

Outline Specification

65 Fleet Street

REVISION: P1

DATE: 30/04/21

STAGE 3

Contents

Section A - Outline Specification	3	5.0 LANDSCAPING	7	5.4 Building Management	
1.0 DESCRIPTION OF THE WORKS	3	5.1 Ground Floor		Section C - T-Sheet	12
2.0 KEY DESIGN CRITERIA	3	5.2 Roof Gardens		ALT - ALTERATIONS TO EXISTING BUILDING FABRIC	12
2.1 Occupancy Criteria		5.3 Irrigation		BA - BALUSTRADES	12
2.2 Ceiling Heights		6.0 SUSTAINABILITY	7	CL - CEILINGS	13
2.3 Circulation		6.1 Reuse & Recycling Rates		EDR - EXTERNAL DOORS	15
2.4 Ceiling Voids / Service Zones		6.2 Materials		EWL - EXTERNAL WALLS	15
2.5 Floor Zones / Trunking		7.0 MOCK-UPS & SAMPLING	8	FFE - FIXTURES / FITTINGS / EQUIPMENT	19
2.6 Planning Modules		7.1 Mock-ups		FL - FLOOR FINISHES	20
2.7 Canteen / Tea Point Areas		7.2 Tests & Sampling		FP - FIRE PROTECTION	22
2.8 Car Parking / Bicycle Storage		Section B - Base Build Summary Specification	9	IW - INTERNAL WALLS	22
2.9 Construction / Structure		1.0 Architectural	9	IWL - INTERNAL WALL LININGS	24
2.10 Services Strategy		1.1 History & Context		RFS - ROOFS	25
2.11 Building Certifications		1.2 Building Configuration		SI - SIGNAGE	26
2.12 Accessibility		1.3 Size & Extent		SR - STAIRS	27
2.13 Fire Strategy		1.4 Building Fabric		WF - WALL FINISHES	27
3.0 EXTERNAL FABRIC	5	1.5 Acoustic		WNX - WINDOWS	28
3.1 External Walls (EWL)		2.0 Environmental	9		
3.2 External Glazed Windows & Doors (EWL)		3.0 Structural	9		
3.3 External Solid Doors (DRS)		3.1 General			
3.4 Roofs (RFS)		3.2 Design Loads			
3.5 Cleaning Access & Maintenance		4.0 Vertical Circulation	9		
3.6 External Lighting		4.1 Lift Arrangement			
4.0 INTERNAL FINISHES	6	4.2 Lift Control			
4.1 Receptions		4.3 Stairs			
4.2 Stairs		5.0 Mechanical & Electrical	10		
4.3 Lift Lobbies & Lifts		5.1 Air Conditioning			
4.4 WC's		5.2 Lighting			
4.5 Showers & Changing Rooms (Basement)		5.3 Power			
4.6 Office Space					
4.7 BOH / Storage / Plant Areas					
4.8 Ground & LG Floor Retail Units					

Section A - Outline Specification

1.0 DESCRIPTION OF THE WORKS

This outline specification has been prepared by Buckley Gray Yeoman Architects on behalf of Whitefriars Ltd. The document relates to the building at 65 Fleet Street, Temple, London EC4Y 8BQ.

The project brief is to provide a first class refurbished and extended office building that provides modern, attractive and flexible office accommodation.

Proposed alterations to the building include:

External:

The additional of two new floors to the South building, complete with rooftop gardens.

Installing new facades to Fleet Street, the South building entrance, and the ground and lower ground floors along Whitefriars & Bouverie Street.

Enhancing the entrance sequence from Fleet Street, through the colonnade and into the courtyard by replacing facades, providing a new canopy and updating the landscaping and paving.

Internal:

Comprehensive internal office refurbishment to all existing floors.

Redesign and refinishing of office receptions.

Reconfiguring the internal core arrangements and light wells.

Restructuring the MEPH services.

Enhancing and reshaping the existing atrium by providing a new feature stair, re-cladding the facades and installing a new glazed roof.

CAT A fit out to all office floors, with shell and core to retail and gym units.

Enhancing the user amenities, with new cycle entrances, storage, lockers and showers at lower ground and basement level.

The following specifications should be read in conjunction with the architect's design drawings, stage 3 report and all other relevant documents by the Structural Engineer, Services Engineer, Facade Consultant and Fire Engineer.

2.0 KEY DESIGN CRITERIA

2.1 Occupancy Criteria

Occupation Density

Means of Escape: 1 person per 8m²

Internal Climate (cooling & fresh air): 1 person per 8m²

Lift Provision: 1 person per 8m² with 80% utilisation & 12% absenteeism

Sanitary Provision: 1 person per 8m² with 80% utilisation

2.2 Ceiling Heights

North Building

Varies - 2.9 - 3.7m from FFL to underside of structural soffit, with downstand beams and suspended services within this height.

South Building

Basement:

3.4m from FFL to underside of slab, with suspended services in this height.

Floors LG - 6:

Typically 3.0 - 3.5m from FFL to underside of downstand beams, with suspended services within this height.

Floors 7 & 8:

2.55m from FFL to underside of downstand beams

3.1m from FFL to underside of slab with suspended services within this height.

2.3 Circulation

Lift Arrangement

Refer to Section B - base-build summary specification and service engineer's drawings, reports and specifications.

Lift Control

Refer to Section B - base-build summary specification and service engineer's drawings, reports and specifications.

Lift Over-run Heights

Heights from top floor FFL to the underside of the structural soffit are as follows, the lifting beam is to be provided within this height:

- Lifts 1, 3, 5 & 6: 4.5m
- Lifts 2 & 4: 4.0m
- Main Core FF Lift: 4.0m
- South Core FF Lift: 4.5m
- North Building Lifts: As existing

Stairs

The North building is served by one staircase.

The South building is served by two staircases, allowing the separation of up and down foot traffic. There is an feature staircase with the atrium serving floors Ground - Second, which will be developed further at Stage 4.

2.4 Ceiling Voids / Service Zones

North Building

Exposed services to ceiling, tight to structural soffit.

South Building

Floors LG - 6:

Structural soffit - underside rafts: 700mm, downstand beams are included within this depth.

Floors 7 & 8:

Ceiling mounted services within downstand beam depth, Duct transfers through regular cellular openings in beams. Beam depth: 550mm

Section A - Outline Specification

2.5 Floor Zones / Trunking

North Building

Low void raised access flooring provided to office floors. No trunking provided. SSL to FFL heights are generally as follows:

Ground floor: 405mm

1st Floor: 75mm

2nd Floor: 65mm

3rd Floor: 50mm

4th Floor: 70mm

South Building

Raised access flooring provided to office floors. No trunking provided. SSL to FFL heights are generally as follows:

Floors 1 - 7: varies 170 - 300mm

Floors 8 & 9: 540 - 575mm

Refer to Section C - T-Sheet, FL-50 and FL-55.

2.6 Planning Modules

On office floors ceiling mounted services are set out to BCO requirements, with 4.5 deep x 6m long zones along the facades, and 50 - 70m2 zones inside this depth. The ceiling grid corresponds to the existing building form and location of downstand beams, and is generally in 3 and 6m intervals.

Partitions to the 7th & 8th floors are to stop short of the ceiling, or have high level vents, to allow natural ventilation. Some partitions to the North Building and lower ground floor to stop short of the ceiling, to allow for air flow, in the event of a fire to AOVs in the facade. tenants to consider acoustic design accordingly.

2.7 Canteen / Tea Point Areas

All office floors to the South Building are served by a kitchen

exhaust duct, future tenants are able to connect to this ductwork from one floor.

There will be provision on each office floor for future tenant fit-out of kitchenettes and tea-point areas. Refer to the stage 3 report for typical locations.

2.8 Car Parking / Bicycle Storage

Car Parking:

None

Motorcycle parking:

None

Loading Bay

1 dedicated loading bay, accessed from Whitefriars Street. The loading bay can be used by Cars/Vans <7.5 Tones. HGVs will service on street, adjacent to the loading bay. Refer to Transport Assessment for further detail

Bicycle Spaces

370 double stacked spaces, 9 Sheffield stands (18 spaces) and 5 adaptive and charging spaces for electric bicycle

‘End of journey’ area

Located in the basement, this includes:

370 No. Lockers.

37 No. Shower Cubicles, split approximately 50/50 male/female and 2 No. Accessible Unisex Shower & WC Rooms.

To comply with the approved planning drawings and design and access statement.

See section 4.5 for further information.

2.9 Construction / Structure

North Building

Existing Structural Grid

The existing columns are generally within the external wall build-up with 4no. columns within the floor-plate on floors 1 - 4.

Existing Structural Slab Thickness

Basement (at South Building LG level) - 850mm reinforced concrete raft foundation

Ground Floor - 250mm reinforced concrete

Typical Floor - Concrete slab - thickness varies

Existing Structure

The North building is concrete framed and six storeys in height plus a single basement. The existing superstructure comprises a reinforced concrete frame. Reinforced concrete columns support wide shallow beams with thinner one way slabs spanning between. A main central beam, deeper than the typical beams, spans between the two main cores. The existing roof comprises of a steel framed mansard. Stability is provided in both directions by the reinforced concrete walls forming the two main stair/lift cores.

The building foundation consists of an 850mm thick reinforced concrete raft bearing onto the natural ground below. A reinforced concrete retaining wall is provided around the perimeter (including around the Tipperary Pub) on the north, east, and west sides with the floor plate connected to the South Building at the lower ground level. Existing below ground drainage has been typically cast into this raft foundation throughout.

South Building

Existing Structural Grid

The existing columns are generally spaced 7.5m apart North - South, and 6 - 9m apart East - West.

Existing Structural Slab Thickness

Basement - 1100mm reinforced concrete raft foundation

Lower Ground Floor: 300mm reinforced concrete

Ground Floor - 350mm reinforced concrete

Typical Floor - 130 mm concrete on 50mm metal deck (minimum 80mm concrete cover)

Section A - Outline Specification

Existing Structure

The South Building is steel framed and seven storeys in height above ground level plus two levels of basement. The existing superstructure comprises of a 130mm concrete slab on steel decking spanning between steel framing. Beginning at fourth floor level, the perimeter of the building is set back by approximately 1.5m with transfer beams introduced to deal with this set back. The building set-backs continue on the levels above creating a terraced profile with transfer beams provided at every affected level above. Stability is provided by vertical steel bracing for the full height of the building located in both directions in each of the three stair/lift cores.

The lower ground floor slab is constructed of a solid flat reinforced concrete slab; however, the main core area framing remains steel framed with a similar configuration to the typical storeys above. The steel columns extend to basement level and are provided with concrete encasement in some areas. A reinforced concrete retaining wall is provided around the perimeter which is cantilevered from lower ground level along the east and west frontages to provide a light-well adjacent to the external pavement. The building foundation consists of an 1100mm thick reinforced concrete raft bearing onto the natural ground below. Existing below ground drainage has been typically cast into this raft foundation throughout.

Please refer to Structural Engineer's information for further details.

2.10 Services Strategy

Refer to Section B - base-build summary specification and service engineer's drawings, reports and specifications.

2.11 Building Certifications

BREEAM

Two BREEAM assessments are being undertaken and these cover all aspects of the scheme on which work is being carried out, including the retail and office uses:

North Building: BREEAM Refurbishment and Fit-Out

South Building: BREEAM Bespoke

Excellent must be achieved for both assessments.

Wired Score

Platinum is targeted. Wired score to be engaged at stage 4 to review proposals and confirm if there are additional requirements.

Other certification schemes

The design team have considered targeting WELL and NABERS certification. CBRE to confirm if further certification is required.

2.12 Accessibility

Step free access is provided into the building at ground floor and into the office accommodation from the internal circulation spaces.

A ramp is provided to basement level, to allow access by adapted cycles.

Accessible toilet facilities are provided on all office floors.

2.13 Fire Strategy

Please refer to fire engineer's information and Fire Strategy drawings.

The North and South buildings are to be sprinklered throughout.

The North building core is protected by a pressurisation system. Two fire fighting shafts are provided to the south building, with smoke ventilation, dry risers, fire fighting stairs and fire fighting lifts.

3.0 EXTERNAL FABRIC

3.1 External Walls (EWL)

Includes curtain walling

See also specification by Facade Consultant, Buro Happold for further information

Existing

North Building: Natural handset stone and brickwork.

South Building & Colonnade: Generally granite cladding, with open joints to upper levels, and closed silicone joints to lower levels.

Proposed

New facades proposed include: handset limestone, curtain walling, cavity masonry, living walls and metal rainscreen cladding.

Refer to Section C - T-Sheet for information on each proposed external wall type.

All insulation materials to have a BRE green guide rating of A+.

3.2 External Glazed Windows & Doors (EWL)

See also specification by Façade Consultant, Buro Happold, for further information.

Existing

North Building: Timber framed single glazed sash windows with secondary glazing, and powder coated aluminium framed fixed double glazing.

South Building: Powder coated aluminium fixed and open-able double glazed windows and doors.

Proposed

Refer to Section C - T-Sheet for information on proposed external windows & doors.

Manifestation: to be provided to full height glazing as required by building regulations approved document K. Detailed design of manifestation to follow at stage 4.

Barrier / guarding: Where applicable the windows / glazing must comply with barrier / guarding loadings as defined in the Building Regulations, British Standards and the relevant National Annex.

3.3 External Solid Doors (DRS)

Existing

Powder coated metal doors along Whitefriars & Bouverie street, into lower ground floor.

Section A - Outline Specification

Proposed

New external doors to service yard and plant-rooms to be powder coated metal. Manual locking and access control required. Access control arrangement to be developed at stage 4 with services engineer and access control consultant.

3.4 Roofs (RFS)

Existing

North Building: Natural slate roof and mansards

South Building: Flat warm roofing with asphalt / waterproof covering.

Proposed

Roofs proposed include: inverted, warm, blue, green and pitched slate roofs.

Refer to Section C - T-Sheet for information on proposed roofs.

All insulation to meet BRE green-guide rating A+. All insulation to parapets and external wall upstands to be non-combustible.

3.5 Cleaning Access & Maintenance

Access & maintenance is provided by a combination of:

- Working from the ground plane, terraces or roof, where no fall risk is present, or where permanent passive fall protection exists
- Working at roof level with fall restraint system
- The use of MEWPs & spider cranes

Please refer to Access Advisors details for further information.

3.6 External Lighting

To be developed at Stage 4 with external lighting consultant. To include lighting to: facades, ground level and roof terraces.

4.0 INTERNAL FINISHES

4.1 Receptions

Refer to interior designer's information.

4.2 Stairs

Refer to interior designer's information.

4.3 Lift Lobbies & Lifts

Refer to interior designer's information.

4.4 WC's

Refer to interior designer's information.

4.5 Showers & Changing Rooms (Basement)

Refer to interior designer's information.

4.6 Office Space

North Building

Walls

Emulsion painted dry-lining plasterboard walls.

Shaft wall construction for risers and where access is only available from one side.

Ceilings

Existing concrete soffits cleaned and treated.

Ceiling mounted services to be exposed and finished as follows:

Cable trays: PPC RAL 7003 or other, with on site touch-ups as required following installation.

Ductwork: Flat oval galvanized steel ducts, spray finished on site to

RAL 7003 or other

Floors

Low void raised access floor generally, bonded screed to WCs and other areas of tiled flooring.

Skirting

Recessed painted mdf skirting with shadow gap bead to new walls.

Columns

Finish made good with plaster and emulsion painted.

Roller Blinds

Refer to interior designer's information.

Riser Doors

Refer to interior designer's information.

South Building

Walls

Emulsion painted dry-lining plasterboard walls.

Shaft wall construction for risers and where access is only available from one side.

Ceilings

Hybrid ceilings, with areas of rafts and baffles, exposed services and plasterboard bulkheads and blind pockets.

To existing floors - existing metal soffit cleaned and painted with intumescent paint, subject to site investigation following strip out. If the soffit is in poor condition, or is unevenly coated with cementitious fire protection then the ceiling is to be dry-lined tight to the structural soffit. Existing beams to be dry-lined and painted.

To new floors - exposed metal deck soffit, painted with intumescent paint to match beams.

To all floors: rafts and baffles suspended under the structural soffit, refer to reflected ceiling plans for further detail.

Ceiling mounted services to be exposed and finished as follows:

Section A - Outline Specification

Cable trays: PPC RAL 7003 or other, with on site touch-ups as required following installation.

Ductwork: Rectangular and circular spray finished on site to RAL 7003 or other

Floors

Raised access floors to offices. Raised floor suitable for tiling to WCs and other tiled areas.

Skirting

Recessed painted mdf skirting with shadow gap bead to new walls.

Columns

Dry-lined and painted with emulsion

Roller Blinds

Refer to interior designer's information.

Riser Doors

Refer to interior designer's information.

4.7 BOH / Storage / Plant Areas

Bin store

Walls - Painted blockwork

Floors - Waterproof paint build-up on existing concrete slab, with drainage gulley

Ceiling - Cleaned existing concrete soffit with exposed services

Cycle Storage

Walls - Subject to further development at stage 4. Walls cladding: timber / cork to high level localised areas, large format tile / rubber elsewhere

Floors - Ramp - concrete with non-slip painted finish, elsewhere raised access floor with resilient rubber finish

Ceiling - Cleaned and treated existing concrete soffit with exposed services

Plant / Store Rooms

Walls - Painted blockwork

Floors - Non-slip paint to existing concrete slab

Ceiling - Cleaned existing concrete soffit with exposed services

4.8 Ground & LG Floor Retail Units

Shell & Core finish.

5.0 LANDSCAPING

5.1 Ground Floor

Paving

Yorkstone generally, with feature areas of terrazzo. Inlaid bronze finish nosings, expansion joints and anti-slip strips.

Fixtures & Fittings

Planters and seating with detailed design development with landscape consultant at stage 4.

Services

Wi-fi connectivity to the colonnade and courtyard. External lighting to be developed at stage 4.

5.2 Roof Gardens

Surfacing

Pavers on pedestals, timber decking, intensive planting and turfed areas. Refer to landscape design concept for more detail. Subject to further development at stage 4.

Fixtures & Fittings

Planters and seating with detailed design development with landscape consultant at stage 4. Bar / kitchenette to be developed at stage 4, with connection to water supply, drainage and power.

Services

Wi-fi connectivity to the colonnade and courtyard. Power, water and drainage to be provided to 8th and 9th floor terraces, capped off for future use. External lighting to be developed at stage 4.

5.3 Irrigation

To specialist subcontractor's design.

To meet BREEAM requirements for credit Wat 04, refer to BREEAM tracker.

6.0 SUSTAINABILITY

6.1 Reuse & Recycling Rates

In additional to any BREEAM requirements:

At least 90% of glass from demolition / strip out must be salvaged and sent for recycling to a UK based cullet return scheme, such as: Saint-Gobain Building Glass Cullet Return Scheme.

Refer to pre-refurbishment audit prepared by Salter Demolition for further reuse requirements.

6.2 Materials

All insulation materials to have a BRE green guide rating of A+.

Products used internally are to be VOC & formaldehyde free.

Materials to be responsibly sourced to meet the requirements of Mat 03.1, 03.2 & 03.3 including as follows:

- Virgin timber, wood panels and products - FSC, PEFC or SFI certified
- In-situ and precast concrete - Concrete Sustainability Council (CSC) gold or platinum certified.
- Concrete reinforcement - 'Eco Reinforcement Responsible Sourcing Standard, Steel Products for the Reinforcement of Concrete' certified
- Steelwork - CARES Sustainable Constructional Steel Scheme

Section A - Outline Specification

certified

- Aluminium - 'ASI Certified Performance', with 'ASI Certified Chain of Custody' All aluminium shall originate from a casthouse that is a certified ASI Member and/or a subsequent supplier of this aluminium that is a certified ASI Member.
- All other materials listed in BREEAM Guidance Note GN18 to be EMS certified, where possible materials are to have BES 6001 Framework Standard for Responsible Sourcing certification

7.0 MOCK-UPS & SAMPLING

7.1 Mock-ups

Refer to drawing series 1046_MU for external mock-ups. Mock-ups to be provided for each of the areas highlighted for design team approval. The purpose of the mock-ups are to test: detailed design, interfaces, workmanship and material quality. Mock-ups may also be required for performance testing where specified.

Mock-ups are also required internally for reception joinery, lift reveals, typical WCs and typical floor-plates. Refer to interior designer's specification. A full list of mock-up areas to be issued at stage 4.

Mock-ups may be included within the finished work with the approval of the architect.

7.2 Tests & Sampling

Finishes as identified by the architect are to be sampled, with an allowance for testing and colour selection. This is particularly applicable where stains or new coatings are to be applied to existing surfaces, such as the existing concrete slabs, metal decks, aluminium cladding etc.

Section B - Base Build Summary Specification

1.0 Architectural

1.1 History & Context

Set within the Fleet Street conservation area, the North Building was redeveloped in the 1990’s and the existing historic facades were retained and refurbished. The South Building is largely outside the conservation area and dates from the early 1990s. The proposals will provide a comprehensive refurbishment of the buildings to provide modern, sustainable, high quality office space.

1.2 Building Configuration

65 Fleet Street comprises two buildings, linked at lower ground floor level, with the primary frontage and entrances being from Fleet Street via a colonnade and from Whitefriars & Bouverie Street, into a central courtyard, sat between the two buildings.

The buildings will have a mix of uses, with retail to the ground and first floors of the North building, amenity / gym use to the lower ground floor, office space from 1st to 8th floor, rooftop gardens at 8th & 9th floors and active travel amenity, including cycle storage at basement level.

Receptions at ground floor will serve the North & South Building with service access & goods loading to the rear, on Whitefriars Street, at lower ground floor level. A dedicated active travel entrance will be provided on the pedestrianised Ashentree Court.

1.3 Size & Extent

Total Office NIA - Approximately 230,000 ft²

Typical North Building floor NIA - Approximately 5,700 ft²

Typical South Building floor NIA - 7,000 - 28,000 ft² with the option to take a split floor

Typical North Building Floor - Ceiling Height - 2.8m with exposed services

Typical South Building Floor - Ceiling Height - Approx. 3.1m with exposed services & downstand beams to upper floors.

Occupation Density: 1 person per 8m²

1.4 Building Fabric

The natural handset stone, granite and brickwork facades to the North and South Buildings are retained and refurbished where these are of a high quality.

New facades have been designed to respond environmentally to their orientation, with deeper reveals and shading to West facing facades at the top of the building.

A new handset limestone facade, with bronze coloured framed glazing to the North building, and a visually light glass facade to the entrance of the South building modernises the scheme, while paying close attention to the surrounding historic context.

New external walls we have a maximum U-Value of 0.28 W/m²K.

New glazing will have a maximum U-Value of 1.6 W/m²K

1.5 Acoustic

Refer to Hann Tucker’s acoustic report

North Building

Exposed concrete soffits with suspended services. Design for control of reverberation to be developed, following on site testing by the acoustic consultant. Following tests it may be necessary to include acoustic rafts and /or baffles, or an acoustic treatment to the soffit. Tenants may need to consider future augmentation as part of their fit out works, refer to section 4.0 of the acoustic report..

South Building

Exposed concrete soffits with suspended services and acoustic rafts and baffles. Design for control of reverberation, and extent and amount of rafts and baffles to be developed, following on site testing by the acoustic consultant. Tenants may need to consider future augmentation as part of their fit out works, refer to section 4.0 of the acoustic report.

2.0 Environmental

BREEAM Excellent is targeted for both the North & South Buildings. Refer to the sustainability consultants BREEAM trackers for further information.

3.0 Structural

3.1 General

The existing superstructure to the upper floors is 130mm concrete slab on steel decking spanning between steel framing.

Foundations consists of an 1100mm thick reinforced concrete raft bearing onto the natural ground below. There is a reinforced concrete retaining wall around the perimeter.

3.2 Design Loads

Office floor plates are designed for a Live Load of 3.50kN/m² and

Superimposed Dead Load: 0.75 - 1 kN/m².

Refer to structural engineer’s drawings and report for further information.

4.0 Vertical Circulation

4.1 Lift Arrangement

The North building is served by two 8 person 630kg 1.6m/sec passenger lifts. The lifts are new cars within existing shafts.

The South Building is served by six 21 person 1600kg 2.5m/sec passenger lifts one of which to be a secondary goods lift, plus two fire fighting lifts, one of which also serves as a dedicated goods lift. The passenger lifts are new cars within altered shafts, and the fire fighting lifts are new cars within new shafts.

The loading bay will have two new platform lifts for transporting goods & waste from entrance to basement level.

Section B - Base Build Summary Specification

4.2 Lift Control

Lifts to the North building will have a group control system.

Lifts to the South building will have a destination control system.

4.3 Stairs

The North building is served by one staircase.

The South building is served by two staircases, allowing the separation of up and down foot traffic. There is an feature staircase with the atrium serving floors Ground - Second.

5.0 Mechanical & Electrical

Refer to service engineer's drawings and Stage 3 report for further information

5.1 Air Conditioning

South Building Heating and Cooling

Heating and cooling to the south building will be provided via centralised 2 pipe and 4 pipe air source heat pumps (ASHPs) located within the 8th floor roof plant enclosure.

The ASHPs will provide chilled water (CHW) and low temperature hot water (LTHW) with heat recovery. CHW and LTHW will be distributed to the office floors via duty and standby circulation pumps via two distribution risers serving the East and West tenancy splits.

Each on-floor branch connection will be equipped with valve arrangements (flow regulator, strainer, isolation valves, flushing bypass, drain cocks, air vents, energy meter, etc.).

CAT A office floors will be provided with 4 pipe (LTHW and CHW) or 2 pipe (CHW only) fan coil units depending on their location on the floor plate.

FCU's will be zoned in accordance with BCO zoning with insulated

secondary ductwork completed with VCD's and grilles mounted at high level. Each fan coil unit will have a dedicated valve arrangement including drain cocks, PICV, isolation valves, air vent, all close coupled over an extended FCU drip tray.

North Building Heating and Cooling

Heating and cooling to the north building will be provided via high efficiency, heat recovery Variable Refrigerant Flow (VRF) fan coil systems. Each floor will be provided with its own dedicated external condenser, serving a branch controller complete with isolation valves to multiple fan coil units (FCU).

FCU's will be zoned in accordance with BCO zoning with insulated secondary ductwork completed with VCD's and grilles mounted at high level.

Miscellaneous Heating

Heating will be provided to ancillary areas of the building where required via radiators, underfloor heating or fan coil units.

Future tenants' plant

Spatial allowance will be provided in the risers and at roof and ground floor level for future office and retail tenants' server rooms heat rejection equipment.

Spatial allowance is provided in the risers and at roof level for future retail tenants' kitchen extract fans.

South Building Office Ventilation

Air Handling Units (AHUs) will be provided within the basement providing supply and extract ventilation to the office floors.

The AHUs will incorporate heat recovery and twin supply and extract fans. The AHUs will be constant volume units providing the minimum fresh air requirements of 12l/s per person to the office floors.

Multiple AHUs and ventilation risers will be provided throughout the building, with primary supply and extract ductwork incorporating fire dampers and volume control dampers to each floors.

North Building Office Ventilation

A single centralised AHU will be provided within the roof level plant enclosure providing supply and extract ventilation to the office floors.

The AHU will incorporate heat recovery and twin supply and extract fans. The AHUs will be constant volume units providing the minimum fresh air requirements of 12l/s per person to the office floors.

Ventilation risers will be provided throughout the building, with primary supply and extract ductwork incorporating fire dampers and volume control dampers to each floors.

Toilet Core Ventilation

Toilet cores will be provided with mechanical extract ventilation.

The south building main core and the north building will be provided with centralised extract fans with extract ventilation risers within the core, complete with fire dampers and volume control dampers.

The south building south core will be provided with local extract fans on each floor.

Make up air to the toilet cores will be provide from the adjacent office space, via an inline supply fan complete with bipolar ionisation.

Bipolar Ionisation

All air handling units (AHUs), fan coil units and supply fans will be provided with ionisation devices to treat the air before it enters the occupied space. The Ionisation devices have be introduced as a measure to reduce the impact of the COVID 19 virus and potentially subsequent similar, outbreaks.

Basement Ventilation

The basement will be provided with a dedicated Air Handling Units (AHUs) located within the basement providing general supply and extract ventilation.

The AHUs will incorporate heat recovery, integral heat pump heating and cooling, and twin supply and extract fans.

All basement ductwork will be fire rated allowing for dual use for both general ventilation and smoke extract ventilation.

Section B - Base Build Summary Specification

Smoke Extract

A mechanical smoke extract system will be provided in the fire-fighting shaft to ventilate the firefighting lobbies. The fans will be located at roof level, suitably rated, with a resilient power supply from the life safety generator.

A dedicated smoke extract system will also be provided to serve the basement areas. The fans will be configured as run and standby set, with resilient power supply from the life safety generator.

EOT Facilities

The EOT facilities will be provided with dedicated Air Handling Units (AHUs) located within the basement providing supply and extract ventilation. The AHU will incorporate heat recovery, electric heater batteries, supply and extract fans.

Shell and Core Areas - Retail Units

Fresh air intake and exhaust air louver provision will be provided for future tenant fit out within the façade, local to the area serving.

5.2 Lighting

The lighting scheme within offices will be designed to provide an average lighting level between 350-450 lux at desk level (750mm above finished floor level) as per the recommendations of the latest amendments of CIBSE Lighting Guide 7 and SLL code for lighting 2013.

Luminaires shall be low glare high efficiency type complete with LED Technology and DALI dimming control driver ballast unit.

Office lighting load 8 W/m².

Lift lobbies and core areas will typically achieve between 150-200Lux at floor level.

The base build shall be fitted with an intelligent lighting control system to provide automatic switching and efficient operation of the building's lighting systems.

Daylight linking shall be utilised to areas with sufficient light levels to maximise efficiencies and minimise running costs.

The office switching shall be controlled by PIRs to provide full

sensor coverage on a local zone basis providing flexibility and user comfort.

5.3 Power

Small power provision of 25W/m² at each tenant riser.

100% of essential life safety services and landlord lighting and power to fire escape routes only.

Tenant standby power can be provided by load shedding and re-configuring the life safety generator for a dual-purpose operation. No space allowance for tenant generator will be provided.

5.4 Building Management

All landlord plant will be controlled or monitored by the landlord BMS system. The BMS will utilise controls enclosures within main plant-rooms and on each floor. Energy meters will be monitored on the BMS or a dedicated energy metering system (EMS).

All Cat A plant will be controlled via a central BMS system with spare capacity for modification by the tenant.

All heating, cooling and electrical demands on the Cat A office space will be metered and recorded for billing on the BMS or separate EMS.

Section C - T-Sheet

1046 - 65 Fleet Street

T-Sheet

Revision	Date	Notes
P1	30.04.21	Stage 3

General Notes:


To be read in conjunction with architects stage 3 report and drawings, and drawings and reports by: structural, services, fire and facade engineers and interior designer.

At stage 3 the interior designer’s scope includes: all finishes, ceilings, lighting, doors, fixtures, sanitary-ware and equipment to: receptions, lift lobbies, stairs, WCs, changing rooms and also design intent of the facades, ceiling and flooring to the external colonnade.

Works to be compliant with English Building Regulations and relevant British Standards, as approved by the building control approved inspector.


Works to achieve BREEAM excellent, refer to sustainability consultants reports and BREEAM trackers.

The following specification is indicative of the design at Stage 3. Further detail to be provided for Stage 4 issue.

Code	NBS Spec (to follow)	Description	Reference / Image
ALT - ALTERATIONS TO EXISTING BUILDING FABRIC			
ALT-01		Repair, cleaning and colour treatment to existing concrete soffits to North Building. Colour treatment eg: KEIM Concretal Lasur Allowance to be made for tests and sampling	
ALT-02		Allowance for new plasterboard lining tight to soffit, subject to site investigations, however preferred finish is: Repair and cleaning to existing metal deck soffits to the South building, including the removal of excess / ‘overspill’ fire protection adjacent to beams and columns. Removal of existing fire protection only to areas where this is not required, coordination with the fire consultant and structural engineer is required. Paint finish	 Preferred finish (note plasterboard lining is drawn in typical details)
ALT-03		Cleaning of existing limestone and granite facades, to facade consultant’s specification	
BA - BALUSTRADES			
BA-01		Solid metal profiled external balustrade, with ledge and integral planters Height from FFL: 1115mm	1046-FA-53 1046-FA-56
BA-02		Frameless glass external balustrade Height from FFL: 1200mm	1046-FA-50 1046-FA-59
BA-03		Metal balustrade, alterations to 7th floor. Additional flat bars, so match existing to be added to existing balustrade to achieve compliance with approved document K. New site-applied finish to facade consultant’s details	


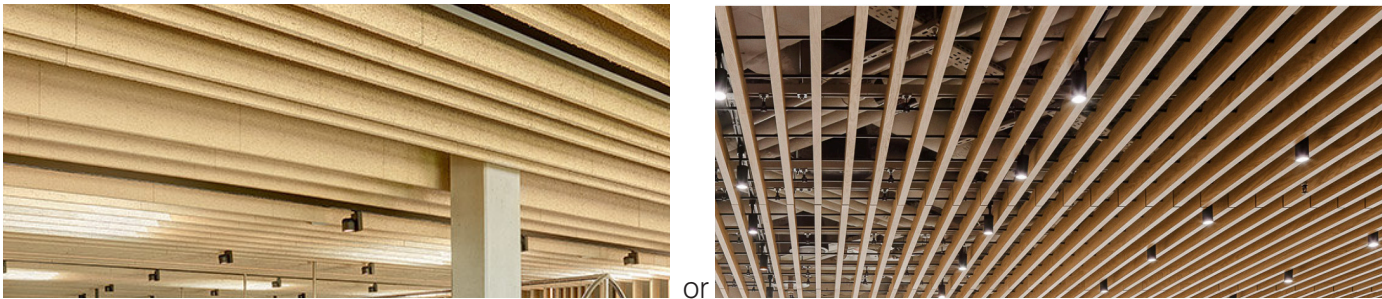
Section C - T-Sheet

1046 - 65 Fleet Street
T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image
BA-04		Frame-less glass balustrade to light-well parapets. With gates to allow maintenance access into lightwells Existing granite topping careful removed. Metal base channel fixed to (assumed) existing concrete upstand, new granite topping installed either side to conceal channel. Height from FFL: see drawings, 1100 - 1300mm	1046-EW-10
BA-05		Metal flat bar balustrade, integrated in planter	
BA-06		Metal balustrade to external courtyard steps	
BA-20		Internal metal balustrade to new metal staircase with timber handrail and high metal stringer	1046-ST series drawings
BA-21		Internal metal balustrade to existing staircase with timber handrail and high metal stringer	1046-ST-01
BA-22		Wall mounted timber handrail to stairs	
BA-30		Internal metal balustrade to atrium stairs	
CL - CEILINGS			
All insulation to have a BRE green guide rating of A+			
CL-01		External soffit to colonnade: Existing and new concrete slab 130mm Rockwool soffit slab (un-faced) Suspended profiled ceiling with integrated lighting. Material to be developed, eg: jesmonite U-Value: max 0.25 W/m²k	1046-FA-36 

Section C - T-Sheet

1046 - 65 Fleet Street
T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image
CL-02		Suspended plasterboard rafts to South building ceilings eg: Knauf AMF TOPIQ SONIC ELEMENT	
CL-03		Suspended vertical baffles to South building ceilings either: Wood-wool eg: Knauf HERADESIGN Baffle basic or: Timber, class O eg: SAS500 TIMBER BAFFLE or Stil Acoustics Vertical Slatted dowels	
CL-04		Suspended monolithic plasterboard ceiling No fire rating required 1 layer 12.5mm plasterboard. Moisture resistant plasterboard to wet areas eg: Knauf MF Suspended Ceiling / BG Gyplyner universal / BG Castoline MF	
CL-05		External soffits H/L GF along Whitefriars & Bouverie street. Existing granite retained, existing cement board remeoved and replaced with powder coated metal to match EWL-07. Mounting for LED strip lighting to be incorporated	
CL-06		External soffit to pavement link bridges. Cementitious board suitable for permanent exposure, on MF system fixed to metal deck soffit.	1046-EW-10
CL-07		Metal soffit to H/L GF at South Building North facade and H/L 4th floor Build-up: Existing concrete slab soffit 130mm Rockwool soffit slab (un-faced) Metal soffit cladding on MF framing,. Metal cladding to wrap up sides of soffit, and interface with EWL-14. Bronze finish to H/L GF, finish TBC to H/L 4th floor. With integrated lighting. U-Value: max 0.25 W/m²k	1046-FA-40
CL-08		Plasterboard bulkhead to atrium perimeter ceiling Plasterboard on MF framing Fire protection : 90 minutes with blind box formed in plasterboard	

Section C - T-Sheet

1046 - 65 Fleet Street

T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image
CL-09		Plasterboard lining to existing steel beams. Lining on top of existing fire protection, without damaging fire protection. Subject to coordination with specialist fire protection subcontractor	
CL-10		Paint finish to underside of new slab soffit metal deck	
EDR - EXTERNAL DOORS			
EDR-01		External double casement door Bronze coloured metal finish U-Value: max centre-pane 1.5, overall including frames 2.5, G-Value: 0.6	Door no.s D.00.S.03 & D.00.S.57
EDR-02		External single casement door Bronze coloured finish U-Value: max centre-pane 1.5, overall including frames 2.5, G-Value: 0.6	Door no.s D.00.N.08 & D.00.N.14
EDR-03		External double, automatic opening door to cycle entrance Bronze coloured finish U-Value: max centre-pane 1.5, overall including frames 2.5, G-Value: 0.6	Door no.s D.LG.S.59 & D.LG.S.60
EDR-04		External metal double and single doors to service yard. Metal or metal wrapped timber U-Value: TBC	Door no.s D.LG.S.56, D.LG.S.57 & D.LG.S.58.
For internal doors refer to interior designer's information			
EWL - EXTERNAL WALLS			
All insulation to have a BRE green guide rating of A+. All insulation to external walls to be non-combustible			
EWL-01		Profiled metal spandrel panel U-Value: max 0.35 W/m²K	1046-FA-51
EWL-02		Masonry cavity wall with vertical metal fins to external side U-Value: max 0.28 W/m²K Build-up: Plaster finish, lightweight blockwork inner leaf, 120mm full-fill mineral wool insulation, outer-leaf blockwork with painted finish, Vertical metal fins (reclaimed and reused from existing plant screens where possible) re-finished to facade consultant's details, fixed to blockwork Wind posts - as required to subcontractor's design	1046-FA-52 1046-FA-57

Section C - T-Sheet

1046 - 65 Fleet Street

T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image
EWL-03		Existing flat panel aluminium rainscreen cladding, and existing window and door frames to be refinished bronze, to facade consultant's details. Includes signage to LG floor SI-05	
EWL-04		Vertical acoustic louvers, with powder coated metal framing. Includes 1no. door. Weather performance: not required Free area: TBC by MEPH consultant Acoustic rating: refer to Hann Tucker's report Louvers must be able to be cleaned from the inside face only. Where this is not possible hinged panels to be provided	1046-FA-52 1046-FA-57 Door no. D.07.S.01
EWL-05		Vertical acoustic louvers, with powder coated metal framing Weather performance: not required Free area: TBC by MEPH consultant Acoustic rating: refer to Hann Tucker's report Louvers must be able to be cleaned from the inside face only. Where this is not possible hinged panels to be provided	1046-FA-52
EWL-06		Living Wall, by specialist Build-up: Geotextile living wall module, with irrigation, on secondary galvanized frame, fixed back to external wall. Substrate wall build-ups vary To contain planting inducing: Minimum 3 species with smaller leaves and a variety of textures to filter air pollutants.	1046-FA-65 - Core 1 walls 1046-RF-51 - Lift overruns & core 2 stairs
EWL-07		Curtain Walling to LG, GF and 1st floor. Includes doors to LG floor office and gym Timber, steel or aluminium mullions - TBC Includes Automatic opening vents to LG floor as required to suit the North core stair pressurisation strategy Fin depth: N/A. Flat metal spandrel panels. U-Value: maximum 1.6W/m²K total, including spandrel panel max 0.35 W/m²K and Glass centre-pane max 1.2 W/m²K G-Value: 0.45 - 0.48 LT: 71%	Door no.s D.LG.S.15 & D.LG.S.61
EWL-08		Curtain Walling to 7th & 8th. Includes doors to terraces. Flat metal spandrel panels. Timber, steel or aluminium mullions - TBC Fin depth: 200mm U-Value: maximum 1.6W/m²K total, including spandrel panel max 0.35 W/m²K and Glass centre-pane max 1.1 W/m²K G-Value: 0.33 LT: 60%	1046-FA-50 Door no.s D.07.S.15, D.07.S.59, D.07.S.56, D.07.S.57, D.07.S.58, D.08.S.32, D.08.S.33

Section C - T-Sheet

1046 - 65 Fleet Street
T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image
EWL-09		Curtain Walling to 7th & 8th Bouverie Street Facade. Includes doors to terraces. Flat metal spandrel panels. Timber, steel or aluminium mullions - TBC Fin depth: 500mm U-Value: maximum 1.6W/m²K total, including spandrel panel max 0.35 W/m²K and Glass centre-pane max 1.1 W/m²K G-Value: 0.33 LT: 60%	1046-FA-53 1046-FA-56 Door no.s D.07.S.02, D.07.S.36, D.07.S.37, D.07.S.38, D.08.S.20, D.08.S.21
EWL-10		Curtain Walling to 9th Floor. Includes door to terrace. Flat metal spandrel panels. Timber, steel or aluminium mullions - TBC Fin depth: 500mm U-Value: maximum 1.6W/m²K total, including spandrel panel max 0.35 W/m²K and Glass centre-pane max 1.1 W/m²K G-Value: 0.33 LT: 60%	1046-RF-50 Door no. D.09.S.10
EWL-11		Smooth handset limestone cladding Build-up: 75mm stone (nom.) on stainless steel brackets & restraints, 50mm min. air gap, 150mm insulation (nom.), breather membrane, particle board, steel frame, plasterboard & skim U-Value: max 0.28 W/m²K	1046-FA-10 1046-FA-11
EWL-12		Fossilised handset limestone cladding Build-up: 75mm stone (nom.) on stainless steel brackets & restraints, 50mm min. air gap, 150mm insulation (nom.), breather membrane, particle board, steel frame, plasterboard & skim U-Value: max 0.28 W/m²K	1046-FA-10-16
EWL-13		Rough cut / textured handset stone cladding Build-up: 75mm stone (nom.) on stainless steel brackets & restraints, 50mm min. air gap, 150mm insulation (nom.), breather membrane, particle board, steel frame, plasterboard & skim U-Value: max 0.28 W/m²K	1046-FA-10 - 16

Section C - T-Sheet

1046 - 65 Fleet Street
T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image
EWL-14		Curtain walling to South building North facade. Includes double sliding drum door eg: GEZE Slimdrive SCR with glass overpanel, bronze finish and lettering mounted above. With access control post mounted seperately. Curved glass as shown on drawing 1046-FA-21 Steel or timber mullions and transoms, with toggle fixing externally. U-Value: maximum 1.6W/m²K total, including spandrel panel max 0.35 W/m²K and Glass centre-pane max 1.2 W/m²K G-Value: 0.53 LT: 70%	1046-FA-20-25 Door no. D.00.S.01 & D.00.S.02
EWL-15		Shopfronts to ground floor Fixed glazing with doors and projecting bays in bronze coloured framing (metal frames or metal wrapped timber). With profiled metal spandrel panels. Access control to reception doors. U-Value: maximum 1.6W/m²K total, including spandrel panel max 0.35 W/m²K and Glass centre-pane max 1.2 W/m²K G-Value: 0.6 LT: 75%	Arrangement varies, see drawings: 1046-FA-11, 32, 33, 40, 41. Door no.s D.00.N.02, D.00.N.11, D.00.N.12, D.00.N.13 Window no.s W.00.N.01, W.00.N.15, W.00.N.16, W.00.N.17, W.00.N.18, W.00.N.19, W.00.N.20, W.00.N.21, W.00.N.22, W.00.N.23, W.00.S.01, W.00.S.02
EWL-16		Ribbed limestone cladding, stainless steel brackets & restraints back to existing wall / column. Discrete 3mm vertical mortar joints between panels, within fluting recess with bronze coloured plinth to colonnade. Concealed door to one panel, limestone cladding stainless steel frame, with concealed metal proective edges and pivot hinges, to be further developed at stage 4.	1046-FA-30 Door no.s D.00.N.19
EWL-17		Limestone historic interpretation panel, with bronze coloured framing. Detailed design by artist Concealed door to one panel, part of EWL-16	1046-FA-30
EWL-18		Metal rainscreen and window surrounds to Fleet Street entrance portal on brackets and steel frame	1046-FA-10
EWL-19		Metal rainscreen facade Build-up: plasterboard lining, SFS inner leaf, sheathing board, 150mm (nom.) mineral wool insulation, 50mm cavity, metal rainscreen cladding with framed profiles U-Value: max 0.28 W/m2K	1046-FA-54
EWL-20		Cavity wall. Build-up: Internal plasterboard lining, SFS inner leaf, sheathing board, AVCL, 130mm full fill mineral wool insulation, lightweight blockwork outer leaf, render finish U-Value: 0.28W/m2K max. Wind posts - as required to subcontractor's design	

Section C - T-Sheet

1046 - 65 Fleet Street
T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image
EWL-21		Pitched plant screen to North Building Roof Free area: TBC Acoustic rating: TBC Not required to be weather lover PPC finish. With zinc trims and flashings.	1046-RF-01
EWL-22		Entrance facade to active travel and cycle workshop Fixed glazing with projecting bronze coloured framing (metal frames or metal wrapped timber). With profiled metal spandrel panels. With door EDR-03 and access control. U-Value: maximum 1.6W/m²K total, including spandrel panel max 0.35 W/m²K and Glass centre-pane max 1.2 W/m²K G-Value: 0.6 LT: 75%	1046-FA-61 Door no.s D.LG.S.59 & D.LG.S.60
EWL-23		New granite cladding to match existing (lighter tone). Build-up varies, dependant on zone available and substrate, generally: Internal plasterboard lining SFS framing with steel posts as required, Sheathing board 150mm (nom.) mineral wool insulation 50mm cavity Granite rainscreen cladding Target U-Value: 0.28 Wm²K	Existing granite to demolished areas to be utilised fist and where possible, and cut to size
EWL-24		As EWL-23, but with granite to match the darker colour on site	Existing granite to demolished areas to be utilised fist and where possible, and cut to size
EWL-25		As EWL-23 but with stone to match the existing ribbed base stone to the perimeter of the building	
EW-26		External enclosure to plant area at roof level, to be coordinated with lanscape designer	
FFE - FIXTURES / FITTINGS / EQUIPMENT			
FFE-01		Feature planter to courtyard	
FFE-02		Perimeter planter to courtyard	
FFE-03		Feature bench to courtyard	
FFE-04		Planter to external LG floor light-wells	

Section C - T-Sheet

1046 - 65 Fleet Street
T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image
FFE-05		Planters & seating to roof terrace to landscape designer's details	
FFE-06		Internal, class O timber clad planter, to active travel hub	
FFE-07		Timber clad reception desk to active travel hub With lift up panel / door for access and integrated access control equipment	
FFE-10		External gates to courtyard and colonnade. Decorative metalwork, concertina, to be held open against existng granite walls May not be required, tbc at Stage 4.	
FFE-20		Fire curtain eg: CoopersFire FireMaster, to be fully concealed. Fire performance: refer to fire strategy plans	
FFE-25		Speedgates to South building, refer to interior designer's information for details	
FFE-26		Speedgates to North building, refer to interior designer's information for details	
FFE-30		Two tiered cycle rack - PPC metal or other durable coloured finish	
FFE-31		Sheffield cycle stand - PPC metal or other durable coloured finish	
FFE-32		Adaptive cycle space - PPC metal or other durable coloured finish	
FFE-33		Cycle servicing point	
FL - FLOOR FINISHES			
Note: Internal floor finishes to entrances, cores & stairs to interior designer's details. Allow for antique bronze trims and expansion joints.			
FL-01		External floor build-up - colonnade & courtyard, on existing slab. Site investigations to determine whether existing waterproofing / tanking layer can be retained as existing. Allow for: existing paving, screeds, adhesives and waterproofing to be removed and replaced with new: liquid applied tanking to slab, insulation, sub base, road base, mortar and scoutmoor yorkstone paving slabs. U-Value target (dependent on existing levels): 0.18 W/m²K	1046-EW series
FL-02		External floor build-up - colonnade on new slab New: liquid applied tanking to slab, insulation, sub base, road base, mortar and Scoutmoor yorkstone paving slabs. Allow for interfaces with existing tanking to surrounding slab. U-Value target (dependent on existing levels): 0.18 W/m²K	1046-EW series

Section C - T-Sheet

1046 - 65 Fleet Street

T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image
FL-03		Works to highways pavements. Replace paving slabs or asphalt to match existing, coordinated with new facade and levels shown. Sub base, road base & mortar as required by Highways to meet imposed loadings.	1046-EW series
FL-04		External feature tile - to colonnade and courtyard. Build-up as FL-01 for existing slab, and FL-02 for new slab. Pavers: TBC	1046-EW series
FL-05		Service yard floor build up. Allow for: existing asphalt, bases and waterproofing to be removed to slab level and replaced with new: built up waterproofing system with insulation, suitable for heavy traffic non-slip surface. Concrete kerb stones. Lift out panels as per S.E's details, surfacing above to be continuous. Linear drainage gulleys as shown on drawings U-Value target (dependent on existing levels): 0.18 W/m²K	1046-EW series
FL-06		Service yard ancillary spaces floor build up Allow for: existing asphalt, bases and waterproofing to be removed to slab level and replaced with new: void former to SE's details to suit new levels, built up waterproofing system, suitable for heavy traffic, non-slip surface	1046-EW series
FL-07		External link bridges to gym and fire escape. New: liquid applied tanking to slab, sub base, road base, mortar and paving slabs.	1046-EW-10
FL-08		External link bridges to active travel hub. New: liquid applied tanking to slab, sub base, road base, mortar and paving slabs.	as 1046-EW-10
FL-09		Making good existing asphalt pavement and kerb stones	
FL-10		Cycle ramp - painted screed / slab. Non-slip aggregate added to paint	
FL-11		Cycle store and basement corridors - recycled rubber floor on raised access floor, OR screed on void formers - TBC.	
FL-12		Works to new and existing vents to the building perimeter	1046-EW-11
FL-13		Paint to existing concrete slabs in plant rooms. Non-slip aggregate added to paint.	
FL-50		Raised access floor to heights above 80mm. Recycled and coated tile eg: RMF E-Coated, on steel pedestals	1046-ID-02, 03 & 04 Reuse of existing RAF to be considered.
FL-51		Bonded screed to low void tiled floors	
FL-52		Raised floor suitable for direct tiling, eg: Knauf GIFA floor. Note: raised floor to ground floor to be capable of taking load of MEWP, route as per Access Advisor's drawings, with reinforcement where necessary	

Section C - T-Sheet

1046 - 65 Fleet Street
T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image																																				
FL-55		Low void raised access floor to North Building, FFL to SSL heights vary from 45 - 80mm. eg: Interface - Intercell – Space Saving Low Profile Floor System	Reuse of existing RAF to be considered.																																				
FP - FIRE PROTECTION																																							
To be developed at Stage 4																																							
IW - INTERNAL WALLS																																							
All insulation to have a BRE green guide rating of A+.																																							
BGY information covers blockwork and drylining types. Refer to interior designer’s information for finishes, cladding, linings and special requirements such as pattressing to: reception, lobby, stair, WC and changing rooms.																																							
IW-01		New partition wall - metal stud, insulation, plasterboard Fire Rating: 120 minutes (also used for 90 minute partitions) Acoustic Rating: 54 R _w dB Thickness (not inc. skim / finishes): 120mm	<div><div>Iw03</div><table><tr><th>Stud type</th><th>Stud spacing (mm)</th><th>Facing</th><th>Infill</th><th>Sound insulation (R_wdB)</th><th>Fire resistance (hours)</th></tr><tr><td colspan="6">Earthwool Acoustic Roll</td></tr><tr><td>50mm C stud</td><td>600 c/s</td><td>12.5mm plasterboard Wallboard each side</td><td>25mm Earthwool Acoustic Roll</td><td>42</td><td>1/2</td></tr><tr><td>70mm C stud</td><td>600 c/s</td><td>15mm Knauf Drywall Fireshield each side</td><td>25mm Earthwool Acoustic Roll</td><td>49</td><td>1</td></tr><tr><td>50mm C stud</td><td>600 c/s</td><td>2 layers of 12.5mm Knauf Drywall Soundshield each side</td><td>25mm Earthwool Acoustic Roll</td><td>54</td><td>1</td></tr><tr><td>70mm C stud</td><td>600 c/s</td><td>2 layers of 12.5mm Knauf Drywall Fireshield each side</td><td>50mm Earthwool Acoustic Roll</td><td>54</td><td>2</td></tr></table></div>	Stud type	Stud spacing (mm)	Facing	Infill	Sound insulation (R _w dB)	Fire resistance (hours)	Earthwool Acoustic Roll						50mm C stud	600 c/s	12.5mm plasterboard Wallboard each side	25mm Earthwool Acoustic Roll	42	1/2	70mm C stud	600 c/s	15mm Knauf Drywall Fireshield each side	25mm Earthwool Acoustic Roll	49	1	50mm C stud	600 c/s	2 layers of 12.5mm Knauf Drywall Soundshield each side	25mm Earthwool Acoustic Roll	54	1	70mm C stud	600 c/s	2 layers of 12.5mm Knauf Drywall Fireshield each side	50mm Earthwool Acoustic Roll	54	2
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IW-02		New partition wall to wet areas - metal stud, insulation, moisture resistant plasterboard + 5mm Schluter KERDI board to tiled walls Fire Rating: 90 minutes Acoustic Rating: 54 R _w dB Thickness (not inc. skim / finishes / KERDI): 120mm	<div><div>Iw03</div><table><tr><th>Stud type</th><th>Stud spacing (mm)</th><th>Facing</th><th>Infill</th><th>Sound insulation (R_wdB)</th><th>Fire resistance (hours)</th></tr><tr><td colspan="6">Earthwool Acoustic Roll</td></tr><tr><td>50mm C stud</td><td>600 c/s</td><td>12.5mm plasterboard Wallboard each side</td><td>25mm Earthwool Acoustic Roll</td><td>42</td><td>1/2</td></tr><tr><td>70mm C stud</td><td>600 c/s</td><td>15mm Knauf Drywall Fireshield each side</td><td>25mm Earthwool Acoustic Roll</td><td>49</td><td>1</td></tr><tr><td>50mm C stud</td><td>600 c/s</td><td>2 layers of 12.5mm Knauf Drywall Soundshield each side</td><td>25mm Earthwool Acoustic Roll</td><td>54</td><td>1</td></tr><tr><td>70mm C stud</td><td>600 c/s</td><td>2 layers of 12.5mm Knauf Drywall Fireshield each side</td><td>50mm Earthwool Acoustic Roll</td><td>54</td><td>2</td></tr></table></div>	Stud type	Stud spacing (mm)	Facing	Infill	Sound insulation (R _w dB)	Fire resistance (hours)	Earthwool Acoustic Roll						50mm C stud	600 c/s	12.5mm plasterboard Wallboard each side	25mm Earthwool Acoustic Roll	42	1/2	70mm C stud	600 c/s	15mm Knauf Drywall Fireshield each side	25mm Earthwool Acoustic Roll	49	1	50mm C stud	600 c/s	2 layers of 12.5mm Knauf Drywall Soundshield each side	25mm Earthwool Acoustic Roll	54	1	70mm C stud	600 c/s	2 layers of 12.5mm Knauf Drywall Fireshield each side	50mm Earthwool Acoustic Roll	54	2
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50mm C stud	600 c/s	2 layers of 12.5mm Knauf Drywall Soundshield each side	25mm Earthwool Acoustic Roll	54	1																																		
70mm C stud	600 c/s	2 layers of 12.5mm Knauf Drywall Fireshield each side	50mm Earthwool Acoustic Roll	54	2																																		
Knauf Fire Moistureshield																																							

Section C - T-Sheet

1046 - 65 Fleet Street
T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image																																				
IW-03		New partition wall - metal stud, insulation, plasterboard Fire Rating: 60 minutes Acoustic Rating: 49 R _w dB Thickness (not inc. skim / finishes): 100mm	<div><div>Iw03</div><table><tr><th>Stud type</th><th>Stud spacing (mm)</th><th>Facing</th><th>Infill</th><th>Sound insulation (R_wdB)</th><th>Fire resistance (hours)</th></tr><tr><td colspan="6">Earthwool Acoustic Roll</td></tr><tr><td>50mm C stud</td><td>600 c/s</td><td>12.5mm plasterboard Wallboard each side</td><td>25mm Earthwool Acoustic Roll</td><td>42</td><td>1/2</td></tr><tr><td>70mm C stud</td><td>600 c/s</td><td>15mm Knauf Drywall Fireshield each side</td><td>25mm Earthwool Acoustic Roll</td><td>49</td><td>1</td></tr><tr><td>50mm C stud</td><td>600 c/s</td><td>2 layers of 12.5mm Knauf Drywall Soundshield each side</td><td>25mm Earthwool Acoustic Roll</td><td>54</td><td>1</td></tr><tr><td>70mm C stud</td><td>600 c/s</td><td>2 layers of 12.5mm Knauf Drywall Fireshield each side</td><td>50mm Earthwool Acoustic Roll</td><td>54</td><td>2</td></tr></table></div>	Stud type	Stud spacing (mm)	Facing	Infill	Sound insulation (R _w dB)	Fire resistance (hours)	Earthwool Acoustic Roll						50mm C stud	600 c/s	12.5mm plasterboard Wallboard each side	25mm Earthwool Acoustic Roll	42	1/2	70mm C stud	600 c/s	15mm Knauf Drywall Fireshield each side	25mm Earthwool Acoustic Roll	49	1	50mm C stud	600 c/s	2 layers of 12.5mm Knauf Drywall Soundshield each side	25mm Earthwool Acoustic Roll	54	1	70mm C stud	600 c/s	2 layers of 12.5mm Knauf Drywall Fireshield each side	50mm Earthwool Acoustic Roll	54	2
Stud type	Stud spacing (mm)	Facing	Infill	Sound insulation (R _w dB)	Fire resistance (hours)																																		
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70mm C stud	600 c/s	2 layers of 12.5mm Knauf Drywall Fireshield each side	50mm Earthwool Acoustic Roll	54	2																																		
IW-04		New partition wall - metal stud, insulation, plasterboard Fire Rating: 30 minutes (also used where no fire rating is required) Acoustic Rating: 42 R _w dB Thickness (not inc. skim / finishes): 95mm	70mm C-stud + 25mm Earthwool Acoustic Roll + 12.5mm wallboard each side																																				
IW-05		New partition wall to wet areas - metal stud, insulation, plasterboard + 5mm Schluter KERDI board to tiled walls Fire Rating: 30 minutes (also used where no fire rating is required) Acoustic Rating: 42 R _w dB Thickness (not inc. skim / finishes / KERDI): 95mm	70mm C-stud + 25mm Earthwool Acoustic Roll + 12.5mm moisture panel each side																																				
IW-10		New partition riser walls - metal shaftwall studs, insulation, plasterboard Fire Rating: 90 minutes (also used for 60 minute riser partitions) Acoustic Rating: Thickness (not inc. skim / finishes): 90mm	2 no. 15mm Knauf Fire Panel + 60mm Knauf 'C-T' Studs at 600mm centers + 19mm Knauf Core Board secured between studs, with 25mm Knauf Earthwool Acoustic Roll within cavity																																				
IW-11		New partition riser walls - metal shaftwall studs, insulation, plasterboard Fire Rating: 120 minutes Acoustic Rating: Thickness (not inc. skim / finishes): 105mm (nom.)																																					
IW-20		New blockwork partition - lightweight paint grade blockwork Fire Rating: 120 minutes (also used where lower fire resitances are required) Thickness: 100mm Wind posts - as required to subcontractor's design	Aggregate industries Enviroblock, lightweight paint grade BRE Green guide rating: A+																																				

Section C - T-Sheet

1046 - 65 Fleet Street
T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image
IW-21		New blockwork cavity wall. Build-up: 100mm lightweight paint grade blockwork, 100mm mineral wool insulation, 100mm lightweight paint grade blockwork U-Value: 0.28W/m2K Wind posts - as required to subcontractor's design	Aggregate industries Enviroblock, lightweight paint grade BRE Green guide rating: A+
IW-30		New atrium perimeter walls. Build-up: 90 minute fire rated internal plasterboard lining, steel sub-frame, acoustic insulation between timber framing, dark fabric facing, Scalloped white oak battens With glazing IW-35	1046-ID-70
IW-31		Works to existing atrium perimeter walls Existing walls demolished to primary structure and new build-up as follows: 90 minute fire rated internal plasterboard lining, steel sub-frame, acoustic insulation between timber framing, dark fabric facing, Scalloped white oak battens With glazing IW-35	1046-ID-70
IW-35		Atrium perimeter glazing. Clear laminated single glazing, with concealed steel head and base frame and glass to glass butt jointing, eg: Forster Fuego Light - fire-resistant butt-joint glazing Fire rating: 30 minutes integrity U-Value: tbc G-Value: tbc Light Transmission: tbc	1046-ID-70
IWL - INTERNAL WALL LININGS			
All insulation to have a BRE green guide rating of A+			
IWL-01		Insulated wall lining to the inside face of external walls Build-up: 100mm IWL drylining stud zone filled with mineral wool insulation, AVCL and 12.5mm plasterboard	
IWL-02		Wall lining to columns Details TBC depedent on existing fire protection	
IWL-03		Wall lining to upgrade fire performance of existing walls to meet the performance shown on the fire strategy plans. Metal frame wall lining eg: Knauf Wall Liner, plasterboard Fire rating: as shown on fire strategy plans	
IWL-04		Wall lining to create service zone in bathrooms Metal frame independant wall lining, insulation, moisture resistant plasterboard + 5mm Schluter KERDI board to tiled walls	

Section C - T-Sheet

1046 - 65 Fleet Street
T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image
RFS - ROOFS			
All insulation to have a BRE green guide rating of A+. All insulation to parapets and upstands to external walls to be non-combustible.			
RFS-01		Inverted roof. Build-up: Ballast as per finishes drawings, drainage layer, EPS insulation, waterproofing, screed to falls, concrete slab. U-Value: 0.16W/m2K	1046-RF series
RFS-02		Inverted blue roof. Build-up: Ballast as per finishes drawings, 108mm blue roof substrate, drainage layer, EPS insulation, waterproofing, concrete slab. Allowance for any localised low points within new slab to be leveled with screed, to provide completely flat roof without back-falls. U-Value: 0.16W/m2K	1046-RF series
RFS-03		Warm roof. Build-up: Waterproof membrane, tapered insulation, AVCL, structural deck U-Value: Generally 0.16W/m2K unless otherwise noted	1046-RF series
RFS-04		Warm roof with vacuum insulation Build-up: Waterproof membrane, tapered insulation, vacuum insulation panels, AVCL, structural deck U-Value: Generally 0.18W/m2K unless otherwise noted	1046-RF series
RFS-05		Refurbished warm roofs to existing terraces Allow for: waterproofing, insulation and membranes to be removed down to structural deck Build-up: Waterproof membrane, tapered insulation, AVCL, structural deck Overall thickness to match existing, report U-Value, target 0.18 W/m²K	1046-RF-01
RFS-10		Warm, intensive green roof Build-up: Vegetation, 210mm substrate, filter fleece, 60mm drainage layer, protection mat, waterproof membrane, tapered insulation, AVCL, structural deck U-Value: Generally 0.16W/m2K unless otherwise noted	1046-RF series
RFS-11		Warm, extensive / bio-diverse green roof Build-up: Vegetation, 100 - 150mm substrate, 45mm drainage layer, waterproof membrane, tapered insulation, AVCL, structural deck U-Value: Generally 0.16W/m2K unless otherwise noted	1046-RF series

Section C - T-Sheet

1046 - 65 Fleet Street
T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image
RFS-15		Pitched slate roof Remove and store existing slates for reuse. Remove battens, membranes and boards, retain timber joists where possible and retain steelwork and structural walls. Allow for new timber joists, sarking board, battens & membrane. Reinstall existing slates, and infill with new to match existing where required. Insulation between joists as shown on details Zinc flashing to junctions	1046-RF-01, 30
RFS-16		Concealed gutter to North Building, zinc lining, on rigid tapered insulation to outlet. Dressed under stone parapet and under slate roof over tilting fillet.	1046-RF-30
RFS-20		Courtyard roof - PPC steel frame, with glazed panels Class 1 roof with fall protection man-safe system	1046-RF-10
RFS-25		Rooflight to North Building Class 1 roof Pitch: 5 deg U-Value: 1.6 W/m²K, Centre-pane 1.1 W/m²K (vertical) 1.5 (horizontal) W/m²K G-Value: 0.28 LT: 60% Complete with water and airtight upstand flashings	1046-RF-01
RFS-30		Atrium roof - PPC steel frame, with triangular glazed panels Integral AOVs Class 1 roof U-Value: Centre-pane 1.1 W/m²K (vertical) 1.5 (horizontal) W/m²K G-Value: 0.30 LT 60%	1046-RF-20
RFS-31		Atrium perimeter gutter - stainless steel, flat with zero falls. Welded RWO connections.	1046-RF-22
RFS-40		Acoustic roof to 8th floor plant enclosure	Hann Tucker to confirm if required
RFS-50		Smooth limestone parapet capping, with mortar joints, on EPDM and stainless steel bracketry as required	1046_FA_12, 1046-FA-30
SI - SIGNAGE			
To be developed with branding agent			
SI-01		'65' numbering to colonnade entrance	1046-FA-01

Section C - T-Sheet

1046 - 65 Fleet Street
T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image
SI-02		'64' numbering to North reception entrances	1046-FA-02
SI-03		'65' numbering South building main facade	1046-FA-20
SI-04		Active travel hub & workshop entrance illuminated signage.	1046-FA-61
SI-05		New signage above the LG floor entrance on Ashentree court. Graphics on spandrel panel or individual applied letters.	
SI-06		External public way-finding signage	
SI-07		External services way-finding signage	
SI-08		Internal signage within the active travel hub	
SI-10		Provision for illuminated future tenant signage to spandrel panels	
SI-11		Provision for illuminated future tenant blade signage	
SR - STAIRS			
SR-01		New metal framed stairs with screeded stair pans. For carpet / vinyl finish	1046-ST series
SR-02		New metal framed stairs with screeded stair pans. For tiled finish	1046-ST series
SR-10		External and plant room access steps Galvanised steel	1046-EW-01, 1046-EJ-02, 1046-GA-00
SR-11		External steps Powder coated steel	1046-EW-01
SR-12		Galvanised steel grating ramps to plant areas	1046-EJ-02, 1046-GA-00
SR-13		New external steps to courtyard, flooring type FL-02 with yorkstone paving and inlaid bronze strips.	1046-EW-20
SR-30		New feature stair to atrium	1046-ST-20
WF - WALL FINISHES			
Refer to interior designer's information for wall fiishes to all reception, lobby, stair, WC and changing room areas.			
WF-01		Emulsion paint applied to blockwork walls	

Section C - T-Sheet

1046 - 65 Fleet Street

T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image
WF-02		Keim paint to concrete walls	
WF-50		Flush skirting. 100mm high painted mdf with square shadow gap bead to top. Note: fire integrity and insulation detail to be developed at Stage 4.	
WNX - WINDOWS			
WNX-01		Fluted glazing to Fleet Street entrance portal, with concealed framing No thermal performance requirements	1046_FA_10 Window no.s W.01.N.01 & W.01.N.02
WNX-02		Window to Fleet Street, with projecting box frame Operation: Fixed Frames: bronze coloured aluminium U-Value: center pane 1.1 W/m²K G-Value: 0.55 LT: 77%	1046_FA_11 1046_FA_16 Window no.s W.01.N.03, W.01.N.04, W.02.N.04, W.02.N.05, W.03.N.04, W.03.N.05
WNX-03		Window to Fleet Street, with projecting box frame Operation: Fixed Frames: bronze coloured aluminium U-Value: center pane 1.1 W/m²K G-Value: 0.55 LT: 77%	1046_FA_12 1046_FA_16 Window no.s W.02.N.01, W.02.N.02, W.02.N.03, W.03.N.01, W.03.N.02, W.03.N.03
WNX-04		Window to 4th floor Fleet Street, with projecting box frame Operation: Fixed Frames: bronze coloured aluminium U-Value: center pane 1.1 W/m²K G-Value: 0.55 LT: 77%	1046_FA_14 Window no.s W.04.N.04 & W.04.N.05
WNX-05		Window to 4th floor Fleet Street, with projecting box frame Operation: Fixed Frames: bronze coloured aluminium U-Value: center pane 1.1 W/m²K G-Value: 0.55 LT: 77%	1046_FA_16 Window no.s W.04.N.01, W.04.N.02, W.04.N.03

Section C - T-Sheet

1046 - 65 Fleet Street
T-Sheet

Code	NBS Spec (to follow)	Description	Reference / Image
WNX-06		Replacement windows to North Building Automatic opening vent linked to fire alarm Frames: PPC aluminium to match existing U-Value: center pane 1.1 W/m²K G-Value: 0.55 LT: 77%	Windows TBC by MEPH engineer, approx. 2no. per floor
WNX-07		Window to Ground floor shopfronts. Fixed glazing Glass centre-pane max 1.1 W/m²K G-Value: 0.55 LT: 77%	1046-FA-42 Window no.s W.00.N.14 & W.00.N.24
WNX-08		New fixed glazing to South Building North elevation. Existing two openings combined into one and new window fitted. Frames: PPC aluminium to match existing Glass centre-pane max 1.1 W/m²K G-Value: 0.55 LT: 77%	Window no.s W.01.S.01, W.01.S.02, W.02.S.01, W.02.S.02, W.03.S.01, W.03.NS02, W.04.S.01, W.04.S.10,
WNX-09		New curtain walling to South building, North facade at 5th and 6th floors U-Value: maximum 1.6W/m²K total, including spandrel panel max 0.35 W/m²K and Glass centre-pane max 1.1 W/m²K G-Value: 0.55 LT: 77%	Window no.s W.05.S.09, W.06.S.01