



# SPECIFICATIONS

SIR JOHN ROGERSON'S QUAY, DUBLIN 2

# TROPICAL FRUIT WAREHOUSE

## – DEVELOPER SPECIFICATION

Following confirmation of all finishes, the specification will be updated and included with lease documentation.

### DESIGN STANDARDS

This building is designed to comply with the Technical Guidance Documents under the relevant Building Control Acts, and the British Council of Offices guide to specification 2014; - Best practice in the specification of offices.

### OCCUPANCY

Means of escape: 1 person per 6 sq m

Internal climate: 1 person per 8 sq m

Lift provision: 1 person per 10 sq m

Sanitary provision: 1 person per 10 sq m NIA

Toilet ratio: 60% male & 60% female provision to BCO Guide 2014 + BS 6465

\* Accessible WC included in female WC provision calculation

Showers: 8 no. Male and 8 no. Female Showers  
1 no. Accessible Shower & Changing

### PLANNING MODULE

1.5m square generally throughout

### STRUCTURAL GRID

#### OFFICE BLOCK (BLOCK 1):

9m span steel beams at 2.5m c/c for steel superstructure generally 7m x 9m for concrete substructure generally

#### GLASS BOX (BLOCK 2):

8.5m span steel beams at 2.50m c/c for steel superstructure generally

#### WAREHOUSE (BLOCK 3):

9m x 10m grid for concrete flat slab at mezzanine floor

### FLOOR LOADINGS

Office floors: 4.0kN per sq. m (+1kN per sq. m partitions)

Lift lobby & toilet areas: 4.0kN per sq. m

Roof areas generally: 1.5kN per sq. m

External terraces (non-roof): Same as accessing floor to the terrace

Plant rooms: 7.5kN per sq. m

Car Park: 2.5kN per sq. m

Bicycle storage: 2.5kN per sq. m

Shower areas: 4.0 kN per sq. m

### FLOOR HEIGHTS

Reception floor to ceiling: 8m

Office slab to slab generally: 3.825m

Office slab to slab Gd Floor: 3.730m

Office slab to slab 1st Floor: 4.815m

### STRUCTURE

#### BLOCK 1 SUPERSTRUCTURE:

Typical floor: steel frame comprising composite metal deck concrete floors on cellular steel beams spanning onto a grid of columns

1st and 2nd floors: steel frame comprising reinforced concrete floor structure on cellular steel beams spanning onto a grid of columns

Reinforced concrete floor structure to core areas

#### BLOCK 1 SUBSTRUCTURE:

Reinforced concrete substructure supported on reinforced concrete columns & walls

Perimeter walls to be reinforced concrete

Foundations comprising CFA reinforced concrete piles typically

#### GLASS BOX (BLOCK 2)

Steel frame comprising composite metal deck concrete floors on cellular steel beams spanning onto perimeter & internal columns

Reinforced concrete floor structure to core areas

### **WAREHOUSE (BLOCK 3)**

Reinforced concrete mezzanine floor supported on reinforced concrete columns

Suspended reinforced concrete ground floor slab supported on pile caps

Foundations comprising CFA reinforced concrete piles typically

### **ITEM 1: RECEPTION**

#### **WALL FINISHES:**

The ground floor Reception area & lift lobby walls will be fair-faced exposed concrete.

The rear wall of the warehouse building will be restored brickwork with feature openings.

#### **FLOOR FINISH:**

Polished concrete

#### **CEILING FINISH:**

Fair-faced exposed concrete

#### **BALUSTRADE:**

Double height reception area will have concrete, metal and glass balustrades at first floor level.

#### **LIFTS:**

4No. 13 Person high speed passenger lifts will be provided in the Main Core complete with destination controls. All lift installations are to be fully EN81 compliant. 1 of these lifts will serve as a fire-fighting lift.

1No. goods/cycle lift will be provided to serve ground and basement level.

Turnstiles by tenant.

### **ITEM 2: LIFT LOBBIES**

#### **CEILINGS:**

Fair-faced exposed concrete.

Feature central bulkhead dropped ceiling formed in black colour metal with black colour metal baffles. Service fittings and lighting to be located within bulkhead ceiling.

#### **WALL FINISHES:**

Fair-faced exposed concrete

#### **FLOOR FINISHES:**

Polished Concrete to Ground Floor level

High quality tiled finish to Levels 01-05

#### **DOORS:1**

Lift lobby entrance doors will be fully glazed metal framed fire rated units with glazed sidelights.

Generally doors will be single or double leaf solid core timber, flush panel with high quality painted finish and high quality frames to match doors. All timber shall

be free from defects and well cut and seasoned and comply with the requirements of BS 11866, part 1.

All doors will be fitted with good quality bushed stainless steel ironmongery with concealed fixings where possible.

## ITEM 3: TOILETS

### CEILINGS:

The ceilings will be stepped and formed with Gypsum ceiling system or similar approved with 12.5mm plasterboard and painted skim finish or a 200mm wide perimeter margin with SAS Powder coated Metal suspended ceiling. Lighting will be high quality low voltage, ceiling and wall mount fittings.

### WALL FINISHES:

Walls generally will be finished with 12.5mm plasterboard and skim finish and provided with high quality tile finish. Full width off-set mirror to back of WHB unit with feature perimeter lighting.

### FLOOR FINISHES:

High quality tiled finish

### LOBBY DOORS:

Generally doors will be single or double leaf solid core timber, flush panel with high quality painted finish and high quality frames to match doors. All timber shall be free from defects and well cut and seasoned and comply with the requirements of BS 11866, part 1. Ironmongery will be good quality solid core brushed stainless steel.

### TOILET CUBICLES:

Generally the toilet cubicles will be full height toilet cubicle system with a selected laminate finish to all doors. Ironmongery will be good quality brushed stainless steel.

### SANITARY WARE AND FITTINGS:

High quality WCs with concealed cisterns. High quality wash hand basins with vanity units and corian counter tops. Urinals with HPL IPS panels.

### DISABLED W.C:

Sanitary facilities for Disabled occupants will be provided as outlined in BS6465: Sanitary Facilities and as provided for in TGD part M.

Doc 'M' Pack suite will be provided for each disabled users WC facility, or similar approved.

## ITEM 4: STAIRCORES

### STAIRCORE 1:

Ceiling: Fair-faced exposed concrete

Floor: Fair-faced exposed concrete

Walls: Fair-faced exposed concrete

Balustrade: Black metal balustrade with ss handrail

### STAIRCORE 2:

Ceiling: Fair-faced exposed concrete

Floor: Fair-faced exposed concrete

Walls: Fair-faced exposed concrete

Balustrade: Black metal balustrade with ss handrail

### STAIRCORE 3:

Ceiling: Painted Plasterboard drylining

Floor: High quality tiled finish

Walls: Painted Plasterboard drylining

Balustrade: Black metal balustrade with ss handrail

## ITEM 5A: BASEMENT - WET ROOMS AND STAFF WELFARE FACILITIES

### CEILINGS:

The ceilings will be stepped and formed with Gypsum ceiling system or similar approved with 12.5mm plasterboard and painted skim finish. Lighting will be high quality low voltage, ceiling and wall mounted fittings.

### WALL FINISHES:

Walls generally will be finished with 12.5mm plasterboard and skim finish and provided with high quality tile finish. Full width off-set mirror to back of WHB unit with feature perimeter lighting.

### FLOOR FINISHES:

High quality tiled finish.

### DOORS:

Generally doors will be single or double leaf solid core timber, flush panel with high quality painted finish and high quality frames to match doors. All timber shall be free from defects and well cut and seasoned and comply with the requirements of BS 11866, part 1. Ironmongery will be good quality solid core brushed stainless steel.

All doors will conform to TGD part B as required.

**SHOWER CUBICLES:**

Generally shower cubicles will be full height system with a selected laminate finish to all doors. Shower head and shower mixer to be high quality chrome sanitaryware fixtures.

**CLEANERS STORE:**

A cleaner store will be provided at all levels as indicated on the design drawings, except basements. All cleaner's stores will include a cleaner's sink and all necessary plumbing. The store will be of a sufficient size to accommodate standard cleaning equipment and supplies for each floor.

**ITEM 5B: BASEMENT - CAR PARK & BICYCLE PARKING****WALLS, SOFFIT AND COLUMNS:**

Painted finish to walls, soffit and columns

Insulated self-coloured render to habitable areas

**FLOOR FINISHES:**

Car-Park Grade Resin finish with line markings.

**PARKING:**

The design and construction of parking and pavements generally – and including all interconnections to the local roads infrastructure – shall comply fully with requirements of the Local Authority and with provisions of Planning Permission, Fire Certification and all other consents and licenses attaching to the development.

Special designated parking bays for disabled users shall be provided in close proximity to entrances in accordance with Building Regulation provisions regarding disabled access and as indicated on drawings.

External lighting shall be provided to all areas consistent with safety and security requirements, and incorporating all necessary maintained emergency lighting.

Pavements shall have full road markings applied throughout in high quality thermoplastic paint supported by additional road signs as necessary designating traffic lanes, direction of traffic flow, ramped access points, parking bays, stop points and clearways. Guardings shall be provided as necessary to any ramped or elevated carriageways and platforms.

Directionally arrows, and numbers will be marked in white thermoplastic paint, or similar approved.

Automatic remote control vehicle barriers will be provided at the entry and exit to the car park. Speaker boxes will be provided at each barrier that will be

wired back to the security desk in the main entrance hall. Car park lighting will be controlled by daylight sensors with time control and manual over-ride.

**SECURE BIKE AND STORAGE LOCKERS:**

Secure bicycle storage will be provided for 136 bikes in selected locations throughout the Basement level. Locker storage will also be provided within changing areas.

**ITEM 6: BUILDING FACADES****OFFICE BLOCK (BLOCK 1)**

Block 1 of the TFW development comprises a six storey commercial building over a two storey basement. The building façade is a mix of glazing, aluminium and stone elements. The glazed façade at ground and first floor level comprises a flush glazed stick curtain wall with feature external extruded aluminium vertical fins. From second floor up, the glazed façade is a bespoke unitised curtain wall with feature extruded aluminium vertical and horizontal fins. Blocks 1 and 3 are connected at ground floor levels through a double height glazed link reception area. The link facade comprises a double storey feature glass fin wall with a glazed roof supported on glass fins.

**GLASS BOX (BLOCK 2)**

Block 2 of the TFW development comprises a two storey high, feature glass box over an existing listed warehouse building (to be refurbished, see Block 3 below). The building façade comprises a bespoke fully glazed double skin façade with glass fins provided in the interstitial cavity designed to create a lightweight, highly transparent architectural feature above the existing masonry warehouse. Blocks 1 and 2 are connected at third and fourth floor level with a glazed link bridge. Aluminium rainscreen cladding is provided to the exposed soffit, roof and core of the building.

**WAREHOUSE (BLOCK 3)**

Block 3 of the TFW development comprises the refurbishment of the existing listed warehouse building into a two-storey commercial office. The existing warehouse façade comprises masonry brickwork walls with single glazed painted steel window elements. The proposal is to retain the existing brickwork walls and replace the existing windows with similar. The proposal includes the provision of new glass on steel facades to the east elevation, new thermally broken conservation rooflights, new thermally broken double-glazed steel windows and doors and new sliding timber external 'shutters' to the north façade.

## ITEM 7: HARD AND SOFT LANDSCAPING

### PUBLIC REALM

The public realm of the development creates a series of green and verdant spaces which promote activity and provide a series of opportunities for users to interact with the public realm and associated buildings.

Garden Lane will be a gated (access controlled) verdant pedestrian street characterised by soft planting and multi-stem trees to provide scale and structure. A raised planter incorporating seating pockets will form the main edge along the eastern side of the space, creating a series of pocket spaces and focal points, while providing a playful and social edge focusing attention on the renovated building.

The design of the public realm will provide key links to Whitaker Square, planting zones and seating opportunities incorporated within the steps to the Square will draw people through the site.

The Office Courtyard is a small scale space which will be overlooked by ground floor office spaces. A thin raised planter and incorporated seating stretching along the western edge provides a green backdrop to the space.

The northern edge of the space is formed by the remains of the Old Marine School wall, multi-stem tree planting in large pots provides an informality to the space and a common language with the rest of the site.

A key feature to the design is the material selection. The palette will utilise a restrained range of natural materials underlining the simplicity of the space. Low level informal planting will help soften the space and create a playful sensory landscape, providing a variety of colour, texture and scent throughout the year.

### PEDESTRIAN AREAS AND PAVING

The paving throughout the development will be designed to unify the masterplan and help set it within its local context. Tone and sizes variations will demarcate each area. Paving palette proposal will promote high quality materials such as natural stone promoting longevity and durability.

The use of natural stones with different tones will help define spaces and uses. The colour palette consists of warm tones and will be kept calm and simple to complement the adjacent building.

All pedestrian areas will promote and be safe and accessible to all and will be consistent in their approach.

## STREET FURNITURE

Furniture for the development will give a unique character to the public realm. It will be of consistent materials robust, high quality and durable.

Garden Lane features a raised planter incorporating seating opportunities against the Dillon Eustace building. Planter edges will be corten steel of blackened steel to fit with the sites industrial heritage.

Seating edges will promote the use of either natural stone or in-situ concrete.

Large scale pot planting will provide an informal garden character and help define main spill out zones and access points to buildings.

Stones from historic site structures are to be reused to create feature walls proposed as a backdrop to the green planted buffer, reflecting the garden character and providing a focal point of attraction. Stones will be reused and selected on site subject to suitability.

## ITEM 8: INTERNAL FINISHES - OFFICE AREAS

### CORE WALL FINISHES:

Core Walls will be finished with plasterboard lining to walls with riser door openings. Other core walls will have exposed concrete finish with finishes by tenant.

### WAREHOUSE WALL FINISHES:

The northern, southern and western walls of the warehouse building will have internal exposed brickwork finish, with an area of exposed limestone in the area of the historical Marine School building.

The eastern warehouse wall will have exposed limestone at ground floor with skimmed and painted plasterboard at first floor.

### OFFICE FLOORS:

150mm Raised Access Floor system

### OFFICE CEILINGS:

1200 x 300mm Metal Tile suspended ceiling system.

## MEP LANDLORD SCOPE OF SERVICE

### MECHANICAL INSTALLATIONS

Heating and cooling will be provided by two reversible air source heat pumps located in the roof level plant areas over block 2. The air source heat pumps deliver heating and chilled water to 4-pipe fan coil units located in the open plan office, reception and lobbies providing heating and cooling to these areas. Toilets will be heated only via radiators.

Backup heating for the air source heat pumps and supplementary heating for the domestic hot water installation shall be provided via high efficiency condensing gas boilers.

#### WINTER DESIGN CONDITIONS:

External Winter:	-3°C Saturated
Internal office:	21°C db $\pm$ 2°C. No Relative Humidity Control
Toilets	18°C minimum. No Relative Humidity Control
Reception	21°C db $\pm$ 3°C. No Relative Humidity Control

#### SUMMER DESIGN CONDITIONS:

External Summer:	26°C dry bulb 19°C Wet Bulb
Internal office:	23°C db $\pm$ 2°C. No Relative Humidity Control
Toilets	18°C minimum. No Relative Humidity Control
Reception	23°C db $\pm$ 2°C. No Relative Humidity Control

#### SYSTEM TEMPERATURES:

Heat Pump	Low Pressure Hot Water: 45-35°C
Chilled Water:	6-12°C
Gas Boiler	
Low Pressure	
Hot Water (DHW)	70-50°C

### VENTILATION INSTALLATION:

Fresh air shall be provided to Block 1 via two supply return air handling units c/w heat recovery located in the roof level plant area. A separate air handling unit again with heat recovery is provided for supply/exhaust ventilation to the toilet core & basement shower/ changing area.

Block 2 is provided with fresh air from a single supply return system. The supply unit is located at roof level and the return air unit is located in the second floor plantroom. A high efficiency heat recovery system is provided between these units. A space allowance has been made for future kitchen/café supply and exhaust systems ductwork and plant.

The basement carpark shall be fully mechanically ventilated.

#### VENTILATION PARAMETERS:

Offices:	12l/s per person – 1 Person/8m <sup>2</sup> + 10% supply leakage allowance
Toilets:	8 air changes per hours Supply & 10 air changes per hour Exhaust
Showers/Changing:	8 air changes per hour Supply & 10 air changes per hour Exhaust

#### ACOUSTIC LEVELS:

Offices Open Plan:	NR 35
Toilets:	NR 40
Reception:	NR 40

## DOMESTIC WATER SERVICES INSTALLATION:

24 hour cold and mains water storage shall be provided based on the parameters below. Water shall be stored at basement level in insulated GRP tanks and shall be pressure boosted to serve all levels. 24 hour mains water storage shall also be provided at basement level and shall be pressure boosted to serve all levels.

Domestic hot water storage shall be provided based on peak demand. Domestic hot water shall be heated via Gas fired boilers. Sufficient primary temperature shall be provided to allow for legionella control/ pasteurisation cycles.

### DOMESTIC WATER:

Domestic Cold

Water Storage: 45l/person @ 1 per 10m<sup>2</sup>

Mains Water Storage: 2.5l/person @ 1 per 10m<sup>2</sup>

Domestic Hot

Water Storage As required by peak demand

## ABOVE GROUND FOUL DRAINAGE:

A fully ventilated single pipe drainage system shall be provided throughout the building. Servicing sanitary facilities, condensate and future tenant allowance

## GENERAL POWER SERVICES

The building has a dedicated ESB sub-station, and provision for a multi-tenant LV power supply.

Sub distribution boards will be provided at each tenancy on each level

Power provisions in the tenancy areas will be supplied from an underfloor busbar system at allowance of 1 workstation per 8m<sup>2</sup>.

## LIGHTING SERVICES

### OFFICE LIGHTING:

For floors other than ground and first floors recessed energy efficient LED luminaires will be provided on a modular layout to provide lighting levels in accordance with the SLL Code for Offices. Lighting on ground and first floors will be surface mounted / suspended energy efficient LED luminaires.

The office lighting will be controlled based on occupancy and daylight. This system will be programmable for future tenants and fitouts.

Lighting levels as follows will be provided:

- |                          |         |
|--------------------------|---------|
| • Offices                | 450 lux |
| • Circulation            | 150 lux |
| • sanitary accommodation | 150 lux |
| • Plant rooms            | 100 lux |
| • Car Park               | 150 lux |

Architectural lighting will be provided in the following areas:

- Toilet areas
- Lift lobbies
- Ground floor reception areas
- External

### EMERGENCY LIGHTING SERVICES:

Miniature recessed LED luminaires with 3 hour self-contained emergency battery packs will be utilized to provide escape lighting in the event of a power failure.

This will include directional and escape signage.

The luminaires will have a Central Test facility and comply in full with Irish standard I.S. 3217 2013.



## **COMMUNICATION & ICT SERVICES:**

A dedicated POP (Point of Presence) room shall be accommodated at basement level -01 in the new building. There shall be 2 routes into the building which ensures good IT connectivity. Each route will have spare capacity to allow for the option of additional IT providers in the future.

## **PROTECTIVE SERVICES:**

A full analogue addressable L1 fire alarm and detection system will be installed in accordance with the Fire Safety Certificate and the Irish Standard for Fire alarm systems I.S.3218 2013

Disabled Refuges will be provided at each refuge point identified in the fire certificate. A disabled refuge communication system with two way speech facility will be provided at each refuge connected directly to the Fire services entry point of that core at Ground floor

Disabled toilet alarm call points will be provided in accordance with Part M of the Building Regulations, in each disabled access toilet with remote indication at the Main reception of each core.

Electronic Access control will be provided at the Main entrances of the building at ground and basement levels. Upper floors will be provided with conduit runs to allow for access control to be added.

CCTV cameras will be provided to cover all access and egress points to the building ground and basement. Provision will be made for CCTV at the entrance to each floor.

An Intercom system will be provided from the Ground Floor and basement areas entrances to the ground floor reception desk.

1 No. car park barriers allowed in the basement between the new and existing car parks.

## **LIGHTNING PROTECTION SERVICES:**

Lightning protection will be provided in accordance with the requirements of I.S.

EN 62305.

