onealbertquay

STRUCTURAL, ARCHITECTURAL, MECHANICAL AND ELECTRICAL SPECIFICATIONS

CONTENTS PAGE

BUILDING SPECIFICATION 3
Design, Construction, Materials and Workmanship
Floor Loadings
Suspended Floors
Sub-Structure and Basement
Structural Frame
Structural Movement Joints/Expansion Joints
Site Works

OUTLINE SPECIFICATION OF EXTERNAL ENVELOPE 7
External Wall Finishes
Roof

LANDLORD SPECIFICATION 10
Basement Levels
Upper Floor Levels

MECHANICAL AND ELECTRICAL SPECIFICATION 19
Electrical Supply
Telecom Supply
Fire Detection and Alarm
Water Supply
Access System
CCTV System
BMS
Lighting
Lifts

OFFICE AREA LANDLORD SPECIFICATION 22
Floors
Wall Linings
Column Linings
Ceilings
Lighting
Air-Conditioning
Fire Alarm
Main Power
Telephone

THE LETTING AGENTS 24

BUILDING SPECIFICATION

DESIGN, CONSTRUCTION, MATERIALS AND WORKMANSHIP

Construction shall be in accordance with all current relevant Codes of Practice, Irish or (if none) British Standards, Legislation (including Health and Safety Legislation) and Statutory Instruments, Regulations, Local Authority and Fire Office Statutory requirements.

The development shall be designed in accordance with the following relevant Building Regulations and Design Codes (and any subsequent amendments):-

Code Reference	Year	Code of Practice
BS:5950 Pt 1	2000	Structural use of Steelwork in Buildings - Code of Practice for Design.
BS:5950 Pt 2	1992	Rolled & Welded Sections - Specifications for Materials.
BS:5950 Pt 3	1990	Fabrication and Erection Hot Rolled Section - Design of Simple and Continuous Composite Beams.
BS:8110 Pt 1	1997	Structural Use of Concrete - Code of Practice for Design and Construction.
BS:6399 Pt 1	1996	Loadings for Buildings - Practice for Dead and Imposed Loads.
BS:6399 Pt 2	1997	Code of Practice for Wind Loads
BS:6399 Pt 3	1988	Code of Practice for Imposed Roof Loads.
BS:8004	1996	Code of Practice for Foundations.

Materials, goods and workmanship will be of good quality, fit for the purpose intended and those for which there is a European, Irish, or British, Standard or Code of Practice are to comply therewith unless otherwise stated.

FLOOR LOADINGS

Suspended floors throughout shall be of precast composite slabs and will be designed to the following requirements in accordance with BS 6339 Part 1: 1996.

The floor loadings listed hereunder are the maximum permitted loadings exclusive of allowances made in the design for party walls provided by the Landlord. The allowance made in respect of such walls and partitions represents the net load of the walls and

partitions only. An allowance of 1.0 kN/m² has been provided in the loadings listed hereunder for the Tenant's own partitions.

SUSPENDED FLOORS

GROUND FLOOR LEVEL

Imposed Loading	10.0 kN/m²
Floor Finishes	0.50 kN/m²
Partitions	Included in the imposed load figure above.
Suspended Services and Ceilings	0.5 kN/m²

UPPER FLOOR LEVELS

Imposed Loading	5.00 kN/m²
Floor Finishes	0.50 kN/m²
Partitions	Included in the imposed load figure above
Suspended Services and Ceilings	0.5 kN/m²

Chasing of the floor slabs shall only be allowed to depths of not more than 30mm and in locations approved in writing by the Landlord's structural engineer.

Horizontal and vertical deflections are limited to the following:
The range of horizontal movement in the 25 mm expansion joints is limited to +/- 10 mm.

The limits of vertical deflection on beams are:
Live load deflection limit of L/360.
Total load deflection limit of L/200.

Tenants are required to provide the Landlord full details of the proposed methods of both noise and vibration attenuation associated with the individual Tenant's plant and equipment.

SUB-STRUCTURE AND BASEMENT

The superstructure and ground floor podium of the project are located above a double basement which will be used for car-parking requirements.

The upper and lower basement structure will be an in-situ concrete frame construction.
The basement walls will be constructed using a sheet piled perimeter retaining wall to the full circumference of the basement.

All column loads will be supported by a reinforced concrete raft foundation.

The basement, when constructed, will be capable of withstanding external water pressure both within the walls and at lower basement floor level.

STRUCTURAL FRAME

The structural frame to the upper floors consists of a structural steel frame construction of eight floors over ground with solid 250mm hollowcore precast slabs with a 75mm screed.
The steel beams are supported on structural steel columns transferred to a concrete column at ground floor and on to a raft foundation at lower basement level.

The steel frame will be braced by eight reinforced concrete lift shafts and five escape stair cores.

The structural frame will be provided with fire protection by the provision of the required cover to the reinforcing steel in the structural concrete elements to give 90 minute fire resistance in accordance with the Fire Safety Certificate and Building Regulations current at the time of construction.

STRUCTURAL MOVEMENT JOINTS/EXPANSION JOINTS

The building in the development has been designed with structural movement joints/expansion joint. These movement joints occur in floors, walls and soffits. Where these movement joints occur in the Tenant's Unit, they will be indicated on drawings furnished to the Tenant. Tenants are responsible for maintaining such joint arrangements through their final finishes and shall ensure that their details comply with the type and extent of movement to which the building has been designed to accommodate.

SITE WORKS

ACCESS ROAD TO RAMP SPECIFICATION

40mm hot rolled asphalt wearing course on 60mm dense bitumen macadam base-course on suspended concrete slab.

HARD LANDSCAPING

PAVING	Natural Granite stone flags 600 x 400mm varying depths from 40mm to 100mm depending on type of traffic pedestrian/vehicle, pavers to be bedded in 30mm - 70mm of 35N/mm2 "Weber" construction grout to specified areas.
TARMACADAM	40mm hot rolled asphalt wearing course on 60mm dense bitumen macadam base-course, 225mm min clause 804 granular stone sub-base on capping layers as required.

UPSTAND WALLS

CLADDING	Flamed Granite stone cladding; 40mm thick; fixed to blockwork with stainless steel fixings drilled into wall at required centres with selected stone capping to match cladding.

SITE RAILINGS

RAILING AND HANDRAILS	Stainless steel balustrade with toughened glass infill panels and Stainless steel balustrade and handrails taken to all other low level walls, steps and ramps on site.

SITE FITTINGS

BOLLARDS	Stainless steel bollards, 1000mm high including excavations of 450 x 450mm concrete foundation.
CARPARK ENTRANCE DOOR	Swinging electric steel entrance gates to basement carpark.
PLANTER BOXES	Hardwood clad planter box, include for filling box with topsoil as necessary.

OUTLINE SPECIFICATION OF EXTERNAL ENVELOPE

EXTERNAL WALL FINISHES

EXTERNAL CLADDING

WALLS	Flamed Granite cladding; 40mm thick; fixed to blockwork with stainless steel fixings drilled into wall at required centres with selected stone capping to match cladding.
SOFFITS	6mm Alucobond rainscreen panels to selected colour including for 100mm PIR insulation mechanically fixed to structure at ground floor level soffits.110mm thick Kingspan insulated cladding panels to soffit of projected areas high level areas.
BASEMENT ACCESS LOBBIES & ESCAPE STAIRS	215mm concrete block wall construction with sand cement plaster finish painted in selected colour externally. Complete with 62.5mm Kingspan Kooltherm K17 or K18 composite drylining board to the inside taped and jointed with painted finish internally.

EXTERNAL GLAZING

WALLS	Aluminium unitised glazing system to achieve a U- Value of 1.1W/m2K with double glazing to manufacturer's recommendations with outer pain of 8mm solar natural HP toughened 71/43, inner pain of 10mm clear toughened, all hermetically sealed double glazed units. Glass spandrel panels are provided at floor slabs. Allowance is provided for high quality neutral elastical silicone based joint sealant between frame and stone cladding reveals to ensure air tightness.
ROOF	Aluminium toggle glazed system, colour to be selected; glazing to achieve a U- Value of 1.1W/m2K with double glazing to manufacturer's recommendations, outer pain to be 8mm solar netural HP toughened 71/43, 20mm toggle, and inner pain to be 10mm laminated clear toughened, all hermetically sealed double

	glazed units. Allow for high quality neutral elastical silicone based joint sealant to ensure air tightness.
METAL LOUVERS	Horizontal louvers, insulated sandwich panel with powder coated aluminium decorative louvers, fixed to curtain walling system.
WINDOWS	Powder coated aluminium thermally broken double glazed window and frames externally including aluminium cills once cranked over cladding including insulation EDPM cavity closer.
EXTERNAL DOORS	Powder coated aluminium thermally broken integrated double glazed doors and frames with aluminium automatic sliding doors to the main entrances.
STEEL DOORS	Hot dipped galvanised mild steel doors and frames, including vertical louvers for ventilation to sub-stations and switch rooms.
EXTERNAL BALUSTRADES TO BALCONIES	Stainless steel balustrade with toughened glass infill panels; composed of 50mm x 10mm brushed stainless steel uprights, fixed to circular plate to edge of concrete steps or floor slab; brushed stainless steel glazing clamps secret fixed to vertical uprights; 50mm diameter stainless steel handrail, fixed to vertical uprights.

ROOF

INSULATION

ROOF INSULATION	Insulation sheet 100mm Kooltherm K3 Kingspan insulation mechanically fixed to concrete transfer roof slab.

ROOF FINISHES

WATERPROOFING	20mm mastic asphalt (limestone aggregate) with asphaltic cement table 3; column 11; separating layer of loose laid sheeting felt; reinforced felt vapour barrier bonded in hot bitumen and wrapped around edges.
FLASHINGS	Aluminium flashings to roof projections over balcony, fixed and sealed to steel frame and curtain wall system.

BALCONIES	450 x 450 x 50mm thick Tobermore concrete paving slabs on proprietary PVC paving stools to balconies; sitting on asphalt roof finish.
5TH FLOOR TERRACE	450 x 450 x 40mm thick Granite paving slabs bedded in 30mm - 70mm of 35N/mm2 "Weber" construction grout to falls and crossfalls with Barley Corn Stone Ballast finish to perimeter.
STONE	Selected stone ballast finish to roof area.
FALL ARREST SYSTEM	Latchways constant force post system N25/210 guided type fall arrest system.
SMOKE VENTS AND ACCESS HATCHES	Coxdome rooflights, Mark 5 hinged roof light or equal approved; complete with insulated aluminium upstand including all necessary flashings and trimmings to suit concrete roof; hoisting and fitting in position.

LANDLORD SPECIFICATION

BASEMENT

CAR PARK AREA

FLOORS	Car park area finished with one coat of Sika Floor 263, apply silical sand and finish with second coat of Sika Floor 263 floor coating; light grey in colour; including all line markings, disabled markings, arrows etc.
WALLS AND COLUMNS	Walls of lift shafts and stair cores finished with smooth plaster. All walls and columns finished with two coats of Sika Elasto Colour, Anti Carbonation Coating, in selected colour.
CEILINGS	150mm Kingspan K5 EWB insulation or similar to underside of atrium floor remaining ceilings of carpark area finished with two coats of Sika Elasto Colour, Anti Carbonation Coating, in selected colour.
TRAFFIC BARRIERS	“Came Guard 4000” automatic barrier kit or similar approved.
BICYCLE STANDS	“Omos” S36 stainless steel bicycle stands or similar approved.
BOLLARDS	“Omos” S23 brushed 316 stainless steel bollards or similar approved.

LIFT SHAFT AND PUBLIC STAIR LOBBIES

FLOORS	600 x 300mm Jura Beige Limestone floor tiling with a 100mm high skirting tile.
WALLS	Concrete and block walls finished with 12.5mm "Gyproc" plasterboard on gypliner system mechanically fixed to concrete wall, joints taped and filled and finish with a 3 mm skim coat of "Pinnacle" finishing plaster to an overall thickness of 15mm. Finished with one coat "Sealapore" or equivalent and approved, and two coats "Dulux Easycare".

CEILINGS	"Gyproc Casoline M/F" galvanised mild steel suspended ceiling system consisting of MF5 ceiling sections, MF7 primary support channels, MF8 strap hangers, etc; suspended from underside of concrete soffit, with and including 1 No. layer of 12.5mm thick "Gyproc" plasterboard fixed to suspension system with "Gyproc" dry wall self drilling screws, all joints taped and filled and finish with a skim coat of "Pinnacle" board finishing plaster; Finished with one coat thinned and two coats vinyl emulsion paint.
JOINERY	Solid core pre finished walnut or similar and approved veneered flush doors and frames, hardwood lipping all round, with vision panels where required complete with selected stainless steel ironmongery.
LIFT LOBBIES SCREENS	Walnut studs at 650mm centres; with Pyrobel insulate fire resisting glass ensuring 60/60 fire resistance throughout; 20 x 20mm glazing beads or similar and approved.
PASSENGER LIFTS	6no Schindler 5500 2.5m/s passenger lifts servicing basement to upper floor levels. Lifts include for Schindler port technology and are finished with Shanghai red back painted glass, brushed stainless steel ceiling and doors.

FIRE ESCAPE STAIRS AND STAIR LOBBIES

STAIR AND LANDING FINISHES	Pre-cast concrete stairs and landing to be finished with two coats of Sika Elasto Colour, Anti Carbonation Coating, in selected colour.
WALLS	Concrete and block walls finished with 12.5mm "Gyproc" plasterboard on gypliner system mechanically fixed to concrete wall, joints taped and filled and finish with a 3 mm skim coat of "Pinnacle" finishing plaster to an overall thickness of 15mm. Finished with one coat "Sealapore" or equivalent and approved, and two coats "Dulux Easycare"
CEILINGS	"Gyproc Casoline M/F" galvanised mild steel suspended ceiling system consisting of MF5 ceiling sections, MF7 primary support channels, MF8 strap hangers, etc; suspended from underside of concrete soffit, with and including 1 No. layer of 12.5mm thick "Gyproc" plasterboard fixed to suspension system with "Gyproc" drywall self drilling screws, all joints taped and filled and finish with a skim coat of "Pinnacle" board finishing plaster to landings. Soffit of stairs finished with1 No. layer of 12.5mm thick "Gyproc"

	plasterboard fixed on Gyproc metal linner system, all joints taped and filled and finish with a skim coat of "Pinnacle" board finishing plaster. Profile cut to string of stairs. All finished with one coat thinned and two coats vinyl emulsion paint.
JOINERY	Solid core pre finished walnut veneered flush doors and frames or similar and approved, hardwood lipping all round, with vision panels where required complete with selected stainless steel ironmongery.
HANDRAILS AND BALUSTRADES TO STAIRS	Mild steel balustrade; composed of 50mm diameter timber handrail fixed to 10mm vertical tubular mild steel at 100mm centres, fixed to 20mm flat bottom rail; fixed to circular base plate at 2000mm centres and fixed to edge of concrete steps or floor slab.
TIMBER HANDRAIL	50mm diameter; fixed to stainless steel wall anchors at 1200mm c/c; anchors fixed to wall; include for all fixings. All finished with one coat etching primer, one undercoat; 2 coats oil-based enamel hard gloss finish; rubbing down between coats.

SHOWER BLOCK

FLOORS	600 x 300mm Jura Beige Limestone floor tiling with a 100mm high skirting.
WALLS	“GypWall Classic” internal partitions comprising of 70mm thick “Gypframe C” metal studs at 600mm centres faced both sides with 2 layers of 12.5mm thick wallboard taped and jointed with 50mm thick mineral “Isover APR 1200” acoustic cavity insulation and seals in accordance with manufacturers requirements including fixing tracks, pins, angle beads and the like. Finished with ceramic wall tiling, fully bonded to plasterboard walls, 3mm joints, layout of whole units with cut margins and makeup pieces as necessary, complete with trims and beads, fixing with approved adhesive in accordance with manufacturer’s instructions.
WALLS LININGS	Concrete and block walls finished with 12.5mm "GypLyner Universal" wallboard on “GL1 Lining Channel” with “GL2 Brackets” mechanically fixed to concrete taped and jointed and seals in accordance with manufacturers requirements including fixing tracks, pins, angle beads and the like. Finished with ceramic wall

	tiling, fully bonded to plasterboard walls, 3mm joints, layout of whole units with cut margins and makeup pieces as necessary, complete with trims and beads, fixing with approved adhesive in accordance with manufacturer's instructions.
CEILINGS	"OWA Sandila" or equivalent mineral fibre tegular edged suspended ceiling tiles, size 600x600x20mm thick laid in and including 24mm organisal coated exposed T-section suspension grid system, all in accordance with manufacturer's instructions.
JOINERY	Solid core pre finished walnut veneered flush doors and frames or similar and approved, hardwood lapping all round, with vision panels where required complete with selected stainless steel ironmongery.
FITTINGS	Pre-finished vanity unit, with marble tops, to incorporate wash hand basins and polished bevel edged mirrors to wall over wash hand basins.
HOT AND COLD WATER SERVICES	Hot water for the main toilet areas is supplied from a central solar hot water storage cylinder feed from an array of solar panels on the roof with electric backup. Hot water is provided on a pumped continuous circulation loop to provide instant hot water at all times. City mains water is provided for drinking water. A rainwater storage tank is located in the lower basement and provides the source of water for grey water. The rainwater is filtered/chlorinated and UV treated and is pumped to the toilet areas by means of an automatic booster pump system with variable speed drive. A separate Coldwater storage tank and booster set is provided to supply water for hand washing.
VENTILATION	Toilets are ventilated from a ceiling mounted air handling unit providing full fresh and exhaust air to the toilets at a rate of 10 air changes per hour with heat recovery and supplementary heat pump for supplying warm air.
SANITARY INSTALLATION	Toilets are fitted out with a full sanitary ware installation using high quality fittings to architects selection. Concept WCs are dual flush E back to wall units. Strada 60cm Wash hand basins are over counter type with Sensoflow sensor activated chrome timed flow taps. E Disabled Suites are provided to comply with Doc M Building Regulations. Showers are to be Mira Sport or similar and approved.

ELECTRICAL	Lighting is provided low energy 2x26 watt ceiling recessed fluorescent fittings using providing a 100 lux. Light fittings are controlled by ceiling mounted PIR infra-red beam detectors which turn off the lights when there is no activity.

SUPERSTRUCTURE

MAIN ATRIUM

FLOORS	900 x 900mm Jura Beige limestone floor tiling or similar and approved with a 100mm high skirting tile.
INTERNAL GLAZING	Aluminium toggle glazed system, colour to be selected; glazing to achieve a U- Value of 1.1W/m2K with double glazing to manufacturer's recommendations, outer pain to be 8mm solar neutral HP toughened 71/43, 20mm toggle, and inner pain to be 10mm laminated clear toughened, all hermetically sealed double glazed units. Allow for high quality neutral elastic silicone based joint sealant to ensure air tightness.
FEATURE WALL	Centralized water feature.

LIFT LOBBY

FLOORS	900 x 900mm Jura Beige limestone floor tiling or similar and approved with a 100mm high skirting tile.
WALLS	Concrete and block walls finished with 12.5mm "Gyproc" plasterboard on gypliner system mechanically fixed to concrete wall, joints taped and filled and finish with a 3 mm skim coat of "Pinnacle" finishing plaster to an overall thickness of 15mm. Finished with one coat "Sealapore" or equivalent and approved, and two coats "Dulux Easycare"
LIFT SURROUNDS	Stainless steel surround to lifts entrance doors with face of lift shafts clad in a glass/timber panel layout
CEILINGS	"Gyproc" Casoline M/F" galvanised mild steel suspended ceiling system consisting of MF5 ceiling sections, MF7 primary support channels, MF8 strap hangers, etc; suspended from underside of concrete soffit, with and including 1 No. layer of 12.5mm thick "Gyproc" plasterboard fixed to suspension system with "Gyproc"

	dry wall self drilling screws, all joints taped and filled and finish with a skim coat of "Pinnacle" board finishing plaster; Finished with one coat thinned and two coats vinyl emulsion paint.
JOINERY	Solid core pre finished walnut veneered flush doors and frames or similar and approved, hardwood lipping all round, with vision panels where required complete with selected stainless steel ironmongery.
PASSENGER LIFTS	6no Schindler 5500 2.5m/s passenger lifts servicing basement to upper floor levels. Lifts include for Schindler port technology and are finished with Shanghai red back painted glass, brushed stainless steel ceiling and doors.
FIREMAN LIFTS	1no Schindler 5500 and 1no Schindler 3300 1m/s fireman lifts servicing ground to upper floor levels. Lifts are finished with brushed stainless steel walls, ceiling and doors.

FIRE ESCAPE STAIRS AND STAIR LOBBIES

STAIR AND LANDING FINISHES	Pre-cast concrete stairs and landing to be finished with marmoleum flooring of selected colour.
WALLS	Concrete and block walls finished with 12.5mm "Gyproc" plasterboard on gypliner system mechanically fixed to concrete wall, joints taped and filled and finish with a 3 mm skim coat of "Pinnacle" finishing plaster to an overall thickness of 15mm. Finished with one coat "Sealapore" or equivalent and approved, and two coats "Dulux Easycare"
CEILINGS	"Gyproc Casoline M/F" galvanised mild steel suspended ceiling system consisting of MF5 ceiling sections, MF7 primary support channels, MF8 strap hangers, etc; suspended from underside of concrete soffit, with and including 1 No. layer of 12.5mm thick "Gyproc" plasterboard fixed to suspension system with "Gyproc" dry wall self drilling screws, all joints taped and filled and finish with a skim coat of "Pinnacle" board finishing plaster to landings. Soffit of stairs finished with1 No. layer of 12.5mm thick "Gyproc" plasterboard fixed on Gyproc metal linner system, all joints taped and filled and finish with a skim coat of "Pinnacle" board finishing plaster. Profile cut to string of stairs. All finished with one coat thinned and two coats vinyl emulsion paint.

JOINERY	Solid core pre finished walnut veneered flush doors and frames, hardwood lipping all round, with vision panels where required complete with stainless steel ironmongery.
HANDRAILS AND BALUSTRADES TO STAIRS	Mild steel balustrade; composed of 50mm diameter timber handrail fixed to 10mm vertical tubular mild steel at 100mm centres, fixed to 20mm flat bottom rail; fixed to circular base plate at 2000mm centres and fixed to edge of concrete steps or floor slab.
TIMBER HANDRAIL	50mm diameter; fixed to stainless steel wall anchors at 1200mm c/c; anchors fixed to wall; include for all fixings. All finished with one coat etching primer, one undercoat; 2 coats oil-based enamel hard gloss finish; rubbing down between coats

PUBLIC TOILETS

FLOORS	600 x 300mm Jura Beige Limestone floor tiling with a 100mm high skirting.
WALLS	“GypWall Classic” internal partitions comprising of 70mm thick “Gypframe C” metal studs at 600mm centres faced both sides with 2 layers of 12.5mm thick wallboard taped and jointed with 50mm thick mineral “Isover APR 1200” acoustic cavity insulation and seals in accordance with manufacturers requirements including fixing tracks, pins, angle beads and the like. Finished with ceramic wall tiling, fully bonded to plasterboard walls, 3mm joints, layout of whole units with cut margins and makeup pieces as necessary, complete with trims and beads, fixing with approved adhesive in accordance with manufacturer’s instructions.
WALLS LININGS	Concrete and block walls finished with 12.5mm "GypLyner Universal" wallboard on “GL1 Lining Channel” with “GL2 Brackets” mechanically fixed to concrete taped and jointed and seals in accordance with manufacturers requirements including fixing tracks, pins, angle beads and the like. Finished with ceramic wall tiling, fully bonded to plasterboard walls, 3mm joints, layout of whole units with cut margins and makeup pieces as necessary, complete with trims and beads, fixing with approved adhesive in accordance with manufacturer’s instructions.

CEILINGS	"OWA Sandila" or equivalent mineral fibre tegular edged suspended ceiling tiles, size 600x600x20mm thick laid in and including 24mm organisal coated exposed T-section suspension grid system, all in accordance with manufacturer's instructions.
JOINERY	Solid core pre finished walnut or similar and approved veneered flush doors and frames, hardwood lipping all round, with vision panels where required complete with stainless steel ironmongery.
TOILET CUBICLES	Cubicle partitions "Kingfisher" post formed or equivalent post formed toilet cubicle system, overall height 2100mm high, comprising 13mm thick compact laminate moisture resistant partitions, 1mm thick in selected white oak sides, 2mm PVC profiled lipping on all visible edges; plywood core with post formed finish, including all necessary matching trims, pedestals, indicator bolts, hinges, buffers, hat and coat hooks etc., assembled and fixed complete including powder coated aluminum post formed laminate fittings, all in accordance with manufacturer's instructions.
FITTINGS	Pre-finished vanity unit, with marble tops, to incorporate recessed wash hand basins and polished bevel edged mirrors to wall over wash hand basins.
HOT AND COLD WATER SERVICES	Hot water for the main toilet areas is supplied from a central solar hot water storage cylinder fed from an array of solar panels on the roof with electric backup. Hot water is provided on a pumped continuous circulation loop to provide instant hot water at all times. City mains Water is provided for drinking water. A Rainwater Storage Tank is located in the Lower Basement and provides the source of water for Grey Water. The Rainwater is filtered/chlorinated and UV treated and is pumped to the toilet areas by means of an automatic booster pump system with variable speed drive. A separate Cold water storage tank and booster set is provided to supply water for hand washing. This tank is fed from the on-site well and this water is also filtered and UV Treated.
VENTILATION	Toilets are ventilated from a central roof mounted Mark Eire air handling unit providing full fresh and exhaust air to the toilets at a rate of 10 air changes per hour with heat recovery and supplementary heat pump for supplying warm air.

SANITARY INSTALLATION	Toilets are fitted out with a full sanitary ware installation using high quality fittings to Architects selection. Concept WCs are dual flush back to wall units. Strada 60cm Wash hand basins are over counter type with Sensoflow sensor activated chrome timed flow taps. Disabled Suites are provided to comply with DOC M Building Regulations.
ELECTRICAL	Lighting is provided low energy 2x26 watt ceiling recessed fluorescent fittings using providing a 100 lux. Light fittings are controlled by ceiling mounted PIR infra-red beam detectors which turn off the lights when there is no activity. There are 3 Air force high output/low energy hand dryers provided for the ladies and 2 for the men's toilets on each floor.

MECHANICAL AND ELECTRICAL SPECIFICATION

ELECTRICAL SUPPLY	The building is fed from two 630KVA sub-station at ground level provided by ESB Networks. A client switchroom is located adjacent to the substation. A 400V three phase power supply will be distributed from the client switchroom to the client offices via distribution cabling to the local distribution board. From their power is distributed to the final socket power outlets and lighting circuits.
TELECOM SUPPLY	External Telecom services are taken directly to the intake rooms by the Telecom suppliers. From their multicore telecom cables are run to the client's offices. Broadband services are available from a number of suppliers.
FIRE DETECTION SYSTEM AND ALARM	The Landlord shall provide an automatic fire detection system covering all common areas. The system shall be fully addressable and shall comply with the requirements of Irish Standard IS 3218:2009 and the requirements of the Fire Officer. Each Tenant shall be provided with an interface unit to enable connection to the Landlord's Fire Detection and Alarm System. Tenants will be required to connect their system to this interface unit using the Landlords selected contractor but at the Tenants expense. The Tenant fire alarm equipment shall be fully compatible with the landlords system and should preferably be identical to the Landlords equipment. The fire detection and alarm systems will be monitored and controlled by the Landlord from the security room. On completion of the installation the tenant will be required to furnish to the Landlord a full set of design, installation and commissioning certificates as set down in IS 3218 2009. Fire Alarm heat detector tape to be provided in the car park to comply with fully with the requirements of Irish Standard IS3218 2009. Code of Practice for Fire Detection and Alarm Systems for Buildings-System Design, Installation, Servicing and Maintenance.
WATER SUPPLY	A 22mm metered Mains Water supply will be brought to the Tenants Unit. This supply will come from a metered manifold in the

	basement and will be connected to the Cork City Council watermain. The Tenant will be responsible for their own internal plumbing installation. An external Fire main is provided around the building. This is fitted with Fire Hydrants suitably located to meet the Building Regulations. It also provides a metered City mains water supply to the building with a mains water meter for each Client.
ACCESS SYSTEM	A computerised Landlord access control system is installed providing access control to designated areas including stairwells. This can be programmed and extended to suit the Clients requirements.
CCTV SYSTEM	A Closed circuit CCTV System is provided covering the Landlord open areas and the lobby areas and car parks. This system is wired back to the Landlord control room for monitoring and can also be viewed on the Web.
BMS	A Landlord building management system is installed in Landlord Areas. This BMS monitors various systems and creates alarms as required. These systems include water pumping systems, water heating, lighting control, Air Conditioning Systems, landlord generator monitoring and metering of power consumption. This BMS is located in the Landlord Security Office
LIGHTING	The Stairwells are fitted with decorative wall lights these are controlled by PIR detectors which turn off the lights when there is no activity. Carpark Lightning to be provided by twin florescent fittings to provide 150 lux and will be controlled by the BMS System. External lighting will be provided around the perimeter. It will be a low energy and low glare system controlled by photocell and BMS System. Emergency lighting will be provided throughout the building complying with the requirements of Irish Standard IS 3217 2008 Code of Practice for Emergency Lighting.

LIFTS

PASSENGER LIFTS	6no Schindler 5500 2.5m/s passenger lifts servicing basement to upper floor levels. Lifts include for Schindler port technology and

	are finished with Shanghai red back painted glass, brushed stainless steel ceiling and doors.
FIREMAN LIFTS	1no Schindler 5500 and 1no Schindler 3300 1m/s fireman lifts servicing ground to upper floor levels. Lifts are finished with brushed stainless steel walls, ceiling and doors.

OFFICE AREA LANDLORD SPECIFICATION

FLOORS	“Dessco Essence” or equal and approved carpet tiles, size 500x500x5mm thick to selected colour on medium duty raised access floor; fixed to base plate 18mm thick, fixed to concrete floor using specialised glue, all in accordance with manufactures instructions.
WALL LININGS	Concrete and block walls finished with 12.5mm "GypLyner Universal" wallboard on “GL1 Lining Channel” with “GL2 Brackets” mechanically fixed to concrete taped and jointed and seals in accordance with manufacturers requirements including fixing tracks, pins, angle beads and the like. Finished with one coat "Sealapore" or equivalent and approved, and two coats "Dulux Easycare".
COLUMN LININGS	12.5mm “GypLyner Universal” wallboard on “Gyproc Lining System” mechanically fixed to steel columns, taped and jointed and seals in accordance with manufacturers requirements including fixing tracks, pins, angles beads and the like. Finished with one coat "Sealapore" or equivalent and approved, and two coats "Dulux Easycare".
CEILINGS	“OWA Sandila” or equivalent mineral fibre tegular edged suspended ceiling tiles, size 600x600x20mm thick laid in and including 24mm organisal coated exposed T-section suspension grid system, all in accordance with manufacturer’s instructions.
LIGHTING	The open plan office area will be provided with 600 x 600mm recessed light fittings with high frequency ballasts with T-5 lamp technology in compliance with ISEN 12464 CIBSE LG7 Code for office lighting. These will be arranged to suit the area and to give a light level of 500 lux up to a maximum of 17 fittings per 100 sqm.
AIR CONDITIONING	The air conditioning system is an air source heat pump type system using VRF (Variable Refrigerant Flow) to heat and cool the open plan floor layout.

	The system uses ceiling mounted cassette units which distribute warm or cool air evenly throughout each area at approximately 110 watts/sqm for a typical open plan layout up to a maximum of one indoor unit per 100 sqm. External condensers for the system are located at roof level. The system provides simultaneous heating and cooling and features inverter control on the outdoor condensers for energy efficiency. The System has a master touch screen controller and also a PC web control interface to control usage and minimize energy consumption. After hours usage can be controlled from the touch screen controller or from the web interface. Fresh and extract air for the open plan areas is provided by means of ceiling mounted high efficiency heat recovery units which distribute fresh air to the ceiling cassettes and extract air from the ceiling void providing 10 litres per person per second based on 10 people per 100m2.
FIRE ALARM	The offices are fitted out with smoke detectors to a open plan layout at 1 per 100m2, break glass units to all exit points and sirens all wired back to the fire alarm control panel located at reception. This panel is also linked to the overall master fire alarm panel in the ground floor entrance. The fire Alarm System is installed to comply with the requirements of Irish Standard IS3218 2009. Fire Detection and Alarm Systems for Buildings-System Design, Installation, Servicing and Maintenance. The landlord system is installed to a standard of L2/L3 which can be enhanced to L1 standard if required by future tenants.
MAIN POWER	The Building has two 630kva substations. Three phase power at 400 volts will be provided to each tenant's demised area. This power will be run from the remote metering switch room on site. A power allowance of 100Watts /sqm has been allowed for.
TELEPHONE WIRING	Multicore Telephone wiring with a generous number of cores will be run from the central telecoms room to a point in each unit. The tenant will be responsible for applying for their own connection and for termination at each end.

THE LETTING AGENTS

SAVILLS

Savills Cork
11 South Mall
Cork
+353 (0) 21 427 1371
cork@savills.ie

Savills Dublin
33 Molesworth Street
Dublin 2
+353 (0) 1 618 1300
info@savills.ie

DTZ

Peter O'Flynn
Director
Email: peter.oflynn@dtz.ie
Mobile: 086 250 7944
Tel: 021 4275454

Seán Healy
Director
sean.healy@dtz.ie
Mobile: 086 240 0153
Tel: 021 4275454