

L-03 + 04 LEVELS BIO-DIVERSE SEMI-INTENSIVE BLUE ROOF 'HARD' LANDSCAPE MATERIALS - OUTLINE SPECIFICATION KEY

- Levels, boundaries, crossings, retaining walls, paving bedding + sub-bases, geotextiles, drainage channels, gullies etc to engineers' and architects' design detail and specification.
- PAVING: PODIUM PERMEABLE PEDESTRIAN PATHS**
Pre-cast concrete paving 80mm depth, random width and length 'Pembroke Eco' in Ground Silver Granite finish in 5-size mix by Kilsaran to gathering space. Paving to be open jointed with 'SUDSFLOW' plastic spacers filled with 3mm down to dust jointing grit to free-draining bedding + sub-base to engineer's design, detail and specification.
 - PODIUM RAISED PLANTERS - CORTEN EDGING**
Varying height weathering steel (cor-ten) 5mm thick edging to form raised planters on roof garden podiums. Each podium to be provided with 2 no. external taps for watering. Provide fixing to concrete foundations poured into egg-crate combination drainage/irrigation based on podium. Fill planter with FLL certified light-weight growing medium suitable for a bio-diverse, extensive or intensive roof as appropriate.
 - STREET FURNITURE - ROOF PERGOLA SHELTERS**
Rabat® aluminium modular pergola shelters or equivalent approved with retractable covers (tall cover with side drainage) and integrated perimeter downpipes to allow water drainage. Cover to be operated by remote control and be water-proof, fire-resistant and UV-stable to provide year round protection from sun, rain and wind. LED lighting lines to be provided on the perimeter of the pergola's roof structure. Integrated electrical system with external power sockets integrated in support posts. Pergola structure to be painted with colour 'Olive Grey' RAL 7002. Provide glass wall to one side of each pergola bay structure.
 - STREET FURNITURE - SEATS + BENCHES**
'Drifter' seats, benches and picnic sets by Streetlife NL in standard lengths of 2.00m and 3.00m with galvanised steel frame supports (finished with a double layer powder coating), provided with 1.8m length back-rests to 2.00m seats with a variety of L1 (300mm depth) + L2 (620mm) seat widths. Recycled 100% hardwood.
 - SCULPTURE LOCATION - PODIUM COURTYARD**
Graphic denotes suggested location for contemporary art sculpture at focal areas throughout the proposed development
 - ROUNDED GRANITE BOULDERS**
Rounded glacial granite erratic boulders with chamfered smooth or rounded edges to act as informal seating element/rain-filled bird baths. Sharp edges deburred. Boulders of 0.75m diameter set 0.30-0.40m deep into landscape finish and fixed securely. Max 0.60m ht.
 - DRAINAGE STRIP - BASE OF ELEVATIONS + PARAPETS**
500mm width, min. 150mm depth layer of 10-20mm diameter washed and graded pea gravel at roof penetrations, along parapets and at base of elevations. 50x150mm pressure-treated edging to separate growing medium and planting. To FLL standards.
 - STREET FURNITURE - INDICATIVE FEATURE LIGHTING LAYOUT**
Layout of lighting posts and bollards to M+E's design to comply with CIBSE standards.
 - City Elements 200' modular lighting system 200mm Ø illuminating cast aluminium and PMMA column with LED lamps by Hess in varying heights as per M+E's detailed design to illuminate open space and approach paths; indicative layout only. Column to contain loudspeakers, cameras, spotlights, WLAN, gobos, power and one mains water connection per foot.
 - Planting up-lighters with spike fixing, e.g. IP-65 rated 'Octan' by FibreLED in warm white LED colour, brown finish.
 - In-ground recessed LED luminaires finished flush set in paving to M+E's design detail + specification, eg. IP66-rated 'Pavo Slim' in 'milky' finish by FibreLED
 - INTENSIVE PLANTING - AUTOMATED DRIP FED IRRIGATION**
Provide automated drip-fed irrigation via 16mm Ø dripper line pipes to tree planter boxes (intensive green roof areas), using dripper lines supplied with water by an irrigation manager as required.
 - PODIUM AND 'GREEN' ROOF SPECIFICATION**
CE-marked ETA-13/0668, FLL compliant green roof build up to meet the European Technical Assessment 'Kits for Green Roofs'
GRO compliant system, to comply with BS 6229:2018
Overflow outlets designed in accordance with BS EN 12056-3:2000
Growing medium substrate to BS 8616
 - STREET FURNITURE - CYCLE SHELTERS (8 SPACES EACH)**
'Bx Bike Shelter' (with 4 no. cycle stands to provide 8 no. cycle parking spaces in each shelter) by Green Roof Cycle Shelters or EQA, 3.70x2.25x2.00x2.078m LxWxHxD with green roof substrate, planting, external wildlife panels for solitary bees and invertebrates, and bird nesting boxes
 - IRRIGATION SYSTEM + TAP (FOR PODIUM ROOF SITUATIONS)**
Automated drip-fed pop-up irrigation system by Irritec or equivalent approved, fed from special water tank, inspection chambers & drainage gullies by Bauder. Provide 1 no. watering tap to each space.



LANDSCAPE MASTERPLAN - LEVEL 03
SCALE 1:200@A1

L-03: 'SOFT' LANDSCAPE MATERIALS - OUTLINE SPECIFICATION KEY

- Refer to Planting Details, Planting Schedule and Planting Maintenance programme. 24-month long landscape maintenance and LA-certified Defects Liability Period required post-Practical Completion. The planting stock should be sourced from a reputable supplier and be of Irish origin/provenance.
- BIODIVERSE EXTENSIVE GROWING MEDIUM (FOR PODIUM ROOF SITUATIONS)**
Specified planting on 75mm depth medium-grade bark mulch topping to planter bed. Enrich 'semi-intensive' growing medium + Bauder 'egg-crate' build-up to planters: 200mm depth FLL semi-intensive Substrate lightweight growing medium, ca. 1250kg/m³ on FLL 1mm polypropylene filter fleece, ca. 105kg/m³ on FLL 40mm expanded polystyrene drainage board, ca. 0.65kg/m³ on FLL 4mm polyester & polypropylene fibre mix protection mat, ca. 1.3kg/m³ on FLL 2 layers 0.2mm polyethylene foil separation layer, ca. 190g/m³.
 - BIO-DIVERSE ROOF FEATURES**
include a variety of features such as hollow log piles, different substrate types such as low (350mm ht.) mounds of sand and rubble, piles of cleaned bricks 350mm ht., piles of local cobbles in mound max 350mm ht., different vegetation layers and spaces for shelter such as Schwiegler nesting boxes
 - TREES (SUITABLE FOR PODIUM ROOF)**
Pinus parviflora 'Glauca' 4xtr/wrb/2.5-3.0m ht
Trees to be secured using an 'underground guying' system and secured in place with 3 no. 'dead-man' kerbs and an RF2 'Plati-Mat' by Platius Tree Anchoring Systems for multi-stemmed trees 2.5-4.5m height, designed for installation on podium roofs, with rootball irrigation and ventilation.
 - BIO-DIVERSE EXTENSIVE/INTENSIVE ROOF PLANTING**
CG p6, 1L, 2L, 3L 3-9m² density
Perennial pollinator-friendly container-grown plants to planter beds with a diverse mix of ornamental grasses, bulbs, corns, ferns, ground-cover plants, sedums and flowering perennials of both native cultivars and exotic species to ensure a pollinator-friendly planting mix in line with the 'National Pollinator Plan'. These plants should establish quickly requiring minimised maintenance.
Planters to be gently mounded to achieve sufficient planting depth for trees. All planters to have raised edges of corten steel to provide sufficient growing medium.
 - PODIUM OR 'LIVING' ROOF BUILD-UP**
 - Vegetation:** native seed and plug mixes used in combination with other habitat features
 - Biodiverse Substrate:** Lightweight growing medium extensive type substrate by Bauder or equivalent approved manufactured to FLL guidelines, typically 150mm deep.
 - Filter fleece:** polypropylene fleece to prevent substrate fines from entering the drainage layer - 1mm deep
 - Drainage Layer:** 'DSE40' or equivalent approved water storage and drainage layer infilled with Bauder Mineral Drain
 - Drainage Void Former:** 'Attenuation Coll 100' 100mm thick multi-directional drainage layer by Bauder, which can hold 95L/m² (95% void space)
 - Protection Layer:** 'FSM 1100' by Bauder or equivalent approved to prevent mechanical damage to the waterproofing system.
 - Flow Restrictor:** 'Bitumen Blue Roof Flow Restrictor and 'ALY 250' Inspection Chamber
 - Emergency Overflow:** 'Parapet Emergency Overflow DN 70' fitted through parapet wall to drain roof water into gutter to act as a 'fall' take of the level of water on the roof
 - Waterproofing:** to architect's design detail and specification, to be specified with root-resistant properties
 - BIRD NESTING BOX**
Wood/concrete bird nesting box 'Nest Box 2GR' with galvanised steel hanger by Schwiegler, with three hole 27mm Ø entrances to support Blue, Marsh, Great and Crested Tits. Due to the small size of the entrance hole no other species can occupy it. An additional recess for Bats has been created inside the roofspace.



LANDSCAPE MASTERPLAN - LEVEL 04
SCALE 1:200@A1

This drawing is the copyright of studioAULA landscape architects. This drawing must be read in conjunction with all relevant design team and surveyor's drawings, details and specifications. Unless otherwise stated all dimensions are in millimetres. Where dimensions are not given, drawings must not be scaled and the matter must be referred to the Landscape Architect. Similarly if the drawings contain conflicting details or dimensions.
If the drawing includes conflicting details/dimensions the matter must be referred to the Landscape Architect.
All dimensions must be checked on site prior to construction or fabrication.
The Landscape Architect must be informed, by the Contractor, of any discrepancies before work proceeds.
This drawing has not been prepared for BCAR, BCMS or DAC purposes, and has not been prepared to demonstrate compliance with the Building Regulations.

LANDSCAPE - NUMBERED KEY

- Raised planters** edged with weathering steel to contain intensive type vegetation, dwarf Pine trees, growing medium, tree anchoring systems and attenuation void formers for stormwater attenuation (total build-up depth 800mm). Planters to be gently mounded to accommodate different planting depths
- Gathering spaces** of Communal Amenity Open Space roof gardens paved with permeable natural stone paving laid with proprietary green roof paving spacers on permeable sub-base on combined egg-crate drainage board laid on the podium roof and root-resistant water-proofing, provided with varieties of seating elements
- Pergola structures** of aluminium suitable for roof gardens to provide all-weather shelter and to provide gathering spaces for groups. Pergolas to be provided with power and drinking water supplies, and illuminated with LEDs at night.
- Gravel strip** 300-500mm width perimeter drainage strip of pea gravel, provided with min. 1 no. overflow pipe detail through building parapet
- Junior children's playspace min. 85m²**
- Senior children's playspace min. 200m²**
- Location of privacy screening** to architect's design detail and specification

L-04: LEVEL AMENITY PLAY LANDSCAPE MATERIALS - OUTLINE SPECIFICATION KEY

- Warranty and guarantee to be provided for equipment as follows: up to 8 years for support posts of boiler impregnated wood; up to 10 years for support posts of larch, oak and robinia; up to 15 years for support posts of concrete and metal; 2 years for all moveable parts, metal fixings and ropes.
Play equipment by Richter Spielgerate, supplied by TimberPlay or equivalent approved. All play equipment where possible to specified as larch with steel feet detail option for durability reasons in climate and context. Concrete foundations to equipment to engineer's design detail and specification. All play equipment to be tested and installed to meet requirements of EN 1176 and 1177. All safety surfacing to be tested and installed in accordance with requirements of EN 1176 and 1177.
- JUNIOR CHILDREN'S PLAY SPACE - PLAY EQUIPMENT**
Larch with steel feet wooden play equipment by Richter Spielgerate selected to provide a play and art point for children of all abilities, designed, manufactured and installed to EN 1176 and EN 1177. Equipment foundations detailed for podium installation. Selected equipment is:
 - '4.66060 Stroking Stone Dog' in natural concrete colour
 - '4.11004 Platform House' with a Platform, House, Slide, Ladder and Inclined Climbing Net as well as basic furnishings at ground level like a table and benches. Provide two additional inclusive play walls at podium level with blackboard + opening windows, with a turning crane and sand chute connecting the upper and lower level for loose materials and communicative play.
 - '5.01200 Sand Tapper' (for inclusive play with loose parts)
 - '5.05250 Turning Crane' (for inclusive play with loose parts)
 - OLDER CHILDREN'S PLAY SPACE - PLAY EQUIPMENT**
Larch with steel feet wooden play equipment and stainless steel/oxidised aluminium by Richter Spielgerate, selected to provide sense-stimulating interactive art points for children of all abilities. Equipment foundations detailed for podium installation. Selected equipment is:
 - '10.23100 Kaleidoscope' - visual sensory stimulation
 - '10.53002 Double Dendrophone' - acoustic sensory stimulation
 - OLDER CHILDREN'S PLAY SPACE - PLAY EQUIPMENT**
Larch with steel feet wooden play equipment by Richter Spielgerate, selected to provide dynamic climbing and resting play for older children. Equipment foundations detailed for podium installation. Selected equipment is:
 - '6.51009 Climbing Structure 09' - dynamic adventurous play and resting or observation in the natural coloured rope net
 - Climbing Structures made from hand-processed irregular round logs, can be integrated into a strongly nature-oriented environment due to their formal expressive character. Many children can play within a small space. Climbing Structures can even absorb the arrival of a large number of children who wish to play on it and incorporates all of them within a flowing play rhythm. Climbing Structures do not only allow for climbing, experiencing height and for having a sensual experience with hands and feet, but they can also be used as a nice seat for relaxing and observing.
 - STREET FURNITURE - CONCRETE STOOLS + TABLES**
Modular stools and chess table by Cassidy Brothers Donegal to support socialising of residents. Street furniture formed of moulded concrete with a polished finish on upper surfaces, etched finish elsewhere, all surfaces waterproofed. Tables and stools to be anchored with threaded rods to foundations to engineer's design detail and specification. Colour to be 'CP White'.
 - PLAYSPACE SIGNAGE: BOULDERS**
Primarily graphic and inclusively designed sign placed at playspace entrance to contain ROSPA guidance on playspace signs and to comply with signage requirements contained in documents including BS 8300, and EN 17210 AND SR CENTRE 17621:2021.
Name of individual playspace to be illustrated bilingually in a sans serif font, with the graphics to contain isometric views of the playspace so that children can understand how to use and move within the space. Pictorial graphics applied to a 800mm Ø hot-dip galvanised mild steel board when fixed to a boulder. Sign to be fixed securely at an angle to reduce visual glare and height suitable for viewing in particular by children or by people using a wheelchair or mobility device.
 - PODIUM PAVING (PERMEABLE) - EPDM WET-POUR IAASS**
EPDM rubber impact-attenuating safety surfacing (IASS) to podium playspace area in permeable wet-pour type laid in total contours to echo a forest clearing, permeable surfacing installed and certified to EN 1177. Gently mounded to create little hummocks for babies and toddlers to crawl and roll on. Detail a 'sieve' to be filled with a play quality pea-gravel to the edge of each larch pole on the podium to assist annual inspections of foundations.



Open Space Area Schedule

Name	Level	Area
CRECHE PLAY SPACE	B1	236.3 m²
PUBLIC OPEN SPACE	B1	53.9 m²
PERIPHERAL AREA	B1	29.5 m²
PERIPHERAL AREA	B1	11.3 m²
PUBLIC OPEN SPACE	G2	129.5 m²
PERIPHERAL AREA	G2	218.3 m²
PRIVATE COMMUNAL AMENITY SPACE	O1	467.6 m²
PRIVATE COMMUNAL AMENITY SPACE	O2	30.9 m²
PRIVATE COMMUNAL AMENITY SPACE	O3	168.5 m²
PRIVATE COMMUNAL AMENITY SPACE	O4	295.9 m²

Public Open Space % of Site Area Schedule

Name	Area	% Percentage of Site Area
PUBLIC OPEN SPACE	1347.4 m²	29.3
TOTAL SITE AREA	4605.6 m²	100

Quantum Open Space Areas

- CRECHE PLAY SPACE
- PERIPHERAL AREA
- PRIVATE COMMUNAL AMENITY SPACE
- PUBLIC OPEN SPACE

ABOVE: Quantum of Open Space Table by OMP Architects

STUDIO AULA
ARCHITECTURE | URBANISM | LANDSCAPE ARCHITECTURE

Client: Blumont Developments (Firhouse) Limited
Project: FIRHOUSE INN SHD
Drawing: LANDSCAPE PLAN - LEVEL 03 OF ROOF GARDEN + LEVEL 04 ROOF PLAYSACE

Issue Status: **PLANNING**
Drawing No: 21_477_05-04
Revision: K
Date Issued: 2022-05-27
Scale: 1:200
Sheet: A1

Project Architects: OMP ARCHITECTS