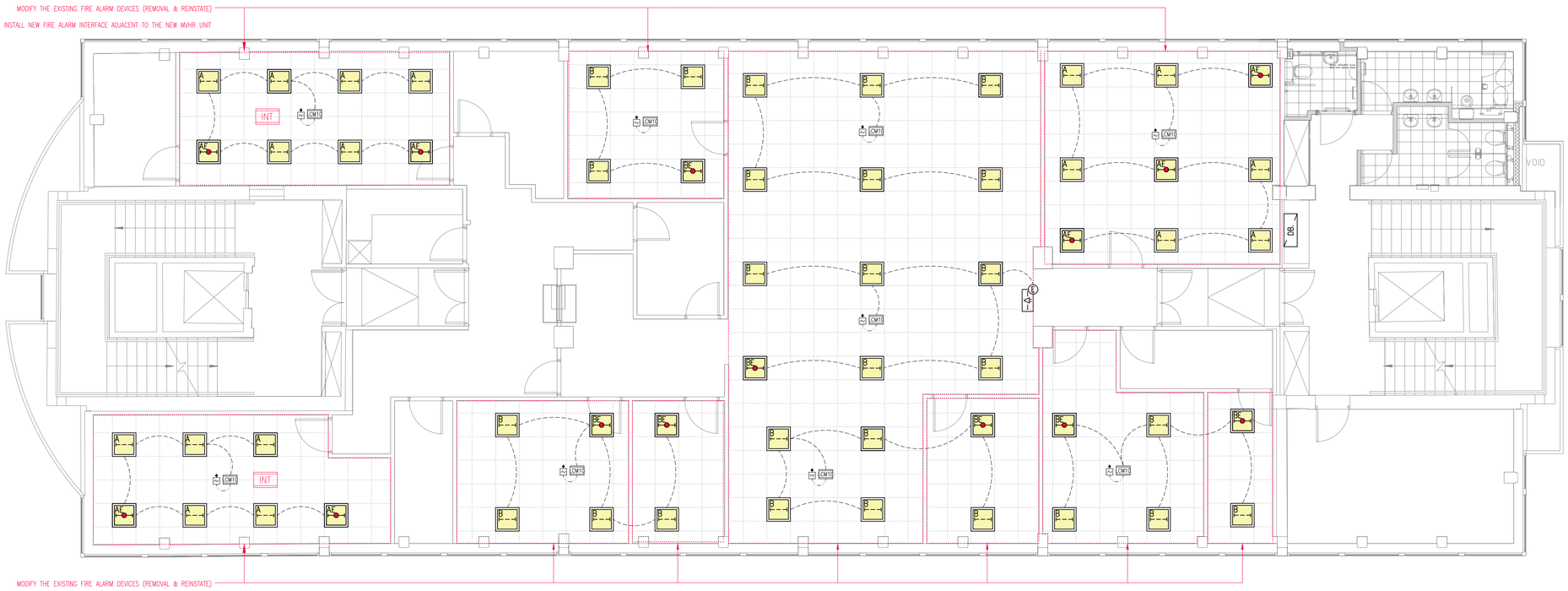
PROPOSED ELECTRICAL ENGINEERING SERVICES 4TH FLOOR





LEGEND

MODULAR LED LUMINAIRE c/w DAYLIGHT MOVEMENT DETECTOR	DEXTRA MODRS L35 RAS (17.9w)
MODULAR LED EM LUMINAIRE c/w DAYLIGHT MOVEMENT DETECTOR	DEXTRA MODRS L35 RAS LS3 (17.9w)
MODULAR LED LUMINAIRE c/w DAYLIGHT MOVEMENT DETECTOR	DEXTRA MODRO L37 RAS (24.4w)
MODULAR LED EM LUMINAIRE c/w DAYLIGHT MOVEMENT DETECTOR	DEXTRA MODRO L37 RAS LS3 (24.4w)
EMERGENCY LIGHTS EXIT SIGN	DEXTRA OEZ2 M3 ST3 ATS + LEGEND
LIGHTING MARSHALLING BOX (LCM) c/w FUSED CONNECTION UNIT	DEXTRA REA7 10X4/6P MB + MK LOGIC PLUS
FIRE ALARM INTERFACE (MECH VENT)	FIRE ALARM SYSTEM
SMOKE DETECTOR c/w SOUNDER BASE	FIRE ALARM SYSTEM
EXISTING DISTRIBUTION BOARD	
NEW CEILING VOID POWER & LIGHTING BASKET TRAY	VARIOUS SIZES AND POSITION TBC BY EEC
FUSED CONNECTION UNIT (CEILING VOID / AC)	MK LOGIC PLUS
WEATHERPROOF IP67 ISOLATOR (25A)	–
	–

INSTALLATION NOTES:

Enabling Works

The Electrical Engineering Contractor shall isolate and safely remove all redundant electrical services as required or requested by the main contractor.

The EEC shall remove all redundant luminaries to allow for the removal of the existing suspended ceilings. The lighting shall be isolated and where applicable modified to suit the proposed replacement lighting scheme. The redundant AC supplies shall be isolated and if applicable modified to serve the proposed new AC equipment or removed completely back to the origin.

All electrical waste shall be disposed of as directed by the WEEE regulations.

Note: All existing services not indicated to be changed shall remain operational.

Lighting and Controls

The Electrical Engineering Contractor shall install new lighting as indicated on the tender drawings. The lighting shall comprise of modified existing wiring or new lighting supplies (6A @ 1.5mm) the luminaires shall be LED lighting with integral (wireless mesh) controls and 3hr "Self Test" integral battery backup emergency lighting.

The EEC shall modify the existing or install new lighting supplies to feed the new lighting marshalling boxes. The lighting shall be predominantly plug and play. Minimal daisy chain linking of luminaires / Corridor & Exit Signs are permitted as long as the wiring is dedicated lighting cables with "T" pieces e.g. CP Electronics modular wiring. Double Pole Key switches shall be provided for each lighting circuit installed adjacent to the existing Distribution Board (all emergency luminaires to be Self Test).

The electrical engineering contractor shall provide and install all the containment as required to ensure all wiring is fully supported and installed in compliance with the current IET wiring regulations (BS7671). Note: Ceiling void cables are no permitted to be laid across suspended ceiling grids.

The lighting shall be commissioned so that the light level is maintained to ~350lx with a hold time of 10minutes, standby period 5minutes @ 10% to off (15mins where None Dimmable). The EEC shall provide to site a handheld lighting programmer for future use (Dextra).

Upon completion the lighting controls shall be fully commissioned by the Manufacturer and a valid certificate enclosed within the O&M's.

The lighting shall be provided by Dextra or equal and approved.

Fire Alarm Modification

The Electrical Engineering Contractor shall employ the services of the approved site Fire Alarm Service Company (RailTrack / MITIE to confirm). The Fire Alarm system is a building wide landlord system. Within the BTP demise the existing ceiling tile located devices shall be isolated and removed to allow for the mechanical engineering enabling works. These devices shall be upgraded and replaced with new items. The existing fire alarm cables shall be modified/replaced to ensure all cables are installed on dedicated/shared containment and suitably clipped (stainless steel) to the building fabric.

The 2x new Heat Recovery Vent Units shall have 2x new Fire Alarm Interfaces installed to allow the units to stop upon fire alarm activation.

Upon completion the fire alarm system shall be fully tested and certified to ensure compliance and correct operation.

General Power Installation

The Electrical Engineering Contractor shall modify existing wiring and install new supplies and wiring accessories. These shall feed the proposed new external Air Conditioning Units the Internal Air Conditioning Units, Wall Controllers and the replacement Mitsubishi Lossnay MVHR Unit.

The EEC shall supply and install all containment to allow any new cabling to be fully installed and supported throughout the entire length of the cables (including new ceiling void basket for the power and data).

Containment Installation

The Engineering Contractor shall install new Lighting, Power & Fire Alarm cabling containment where required within the suspended ceiling void, drops to Wall Controllers. The EEC shall establish the sizes to allow a minimum of 25% spare capacity for future expansion. The indicated routes on the tender drawing E003 are drawn schematically, the final position shall be confirmed on site by the EEC.

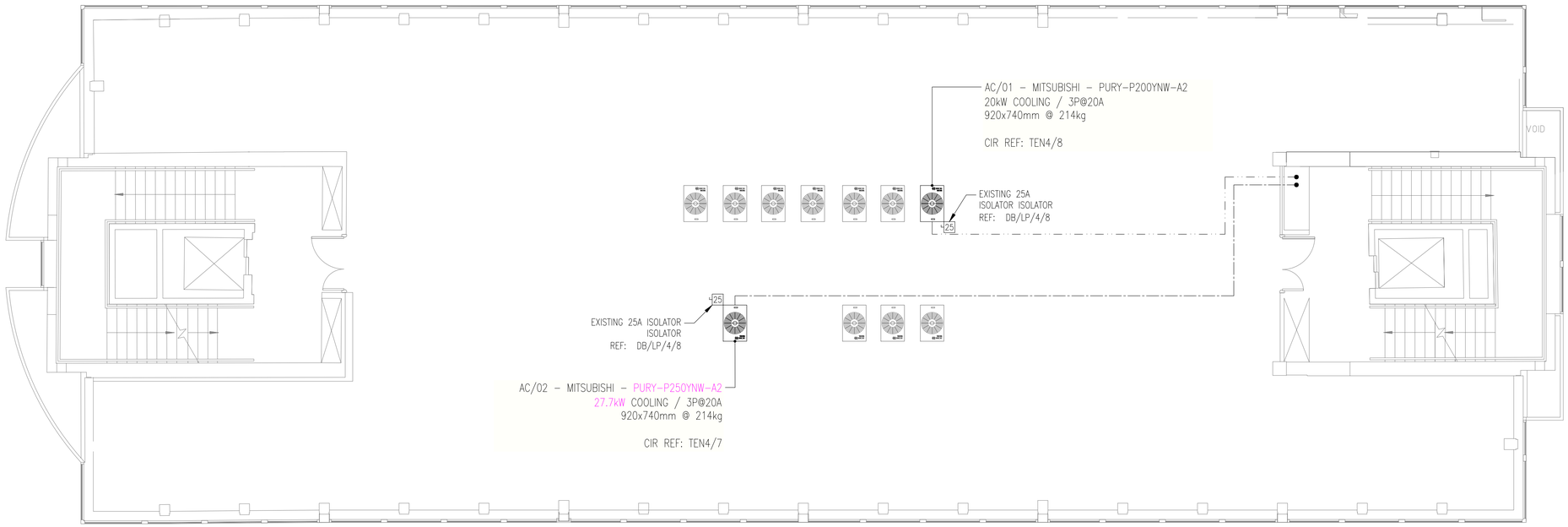
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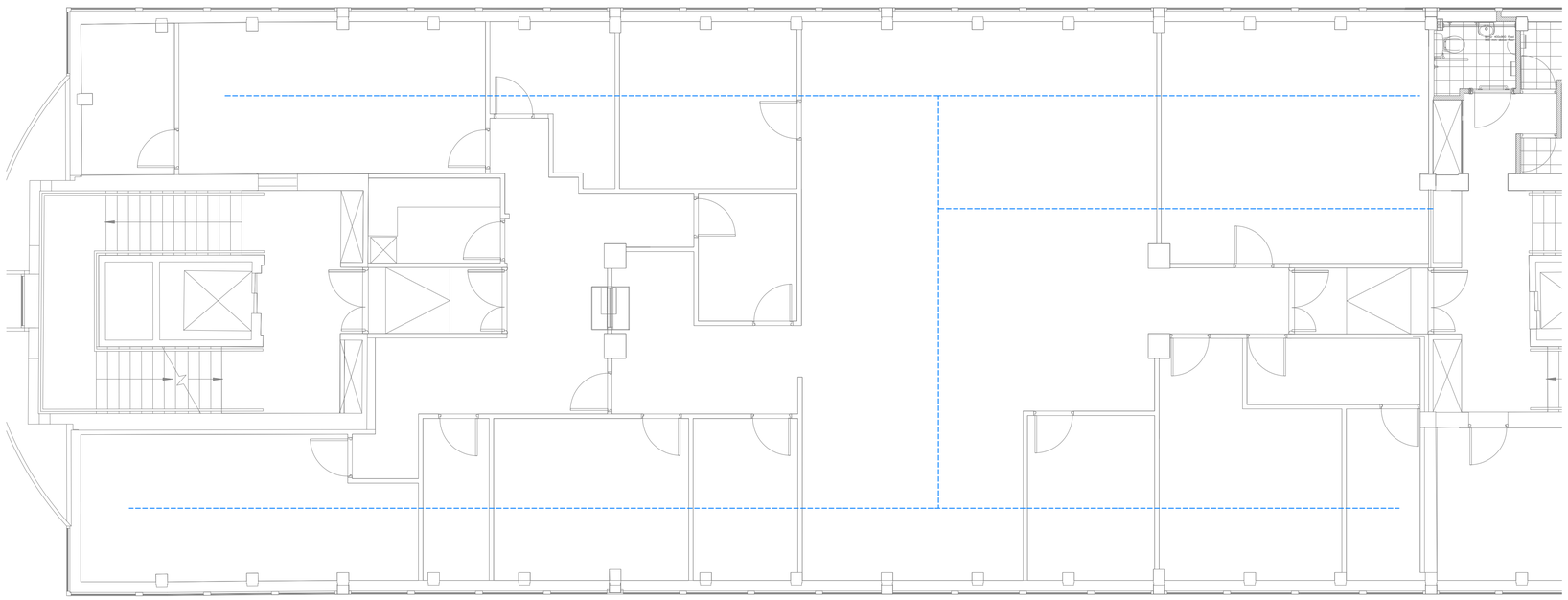
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DRAWING ISSUE.	TENDER
PROJECT.	BTP - MANCHESTER PICCADILLY MECHANICAL SERVICES REPLACEMENT
DWG TITLE.	ELECTRICAL ENGINEERING SERVICES - PROPOSED WORKS
DWG No.	12031 - E001
REV.	**T1**
SCALE.	NTS@A1
DWG DATE.	JANUARY 2026
APPROVED.	S J Walmsley
INFO.	This drawing is designed in colour

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07739 797 101

DRAWING NOTE: THIS DRAWING HAS BEEN PRODUCED AS A TENDER DRAWING TO ALLOW THE PROJECT TO BE ACCORDINGLY PRICED. IT IS THE SUCCESSFUL ENGINEERING CONTRACTOR'S RESPONSIBILITY TO PROVIDE A FULLY PM APPROVED SET OF ON SITE WORKING DRAWINGS. All CAD files are available upon request

PROPOSED ELECTRICAL ENGINEERING SERVICES 4TH FLOOR CONTAINMENT & ROOF PLANT ROOM





LEGEND

MODULAR LED LUMINAIRE c/w DAYLIGHT MOVEMENT DETECTOR	DEXTRA MODRS L35 RAS (17.9w)
MODULAR LED EM LUMINAIRE c/w DAYLIGHT MOVEMENT DETECTOR	DEXTRA MODRS L35 RAS LS3 (17.9w)
MODULAR LED LUMINAIRE c/w DAYLIGHT MOVEMENT DETECTOR	DEXTRA MODRO L37 RAS (24.4w)
MODULAR LED EM LUMINAIRE c/w DAYLIGHT MOVEMENT DETECTOR	DEXTRA MODRO L37 RAS LS3 (24.4w)
EMERGENCY LIGHTS EXIT SIGN	DEXTRA OEZ2 M3 ST3 ATS + LEGEND
CM1R LIGHTING MARSHALLING BOX (LCM) c/w FUSED CONNECTION UNIT	DEXTRA REA7 10X4/6P MB + MK LOGIC PLUS
INT FIRE ALARM INTERFACE (MECH VENT)	FIRE ALARM SYSTEM
SMOKE DETECTOR c/w SOUNDER BASE	FIRE ALARM SYSTEM
DB EXISTING DISTRIBUTION BOARD	
NEW CEILING VOID POWER & LIGHTING BASKET TRAY	VARIOUS SIZES AND POSITION TBC BY EEC
FUSED CONNECTION UNIT (CEILING VOID / AC)	MK LOGIC PLUS
WEATHERPROOF IP67 ISOLATOR (25A)	–
	–

INSTALLATION NOTES:

Enabling Works

The Electrical Engineering Contractor shall isolate and safely remove all redundant electrical services as required or requested by the main contractor.

The EEC shall remove all redundant luminaries to allow for the removal of the existing suspended ceilings. The lighting shall be isolated and where applicable modified to suit the proposed replacement lighting scheme. The redundant AC supplies shall be isolated and if applicable modified to serve the proposed new AC equipment or removed completely back to the origin.

All electrical waste shall be disposed of as directed by the WEEE regulations.

Note: All existing services not indicated to be changed shall remain operational.

Lighting and Controls

The Electrical Engineering Contractor shall install new lighting as indicated on the tender drawings. The lighting shall comprise of modified existing wiring or new lighting supplies (6A @ 1.5mm) the luminaires shall be LED lighting with integral (wireless mesh) controls and 3hr "Self Test" integral battery backup emergency lighting.

The EEC shall modify the existing or install new lighting supplies to feed the new lighting marshalling boxes. The lighting shall be predominantly plug and play. Minimal daisy chain linking of luminaires / Corridor & Exit Signs are permitted as long as the wiring is dedicated lighting cables with "T" pieces e.g. CP Electronics modular wiring. Double Pole Key switches shall be provided for each lighting circuit installed adjacent to the existing Distribution Board (all emergency luminaires to be Self Test).

The electrical engineering contractor shall provide and install all the containment as required to ensure all wiring is fully supported and installed in compliance with the current IET wiring regulations (BS7671). Note: Ceiling void cables are no permitted to be laid across suspended ceiling grids.

The lighting shall be commissioned so that the light level is maintained to ~350lx with a hold time of 10minutes, standby period 5minutes @ 10% to off (15mins where None Dimmable). The EEC shall provide to site a handheld lighting programmer for future use (Dextra).

Upon completion the lighting controls shall be fully commissioned by the Manufacturer and a valid certificate enclosed within the O&M's.

The lighting shall be provided by Dextra or equal and approved.

Fire Alarm Modification

The Electrical Engineering Contractor shall employ the services of the approved site Fire Alarm Service Company (RailTrack / MTIE to confirm). The Fire Alarm system is a building wide landlord system. Within the BTP demise the existing ceiling tile located devices shall be isolated and removed to allow for the mechanical engineering enabling works. These devices shall be upgraded and replaced with new items. The existing fire alarm cables shall be modified/replaced to ensure all cables are installed on dedicated/shared containment and suitably clipped (stainless steel) to the building fabric.

The 2x new Heat Recovery Vent Units shall have 2x new Fire Alarm Interfaces installed to allow the units to stop upon fire alarm activation.

Upon completion the fire alarm system shall be fully tested and certified to ensure compliance and correct operation.

General Power Installation

The Electrical Engineering Contractor shall modify existing wiring and install new supplies and wiring accessories. These shall feed the proposed new external Air Conditioning Units the Internal Air Conditioning Units, Wall Controllers and the replacement Mitsubishi Lossnay MVHR Unit.

The EEC shall supply and install all containment to allow any new cabling to be fully installed and supported throughout the entire length of the cables (including new ceiling void basket for the power and data).

Containment Installation

The Engineering Contractor shall install new Lighting, Power & Fire Alarm cabling containment where required within the suspended ceiling void, drops to Wall Controllers. The EEC shall establish the sizes to allow a minimum of 25% spare capacity for future expansion. The indicated routes on the tender drawing E003 are drawn schematically, the final position shall be confirmed on site by the EEC.

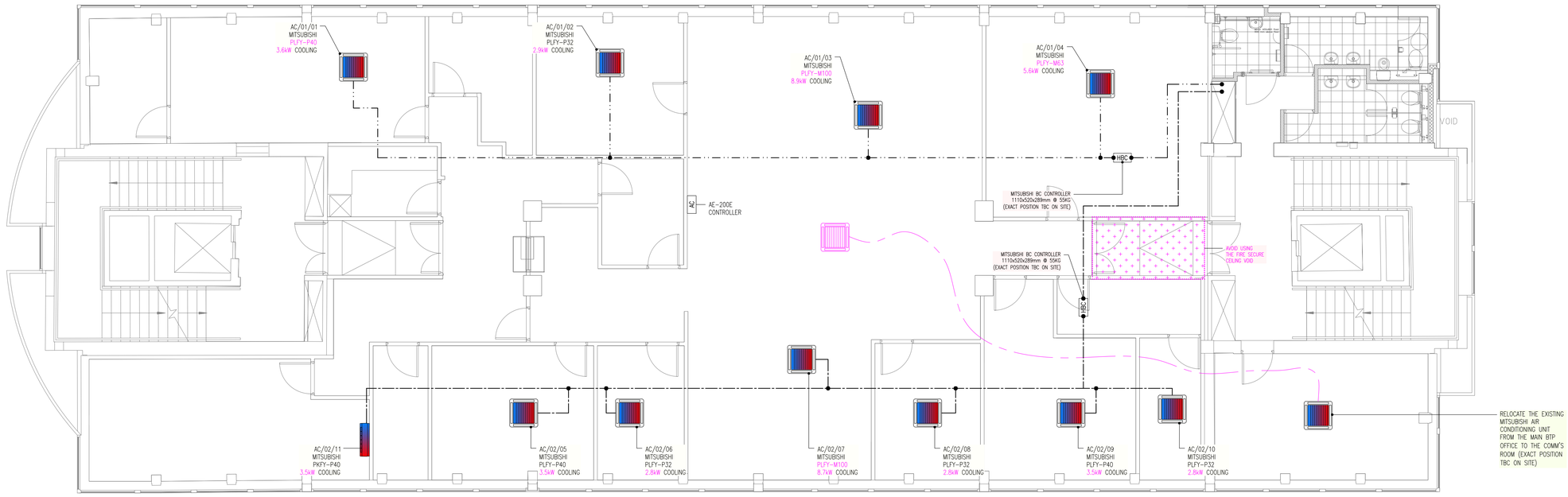
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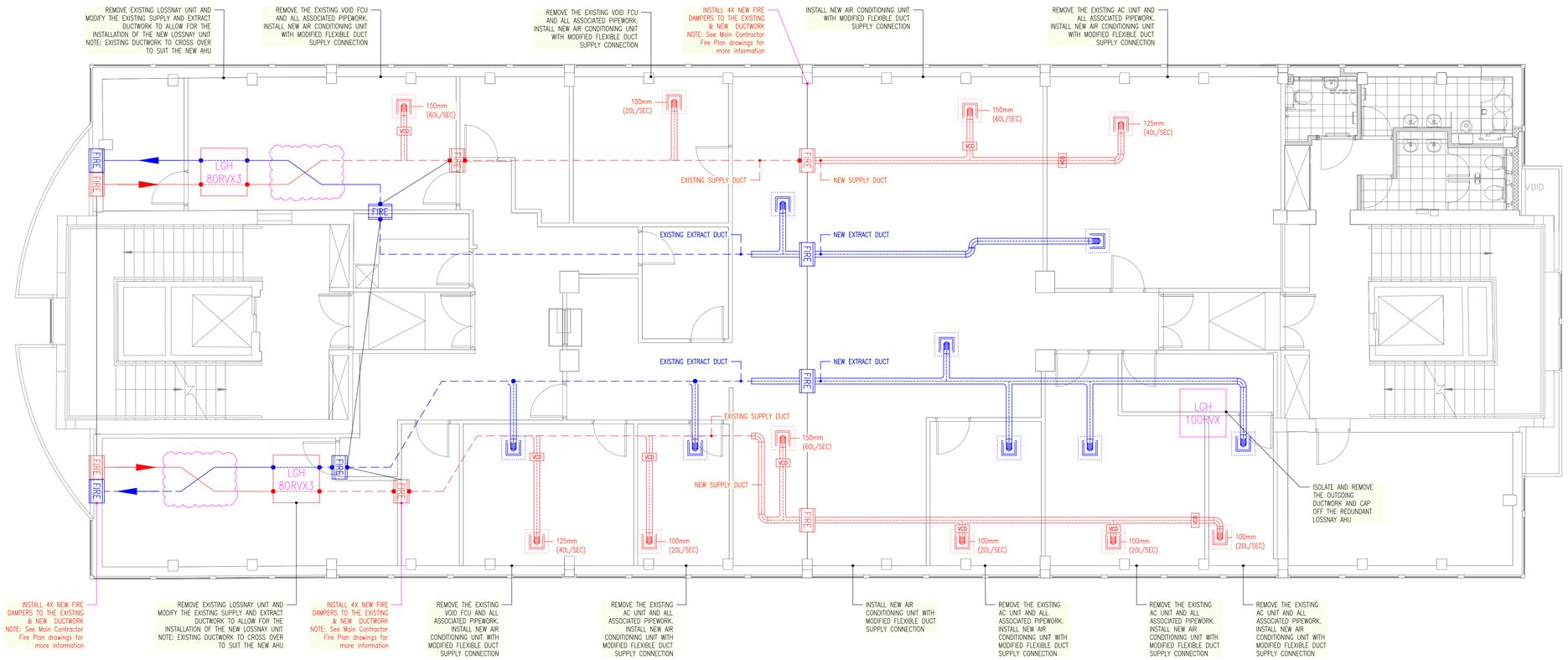
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DRAWING ISSUE.	TENDER
PROJECT.	BTP - MANCHESTER PICCADILLY MECHANICAL SERVICES REPLACEMENT
DWG TITLE.	ELECTRICAL ENGINEERING SERVICES - PROPOSED WORKS
DWG No.	12031 - E002
REV.	**T1**
SCALE.	NTS@A1
DWG DATE.	JANUARY 2026
APPROVED.	S J Walmsley
INFO.	This drawing is designed in colour

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PROPOSED MECHANICAL ENGINEERING SERVICES 4TH FLOOR





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INSTALLATION NOTES:

Enabling Works

The mechanical engineer contractor shall isolate and safely disconnect/remove all redundant mechanical services as required and requested by the main contractor. This shall include the following:

The removal of the existing Mitsubishi AC system (complete) this shall include all the redundant units, pipework etc.

The removal of the existing 2x AHU's (Mitsubishi Lossnay Units) and all redundant ductwork, and the areas made ready for the installation of the new units. The 3rd AHU shall be decommissioned, this unit has very limited access. So the unit shall be isolated, and where possible the ductwork removed and capped off.

The existing supply and extract ducts & ceiling grilles, unless identified to be modified shall be safely removed to allow for the proposed works, cleaned and made ready for reinstallation.

Air Conditioning Installation

The mechanical engineering contractor shall be, or employ the services of an approved Mitsubishi Accredited Installer (AI) to install a new Air Conditioning System. The recommended system would comprise 2x City Multi outdoor units and the specified indoor units. The indoor units shall be controlled via a Centralised Controllers. The external unit shall be installed and mounted on the roof plant dedicated frame rails c/w anti vibration Rubber Support Feet. The indoor units shall be 4 way blow ceiling cassette units. The AC contractor shall design and install the suitable brackets to carry the load of the indoor units.

The AC contractor shall install all containment (existing AC Traywork to be modified to suit) to support the AC pipework and interlinking power & communications wiring.

The Condensate drainage shall be provided either via gravity or pumped solutions.

Note Air Conditioning system to be mounted in the external roof plant room and the pipework to drop to Level 4 (BTP Demises).

Mechanical Ventilation

The mechanical engineering contractor shall replace 2x new MVHR systems. The system shall comprise of Mitsubishi Lossnay unit with associated supply & extract ducts to feed the AC units (Note: the orientation of the Supply and Extract changes from the existing AHU to the proposed). Supply & Extract ducts to be fully insulated within the suspended ceiling void (New & Existing).

Generally the existing rooms shall have the supply and extract ducts/grilles reinstalled (if removed in the enabling works) and all new supply grilles shall be fed with new ductwork c/w Volume Control Dampers to achieve the specified air flow. In the Area where the AHU has been decommissioned, the MEC shall install additional main runs of ducting Supply & Extract to feed into the proposed rooms/AC Units.

The supply and extract grilles shall be plenum box ceiling grilles – Gilberts Type

The MVHR units shall be controlled via a wall mounted Touchscreen controller (See Air Conditioning).

The ductwork shall be galvanised steel spiral ductwork.

The MEC shall modify/install new wiring to feed the new HR vent units.

Within the Main Office the existing Mitsubishi AC Unit, shall be degassed and relocated into the Comm's Room. The exact position shall be confirmed on site. Once installed the system shall be fully serviced/tested and commissioned back to full operation.

Note the position of the AC units and the ductwork shown on the tender drawings are shown schematically and for approximate reference. Final duct runs and positions to be confirmed by the MEC on site.

The MEC shall modify the existing/new ductwork and install new Fire Dampers across the existing ceiling void. The fire dampers Curtain Style dampers, that are suitably designed for the installation method. MEC to liaise with Main Contractor and Fire Specialist to ensure compliance. For more information, see Main Contract Fire Plan drawing.

ISSUE	DESCRIPTION	DATE	INS
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CLIENT. BTP

DRAWING ISSUE. TENDER

PROJECT. BTP - MANCHESTER PICCADILLY MECHANICAL SERVICES REPLACEMENT

DWG TITLE. MECHANICAL ENGINEERING SERVICES - PROPOSED WORKS

DWG No. 12031 - M001

REV. T2

SCALE. NTS@A1

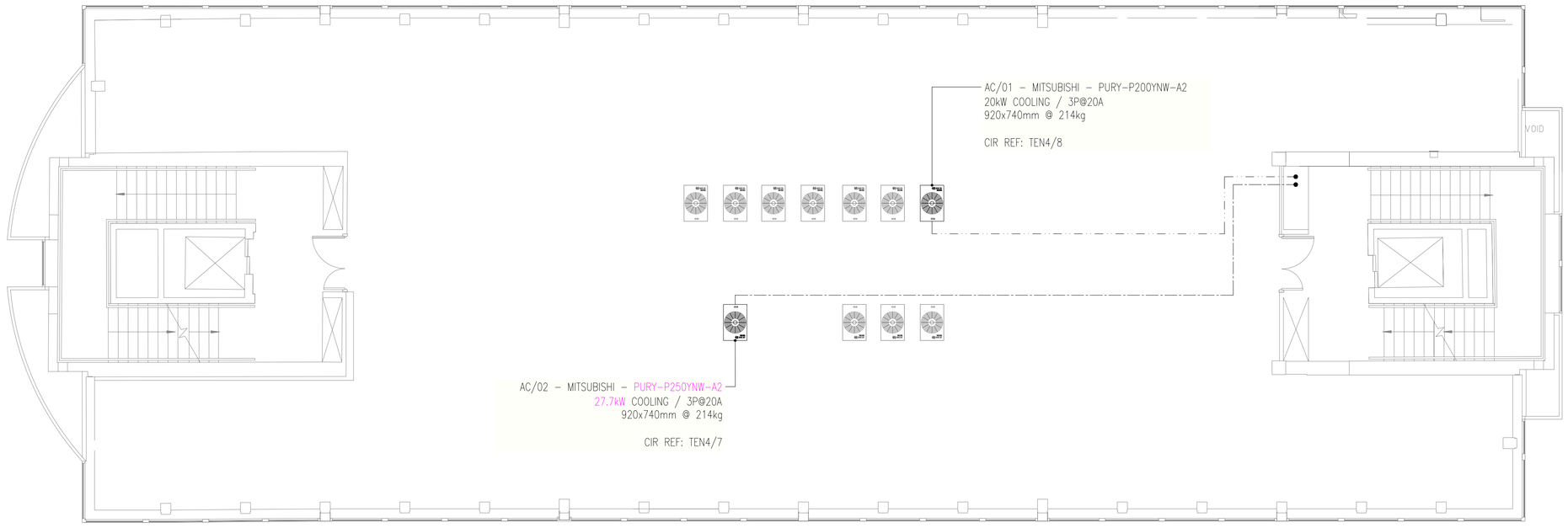
DWG DATE. JANUARY 2026

APPROVED. S J Walmsley

INFO. This drawing is designed in colour

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PROPOSED MECHANICAL ENGINEERING SERVICES ROOF PLANT



INSTALLATION NOTES:

Enabling Works

The mechanical engineer contractor shall isolate and safely disconnect/remove all redundant mechanical services as required and requested by the main contractor. This shall include the following:

The removal of the existing Mitsubishi AC system (complete) this shall include all the redundant units, pipework etc.

The removal of the existing 2x AHU's (Mitsubishi Lossnay Units) and all redundant ductwork, and the areas made ready for the installation of the new units. The 3rd AHU shall be decommissioned, this unit has very limited access. So the unit shall be isolated, and where possible the ductwork removed and capped off.

The existing supply and extract ducts & ceiling grilles, unless identified to be modified shall be safely removed to allow for the proposed works, cleaned and made ready for reinstallation.

Air Conditioning Installation

The mechanical engineering contractor shall be, or employ the services of an approved Mitsubishi Accredited Installer (AI) to install a new Air Conditioning System. The recommended system would comprise 2x City Multi outdoor units and the specified indoor units. The indoor units shall be controlled via a Centralised Controllers. The external unit shall be installed and mounted on the roof plant dedicated frame rails c/w anti vibration Rubber Support Feet. The indoor units shall be 4 way blow ceiling cassette units. The AC contractor shall design and install the suitable brackets to carry the load of the indoor units.

The AC contractor shall install all containment (existing AC Traywork to be modified to suit) to support the AC pipework and interlinking power & communications wiring.

The Condensate drainage shall be provided either via gravity or pumped solutions.

Note Air Conditioning system to be mounted in the external roof plant room and the pipework to drop to Level 4 (BTP Demises).

Mechanical Ventilation

The mechanical engineering contractor shall replace 2x new MVHR systems. The system shall comprise of Mitsubishi Lossnay unit with associated supply & extract ducts to feed the AC units (Note: the orientation of the Supply and Extract changes from the existing AHU to the proposed). Supply & Extract ducts to be fully insulated within the suspended ceiling void (New & Existing).

Generally the existing rooms shall have the supply and extract ducts/grilles reinstalled (if removed in the enabling works) and all new supply grilles shall be fed with new ductwork c/w Volume Control Dampers to achieve the specified air flow. In the Area where the AHU has been decommissioned, the MEC shall install additional main runs of ducting Supply & Extract to feed into the proposed rooms/AC Units.

The supply and extract grilles shall be plenum box ceiling grilles – Gilberts Type

The MVHR units shall be controlled via a wall mounted Touchscreen controller (See Air Conditioning).

The ductwork shall be galvanised steel spiral ductwork.

The MEC shall modify/install new wiring to feed the new HR vent units.

Within the Main Office the existing Mitsubishi AC Unit, shall be degassed and relocated into the Comm's Room. The exact position shall be confirmed on site. Once installed the system shall be fully serviced/tested and commissioned back to full operation.

Note the position of the AC units and the ductwork shown on the tender drawings are shown schematically and for approximate reference. Final duct runs and positions to be confirmed by the MEC on site.

The MEC shall modify the existing/new ductwork and install new Fire Dampers across the existing ceiling void. The fire dampers Curtain Style dampers, that are suitably designed for the installation method. MEC to liaise with Main Contractor and Fire Specialist to ensure compliance. For more information, see Main Contract Fire Plan drawing.

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CLIENT.	BTP
DRAWING ISSUE.	TENDER
PROJECT.	BTP - MANCHESTER PICCADILLY MECHANICAL SERVICES REPLACEMENT
DWG TITLE.	MECHANICAL ENGINEERING SERVICES - PROPOSED WORKS
DWG No.	12031 - M002
REV.	T2
SCALE.	NTS@A1
DWG DATE.	JANUARY 2026
APPROVED.	S J Walmsley
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