# **SUMMARY SPECIFICATION**

# **BASE BUILD SHELL AND CORE**

#### 1. PURPOSE

The works consist of the alterations, extension and refurbishment of the existing building to provide approximately 113,000 sq ft of office accommodation over 7 floors, with a ground floor reception and facilities for cyclists, and car parking over two levels of below ground basement space.

# 2. BUILDING DESCRIPTION

## 2.1 Uses

The offices will be client facing, institutional standard accommodation, over levels 1 to 7. The space provides large open plan floor plates, with a central core which includes 4 no. passenger lifts and new washroom facilities. Two existing staircases are located along the north side of the floor plates.

At ground floor level there will be a new entrance for staff and visitors, and a new retail unit (A1 – A5 use) facing Bull Street. Within the ground floor level are back-of-house facilities for the building management, and cyclists. The rear of the property retains existing vehicle entrance points, which provide car access to the two basement

A new seventh floor level is to be built, which provides open plan office accommodation, with external terraces to its perimeter.

At roof level is a new plant enclosure set back from the main façades. This plant space includes a zone for tenant plant.

#### 2.2 Description

levels.

The base-build will accommodate tenancies in a predominantly open plan arrangement. A double height foyer is located within the new Bull Street entrance. The core is largely rebuilt and will provide the necessary amenities required and associated with accommodation of this nature.

# 2.3 Design criteria

#### Office Floors

Raised floor zone (overall)

Finished floor to suspended ceiling

Services zone

Lighting zone

150 mm clear

2750 mm min

550 mm min

100 mm

# Occupancy Levels

For the purpose of calculation, the following occupancy levels will be used:

Sanitary accommodation 1 person / 8m²
Means of escape 1 person / 6m²
Services provision 1 person / 8m²

#### 2.4 Sub-divisibility

The core and services are designed for a split letting 2 per floor

# 2.6 BREEAM

The refurbishment shall achieve a VERY GOOD BREEAM office refurbishment rating and a minimum EPC rating of B.

#### OFFICE

#### 3.1 Sub and Superstructure

Structural steel frame with solid load bearing timber joists, with some areas of composite reinforced concrete slab.

#### 3.2 Loading criteria

The existing floor slabs are generally designed to accommodate the imposed live loads as follows:

Ground floor	5.0 kN/m <sup>2</sup>
Office floors - general	2.5 kN/m <sup>2</sup>
Office floors - high load areas	4.0 kN/m <sup>2</sup>
Office floors - partitions	1.0 kN/m <sup>2</sup>
Roof plant area (see structural plans)	5.0 kN/m <sup>2</sup>
Loading bay	10.0 kN/m <sup>2</sup>
Basement car parking area	2 5 kN/m <sup>2</sup>

# 3.3 Wall finishes (summary)

#### Reception

The reception area will be finished in a combination of dry-linings, new joinery around the reception desk and new feature walls. New timber veneered or painted panels will surround the entrance leading into the lift core.

# Core Areas

Three coats emulsion paint on taped and jointed plaster-board. Painted MDF or softwood skirting will be provided to core walls within office areas.

# Washroom Areas

Walls will generally be finished in a combination of full height porcelain tiles or 3 coats of emulsion paint, applied directly to taped and jointed moisture resistant plasterboard.

#### Floor finishes (summary)

Selected in-situ floor tiles will be laid in the entrance space and provide slip resistance in both wet and dry conditions (this shall be verified by an independent UKAS accredited test, and a PTV value of 40 in the wet). A recessed skirting is to be fitted into the wall build-up. An aluminium reinforced entrance mat will be fitted adjacent to the main entrance

#### **Common Landlord Areas**

The raised floor will comply with latest medium grade standard and will include all necessary fire breaks and closure details around the perimeter and columns, and earth bonding back to the occupier's earth bar in the main electrical riser shaft.

Raised Access Floor: 600 x 600mm encapsulated floor tiles, with adjustable pedestals.

Carpet tiles to be installed within landlord areas shall be bonded to the raised access floor with a suitable tackifier to the carpet supplier's recommendations.

#### Washrooms and Core

Self levelling screed with anti-slip floor tiles.

# 3.5 Ceiling finishes (summary)

## Reception

Taped and jointed plasterboard finished with 3 coats emulsion paint. Ceiling to include feature lighting incorporating recessed downlighters. A feature finish may be applied to the entrance space, to align with the feature wall finish.

#### **Washrooms and Core**

Taped and jointed plasterboard finished with 3 coats emulsion paint. Ceiling to include feature lighting incorporating recessed downlighters.

(Note - access to services above ceiling to be accessed via proprietary ceiling panels).

# 3.6 Joinery

#### Reception

The joinery wall with integrated reception desk will be located as shown on the drawings and include space for back-of-house storage. The reception desk will include a heater, and controls for fire systems, access and security systems. Comms and data will be provided for two receptionists.

# 3.7 Services risers

Landlord and tenant risers are provided within the office floors. The risers are fire rated with the doors and walls of the riser forming the enclosure. The riser floors are to be provided with an open galvanised mesh grating at each floor level.

#### **Facilities management areas**

Landlord facilities management areas are provided at ground floor level, behind reception. Included within this area is a BMS / FM office, and a Fire Command / Security room, to be laid out to suit specific requirements. These rooms will be finished in painted plasterboard walls, plasterboard and suspended tile ceilings, and carpeting on a raised access floor.

#### **SERVICES** 4.

#### Design and criteria for building services 4.1

#### Mechanical:

#### **External Design Condition:**

Summer Winter	26.1oC db / 19.2oC wb -4oC / 100% sat	
Internal Design Conditions:	Summer	Winter
Cat A office	$24^{\circ}\text{C} \pm 2^{\circ}\text{C}$	21°C ± 2°C
Reception	$24^{\circ}\text{C} \pm 2^{\circ}\text{C}$	21°C ± 2°C
Washrooms, showers	no cooling	18°C min
stairs, landlord areas		
lift lobbies	$24^{\circ}\text{C} \pm 2^{\circ}\text{C}$	21°C ± 2°C
General plant rooms,	no upper limit	5°C min
cycle store, store		

Lighting and Power Load Densities for Cooling:

Base Loads

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

Small Power

Office 25W/m<sup>2</sup>

Fresh Air Supply 12l/s per person @1:8m<sup>2</sup>

> density (an allowance has been made for one floor to accommodate 1:6m2

density)

#### **Electrical:**

Design Criteria for Office Floors: On floor distribution (underfloor bus bar

provided by tenants CAT B) 25 W/m<sup>2</sup> Diversified load - over 1000m<sup>2</sup> 19 W/m<sup>2</sup> Back of House Small Power 5 W/m<sup>2</sup> 12 W/m<sup>2</sup> Office Area Lighting 9 W/m<sup>2</sup> Back of House Lighting Landlord's standby power system (life safety only)

#### 4.2 Utilities

#### Electrical:

The electrical installation consists of the following major elements:

1.25MVA electrical power supply to the building. Emergency lighting in accordance with BS 5266.

#### Telecommunications:

Risers will be provided for the tenant use in each notional tenancy.

#### Water Services:

Incoming mains water supply is provided from the mains in Bull Street.

A separate existing fire main is provided.

A dry riser is provided to the escape stair core.

#### **Drainage and Plumbing:**

The building's existing waste water and drainage installation is divided into two systems: foul and surface water. Discharge is via combined connections to the sewer.

#### Gas:

An existing gas main is provided to the gas meter room in the basement from the Old Square side of the building.

# 4.3 Mechanical ventilation systems

The following spaces are mechanically ventilated as indicated:

Office Areas 12 l/s/person

Washroom Extract 6 air changes/hr, with duty

standby fans

#### Office Ventilation:

New heat recovery supply and extract air handling units will be provided to satisfy the outside air requirements. The supply AHU will be located on the roof.

The AHUs will be provided with LTHW heating coils to provide the heating. Air handling units will be provided with heat recovery in the form of thermal wheels. The AHUs will be provided with chilled water coils to cool the supply air. Washroom ventilation is achieved via a supply and extract air handling unit on the roof. The unit will temper supply air only. The AHU will be provided with heat recovery in the form of a cross flow heat exchanger (Recouperator).

# 4.4 Air conditioning system

The building will be air conditioned using a fan coil unit system. The fan coil units will be four pipe heating and cooling to perimeter units with two pipe (cooling only) to internal units. The tenant systems will be electrically fed from the dedicated EDF metered tenant distribution boards at each floor. This will enable separate utility billing for all energy consumption attributable to each tenant for their AC system.

Ducted fan coil units, concealed within the ceiling void, will be used to serve the office areas.

Units have been selected and arranged so that they serve BCO recommended zone sizes.

#### 4.5 Fire and protection services

Sprinklers and dry riser systems will be provided as follows: The building will be protected by an automatic sprinkler system.

Sprinkler spacing in office areas will be based on Ordinary Hazard Category 1 Classification.

A separate dry riser system will be provided to the escape stairs including outlet valves at each floor level and fire brigade inlets on the outside of the building.

Any areas subject to freezing will be provided with adequate protection.

The fire alarm system will be L1 classification, analogue addressable.

A fire alarm interface unit will be installed for each separate tenancy area.

#### 4.6 Automatic controls and BMS

A new DDC (Direct Digital Control) system with head end is provided to control and monitor the Mechanical, Electrical, Public Health, Fire and Lift Installations.

#### 4.7 Communication risers

Each tenancy will be provided with a tenant telecoms riser. The riser will be provided with containment systems to allow cabling installation by the tenant.

## 4.8 Lightning protection

The building superstructure and foundations serve as the main building lightning protection earthing point. A lightning protection system is installed to BS EN: 62305:2006 on the roof areas interconnected with foundations by means of connections to the building steel frame.

All roof installed equipment is connected to the roof lightning protection system.

#### 4.9 Security

A CCTV system, linked to the security room, will monitor the cycle storage area and all entrances/exits.

An access control system will be provided to control access to all building entry and exit points and access to tenancies on each floor level. The access control system will also be extended into the lifts to control access vertically within the building.

Containment to allow for the future provision of security devices on each floor entry point will be provided.

Access control will be extended to serve the security gates in the ground floor reception.

#### 4.10 Lift installation

The building will be provided with four new passenger lifts. Each lift will be 21 person 1600kg 2.0m/s MRL. The passenger lifts will be provided with destination control to achieve the required BCO standards.

The passenger cars will have a minimum headroom of 2.300m and lift door height of 2.200m.

New firefighting lift will be 8 person 630Kg 1.0m/s MRL. Two way intercom system linked to the fire security room machine room is provided from each lift and also an external phone line.

Access control will be extended into the lift control system to control access.

## 5. EQUIPMENT

# 5.1 Refuse and recycling facilities

The existing loading bay contains a goods lift and space for the storage and collection of waste. The existing strategy to move waste from each floor shall remain, where a tenant shall take waste down to basement level via a passenger lift, wheel the waste across to the goods lift in a eurobin or similar, and take the waste up to the ground floor loading bay for storage and collection.

#### 6. EXTERNAL WORKS

# 6.1 Paving and lighting

The paving to Bull Street has been recently replaced as part of the Centro Tram works on the street. New paving to match will be provided where the works are undertaken to the entrance.

New up-lighting is set within the external paving to up-light the new entrance canopy and glass screen.

# 6.2 Façade

The main façades are of Portland Stone with new double-glazed window units whilst the new seventh floor comprises high performance full-height glazed curtain walling.

# **CAT A FIT-OUT**

# 1. OFFICE FINISHES

# 1.1 Floor boxes and carpets

An allowance for floor boxes is to be provided, at 1/10 sq m net lettable area. An allowance for carpets is to be provided based on net lettable area.

#### 2. OFFICE SERVICES

## 2.1 Sprinkler installation

The building sprinkler system serves the entire building. Sprinkler spacing in office areas is on the basis of Ordinary Hazard Classification 1 and is generally laid out on a 4m x 3m grid.

#### 2.2 Lighting installation

Office lighting wired in flexible plug-in wiring is configured from circuits on tenants' lighting distribution boards located in on-floor electrical riser cupboards. Switching is by central on-floor control

Typical luminaires provided are LED, recessed modular type, diffuser assembly in accordance with the spirit of LG7, subject to the limitations of Building Regulations for efficiency of luminaires.

Luminaires at emergency exits and 5% of the total on-floor area are provided with self-contained battery-inverter packs giving 3 hours' emergency operation necessary for escape lighting. The emergency lighting circuits are un-switched and run separately.

The average lighting level in open plan office spaces (at desk height) is approximately 350 lux. The lighting level in emergency mode is 1 lux.

Daylight controlled dimming and occupancy-sensing switching are provided to aid compliance with Building Regulations Part L2.

# 2.3 Ceiling finishes

Fully accessible modular suspended ceiling system utilising perforated metal tiles based on a 600 x 600mm tile or a 1200 x 300mm plank. Acoustic pads will be provided to the back of the perforated ceiling for damping to achieve the specified acoustic performance. All ceilings to be laser levelled. Sealed cavity fire barriers provided where necessary.

Perimeter linear diffusers or grilles will allow air distribution adjacent to the windows, located within a continuous plasterboard margin or within the ceiling tiles. Shadow gap edge trims are to be installed to the perimeter of all areas. Access panels in plasterboard ceiling shall be discrete and painted to match the surrounding ceiling.

# 2.4 Floor finishes

Raised Access Floor:  $600 \times 600 \text{mm}$  encapsulated floor tiles, with adjustable pedestals.