

## 3.2 BREAKDOWN OF LUMP SUM PRICES

### 3.2.1 Preliminaries

Item	Description		Amount (S\$)
.1	Preliminaries		
1.1	Project Management and Site Co-ordination		
a)	Site staff		S\$
b)	Supervision Professional Engineer and Installation Licensed Electrical Worker		S\$
1.2	Shop Drawings		
a)	Preparation and submission of Shop Drawings		S\$
b)	Preparation and submission of updated Shop Drawings to reflect approved changes during construction period		S\$
1.3	As-built Drawings and O&M Manuals		
a)	Preparation and submission of hard copy and softcopy As-Built Drawings (not later than two(2) months before the TOP)		S\$
b)	Preparation and submission of hard copy and softcopy Operations & Maintenance Manuals (no later than One(1) month prior to start of system testing commissioning)		S\$
c)	Verification and Certification on Shop-drawings, As-Built Drawings and Operations & Maintenance Manuals by Supervision Professional Engineer and Licensed Worker		S\$
1.4	Spares, tools and consumable material as specified		S\$
1.5	Others		
a)			S\$
b)			S\$
c)			S\$
<b>Sub-Total for Preliminaries</b>			S\$ -

### **3.2.2 Air-Conditioning and Mechanical Ventilation Works**

#### **Preambles for Lump Sum Tender Price Breakdown**

##### **A General**

The itemised breakdown of the Lump Sum Tender Price as listed below shall form only as an indication of the breakdown value for this contract works.

The descriptions stated in the breakdown of the Lump Sum Tender Prices are not comprehensive. The tenderer shall price the contract work in accordance with the tender drawings and documents.

No claim for extra or otherwise shall be considered for any trade/items/works as specified and shown in the tender drawings and specifications but not described hereunder.

##### **B Air-Conditioning and Mechanical Ventilation (ACMV) Installation**

Supply and installation of ACMV equipment shall include supply, delivery, installation, testing, commissioning and other associated ancillary accessories.

Split type fan coil units and condensing units shall include air filters, thermostats and other associated ancillary accessories.

Fan coil units shall include air filters and drip-trays as supplied by manufacturers in compliance to specification.

Computer room air-conditioning units shall include air filters as supplied by manufacturers in compliance to specification.

Mechanical ventilation fans as supplied by manufacturers in compliance to specification.

Ductworks shall include marking, cutting, bending, forming bolted joints, brazing, welding and associated labour required to fabricate and erect ductwork, fittings, air leakage test and any other associated ancillary accessories.

Ductworks shall include turns, splitter dampers, fire dampers, motorised dampers, fire-rated materials, insulation, orifices, access panels, stiffeners, brackets, straps, hangers, test holes and any other associated ancillary accessories.

Air distribution devices and louvres shall complete with volume control dampers and any other associated ancillary accessories.

External weather-proof louvres shall include volume control dampers and any other associated ancillary accessories.

Supply and installation of pipe work shall include valves, fittings, equipment connections, hangers, supports, pressure testing and other associated ancillary accessories.

Refrigerant pipe shall include insulation, trunking and other associated ancillary accessories.

Condensate drain pipe shall include insulation and other associated ancillary accessories.

### Electrical Works

Electrical equipment and control panels/switchgears shall complete with necessary circuit breakers, protective devices/relays, starters, internal cabling, testing, commissioning and any other associated ancillary accessories.

Electrical power supply and control cabling work for outgoing cables from MCC/LMCP to ACMV equipment shall complete with necessary cables, cable termination glands/lugs, cable support system, insulation test and any other associated ancillary accessories.

**Lump Sum Tender Price Breakdown for Air-Conditioning and Mechanical Ventilation Works**

Item	Description			Amount (S\$)	
.1	Air-Conditioning System				
	1.1	Multi Split Air Conditioning System			
		1.1.1	Supply , delivery and installation of fan coil units, condensing units including air filters, thermostats for CUs & FCUs and accessories		
			A)	1st Storey	S\$
			B)	2nd Storey	S\$
		1.1.2	Refrigerant pipe work with necessary valves, fittings, trunking, insulation, support and accessories		
			A)	1st Storey	S\$
			B)	2nd Storey	S\$
		1.1.3	Electrical power supply and control cabling complete with cable support system and accessories for the air conditioning system (include isolators for CU and 13A S/S/O for individual FCU)		
			A)	1st Storey	S\$
			B)	2nd Storey	S\$
		1.1.4	Acoustic and vibration control with necessary attenuators, vibration isolators, neoprene pads, inertia blocks, equipment acoustic enclosure and insulation etc		S\$
		1.1.5	Others (please specify)		S\$
		1.2	Condensate Pipework		
	1.2.1		Condensate drain pipe with Insulation, fittings, supports and accessories		
			A)	1st Storey	S\$
		B)	2nd Storey	S\$	
Sub-Total for Air-Conditioning System				S\$ -	

Item	Description		Amount (S\$)
.2	Air-Conditioning Fresh Air System		
	2.1	Supply, delivery and installation of fresh air ductwork, fans, grilles & diffusers complete with necessary accessories, insulation, control dampers, painting and labelling	S\$
<b>Sub-Total for Air-Conditioning Fresh Air System</b>			S\$ -

Item	Description		Amount (S\$)
.3	Mechanical Ventilation System		
	3.1	Supply, delivery and installation of Mechanical Ventilation System complete with ductwork, fans, grilles & diffusers, all necessary accessories, internal acoustic lining, silencers, control dampers, control panels, cabling, painting and labelling for the following:	
	3.1.1	Toilet Exhaust System	
		A) 1st Storey	S\$
	3.1.2	Exhaust System	
		A) 1st Storey Store	S\$
	3.2	Acoustic and vibration control with necessary attenuators, vibration isolators, neoprene pads, inertia blocks, equipment acoustic enclosure and insulation etc	S\$
<b>Sub-Total for Mechanical Ventilation System</b>			S\$ -

Item	Description		Amount (S\$)
.4	Testing and Commissioning		
	4.1	Air-Conditioning System	S\$
	4.2	Air-Conditioning Fresh Air System	S\$
	4.3	Mechanical Ventilation System	S\$
Sub-Total for Testing and Commissioning			S\$ -

Item	Description	Amount (\$\$)
.5	Maintenance and Warranty Concurrent with Defects Liability / Maintenance Period	S\$
Sub-Total for Maintenance and Warranty Concurrent with Defects Liability / Maintenance Period		S\$ -

Item	Description		Amount (S\$)
.6	Any Other Works		
	6.1	Any other works which are necessary for the completion of the works or included in the Drawings and/or Specifications but not included above (please specify):	
	6.1.1		S\$
	6.1.2		S\$
	6.1.3		S\$
Sub-Total for Any Other Works			S\$ -

SUMMARY OF TENDER PRICES FOR AIRCONDITIONING & MECHANICAL VENTILATION WORKS

Item	Description	Amount (S\$)
.1	Sub-Total for Air-Conditioning System	S\$ -
.2	Sub-Total for Air-Conditioning Fresh Air System	S\$ -
.3	Sub-Total for Mechanical Ventilation System	S\$ -
.4	Sub-Total for Testing and Commissioning	S\$ -
.5	Sub-Total for Maintenance and Warranty Concurrent with Defects Liability / Maintenance Period	S\$ -
.6	Sub-Total for Any Other Works	S\$ -
Total Lump Sum Tender Price (Excluding GST) Carried To The Summary of Tender Prices for Mechanical and Electrical Services		S\$ -

### **3.2.3 Fire Protection Works**

#### **Preambles for Lump Sum Tender Price Breakdown**

##### **A General**

The itemised breakdown of the Lump Sum Tender Price as listed below shall form only as an indication of the breakdown value for this contract works.

The descriptions stated in the breakdown of the Lump Sum Tender Prices are not comprehensive. The tenderer shall price the contract work in accordance with the tender drawings and documents.

No claim for extra or otherwise shall be considered for any trade/items/works as specified and shown in the tender drawings and specifications but not described hereunder.

##### **B Fire Protection System Installation**

Supply and installation of fire protection system shall include supply, delivery, installation, testing, commissioning and other associated ancillary accessories.

Water tank accessories shall include inlet/outlet valves, overflow and drain, level indicators, internal and external ladders, access panels and other associated ancillary accessories.

Pumps shall include other associated ancillary accessories.

Pipework shall include valves, flow switches, fittings, support and other associated ancillary accessories.

Cabling work shall include cables, cable termination glands/lugs, cable support system, testing, commissioning and other associated ancillary accessories.

Fire-rated enclosure shall include Declaration of Compliance and Certificate of Completion.

Services and maintenance during defects liability or maintenance period shall include the supply of all labour, materials, tools, transport and everything necessary to carry out scheduled servicing and maintenance.

**Lump Sum Tender Price Breakdown for Fire Protection Works**

Item	Description	Amount (S\$)
.1	Hose Reel System	
1.1	Hose reel pipe work complete with valves, fittings, support and all necessary accessories	S\$
1.2	Hose reels without cabinet in compartment shaft complete with hoses, nozzles, hose guides and all necessary accessories	S\$
1.3	Hose reels with steel cabinets complete with hoses, nozzles, hose guides and all necessary accessories	S\$
<b>Sub-Total for Hose Reel System</b>		<b>S\$ -</b>

Item	Description	Amount (S\$)
.2	Dry Riser System	
2.1	Dry riser pipe work complete with valves, fittings, support and all necessary accessories	S\$
2.2	Landing valves complete with standby hose, strap locks and all necessary accessories	S\$
2.3	Fire Service breaching inlet connection complete with cabinet and earthing	S\$
2.4	Fire-rated enclosure to dry riser pipework	S\$
2.5	Provision of temporary riser connection during construction	S\$
<b>Sub-Total for Dry Riser System</b>		<b>S\$ -</b>

Item	Description	Amount (S\$)
3	Fire Alarm System	
3.1	New Sub Alarm Panel (SAP-1) complete with mimic section and alarm functions and 24V battery charger, Zone Chart and batteries	S\$
3.2	Linkage from Existing Main Fire Alarm Panel at 1st Storey Admin Office to New Sub-Alarm Panel (SAP-1)	S\$
3.3	Manual Call Points, alarm bells c/w strobe lights	S\$
3.4	Strobe lights	S\$
3.5	Detectors:	
3.5.1	Smoke detectors	S\$
3.6	Wiring for connecting to all field devices complete with cable support and containment system	
3.7	Mimic panels	S\$
3.8	Fire alarm signal complete with wiring, cable support and containment system to the following	
3.8.1	Lift panel (including alternate lift landing)	S\$
3.8.2	Security self-closing door (wherever applicable)	S\$
3.8.3	Fire Roller shutters	S\$
3.8.4	Others (please specify)	
	i)	S\$
	ii)	S\$
	iii)	S\$
<b>Sub-Total for Fire Alarm System</b>		<b>S\$ -</b>

Item	Description	Amount (S\$)
4	Testing and Commissioning	
4.1	Hose Reel System	S\$
4.2	Dry Riser System	S\$
4.3	Fire alarm system	S\$
<b>Sub-Total for Testing and Commisioning</b>		<b>S\$ -</b>

Item	Description	Amount (S\$)
5	Maintenance and Warranty Concurrent with Defects Liability / Maintenance Period	S\$
<b>Sub-Total for Maintenance and Warranty Concurrent with Defects Liability / Maintenance Period</b>		<b>S\$ -</b>

Item	Description	Amount (S\$)
6	Any Other Works	
6.1	Any other works which are necessary for the completion of the works or included in the Drawings and/or Specifications but not included above (please specify):	
6.1.1		S\$
6.1.2		S\$
6.1.3		S\$
<b>Sub-Total for Any Other Works</b>		<b>S\$ -</b>

**SUMMARY OF TENDER PRICES FOR FIRE PROTECTION WORKS**

Item	Description	Amount (S\$)
.1	Sub-Total for Hose Reel System	S\$ -
.2	Sub-Total for Dry Riser System	S\$ -
.3	Sub-Total for Fire Alarm System	S\$ -
.4	Sub-Total for Testing and Commisioning	S\$ -
.5	Sub-Total for Maintenance and Warranty Concurrent with Defects Liability / Maintenance Period	S\$ -
.6	Sub-Total for Any Other Works	S\$ -
<b>Total Lump Sum Tender Price (Excluding GST) Carried To The Summary of Tender Prices for Mechanical and Electrical Services</b>		<b>S\$ -</b>



### **3.2.4 Plumbing and Sanitary Works**

#### **Preambles for Lump Sum Tender Price Breakdown**

##### **A General**

The itemised breakdown of the Lump Sum Tender Price as listed below shall form only as an indication of the breakdown value for this contract works.

The descriptions stated in the breakdown of the Lump Sum Tender Prices are not comprehensive. The tenderer shall price the contract work in accordance with the tender drawings and documents.

No claim for extra or otherwise shall be considered for any trade/items/works as specified and shown in the tender drawings and specifications but not described hereunder.

##### **B Plumbing and Sanitary System Installation**

Plumbing and sanitary system shall include supply, delivery, installation, testing, commissioning and other associated ancillary accessories

Water tank accessories shall include inlet/outlet valves, overflow and drain, level indicators, internal and external ladders, access panels and other associated ancillary accessories.

Pumps shall include other associated ancillary accessories.

Pipework shall include valves, flow switches, fittings, support and other associated ancillary accessories.

Services and maintenance during defects liability or maintenance period shall include the supply of all labour, materials, tools, transport and everything necessary to carry out scheduled servicing and maintenance.

Swimming pool filtration system, sump pump / ejector system shall include design, PE endorsement and authority submission.

**Lump Sum Tender Price Breakdown for Plumbing, Sanitary and Gas Works**

Item	Description		Amount (S\$)
.1	Potable Water System		
	1.1	<b>Pipe Works</b>	
		Supply and installation of potable water pipe work complete with supports, valves, fittings, fire-stops and accessories for the portions	
	A)	To protect and divert existing 2nos. 50mm dia. cold water pipe (underground and aboveground)	S\$
	B)	From diverted cold water pipe to main water riser	S\$
	C)	From main water riser / dropper to main branch-off points on all floors including main droppers to fittings	
	i)	1st Storey	S\$
	ii)	2nd Storey	S\$
	iii)	Roof Terrace	S\$
<b>Sub Total for Potable Water System</b>			<b>S\$ -</b>

Item	Description		Amount (S\$)
.2	Hot Water System		
	2.1	Electric Storage Water Heater	
	A)	Supply, delivery and installation of water heaters complete with supports, safety outlet drain, wiring and accessories	
	i)	1st Storey	S\$
	ii)	2nd Storey	S\$
<b>Sub Total for Hot Water System</b>			<b>S\$ -</b>

Item	Description		Amount (S\$)
.3	Sanitary Drainage System		
	3.1	Underground Sanitary Drainage	
	A)	Supply and installation of sanitary drain lines, haunching and accessories	S\$
	B)	Supply and installation of inspection chambers, cast-iron covers, floor traps, gully traps, and accessories	S\$
	C)	Supply and installation of dilution tank and accessories	S\$
	D)	Piling for underground sanitary pipework, inspection chambers and dilution tank	S\$
	E)	Connection from new IC to existing IC within site	S\$
	F)	Pre and post CCTV inspection for sewer line condition	S\$

Item	Description		Amount (S\$)
	3.2	Aboveground Sanitary Drainage	
	A)	Supply and installation of sanitary drainage system (aboveground), comprising soil, waste and vent pipes, floor drains, floor traps, fire stops and accessories connecting to inspection chambers and dilution tank	
	i)	Main stacks	S\$
	ii)	Branch pipe tee off from main stacks	
	a)	1st Storey	S\$
	b)	2nd Storey	S\$
	c)	Roof Terrace	S\$
<b>Sub Total for Sanitary Drainage System</b>			<b>S\$ -</b>

Item	Description		Amount (S\$)
.4	Sanitary Wares and Fittings		
	4.1	Taking delivery and installation of sanitary wares and fittings complete with supports, jointing and sealing compounds. (Sanitary wares and fittings shall be supplied by Others)	
	A)	1st Storey	S\$
	B)	2nd Storey	S\$
	C)	Roof Terrace	S\$
<b>Sub Total for Sanitary Wares and Fittings</b>			<b>S\$ -</b>

Item	Description		Amount (S\$)
.5	Testing and Commissioning		
	5.1	Potable Water System	S\$
	5.2	Hot Water System	S\$
	5.3	Sanitary Drainage System	S\$
<b>Sub Total for Testing and Commissioning</b>			<b>S\$ -</b>

Item	Description		Amount (S\$)
.6	Maintenance and Warranty Concurrent with Defects Liability / Maintenance Period		
	6.1	Potable Water System	S\$
	6.2	Hot Water System	S\$
	6.3	Sanitary Drainage System	S\$
<b>Sub Total for Maintenance and Warranty Concurrent with Defects Liability / Maintenance Period</b>			<b>S\$ -</b>

Item	Description	Amount (S\$)
.7	Any Other Works Any other works which are necessary for the completion of the works or included in the Drawings and/or Specifications but not included above (please specify):	
i)		S\$
ii)		S\$
iii)		S\$
<b>Sub Total for Any Other Works</b>		<b>S\$ -</b>

**SUMMARY OF TENDER PRICES FOR PLUMBING AND SANITARY WORKS**

Item	Description	Amount (S\$)
.1	Sub Total for Potable Water System	S\$ -
.2	Sub Total for Hot Water System	S\$ -
.3	Sub Total for Sanitary Drainage System	S\$ -
.4	Sub Total for Sanitary Wares and Fittings	S\$ -
.5	Sub Total for Testing and Commissioning	S\$ -
.6	Sub Total for Maintenance and Warranty Concurrent with Defects Liability / Maintenance Period	S\$ -
.7	Sub Total for Any Other Works	S\$ -
<b>Total Lump Sum Tender Price (Excluding GST) Carried To The Summary of Tender Prices for Mechanical and Electrical Services</b>		<b>S\$ -</b>

### **3.2.5 Electrical Works**

#### **Preambles for Lump Sum Tender Price Breakdown**

##### **A General**

- 1 The itemised breakdown of the Lump Sum Tender Price as listed below shall form only as an indication of the breakdown value for this contract works.
- 2 The descriptions stated in the breakdown of the Lump Sum Tender Prices are not comprehensive. The tenderer shall price the contract work in accordance with the tender drawings and documents.
- 3 No claim for extra or otherwise shall be considered for any trade/items/works as specified and shown in the tender drawings and specifications but not described hereunder.

##### **B Electrical Installation**

- 1 Supply and installation of Electrical equipment shall include supply, delivery, installation, testing, commissioning and other associated ancillary accessories
- 2 Distribution boards shall include busbars, moulded case circuit breakers, miniature circuit breakers, residual current circuit breakers, time switches and other associated ancillary accessories as specified.
- 3 Final circuits for lightings shall include wirings, cable support and containment systems, lighting switches and other associated ancillary accessories as specified. (50m run)
- 4 Final circuits for small power and isolator shall include wirings, cable support and containment systems, switch socket outlets, isolators and other associated ancillary accessories as specified. (50m run)
- 5 Light fittings and fixtures shall include lamps, control gears, starters, brackets and other associated ancillary accessories as specified.
- 6 External street light fittings and fixtures shall include lamps, control gears, starters, brackets, lamp posts and other associated ancillary accessories as specified.
- 7 Exit signs and emergency light fittings and fixtures shall include lamps, control gears, starters, brackets, battery packs and other associated ancillary accessories as specified.
- 8 Security systems shall include uninterruptible power supply, servers, workstations, equipment racks, application softwares, firewall softwares, cabling and other associated ancillary accessories as specified.
- 9 Power, data and control cabling systems shall include cable support and containment systems and other associated ancillary accessories as specified.
- 10 EVC/PA system equipment shall include equipment paging consoles, racks, amplifiers, tuners, CD players, fault monitoring panels, over-riding switch, UPS, hardwares, softwares and other associated ancillary accessories as specified
- 11 Speakers shall include housings, mounting brackets and other associated ancillary accessories as specified.

- 12 Lightning protection system shall include roof conductors, air terminals, equipotential bonding to metallic parts, down conductors, earth electrodes, earth pits and other associated ancillary accessories as specified
- 13 Main earthing system shall include earth continuity conductors, copper tapes, earth bars, equipotential bondings, earth rods, earth pits and other associated ancillary accessories as specified
- 14 Services and maintenance during defects liability or maintenance period shall include the supply of all labour, materials, tools, transport and everything necessary to carry out scheduled servicing and maintenance as specified.
- 15 The electrical Contractor is strongly encouraged to engage the existing Building Licensed Electrical Worker (LEW) as their Installation LEW.
- 16 The electrical Contractor is to liaise, co-ordinate with, submit and obtain approval from the existing Building Licensed Electrical Worker (LEW) for any associated electrical works such as tapping of electrical supply from existing electrical switchboard/s. All associated cost such as LEW attendance fee, LEW switching cost, etc shall be deemed included in your tender price.

**Lump Sum Tender Price Breakdown for Electrical Works**

Item	Description	Amount (S\$)
1	LV Sub-Switchboard	
	LV Sub-Switchboard complete with circuit breakers, metering, protection devices, terminal blocks, cable boxes, etc.	
	1.1 Modification/Replacement of existing MCCB at tap-off unit	S\$
	1.2 Sub-switchboard	S\$
Sub-Total for LV Switchboards		S\$ -

Item	Description	Amount (S\$)
2	Sub-Main Distribution System	
	2.1 From Existing Tap-Off Unit at Primary Block 2nd storey electrical riser to SB-KGB	S\$
	2.2 From SB-KGB to distribution boards at	
	a) 1st Storey	S\$
	b) 2nd Storey	S\$
Sub-Total for Sub-Main Distribution System		S\$ -

Item	Description	Amount (S\$)
3	Distribution Boards ( DB & EDB)	
	3.1 Distribution boards at 1st Storey	S\$
	3.2 Distribution boards at 2nd Storey	S\$
Sub-Total for Distribution Boards ( DB & EDB)		S\$ -

Item	Description	Amount (S\$)
4	Final Circuit Wiring	
	4.1 Final circuits for lightings	
	Lighting subcircuits including wiring, trunking/conduits, conduit accessories, etc for the following areas:	
	a) 1st Storey	S\$
	b) 2nd Storey	S\$
	c) Roof Terrace	S\$
	4.2 Final circuits for small power and electrical isolators	
	Power subcircuits including wiring, trunking/ conduits, conduit accessories, etc for the following areas:	
	a) 1st Storey	S\$
	b) 2nd Storey	S\$
	c) Roof Terrace	S\$
Sub-Total for Final Circuit Wiring		S\$ -

Item	Description		Amount (S\$)
5	Lighting and Small Power Installation		
5.1	Supply and Installation of Lighting for the following areas		
	a)	1st Storey	S\$
	b)	2nd Storey	S\$
	c)	Roof Terrace	S\$
5.2	Supply and installation of small power socket outlets, isolators, connector units, etc. for the following areas:		
	a)	1st Storey	S\$
	b)	2nd Storey	S\$
	c)	Roof Terrace	S\$
Sub-Total for Lighting and Small Power Installation			S\$ -

Item	Description		Amount (S\$)
6	Telephone Cabling System		
	6.1	Telecommunication cables from the existing Telecom Distribution Panel in Admin Office (Primary Block) to 1st storey ELV riser including cable trays, conduits, trunking c/w brackets and accessories	S\$
	6.2	Telecommunication cables from Distribution Panels to the data / voice outlets including face plates, conduits and accessories	S\$
	6.3	Equipment such as FTP, DP and accessories	S\$
Sub-Total for Telephone Cabling System			S\$ -

Item	Description		Amount (S\$)
7	IT Structured Cabling System		
	7.1	FO cables from the new Fibre Optics Termination Panel in existing IT server room at Admin Office (Primary Block) to 1st storey ELV riser including cable trays, conduits, trunking c/w brackets and accessories	S\$
	7.2	Distribution cables from patch panel to data points including conduits, faceplate outlets and accessories	S\$
	7.3	Equipment such as Fibre Optic Termination Panel , patch panels and accessories	S\$
Sub-Total for IT Structured Cabling System			S\$ -

Item	Description		Amount (S\$)
8	Security System		
8.1	CCTV System		
	a)	Application softwares complete with servers, workstations, firewall softwares and accessories	S\$
	b)	Camera Brackets/Poles/Accessories	S\$
	c)	CCTV Camera with associated lens and housing	S\$
Sub-Total for Security System			S\$ -

Item	Description		Amount (S\$)
9	Public Address System		
	9.1	System equipment including equipment paging console, rack, amplifier, tuner, CD player, fault monitoring panel, UPS and all necessary hardware and software	S\$
	9.2	Indoor and outdoor speakers including all necessary cablings, housing, mounting bracket, etc	S\$
Sub-Total for Public Address System			S\$ -



Item	Description	Amount (S\$)
10	PWD Intercom System	
10.1	Master PWD intercom panel complete with standby battery and charger, LED status and handsets, etc including controls wiring in conduit/trunkings and all necessary accessories	S\$
10.2	Remote PWD intercom panels complete with controls wiring in conduit/trunkings and all necessary accessories	S\$
Sub-Total for PWD Intercom System		S\$ -

Item	Description	Amount (S\$)
11	Lightning Protection System	
	Supply and installation of Lightning Protection System including roof conductors, earth electrodes, earth pits etc. and testing of the system	
11.1	Roof conductors and air terminals including accessories	S\$
11.2	Equipotential bonding to outdoor / external metallic parts	S\$
11.3	Down conductors including accessories	S\$
Sub-Total for Lightning Protection System		S\$ -

Item	Description	Amount (S\$)
12	Standby Generator System	
	Weatherproof Outdoor Generator set complete with weatherproof acoustic enclosure, automatic main failure panels, exhaust piping, silencers, protection devices, fuel tanks, accessories, etc.	S\$
Sub-Total for Standby Generator System		S\$ -

Item	Description	Amount (S\$)
13	Other Systems	
12.1	<u>Emergency Call Bell system for Handicap Toilets</u> 1 lot of emergency call bell system including conduits, cablings, panels, etc	S\$
12.2	<u>Fire Stopping</u> One lot of fire stops and fire proofing materials	S\$
Sub-Total for Other Systems		S\$ -

Item	Description	Amount (S\$)
14	Licensing	
	Licensing fees for the electrical installation from date of 'TURN-ON' to end of Defects Liability Period	S\$
Sub-Total for Licensing		S\$ -

Item	Description	Amount (S\$)
15	Testing and Commissioning	
15.1	LV Sub-Switchboard	S\$
15.2	Sub-Main Distribution System	S\$
15.3	Distribution Boards	S\$
15.4	Final Circuit Wiring	S\$
15.5	Lighting and Small Power Installation	S\$
15.6	Telephone Cabling System	S\$
15.7	IT Structured Cabling System	S\$
15.8	Security System	S\$
15.9	Public Address System	S\$
15.10	PWD Intercom System	S\$
15.11	Lightning Protection System	S\$
15.12	Standby Generator System	S\$
15.13	Other Systems	S\$
Sub-Total for Testing and Commissioning		S\$ -

Item	Description	Amount (S\$)
16	Maintenance and Warranty Concurrent with Defects Liability / Maintenance Period	S\$
Sub-Total for Maintenance and Warranty Concurrent with Defects Liability / Maintenance Period		S\$ -

Item	Description	Amount (S\$)
17	Any Other Works	
	Any other works which are necessary for the completion of the works or included in the Drawings and/or Specifications but not included above (please specify):	
A)	Liaising, Co-ordination with Existing Building LEW	S\$
B)		S\$
C)		S\$
D)		S\$
Sub-Total for Any Other Works		S\$ -

**SUMMARY OF TENDER PRICES FOR ELECTRICAL WORKS**

Item	Description	Amount (S\$)
1	Sub-Total for LV Switchboard	S\$ -
2	Sub-Total for Sub-Main Distribution System	S\$ -
3	Sub-Total for Distribution Boards	S\$ -
4	Sub-Total for Final Circuit Wiring	S\$ -
5	Sub-Total for Lighting and Small Power Installation	S\$ -
6	Sub-Total for Telephone Cabling System	S\$ -
7	Sub-Total for IT Structured Cabling System	S\$ -
8	Sub-Total for Security System	S\$ -
9	Sub-Total for Public Address System	S\$ -
10	Sub-Total for PWD Intercom System	S\$ -
11	Sub-Total for Lightning Protection System	S\$ -
12	Sub-Total for Standby Generator System	S\$ -
13	Sub-Total for Other Systems	S\$ -
14	Sub-Total for Licensing	S\$ -
15	Sub-Total for Testing and Commissioning	S\$ -
16	Sub-Total for Maintenance and Warranty Concurrent with Defects Liability / Maintenance Period	S\$ -
17	Sub-Total for Any Other Works	S\$ -
<b>Total Lump Sum Tender Price (Excluding GST) Carried To The Summary of Tender Prices for Mechanical and Electrical Services</b>		<b>S\$ -</b>

### **3.2.6 Lift Works**

#### **Preambles for Lump Sum Tender Price Breakdown**

##### **A General**

- 1 The itemised breakdown of the Lump Sum Tender Price as listed below shall form only as an indication of the breakdown value for this contract works.
- 2 The descriptions stated in the breakdown of the Lump sum Tender Prices are not comprehensive. The tenderer shall price the contract work in accordance with the tender drawings and documents
- 3 No claim for extra or otherwise shall be considered for any trade/items/works as specified and shown in the tender drawings and specifications but not described hereunder.

##### **B Lift System Installation**

- 1 Lift System shall include complete traction machine, lift car and hoist way equipment, control panels, Emergency Power Supply System, landing doors, hall fixtures, wiring etc as per fixtures, wirings etc per requirements of technical specification and drawings.
- 2 Ceiling finishes shall include light fittings complete with cabling, cable support system and necessary accessories.
- 3 Interfacing works with other services and systems shall include all necessary accessories as required.
- 4 Cabling works for power distribution system shall include all necessary cable trays, trunkings, GI conduits, flexible conduits as required.
- 5 Communication travelling control cable shall include all necessary accessories as required for CCTV, Access Control Reader, PA System.
- 6 Supply and installation of Lift Supervisory System shall include supply, delivery, installation, testing, commissioning and other associated ancillary accessories.
- 7 Lift supervisory panel shall include wiring, computer system, hardware and software etc.
- 8 Lift intercom system shall include wiring, master intercom console, slave intercom handset etc.
- 9 Cabling work from lift motor/ motor room to main lift supervisory panel shall include cable support system, excavation, MCT, etc, if required.
- 10 Services and maintenance during defects liability or maintenance period shall include the supply of all labour, materials, tools, transport and everything necessary to carry out scheduled servicing and maintenance as specified.

**Lump Sum Tender Price Breakdown for Lift Works**

Item	Description		Amount (S\$)
1	Passenger/Evacuation Lift		
1.1	Passenger/Evacuation Lift Complete with traction machine, lift car and hoist way equipment, control panels, UPS, landing doors, hall fixtures, wiring etc as per fixtures, wiring etc per requirements of technical specification and drawings		S\$
1.2	Lift finishes as per specification		
	a)	Wall finishes	S\$
	b)	Floor finishes	S\$
	c)	Ceiling finishes including light fittings complete with cabling, cable support system and necessary accessories	S\$
1.3	Interfacing works with other services and systems including all necessary accessories as required		S\$
1.4	Lighting and switch socket outlet as specified for lift shaft and lift pit		S\$
1.5	Cabling works for power distribution system including all necessary cable trays, trunkings, GI conduits, flexible conduits as required		S\$
1.6	Communication travelling control cable include all necessary accessories as required for CCTV, PA		S\$
1.7	Canvas padding protection necessary for lift car interior complete with hooks after completion		S\$
1.8	a)	Associated builder's works	
	i)	trimmer beams	S\$
	ii)	catladder	S\$
	iii)	brackets	S\$
	iv)	hoisting hooks	S\$
1.9	Any other works or equipment not covered by the above items but are required in the specification and drawings to complete the works as whole (If not stated and allowed herein shall be deemed to be included in the breakdown items)		
	i)		S\$
	ii)		S\$
	iii)		S\$
Sub-Total for Passenger/Evacuation Lift			

Item	Description	Amount (S\$)
2	Lift Supervisory System	
2.1	Lift supervisory panel (mimic panel) complete with wiring, indication lights, key switches and necessary accessories	S\$
2.2	Lift intercom system complete with wiring, master intercom console, slave intercom handset etc	S\$
2.3	Cabling work from lift motor/ motor room to lift supervisory panel complete with cable support system, excavation, MCT, etc., if required	S\$
Sub-Total for Lift Supervisory System		S\$ -

Item	Description	Amount (S\$)
.3	Testing and Commissioning	
3.1	Passenger/Evacuation Lift	S\$
3.2	Lift supervisory system	S\$
Sub-Total for Testing and Commissioning		S\$ -

Item	Description	Amount (S\$)
.4	Maintenance and Warranty Concurrent with Defects Liability / Maintenance Period	S\$
Sub-Total for Maintenance and Warranty Concurrent with Defects Liability / Maintenance Period		S\$ -

Item	Description	Amount (S\$)
.5	Any Other Works Any other works which are necessary for the completion of the works or included in the Drawings and/or Specifications but not included above (please specify):	
i)		S\$
ii)		S\$
iii)		S\$
Sub-Total for Any Other Works		S\$ -

**SUMMARY OF TENDER PRICES FOR LIFT WORKS**

<b>Item</b>	<b>Description</b>	<b>Amount (S\$)</b>
1	Sub-Total for Passenger/Evacuation Lift	S\$ -
2	Sub-Total for Lift Supervisory System	S\$ -
3	Sub-Total for Testing and Commissioning	S\$ -
4	Sub-Total for Maintenance and Warranty Concurrent with Defects Liability / Maintenance Period	S\$ -
5	Sub-Total for Any Other Works	S\$ -
<b>Total Lump Sum Tender Price (Excluding GST) Carried To The Summary of Tender Prices for Mechanical and Electrical Services</b>		<b>S\$ -</b>