

Denmark Place Venue



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# 1. General Design Requirements

## Overview

The following section outlines the requirements for buildings and uses of the new build part of the development. It should be noted that the information is a summary of detail designs provided by the Design Team in the form of drawings, specifications, schedules & reports that should be consulted for detail explanations.

### 1.1. Service and Component Life

New materials will comply with BS 7543 and BS ISO 15686. The design and service life of the building and component parts will be as listed below. Maintenance will be required during this service life, in accordance with the component suppliers’ recommendations.

– Structural frame	50 years
– Structural frame (new structural elements only)	50 years
– Cladding – Primary components	60 years
– Cladding – Secondary components	30 years
– Cladding – Door & ironmongery	10 years
– Roof coverings	25 years
– Internal wall	25 years
– Mechanical & electrical services	in accordance with CIBSE guide M table 12.A1 (New Plant)

### 1.2. Sustainability Standards

#### 1.2.1 BREEAM

New build BREEAM target will be Very Good. The building is being assessed under BREEAM New Construction Core and Shell. Green Lease Agreements outlining fit out obligations are to be incorporated by the tenant, to ensure compliance with BREEAM. Refer to the project environmental report and appendix for further details.

#### 1.2.2. Energy Efficient Systems

In order to comply with Building Control and Planning requirements the tenant must comply with relevant Part L Requirements including fit out equipment efficiencies. Refer to the environmental report appendix for further details.

## Fire Protection

- This document is to be read in conjunction with the fire strategy report.
  - Fire rated steel structure in accordance with the Fire Strategy report. Refer to SKA-FP-100 – Additional Fire protection to Basement 09 12 2016 & Fire Strategy Report
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## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.1. Main Events Space

#### Room Name & Number

Events Space / Room A.B1.O6

#### Brief

To provide a multipurpose events space for 2,200 people incl staff with finishes in accordance with “base build” definition as noted below.

#### Architectural

Base build FFL to Soffit:  
8.400m nom.

Base build FFL to U/S of beam:  
7.785m nom.

Occupancy Level:

800 ppl total with ability to enhance to 2000 people plus 200 staff.

Suggested split for enhanced scheme:

- 1670 ppl. @ B1 Level
- 330 ppl. @ MZ Level
- 200 staff

#### Walls

- Box in Box exposed masonry wall by the main contractor to 58dB Rw. Tenant to compliment acoustic desing criteria to values as recommended in the Acoustic Report.
- 60mim fire resistance around main space &120min compartmentatin. Refer to Fire Strategy Report and Orms FR series for locations
- No skirtings

#### Partitions

- Partitions between main space and ancillary areas to be in paint grade blockwork

- Acoustic rating  $\geq 55\text{dB Rw}$ . Refer to Acoustic report annex for locations

#### Floor

Power float concrete slab with access to jetting points for cavity drainage system below

#### Ceiling

Exposed Box in Box composite deck soffit with intumescent painted primary steel. Structural support grid provided for fit out by the operator to structural engineer design.

#### Doors

- Hardwood frame doors with full height high pressure laminate. Riser doors to be in painted finish.
- Stainless steel ironmongery
- Doors to be fire rated FR30S & FR60S. Refer to Fire Strategy Report and Orms FR series for locations
- Acoustic performance 25dB Rw & 40dB Rw. Refer to Acoustic report annex for locations
- ACS

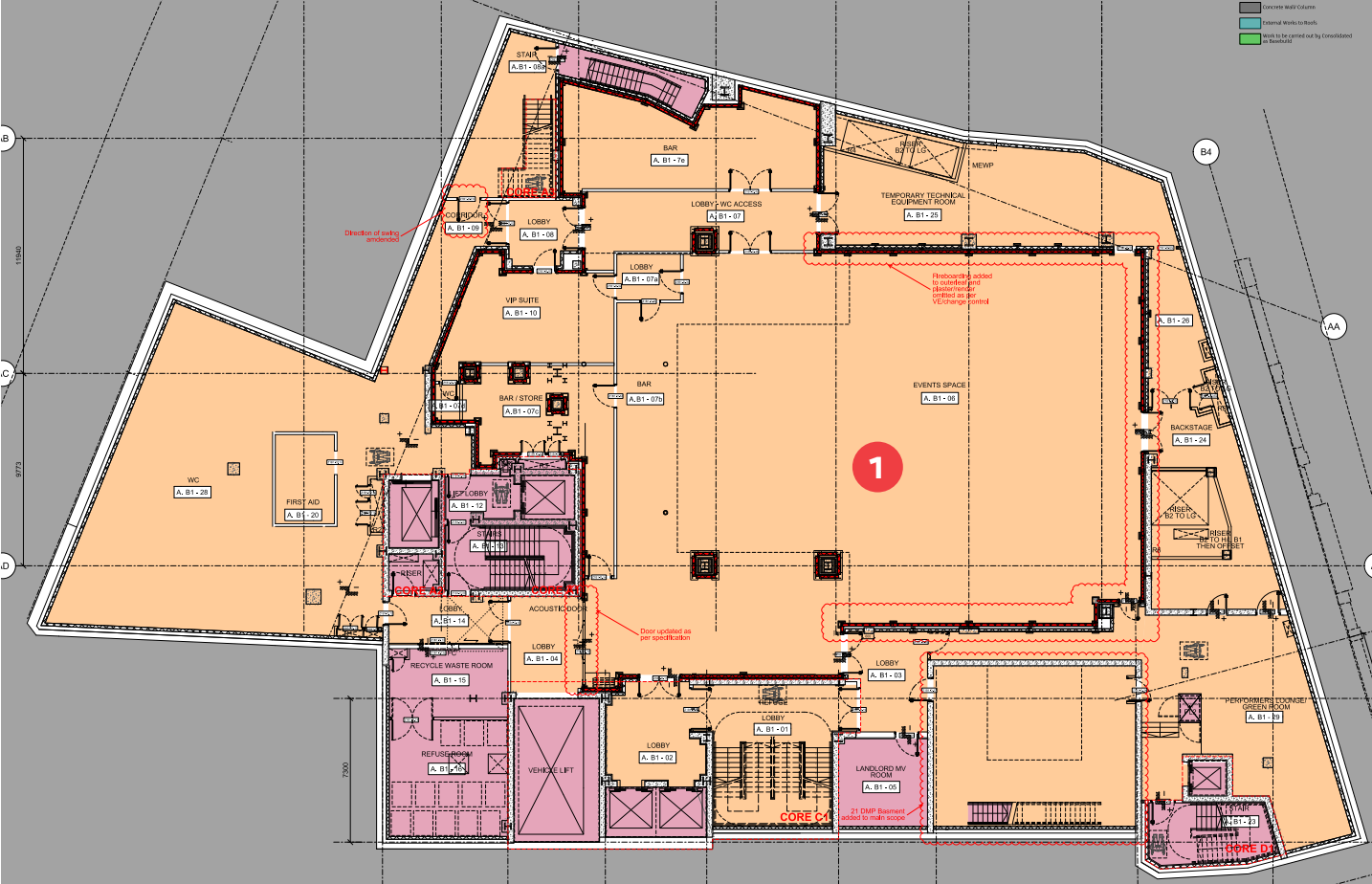
#### Signage

Statutory only

#### Structural

##### Imposed Load

- Uniform Distributed Load  $q_k 10.0 \text{ (kN/m}^2\text{)}$
- Concentrated Loads  $q_k 15.0 \text{ (kN)}$
- Horizontal Loads on Partitions, Walls and Parapets  $q_k 3.0 \text{ (kN/m)}$
- Frequency  $>8.4 \text{ Hz}$



Basement level

#### KEY

- Base build
- Common parts
- Capped off Services

- Response Factor N/A
- Criteria Client Requirement
- Suspended Loads Refer to drawings
- Digital Screens  $g_k 1.0 \text{ (kN/m}^2\text{)}$  to wall elevations- Refer to drawings

#### Superimposed Dead Load

Nominal Load for Services and Finishes  $g_k 0.5 \text{ (kN/m}^2\text{)}$

#### Mechanical

Temperature:

- Winter  $21 \pm 2$
- Summer  $24 \pm 2$

Ventilation and Environmental Strategy

- Type Mechanical supply & extract
- Rate  $8\text{l/s/person}$  at full 2000 person occupancy. Tenant to install centralised air handling plant with all associated chiller water and LTHW connections.

## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.1. Main Events Space

#### Landlord Installation

The following capped services shall be provided:

- Capped ductwork from above ground intake and exhaust louvres
- Metered chilled water flow and return (7/12°C) capped at riser
- Metered LTHW flow and return (70/50°C) capped at riser
- Metered domestic water

#### Tenant Installation

- Events gallery AHU(s) and ductwork to serve events gallery. Supply and extract ductwork, grilles, dampers, insulation etc. to serve the Events Gallery and ancillary areas.
- Extension to the chilled water and LTHW connections including FCUs and radiators or trench heaters within the ancillary spaces not conditioned by the main events space air handling plant.

#### Electrical

Power: - Small Power                      25 W/m2

Lighting:

- Work Lighting                              9W/m2
- House Lighting                              12W/m2

Landlord Installation:

- Power supplies and distribution boards serving specialist venue systems. Refer to 3.2.5 back of house and section 8 Theatre consultant section
- All specialist venue systems temporary power panels
- Spare taps off on busbar for serving distribution boards in future fit out of general small power, house and work lighting.

- Temporary general and emergency lighting.
- Minimum fire detection and alarm system.
- Containment within riser for future ICT cabling.

Tenant Installation:

- Extension of power supplies from the distribution boards provided for specialist venue systems to suit fit out requirements.
- Metered distribution boards and power supplies to suit fit-out.
- Provision of small power, house lighting and work lighting.
- Extension of fire alarm system to suit fit out.
- Lighting including general, display and production lighting.
- LED Screens.

#### Public Health

Cold water storage:              4 litre / person

Hot water storage                1 litre / person

Based on 2000 people

Landlord Installation

- Metered domestic hot and cold water services, capped at local riser.
- Sanitary drainage stub stacks and vent pipes.
- Sprinkler main with zone valve and single sprinkler head

Tenant Installation

- Supply and installation of any sanitary ware and kitchenette equipment required. -Extension of the domestic hot and cold water supplies to serve any sanitary ware and connection to the drainage stub stacks provided. Trace

heating to domestic hot water where required.

- Extension of the sprinkler system to suit layout.

#### Acoustic

Interior noise criteria when rooms are unoccupied:

- |                                |       |
|--------------------------------|-------|
| - Ground borne (railway noise) | NR 30 |
| - Equivalent LAeq              | 35dBA |
| - Services and other noise     | NR 30 |
| - Equivalent LAeq              | 35dBA |
| - Events gallery bar           | NR 45 |
| - Equivalent LAeq              | 50dBA |

#### Security

Criteria: TBA

Camera coverage to allow recognition as shown on drawings.

Access control to doors.

#### Lifts

- The Events Gallery is served by vertical transportation as follows.

Core A1 / F1 (Fire fighting lift)

Core A2 / G1 (Goods lift)

Core C1 / G2 (Vehicle lift)

Core C1/ P9 & P10 (Passenger)

Core D1 / PG8 (Passenger and goods lift)

For further information refer to the lift specification.

#### A/V

Landlord Installation:

- Power supplies and distribution boards serving specialist venue systems, Stage lighting / Audiovisual / Stage Engineering / Screens) including all

cabling and containment runs back the main electrical intake.

- All specialist venue systems temporary power panels
- BWIC zones to accommodate specialist venue systems containment routes in the field
- The new slab for the production/ broadcast facility but no partitions etc. or specialist services - only domestic services on a temporary, (surface-mounted) basis that will allow removal or reconfiguration during fit-out
- Television stub up for Tenant installation

Tenant Installation:

- LED Screens.
- Fit out of specialist venue systems equipment.
- Supply of all production and ICT equipment and the provision of associated local cooling.
- Secondary structure associated with screen mountings across the site, (not the mounting systems but the frames/ galleries/columns to which they will be fixed)
- Refer to section 8 of this report for full details

#### Miscellaneous

- Technical gantry around Events Gallery by Tenant. Refer to structural engineer's drawings for interface

#### WiFi

As part of fit out



# 2. Design Finishes / Layouts / Shell and Core Services Engineering

## 2.2. Bar Areas

### Room Names & Numbers

- B1 Level : Bar / A.B1.07c & 07b
- B1 Level : Temporary Bar or Preparation Kitchen / A.B1.07e
- MZ Level: Bar / A.B1.06

### Brief

To provide fixed and temporary spaces for bar and food preparation to suit multiple types of events with finishes in accordance with “base build” definition as noted below.

### Architectural

Following areas included in Events Space area

Base build FFL Soffit: B1 Bar 2.745M  
B1 Temp Bar: 3.400m  
MZ Bar 4.770m nom.

Base build FFL to U/S of beam:  
B1 Bar 2.735mmom.  
B1 Temp Bar:3.115 nom.  
MZ Bar: 4.770m nom.

Occupancy Level: Refer to events space

### Walls

- Box in Box exposed masonry wall by the main contractor to 58dB Rw. Tenant to compliment acoustic design criteria to values as recommended in the Acoustic Report.
- 60mim fire resistance around main space &120min . Refer to Fire Strategy Report and Orms FR series for locations
- No skirtings

### Partitions

- Partitions between main space and ancillary areas to be in paint grade blockwork

- Acoustic rating  $\geq 55\text{dB Rw}$ . Refer to Acoustic report annex for locations
- Plasterboard infill partitions to be taped and jointed only. No finises

### Floor

Power float concrete slab at B1 level and MZ level

### Ceiling

Exposed metal deck with primary steel fire protected with intumescent paint

### Doors

- Hardwood frame doors with full height high pressure laminate to door leaf. Riser doors to be in painted finish
- Stainless steel ironmongery
- Fire rating N/A
- Acoustic performance 25dB Rw. Refer to Acoustic report annex for locations

### Signage

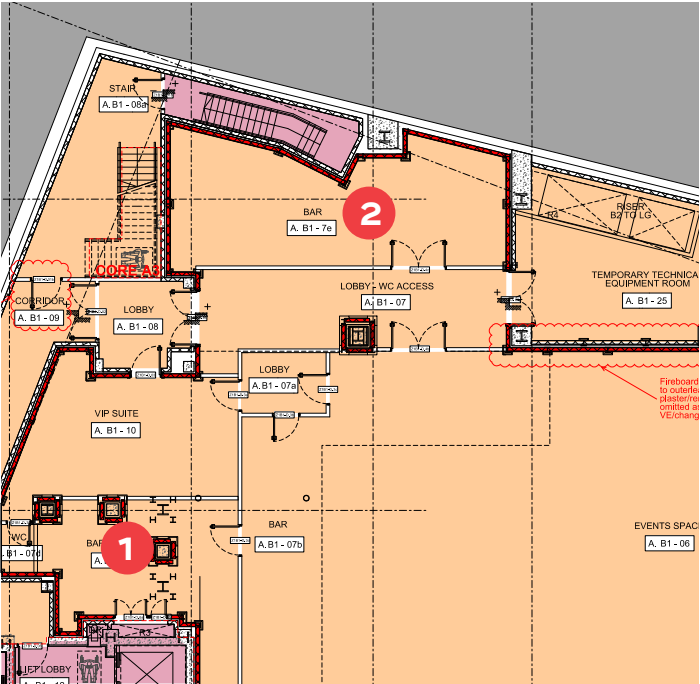
Statutory only

### Bar areas at ground (1&2)

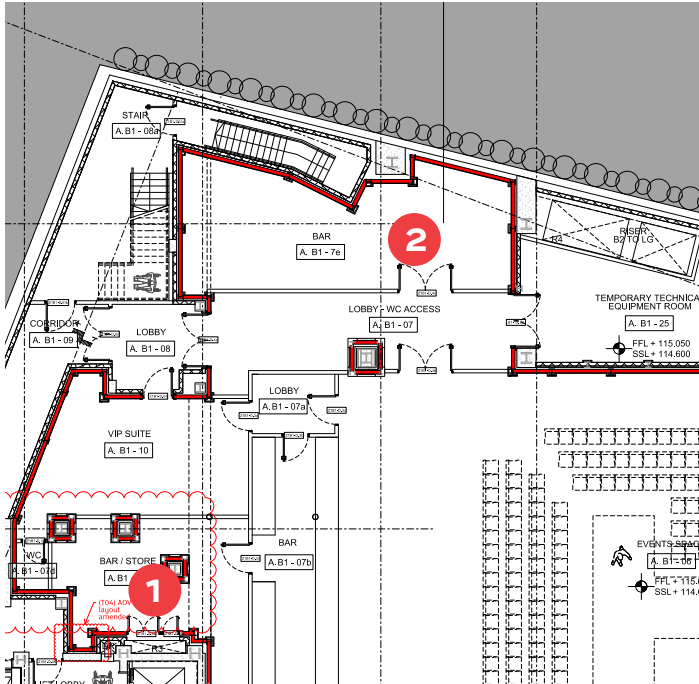
### Structural

#### Imposed Load

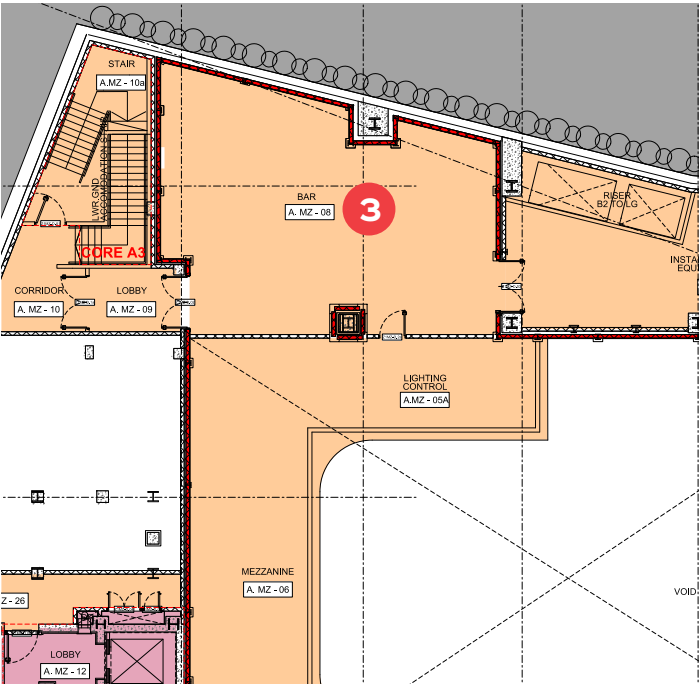
- Uniform Distributed Load including partitions  $q_k 10.0 \text{ (kN/m}^2\text{)}$
- Concentrated Loads  $Q_k 15.0 \text{ (kN)}$
- Horizontal Loads on Partitions, Walls and Parapets  $q_k 3.0 \text{ (kN/m)}$
- Frequency  $>8.4 \text{ Hz}$
- Response Factor N/A
- Criteria Client Requirement



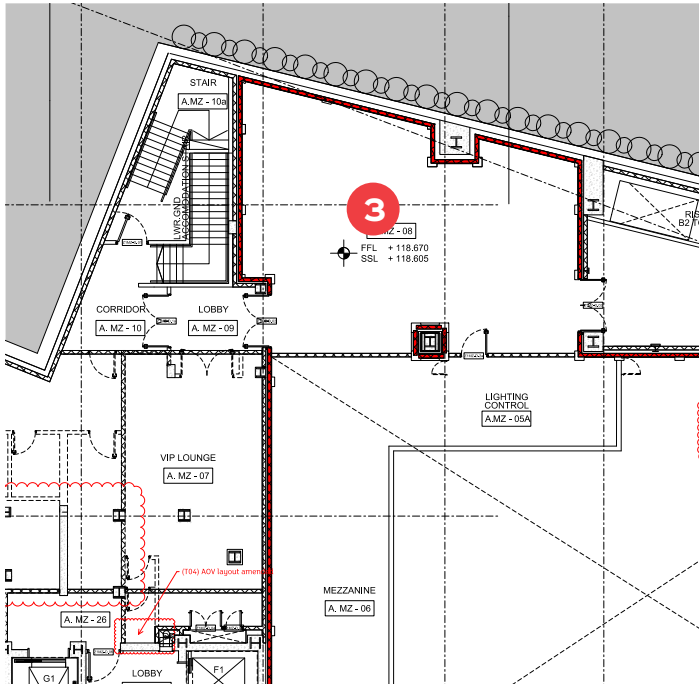
Basement Level B1 – Base Build



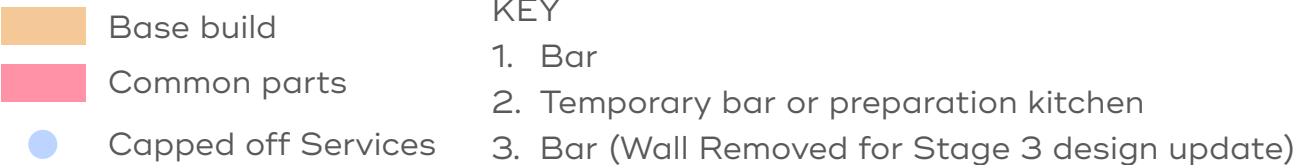
Basement Level- B1 – GA layout



Mezzanine Level (MZ) – Base Build



Mezzanine Level – MZ GA layout



## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.2. Bar Areas

#### Superimposed Dead Load

- Nominal Load for Services and Finishes  
gk 0.5 (kN/m<sup>2</sup>)

#### Bar areas at Mezzanine (3)

##### Structural

##### Imposed Load

- Uniform Distributed Load including partitions  
qk 5.0 (kN/m<sup>2</sup>)
- Concentrated Loads Qk 4.5 (kN)
- Horizontal Loads on Partitions, Walls and Parapets  
qk 3.0 (kN/m)
- Frequency 5 Hz
- Response Factor N/A
- Criteria Client Requirement

#### Superimposed Dead Load

- Nominal Load for Services and Finishes  
gk 2.1 (kN/m<sup>2</sup>)
- 1.6kN/m<sup>2</sup> for floor finishes
- 0.5kN/m<sup>2</sup> for ceiling and services

#### Mechanical

Temperature:

Winter 22 +/- 2

Summer 24 +/- 2

Ventilation Rate 8 l/s/person fresh air

Occupancy included in events gallery

Landlord Installation:

- Metered chilled water flow and return connection (7/12°C), capped at riser.
- Metered LTHW flow and return connection (70/50°C), capped at riser.

Tenant Installation:

- Supply and extract ductwork, grilles, dampers, insulation etc. from the main events gallery AHU(s) to serve space.
- Extension to the chilled water and LTHW connections including FCUs and radiators or trench heaters within the ancillary spaces not conditioned by the main events space air handling plant.

#### Electrical

Power

Small Power 25W/m<sup>2</sup>

Lighting

Work lighting 9W/m<sup>2</sup>

House Lighting 12W/m<sup>2</sup>

Landlord Installation:

- Rising busbar with spare tap offs in local riser.
- Minimum fire detection and alarm system.
- Temporary general and emergency lighting.
- Containment within riser for future ICT cabling.

Tenant Installation:

- Containment, Metered distribution boards and power supplies to suit fit out
- Provision of small power, house lighting and work lighting.
- Extension of fire alarm system to suit fit out.
- All lighting including general, emergency, display and production lighting and associated lighting controls to suit fit out.

#### Public Health

Cold water storage: 4 litre / person

Hot water storage 1 litre / person

Based on 2000 people

Landlord Installation

- Metered domestic hot and cold water services, capped at local riser.
- Sanitary drainage stub stacks and vent pipes.

Sprinkler main with zone valve and single sprinkler head

Tenant Installation

- Supply and installation of any sanitary ware or equipment required such as bar sinks and glass washers. Extension of the domestic hot and cold water supplies to serve these fixtures and connection to the drainage stub stacks provided. Trace heating to domestic hot water where required.

#### Acoustic

For interior noise criteria and any relevant limitations on installed equipment refer to the project acoustic report.

#### Security

Criteria: As part of fit out

#### Lifts

N/A

# 2. Design Finishes / Layouts / Shell and Core Services Engineering

## 2.2. Mezzanine

### Room Names & Numbers

- Mezzanine / A.MZ.O5, O5A & O6

### Brief

To provide mezzanine level for occupancy of main Event Space with finishes in accordance with “base build” definition as noted below.

### Architectural

Base build FFL to Soffit:  
4.770m nom.  
Base build FFL to U/S of beam:  
4.770m nom.

Occupancy Level: Staff only with ability to be enhanced to 34Oppl as part of the as described in the Main Event Space section . Enhanced layout not part of main contract.

### Walls

- Box in Box exposed masonry wall by the main contractor to 58dB Rw. Tenant to compliment acoustic testing criteria to values as recommended in the Acoustic Report.
- 120min compartmentation at interfaces. Refer to Fire Strategy Report and Orms FR series for locations
- LED steel gantry by tenant/operator
- No skirtings

### Partitions

- Exposed masonry wall to Box in Box
- Plasterboard infill partitions to be taped and jointed only. No finises
- 40dB Rw acoustic requirement. Refer to Acoustic report annex for locations

### Floor

Exposed levelling screed

### Ceiling

- Concrete composite deck with primary steel structure intumescent painted

### Doors

- Hardwood frame doors with full height high pressure laminate lining to door leaf. Riser doors to be in painted finish
- Stainless steel ironmongery
- Fire rating N/A
- Acoustic performance 25 & 30dB Rw Refer to acoustic report annex for locations

### Signage

Statutory only

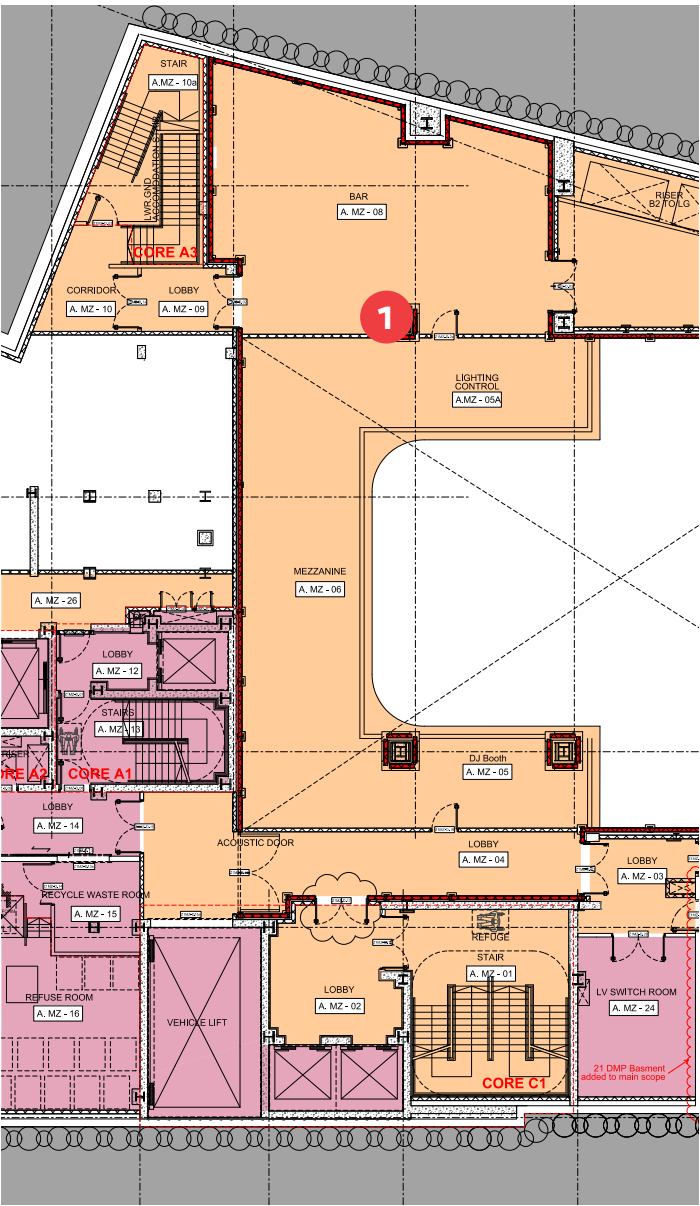
### Miscellaneous

- Temporary guarding where required for health and safety

### Structural

#### Imposed Load

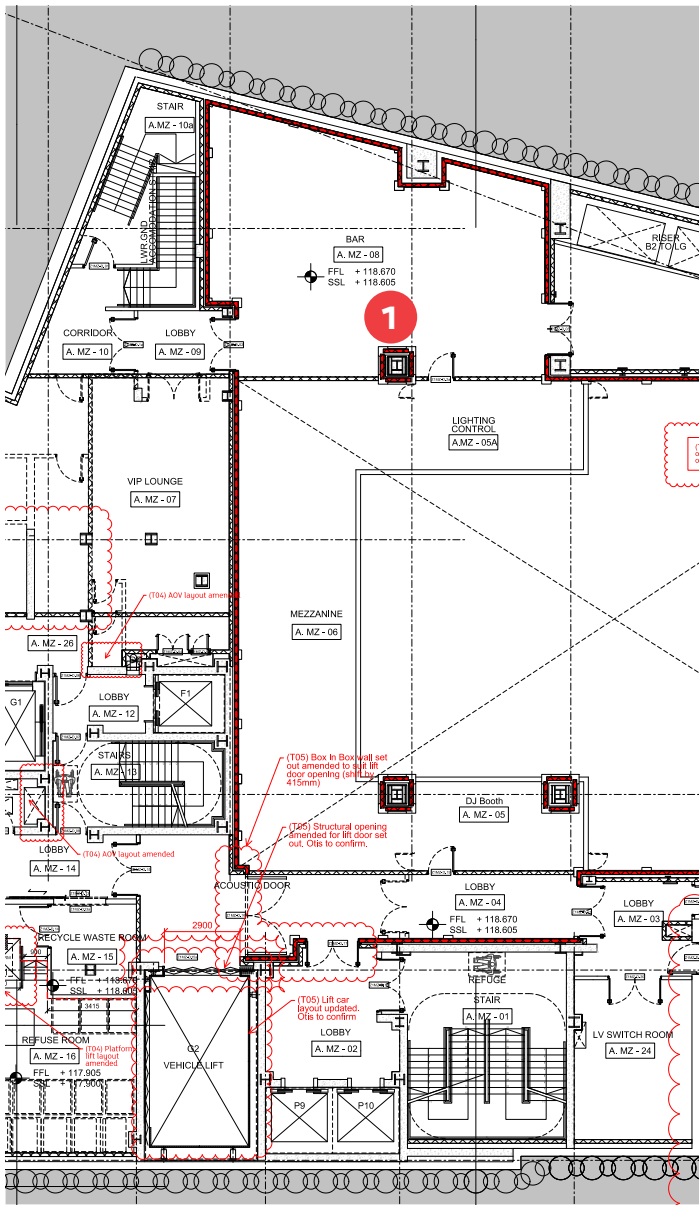
- Uniform Distributed Load including partitions  
qk 5.0 (kN/m2)
- Concentrated Loads Qk 4.5 (kN)
- Horizontal Loads on Partitions, Walls and Parapets qk 3.0 (kN/m)
- Frequency 5 Hz
- Response Factor N/A
- Criteria Client Requirement



Mezzanine Level - Base build

### Superimposed Dead Load

- Nominal Load for Services and Finishes gk 2.1 (kN/m2)
- 1.6kN/m2 for floor finishes and
- 0.5kN/m2 for ceiling and services



Mezzanine Level - Fit out layout

### KEY

- Base build
- Common parts
- Capped off Services



## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.2. Mezzanine

#### Mechanical

Temperature:

Winter 21 +/- 2

Summer 24 +/- 2

Ventilation and Environmental Strategy

- Type Mechanical supply & extract
- Rate 8 l/s/person

Tenant to install centralised air handling plant for events gallery ventilation.

Landlord Installation:

- Capped ductwork from above ground intake and exhaust louvres
- Metered chilled water flow and return (7/12°C)
- Metered LTHW flow and return (70/50°C)

Tenant Installation:

- Events gallery AHU(s) and ductwork to serve events gallery. Supply and extract ductwork, grilles, dampers, insulation etc. to serve the Events Gallery and ancillary areas.
- Extension to the chilled water and LTHW connections including FCUs and radiators or trench heaters within the ancillary spaces not conditioned by the main events space air handling plant.

#### Electrical

Power

Small Power 25W/m2

Lighting

Work lighting 9W/m2

House Lighting 12W/m2

Landlord Installation:

- Power supplies and distribution boards serving specialist venue systems. Refer to 3.2.5 back of house and section 8 Theatre consultant section
- All specialist venue systems temporary power panels
- Spare taps off on busbar for serving distribution boards in future fit out of general small power, house and work lighting.
- Temporary general and emergency lighting.
- Minimum fire detection and alarm system.
- Containment within riser for future ICT cabling.

Tenant Installation:

- Extension of power supplies from the distribution boards provided for specialist venue systems to suit fit out requirements.
- Metered distribution boards and power supplies to suit fit-out.
- Provision of small power, house lighting and work lighting.
- Extension of fire alarm system to suit fit out.
- Lighting including general, display and production lighting.
- LED Screens.
- All containment to fit out equipment

#### Public Health

Cold water storage: 4 litre / person

Hot water storage 1 litre / person

Based on 2000 people

Landlord Installation

- Metered domestic hot and cold water services, capped at local riser.
- Sanitary drainage stub stacks and vent pipes.

Sprinkler main with zone valve and single sprinkler head

Tenant Installation

- Supply and installation of WC facilities and any kitchenette areas required, connecting into the capped domestic hot and cold water supplies and to the drainage stub stacks provided. Meters to domestic hot and cold water.
- Extension of the sprinkler system to suit layout.

#### Acoustic

For interior noise criteria and any relevant limitations on installed equipment refer to the project acoustic report.

#### Security

Criteria: As part of fit out

#### Lifts

Criteria: Refer to lift specification

#### A/V

Criteria: As part of fitout



## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.3. BMZ VIP Lounge

#### Room Names & Numbers

VIP Lounge / A.MZ.07

#### Brief

To identify a space for VIP accommodation with connection to main Events Space with finishes in accordance with “base build” definition as noted below. Layout to form part of the enhanced scope of works not included in the main contract.

#### Architectural

Base build FFL to Soffit: 2.630m nom.

Occupancy

Level: Refer to Main Event Space section for the enhanced layout

#### Walls

- Exposed masonry and concrete walls. Acoustic lining to meet acoustic design criteria by tenant/operator
- FR 60 & 120min around compartment walls. Refer to Fire Strategy Report and Orms FR series for locations
- Box in Box exposed masonry wall by the main contractor to 58dB Rw. Tenant to compliment acoustic desing criteria to values as recommended in the Acoustic Report.

#### Partitions

- Fit out partition by Tenant/Operator
- 60mimin fire resistance around main space &120min. Refer to Fire Strategy Report and Orms FR series for locations
- Acoustic rating  $\geq 45$  & 60dB Rw. Refer to Acoustic report annex for locations

#### Floor

Power floated & trowelled slab

#### Ceiling

Exposed concrete soffit

#### Doors

- Doors by Tenant/Operator
- Doors to be fire rated FR30S & FR60S on risers
- Acoustic performance 25dB Rw. Refer to Acoustic report annex for locations

#### Signage

Statutory only where required

#### Structural

- Uniform Distributed Load including partitions qk 5.0 (kN/m<sup>2</sup>)
- Concentrated Loads Qk 4.5 (kN)
- Horizontal Loads on Partitions, Walls and Parapets qk 3.0 (kN/m)
- Frequency N/A
- Response Factor N/A
- Criteria Client Requirement

Superimposed Dead Load:

- Nominal Load for Services and Finishes gk 2.1 (kN/m<sup>2</sup>)
- 1.6kN/m<sup>2</sup> for floor finishes
- 0.5kN/m<sup>2</sup> for ceiling and services

#### Mechanical

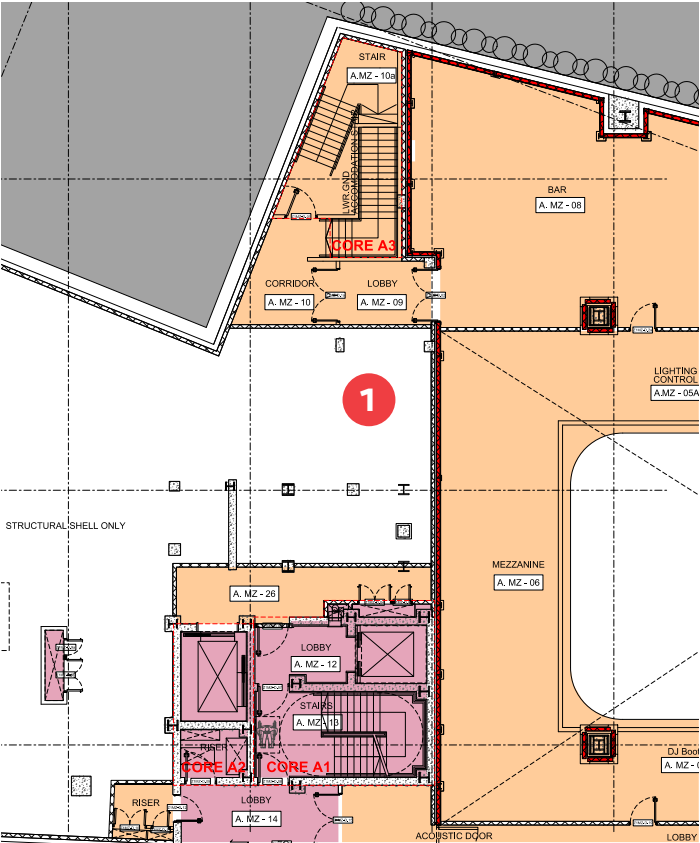
Temperature:

Winter 21 +/- 2

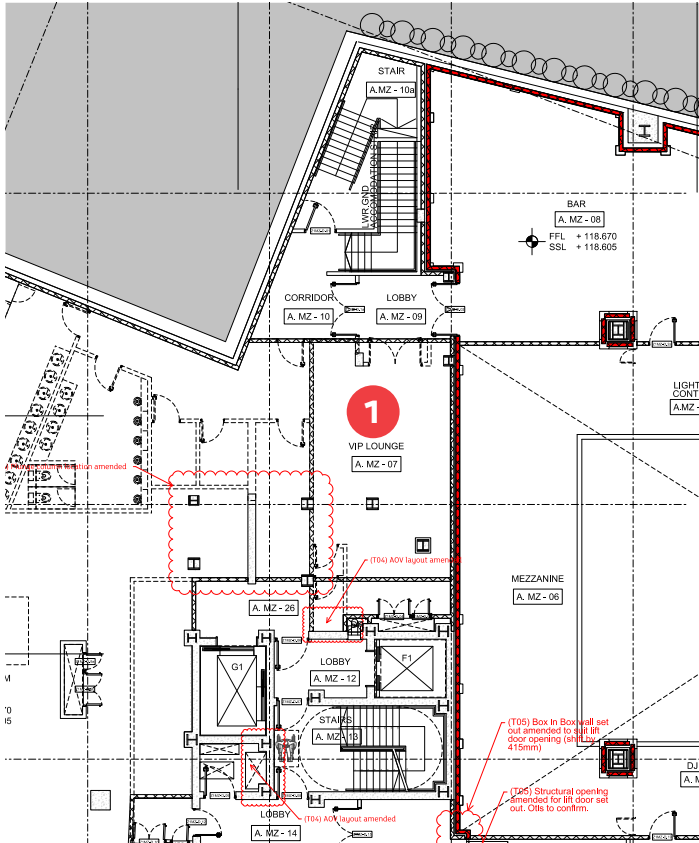
Summer 24 +/- 2

Ventilation Rate 8 l/s/person fresh air

Occupancy 2000 people (including Mezzanine, bars and VIP)



Mezzanine Level - Base build



Mezzanine Level - Fit out layout

#### KEY

- Base build
- Common parts
- Capped off Services

## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.3. BMZ VIP Lounge

Landlord Installation:

- Metered chilled water flow and return connection (7/12°C), capped at riser.
- Metered LTHW flow and return connection (70/50°C), capped at riser.

Tenant Installation:

- Supply and extract ductwork, grilles, dampers, insulation etc. from the main events gallery AHU(s) to serve space.
- Extension to the chilled water and LTHW connections including FCUs and radiators or trench heaters within the ancillary spaces not conditioned by the main events space air handling plant.

**Electrical**

Power	
Small Power	25W/m2
Lighting	
Work lighting	9W/m2
House Lighting	12W/m2

Landlord Installation:

- Spare taps off on busbar for serving distribution boards in future fit out of general small power, house and work lighting.
- Temporary general and emergency lighting.
- Minimum fire detection and alarm system.
- Containment within riser for future ICT cabling.

Tenant Installation:

- Metered distribution boards and power supplies to suit fit-out.

- Provision of small power, house lighting and work lighting.
- Extension of fire alarm system to suit fit out.
- Lighting including general and decorative house lighting to suit fit out.

**Public Health**

Cold water storage:	4 litre / person
Hot water storage	1 litre / person
Based on 2000 people	

Landlord Installation

- Metered domestic hot and cold water services, capped at local riser.
- Sanitary drainage stub stacks and vent pipes.
- Sprinkler main with zone valve and single sprinkler head

Tenant Installation

- Supply and installation of any sanitary ware or equipment required such as bar sinks and glass washers. Extension of the domestic hot and cold water supplies to serve these fixtures and connection to the drainage stub stacks provided.
- T-Extension of the sprinkler system to suit layout.

**Acoustic**

For interior noise criteria and any relevant limitations on installed equipment refer to the project acoustic report.

**Security**

As part of fit out

**Lifts**

Refer to Lift specification

**A/V**

As part of fit out

**WiFi**

As part of fit out

# 2. Design Finishes / Layouts / Shell and Core Services Engineering

## 2.3. B1 VIP Suite

### Room Names & Numbers

VIP Lounge / A.B1.10

### Brief

To provide a space for VIP accommodation with connection to main Events Space with finishes in accordance with “base build” definition as noted below. Layout to form part of the enhanced scope of works not included in the main contract.

### Architectural:

Base build FFL to Soffit: 2.630m nom.  
Occupancy Level: Refer to the Main Event Space section for the enhanced layout

### Walls

- Box in Box exposed masonry wall by the main contractor to 58dB Rw. Tenant to compliment acoustic desing criteria to values as recommended in the Acoustic Report.
- 60mimin fire resistance along Box in Box. Refer to Fire Strategy Report for full details. Refer to Fire Strategy Report and Orms FR series for locations
- No skirtings

### Partitions

- Plasterboard partitions with painted finish
- Acoustic rating ≥55dB Rw. Refer to Acoustic report annex for locations
- Fire rating N/A

### Floor

Power floated slab

### Ceiling

- Soffit exposed and unfinished
- Steelwork fire protected

### Doors

- Hardwood frame doors with full height high pressure laminate to door leaf.
- Stainless steel ironmongery
- Doors to be fire rated FR30S. Refer to Fire Strategy Report and Orms FR series for locations
- Acoustic performance 25dB Rw. Refer to Acoustic report annex for locations

### Signage

Statutory only where required

### Structural

As per Bar Areas in this report

### Mechanical

Temperature:

Winter 21 +/- 2

Summer 24 +/- 2

Ventilation Rate 8 l/s/person fresh air

Occupancy 2000 people (including

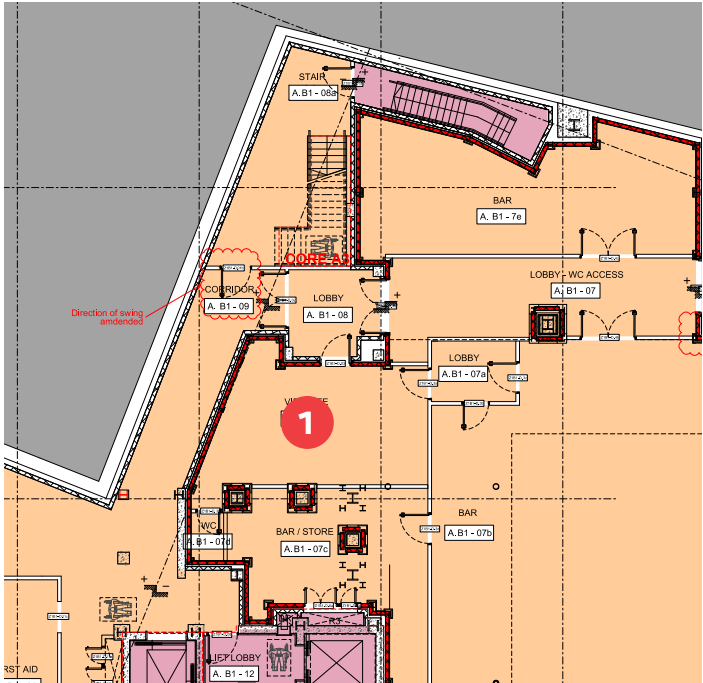
Mezzanine, bars and VIP)

Landlord Installation:

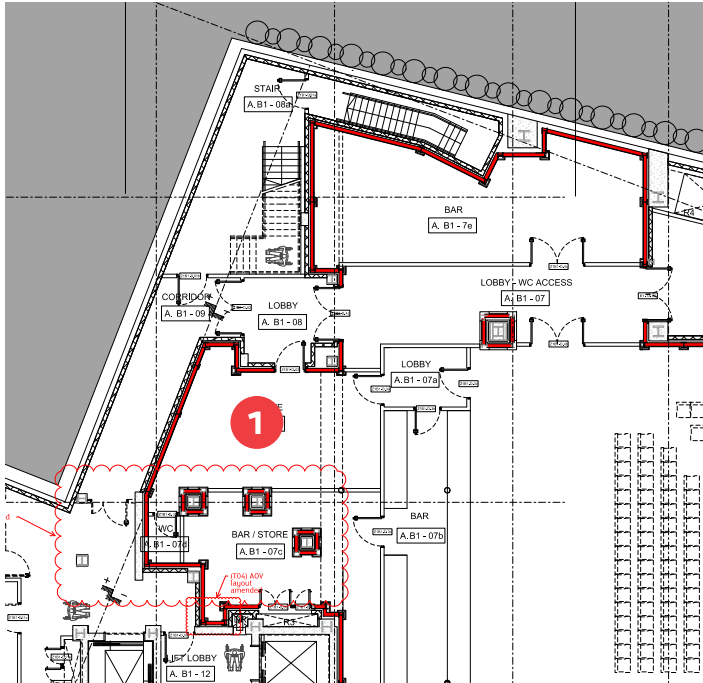
- Metered chilled water flow and return connection (7/12°C), capped at riser.
- Metered LTHW flow and return connection (70/50°C), capped at riser.

Tenant Installation:

- Supply and extract ductwork, grilles, dampers, insulation etc. from the main events gallery AHU(s) to serve space.



Basement Level B1 – Base Build



Basement Level- B1 – GA layout

### KEY

- Base build
- Common parts
- Capped off Services

- Extension to the chilled water and LTHW connections including FCUs and radiators or trench heaters within the ancillary spaces not conditioned by the main events space air handling plant.

### Electrical

Power	
Small Power	25W/m2
Lighting	
Work lighting	9W/m2
House Lighting	12W/m2

Landlord Installation:

- Spare taps off on busbar for serving distribution boards in future fit out of general small power, house and work lighting.
- Temporary general and emergency lighting.
- Minimum fire detection and alarm system.
- Containment within riser for future ICT cabling.

## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.3. B1 VIP Suite

Tenant Installation:

- Metered distribution boards and power supplies to suit fit-out.
- Provision of small power, house lighting and work lighting.
- Extension of fire alarm system to suit fit out.
- Lighting including general and decorative house lighting to suit fit out.

**Public Health**

Cold water storage:     4 litre / person  
Hot water storage       1 litre / person  
Based on 2000 people

Landlord Installation

- Metered domestic hot and cold water services, capped at local riser.
- Sanitary drainage stub stacks and vent pipes.
- Sprinkler main with zone valve and single sprinkler head

Tenant Installation

- Supply and installation of any sanitary ware or equipment required such as bar sinks and glass washers. Extension of the domestic hot and cold water supplies to serve these fixtures and connection to the drainage stub stacks provided. Trace heating to domestic hot water where required.
- Extension of the sprinkler system to suit layout.

**Acoustic**

For interior noise criteria and any relevant limitations on installed equipment refer to the project acoustic report.

**Security**

As part of fit out

**Lifts**

Refer to lift specification

**A/V**

As part of fit out

**WiFi**

As part of fit out



## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.4. Stair & Lift Cores – Common Parts

#### Room Names & Numbers

Core A1 / Varies from B2-GF – Refer to plans

Core D1 / Varies from B1-GF – Refer to plans

#### Brief

To provide access cores for 2000 people into events space, site wide functions and statutory requirements with finishes in accordance with “common parts” definition as noted below.

#### Architectural

Base build floor to floor Varies 3.100-4.350m nom.

#### Walls

- Painted finish to blockwork & in situ concrete. Infill plasterboard partitions fully finished (taped,jointed, skimmed) and painted.
- FR120min & FR 60min. Refer to Fire Strategy Report for full details . Refer to Fire Strategy Report and Orms FR series for locations

#### Partitions

- Infill plasterboard partitions fully finished (taped,jointed, skimmed) and painted.
- FR120min & FR 60min. Refer to Fire Strategy Report for full details. Refer to Fire Strategy Report and Orms FR series for locations

#### Floor

- Paint finsih to floor and stair.
- Anti-slip contrasting nosing applied to stair

#### Ceiling

Painted finish to concrete stair and soffit

#### Doors

- Hardwood frame doors with full height high pressure laminate door leaf. Riser doors to be in painted finish
- Stainless steel ironmongery
- Doors to be fire rated FR60S & FR30S inside core. Refer to Fire Strategy Report and Orms FF series for locations
- Acoustic performance 25dB Rw & 30dB Rw. Refer to Acoustic report annex for locations

#### Furniture

N/A

#### Metalwork

- Balustrade with mild steel flats and solid mild steel stringer to architectural standard and painted finish
- Brushed stainless steel handrail

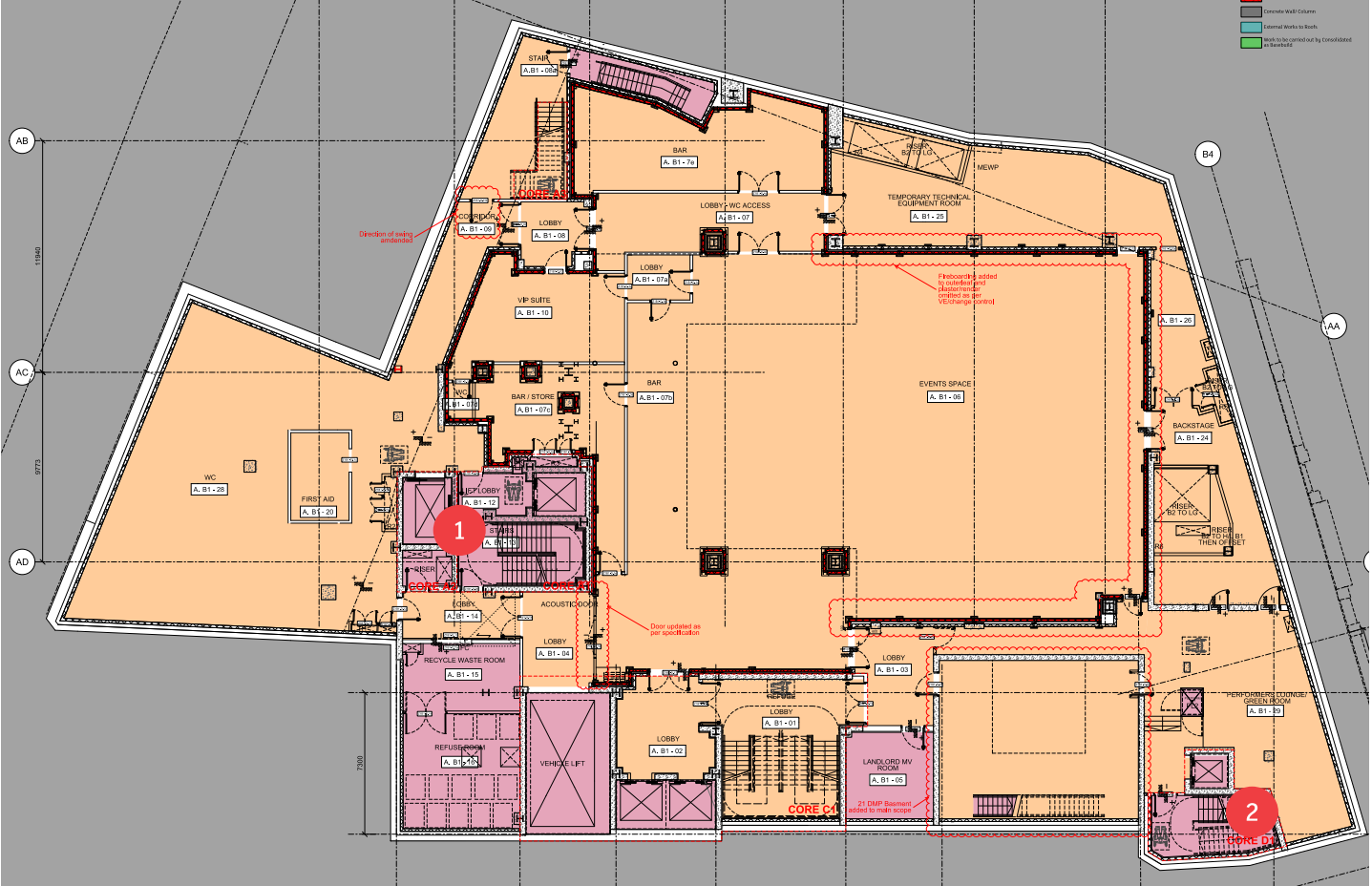
#### Signage

- Statutory signage through out
- Stainless steel feature panel to be applied to every level of where there is a disabled refuge, dry riser cabinet or stair/lift lobby/landing without either.

#### Structural

##### Lobbies and floor slabs

Imposed and Superimposed Dead Loads as per adjacent rooms.



Basement Level

#### KEY

- Base build
- Common parts
- Capped off Services

- Core A1 / B2 - GF
- Core D1 / B1 - GF

#### Stairs

##### Imposed Load

- Uniform Distributed Load  $q_k 4.0 (kN/m^2)$
- Concentrated Loads  $Q_k 4.5 (kN)$
- Horizontal Loads on Partitions, Walls and Parapets  $q_k 3.0 (kN/m)$
- Frequency N/A
- Response Factor N/A
- Criteria C33/C35

---

## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.4. Stair & Lift Cores – Common Parts

#### Superimposed Dead Load

- Nominal Load for Services and Finishes gk 2.1 (kN/m2)
- 1.6kN/m2 for floor finishes and
- 0.5kN/m2 for ceiling and services

#### Mechanical

Temperature:

Winter                18 +/- 2

Summer              Uncontrolled

Ventilation          N/A

Occupancy          N/A – Transient occupants only

Ventilation of stairs via natural infiltration from neighbouring spaces.

Background heating via LTHW to radiators to lowest stair level. No cooling provision.

#### Electrical

Power

Small Power        5W/m2

Lighting            8W/m2

- Containment, distribution boards and power supplies for all landlord’s equipment.
- Fire detection and alarm system.
- All general and emergency lighting and associated lighting controls.

#### Public Health

Sprinkler system with zone valves and sprinkler heads.

#### Acoustic

For interior noise criteria and any relevant limitations on installed equipment refer to the project acoustic report.

#### Security

Access control and CCTV

#### Lifts

Refer to lift specification

#### A/V

As part of fitout

#### WIFI

As part of fitout

## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.5. Stair & Lift Cores – Base Build

#### Room Names & Numbers

Core A3 / Varies from B1-LG

Core C1 / Varies from B1-GF

#### Brief

To provide access cores for 2000 people into events space, site wide functions and statutory requirements with finishes in accordance with “base build” definition as noted below.

#### Architectural

Base build floor to floor  
Varies 3.100–4.350m nom.

#### Walls

- Exposed in-situ concrete walls and blockwork
- FR120min & FR 60min. Refer to Fire Strategy Report for full details . Refer to Fire Strategy Report and Orms FF series for locations
- No skirtings

#### Partitions

- Fire and acoustic rated dryline partitions taped jointed and skimmed finish only
- FR120min & FR 60min. Refer to Fire Strategy Report for full details. Refer to Fire Strategy Report and Orms FR series for locations
- No skirtings

#### Floor

- Concrete slab with cavity tray drainage where specified, insulation and screed at basement level. Generally upper levels include screed finish.

- Temporary step access to be provided to contractors proposals to reconcile changes in level. Temporary timber stairs acceptable.

#### Ceiling

Exposed concrete or metal deck finish

#### Doors

- Hardwood frame doors with full height high pressure laminate to door leaf. Riser doors to be in painted finish
- Stainless steel ironmongery
- Doors to be fire rated FR60S & FR30S. Refer to Fire Strategy Report and Orms FR series for locations
- Acoustic performance 25dB Rw & 30dB Rw. Refer to Acoustic report annex for locations

#### Furniture

N/A

#### Metalwork

Key clamp proprietary mild steel balustrade with PPC finish

#### Signage

Statutory only where required

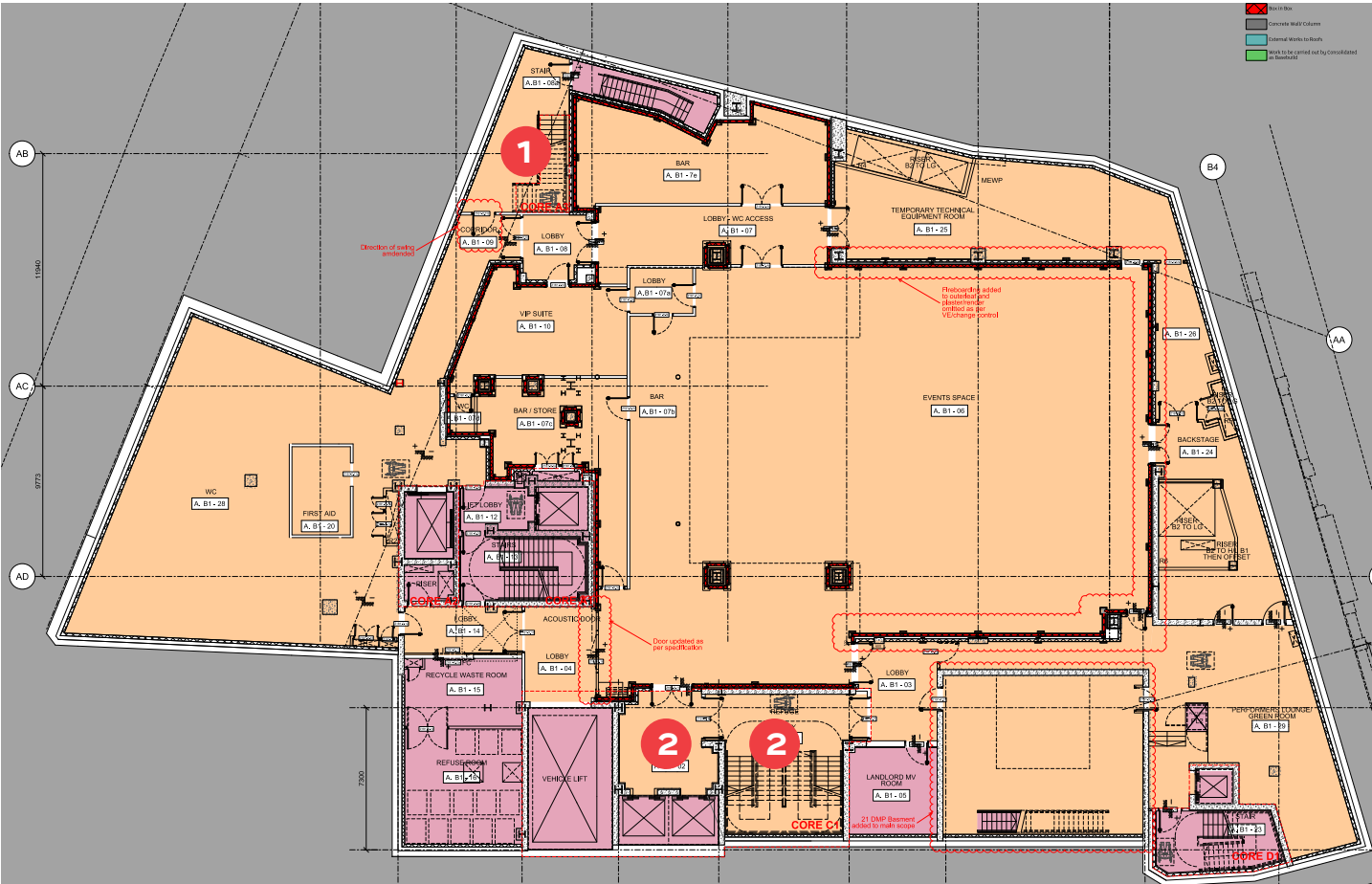
#### Miscellaneous

N/A

#### Structural

##### Lobbies and floor slabs

Imposed and Superimposed Dead Loads as per adjacent rooms.



#### Basement Level

##### KEY

- Base build
- Common parts
- Capped off Services

- Core A3 / B1 to LG
- Core C1 / B1 - GF

#### Stairs

##### Imposed Load

- Uniform Distributed Load  $q_k$  4.0 (kN/m<sup>2</sup>)
- Concentrated Loads  $Q_k$  4.5 (kN)
- Horizontal Loads on Partitions, Walls and Parapets  $q_k$  3.0 (kN/m)
- Frequency N/A
- Response Factor N/A
- Criteria C33/C35

##### Superimposed Dead Load

- Nominal Load for Floor Finishes  $g_k$  1.6 (kN/m<sup>2</sup>)
- Nominal Load for Ceiling and Services over.  $g_k$  0.5 (kN/m<sup>2</sup>)

---

## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.5. Stair & Lift Cores – Base Build

#### Mechanical

Temperature:

Winter	18 +/- 2
Summer	Uncontrolled
Ventilation	N/A
Occupancy	N/A – Transient occupants only

- Ventilation via natural infiltration from neighbouring spaces.
- Background heating via LTHW to radiators where required. No cooling provision.

Tenant Installation

- Extension of capped LTHW and CHW services to serve space heating and cooling if required. Extension of tenant ventilation system to serve stair / lift lobbies if required.

#### Electrical

Power

Small Power	5W/m2
Lighting	8W/m2

- Containment, distribution boards and power supplies for all landlord’s equipment.
- Fire detection and alarm system.
- All general and emergency lighting and associated lighting controls.

#### Public Health

Sprinkler system with zone valves and sprinkler heads.

#### Acoustic

For interior noise criteria and any relevant limitations on installed equipment refer to the project acoustic report.

#### Security

Access control, hold opens and CCTV

#### Lifts

Refer to lift specification

#### A/V

As part of fitout

#### WiFi

As part of fit out



## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.6. Landlord Plant Space

#### Room Names & Numbers

Sub basement plant rooms / A.B2.02-05, A.B2.09-17

Basement plant rooms / A.B1.16, 24-26

Mezzanine plant rooms / A.MZ.16, 24 & 25

Lower ground plant rooms / A.LG.14-16

#### Brief

To provide landlord plant facilities across sub-basement level and along southern parts of basement and mezzanine level to “common parts” standards listed below and those required by statutory bodies.

#### Architectural

Base build FFL to Soffit:  
2.630 - 3.500m nominal

Occupancy Level: Refer to events gallery

#### Walls

- Generally blockwork or in situ concrete with paint finish.
- No skirtings
- FR120min & FR 60min. Refer to Fire Strategy Report and Orms FR series for locations
- Acoustic requirement :  $\geq 60\text{dB}$  Rw &  $\geq 55\text{dB}$  Rw. Refer to Acoustic report annex for locations

#### Partitions

- Fire and acoustic rated dryline partitions with skim finish only
- No skirtings
- FR120min & FR 60min. Refer to Fire Strategy Report and Orms FR series for locations

Acoustic requirement :  $\geq 60\text{dB}$  Rw &  $\geq 55\text{dB}$  Rw. Refer to Acoustic report annex for locations

#### Floor

- Generally epoxy resin paint to concrete
- Tank rooms to be bundled to services contractor’s proposals
- Electrostatic finishes to IT Coms rooms
- Concrete slab with cavity tray drainage, insulation and screed at B2 & B1 level where specified.
- Temporary step access to be provided to contractors proposals to reconcile changes in level

#### Ceiling

Dust sealer in plant rooms and paint finishes along stairs lobbies and corridors

#### Doors

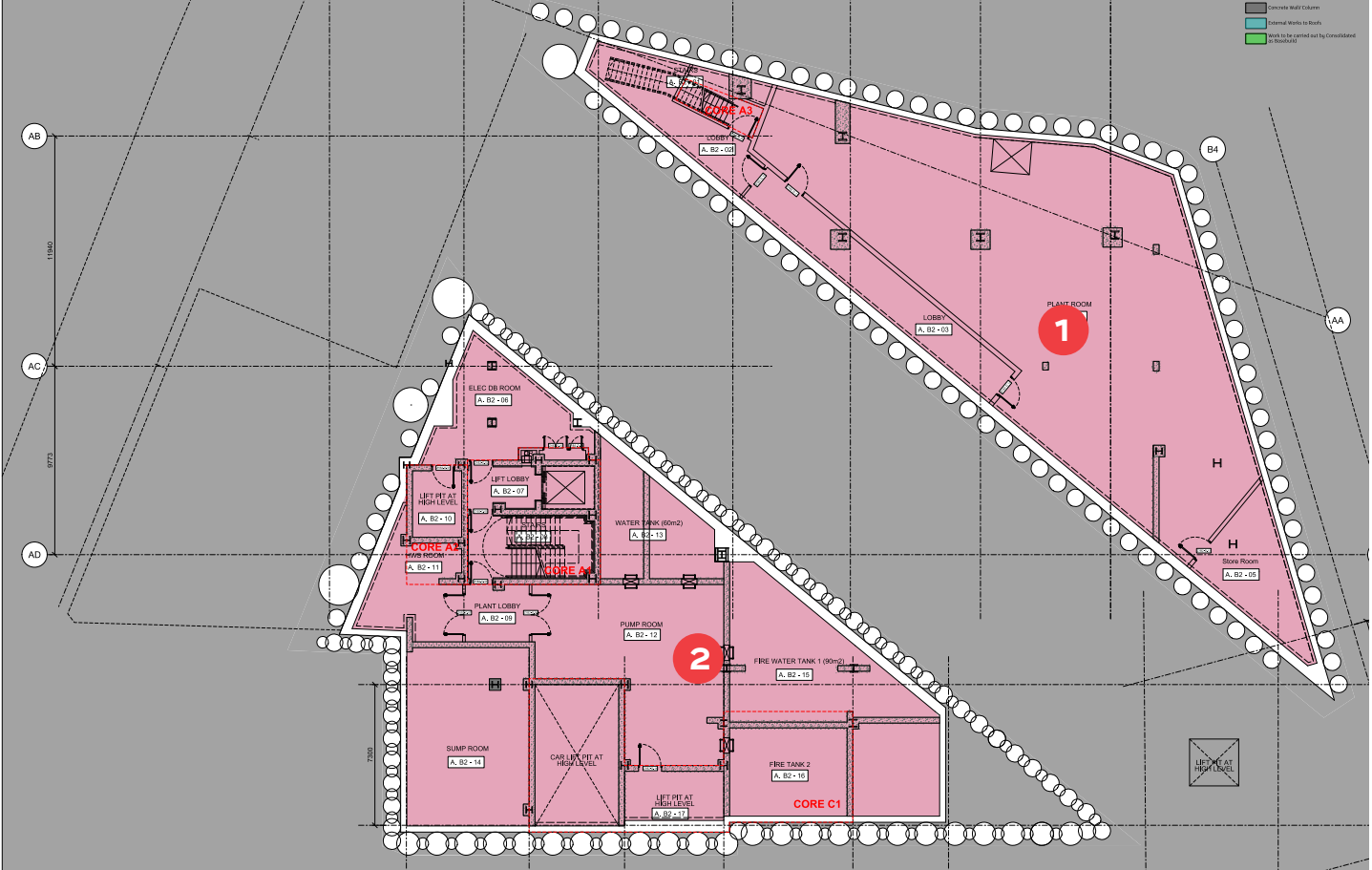
- Hardwood frame with high pressure laminate finish
- Fire rating FR60S & FR30S. Refer to Orms FF series for locations
- Acoustic performance: 25-40dB Rw Refer to acoustic report annex for locations
- Metal gates into refuse rooms and UKPN rooms with polyester powder coat finish
- Stainless steel ironmongery
- Access Control

#### Furniture

N/A

#### Signage

- Statutory signage where required
- Plant room names and numbers on doors



Sub Basement Level

#### Miscellaneous

- Temporary balustrade guarding around capped penetrations where required
- Any required by UKPN by the UKPN room contractor

#### KEY

- Base build
- Common parts
- Capped off Services

1. Sub-basement north plant room
2. Sub-basement south plant room
3. Transformer room
4. Basement and Mezzanine refuse rooms
5. Storm water attenuation tank
6. Oil tank room
7. UKPN room
8. Comms intake room
9. MV room

## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.6. Landlord Plant Space

#### Structural

##### 1. Northern B2 Plant room

Imposed Load:

- Uniform Distributed Load including partitions qk 7.5 (kN/m<sup>2</sup>)
- Concentrated Loads Qk 10.0 (kN)
- Horizontal Loads on Partitions, Walls and Parapets qk 3.0 (kN/m)
- 1.5kN/m for non public areas
- Frequency N/A
- Response Factor N/A
- Criteria Typical Mechanical Plant

##### Superimposed Dead Load

- 100mm Hard Finishes / Cavity Drain gk 2.4 (kN/m<sup>2</sup>)
- Hung services , Soffit above gk 0.5 (kN/m<sup>2</sup>)

##### 2. Southern B2 Plant room

(Standard mechanical plant rooms as 1)

##### Imposed Load

- Uniform Distributed Load
  - Tank room qk 30.0 (kN/m<sup>2</sup>)
  - Elsewhere qk 7.5 (kN/m<sup>2</sup>)
- Concentrated Loads
  - Tank room Qk 30.0 (kN)
  - Elsewhere Qk 10.0 (kN)
- Horizontal Loads on Partitions, Walls and Parapets qk As Req (kN/m)
- Frequency N/A
- Response Factor N/A
- Criteria Tanks

##### WiFi

As part of fit out

##### Superimposed Dead Load

- 100mm Hard Floor Finishes / Cavity Drain gk 2.4 (kN/m<sup>2</sup>)
- Hung services , Soffit above gk 0.5 (kN/m<sup>2</sup>)

##### 3. Transformer Room

##### Imposed Load

- Uniform Distributed Load including partitions qk 7.5 (kN/m<sup>2</sup>)
- Concentrated Loads Qk 10.0 (kN)
- Horizontal Loads on Partitions, Walls and Parapets qk 3.0 (kN/m)
- Frequency N/A
- Response Factor N/A
- Criteria Heavy Mechanical Plant

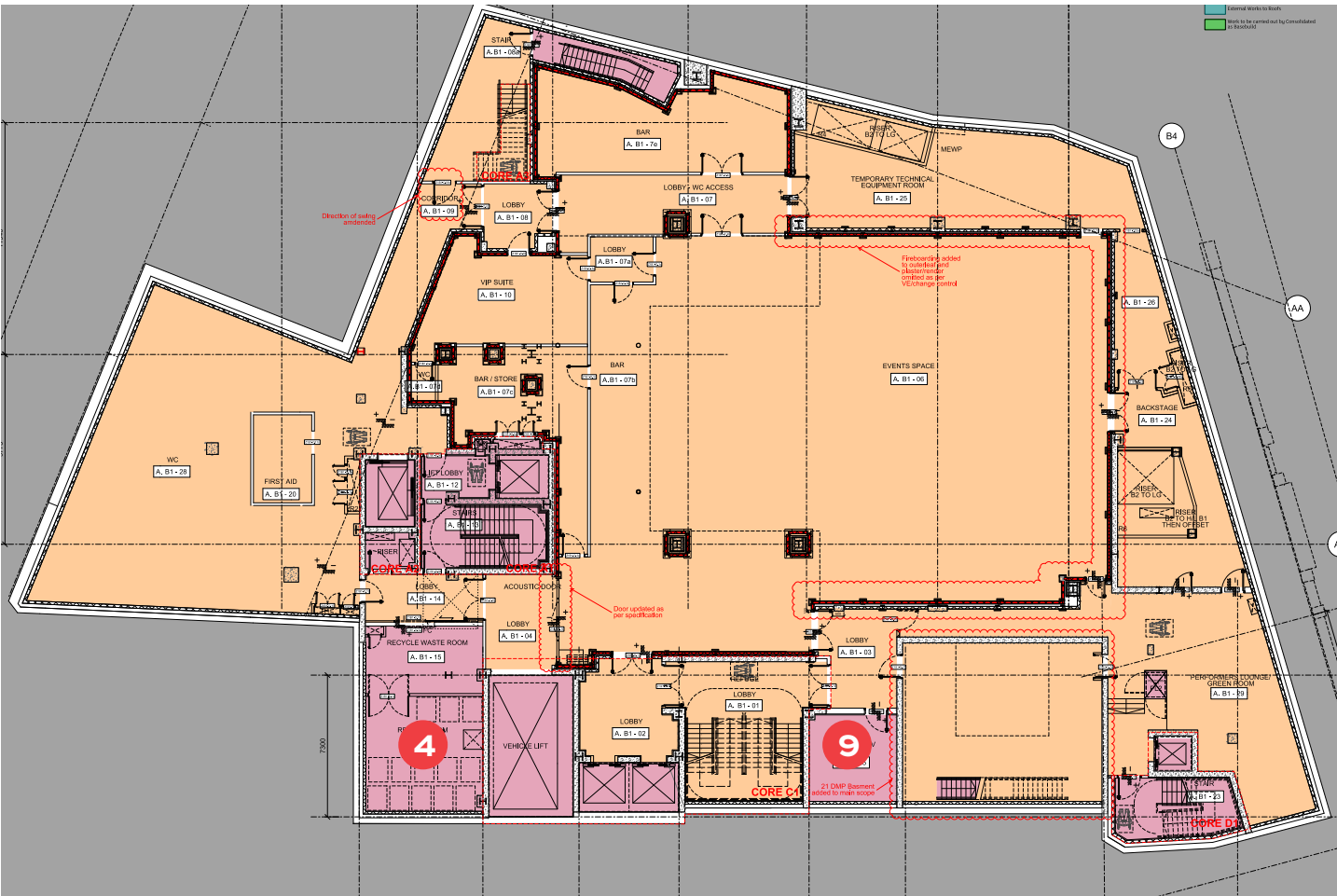
##### Superimposed Dead Load

- 65mm Hard Floor Finishes gk 2.1(kN/m<sup>2</sup>)
- Hung services , Soffit above gk 0.5 (kN/m<sup>2</sup>)

##### 4. Basement level Areas

##### Imposed Load

- Uniform Distributed Load including partitions qk 10.0 (kN/m<sup>2</sup>)
- Concentrated Loads Qk 15.0 (kN)
- Horizontal Loads on Partitions, Walls and Parapets qk 3.0 (kN/m)
- Frequency N/A
- Response Factor N/A
- Criteria Heavy Mechanical Plant



Basement level

#### KEY

- Base build
- Common parts
- Capped off Services

- Sub-basement north plant room
- Sub-basement south plant room
- Transformer room
- Basement and Mezzanine refuse rooms
- Storm water attenuation tank
- Oil tank room
- UKPN room
- Comms intake room
- MV room



## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.6. Landlord Plant Space

#### Superimposed Dead Load

- 100mm Hard Floor Finishes  
gk 2.4 (kN/m<sup>2</sup>)
- Hung services , Soffit above  
gk 0.5 (kN/m<sup>2</sup>)

#### 5. Lower Ground Level (attenuation tank)

##### Imposed Load

- Uniform Distributed Load qk 7.5 (kN/m<sup>2</sup>)
- Attenuation tanks qk 20 (kN/m<sup>2</sup>)
- Concentrated Loads Qk 10.0 (kN)
- Attenuation tanks QK 15 (kN)
- Horizontal Loads on Partitions, Walls and Parapets qk As Req (kN/m)
- Frequency N/A
- Response Factor N/A
- Criteria Storm Water Attenuation

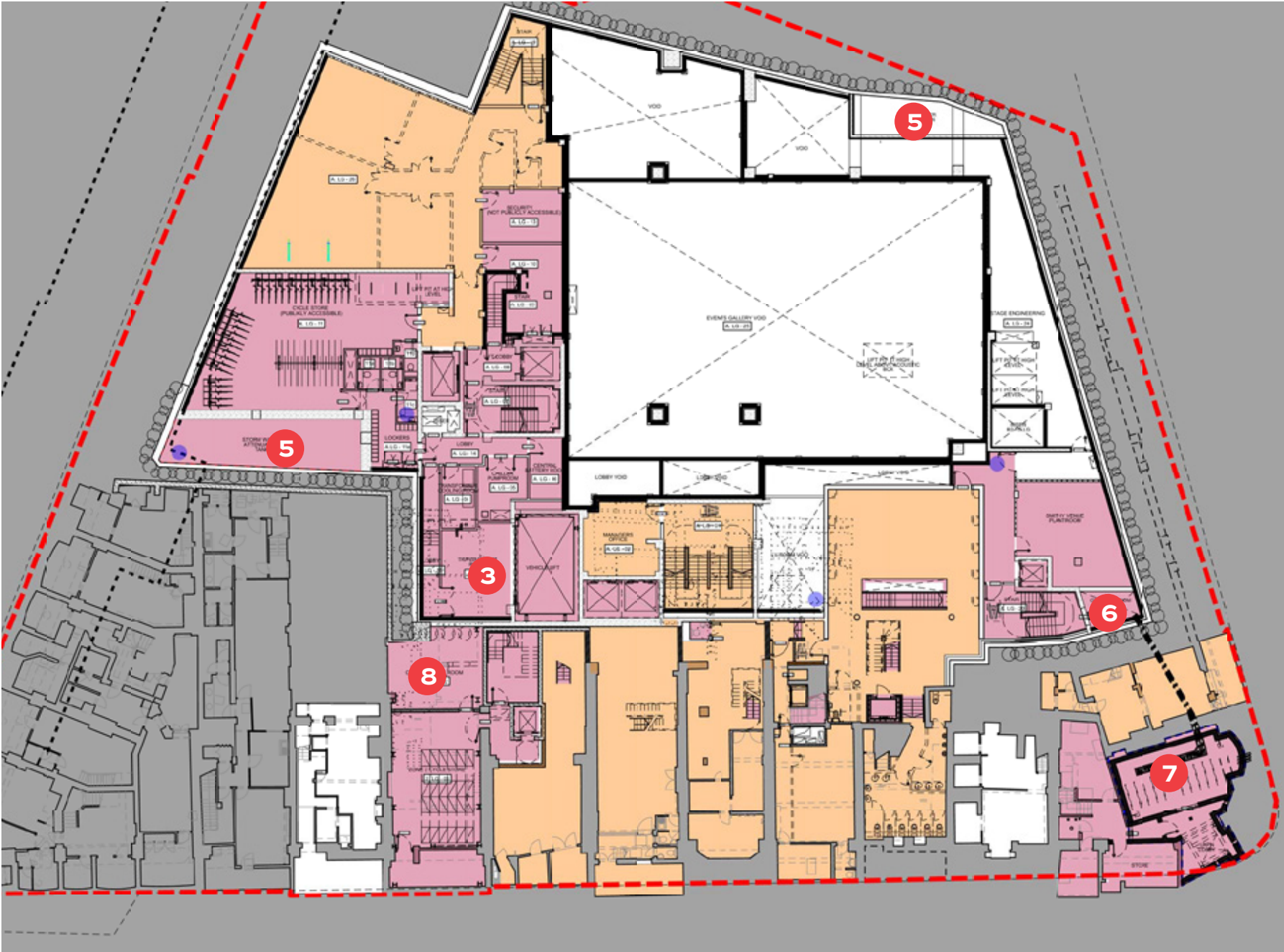
#### Superimposed Dead Load

- 65mm Hard Finishes gk 1.6 (kN/m<sup>2</sup>)
- Hung services, Soffit above  
gk 0.5 (kN/m<sup>2</sup>)

#### 6. Oil Tank Room

##### Imposed Load

- Uniform Distributed Load  
qk 7.5(kN/m<sup>2</sup>)
- Concentrated Loads Qk 10 (kN)
- Horizontal Loads on Partitions, Walls and Parapets qk TBC (kN/m)
- Frequency N/A
- Response Factor N/A
- Criteria TBC



Lower Ground Level

#### KEY

- Base build
- Common parts
- Capped off Services

- 1. Sub-basement north plant room
- 2. Sub-basement south plant room
- 3. Transformer room
- 4. Basement and Mezzanine refuse rooms
- 5. Storm water attenuation tank
- 6. Oil tank room
- 7. UKPN room
- 8. Comms intake room
- 9. MV room

## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.6. Landlord Plant Space

#### Superimposed Dead Load

- 65mm Hard Finishes   gk 1.6(kN/m2)
- Hung services, Soffit above  
gk 0.5(kN/m2)

#### 7. 28 Denmark Street Basement level Areas

##### Imposed Load

- Uniform Distributed Load including partitions       qk 7.5 (kN/m2)
- Concentrated Loads   Qk 10 (kN)
- Horizontal Loads on Partitions, Walls and Parapets       qk TBC (kN/m)
- Frequency               N/A
- Response Factor       N/A
- Criteria                 TBC

#### Superimposed Dead Load

- Hard Finishes           gk 2.5(kN/m2)
- Hung services, Soffit above  
gk 0.5(kN/m2)

#### Mechanical

Temperature:

- |                  |              |
|------------------|--------------|
| Winter           | 18 +/- 2     |
| Summer           | Uncontrolled |
| Ventilation Rate | 1 ACH        |

Occupancy

N/A - Transient occupants only

Ventilation and Environmental Strategy

- Fresh air provision to plant rooms via central, landlords air handling plant, including provision of all associated ductwork, dampers, grilles and insulation as required to provide a complete working system.
- Background heating via LTHW to radiators. No cooling provision.

#### Electrical

Power

Small Power       5W/m2

Lighting           8W/m2

- Containment, distribution boards, mechanical control panels and power supplies for all landlord's equipment.
- Fire detection and alarm system.
- All general and emergency lighting and associated lighting controls.

#### Public Health

All plant room floor drains and associated pipe work. Sprinklers as required by the fire strategy and local code and associated pipe work, valves and ancillary items.

#### Acoustic

For interior noise criteria and any relevant limitations on installed equipment refer to the project acoustic report of this report.

#### Security

Criteria:       No base build provision

#### Lifts

Criteria:       Refer to lift specification

#### A/V

Criteria:       As part of fit out

#### WiFi

As part of fit out



# 2. Design Finishes / Layouts / Shell and Core Services Engineering

## 2.7. Back of House (BOH)

### Room Names & Numbers

Basement BOH / A.B1.09, 14, 22, 27 & 28

Mezzanine BOH / A.MZ.09, 14, 20, 22, 22a,26,27 & 28

Lower Ground BOH / A.LG.02, 12& 13

### Brief

To identify ancillary spaces ranging from back stage facilities, dressing rooms, first aid rooms plus associated corridors and lobbies to “base build” standards as noted below. Enhanced layout for 2000 people not included in the main contract.

### Architectural

Base build FFL to Soffit:  
2.630 - 3.2m nominal

Occupancy Level: Refer to events gallery

### Walls

- Generally exposed fair faced blockwork or in situ concrete
- No skirtings
- FR120min & FR 60min. Refer to Fire Strategy Report and Orms FR series for locations.
- Acoustic requirement :  $\geq 58\text{dB}$  Rw &  $\geq 55\text{dB}$  Rw on the Box in Box side only.

### Partitions

- Fire and acoustic rated dryline partitions with skim finish only
- FR120min & FR 60min. Refer to Fire Strategy Report and Orms FR series for locations.
- Exposed steel columns to be boarded to FR 60.
- No skirtings

### Floor

- Exposed concrete or screed finishes

### Ceiling

- Exposed concrete or steel deck soffit
- Refer to Orms RC series and finishes schedule for details

### Doors

- Hardwood frame doors with full height shigh pressure laminate to door leaf. Riser doors to be in painted finish
- Metal gates into refuse rooms and UKPN rooms with polyester powder coat finish
- Stainless steel ironmongery
- Access Control

### Furniture

N/A

### Signage

Statutory signage where required only

### Miscellaneous

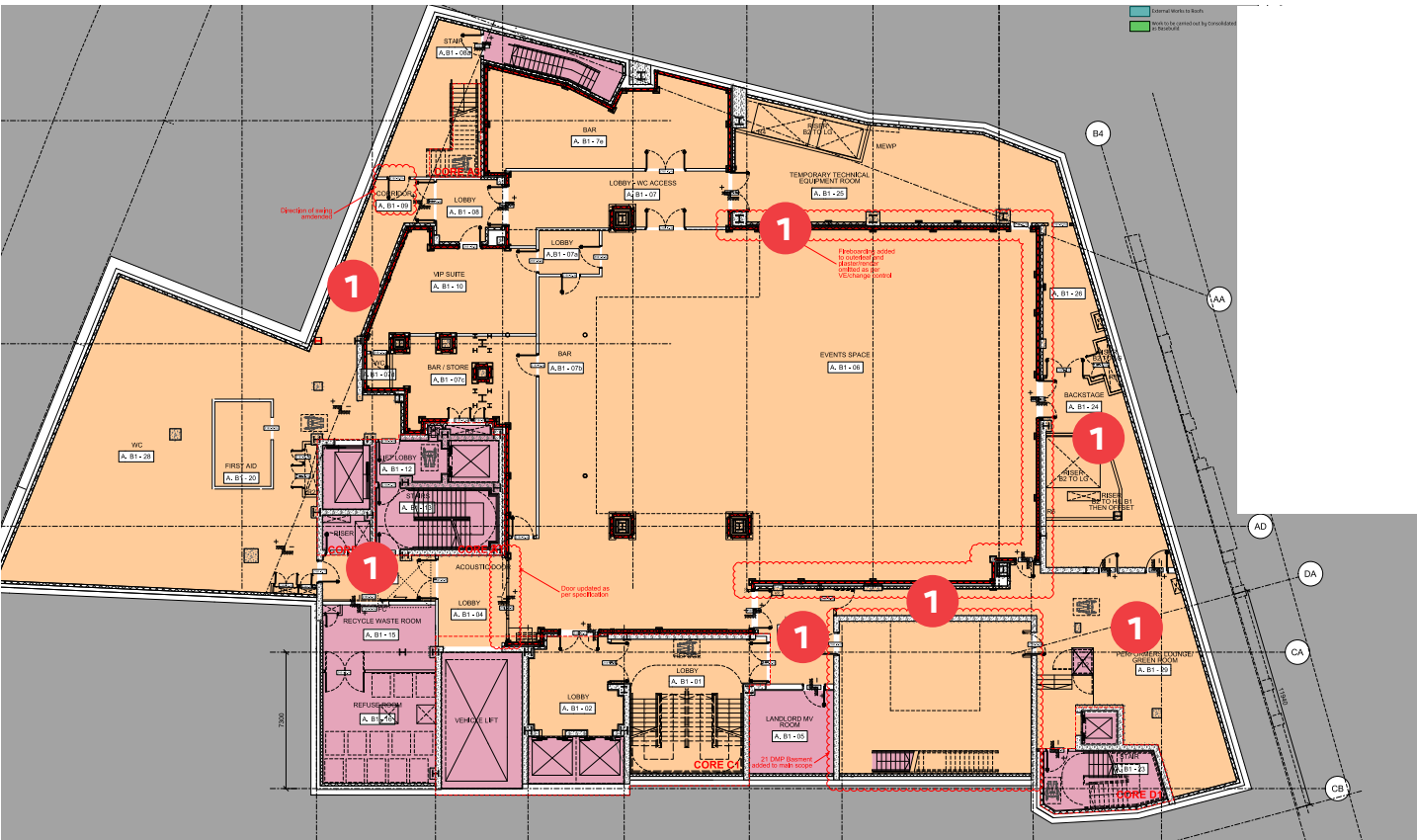
- Temporary balustrade /guarding around capped penetrations, changes in levels, where required
- Any required by UKPN

### Structural

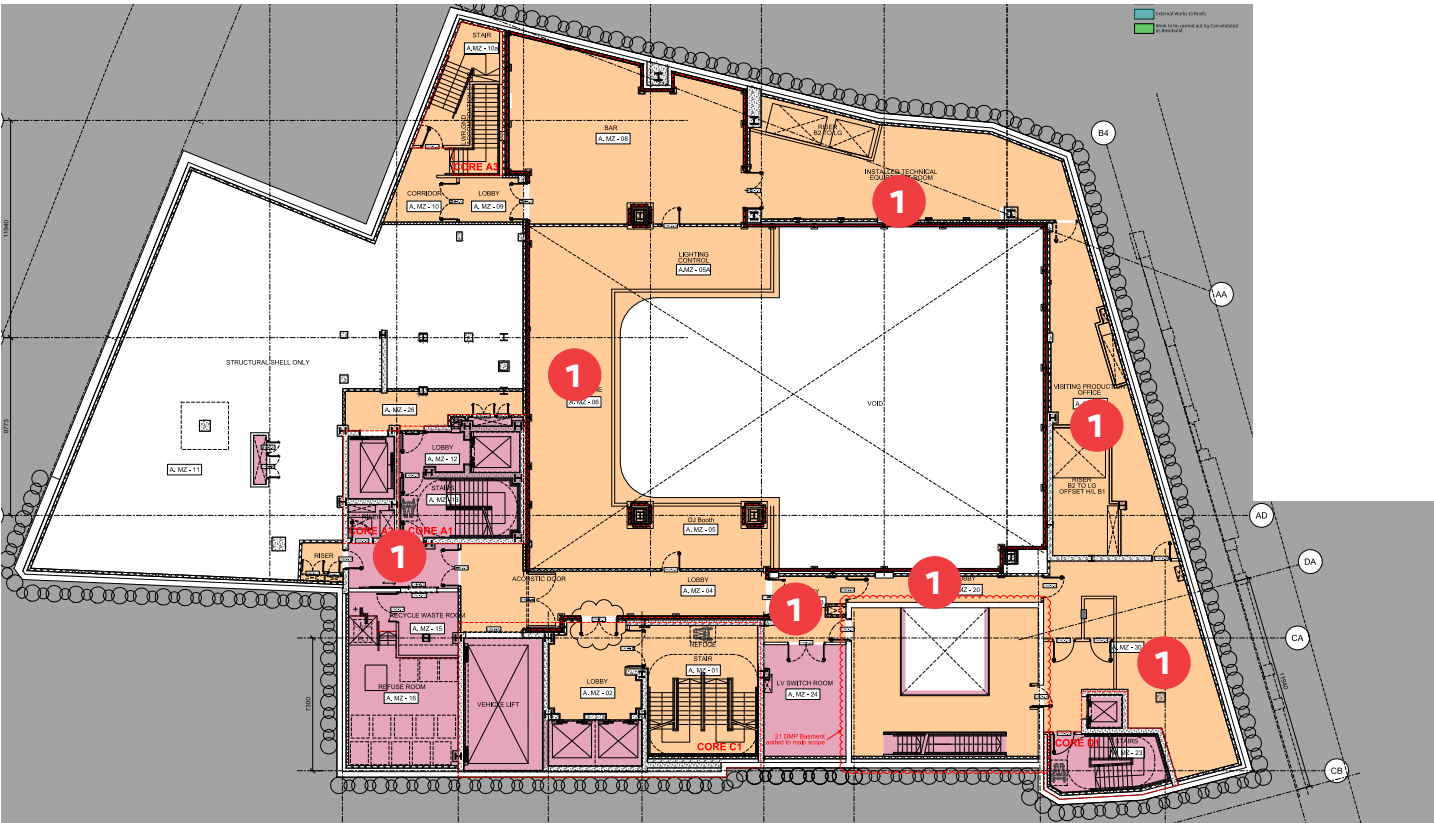
#### Basement Level

### Imposed Load

- Uniform Distributed Load including partitions  $q_k 10.0 \text{ (kN/m}^2\text{)}$
- Concentrated Loads  $Q_k 15.0 \text{ (kN)}$
- Horizontal Loads on Partitions, Walls and Parapets  $q_k 3.0 \text{ (kN/m)}$



Basement level



Mezzanine Level

# 2. Design Finishes / Layouts / Shell and Core Services Engineering

## 2.7. Back of House (BOH)

- Frequency N/A
- Response Factor N/A
- Criteria Client Requirement

### Superimposed Dead Load

- 100mm Hard Finishes / Cavity Drain gk 2.4 (kN/m2)
- Finishes zone is 450mm in some areas
- Hung services , Soffit above gk 0.5 (kN/m2)

### Mezzanine & Lower Ground Level Imposed Load

- Uniform Distributed Load including partitions qk 5.0 (kN/m2)
- Concentrated Loads Qk 4.5 (kN)
- Horizontal Loads on Partitions, Walls and Parapets qk 3.0 (kN/m)
- Frequency N/A
- Response Factor N/A
- Criteria Client Requirement

### Superimposed Dead Load

- Nominal Load for Services and Finishes below gk 2.1 (kN/m2)
- floor finishes 1.6kN/m2
- hung ceiling and finishes 0.5kN/m2

### Mechanical

- Temperature:
- Winter 18 +/- 2
- Summer 26 +/- 2
- Ventilation Rate 2 ACH
- Occupancy 4m<sup>2</sup> per person to dressing rooms

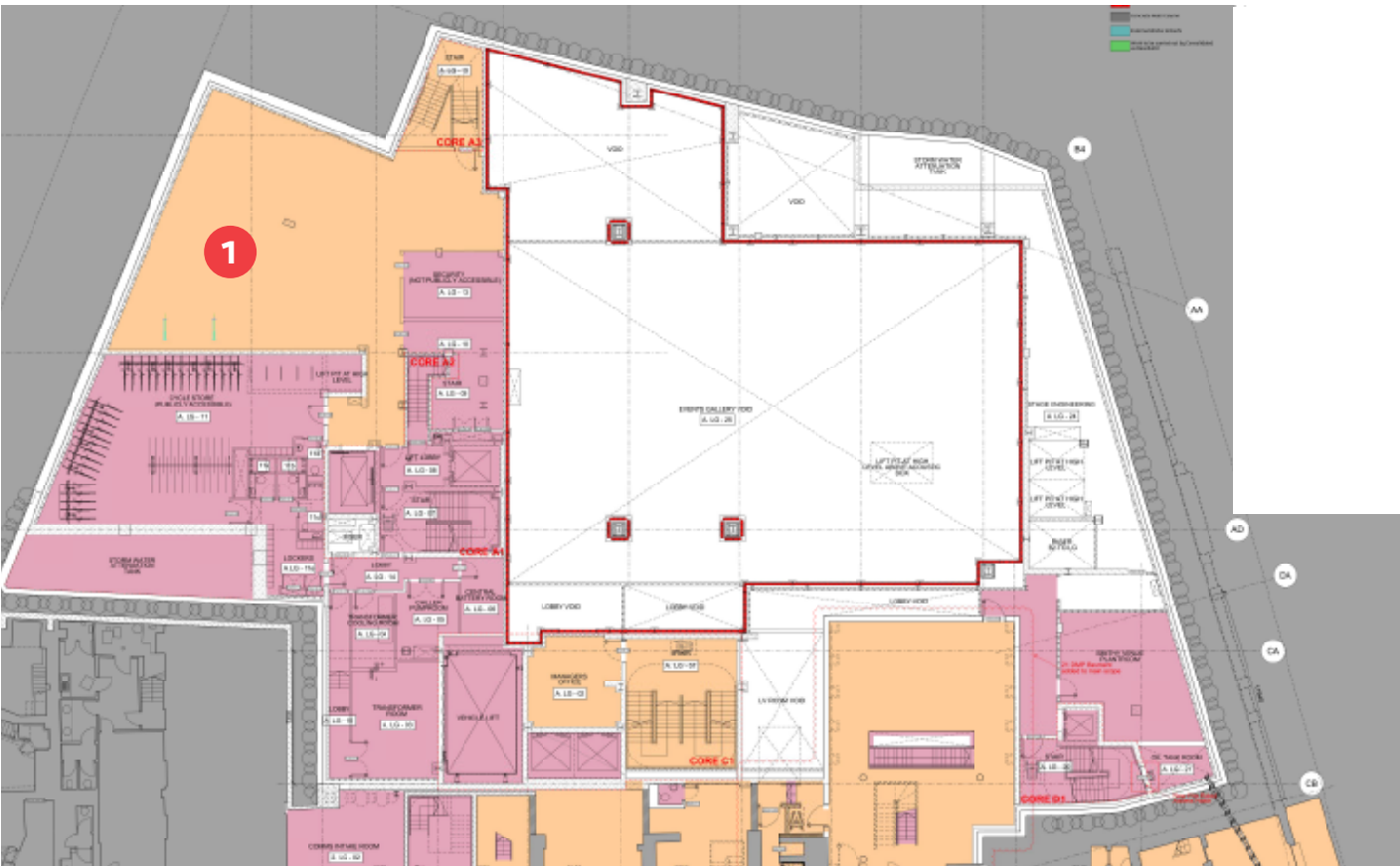
- Landlord Installation:
- Capped ductwork from intake and exhaust louvres.
  - Metered chilled water flow and return connection (7/12°C), capped at riser.
  - Metered LTHW flow and return connection (70/50°C), capped at riser.

- Tenant Installation:
- Supply and extract ductwork, grilles, dampers, insulation etc. from the main events gallery AHU(s) to serve space.
  - Extension to the chilled water and LTHW connections including FCUs and radiators or trench heaters within the ancillary spaces not conditioned by the main events space air handling plant.
  - Any close control cooling units serving technical equipment rooms.

### Electrical

- Landlord Installation:
- Power supplies and distribution boards serving specialist venue systems as summarized below.
- Stage Lighting
- The Stage lighting system will be provided with a 600A TPN overall supply to a stage lighting main power panel located in the mezzanine equipment room.

From this panel supplies will be provided to a stage lighting distribution board and custom 400A and 200A TPN powerlock power panels. In addition, it will also provide a number of 63A TPN supplies for temporary power in the Restaurant and TV Studio.



Lower Ground Level

The Stage lighting system will generally not be used at full capacity. This supply is sized to prevent unwanted tripping at times of peak load, but the typical load is likely to be up to 100kW.

Stage Engineering

The Stage Engineering system will be provided with a 400A TPN overall supply to an engineering main panel located within the lower ground floor equipment room.

- KEY
- Base build
  - Common parts
  - Capped off Services
1. Back of house space (BOH)

## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.7. Back of House (BOH)

From this panel supplies will be provided to a stage engineering and custom 200A TPN powerlock power panels. It will also supply connections for the Urban Gallery and Restaurant for the connection of temporary, brought-in equipment and operation of movable sliders.

At peak load, the Stage Engineering supply will be at 50% of supply capacity. However, this would be for a short duration and quite rare. Generally, the load on the supply can be almost fully diversified against the Stage lighting load.

The sub-distribution panels for supplies to LED screens in the Event Gallery, Urban Gallery and Restaurant / Cafe.

#### Audio Visual

The Audiovisual system will be provided with a 300A TPN overall supply to an Audiovisual main panel located within the mezzanine level equipment room.

From this panel supplies will be provided to a audio visual distribution board and custom 200A TPN powerlock power panel to serve OB facilities. Several 32A, 63A and 125A TPN supplies

for connection of temporary, brought-in audiovisual equipment are also provided for the Event Gallery, Urban Gallery and Restaurant.

The Audiovisual system will generally not be used at full capacity. This supply is sized to prevent unwanted tripping at times of peak load and switch-on, but the typical load, when OB power is in use, is likely to be around 50kW (25%) of supply capacity. When OB power is not in use this load will be around 10kW to 20kW (5-10%) of supply capacity

#### Video System

The Video Systems will be provided with a 1600A TPN overall supply to an video systems main panel located within the lower ground video rack room.

From this panel supplies will be provided to a video systems small power distribution board and sub-distribution panels for supplies to LED screens in the Event Gallery, Urban Gallery and Restaurant / Cafe.

As described in the separate LED section of this report the load of the screens will largely depend on the content and brightness. Please refer to Theatre Consultant's report and M&E specification for final loads.

- Spare taps off on busbar for serving distribution boards for future fit out of general small power and lighting
- Temporary general and emergency lighting.
- Minimum fire detection and alarm system.
- Containment within riser for future ICT cabling.

#### Tenant Installation:

- Extension of power supplies from the distribution boards provided for specialist venue systems to suit fit out requirements.
- Metered distribution boards and power supplies to suit fit-out.
- Provision of small power and lighting to suit fit out
- Extension of fire alarm system to suit fit out.

- Lighting including general, display and production lighting.
- LED Screens.

#### Public Health

##### Landlord Installation

- Metered domestic hot and cold water services, capped at local riser.
- Sanitary drainage stub stacks and vent pipes.
- Sprinkler main with zone valve and single sprinkler head

##### Tenant Installation

- Supply and installation of any sanitary ware or equipment required. Extension of the domestic hot and cold water supplies to serve these fixtures and connection to the drainage stub stacks provided. Trace heating to domestic hot water where required.
- Extension of the sprinkler system to suit layout. Any inert gas suppression systems required for technical equipment rooms.

#### Acoustic

For interior noise criteria and any relevant limitations on installed equipment refer to the project acoustic report.

#### Security

Access Control & CCTV

#### Lifts

Refer to lift specification

#### A/V

As part of fit out

#### WiFi

As part of fit out



# 2. Design Finishes / Layouts / Shell and Core Services Engineering

## 2.8. Toilets

### Room Names & Numbers

Basement / A.B1.28 Mezzanine / A.MZ.11

### Brief

To identify space for toilets in support of events space for 2000 people in accordance with “base build” definition as outlined below. Toilet fit out by tenant/ operator.

### Architectural

Base build FFL to soffit: 3.2m nom. (B1)  
2.630m nom (MZ)

Occupancy Level:

Refer to Main Event Space section

### Walls

- Concrete blockwork along perimeter of cavity drainage wall and internal partitions
- No finishes required

### Partitions

- Dry riser using shaftwall system to FR 120min.
- Acoustic requirement : ≥45dB R
- No finishes

### Floor

Structural concrete slab with power float finish to structural engineer specification  
No finishes

### Ceiling

- Exposed concrete soffit
- No finishes

### Doors

N/A

### Furniture

N/A

### Signage

N/A

### Miscellaneous

Temporary steps and/or step down markers plus guarding as required to contractors proposals

### Structural

#### Imposed Load

- Uniform Distributed Load including partitions qk 5.0 (kN/m2)
- B1 basement is designed for UDL 10.0kN/m2, concentrated 15.0kN
- Concentrated Loads Qk 4.5 (kN)
- Horizontal Loads on Partitions, Walls and Parapets qk 3.0 (kN/m)
- Frequency N/A
- Response Factor N/A
- Criteria Client Requirement

#### Superimposed Dead Load

- Nominal Load for Floor Finishes gk 1.6 (kN/m2)  
gk 2.4 at B1
- Nominal Load for Ceiling and Services over. gk 0.5 (kN/m2)

### Mechanical

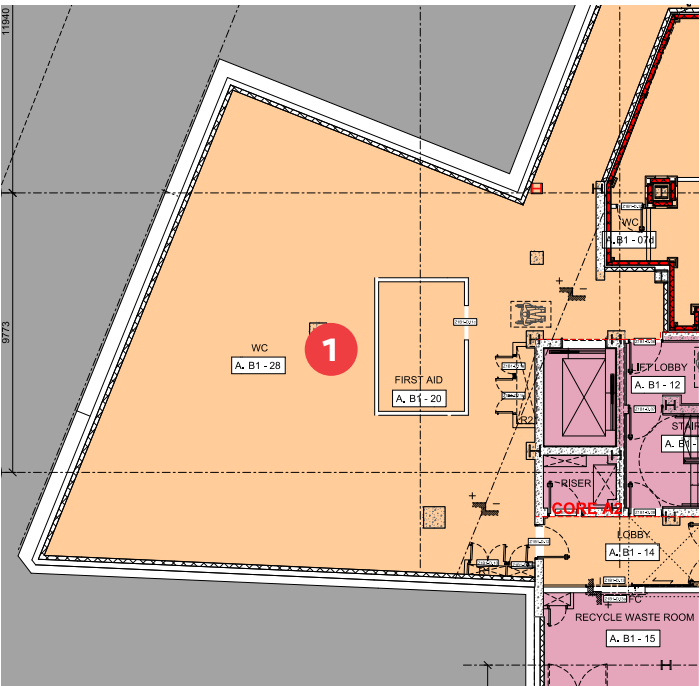
Temperature:

Winter 18 +/- 2

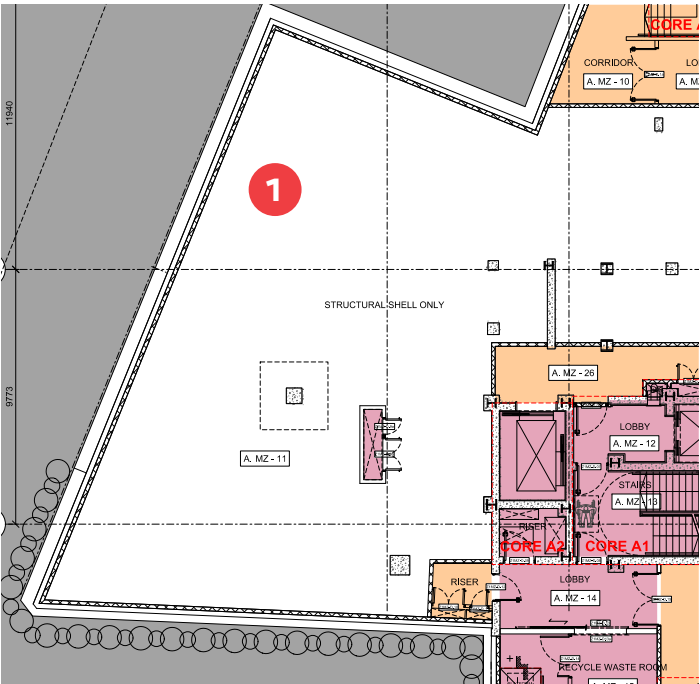
Summer Not Controlled

Ventilation Rate 10 ACH

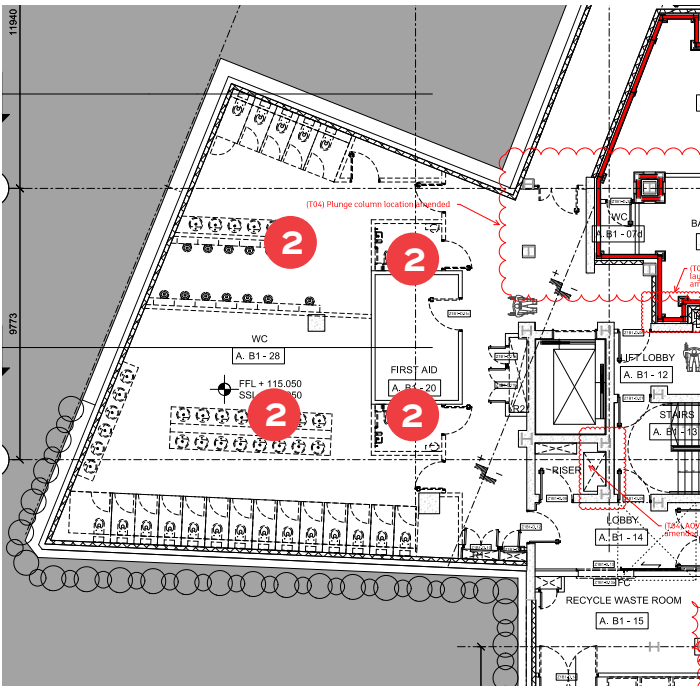
Occupancy N/A - Transient occupancy only



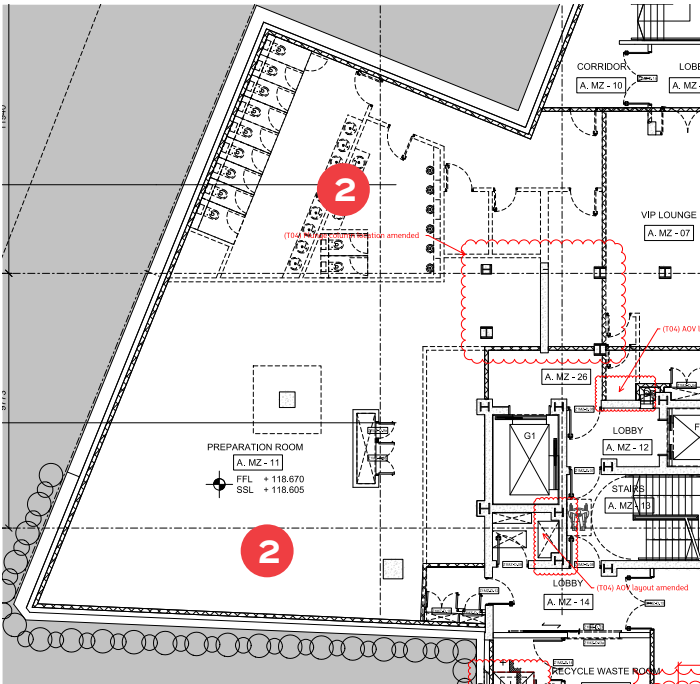
Basement Level- B1



Mezzanine Level - MZ



Basement Level- B1



Mezzanine Level - MZ

- KEY
- Base build
  - Common parts
  - Capped off Services

### KEY

1. Location of WCs base build
2. Indicative layout to be fitted by future operator



## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.8. Toilets

Landlord Installation:

- Connection for exhaust ductwork to general louvre at ground floor level .
- Metered LTHW flow and return connection (70/50°C), capped at riser.

Tenant Installation:

- Extend supply and extract ductwork including, grilles, dampers, insulation etc. to suit layout. Including installation of toilet extract fans to connect to landlord exhaust duct as required.
- Extension of the LTHW connections including FCUs and radiators or trench heaters as desired.

**Electrical**

Power	
Small Power	5W/m2
Lighting	8W/m2

Landlord Installation:

- Spare taps off on busbar for serving distribution boards in future fit out of general small power and lighting.
- Temporary general and emergency lighting.
- Minimum fire detection and alarm system.
- Containment within riser for future ICT cabling.

Tenant Installation:

- Metered distribution boards, power supplies and all electrical equipment such as hand dryers to suit fit-out.
- Extension of fire alarm system to suit fit out.

- Lighting including emergency and decorative lighting and lighting controls to suit fit out.

**Public Health**

Landlord Installation

- Metered domestic hot and cold water services, capped at riser.
- Sanitary drainage stub stacks and vent pipes within local riser.

Sprinkler main with zone valve and single sprinkler head

Tenant Installation

- Supply and installation of all sanitary ware. Extension of the domestic hot and cold water supplies to serve these fixtures and connection to the drainage stub stacks provided. Trace heating to domestic hot water where required.
- Extension of the sprinkler system to suit layout.

**Acoustic**

For interior noise criteria and any relevant limitations on installed equipment refer to the project acoustic report.

**Security**

CCTV coverage outside

**Lifts**

Refer to lift specification

**A/V**

As part of fitout

**WiFi**

As part of fit out

# 2. Design Finishes / Layouts / Shell and Core Services Engineering

## 2.9. Landlord Production Room

### Room Names & Numbers

Landlord Production room / A.LG.26

### Brief

To identify a space for production activities related to the Urban Gallery in accordance with “base build” definition as noted below. Production facilities to be fitted by tenant/operator.

### Architectural

Base build FFL to Soffit:  
2.740m nom.

Occupancy Level: Refer to  
Main Events Space  
section and Charcoal Blue  
stage report

### Walls

- Concrete blockwork along perimeter of cavity drainage wall and internal partitions
- No finishes required

### Partitions

- No internal partitions
- No finishes required
- Partitions along the security room to be FR 60 and 120 along the Core 2. Refer to Fire Strategy Report and Orms FR series for locations.

### Floor

- Structural concrete slab with power float finish to structural engineer specification
- No finishes

### Ceiling

- Exposed concrete soffit
- No finishes required

### Doors

- Hardwood frame doors with full height high pressure laminate to door leaf. Riser doors to be in painted finish
- FR60S & FR 30S. Refer to Fire Strategy Report and Orms FR series for locations.
- Stainless steel ironmongery
- Access Control

### Furniture

N/A

### Signage

Statutory

### Miscellaneous

- Temporary steps and/or step down markers between rooms
- Temporary guard at edge of slab
- Temporary stair by main contractor. Final accommodation stair by future operator

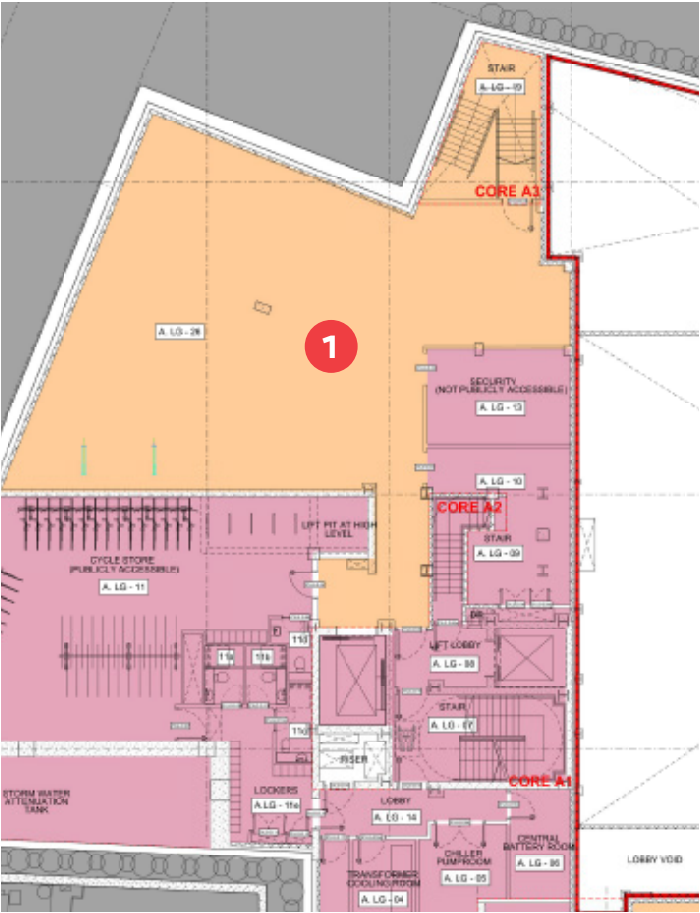
### Structural

#### Imposed Load

- Uniform Distributed Load including partitions qk 5.0 (kN/m2)
- Concentrated Loads Qk 4.5 (kN)
- Horizontal Loads on Partitions, Walls and Parapets qk 3.0 (kN/m)
- Frequency N/A
- Response Factor N/A
- Criteria Client Requirement

#### Superimposed Dead Load

- Nominal Load for Floor Finishes gk 1.6 (kN/m2)
- Nominal Load for Ceiling and Services over. gk 0.5 (kN/m2)



Lower ground Level - Base build

### Mechanical

Temperature:

Winter 21 +/- 2

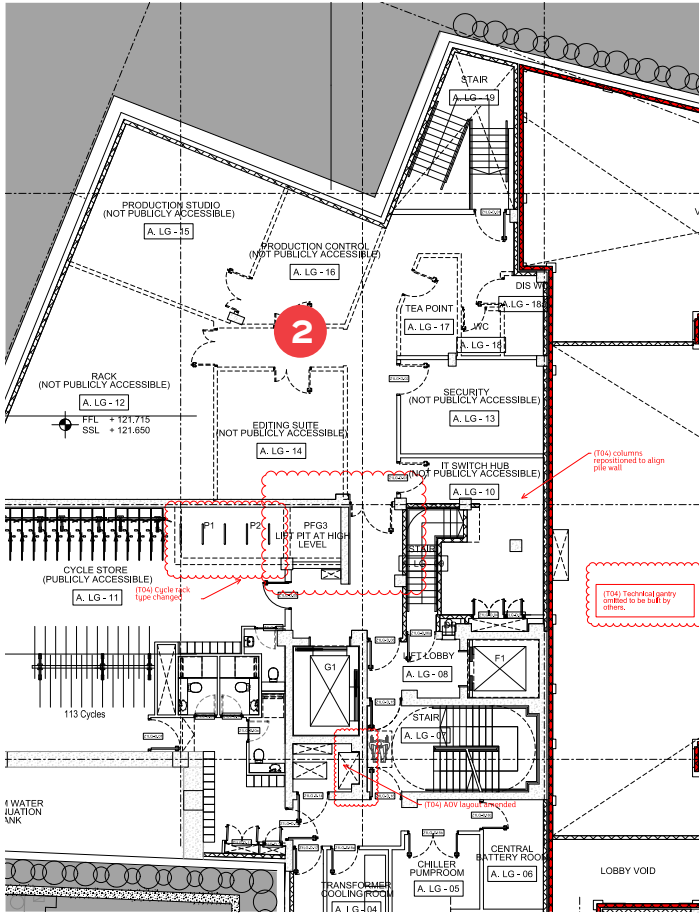
Summer 24 +/- 2

Ventilation Rate 10 l/s/person fresh air

Occupancy 10m²/person

Landlord Installation:

- Metered chilled water flow and return connection (7/12°C), capped at riser.
- Metered LTHW flow and return connection (70/50°C), capped at riser.
- Capped fresh air supply and extract from main landlord AHU



Lower Ground Level - Fit out by others

### KEY

- Base build
- Common parts
- Capped off Services

1. Production room base build
2. Indicative layout to be fitted by future operator

## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.9. Landlord Production Room

Tenant Installation:

Supply and extract ductwork, grilles, dampers, insulation etc. from the landlord AHU to serve space.

- Extension to the chilled water and LTHW connections including FCUs and radiators or trench heaters within the ancillary spaces not conditioned by the main events space air handling plant.
- Any close control cooling units required for technical equipment rooms within the production area.

#### Electrical

Power

Small Power                      50W/m2

Lighting                              10W/m2

Landlord Installation:

Refer to 3.2.5 back of house and section 8 Theatre consultant section for power supplies for Video systems.

- Spare taps off on busbar for serving distribution boards in future fit out of general small power and lighting.
- Temporary general and emergency lighting.
- Minimum fire detection and alarm system.
- Containment within riser for future ICT cabling.

Tenant Installation:

- Extension of power supplies from the distribution boards provided for specialist venue systems to suit fit out requirements.
- Metered distribution boards, power supplies for small power and lighting.

- Extension of fire alarm system to suit fit out.
- Lighting including emergency and general and lighting controls to suit fit out.

#### Public Health

Landlord Installation

- Metered domestic hot and cold water services, capped at local riser.
- Sanitary drainage stub stacks and vent pipes.

Sprinkler main with zone valve and single sprinkler head

Tenant Installation

- Supply and installation of any sanitary ware or equipment required kitchenette sinks. Extension of the domestic hot and cold water supplies to serve these fixtures and connection to the drainage stub stacks provided. Trace heating to domestic hot water where required.
- Extension of the sprinkler system to suit layout.

#### Acoustic

For interior noise criteria and any relevant limitations on installed equipment refer to the project acoustic report.

#### Security

As part of fit out

#### Lifts

Refer to lift specification

#### A/V

As part of fitout

As part of fitout



# 2. Design Finishes / Layouts / Shell and Core Services Engineering

## 2.11. Preparation room

### Room Names & Numbers

Preparation room / A.MZ.11

### Brief

To identify a space for catering in support of the enhanced main events layout for 2000 people. The enhance layout does not form part of the main contract.

### Architectural

Base build FFL to Soffit: 2.630m nom.  
Occupancy Level: Refer to the Main Event Space section of this report

### Walls

- Concrete blockwork along perimeter of cavity drainage wall and internal partitions
- No finishes required

### Partitions

- Dry riser using shaftwall system
- Partitions to maintain FR120 & FR 60 compartment. Refer to Fire Strategy Report and Orms FR series for locations.
- No finishes

### Floor

Structural concrete slab with power float finish to structural engineer specification

- No finishes

### Ceiling

- Exposed concrete soffit
- No finishes

### Doors

N/A

### Furniture

N/A

### Signage

N/A

### Miscellaneous

N/A

### Structural

#### Imposed Load

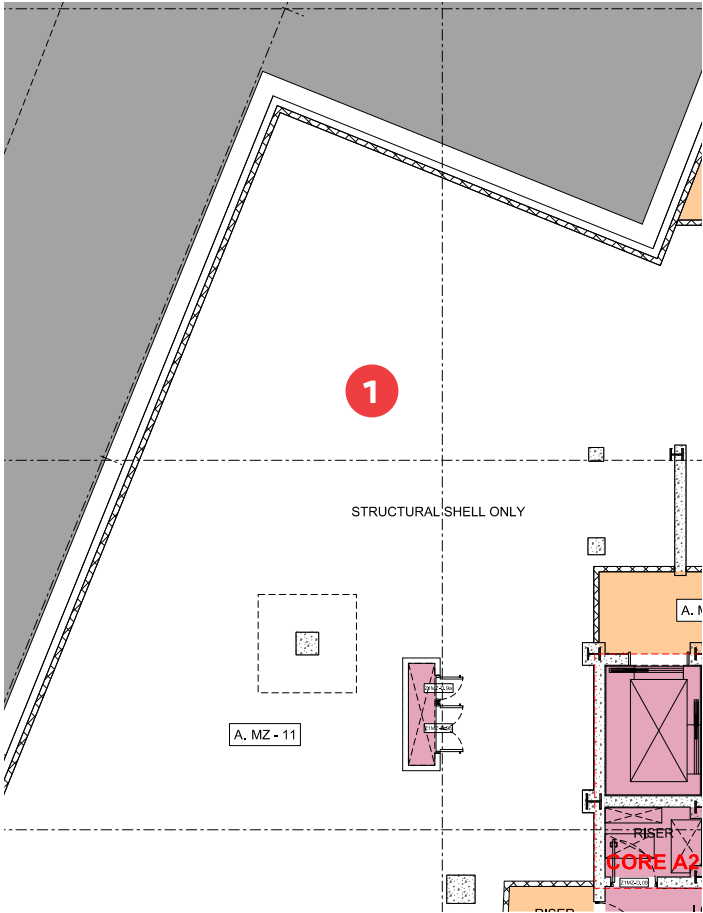
- Uniform Distributed Load including partitions qk 5.0 (kN/m2)
- Concentrated Loads Qk 4.5 (kN)
- Horizontal Loads on Partitions, Walls and Parapets qk 3.0 (kN/m)
- Frequency N/A
- Response Factor N/A
- Criteria Client Requirement

#### Superimposed Dead Load

- Nominal Load for Floor Finishes gk 1.6 (kN/m2)
- Nominal Load for Ceiling and Services over. gk 0.5 (kN/m2)

### Mechanical

Temperature:  
Winter 18 +/- 2  
Summer 28 +/- 2  
Ventilation Rate 10 ACH  
Occupancy 5m<sup>2</sup>/person  
Final loads to be confirmed by Kitchen consultant.



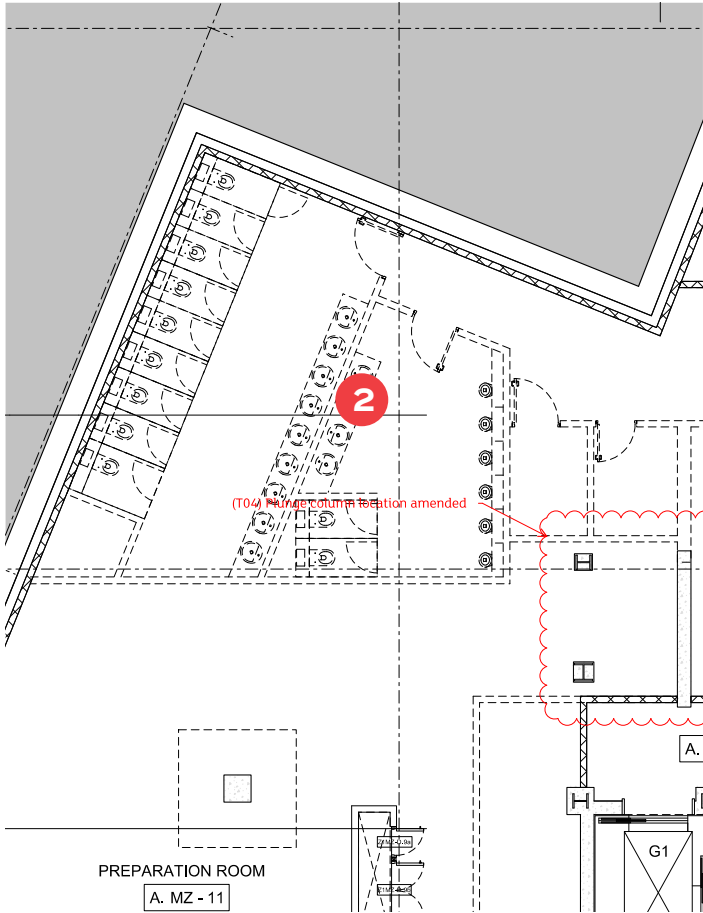
Mezzanine Level - Base build

### Landlord Installation:

- Capped kitchen extract ductwork and exhaust louvres.

Spatial provision for kitchen extract air handling plant.

- Metered chilled water flow and return connection (7/12°C), capped at riser.
- Metered LTHW flow and return connection (70/50°C), capped at riser.



Mezzanine Level- Fit out by others

### KEY

- Base build
- Common parts
- Capped off Services

1. Preparation room base build
2. Preparation room indicative layout to be fitted by future operator

## 2. Design Finishes / Layouts / Shell and Core Services Engineering

### 2.11. Preparation room

Tenant Installation:

- Supply and extract ductwork, grilles, dampers, insulation etc. from the main events gallery AHU(s) to serve space.
- Extension to the chilled water and LTHW connections including FCUs and radiators or trench heaters within the ancillary spaces not conditioned by the main events space air handling plant.
- Kitchen extract fans and equipment to suit final kitchen requirements

**Electrical**

Power

Small Power                      100W/m2

Lighting                              15W/m2

Landlord Installation:

- Spare taps off on busbar for serving distribution boards in future fit out of general small power and lighting.
- Temporary general and emergency lighting.
- Minimum fire detection and alarm system.
- Containment within riser for future ICT cabling.

Tenant Installation:

- Metered distribution boards, power supplies for small power and lighting.
- Extension of fire alarm system to suit fit out.
- Lighting including emergency and general and lighting controls to suit fit out.

**Public Health**

Landlord Installation:

- Metered domestic hot and cold water services, capped at local riser.
- Sanitary drainage stub stacks and vent pipes.
- Sprinkler main with zone valve and single sprinkler head

Tenant Installation

- Supply and installation of all sanitary ware and equipment required. Extension of the domestic hot and cold water supplies to serve these fixtures and connection to the drainage stub stacks provided. Provision of any water softening or reverse osmosis water treatment as required for equipment. Trace heating to domestic hot water.
- Extension of the sprinkler system to suit layout. Any specialist fire suppression systems such as cooker hood integrated water misting systems.
- Grease removal equipment for kitchen equipment, in line with building regulations

**Acoustic**

For interior noise criteria and any relevant limitations on installed equipment refer to the project acoustic report.

**Security**

Criteria:        As part of fit out

**Lifts**

Refer to lift specification

**A/V**

As part of fitout

**WiFi**

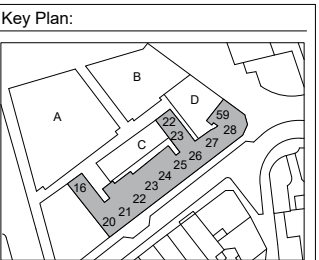
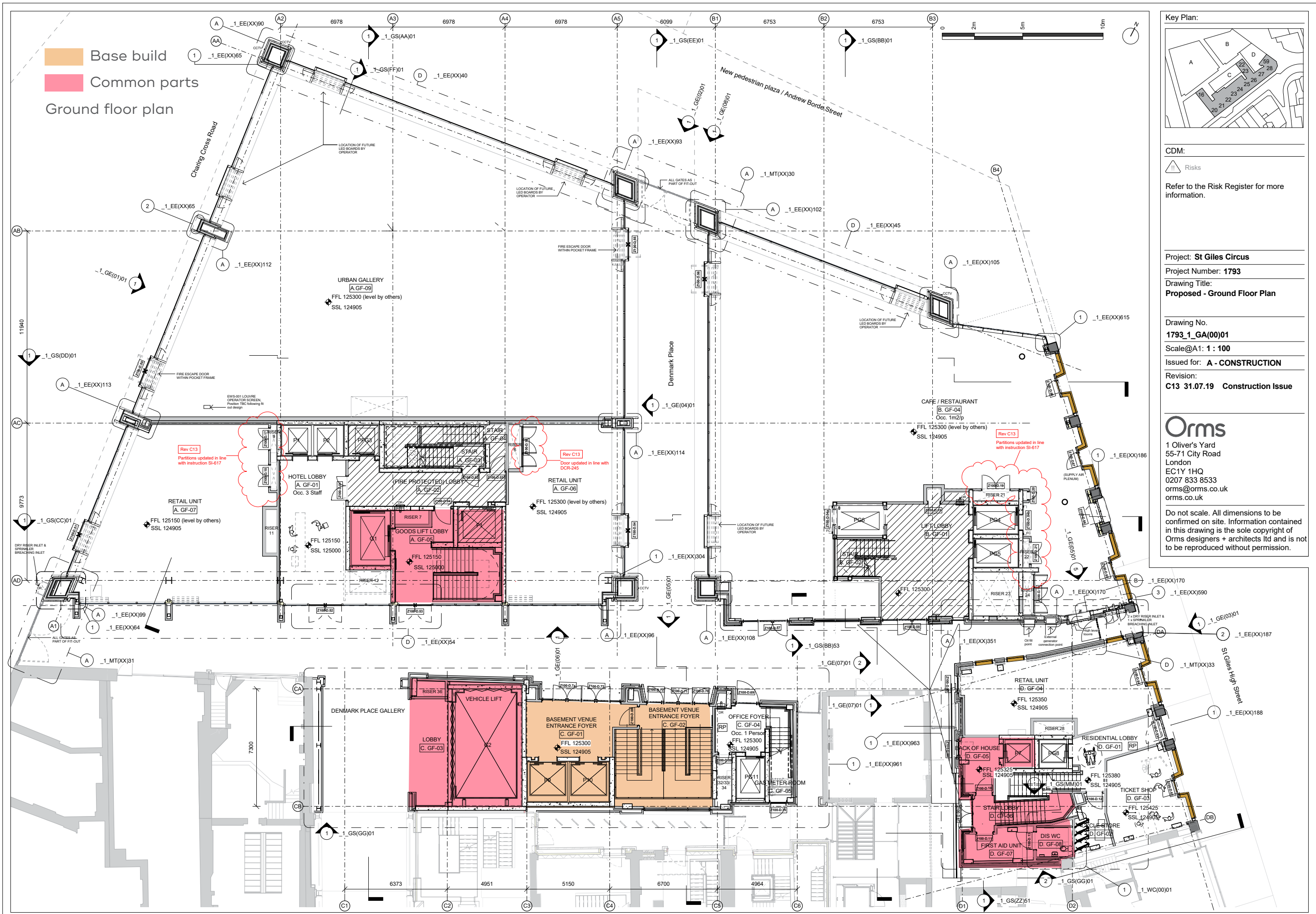
-As part of fitout

# 2. Design Finishes / Layouts / Shell and Core Services Engineering

## 2.12. Building C - North Elevation







CDM:  
Risks  
Refer to the Risk Register for more information.

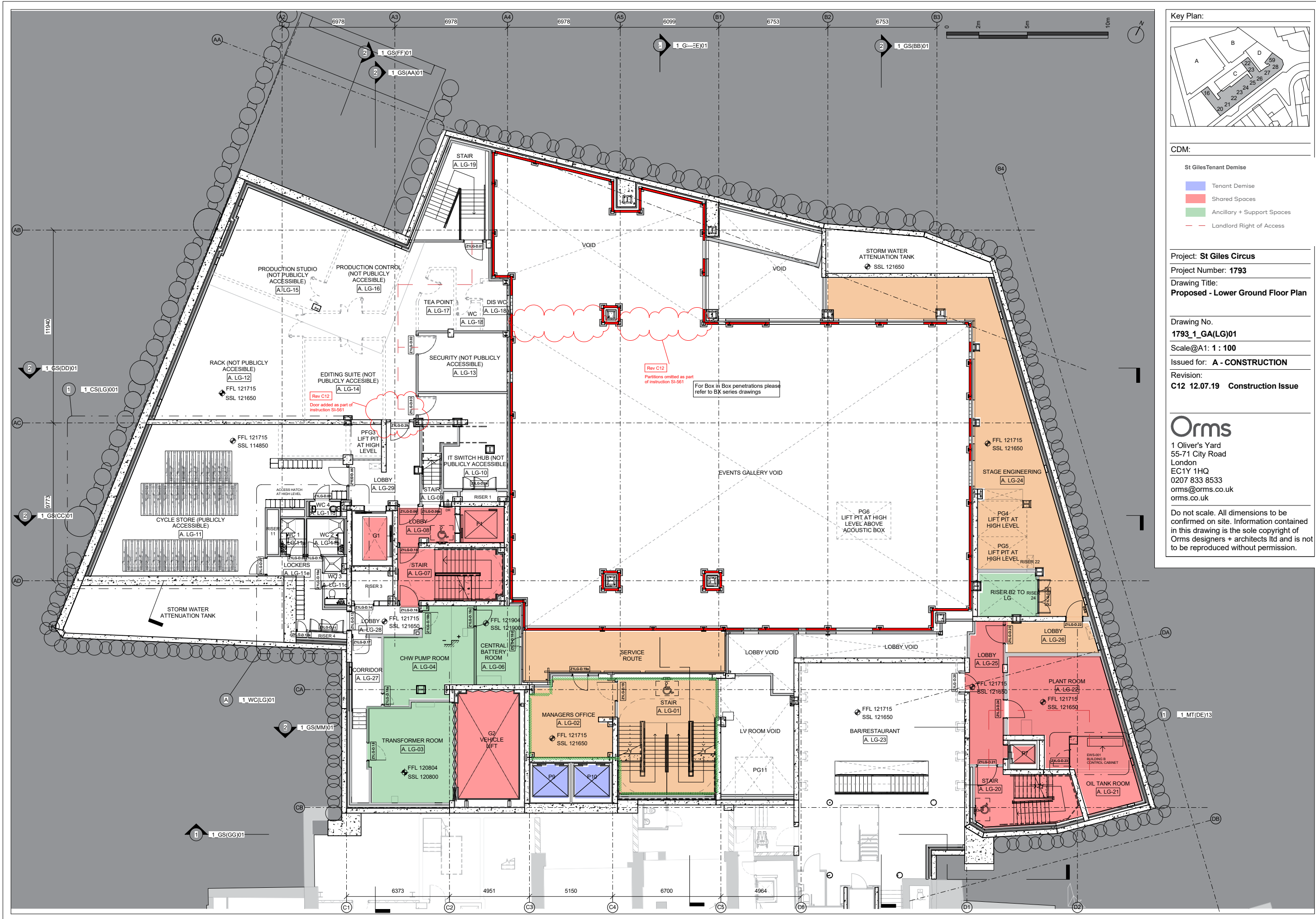
Project: **St Giles Circus**  
Project Number: **1793**  
Drawing Title:  
**Proposed - Ground Floor Plan**

Drawing No.  
**1793\_1\_GA(00)01**  
Scale@A1: **1 : 100**  
Issued for: **A - CONSTRUCTION**  
Revision:  
**C13 31.07.19 Construction Issue**

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**Key Plan:**

**CDM:**

**St Giles Tenant Demise**

- Tenant Demise
- Shared Spaces
- Ancillary + Support Spaces
- Landlord Right of Access

**Project: St Giles Circus**

**Project Number: 1793**

**Drawing Title:**

**Proposed - Lower Ground Floor Plan**

**Drawing No.**

**1793\_1\_GA(LG)01**

**Scale@A1: 1 : 100**

**Issued for: A - CONSTRUCTION**

**Revision:**

**C12 12.07.19 Construction Issue**

**Orms**

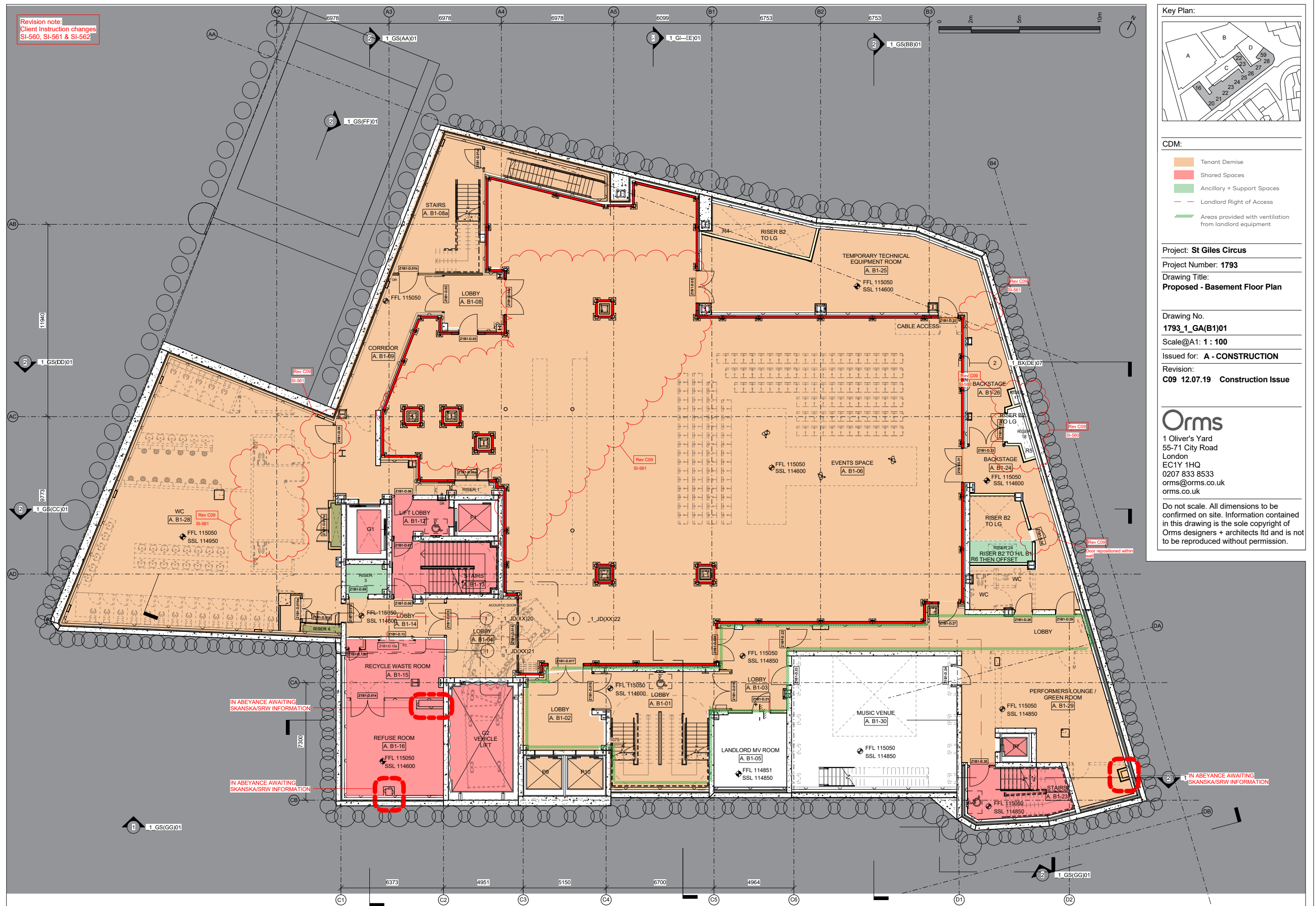
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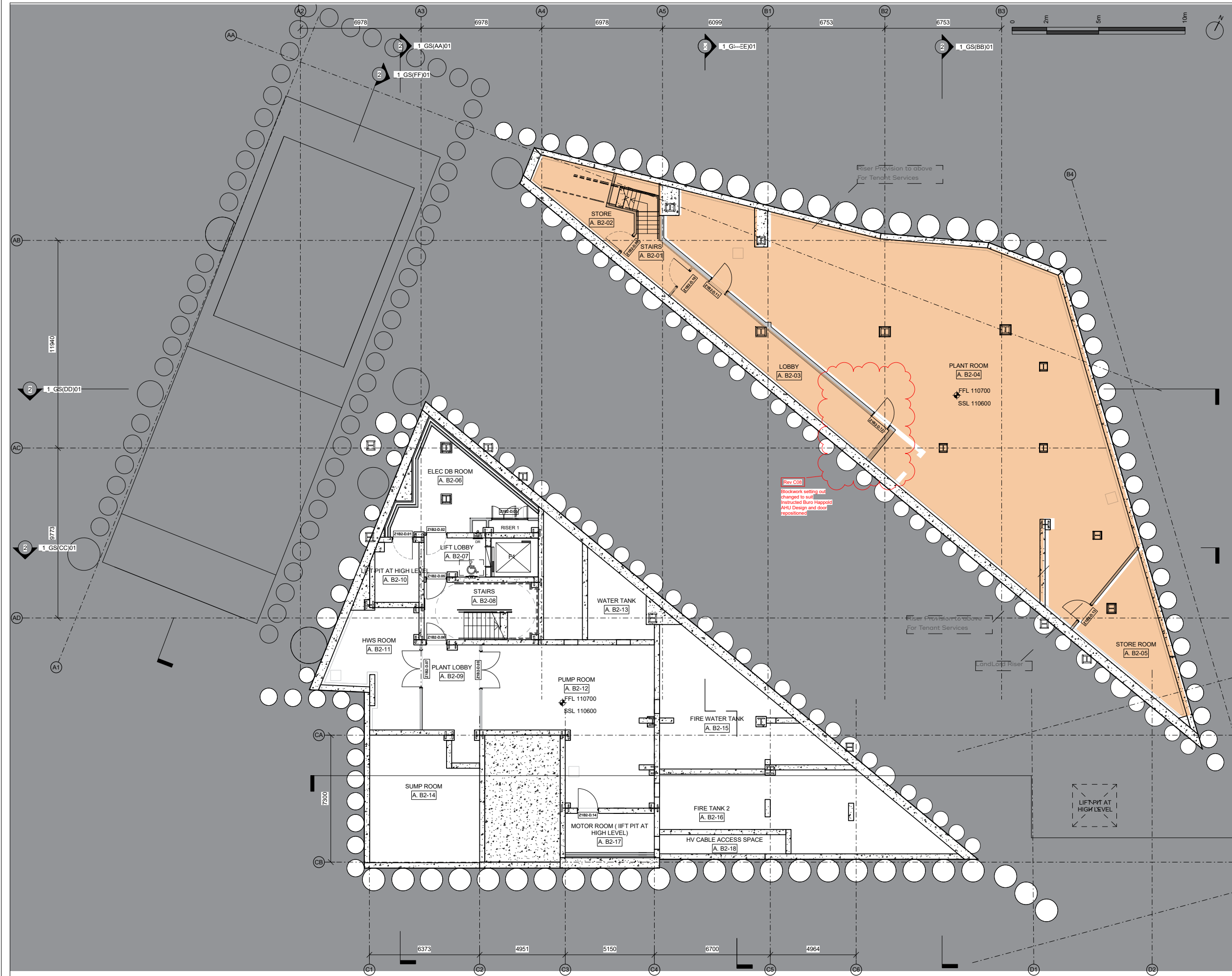
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Revision note:  
Client Instruction changes  
SI-560, SI-561 & SI-562





Key Plan:

CDM:

- Tenant Demise
- Shared Spaces
- Ancillary + Support Spaces
- Landlord Right of Access

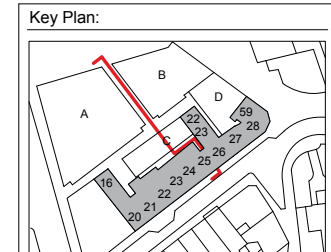
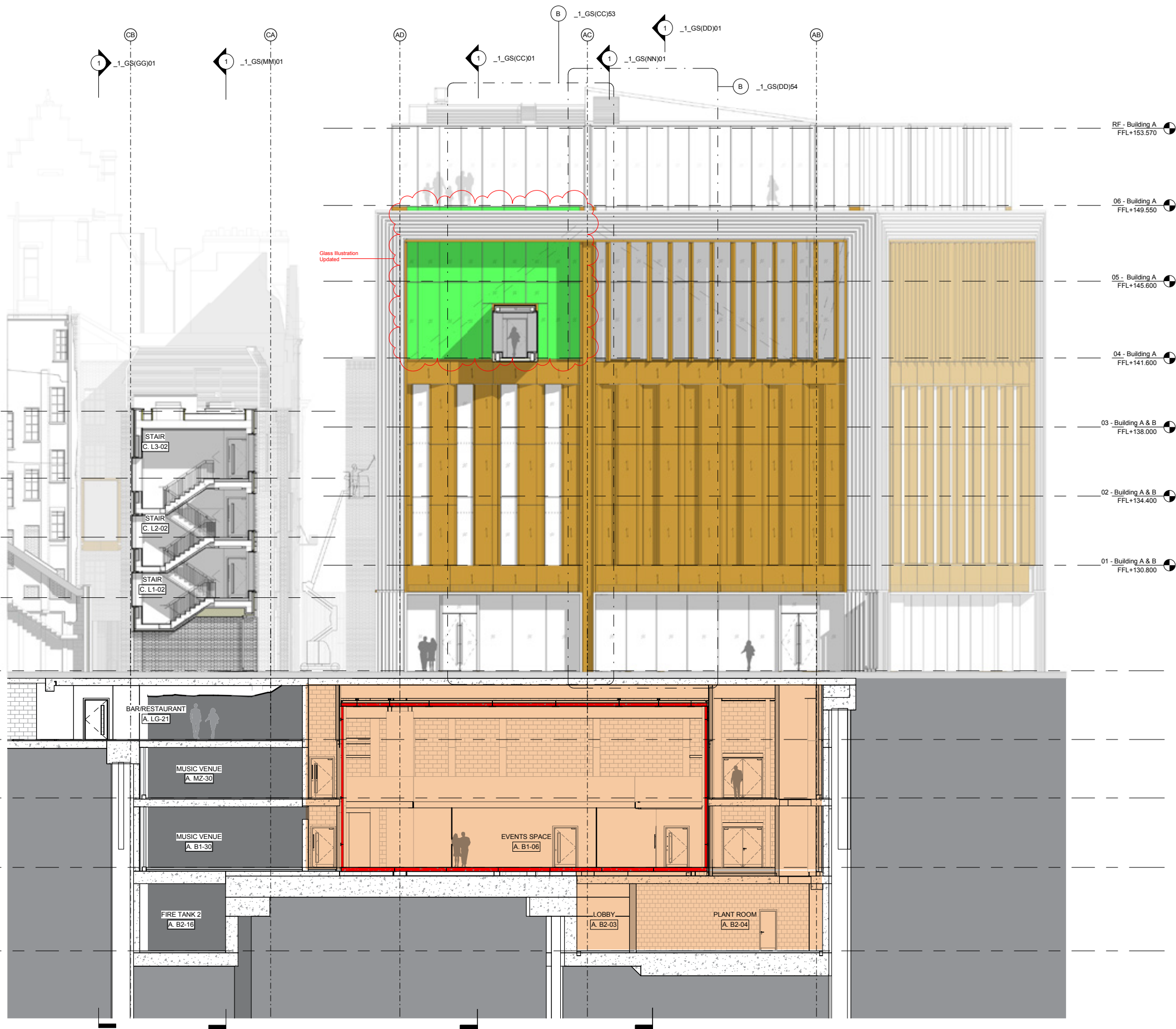
Project: **St Giles Circus**  
Project Number: **1793**  
Drawing Title:  
**Proposed - Sub Basement Floor Plan**

Drawing No.  
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Scale@A1: **1 : 100**  
Issued for: **A - CONSTRUCTION**  
Revision:  
**C08 12.07.19 Construction Issue**

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CDM:

Risks

Refer to the Risk Register for more information.

Window Type Key:

- Back Painted Glass
- Sefar Mesh Interlayer
- Sefar Mesh with Milky Interlayer
- Glass with Milky Interlayer

GENERAL REVISION NOTE: GLASS TYPES  
UPDATED IN-LINE WITH MARK-UP PROVIDED ON  
11.04.2018. ANNOTATION UPDATED FOR CLARITY.

Project: **St Giles Circus**

Project Number: **1793**

Drawing Title:  
**Elevation 04 - Denmark Place East**

Drawing No.  
**1793\_1\_GE(04)01**

Scale@A1: **1 : 100**

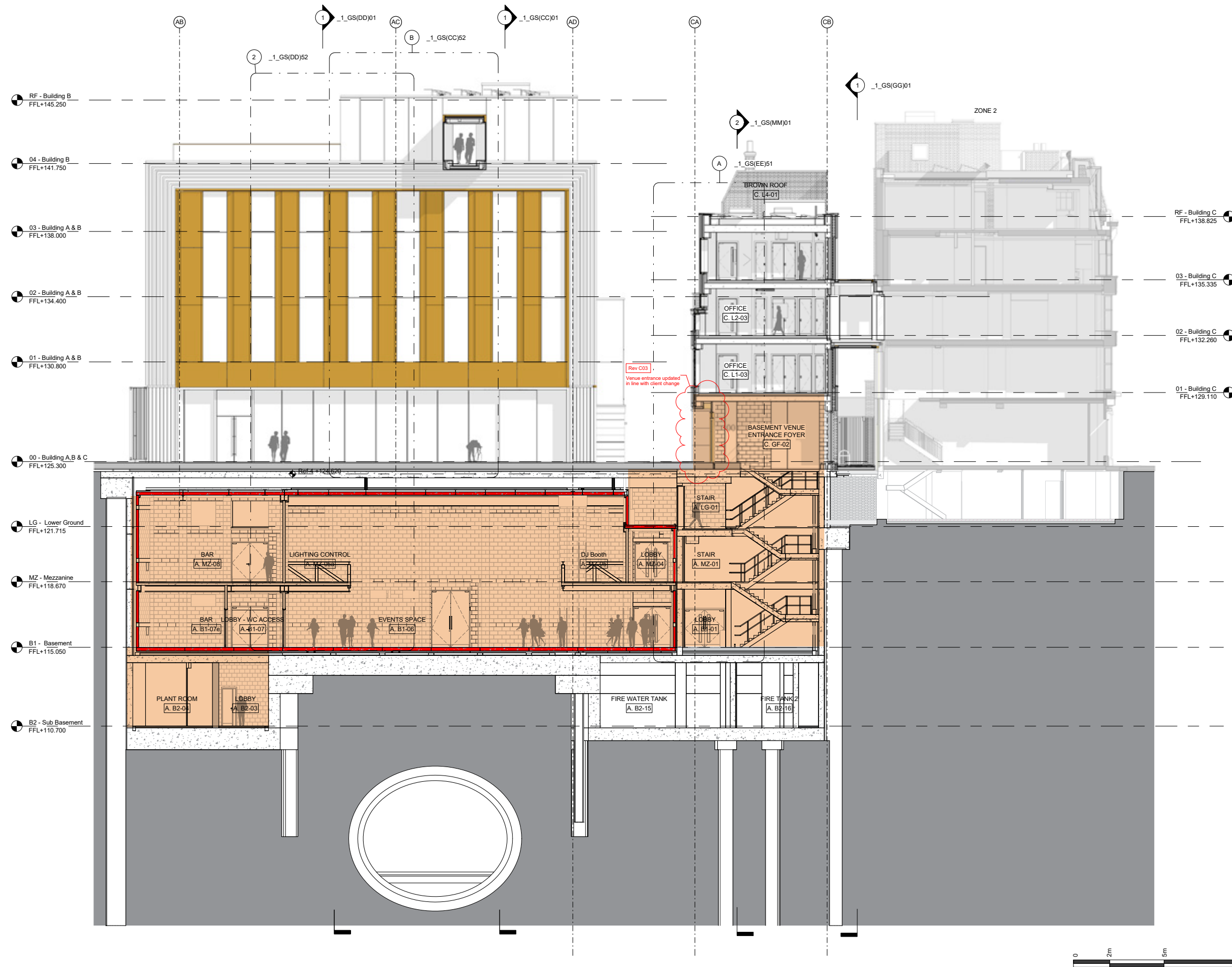
Issued for: **A - CONSTRUCTION**

Revision:  
**C02 25.06.18 Glass Types Update**

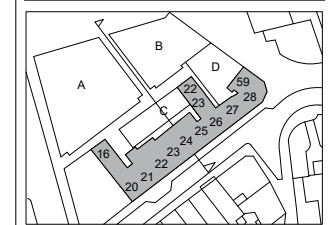
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Key Plan:



CDM:



Refer to the Hazard Elimination and Management List for more information.

Project: **St Giles Circus**

Project Number: **1793**

Drawing Title:

**Section EE**

Drawing No.

**1793\_1\_GS(EE)01**

Scale@A1: **1 : 100**

Issued for: **A - CONSTRUCTION**

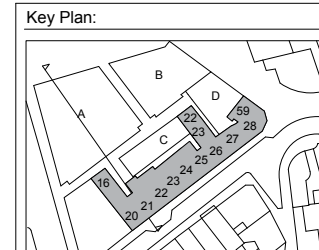
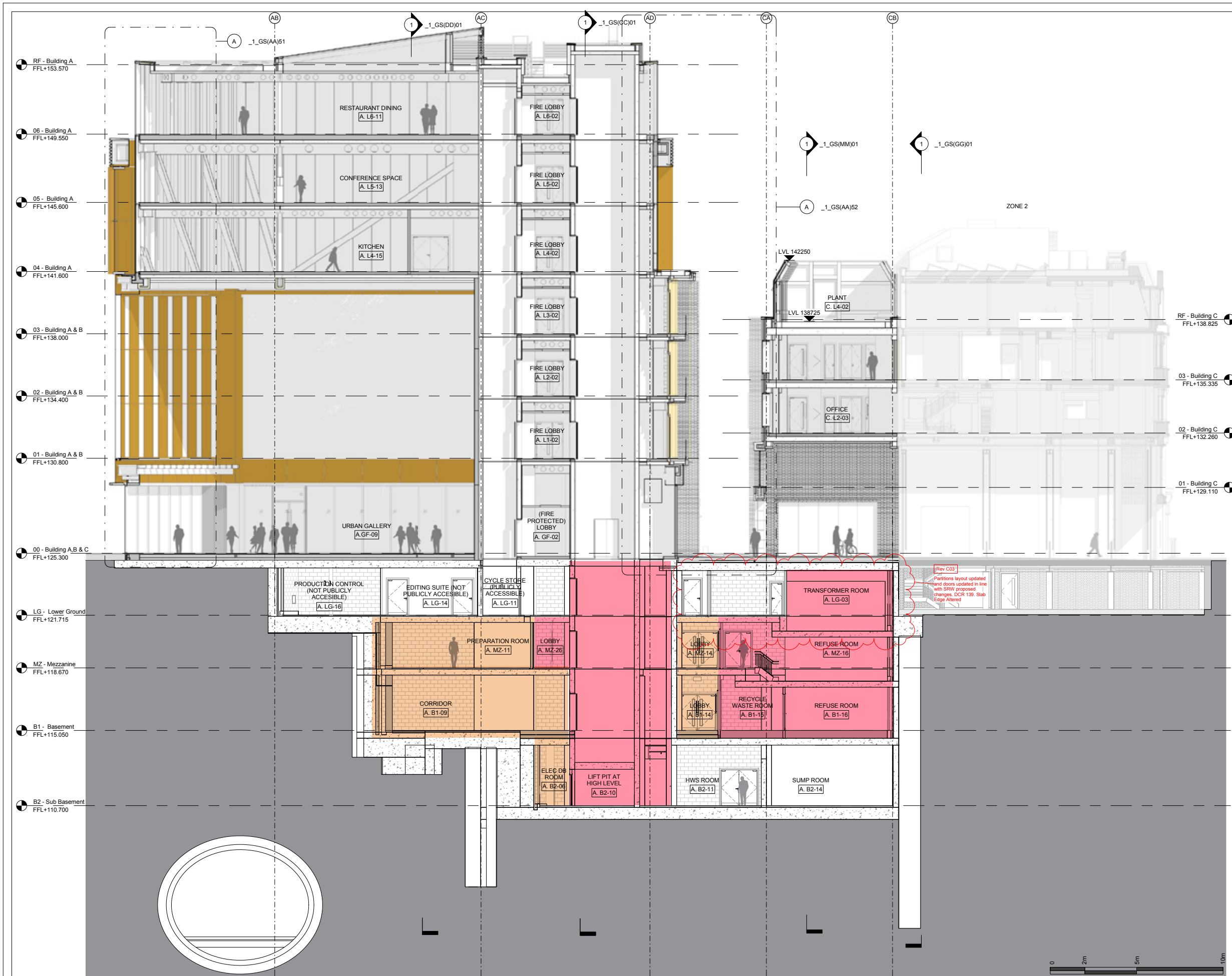
Revision:

**C03 24.05.19 Construction Issue**

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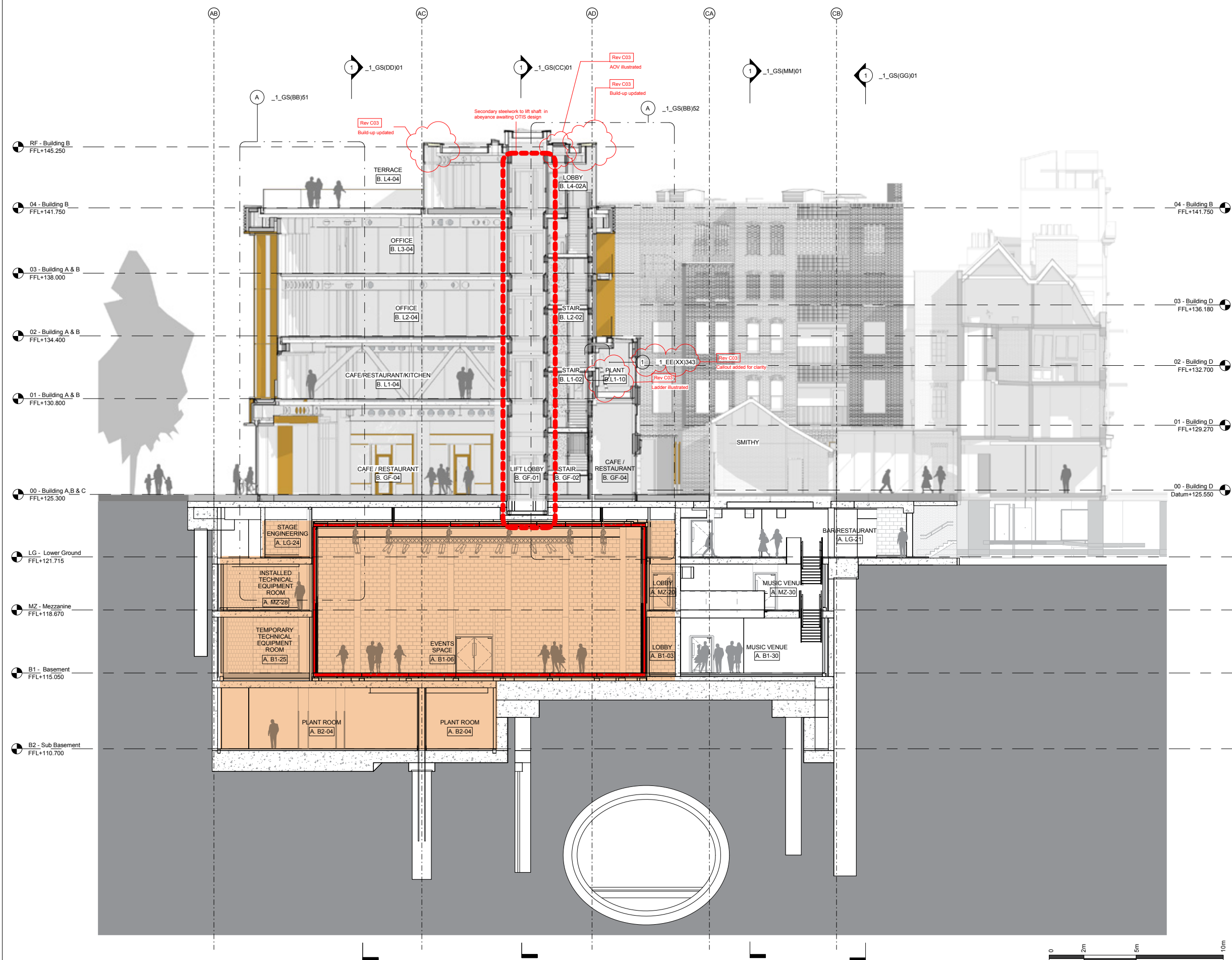


CDM:  
Risks  
Refer to the Hazard Elimination and Management List for more information.

Project: **St Giles Circus**  
Project Number: **1793**  
Drawing Title:  
**Section AA**  
Drawing No.  
**1793\_1\_GS(AA)01**  
Scale@A1: **1 : 100**  
Issued for: **A - CONSTRUCTION**  
Revision:  
**C03 20.11.18 Construction Issue**

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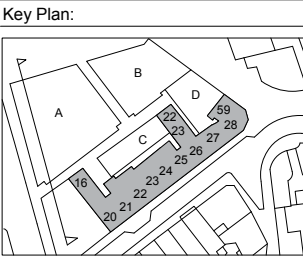
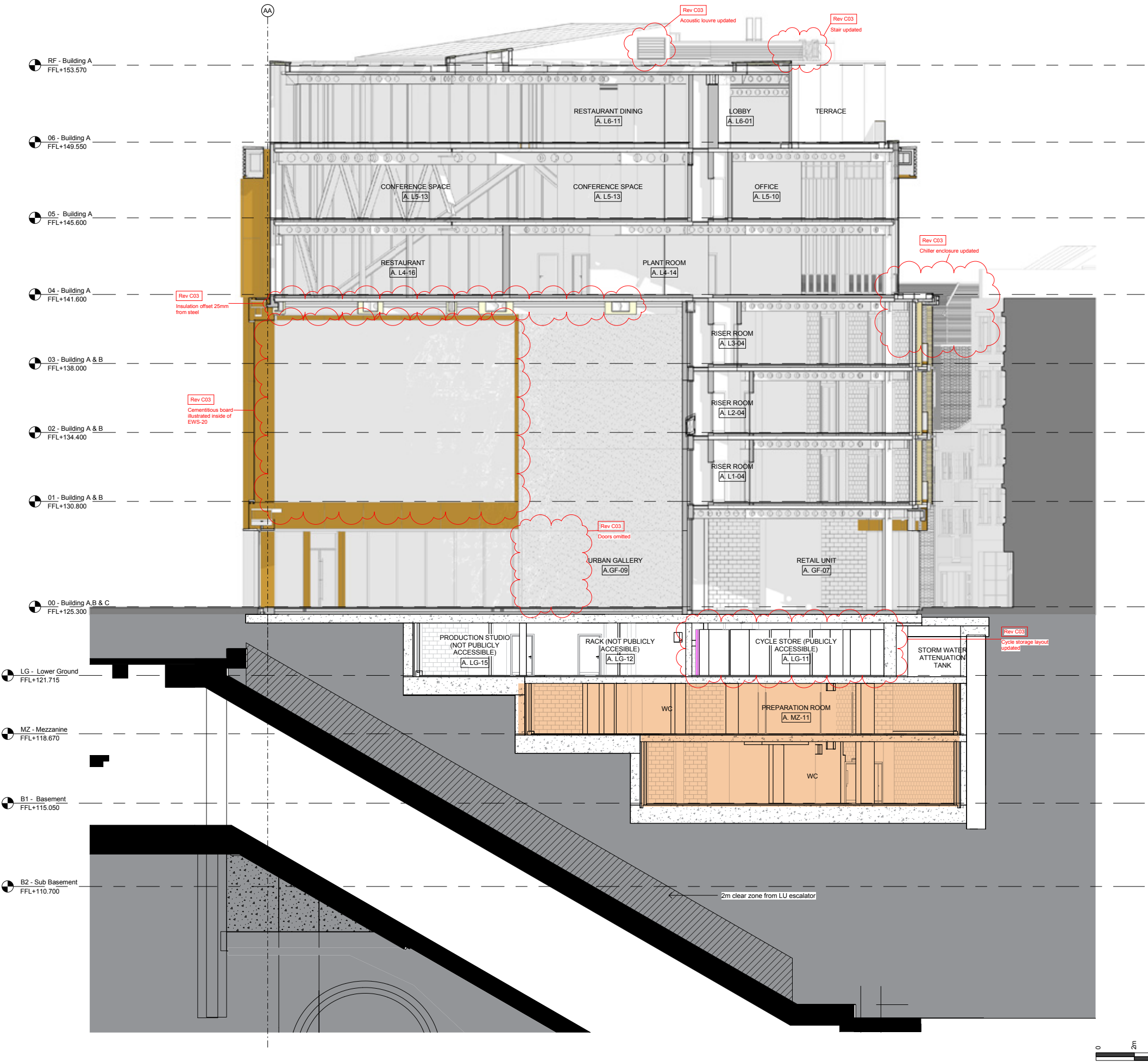




CDM:

Refer to the Hazard Elimination and Management List for more information.





CDM:

Risks

Refer to the Hazard Elimination and Management List for more information.

Project: **St Giles Circus**

Project Number: **1793**

Drawing Title:  
**Section FF**

Drawing No.  
**1793\_1\_GS(FF)01**

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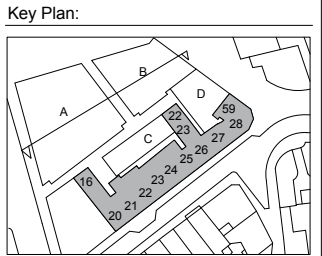
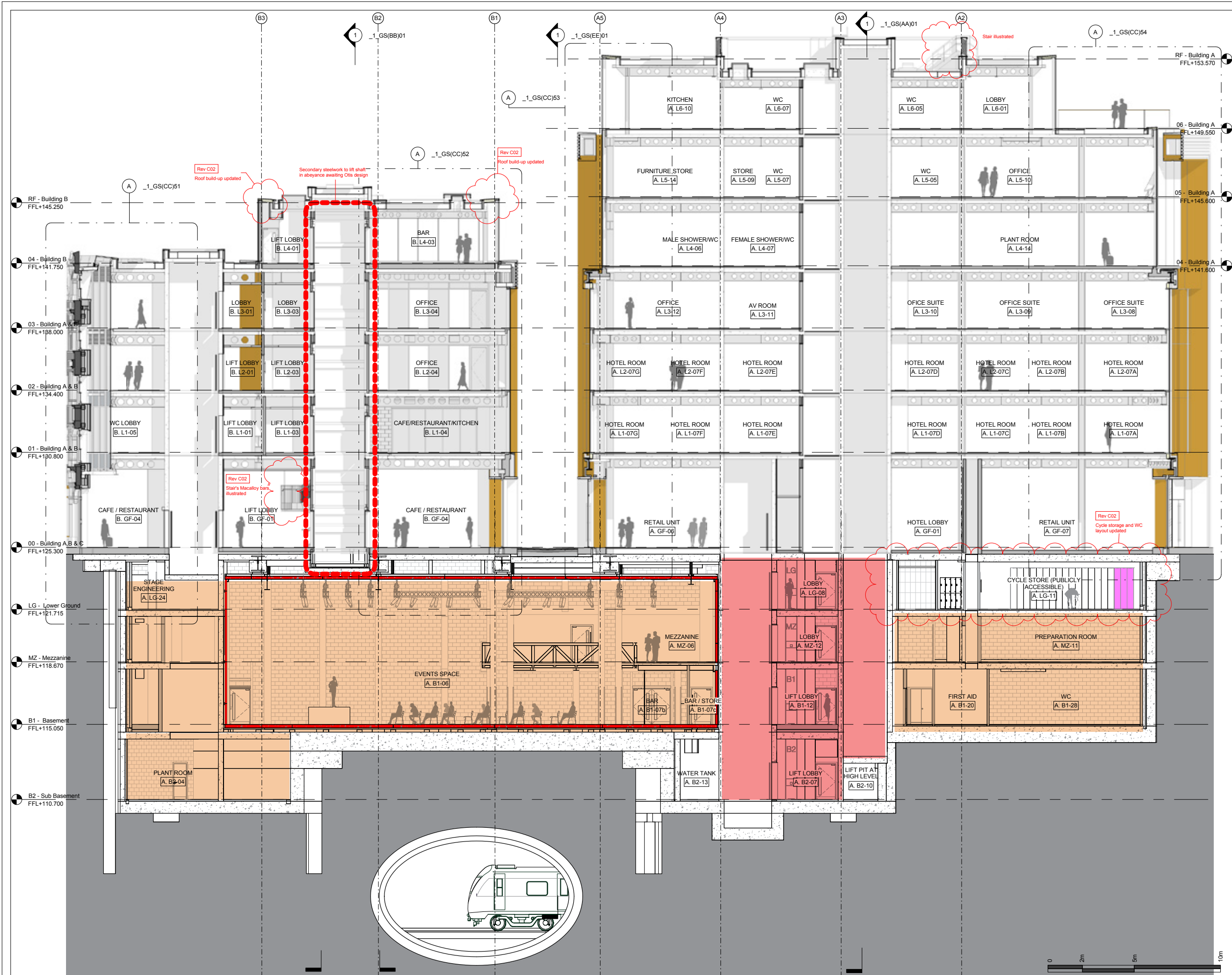
Issued for: **A - CONSTRUCTION**

Revision:  
**C03 19.10.18 GE/GS general update**

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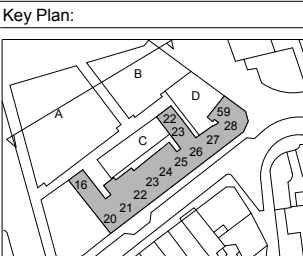
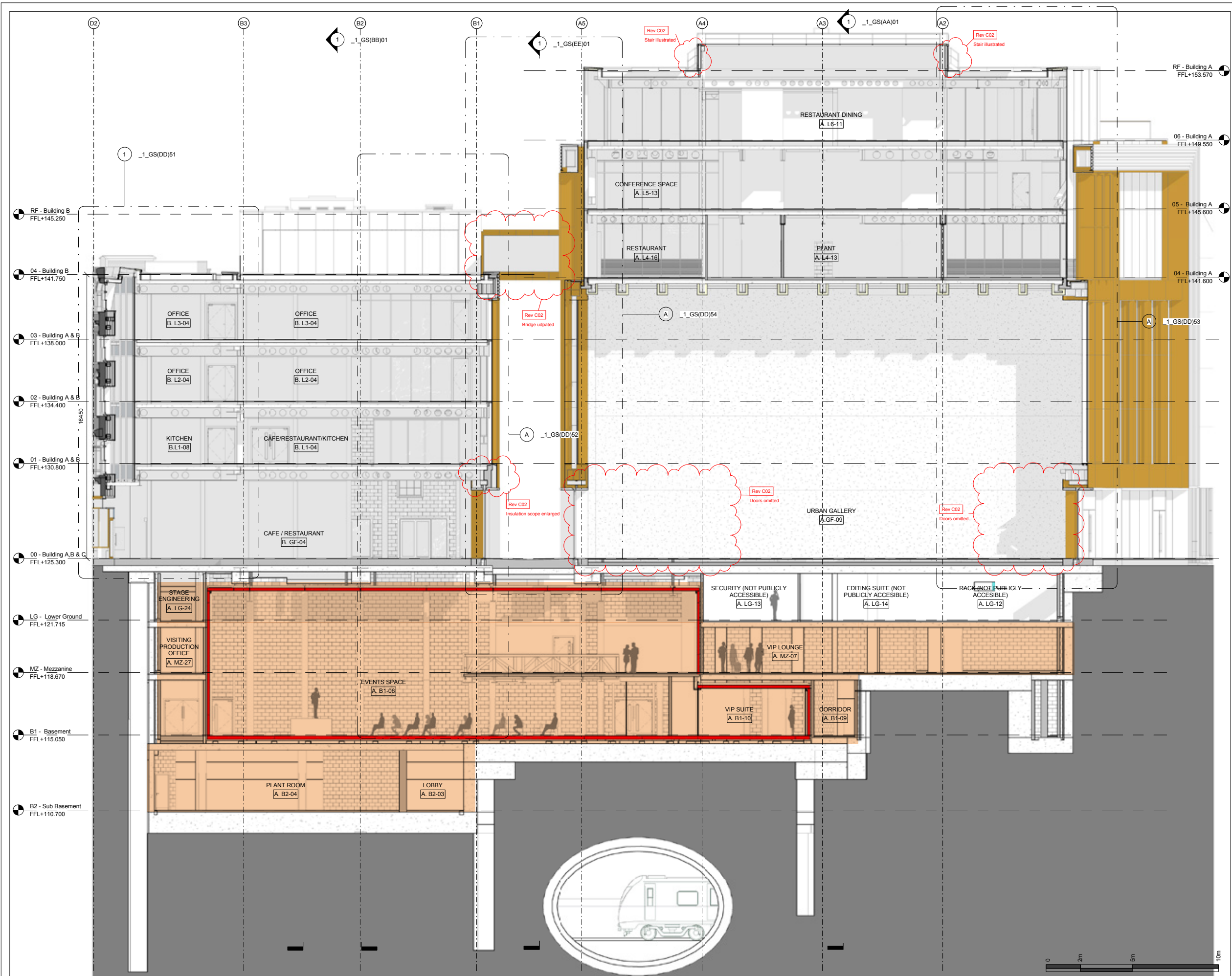


CDM:  
Risks  
Refer to the Hazard Elimination and Management List for more information.

Project: **St Giles Circus**  
Project Number: **1793**  
Drawing Title:  
**Section CC**  
Drawing No.  
**1793\_1\_GS(CC)01**  
Scale@A1: **1 : 100**  
Issued for: **A - CONSTRUCTION**  
Revision:  
**C02 19.10.18 GE/GS general update**

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CDM:

Risks

Refer to the Hazard Elimination and Management List for more information.

Project: **St Giles Circus**

Project Number: **1793**

Drawing Title:  
**Section DD**

Drawing No.  
**1793\_1\_GS(DD)01**

Scale@A1: **1 : 100**

Issued for: **A - CONSTRUCTION**

Revision:  
**C02 19.10.18 GE/GS general update**

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# Other

### 3. Fire Protection

- This document is to be read in conjunction with the fire strategy report.
- Fire rated steel structure in accordance with the Fire Strategy report. Refer to SKA-FP-100 - Additional Fire protection to Basement 09 12 2016 & Fire Strategy Report

### 4. Lifts

Lift performance will comply generally with the recommendations of BCO2009, CIBSE and British Standards.

#### 4.1. 1 St Giles Square

This building comprises a Ground floor above the event space with main entrance, a gallery, retail and access to the public realm at ground floor, 2 floors of hotel accommodation, office on the 3rd floor, 4th Floor kitchen and BoH, 5th floor Conference space and a restaurant/bar on the 6th floor.

##### 4.1.1 Core A

This Core serves the above areas and the traffic to the different uses will need to be managed by means of the security system and by the building management to ensure that unauthorised persons cannot enter floors where they do not have permission to access, although it must be accepted that this system can never be 100% secure, as it is always possible for an authorised person to be ‘tailgated’ or for a person to ait in the car until it is called to another floor. This will need further discussion and design with the operators of the various areas.

There is a separate service lift which serves all floors from B to 6. The use of this lift will need to managed carefully, not

only for security but to ensure that peaks of deliveries/movements to the various areas do not occur at the same time. This will also be needed to manage clean and dirty movements for food hygiene.

This lift also is used to access the cycle parking at LG and again it will need careful management to ensure deliveries are not planned at the same time as the peak cycle arrival/departures.

This lift will have an average interval of 85 seconds, when serving the whole building and be able to make 3.5 moves per 5 minutes, depending on the loading and unloading times.

If the lift is just used between G and LG for cycles, the average waiting time will be 44 seconds based on 3 cycles per trip, which means the lift in this mode only, will move 20 cycles per 5 minutes maximum.

There is also a further firefighting lift, which serves for G down to SB; this may also be able to be used for movements of goods and materials down to the events areas and for plant maintenance/ replacement at SB.

#### 4.2. Building C

##### 4.2.1 Core C1

This core serves the event space and comprises a duplex pair of passenger lifts and a large service/vehicle lift.

The population of this area is as follows:

Floor Use	Population
G Main Entry	0
LG Production and cycle store ( covered by goods lift in Core A)	164 cycles and 23 people
BM Events Space	340 people
B Events Space	1670 people

The two passenger lifts are will have an average waiting time of 45 seconds and be able to move 120 people per 5 minutes, based on the cars being loaded to 70% of the maximum. It is expected that the large majority of visitors to the events will use the stairs, persons using these lifts will be either mobility impaired or less able or willing to walk, therefore there will be times when the cars will be less densely loaded because of wheelchairs etc. being used, and therefore the persons moved will reduce for several journeys.

#### 4.3. Building D

This core also has an entrance to the ‘Green Room’ for the event space, which has a separate passenger lift serving G, LG, BM and B. This lift will have an average waiting time of 40 seconds and handle 30 people in 5 minutes.

### 5. Category A Fit Out

Air conditioning systems will allow formation of perimeter and internal zones each with independent means of control typically in line with each existing bay dimension. In open plan configuration, each zone shall be installed with humidity and temperature control to prevent condensation.

The lighting installation will be designed in cognisance of CIBSE LG7. The lighting controls and infrastructure will have facility for additional supplementary and feature lighting to be added by the Tenant to comply with LG7, if required. Office luminaires will incorporate LED lighting and be controlled via a lighting control system capable of providing constant illuminance control, occupancy control and daylight linking.

Sprinkler branch zone valve shall be provided with a monitored isolation valve, non-return valve, flow switch zone check arrangement, drain and test valves in the core and is extended to the Cat A areas.

### 6. WC’S

WC provision on every floor based on occupancy of 1 person per 5 sq m for A3 areas with a 60/60 male female split and recommendations of BS6465 2006 +A 1: 2009 on a floor calculation.

Accessible WCs: 1 no unisex accessible toilet will be provided on each floor.

### 8. MEANS OF ESCAPE

Escape widths are designed to accommodate evacuation based on the following occupancy criteria.  
A3: 5m2/person