



JKR WILAYAH PERSEKUTUAN PUTRAJAYA



KEMENTERIAN KOMUNIKASI

TAKLIMAT SEBUT HARGA BAGI

TAWARAN SEMULA KERJA-KERJA PENGGANTIAN 75 UNIT *VARIABLE SPEED DRIVE (VSD)* SERTA KERJA-KERJA LAIN YANG BERKAITAN DI KEMENTERIAN KOMUNIKASI, LOT 4G9, PRESINT 4, PUTRAJAYA

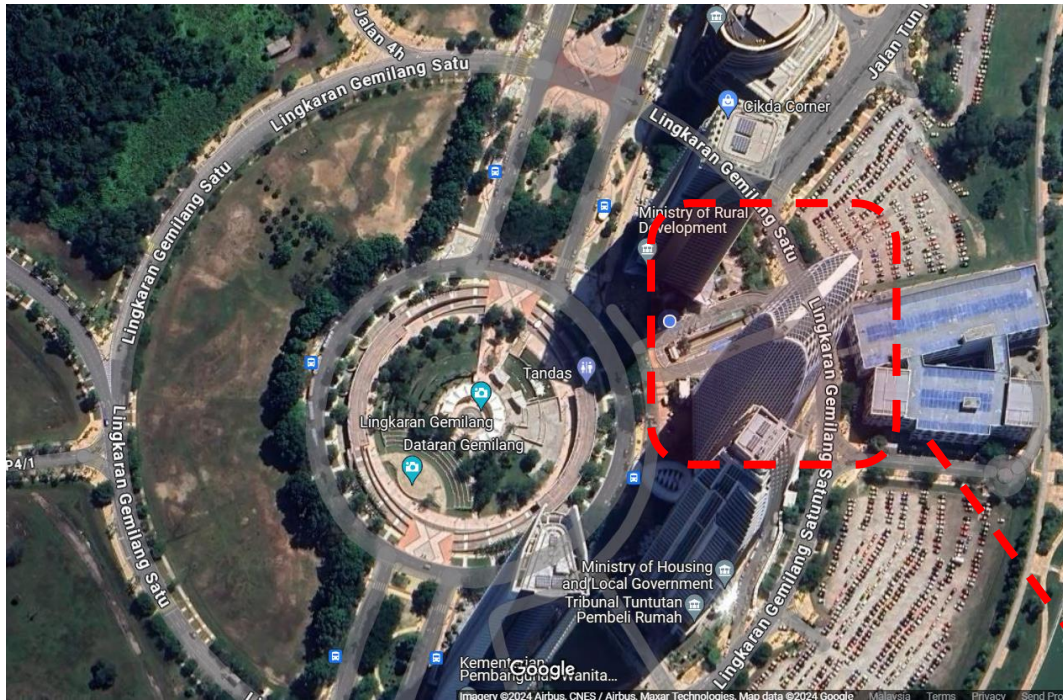
NO. SEBUT HARGA : JKR/WPP/Q/96/2026

DISEDIAKAN OLEH :
JABATAN KERJA RAYA WILAYAH PERSEKUTUAN PUTRAJAYA
BLOK F7, KOMPLEKS F,
PUSAT PENTADBIRAN KERAJAAN PERSEKUTUAN,
62000 PUTRAJAYA

PERINGATAN !!!

**DOKUMEN TENDER HARUS DIBACA BERSEKALI DENGAN
SCOPE OF WORK AND TECHNICAL SPECIFICATIONS**

PELAN TAPAK DAN LOKASI



KEMENTERIAN KOMUNIKASI, LOT 4G9
Pusat Pentadbiran Kerajaan Persekutuan, 51
Persiaran Perdana, Presint 4
62100, Wilayah Persekutuan Putrajaya

Koordinat Lokasi:
2°56'15.3"N, 101°41'12.8"E

KERJA-KERJA PENGGANTIAN 75 UNIT *VARIABLE SPEED DRIVE* (VSD) SERTA KERJA-KERJA LAIN YANG BERKAITAN DI KEMENTERIAN KOMUNIKASI, LOT 4G9, PRESINT 4, PUTRAJAYA



NOTIS SEBUT HARGA



JKR WILAYAH PERSEKUTUAN PUTRAJAYA NOTIS SEBUT HARGA

NO. SEBUT HARGA : JKR / WPP / Q / 96 / 2026

TAWARAN SEMULA KERJA-KERJA PENGGANTIAN 75 UNIT *VARIABLE SPEED DRIVE* (VSD) SERTA KERJA-KERJA LAIN YANG BERKAITAN DI KEMENTERIAN KOMUNIKASI, LOT 4G9, PRESINT 4, PUTRAJAYA

1. Sebut Harga adalah dipelawa daripada kontraktor-kontraktor yang berdaftar dengan Lembaga Pembangunan Industri Pembinaan Malaysia (CIDB) di Wilayah Persekutuan Putrajaya, Wilayah Persekutuan Kuala Lumpur, Negeri Selangor dan mempunyai Perakuan Pendaftaran Kontraktor (PPK), Sijil Taraf Bumiputera (STB), serta Sijil Perolehan Kerja Kerajaan (SPKK) yang masih sah dalam Gred G3 di bawah kategori ME, Pengkhususan M01 (Sistem hawa dingin dan pengedaran udara).

(Tempoh sah sijil-sijil hendaklah tidak kurang 90 hari dari tarikh tutup iklan ini)

2. Lawatan tapak adalah TIDAK DIWAJIBKAN. Surat Kebenaran Khas CIDB adalah tidak dibenarkan.
3. Kontraktor dikehendaki membuat semakan kelayakan melalui pautan <https://s3pk.jkr.gov.my/pc5/IklanDetails.aspx?refNo=PRO260811160448199> atau melalui imbasan QR Kod di bawah bermula dari tarikh 17/8/2026 bermula jam 12:00 tengah malam sehingga 18/8/2026 jam 11:45 malam sahaja. Sila klik butang Berminat untuk mendapatkan Dokumen Sebut Harga.
4. Emel yang mengandungi nombor siri unik akan dihantar melalui EMEL RASMI SYARIKAT YANG AKTIF SAHAJA (Emel persendirian tidak dibenarkan). Dokumen Sebut Harga boleh dimuat turun dari laman sesawang S3PK, bermula dari 20/8/2026 sehingga 24/8/2026 setelah menerima emel nombor siri.
5. Dokumen Sebut Harga dalam bentuk salinan cetak (*hardcopy*) yang telah lengkap diisi hendaklah dihantar dengan serahan tangan atau perkhidmatan pos dan dimasukkan ke dalam Peti Tawaran Sebut Harga JKR WPP, Aras 2, Bahagian Kontrak & Ukur Bahan Jabatan Kerja Raya Wilayah Persekutuan Putrajaya, Blok F7, Kompleks F Pusat Pentadbiran Kerajaan Persekutuan, 62000 Putrajaya TIDAK LEWAT DARI JAM 12.00 tengah hari, hari Khamis, 27/8/2026.
6. Sebarang pertanyaan sila emel ke mkanwar@jkr.gov.my.




(Ir. SAPARUDIN BIN LOLONG)
Jurutera Elektrik Penguasa Kanan
Bahagian Bangunan Kerajaan 3
JKR Wilayah Persekutuan Putrajaya

Tarikh: 11/8/2026

RINGKASAN SKOP KERJA

The Contractor shall undertake to carry out the following scope of works for the equipment and systems required for the proposed project. The specifications and requirements under this section cover the general scope of works for the whole project:

- I. To supply, install and configure all the new components as stated in Bill of Quantities (BQ) or Ringkasan Sebut Harga.
 - a) To supply and install one (1) unit of variable speed drive (VSD), rated at 4 kW, complete with all necessary accessories.
 - b) To supply and install one (2) unit of variable speed drive (VSD), rated at 5.5 kW, complete with all necessary accessories.
 - c) To supply and install one (12) unit of variable speed drive (VSD), rated at 7.5 kW, complete with all necessary accessories.
 - d) To supply and install one (45) unit of variable speed drive (VSD), rated at 11 kW, complete with all necessary accessories.
 - e) To supply and install one (6) unit of variable speed drive (VSD), rated at 15 kW, complete with all necessary accessories.
 - f) To supply and install one (2) unit of variable speed drive (VSD), rated at 18.5 kW, complete with all necessary accessories.
 - g) To supply and install one (1) unit of variable speed drive (VSD), rated at 22 kW, complete with all necessary accessories.
 - h) To supply and install one (2) unit of variable speed drive (VSD), rated at 37 kW, complete with all necessary accessories.
 - i) To supply and install one (4) unit of variable speed drive (VSD), rated at 90 kW, complete with all necessary accessories.
 - j) To configure LonWorks communication between the new VSDs and Building Control System (BCS).
- II. To dismantle and remove from site all components that are being replaced for the above system.



SPEKIFIKASI TEKNIKAL

ITEM	DESCRIPTION	REQUIREMENT
1	VARIABLE SPEED DRIVE (VSD) 4 kW	
	Type	Variable Speed Drive (VSD)
	Rated Motor Capacity	4 kW
	Rated Output Current	Minimum 9.5 A
	Input Supply	380-480 VAC, 3 Phase, 5-/60 Hz
	Application	Air handling unit (AHU), chilled water pump, ventilation fan
	Control Method	Sensorless vector control and V/f control
	System Compatibility	Compatible with existing BMS, PLC, SCADA and HVAC controls
	Network Communication	Built-in RS485 Modbus RTU
	Protection	Overcurrent, overload, earth fault, short circuit, phase loss, over/under voltage, overtemperature
	Protection Rating	Minimum IP55
	EMC	IEC/EN 61800-3 Category C2 or equivalent
	Safety	Integrated Safe Torque Off (STO) SIL3/PLe or equivalent
	Certification	IEC 61800 series, IEC 61000, IEC 60529, CE and RoHS where applicable
	Warranty (years)	To be specified by tenderer

ITEM	DESCRIPTION	REQUIREMENT
2	VARIABLE SPEED DRIVE (VSD) 5.5 kW	
	Type	Variable Speed Drive (VSD)
	Rated Motor Capacity	5.5 kW
	Rated Output Current	Minimum 12 A
	Input Supply	380-480 VAC, 3 Phase, 50/60 Hz
	Application	Air handling unit (AHU), chilled water pump, ventilation fan
	Control Method	Sensorless vector control and V/f control
	System Compatibility	Compatible with existing BMS, PLC, SCADA and HVAC controls
	Network Communication	Built-in RS485 Modbus RTU
	Protection	Overcurrent, overload, earth fault, short circuit, phase loss, over/under voltage, overtemperature
	Protection Rating	Minimum IP55
	EMC	IEC/EN 61800-3 Category C2 or equivalent
	Safety	Integrated Safe Torque Off (STO) SIL3/PLe or equivalent
	Certification	IEC 61800 series, IEC 61000, IEC 60529, CE and RoHS where applicable
	Warranty (years)	To be specified by tenderer



SPEKIFIKASI TEKNIKAL

ITEM	DESCRIPTION	REQUIREMENT
3	VARIABLE SPEED DRIVE (VSD) 7.5 kW	
	Type	Variable Speed Drive (VSD)
	Rated Motor Capacity	7.5 kW
	Rated Output Current	Minimum 16 A
	Input Supply	380-480 VAC, 3 Phase, 50/60 Hz
	Application	Air handling unit (AHU), chilled water pump, ventilation fan
	Control Method	Sensorless vector control and V/f control
	System Compatibility	Compatible with existing BMS, PLC, SCADA and HVAC controls
	Network Communication	Built-in RS485 Modbus RTU;
	Protection	Overcurrent, overload, earth fault, short circuit, phase loss, over/under voltage, overtemperature
	Protection Rating	Minimum IP55
	EMC	IEC/EN 61800-3 Category C2 or equivalent
	Safety	Integrated Safe Torque Off (STO) SIL3/PLe or equivalent
	Certification	IEC 61800 series, IEC 61000, IEC 60529, CE and RoHS where applicable
	Warranty (years)	To be specified by tenderer

ITEM	DESCRIPTION	REQUIREMENT
4	VARIABLE SPEED DRIVE (VSD) 11 kW	
	Type	Variable Speed Drive (VSD)
	Rated Motor Capacity	11 kW
	Rated Output Current	Minimum 25 A
	Input Supply	380-480 VAC, 3 Phase, 50/60 Hz
	Application	Air handling unit (AHU), chilled water pump, ventilation fan
	Control Method	Sensorless vector control and V/f control
	System Compatibility	Compatible with existing BMS, PLC, SCADA and HVAC controls
	Network Communication	Built-in RS485 Modbus RTU;
	Protection	Overcurrent, overload, earth fault, short circuit, phase loss, over/under voltage, overtemperature
	Protection Rating	Minimum IP55
	EMC	IEC/EN 61800-3 Category C2 or equivalent
	Safety	Integrated Safe Torque Off (STO) SIL3/PLe or equivalent
	Certification	IEC 61800 series, IEC 61000, IEC 60529, CE and RoHS where applicable
	Warranty (years)	To be specified by tenderer



SPEKIFIKASI TEKNIKAL

ITEM	DESCRIPTION	REQUIREMENT
5	VARIABLE SPEED DRIVE (VSD) 15 kW	
	Type	Variable Speed Drive (VSD)
	Rated Motor Capacity	15 kW
	Rated Output Current	Minimum 32 A
	Input Supply	380-480 VAC, 3 Phase, 50/60 Hz
	Application	Air handling unit (AHU), chilled water pump, ventilation fan
	Control Method	Sensorless vector control and V/f control
	System Compatibility	Compatible with existing BMS, PLC, SCADA and HVAC controls
	Network Communication	Built-in RS485 Modbus RTU;
	Protection	Overcurrent, overload, earth fault, short circuit, phase loss, over/under voltage, overtemperature
	Protection Rating	Minimum IP55
	EMC	IEC/EN 61800-3 Category C2 or equivalent
	Safety	Integrated Safe Torque Off (STO) SIL3/PLC or equivalent
	Certification	IEC 61800 series, IEC 61000, IEC 60529, CE and RoHS where applicable
	Warranty (years)	To be specified by tenderer

ITEM	DESCRIPTION	REQUIREMENT
6	VARIABLE SPEED DRIVE (VSD) 18.5 kW	
	Type	Variable Speed Drive (VSD)
	Rated Motor Capacity	18.5 kW
	Rated Output Current	Minimum 38 A
	Input Supply	380-480 VAC, 3 Phase, 50/60 Hz
	Application	Air handling unit (AHU), chilled water pump, ventilation fan
	Control Method	Sensorless vector control and V/f control
	System Compatibility	Compatible with existing BMS, PLC, SCADA and HVAC controls
	Network Communication	Built-in RS485 Modbus RTU;
	Protection	Overcurrent, overload, earth fault, short circuit, phase loss, over/under voltage, overtemperature
	Protection Rating	Minimum IP55
	EMC	IEC/EN 61800-3 Category C2 or equivalent
	Safety	Integrated Safe Torque Off (STO) SIL3/PLC or equivalent
	Certification	IEC 61800 series, IEC 61000, IEC 60529, CE and RoHS where applicable
	Warranty (years)	To be specified by tenderer



SPEKIFIKASI TEKNIKAL

ITEM	DESCRIPTION	REQUIREMENT
7	VARIABLE SPEED DRIVE (VSD) 22 kW	
	Type	Variable Speed Drive (VSD)
	Rated Motor Capacity	22 kW
	Rated Output Current	Minimum 45 A
	Input Supply	380-480 VAC, 3 Phase, 50/60 Hz
	Application	Air handling unit (AHU), chilled water pump, ventilation fan
	Control Method	Sensorless vector control and V/f control
	System Compatibility	Compatible with existing BMS, PLC, SCADA and HVAC controls
	Network Communication	Built-in RS485 Modbus RTU;
	Protection	Overcurrent, overload, earth fault, short circuit, phase loss, over/under voltage, overtemperature
	Protection Rating	Minimum IP55
	EMC	IEC/EN 61800-3 Category C2 or equivalent
	Safety	Integrated Safe Torque Off (STO) SIL3/PLe or equivalent
	Certification	IEC 61800 series, IEC 61000, IEC 60529, CE and RoHS where applicable
	Warranty (years)	To be specified by tenderer

ITEM	DESCRIPTION	REQUIREMENT
8	VARIABLE SPEED DRIVE (VSD) 37 kW	
	Type	Variable Speed Drive (VSD)
	Rated Motor Capacity	37 kW
	Rated Output Current	Minimum 72 A
	Input Voltage	380-480 VAC, 3 Phase, 50/60 Hz
	Application	Air handling unit (AHU), chilled water pump, ventilation fan
	Input Voltage	380–480 VAC (Nominal 415 VAC), 3 Phase
	Network Communication	Built-in RS485 Modbus RTU; expandable to BACnet, Modbus TCP, EtherNet/IP, PROFINET and PROFIBUS
	Protection	Overcurrent, overload, earth fault, short circuit, phase loss, over/under voltage, overtemperature
	Protection Rating	Minimum IP55
	EMC	IEC/EN 61800-3 Category C2 or equivalent
	Safety	Integrated Safe Torque Off (STO) SIL3/PLe or equivalent
	Certification	IEC 61800 series, IEC 61000, IEC 60529, CE and RoHS where applicable
	Warranty (years)	To be specified by tenderer



SPEKIFIKASI TEKNIKAL

ITEM	DESCRIPTION	REQUIREMENT
9	VARIABLE SPEED DRIVE (VSD) 90 kW	
	Type	Variable Speed Drive (VSD)
	Rated Motor Capacity	90 kW
	Rated Output Current	Minimum 170 A
	Input Supply	380-480 VAC, 3 Phase, 50/60 Hz
	Application	Air handling unit (AHU), chilled water pump, ventilation fan
	Control Method	Sensorless vector control and V/f control
	System Compatibility	Compatible with existing BMS, PLC, SCADA and HVAC controls
	Network Communication	Built-in RS485 Modbus RTU; expandable to BACnet, Modbus TCP, EtherNet/IP, PROFINET and PROFIBUS
	Protection	Overcurrent, overload, earth fault, short circuit, phase loss, over/under voltage, overtemperature
	Protection Rating	Minimum IP55
	EMC	IEC/EN 61800-3 Category C2 or equivalent
	Safety	Integrated Safe Torque Off (STO) SIL3/PLe or equivalent
	Certification	IEC 61800 series, IEC 61000, IEC 60529, CE and RoHS where applicable
	Warranty (years)	To be specified by tenderer



LOKASI TERLIBAT

BIL.	LABEL VSD			KUASA	KUANTITI	LOKASI
1	AHU-B1a-1			4 kW	1	Bilik AHU (Aras B1a)
2	AHU-L1-1 AHU-L1-2			5.5 kW	2	Bilik AHU (Aras 1)
3	AHU-GF-1	AHU-L8-2	AHU-L26-2	7.5 kW	12	- Bilik AHU (Aras G, 1, 2, 5, 8, 9, 21, 23, 26, 27) - Bilik CHWP (Aras B1)
	AHU-L1-3	AHU-L9-2	AHU-L27-1			
	AHU-L2-2	AHU-L21-1	CHWP-5			
	AHU-L5-2	AHU-L23-2	CHWP-6			
4	AHU-B1a-2	AHU-L11-1	AHU-L19-2	11 kW	45	Bilik AHU (Aras B1a, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 36, 37)
	AHU-L2-1	AHU-L11-2	AHU-L20-1			
	AHU-L3-1	AHU-L12-1	AHU-L20-2			
	AHU-L3-2	AHU-L12-2	AHU-L21-2			
	AHU-L4-1	AHU-L13-1	AHU-L22-1			
	AHU-L4-2	AHU-L13-2	AHU-L22-2			
	AHU-L5-1	AHU-L14-1	AHU-L23-1			
	AHU-L6-1	AHU-L14-2	AHU-L24-1			
	AHU-L6-2	AHU-L15-1	AHU-L24-2			
	AHU-L7-1	AHU-L15-2	AHU-L25-1			
	AHU-L7-2	AHU-L16-1	AHU-L25-2			
	AHU-L8-1	AHU-L16-2	AHU-L26-1			
	AHU-L9-1	AHU-L18-1	AHU-L27-2			
	AHU-L10-1	AHU-L18-2	AHU-L36-1			
	AHU-L10-2	AHU-L19-1	AHU-L37-1			
5	AHU-L30-1	AHU-L32-1	AHU-L34-1	15 kW	6	Bilik AHU (Aras 30, 31, 32, 33, 34, 35)
	AHU-L31-1	AHU-L33-1	AHU-L35-1			
6	AHU-L28-1 AHU-L29-1			18.5 kW	2	Bilik AHU (Aras 28, 29)
7	SEF-L17-1			22 kW	1	Bilik M&E (Aras 17)
8	FAF-L17-1 FAF-L17-2			37 kW	2	Bilik M&E (Aras 17)
9	CHWP-1	CHWP-2	CHWP-3	90 kW	4	Bilik CHWP (Aras B1)
	CHWP-4					

Senarai peranti VSD di bangunan Kementerian Komunikasi yang akan dilaksanakan untuk penggantian





JABATAN KERJA RAYA WILAYAH PERSEKUTUAN PUTRAJAYA

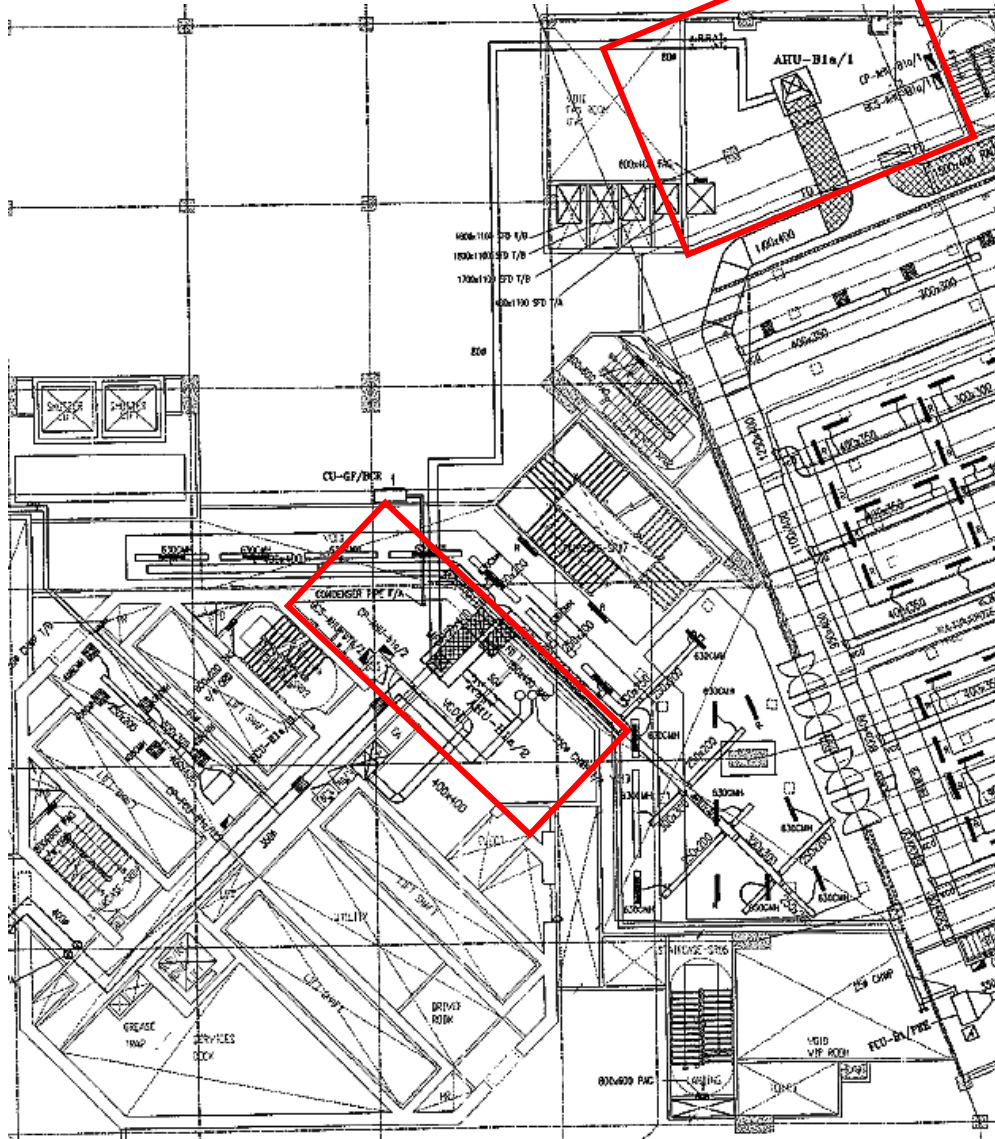


KEADAAN SEMASA DI TAPAK



Peranti VSD berkuasa 11.0 kW yang telah usang (*obsolete*)
di Bilik AHU 2, Aras B1a

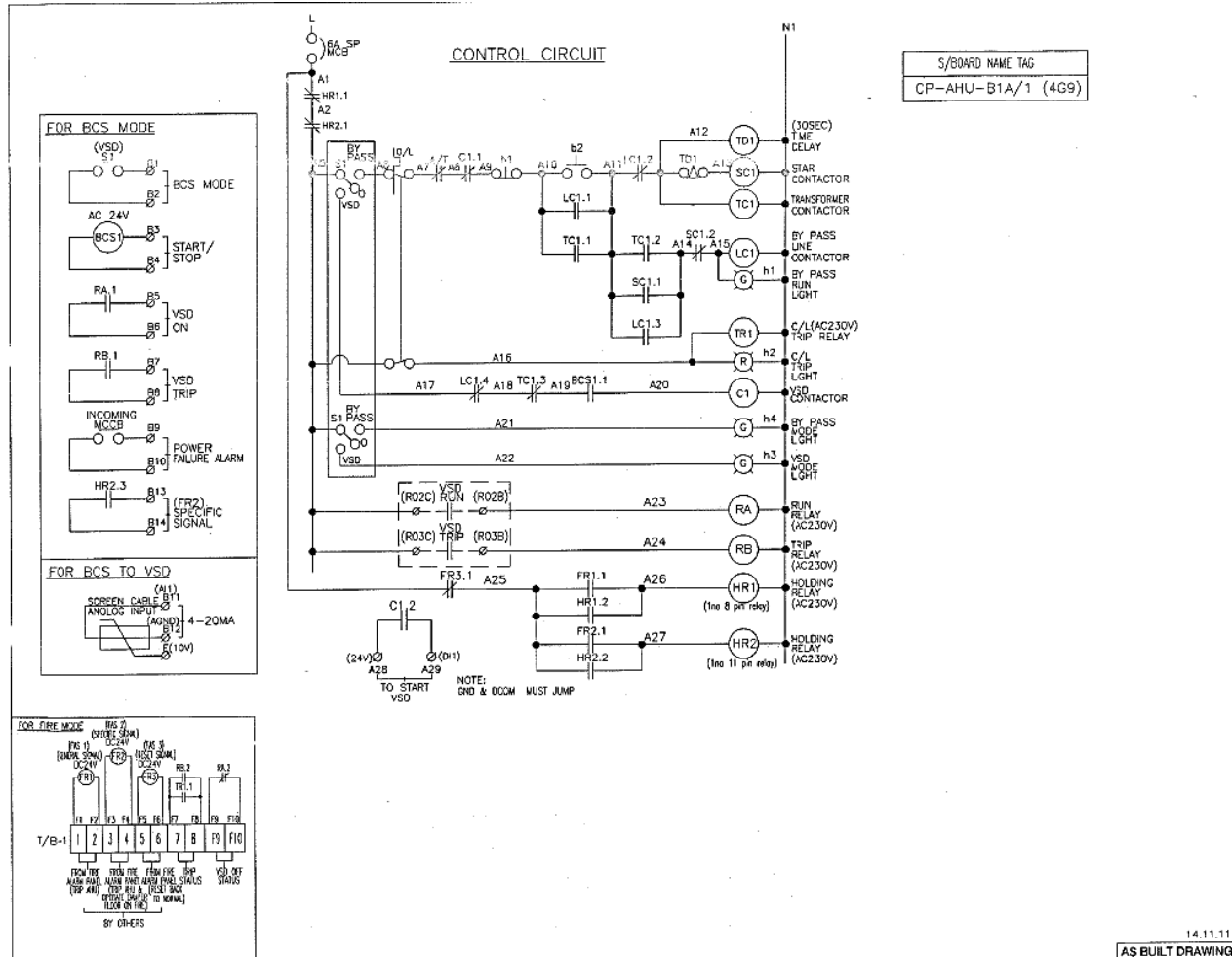
KEADAAN SEMASA DI TAPAK



Pelan lantai lokasi peranti VSD berkuasa 4.0 kW di Bilik AHU 1 dan 11.0 kW di Bilik AHU 2 di Aras B1a



KEADAAN SEMASA DI TAPAK



Lukisan skematik bagi VSD berkuasa 4.0 kW di Bilik AHU 1 di Aras B1a

KEADAAN SEMASA DI TAPAK



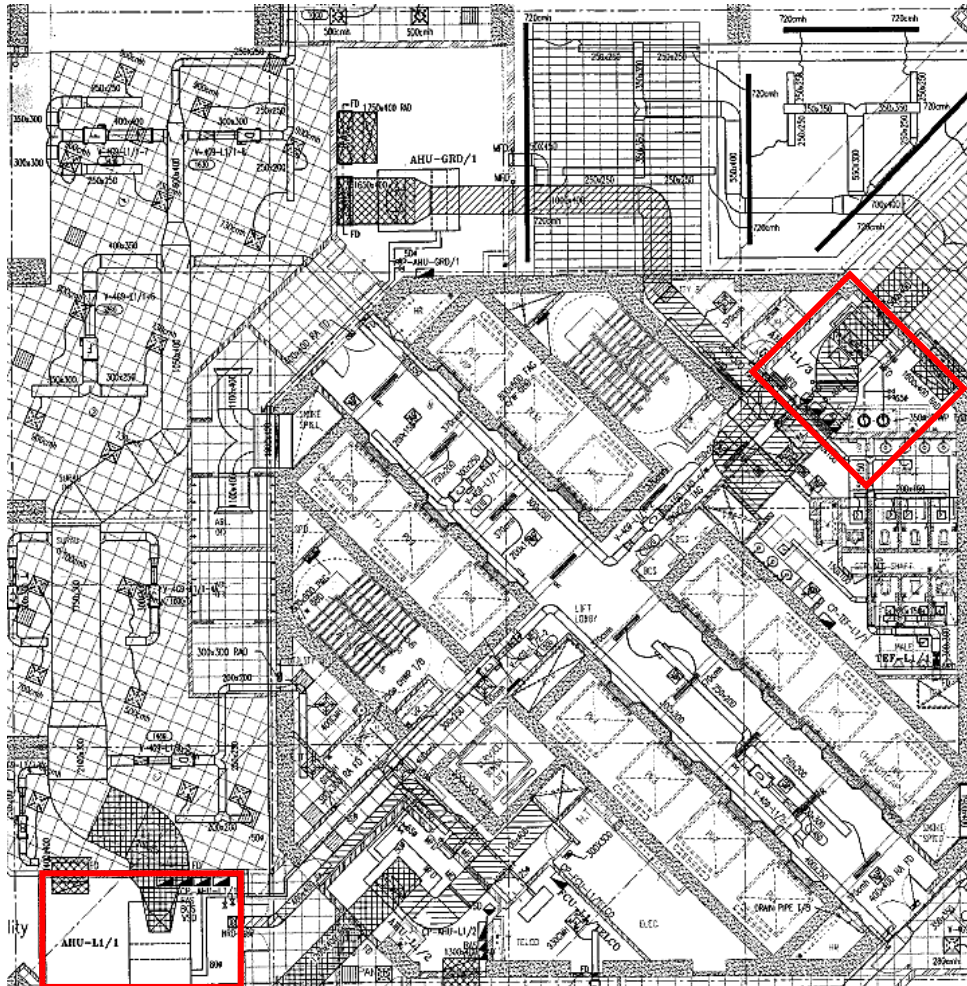
Peranti VSD berkuasa 5.5 kW yang telah usang (*obsolete*)
di Bilik AHU 1, Aras 1

KEADAAN SEMASA DI TAPAK



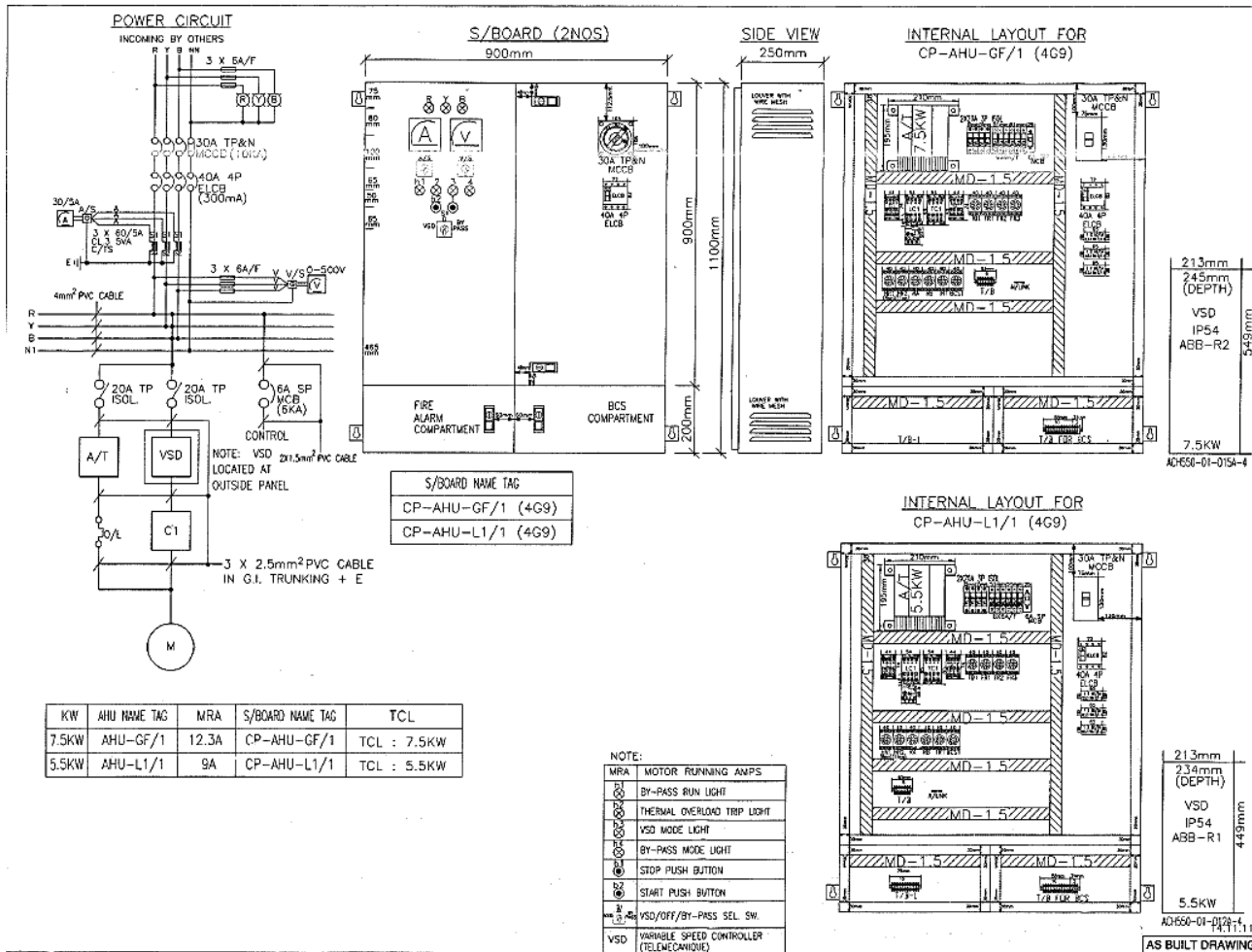
Peranti VSD berkuasa 7.5 kW yang telah usang (*obsolete*) di Bilik AHU 3, Aras 1

KEADAAN SEMASA DI TAPAK



Pelan lantai lokasi peranti VSD berkuasa 5.5 kW di Bilik AHU 1 dan 7.5 kW di Bilik AHU 3 di Aras 1

KEADAAN SEMASA DI TAPAK



Lukisan skematik bagi VSD berkuasa 5.5 kW di Bilik AHU 1 di Aras 1



KEADAAN SEMASA DI TAPAK

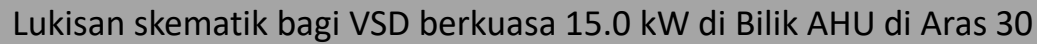


Peranti VSD berkuasa 15.0 kW yang telah usang (*obsolete*)
di Bilik AHU, Aras 30

KEADAAN SEMASA DI TAPAK



Pelan lantai lokasi peranti VSD
berkuasa 15.0 kW di Bilik
AHU, Aras 30

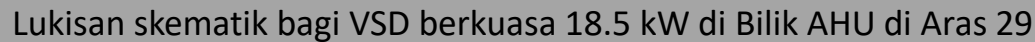


KEADAAN SEMASA DI TAPAK



Peranti VSD berkuasa 18.5 kW yang telah usang (*obsolete*)
di Bilik AHU, Aras 29

[illegible]

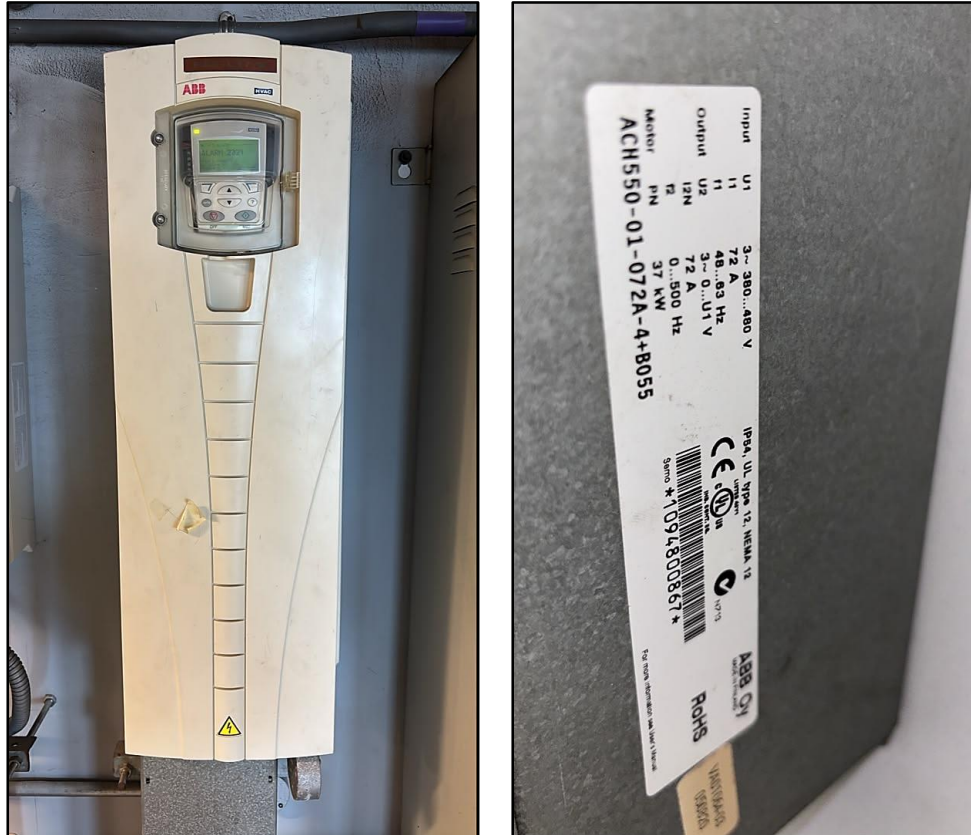


KEADAAN SEMASA DI TAPAK



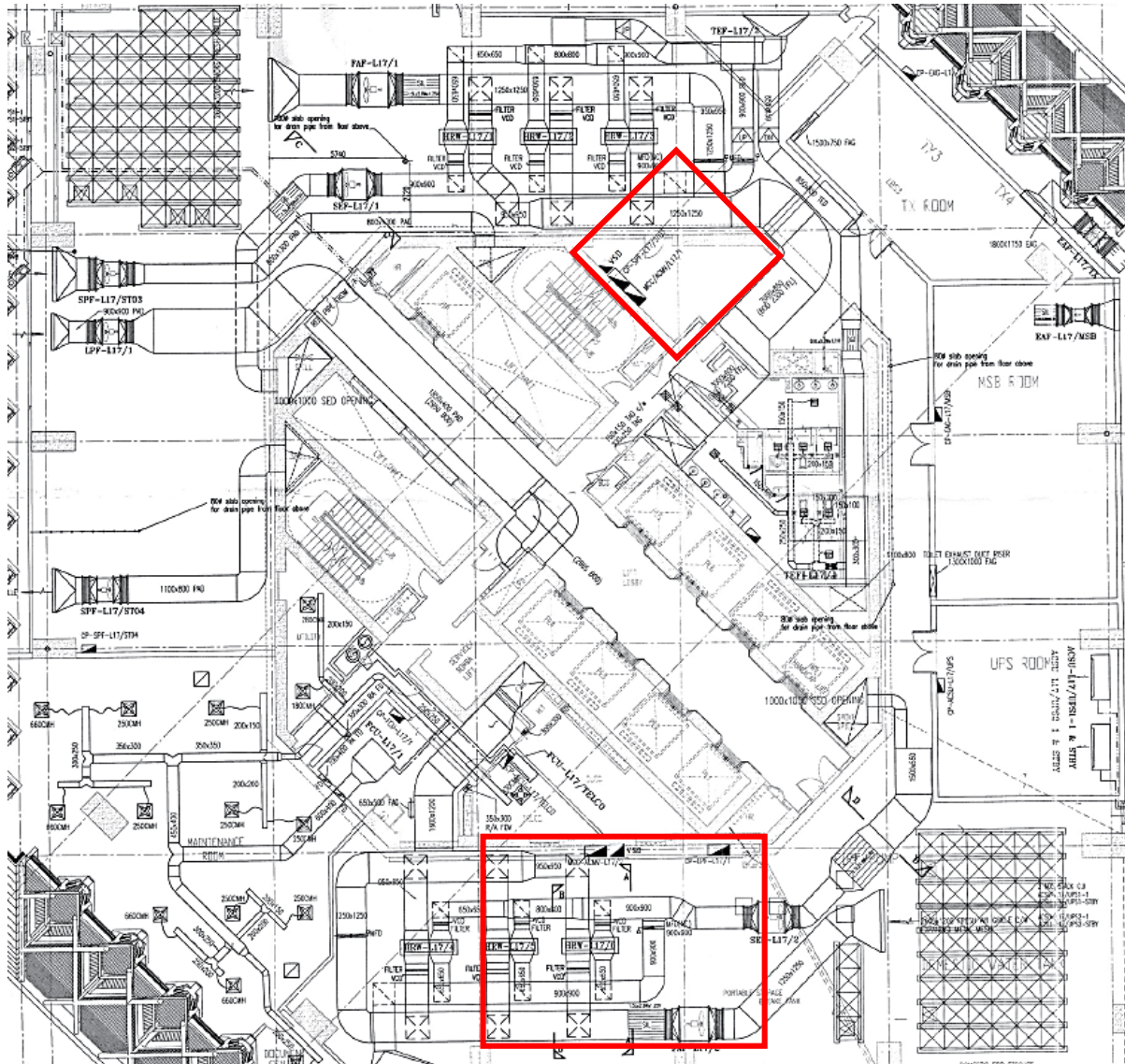
Peranti VSD berkuasa 22.0 kW yang telah usang (*obsolete*)
di Bilik M&E, Aras 17

KEADAAN SEMASA DI TAPAK

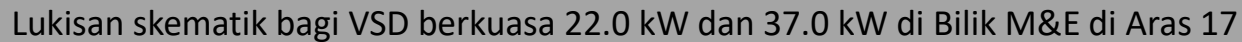


Peranti VSD berkuasa 37.0 kW yang telah usang (*obsolete*) di Bilik M&E, Aras 17

KEADAAN SEMASA DI TAPAK



Pelan lantai lokasi peranti VSD
berkuasa 22.0 kW dan 37.0 kW
di Bilik M&E, Aras 17

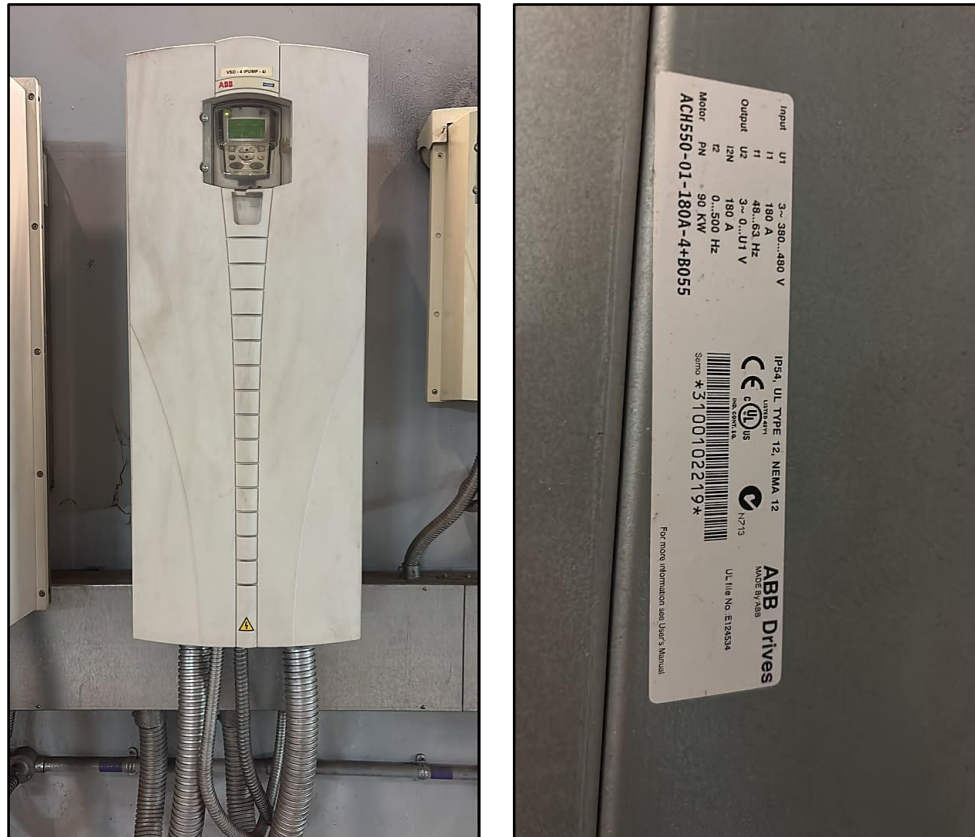


KEADAAN SEMASA DI TAPAK



Peranti VSD berkuasa 7.5 kW yang telah usang (*obsolete*)
di Bilik CHWP, Aras B1

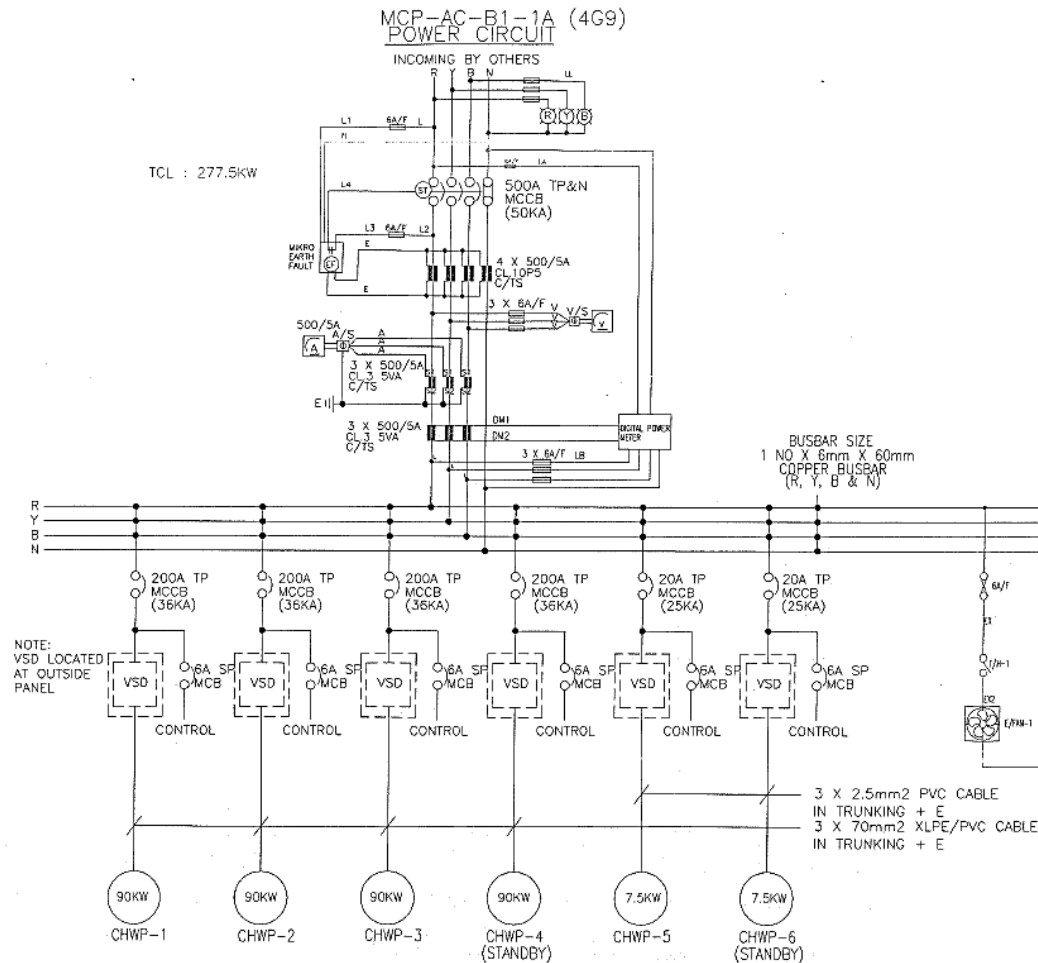
KEADAAN SEMASA DI TAPAK



Peranti VSD berkuasa 90.0 kW yang telah usang (*obsolete*)
di Bilik CHWP, Aras B1



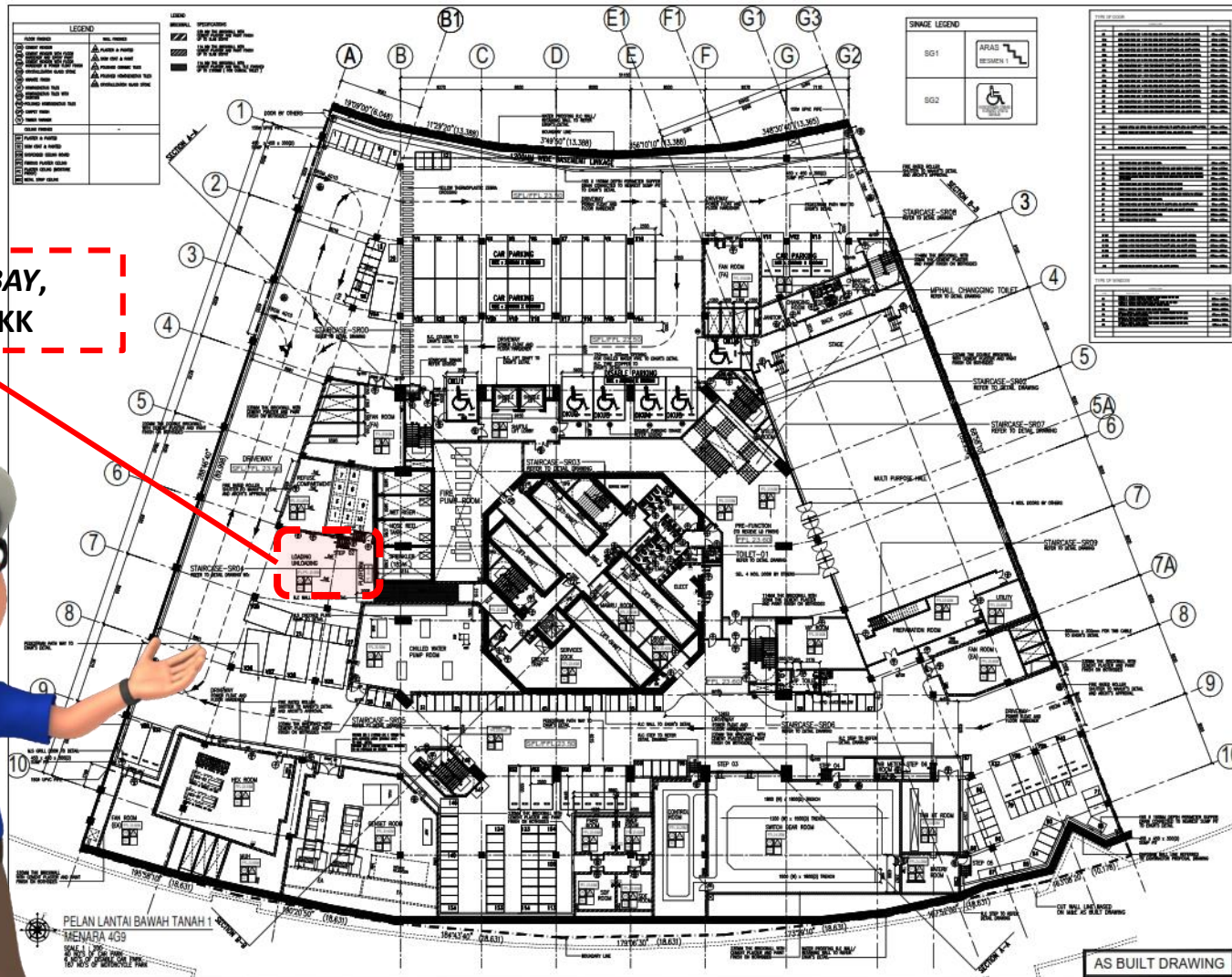
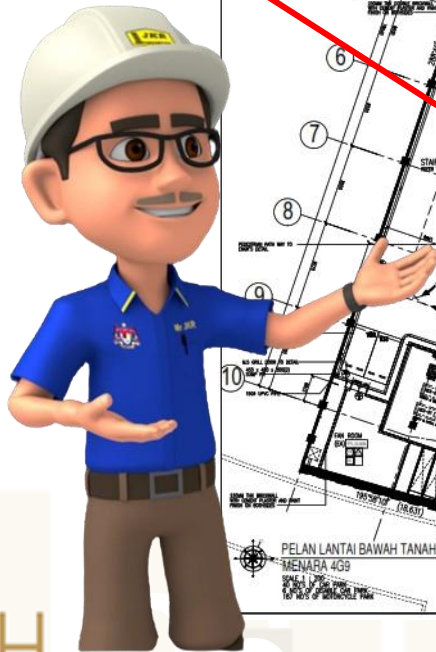
KEADAAN SEMASA DI TAPAK



Lukisan skematik bagi VSD berkuasa 7.5 kW dan 90.0 kW di Bilik CHWP, Aras B1

RUANG LOADING DAN UNLOADING

LOADING BAY,
ARAS B1, KK



INFO TAMBAHAN

SEBARANG PERTANYAAN DAN MAKLUMAT LANJUT
BOLEH HUBUNGI :





JKR
SEKIAN,
TERIMA KASIH

