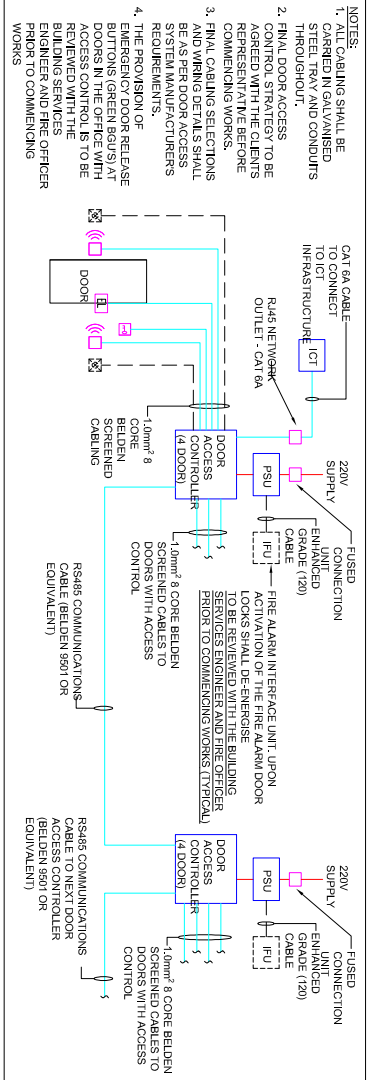
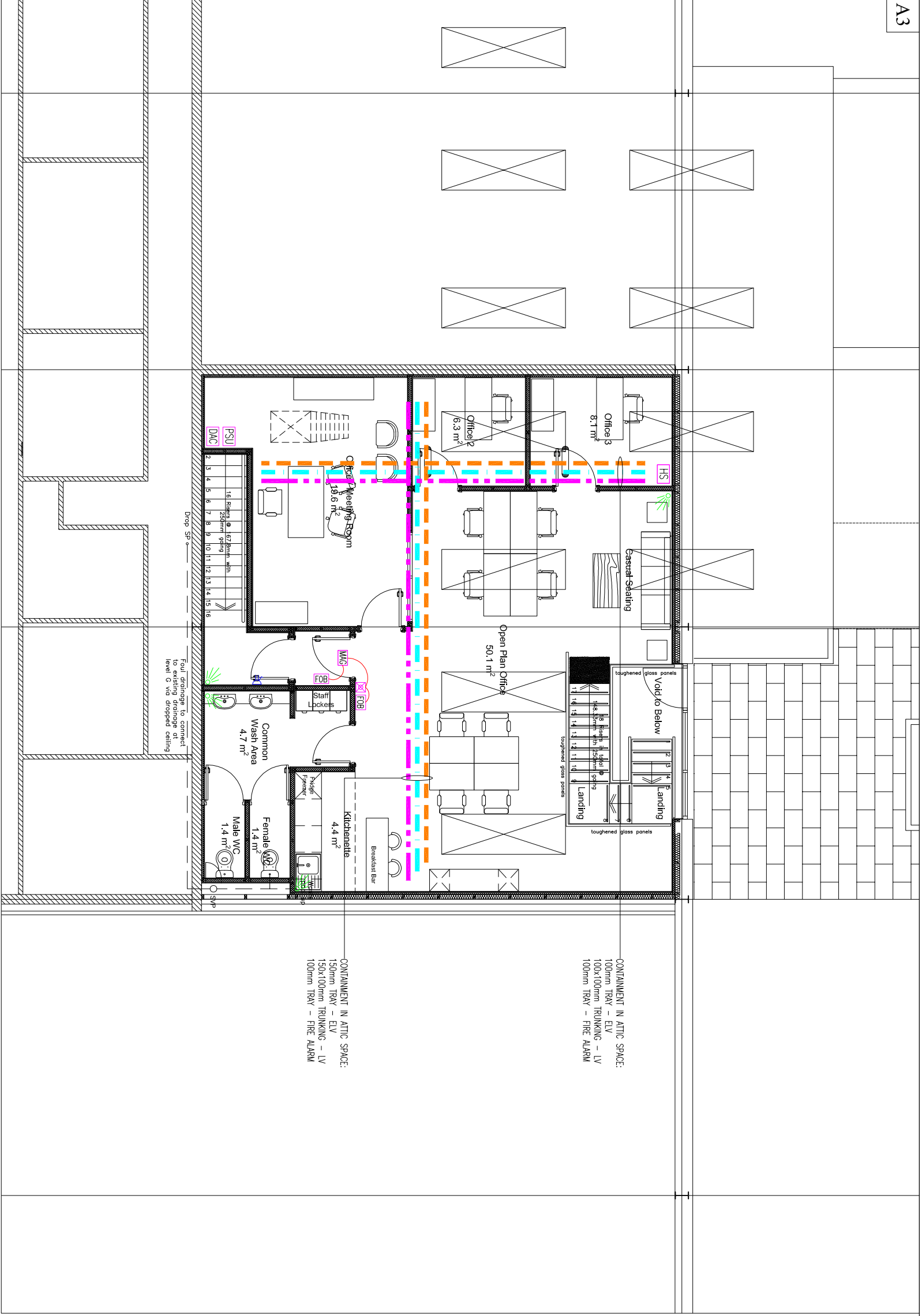
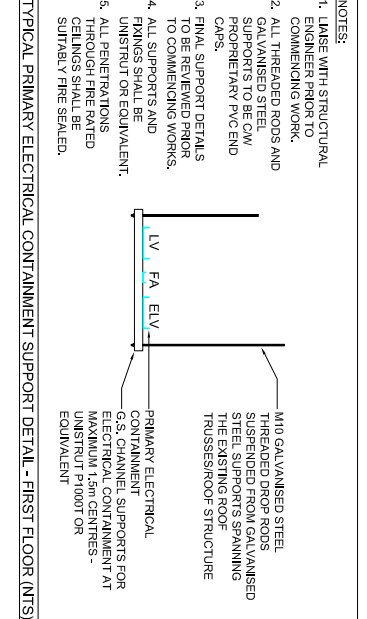




TYPICAL ACCESS CONTROL SCHEMATIC (NTS)



TYPICAL PRIMARY ELECTRICAL CONTAINMENT SUPPORT DETAIL - FIRST FLOOR (NTS)

- NOTES:
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL MECHANICAL, ELECTRICAL, ARCHITECTURAL AND STRUCTURAL DRAWINGS & SPECIFICATIONS.
 - THE ELECTRICAL CONTRACTOR SHALL CO-ORDINATE ALL SERVICES FULLY WITH ALL TRADES BEFORE COMMENCING WORK.
 - DO NOT SCALE THIS DRAWING. ALL DIMENSIONS SHALL BE TAKEN ON SITE.
 - THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY INFORMATION TO ALLOW PROPER CO-ORDINATION OF ALL SERVICES.
 - EXTRA COSTS INCURRED DUE TO THE CO-ORDINATION EXERCISE NOT BEING COMPLETED WILL NOT BE ACCEPTED BY THE ENGINEER.
 - EXACT LOCATION OF ALL SERVICES SHALL BE AGREED WITH THE EMPLOYERS REPRESENTATIVE PRIOR TO COMMENCEMENT ON SITE.
 - ALL SERVICES AS SHOWN ON THIS DRAWING SHALL BE INCLUDED IN THE FINAL TENDER PRICE.
 - SAMPLE OF ALL EQUIPMENT SHALL BE APPROVED BY CLIENT, ARCHITECT AND BUILDING SERVICES ENGINEER PRIOR TO ORDERING.
 - ALL DIMENSIONS IN MILLIMETRES UNLESS STATED OTHERWISE.

INTRODUCER ALARM NOTES:

- THE ELECTRICAL CONTRACTOR SHALL INSTALL AND COMMISSION A FULLY MONITORED INTRODUCER ALARM SYSTEM.
- ACTIVATION OF INTRODUCER ALARM SHALL ACTIVATE EXTERNAL LIGHTS ON BUILDING FACADE DURING HOURS OF DARKNESS - CONDUCTORS SHALL BE MADE AVAILABLE FOR SWITCHING OF SAME. WARNING OF CONDUCTORS TO LIGHTING BOARD BY THE ELECTRICAL CONTRACTOR.
- ALLOW FOR FITTING GALVANISED STEEL MESH DOORS TO ALL EXTERNAL INTRODUCER ALARM SOUNDERS. ALL TO BE SUPPLIED AND FITTED BY THE ELECTRICAL CONTRACTOR.
- ALL SURFACE MOUNTED INTRODUCER ALARM DOORS SHALL BE CONCEALED IN PLASTIC HOUSINGS, LOW VOLTAGE COMPONENTS OR ATTACHED TO DOOR THRU. ALL TO BE SUPPLIED AND FITTED BY THE ELECTRICAL CONTRACTOR.
- THE ELECTRICAL CONTRACTOR SHALL ALLOW FOR INTRODUCER ALARM EXPANDER UNITS AS REQUIRED.
- THE ELECTRICAL CONTRACTOR SHALL ALLOW FOR POWER SUPPLIES & ELECTRICAL CONNECTIONS TO ALL INTRODUCER ALARM DEVICES REQUIRED.

CTV NOTES:

- FINAL LOCATION OF ALL CTV CAMERAS AND EQUIPMENT TO BE REVIEWED WITH CLIENT PRIOR TO INSTALLATION.
- INCLUDE FOR POWER SUPPLIES AND ELECTRICAL WIRING TO ALL NEW CTV EQUIPMENT AS SHOWN ON THE DRAWINGS AND DETAILED IN THE SPECIFICATIONS.
- EXTERNAL CTV CAMERAS SHALL COME WITH BUILT-IN HEATER AND THERMOSTAT AND SHALL BE PLACED AT HIGH LEVEL, COVERED BY GALVANISED STEEL DOORS. DOORS TO BE CUT WHEN CAMERAS ARE FROZEN. DOORS TO BE SUPPLIED AND FITTED BY THE ELECTRICAL CONTRACTOR.
- THE ELECTRICAL CONTRACTOR SHALL ALLOW FOR DATA CABLES FROM DATA CTV CAMERA BACK TO HWY/RESPECTIVE FLEET SWITCH.

DOOR ACCESS NOTES:

- ALL NEW WALL MOUNTED DEVICES SHALL FINISH FLUSH C/W RECESSED GALVANISED STEEL BACKBOXES. GALVANISED STEEL CONDUITS TO SAME SHALL BE RECESSED IN STUD PARTITIONS/CHASED INTO MASONRY WALLS - LAMSE WITH MAIN CONTRACTOR. INDEPENDENT FIRE PLUGS TO BE FIRED TO THE REAR OF BACK BOXES RECESSED IN STUD PARTITIONS - THE INTEGRITY OF THE FIRE RATED PARTITIONS MUST BE MAINTAINED.
- SURFACE MOUNTED CONDUIT OR CONTAINMENT DROPS ARE NOT ACCEPTABLE IN THE SIGN AREA.
- NO SURFACE MOUNTED CONDUIT OR CONTAINMENT DROPS ARE ALLOWED IN THE EXISTING GP AREA OR EXISTING CARPARKS. CONDUIT DROPS IN THESE AREAS SHALL GENERALLY BE IN AN ALUMINIUM TRAY RECESSED IN STUD PARTITIONS/CHASED INTO MASONRY WALLS - LAMSE WITH MAIN CONTRACTOR. INDEPENDENT FIRE PLUGS TO BE FIRED TO THE REAR OF BACK BOXES RECESSED IN STUD PARTITIONS - THE INTEGRITY OF THE FIRE RATED PARTITIONS MUST BE MAINTAINED.
- BATTERY BACK-UP POWER SHALL BE PROVIDED FOR DOORS WITH ACCESS CONTROL.
- THE ELECTRICAL CONTRACTOR SHALL ALLOW FOR POWER SUPPLIES & ELECTRICAL CONNECTIONS TO ALL DOOR ACCESS DEVICES REQUIRED.
- FINAL DOOR ACCESS CONTROL STRATEGY TO BE AGREED WITH THE CLIENTS REPRESENTATIVE BEFORE COMMENCING WORKS.
- UNBATTERED ELECTRICIAN WIRING DETAILS SHALL BE AS PER DOOR ACCESS SYSTEM MANUFACTURERS REQUIREMENTS.
- PROVISION OF EMERGENCY DOOR RELEASE BUTTONS IN SIGN AREA TO BE RISK ASSESSED PRIOR TO INSTALLATION. THE ELECTRICAL CONTRACTOR SHALL AGREE THE DOOR ACCESS STRATEGY WITH THE SIGN AREA WITH THE BUILDING SERVICES ENGINEER PRIOR TO COMMENCING INSTALLATION.

EMERGENCY ASSISTANCE NOTES:

- ALL NEW WALL MOUNTED DEVICES SHALL FINISH FLUSH C/W RECESSED GALVANISED STEEL BACKBOXES. GALVANISED STEEL CONDUITS TO SAME SHALL BE RECESSED IN STUD PARTITIONS/CHASED INTO MASONRY WALLS - LAMSE WITH MAIN CONTRACTOR. INDEPENDENT FIRE PLUGS TO BE FIRED TO THE REAR OF BACK BOXES RECESSED IN STUD PARTITIONS - THE INTEGRITY OF THE FIRE RATED PARTITIONS MUST BE MAINTAINED.
- SURFACE MOUNTED CONDUIT OR CONTAINMENT DROPS ARE NOT ACCEPTABLE IN THE SIGN AREA.

LIGHTNING PROTECTION NOTES:

- THE LIGHTNING PROTECTION SYSTEM SHALL BE IN ACCORDANCE WITH ISEN 62305:2011.
- EACH EARTH TERMINAL SHALL HAVE A RESISTANCE NOT EXCEEDING 10 OHMS.
- THE LIGHTNING PROTECTION SYSTEM SHALL INCLUDE AIR TERMINATIONS, DOWN CONDUCTORS, JOINTS & BONNS, TEST JOINTS, EARTH TERMINATIONS AND EARTH ELECTRODES.
- FINAL LOCATIONS OF THE EARTH PINS, DOWN CONDUCTORS ETC. TO BE AGREED BETWEEN THE MAIN CONTRACTOR, ELECTRICAL CONTRACTOR AND SPECIALIST LIGHTNING PROTECTION CONTRACTOR.
- THE SPECIALIST LIGHTNING PROTECTION CONTRACTOR MUST ENSURE ALL EXTERNAL METALLIC STRUCTURES AND SERVICES ARE BONDED IN ACCORDANCE WITH ISEN 62305:2011

ELECTRICAL CONTAINMENT NOTES:

- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION & LAYOUT OF THE CABLE CARRIER SYSTEM WHICH SHALL INCLUDE A GALVANISED STEEL TRAY, TRUNKING & CONDUIT SYSTEM THROUGHOUT.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL BONDS, TIES AND CROSS-OVERS THAT ARE REQUIRED TO MEET CURRENT ETD STANDARDS. THE ROUTES INDICATED ARE MAIN ROUTES THAT ARE TO BE REVIEWED PRIOR TO COMMENCING WORKS.
- ALL PENETRATIONS THROUGH ROOF STRUCTURE TO BE REVIEWED PRIOR TO COMMENCING WORKS.
- FININGS SHALL BE UNBUILT/ROOF EQUIVALENT.
- THE ELECTRICAL CONTRACTOR SHALL ALLOW FOR ALL FOR CHANVES OF LEVEL AND VERTICAL CONTAINMENT AS REQUIRED.
- THE ELECTRICAL CONTRACTOR SHALL ALLOW FOR GREETING AND SHAKING ELECTRICAL CONTAINMENT TO COORDINATE WITH SERVICES OPENINGS IN WALLS.
- NO SURFACE MOUNTED CONDUITS OR CONTAINMENT DROPS ARE ALLOWED IN CORRIDORS.
- THE ELECTRICAL CONTRACTOR SHALL ALLOW FOR GALVANISED STEEL HEADER TRUNKING OVER THE DISTRIBUTION BOARDS.
- THE FIRE ALARM & DETECTION SYSTEM CABLEING SHALL BE CARRIED IN DEDICATED CONTAINMENT.
- THIS DRAWING INDICATES PROPOSED PRIMARY ELECTRICAL CONTAINMENT ROUTES ONLY.

GENERAL NOTES

- Do not use scale service equipment from this drawing.
- All dimensions should be checked on site.
- Any drawings not shown or details should be brought to the attention of the Engineer.
- Drawings to be used in conjunction with all other drawings and documentation.

INTRODUCER ALARM LEGEND:

- INTRODUCER ALARM PANEL
- INTRODUCER ALARM UNIT
- INTRODUCER ALARM DUAL TECH PASSIVE INFRARED MOTION DETECTOR
- INTRODUCER ALARM DOUBLE PUSH ALARM UNIT
- INTRODUCER ALARM DOOR CONTACT
- INTRODUCER ALARM EXTERNAL SOUNDER C/W STROBE LIGHT - IP68 RATED
- INTRODUCER ALARM INTERNAL SOUNDER
- INTRODUCER ALARM KEY PAD
- ADJACENT TO SIGNAL DEVICES EXISTING DEVICE

EMERGENCY CALL/PANIC ALARM SYSTEM LEGEND:

- EMERGENCY CALL/PANIC ALARM SYSTEM CONTROL STATION
- WIRELESS HANDHELD PANIC BUTTON
- WIRELESS REFLECTOR UNIT LINKED TO EMERGENCY CALL
- PANIC ALARM SYSTEM CONTROL STATION

DOOR ACCESS LEGEND:

- DOOR BELL
- DOOR BELL SOUNDER
- DOOR ACCESS FLUSH MOUNTED STAINLESS STEEL DOOR ENTRY PANEL WITH BUZZER BUTTON MICROPHONE AND SPEAKER LINKED TO INTERNAL HUBSET
- DOOR ACCESS INTERNAL INTERCOM HUBSET WITH RELEASE BUTTON
- DOOR ACCESS INTERNAL INTERCOM HUBSET WITH RELEASE BUTTON
- DOOR ACCESS EMERGENCY DOOR RELEASE BUTTON
- DOOR ACCESS KEY OPERATED OVERRIDE SWITCH
- POWER SUPPLY UNIT FOR DOOR ACCESS CONTROLLER
- DOOR ACCESS CONTROLLER
- ADJACENT TO SIGNAL DEVICES SHALL BE PAS BATED

EMERGENCY ASSISTANCE LEGEND:

- EMERGENCY ASSISTANCE ALARM SYSTEM CALL CONTROLLER
- EMERGENCY ASSISTANCE ALARM SYSTEM OVER DOOR LIGHT/ALARM
- EMERGENCY ASSISTANCE ALARM SYSTEM MESH
- POINT C/W RESISTANCE SOUNDER & LED
- EMERGENCY ASSISTANCE ALARM SYSTEM FULL CHARG SWITCH
- PROPOSED ROUTE OF CABLE TRAY FOR LV CABLES - SIZE AS INDICATED
- PROPOSED ROUTE OF CABLE TRAY FOR FIRE ALARM CABLEING - SIZE AS INDICATED
- PROPOSED ROUTE OF CABLE TRAY FOR FIRE ALARM CABLEING - SIZE AS INDICATED

Revision	Description	Date	Drawn	Checked
0	Construction base	April 2024	RJM	CG
1	Construction base	May 2026	RJM	CG

WATERLOO DISTRICTS PARK, WATERLOO, ONTARIO
PROJECT NO: 2024-001
DATE: 04/04/2024
BY: RJM
CHECKED: CG

project title: Duntihill Eco Centre Proposed Offices Duntihill, Co. Watford

drawing title: Protective Services & Containment Layout First Floor

architect: The E Project Chartered Architects

scale: 1:100 @ A3

drawing number: EL7 project number: 0595