

NOTE I. - EXTENSIVE BIODIVERSE GREEN ROOF

1. Roof structure, waterproofing and protection to be specified by engineer.
2. Drainage layer - 25mm deep-water retaining drainage layer manufactured out of either recycled polypropylene or polystyrene. Profiles to permit excess water to drain in any direction beneath, with a minimum flow rate of 0.3l/m²/sec. Boards to be close butted to form a continuous drainage layer over the deck.
3. Filter Sheet - Specified filter fleeces type 200, better suited for extensive green roofs, roll out filter sheet over the drainage layer. Laps to be minimum 100mm. Filter sheet to be taken up around all up stands, protrusions etc. to substrate surface level.
4. Main substrate: Extensive crushed brick substrate, consisting of 80% crushed clay brick and 20% organic matter (Locally sourced Green waste), to be installed at a depth of 150mm, but taking into account compaction rates associated with the substrate supplied by the contractor. Assuming a 15% compaction rate, laid depths will be 175mm (for a finished depth of 150mm). Estimated pH value of 8.4. Estimated weight of 130kg per sqm at 150mm deep when dry, 216kg per sqm at 150mm deep when fully saturated.
5. Seed - The seed mix for the substrate will consist of all the wildflowers listed in the table below. These will be sourced from certified native seed stock such as from Emorsgate (or alternative approved by the green roof consultant) and be hydro-seeded at a rate of 2g/m².

Wildflower seed list for main substrate

Agrimony (*Agrimonia eupatoria*), Kidney Vetch (*Anthyllis vulneraria*), Common Knapsweed (*Centaurea nigra*), Wild basil (*Clanopodium vulgare*), Viper's-bugloss (*Echium vulgare*), Lady's Bedstraw (*Galium verum*), Perforate St John's-wort (*Hypericum perforatum*), Field Scabious (*Knautia arvensis*), Autumn Hawkbit (*Leontodon autumnalis*), Rough Hawkbit (*Leontodon hispidus*), Oxeye Daisy (*Leucanthemum vulgare*), Common Toadflax (*Linaria vulgaris*), Bird's-foot-trefoil (*Lotus corniculatus*), Musk-mallow (*Malva moschata*), Wild Marjoram (*Origanum vulgare*), Hoary Plantain (*Plantago media*), Cowslip (*Primula veris*), Selfheal (*Prunella vulgaris*), Meadow Buttercup (*Ranunculus acris*), Bulbous Buttercup (*Ranunculus bulbosus*), Wild Mignonette (*Reseda lutea*), Salad Burnet (*Poterium sanguisorba*), Bladder Campion (*Silene vulgaris*)

Plug-planted sedum list for main substrate

White stonecrop (*Sedum album*), Biting stonecrop (*Sedum acre*), White stonecrop (*Sedum anglicum*)

Plug-planted wildflower list for main substrate

Kidney Vetch (*Anthyllis vulneraria*), Oxeye Daisy (*Leucanthemum vulgare*), Bird's-foot-trefoil (*Lotus corniculatus*), Bulbous Buttercup (*Ranunculus bulbosus*), Salad Burnet (*Sanguisorba minor*), Autumn Hawkbit (*Leontodon autumnalis*), Viper's-bugloss (*Echium vulgare*), Rough Hawkbit (*Leontodon hispidus*), Common Toadflax (*Linaria vulgaris*), Musk-mallow (*Malva moschata*), Hoary Plantain (*Plantago media*), Selfheal (*Prunella vulgaris*), Meadow Buttercup (*Ranunculus acris*), Wild Mignonette (*Reseda lutea*), Bladder Campion (*Silene vulgaris*), Hare's Foot Clover (*Trifolium arvense*)

NOTE II. - SEDUM MINIMUM MAINTENANCE GREEN ROOF

1. Bauder XF301 28mm deep Sedum blanket or Similar
2. Bauder SDF 20mm Matt or Similar
3. Bauder root resistant capping sheet or Similar
4. Bauder underlayer or Similar
5. Bauder Insulation or Similar
6. Bauder Vapour Barrier or Similar
7. Concrete Slab to Engineers and Architect details

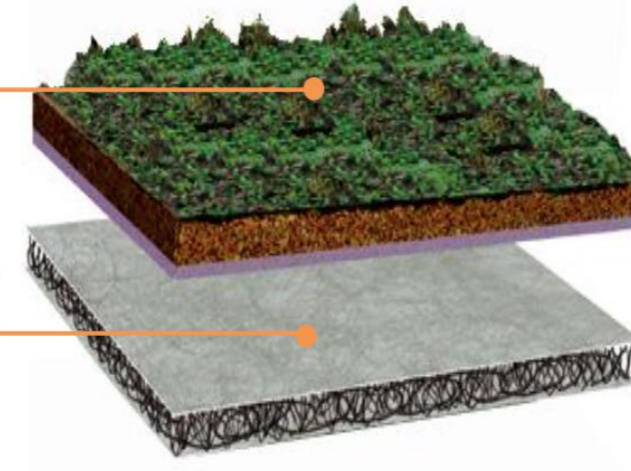
Bauder Specification/Drawings below:

Bauder XF301 Sedum Blanket

is a pre-cultivated vegetation blanket on a patented nylon loop and geo-textile base carrier with special substrate and a pre-attached integral 8mm moisture retention fleece.

Bauder SDF Mat

is a multifunctional drainage, filtration and protection layer manufactured from ultraviolet resistant nylon woven loops which are thermally bonded to geo-textile filter fleece facings.



**Weight Loading
Based on 1-2° pitch**

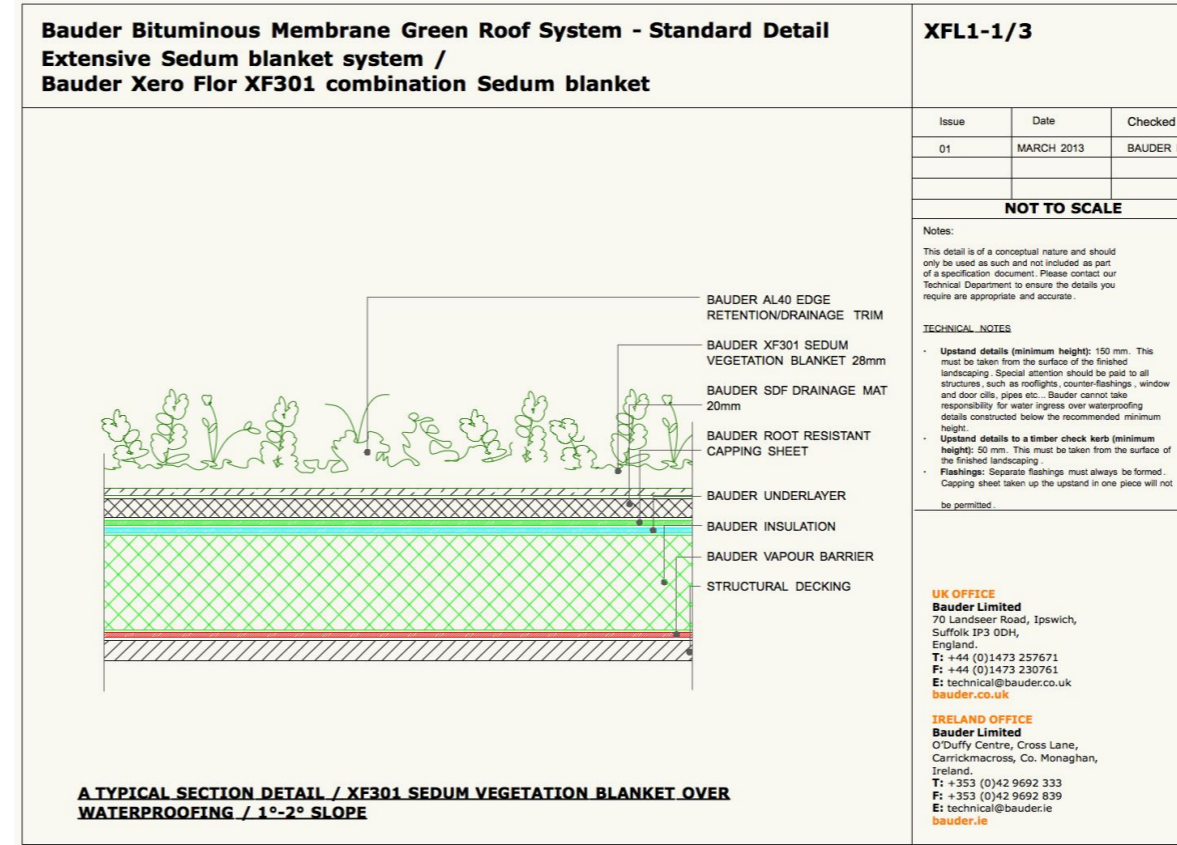
Product	Thickness (mm)	Saturated Weight (Kg/m ²)
Bauder XF301 Sedum Blanket	28.0	44.0
Bauder SDF Mat	20.0	0.2
Totals	48.0	44.2

Enviromat - Species

White Stone Crop (*Sedum album*), Stonecrop-Russian (*Sedum kamtschaticum*), Widow's Cross (*Sedum pulchellum*), Sedum Reflexum (*Sedum reflexum*), Caucasian Stonecrop (*Sedum spurius*), Tasteless Stonecrop (*Sedum sexangulare*), Golden Stonecrop (*Sedum acre*)

Sedum - Plugs

White Stone Crop (*Sedum album*), Biting Stonecrop (*Sedum acre*), Corsican stonecrop (*Sedum dasyphyllum*), Spanish Stonecrop (*Sedum hispanicum*), Stone orpine (*Sedum rupestre*)



NOTES

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2. Do not scale from this drawing.
3. All dimensions in millimetres unless otherwise shown.
4. All levels in metres above Ordinance Datum (mAOD) unless otherwise shown.
5. All dimensions to be checked on site and any discrepancies reported to CA before pricing / work starts.
6. Any ambiguities or discrepancies within this drawing or between this drawing and any other information given elsewhere must be reported to Camlins and the CA for clarification before pricing / work proceeds.
7. All drawings to be read in conjunction with other Camlins drawings and specification and with relevant Engineer's and Architect's work packages as appropriate.
8. All works carried out in accordance with the latest British Standards and appropriate codes of practice as a minimum.

KEY

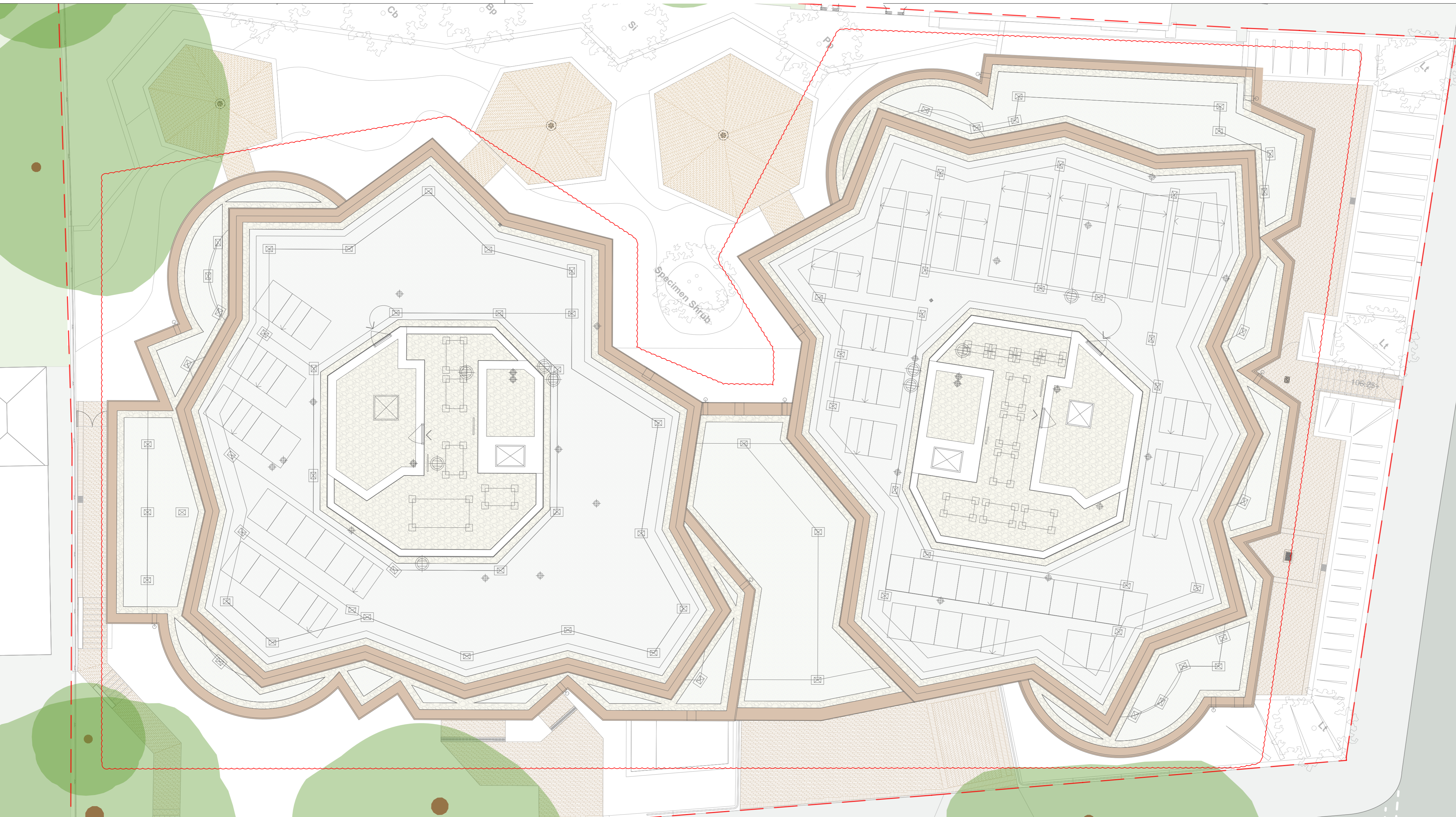
- Photovoltaics (PV) panels
See Max Fortham information
- Architectural coping
- ManSafe roof system
- River Pebble / Duck Stone Surface As Ground Cover
Rounded stones nominal 70mm - 30mm
- Extensive biodiverse green roof (See Note I.)
472.76m²
- Sedum minimum maintenance green roof (See Note II. for suggested specification)
246m²
- Aluminium Edge. Kinley AluExcel or equivalent approved.

All green roofs include ManSafe System for maintenance.

Architectural and Structural information shown is indicative only. Contractor external designer to co-ordinate with current Architectural and Structural information.

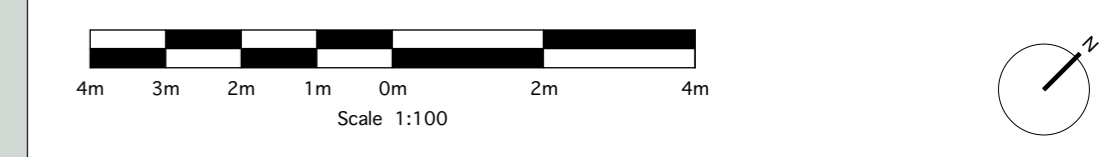
All growing medium, drainage and planting on roof are to be part of contractor design for roof system. Contractor design for roof system to determine future maintenance.

For exact details on foundations / Build-ups / Structural information etc please refer to Engineers and Architects details.



Revisions

Rev:	Date:	Description:	Revised by:	Checked by:
1	14/04/2016	Roof plan updated to match architectural layout	LC	PSS



EMPLOYERS REQUIREMENTS
FITZJOHNS AVENUE
PEGASUS LIFE

General Arrangement - Roof Plan

Drawing No.:	Revision:	Scale:	Date:
LL489-400-0002	1	1:100@A1	18.03.2016

Drawn by: JN/LC
 Checked by: PSS