16	meters		
7	Himel Breaker with Switch Box	4	pcs.		
H.	Office Room				
1	2.5 HP Wall Mounted Split Type	1	sets		
2	Copper Tubing with Rubber Insulation and Tape	4	meters		
3	Communication Wire	4	meters		
4	PVC Pipe for Condensate Drain	1	pc.		
5	Metal L-Type Bracket for Condenser	2	pcs.		
6	THHN Wire 2.0 m2	4	meters		
7	Himel Breaker with Switch Box	1	pcs.		
I.	Basement Ventilation Exhaust and Fan Replacement Duct Works				
1	Basement Roof Top Exhaust Ventilator	1	units		
2	Motor Controller	1	pcs.		
3	Maintenance Breaker Switch Box	2	pcs.		
4	Max. 10 Meters Electrical Works for (Motor Controller, Bio PVC Pipes, Bio PVC Flexible Hose and Boston Wires - Load Side only)	1	lot		
IX.	Painting Works				
1	Scrapping of Existing Paint	1,302.69	m2		
2	Masonry/Concrete				
	Basement	477.70	m2		
	Equipment Storage	128.40	m2		
	Rehearsal Room	212.17	m2		
	Men's Shower Room	77.10	m2		
	Men's Dressing Room	125.49	m2		
	Ladies Shower Room	77.98	m2		
	Ladies Dressing Room	134.01	m2		
	Meeting Room 2	97.67	m2		
	Meeting Room 1	99.55	m2		
	Backstage	918.76	m2		
	HE CR	8.62	m2		
	SHE CR	6.72	m2		
	Janitor Room	34.29	m2		
	Electrical Room	45.84	m2		
	Server Room	78.81	m2		
	Command Center	78.81	m2		
	Office Room	86.57	m2		
	Control Room	55.32	m2		
	Exterior Wall	732.60	m2		

No.	Description	Qty.	Unit	Unit Cost	Amount
3	Steel Trusses				
	EPOXY PRIMER	20.00	gals.		
	EPOXY ENAMEL	20.00	gals.		
	POLYTUFF	7.00	gals.		
	EPOXY REDUCER	8.00	gals.		
	RUST CONVERTER	7.00	gals.		
	SANDING DISK	30.00	pcs		
	PAINT BRUSH 1 1/2"	25.00	pcs		
	BABY ROLLER	25.00	pcs		
4	Rubberized Floor Paint				
	Front Stage	351.53	m2		
	Backstage	570.09	m2		
X.	Mechanical Works				
1	Ventilation - HVLS Series Ceiling Fan, Aviation Aluminum Extruded Anodized (Airfoil Style), # of Airfoil: 8, 80RPM (VFD Controller) 3730CMM, 220V 1PH 60HZ Motor: Brushless Rare Earth, Permanent Magnet SKF Explorer Reinforced, IP20 14ft. diameter (4.2m) IND42-1PH (I-MXA-VNA-00037)	4.00	units		
2	Wires (4G x 2.5mm2 Control Cable)	400.00	m		
XI.	Landscaping Works				
1	Excavation	120.00	m3		
2	Garden Soil	120.00	m3		
3	Frog Grass	400.00	m2		
4	PODOCARPUS COSTALIS (Maki) approx. 2-3ft	2,500.00	pcs.		
5	PHILODENDRON SELLOUM	300.00	pcs.		
XII.	Provision for Steel Basket (3 units)				
	Flat Bar 50mm x 3mm thick x 6m	24.00	pcs.		
	B.I. (Black Iron) Tubular 25mm x 25mm x 1.5mm thick	24.00	pcs.		
	B.I. (Black Iron) Tubular 50mm x 50mm x 1.5mm thick	9.00	pcs.		
	Welding Rod	3.00	boxes		
	Paint Metal Epoxy	2.00	gals.		
XIII.	Provision of Scaffolding Rental				
	Rental per set				
	6 H - Frame (1.70 x 1.20) @ P pc. = Php 				
	12 - Cross Braces (1.80m) @ P pc. = Php 				
	2- Catwalk 0.50m x 1.80m @ P pc. = Php 				
	Joint Pin				
	Adjustable U- Head				
	8 pcs. x 1 1/4" x 600mm @ P : Php 				
	Adjustable Base Jack				
	8 pcs. x 1 1/4" x 600mm @ P Php 				
	Total Amount Per set = Php 				
	No. of Sets = 20 sets x P /Month = Php 	6.00	month		

No.	Description	Qty.	Unit	Unit Cost	Amount
XIV.	Pest Control				
1	Comprehensive termite control program includes the following: (2 year warranty) supply of chemicals, supply of materials and equipments labor and supervision	1.00	lot		
2	General Pest Control Maintenance Program (6 months contract) supply of chemicals, supply materials and equipment labor and supervision	6.00	months		
XV.	Lights Equipment				
1	4 bulb LED Molefay	12.00	units		
	4-Eyes "MOLEFAY" design Ø High-Power WW LED COB Lamps: 4 x 100W (400w) 3000 to 3200°K Ø Beam Angle: >90 degree Wide Flood Ø DMX operation - with 1 channel (4 ch. Optional) Ø Wireless DMX ready – using special 3-Pin XLR socket with 5vdc Ø Horizontal adjustment of 2-Beam columns Ø Auto operation with built-in control Ø Master-Slave operation Ø Powercon IN & OUT for mains Ø Power: 90 – 255 VAC - 50/60 Hz, @450 watts				
2	Jolly 1218 RGBW LED Par	56.00	units		
	Angle 15°/25°/45°optional • Lamp 18pcs LED, RGBW, 15W • Color Temperature 6000-6500K • Power 100-250V 50/60Hz 250w • Channel 8/14 ch • Color RGBW • Strobe 1-25/S • Linear Dimmer • LED Display • L322mm x W293mm x H134mm • Weight 5.5 kgs • IP65				
3	COB DMX200 Daylight Tungsten LED Par with Barn Door	26.00	units		
	Light Source 200w Warm+cool white • 200w Rated Power • Beam Angle 45 degrees • Dimming 0 to 100% linear Dimming • 5 DMX Channel • Control Mode DMX512 self propelled master slave voice activated • LCD Display • AC90 to 240V 50-60hz				
4	Solar Flare	8.00	units		
	Colour mixing: Linear CMY color mixing Color Temperature: 6500K Switch to high CRI mode with high CRI filter Framing shutters : 4 fast and smooth framing shutters, each shutter blade position and angle can be controlled individually; Each shutter blade can block out light completely, the framing module can be rotated at ± 45° Rotating gobo wheel: 1 rotating gobo wheel with 6 gobos plus open, convenient replacement Static gobo Wheel: 1 static gobo wheel with 8 gobos plus open Color Wheel: 1 color wheel with 5 colors plus white Prism: 4 - facet prism rotating in both directions Iris: Motorized, linear Frost: 2 new material frost filters(light & medium), can be used independent and overlay Motorized zoom and focus Outstanding strobe effect with variable speed Random strobe & pulse effects Equipped with new heat management which effectively dissipate heat and reduce noise With 2 modes: standard & power saving mode				
5	Lighting Control Console	1.00	units		
	40 electronically-labelled playback faders 15.6" main touch screen 7" secondary touchscreen 20 macro / executor buttons 3 optical attribute encoders 4 optical playback pots UPS battery backup Built-in 4-port managed gigabit network switch Ethercon for all ethernet connections OpticalCon stage link output 16 universes of ArtNet or S-ACN, expandable with Titan Net Processors 8 Physical DMX outputs on 5-pin XLR				
6	2500w Follow Spot with stand and dustcover	2.00	units		
7	DMX Splitter, Cables and Connectors	1.00	sets		

No.	Description	Qty.	Unit	Unit Cost	Amount
XVI.	Audio Equipment				
1	Front of House Speakers (suspended from roof)	12.00	units		
	120,000.00 1,440,000.00 Frequency response (-5 dB standard) 67 Hz - 18 kHz Frequency response (-5 dB CUT mode) 100 Hz - 18 kHz Max. sound pressure ₁ - with D20/30D 139 dB - with D40/D80/40D 142 dB Configuration High performance 3-way passive line array loudspeaker Nominal impedance 8 Ω Power handling capacity (RMS/peak 10 ms) 500/2000 W Nominal dispersion angle (horizontal) 80° ² Splay angle settings 0° - 14° (1° increment) Components - 2 x 10" driver / 1 x 8" driver - 2 x 1.4" exit compression driver passive crossover network Connections - 2 x NLT4 F/M - optional 2 x NL4 Dimensions (H x W x D) - 310 x 700 x 460 mm Weight 34 kg				
2	Subwoofer (under stage)	4.00	units		
	Frequency response (-5 dB standard) 37 Hz - 90 Hz Frequency response (-5 dB INFRA mode) 32 Hz - 68 Hz Max. sound pressure ₁ - with D20/30D 140 dB -with D40/D80/40D 143 dB Configuration High performance subwoofer intended for ground stacked applications Nominal impedance 4 Ω Power handling capacity (RMS/peak 10 ms) 1000/4000 W Components - 2 x 18" driver with neodymium magnet Connections - 2 x NLT4 F/M				
3	Front fill speakers (under stage)	4.00	units		
	Frequency response (-5 dB standard) 54 Hz - 19 kHz Frequency response (-5 dB CUT mode) 100 Hz - 19 kHz Max. sound pressure ₁ - with 10D 134 dB -with D20/30D 137 dB -with D40/D80/40D 139 dB High performance 2-way passive line array loudspeaker Nominal impedance 8 Ω Power handling capacity (RMS/peak 10 ms) 400/1600 W Nominal dispersion angle (horizontal) 80° Splay angle settings 0° - 14° (1° increment) Components - 2 x 8" driver with neodymium magnet - 1.4" exit compression driver passive crossover network				

No.	Description	Qty.	Unit	Unit Cost	Amount
4	4-Channel Amplified Controller	6.00	units		
	Output power (no limiter 200 ms sine bursts, 1 kHz, < 1% THD, all channels) 4 x 3300 W at 2.7 ohms 4 x 2600 W at 4 ohms 4 x 1400 W at 8 ohms Amplification class: High-efficiency Class D Maximum output voltage: 157 V (peak voltage) Architecture: 4 in x 4 out Frequency range: 20 Hz - 20 kHz (+/- 0,1 dB, 8 ohms, 60 W output power) Distortion THD+N: < 0.05% (20 Hz - 10 kHz, 8 ohms, 60 W output power) Output dynamic range: > 114 dB (20 Hz - 20 kHz, 8 ohms, A-weighted) Noise level < -72 dBV (20 Hz - 20 kHz, 8 ohms, A-weighted) Amplification gain: 32 dB Channel separation: > 85 dB (1 kHz, 4 ohms) Output delay: adjustable from 0 to 1000 ms				
5	LA8 Amplifiers	1.00	units		
	4-channel amplifier Universal switched mode power supply, 120 / 230 V (or 100 / 200 V for Japan) 4 x 1100 W / 8 Ω at 1% THD, all channels driven (4 x 1300 W peak) 4 x 1800 W/4 or 2.7 Ω at 1% THD, all channels driven (4 x 2500 W peak) Amplifier gain = 32 dB Frequency response: 10 Hz – 30 kHz, -1.5/+0 dB at 8 Ω Output noise: -67 dBV (20 Hz – 20 kHz, A-weighted) Output dynamic range: 107 dB (20 Hz – 20 kHz, A-weighted) Max input level: +22 dBu (balanced, THD 1%) Channel separation: > 85 dB (1 kHz) Input impedance: 22 kΩ, balanced AES/EBU input board: refer to the LA-AES3 spec sheet Dimensions H x W x D: 88 (2U) x 483 x 420 mm 3.5 (2U) x 19 x 16.5 in Weight (net): 12.2 kg 26.9 lbs. Finish: black and anthracite gray				
6	Loud Speaker Management System 3in / 6 out	1.00	units		
	Number of Channels:6 EQ:31-band (Graphic), 12-band (Parametric) Compressor:Yes Feedback Eliminator:Yes Analog Inputs:3 x XLR, 1 x XLR (RTA Mic) Analog Outputs:6 x XLR Computer Connectivity:1 x USB-B Rack Spaces:1U Height:1.75" Depth:8" Width:19"				

No.	Description	Qty.	Unit	Unit Cost	Amount
7	Floor Monitors	8.00	units		
	15" Neodymium Woofer 1" Kapton Dome Neodymium Tweeter 60 x 60° Dispersion 700W Digital Amplifier DSP Processing XLR and 1/4" Inputs and XLR Output AC Input and Output Connectors Integrated Handle and Pole Socket				
8	Digital Mixer	1.00	units		
	Type: Digital Mixer Channels: 40 Inputs - Mic Preamps: 32 x XLR Phantom Power: 48V, Switchable per Input Inputs - Line: 1 x Dual RCA Stereo (aux) Inputs - Other: 6 x 1/4" TRS (aux) Outputs - Main: 16 x XLR, 2 x XLR (monitor), 2 x 1/4" (monitor) Outputs - Other: 6 x 1/4" TRS (aux), 1 x Dual RCA Stereo (aux) Outputs - Digital: 1 x XLR (AES/EBU) Busses/Groups: 25 time-aligned/phase-coherent mix buses, 8 DCA groups Talkback: 1 x XLR MIDI I/O: In/Out/USB Data I/O: 1 x EtherCon (Ultraset), 2 x EtherCon (AES50), 1 x Ethernet Headphones: 2 x 1/4" TRS (stereo) USB: 1 x Type B, 1 x Type A Computer Connectivity: USB, Ethernet Faders: 16 x Input Faders, 8 x Bus Faders, 1 x Main Fader A/D Resolution: 24-bit/48kHz EQ Bands: 4-band EQ Effects: 8 x Stereo FX Engines Signal Processing: Gate, Compressor Features: 100-band RTA, 100 scenes, 100 Snippets, 32-bit/48kHz SD Card recording DAW Control: Yes Screen: 7" TFT Display Storage: 2 x SD card slots Power Source: Standard IEC AC cable				
9	32-Input / 16-Output Stage Box	1.00	units		
	32 microphone preamplifiers with switchable 48 V phantom power 16 electronically balanced low impedance line level outputs Two AES-3 ports (AES/EBU), e.g. for directly connecting PA system controllers with digital inputs, Remote operation up to 100 m via CAT5/5e cable, Rugged 3U rackmount chassis for durability in portable applications Auto-ranging universal switch-mode power supply Mute-All-Inputs function for quietly patching any inputs on stage				
10	Dual Channel Digital Wireless Receiver with 2 Handheld Transmitters	2.00	sets		
	Extended 20 Hz to 20 kHz frequency range (microphone dependent) 118 dB dynamic range, Digital predictive switching diversity 44 MHz tuning bandwidth (region dependent) 32 available channels per frequency band (region dependent) Up to 10 compatible systems per 6MHz TV band; 12 systems per 8 MHz band, Easy pairing of transmitters and receivers over IR scan and sync Portable Receiver & Plug-On Transmitter Options				
11	Wired microphones	8.00	units		
	Type: Dynamic Frequency Response: 50 to 15,000 Hz Polar Pattern: Cardioid Sensitivity (at 1,000 Hz Open circuit voltage): -54.5 dBV/Pa (1.85 mV), 1 Pa = 94 dB SPL Impedance: Rated impedance is 150 Ω (300 Ω actual) for connection to microphone inputs rated low impedance Polarity: Positive pressure on diaphragm produces positive voltage on pin 2 with respect to pin 3 Case: Dark gray, enamel-painted, die cast metal; matte-finished, silver colored, spherical steel mesh grille Connector: Three-pin professional audio connector (male XLR type)				

No.	Description	Qty.	Unit	Unit Cost	Amount
11	Pencil condenser microphones	8.00	units		
	Small-diaphragm pencil condenser microphones Packaged as a stereo pair (matched within $\pm 0.5\text{dB}$ sensitivity of each other) Cardioid pickup pattern Up to 134dB SPL Gold-plated XLR connectors Protective carry case, shock-mounted mic clips and windscreens included				
12	Mic stand with boom	16.00	units		
13	DI Box	6.00	units		
14	Equipment Rack	1.00	units		
15	Full Duplex Wireless Intercommunication System	1.00	units		
	Up to 1300ft Radius Communication Range POE Power Supply / NP-F Type Battery 450 meters Line-of-Sight Usage Grouping Talk 1.9GHz Frequency Multi-Device Cascade Connection With Professional Headphones Sidetone Function Removable Li-ion Batteries 3.55mm Headset Interface/USV-Type C Interface/Headset Interface With 1 Station, 8 Beltpack, Charging Base, High Gain Antenna, Extra Battery for Beltpacks, Cables				
XVII.	Replacement of LED Wall Frame				
1	Dismantling of Existing 168 LED Panel				
	Labor Force: Consisting of Five (5) Working Days				
	1 - Foreman @ P per day	5.00	days		
	4- skilled @ P per day = Php	5.00	days		
	4- unskilled @ P per day = Php	5.00	days		
2	New Structural Steel Framing				
	B.I. (Black Iron) Tubular 150mm x 50mm x 1.5mm thick x 6 meters	23.00	pcs.		
	Angle Bar (75mm x 75mm x 6mm thick x 6 meters)	5.00	pcs.		
	Welding Rod	2.00	boxes		
	Base Plate 6" x 10"	28.00	pcs.		
	Anchor Bolts	76.00	pcs.		
	Paint Metal Epoxy	2.00	gals.		
	Equipment Rental				
	1 - Welding Machine @ 850.00/per day	10.00	days		
3	Removal of Existing Diagonal Frame				
	Labor Force: Consisting of Two (2) Working Days				
	1 - Foreman @ P per day	2.00	days		
	4- skilled @ P per day = Php	2.00	days		
	2- unskilled @ P per day = Php	2.00	days		
4	Restoration of Existing 168 LED Panel				
	Labor Force: Consisting of Seven (7) Working Days				
	1 - Foreman @ P per day	7.00	days		
	4- skilled @ P per day = Php	7.00	days		
	4- unskilled @ P per day = Php	7.00	days		
XVIII.	Facilities For The Engineer				
1	Construction of Field Office for the Engineer	1.00	I.s.		
XIX.	Other General Requirements				
1	COA	1.00	I.s.		
2	Project Billboard	1.00	I.s.		
3	Occupational Safety and Health Program	1.00	I.s.		
4	Mobilization/Demobilization	1.00	I.s.		
	TOTAL PROJECT COST				-

Name of Company/Bidder

Signature Over Printed Name of
Authorized Representative

Date