



**Former Mount View Surgery,
Bridge Street, CF48 4QU**

Landscape and Ecological Management Plan

December 2024

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PLANS

PLAN 1: LOCATION PLAN

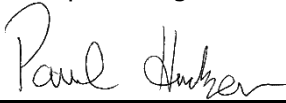
PLAN 2: DEVELOPMENT PROPOSALS

PLAN 3: FLOOR PLANS

PLAN 4: MITIGATION PLAN

PLAN 5: LIGHTING PLAN

DOCUMENT CONTROL

Former Mount View Surgery, Bridge Street, CF48 4QU Landscape and Environmental Management Plan				
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1. Introduction

1.1. Brief

This report presents a Landscape and Environmental Management Plan (LEMP) Plan for Former Mount View Surgery, Bridge Street, CF48 4QU within the boundary of Merthyr Tydfil County Borough Council. (Ordnance Survey Grid Reference centred at: SO 0719 0020)¹.

The site location is displayed in Plan 1.

1.2. Proposed Works

The development proposals involve the conversion and increased height of the present building into two residential flats and will include the erection of a bin store and enclosures, as well as associated parking for five cars.

The proposed development plan is provided in Plan 2.

1.3. Site Description

The site proposed for development comprises one derelict structure, referred to throughout the remainder of this report as the Former Surgery building, with the majority of the surrounding area within the red line boundary comprising bare ground.

The site is located on the eastern edge of the village of Aberfan, approximately 6.5km south of the town of Merthyr Tydfil. Open fields lie 0.1km to the east and 0.2km to the west of the site. The River Taff is 0.06km to the east of the site. The wider landscape to the north and west of the site is largely residential housing.

1.4. Relevant Planning Conditions

The purpose of this report is to support the planning application submitted under reference P/24/0026².

A long-term landscaping management and maintenance plan has been requested as part of the planning application:

"As this is essential for demonstrating a Net Benefit for Biodiversity (NBB) within the Green Infrastructure Statement, a landscaping scheme accompanied by a long-term management of maintenance plan, will need to be provided prior to determination it must use native species, of local (if not Welsh/UK) provenance only and must follow the criteria as set out in Planning Policy Wales 12 (PPW 12), e.g., "The management plan should set out the immediate and on-going management of the site, future monitoring arrangements

¹ Latitude and Longitude: 51.692852, -3.3441372 / what3words: poetry.worm.jungle

² [P/24/0026 | Convert and increase height of building to provide 2 flats, to include the erection of a bin store and enclosures | Former Mount View Surgery Bridge Street Aberfan CF48 4QU \(merthyr.gov.uk\)](#)

for all secured measures and it should clearly identify the funding mechanisms in place to meet the management plan objectives.”.”

The content of the LEMP shall include, but not be limited to, the following:

- Immediate and on-going management of the site;
- Future monitoring arrangements for all secured measures; and
- Funding mechanisms in place to meet the management plan objectives.

1.5. Associated Documents and Reports

The LEMP builds on and complements, without attempting to duplicate the following documents which should be read in conjunction with the LEMP:

- Acer Ecology Ltd – Bat and Nesting Bird Survey Report, Revision 3.0 – Former Surgery, Aberfan – 5th March 2024; and
- Acer Ecology Ltd – Green Infrastructure Statement, Revision 5.0 – Former Mount View Surgery, Bridge Street, CF48 4QU – 28th November 2024.

1.6. Aims

This report sets out how the valuable ecological features of the site will be managed and enhanced to increase the value of the site for wildlife. Subsequent management and monitoring measures will be put in place to ensure the benefits are long-lasting.

The overall aim of this report is to ensure that certain features of biodiversity value on the site are protected during construction and that the potential biodiversity value of the operational site is realised.

1.7. Reporting

The management plan includes the following elements:

- a) Description and evaluation of features to be managed and enhanced;
- b) Ecological trends and constraints on site that could influence management;
- c) Aims and objectives of management;
- d) Appropriate management options for achieving aims and objectives and prescriptions for management actions;
- e) Prescriptions for management actions;
- f) Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period);
- g) Body or organisation personnel responsible for implementation of the plan;
- h) Monitoring, contingencies and remedial measures; and
- i) Legal and funding resources and mechanisms to ensure sustainable long-term management delivery.

2. Description and Evaluation of Features to be Created and Managed

2.1. Description of Features

The site consists of a single-storey building and bare ground with negligible ecological value. However, the Former Surgery building proposed for conversion is known to support roosting bats and nesting birds. To compensate for their loss as a result of the development, mitigation measures for roosting bats and nesting birds will be integrated into the new design.

Japanese knotweed (*Fallopia japonica*) is present within the development site. Measures for its eradication will be detailed in a method statement prepared by a professional invasive non-native species specialist contractor.

Photo 1: Southern Elevation of Former Surgery Building



Photo 2: Eastern Elevation of Former Surgery Building



The following habitats on site will be created and managed:

- Two bird nesting boxes installed on the eastern external wall of the new building;
- Two pole mounted bat roosting boxes;
- One bat tube incorporated into the northern external wall of the new building;
- Designated bat loft areas within the new building;
- Hedgerow planting around the perimeter of the site;
- Provision of lawn area; and
- Provision of new trees and shrubs.

2.2. Existing Features

2.2.1. Bare Ground

The majority of the site comprises bare ground, with evidence of the site being cleared before the survey work, outlined in Section 1.5 above, was conducted. The central and eastern portions of the bare ground

will be lost and replaced with new planting on the eastern boundary and a lawn area comprising of species-rich grassland, detailed in Section 2.3 below. The southern section of the bare ground will be replaced by hardstanding for the provision of a new car parking area and bike store.

2.3. Newly Created Features

2.3.1. Species-rich Grassland/Lawn Area

An area of the existing bare ground in the eastern and central sections of the site will be managed to create and maintain a new lawn area comprising of species-rich grassland.

Photo 3: Species-rich Wildflower Grassland



2.3.2. Tree and Shrub Planting

Trees will be planted along the eastern boundary and alongside the permeable paving path in the central section of the site. The tree species will include scattered downy birch (*Betula pubescens*), wych elm (*Ulmus glabra*), and sessile oak (*Quercus petraea*).

Shrub species, such as wild privet (*Ligustrum vulgare*), common hawthorn (*Crataegus monogyna*), and common holly (*Ilex aquifolium*), will be planted along the eastern and southern boundaries, as well as along the path leading from the proposed parking area to the building forming hedgerows. Additionally, common juniper (*Juniperus communis*) will be planted near the front doors of flats 1 and 2.

The locations of these plantings are shown in Plan 2.

2.3.3. Nesting Bird Enhancement

The site will be enhanced for nesting birds by the installation of one Vivara Barcelona WoodStone Open Nest Box and one Schwegler 1SP Sparrow Terrace (or suitable alternatives) on the eastern side of the new building (Plan 4) to mitigate for the loss of nesting habitat within the building.

Photo 4: Vivara Barcelona WoodStone Open Nest Box Photo 5: Schwegler 1SP Sparrow Terrace Box



2.3.4. Roosting Bat Enhancement

Bat roosting opportunities on site will be enhanced by the incorporation of one Schwegler 2FR bat tube (or suitable alternative) into the exterior wall of the northern gable end of the new development.

Additionally, two voids will be retained in the eastern and western sides of the roof to create two eaves roosts for brown long-eared bats (*Plecotus auritus*). Although it is considered unlikely the building is being used as a maternity roost, the provision of these two voids will provide adequate compensation if that were the case.

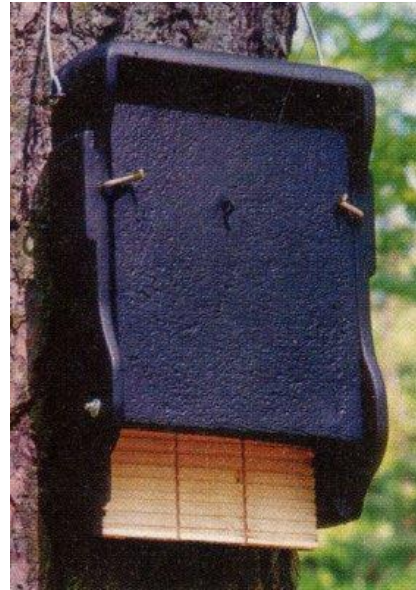
In advance of the works, as there are no trees on site, two Schwegler 1FF bat boxes (or a suitable alternative) will be mounted on poles erected within the grounds of the site to provide compensatory roosting habitats during the construction period for any vesper bats which may be displaced as a result of the works.

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Photo 6: Schwegler 2FR bat tube



Photo 7: Schwegler 1FF bat box



3. Ecological Trends and Constraints On-site That Could Influence Management

3.1. Natural

3.1.1. Non-Native Species

Without appropriate site management, non-native and invasive species such as buddleia (*Buddleja davidii*), an invasive species commonly found within urban settings, may colonise and dominate the areas of planting over a relatively short period of time and reduce biodiversity, impacting the ecological functionality of the site.

3.1.2. Hedgerow Planting

Hedgerows to be planted may need long term management to prevent overcrowding by non-hedgerow forb species or die-off in the first few years, this will need to be managed. High nitrogen fertilisers may need to be used to encourage growth of the newly planted hedgerow. The use of mulch will be needed to reduce weed growth, that is likely to be prolific on this site.

3.1.3. Birds Nesting

There is potential for birds to use the new hedgerows and trees for nesting once they are established. Nest disturbance must be avoided and minimised, and management activities such as pruning or weeding that may be required for areas where active nests are present must not be undertaken during the nesting season from March to September, and management work postponed until the young have fledged.

3.1.4. Weathering

Gradual weathering or storm damage to the newly installed bird and bat boxes could result in the failure of the boxes. A degree of monitoring will ensure that any damaged, destroyed or lost boxes are replaced and remain viable.

3.2. Artificial

3.2.1. Increase of Human Activity on Site

Inappropriate or insensitive management of features considered to be of biodiversity value has the potential to reduce the biodiversity value of the site. For example, damage to trees and hedges via careless activities such as driving over roots or collisions, insensitive or excessive mowing of grasslands, unnecessary use of fertilisers or inappropriate hedgerow management. Inappropriate or insensitive management may negatively impact upon protected and threatened species such as bats, nesting birds and hedgehogs.

3.2.2. Light Spill

Uncontrolled light spill may impact upon foraging bats and other nocturnal wildlife. Increased levels of excessive artificial lighting as a result of construction works and incidental light levels emanating from the residential properties and infrastructure is likely to reduce the suitability of the site and surrounding habitats for foraging bats. To address this, a sensitive lighting strategy has been outlined in the Final Bat and Nesting Bird Report (Acer, 2024).

4. Aims and Objectives of Management

The following objectives have been identified which, when achieved, will ensure the overarching aims of the LEMP are achieved.

4.1. Management Objective MO1: Creation and Management of Species-Rich Grassland

Areas of bare ground will be cleared in preparation to sow a native species-rich seed mix suitable for the soil type to enhance the floristic diversity of this habitat.

4.2. Management Objective MO2: Creation and Management of Native Hedgerow

To compensate for the historic loss of habitat on site, hedgerow planting will occur along the eastern and southern boundaries, as well as along the path leading from the proposed parking area to the building.

4.3. Management Objective MO3: Planting and Management of Scattered Trees

Trees will be planted along the eastern boundary and alongside the permeable paving path in the central section of the site.

4.4. Management Objective MO4: Enhancement for Nesting Birds

To compensate for the loss of bird nesting opportunities within the building, one Vivara Barcelona WoodStone Open Nest Box and one Schwegler 1SP Sparrow Terrace (or suitable alternatives) will be installed on the side of the new building.

4.5. Management Objective MO5: Enhancement for Roosting Bats

To compensate for bat roosting opportunities within the building, one Schwegler 2FR bat tube (or suitable alternative) will be recessed into the exterior wall of the new development. Additionally, two voids will be retained in the eastern and western sides of the roof to create two eaves roosts for brown long-eared bats. In advance of the works, as there are no trees on site, two Schwegler 1FF bat boxes (or a suitable alternative) will be mounted on poles erected within the grounds of the site to provide compensatory roosting habitats during the construction period for any vesper bats which may be displaced as a result of the works.

4.6. Management Objective MO6: To Monitor the Site and Assess the Success of Management

To deliver the proposed ecological objectives, monitoring of the effects of management prescriptions will be required to ensure that these are effective, and to inform any necessary refinement of the site management. Annual reporting and review of progress will be affected through appropriate planning controls.

5. Appropriate Management Options and Prescriptions for Achieving Aims and Objectives

Please note that within the remainder of this report the following definition applies:

“Land Owner” refers to the owner of the relevant land within the boundary of the area edged red on Plan 1 contained in this report, or any such person as shall be appointed under the terms of any agreement made at any time after the date of this report between the developer of the land and any successors in title to it.

5.1. Construction Phase Management Prescriptions

The following prescriptions lay out in detail how the management objectives (MO1 – MO5) will be achieved during the construction phase of the development.

5.1.1. Management Prescription PR1 – Sowing and Establishment of Species Rich Grassland

Contributes to MO1

Selection of Seed Mix

A native species-rich seed mix that is suitable for the soil type and regional climate will be used. The seed mix will include a variety of perennial wildflowers and grasses that are characteristic of local meadows. Species such as oxeye daisy, knapweed, birdsfoot trefoil, lady’s bedstraw and yarrow alongside fine-leaved grasses like common bent and red fescue.

The wildflower mix will be Emorsgate EM5³ (or suitable alternative). The Emorsgate EW5 mix is composed of 20% native wildflowers and 80% slow growing grasses (by weight). The following species will be incorporated into the wildflower meadow mix as indicated below:

Table 1: Composition of Emorsgate EM5 Wildflower Mix

Species	Latin Name	%
Broadleaved Herbs		
Yarrow	<i>Achillea millefolium</i>	0.6
Agrimony	<i>Agrimonia eupatoria</i>	0.8
Betony	<i>Betonica officinalis</i> (<i>Stachys officinalis</i>)	0.4
Common Knapweed	<i>Centaurea nigra</i>	2.8
Wild Carrot	<i>Daucus carota</i>	0.6
Lady’s Bedstraw	<i>Galium verum</i>	1.5
Meadow Crane’s-bill	<i>Geranium pratense</i>	0.6
Field Scabious	<i>Knautia arvensis</i>	1.5
Rough Hawkbit	<i>Leontodon hispidus</i>	0.1
Oxeye Daisy	<i>Leucanthemum vulgare</i>	1.8

³ [EM5 Meadow Mixture for Loamy Soils - Emorsgate Seeds \(wildseed.co.uk\)](https://www.wildseed.co.uk/emorsgate-em5-meadow-mixture-for-loamy-soils)

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Birdsfoot Trefoil	<i>Lotus corniculatus</i>	0.2
Musk Mallow	<i>Malva moschata</i>	2.2
Ribwort Plantain	<i>Plantago lanceolata</i>	2.4
Salad Burnet	<i>Poterium sanguisorba (Sanguisorba minor)</i>	1.2
Cowslip	<i>Primula veris</i>	0.8
Selfheal	<i>Prunella vulgaris</i>	0.4
Meadow Buttercup	<i>Ranunculus acris</i>	0.2
Bulbous Buttercup	<i>Ranunculus bulbosus</i>	0.1
Yellow Rattle	<i>Rhinanthus minor</i>	1.0
Bladder Campion	<i>Selene vulgaris</i>	0.4
Tufted Vetch	<i>Vicia cracca</i>	0.4
		20%
Grasses		
Common Bent	<i>Agrostis capillaris</i>	8.0
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	1.6
Quaking Grass	<i>Briza media</i>	0.8
Crested Dog's-tail	<i>Cynosurus cristatus</i>	52.0
Red Fescue	<i>Festuca rubra</i>	11.2
Smaller Cat's-tail	<i>Phleum bertolonii</i>	6.4
		80%
Sowing Rates: 40 kg/hectare, 16kg/acre, 4g/m²		

Ground Preparation

The soil should be assessed to determine its type, pH, and fertility, providing a better understanding of the existing conditions needed to achieve the desired state of species-rich grassland. Most wildflower species thrive in low-nutrient soils, as this helps to reduce competition from more vigorous grasses.

If the soil is too fertile, consideration should be given to removing the topsoil to reduce fertility. This can help prevent aggressive grass species from dominating and allows wildflowers to establish. Avoid adding fertilisers or compost, as this would favour grasses over wildflowers.

Once cleared, lightly scarify or harrow the soil surface. This helps create a suitable seedbed with good soil-to-seed contact while minimising soil disturbance.

Sowing

Sowing on ground prone to winter flooding should be undertaken either in late summer or spring, once the land has drained. Most plants need time to grow to be mature enough to withstand flooding. The seed must be surface sown and can be broadcast by hand. To get an even distribution and to avoid running out, divide the seed into two or more parts and sow in overlapping sections. August-September and March-April usually produce the best conditions for sowing outside in most parts of the UK. May to July sowings also work well in wetter western regions. Late autumn sowings should be avoided on sites prone to waterlogging in winter; and late spring and summer sowings should be avoided on drought prone sites.

The recommended sowing rate from Emorsgate is much lower than conventional lawn and amenity grass rates (4g/m² compared with 25-50g/m²). This is deliberate, as rather than aiming for rapid ground cover to suppress all weeds, wild seeding aims to allow an extended period of establishment with room for both fast growing grasses and slower germinating flower seeds. Care will be taken to ensure that the mixture is not sown too heavily as this can lead to overcrowding or an imbalance in the establishing sward. The seedmix is designed to work optimally at the specified rate.

5.1.2. Management Prescription PR2 – Planting and Management of Native Hedgerow

Contributes to MO2

Selection of Species

Common hawthorn, holly, and wild privet will be planted in a mix, ensuring species diversity for structural and seasonal interest. The recommended planting proportions are:

- Hawthorn: 50%.
- Common Holly: 25%.
- Wild Privet: 25%.

Ground Preparation

Any existing vegetation in the planting area should be cleared to reduce competition for nutrients and moisture. Afterward, a 1-metre-wide strip should be dug along the proposed hedgerow line to break up compacted soil. If the soil structure is very poor, add a light layer of mulch or compost, but avoid over-fertilisation, as this can promote excessive growth of grasses and weeds.

Planting

Planting should ideally be undertaken between November and March, during the dormant season, avoiding waterlogged or frozen ground conditions. Whips⁴ will be planted in a double, staggered row (individual rows c. 40cm apart) with 4 - 6 plants per meter. Double staggered rows tend to be better for wildlife as they are wider and provide more shelter and habitat. Whips will be fitted with spiral guards to prevent damage from rabbits and planted in a staggered row.

Whips will be mulched using wood chips to at least 3cm deep to prevent competition from weed species. The mulch will be maintained (topped up if necessary) for at least the first three years to aid establishment.

All plants will be watered in at the end of each day of planting.

⁴ A whip is a slender, unbranched shoot or plant. This term is used in forestry/landscaping to refer to unbranched young tree seedlings of approximately 0.5-1.0 m (1 ft 7 in-3 ft 3 in) in height and 2-3 years old that have been grown for planting out.

5.1.3. Management Prescription PR3 – Planting and Management of Scattered Trees

Contributes to MO3

Scattered trees will be planted across the site, with a focus on the central lawn and northern areas.

Species Selection

The chosen species – sessile oak, wych elm, common juniper, and downy birch – have been selected for their native status and ecological value. These trees will provide structural diversity, creating habitats for a variety of wildlife, including birds, invertebrates, and mammals. Each species will contribute unique ecological benefits: sessile oak supports numerous invertebrate species; wych elm offers food for caterpillars; common juniper provides cover and berries for birds; and downy birch is a pioneer species that enriches the soil and supports fungi and insects.

Site Preparation and Planting

Before planting, the ground will be prepared by clearing any vegetation that may compete with the young trees for water and nutrients. It is essential to ensure that the planting holes are wide enough to accommodate the roots comfortably, allowing them to spread naturally without restriction. Each tree will be planted at the appropriate depth, ensuring that the root collar is level with the soil surface. To protect the trees during their establishment, tree guards will be installed to prevent browsing by deer and rabbits. Sessile oak and wych elm will be spaced more widely apart to allow their large canopies to develop fully, while downy birch and common juniper, being smaller species, will be interspersed throughout the planting areas to create a more varied structure. Common juniper will be planted in sunnier areas where there is little shade to maximise its establishment success.

5.1.4. Management Prescription PR4 - Installation of Nesting Bird Provision

Contributes to MO6

Nest boxes will be installed on the building's exterior, positioned to minimise disturbance and maximise suitability for nesting birds:

The Vivara Barcelona WoodStone Open Nest Box will be mounted on the eastern side of the building, ideally in a shaded or semi-shaded location to avoid overheating. It should be positioned at a height of 2–4 metres above ground, ensuring it is safe from predators such as cats.

The Schwegler 1SP Sparrow Terrace will be installed on the same side of the building but in a separate location to allow for species-specific preferences. It will be mounted at a height of approximately 3–4 metres and placed under eaves or in a similar sheltered spot.

Both boxes should be installed on a north or east-facing wall to prevent excessive exposure to direct sunlight and prevailing winds. The proposed location of the nest boxes is shown on Plan 4. The boxes must

be securely fixed using appropriate screws or brackets, ensuring they remain stable over time. Care will be taken to avoid drilling into materials that could compromise the building's integrity or insulation.

5.1.5. Management Prescription PR5 – Installation of Roosting Bat Provision

Contributes to MO5

Schwegler 2FR Bat Tube

The Schwegler 2FR bat tube (or suitable alternative) will be positioned on the exterior wall of the northern gable end of the new development. The bat tube will be recessed into the walls and lying flush with the surrounding wall. It can then be rendered but with care taken to ensure that the entrance slot is left exposed or painted with breathable paint if required. The tube will be positioned at least 0.5m below the eaves or gable apex to prevent predation by domestic cats. It is also recommended that, where practical, the tube is not positioned above windows or doors. Ideally the bat tube will be installed in an unlit location close to connective features to allow bats undisrupted dispersal to local foraging habitat.

Schwegler 1FF Bat Box

Two Schwegler 1FF Bat Boxes (or a suitable alternative) will be mounted on poles erected adjacent to the northern site boundary. These boxes should be located at least 3.5m (preferably 5m) above ground level, with bat boxes in positions where the entrance is not artificially illuminated at night and is clear of obstructions. The bat boxes will be retained on site after completion of the works in-perpetuity as a biodiversity enhancement. Specification of the Schwegler 1FF bat boxes can be found in the Final Bat and Nesting Bird Survey Report (Acer Ecology, 2024) and proposed locations are shown on Plan 4.

Eaves Roosts

The two designated loft areas will extend 12.6m along the eastern and western eaves. Access to the roost will be provided via gaps beneath the adjoining fascias/soffits. Roughened timber cross battens with tiles or plywood squares secured to the battens will be attached to the sloping roof and vertical wall of the area to provide extra roosting opportunities and increase the range of crevices and niches available. An inspection door will be provided on the internal wall of the roost in order to facilitate monitoring and maintenance work. It is essential that the 'bat-friendly' bitumen felt is used and not a breathable membrane. Small holes will be made through the underlying felt directly behind the ridge tile access points. The access holes will be located adjacent to rafters (where possible) to allow bats to crawl in and out. No security lighting will be installed in close proximity to the access points.

5.2. Operational Phase Management Prescriptions

The following prescriptions lay out in detail how the management objectives (MO1 – MO6) will be achieved during the operational phase of the development.

5.2.1. Management Prescription PR6 – Management of Newly Established Grassland

Contributes to MO1

First Year Management

Most of the sown meadow species are perennial and will be slow to germinate and grow. Usually, they do not flower in the first growing season. There will often be a flush of annual weeds in the first growing season. This weed growth is easily controlled by mowing.

These sown annuals will be allowed to flower, then cut in mid-summer and the vegetation removed. It is important to cut back the annuals before they die back, set seed and collapse: this cut will reveal the developing meadow mixture and allow seeds to germinate and develop.

Management Once Established

In the second and subsequent years EM5 sowings can be managed in a number of ways which, in association with soil fertility, will determine the character of the grassland. The best results are usually obtained by traditional meadow management based around a main summer hay cut in combination with autumn and possibly spring mowing or grazing.

Meadow grassland is not cut or grazed from spring through to late July/August to give the sown species an opportunity to flower. After flowering in July or August take a 'hay cut': cut back with a scythe, petrol trimmer or tractor mower to c 50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site. Mow or graze the re-growth through to late autumn/winter to c 50mm and again in spring if needed.

Loamy soils tend to be more fertile, encouraging the growth of grasses. Increasing the frequency of mowing or grazing to remove surplus grass can help to maintain a balanced sward structure with a good flower content.

5.2.2. Management Prescription PR7 – Management of Hedgerow

Contributes to MO2

Establishment and Early Growth

During the first three years, the primary objective is to ensure that the hedgerow establishes well. This will involve regular maintenance to control competing vegetation and provide sufficient water to young plants. Removal of non-hedgerow forb species should be carried out frequently to reduce competition from grasses and other invasive species, this should be done by hand rather than using herbicide. In periods of dry weather, particularly during the first summer, it is important to water the plants regularly to support their growth. Additionally, protective tree guards should be inspected annually to ensure they remain effective and are not restricting the plants' growth. Any damaged guards should be replaced as necessary.

Promoting Dense Structure

From year three to year five, the focus shifts to developing a dense and bushy hedgerow. Formative pruning will begin during this phase, carried out in late winter, to encourage lateral growth and promote thickness at the base. Around one-third of the new growth should be trimmed to encourage the development of side shoots, which will contribute to a dense structure that benefits wildlife. It is also important to continue protecting the hedgerow from grazing pressure by maintaining tree guards or fencing. During this period, any gaps or failures should be addressed by replanting to ensure continuous and consistent growth throughout the hedgerow.

Long-Term Management for Biodiversity

Once the hedgerow has become fully established by around year five, the management focus will be on maintaining the structure and maximising its value for biodiversity. The hedgerow should be managed through rotational cutting, with different sections of the hedgerow being trimmed each year. This ensures that parts of the hedge are always left to flower and fruit, which is beneficial for pollinators and other wildlife. The ideal structure for the hedgerow would be 2 to 3 metres in height and 1 to 2 metres in width, ensuring both shelter for wildlife and aesthetic value. Any gaps that form over time should be replanted to maintain the overall density of the hedge.

5.2.3. Management Prescription PR8 – Management of Scattered Trees

Contributes to MO3

Establishment and Maintenance

During the first 2–3 years, the young trees will require regular watering, particularly during dry spells, to ensure their successful establishment. The protective tree guards will be checked annually and adjusted or replaced as necessary. Any failed trees will be replaced during the next planting season to maintain the desired tree density. Mulching around the base of each tree will help to retain moisture, reduce weed growth, and protect the roots from temperature fluctuations.

Long-Term Management

Once the trees are established, regular inspections will be carried out to monitor their health and identify any signs of disease, pests, or damage. Sessile oak and wych elm will be particularly monitored for signs of disease, such as oak decline or Dutch elm disease. Deadwood from downy birch and other species will be retained on site where possible, as it provides valuable habitat for invertebrates and fungi. As the trees mature, any necessary formative pruning will be carried out to ensure good structure and longevity, particularly for wych elm and downy birch, which may require more frequent attention during their early years.

Enhancement for Biodiversity

The scattered trees will enhance the site's biodiversity by offering varied habitats. Bird and bat boxes will be installed on mature trees, once they are sufficiently established, to provide roosting and nesting opportunities. The inclusion of common juniper will add to the habitat's diversity by providing berries, a valuable winter food source for birds. Over time, the trees will act as stepping stones for wildlife, linking habitats within and beyond the site. This mixture of species will create a robust and biodiverse landscape, benefiting the ecosystem as the trees grow and mature.

5.2.4. Management Prescription PR9 – Bird and Bat Box Management

Contributes to MO4, MO5 and MO6

The bird boxes will be monitored annually in years 0, 1, 2, 3, 4 and 5 following installation, to check that they remain in a useable condition. They will be checked once a year in the Autumn (October to November inclusive), once the bird breeding season has finished. Any old nest debris will be removed from the boxes.

The condition of the bat boxes will be checked externally only. Please note that site contractors are legally prohibited from physically inspecting the bat boxes.

6. Work Schedule (Including an Annual Work Plan Capable of Being Rolled Forward Over a Five-year period);

6.1. Management Diary

The management tasks required on the site will be repeated for each year. There is therefore considered to be no requirement to produce a five-year plan and instead the annual plan adequately defines the work.

Table 2: Work Schedule

Management Prescription	Year	Activity Summary	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Grassland Creation	0	Ground Preparation and Seed Sowing												
	1 year	Cut Back of Annuals												
	2 – 5 years	Main Summer Hay Cut												
	2 – 5 years	Mowing (If Needed)												
Hedgerow Planting	0	Ground Preparation and Shrub Planting												
	0 – 5 years	Annual Inspection of New Planting												
	1 – 5 years	Replacement of Failed Shrubs												
	1 – 5 years	Pruning Twice Annually												
	0 – 5 years	Watering as Required												
Scattered Tree Planting	0	Ground Preparation and Tree Planting												
	0 – 5 years	Annual Inspection of New Planting												
	1 – 5 years	Replacement of Failed Trees, Checking Stakes/Ties and Re-firm Trees												

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	1 – 5 years	Pruning Trees Twice Annually												
	0 – 5 years	Watering as Required												
Ground Planting	0	Ground Preparation and Seed Sowing												
	1 – 5 years	Cutting Back and Removal of Weeds Annually												
Bat Enhancement	0	Installation of Pole Mounted Bat Boxes, Bat Tube and Eaves Roosts												
	1 – 5 years	Monitoring of Bat Features (Undertaken by licensed ecologist)												
Bird Enhancement	0	Installation of Bird Boxes												
	1 – 5 years	Monitoring and Cleaning of Bird Boxes												
Ecological Monitoring	1, 3 and 5 years	Botanical Monitoring												

7. Responsibilities for Implementation of the Plan

7.1. Construction Phase Responsibilities

The long-term management of the site is a relatively straight forward process that will be undertaken by a contractor of the owner's choosing. It is considered that there is no need to specify the identity of any particular contractor as the work is not specialist and it would be inappropriate to prejudice future owner's decision making in regard to choice of contractor.

Ecological queries will be directed to Acer Ecology Ltd.

7.2. Operational Phase Responsibilities

The long-term management of the site is relatively low-cost and it is felt that there is no need to provide this detail within the plan. The plan is also the subject of a condition which obliges performance. Ultimately that creates a responsibility for the owner to fund the management plan requirements.

Ecological queries will be directed to Acer Ecology Ltd.

8. Monitoring, Contingencies and Remedial Measures

8.1. Monitoring of Effectiveness

A report detailing the results of the monitoring will be prepared following each year of monitoring and issued to the council. The annual report will give a summary of the outcomes of the losses and gains of biodiversity.

8.1.1. Summary of Predicted Losses and Gains for Biodiversity

A report detailing the results of the monitoring will be prepared following each year of monitoring and issued to the council. The annual report will give a summary of the outcomes of the losses and gains of biodiversity.

8.1.2. Aims of Monitoring the Construction Phase Objectives

The success of the construction phase objectives (MO1 – MO6) will be assessed by the ecologist during and upon completion of all works within this phase. They will form an integral component of the development and will undertake a 'sign off' site visit upon completion of this phase to inspect all landscaping features.

8.1.3. Aims of Monitoring the Operational Phase Objectives

The condition and extent of works to the habitats on the site will be assessed over the course of at least five years, and amendments to the management plan made as required. The monitoring will determine if the works are being implemented successfully and if any modifications are required.

8.1.4. Success Criteria and Targets

The condition of the site will be appraised against the aims and objectives of the management prescriptions detailed in Section 4.

As the ecological management of the site is relatively straightforward and does not require close scientific monitoring, the success criteria can be relatively simple.

If the newly planted grassland, hedgerows and trees have established after 5 years and are in good condition this will be regarded as a success. If these habitats have not established after 5 years and are in poor condition, then this will be regarded as a failure.

8.1.5. Timing and Duration of Monitoring

Monitoring of the construction phase objectives (MO1 – MO6) will be undertaken during and immediately after the completion of the development and aims to ensure that the objectives have been correctly implemented.

Monitoring of the operational phase objectives (MO1 – MO6) will be undertaken a per the timings detailed in Table 2.

8.1.6. Responsible Persons and Lines of Communication

Ecological monitoring will be undertaken by Acer Ecology Ltd., or another specialist ecological consultancy. Grounds maintenance will be undertaken by the owner or contracted workers.

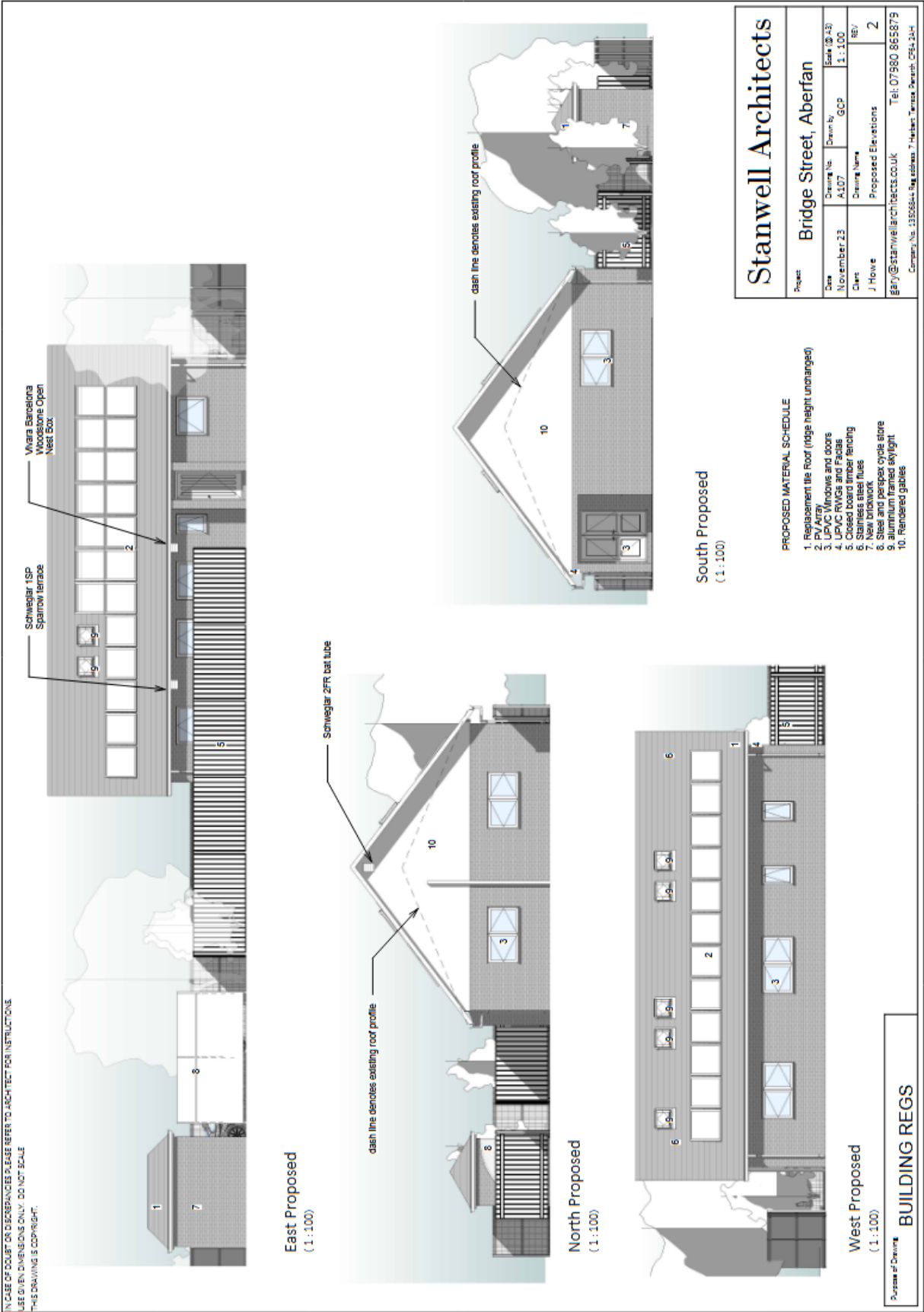
9. Legal and Funding Resources and Mechanisms to Ensure Sustainable Long-term Management Delivery

The long-term management of the site is relatively low-cost and it is felt that there is no need to provide this details within the plan. The plan is also the subject of a condition which obliges performance. Ultimately that creates a responsibility for the owner to fund the management plan requirements.

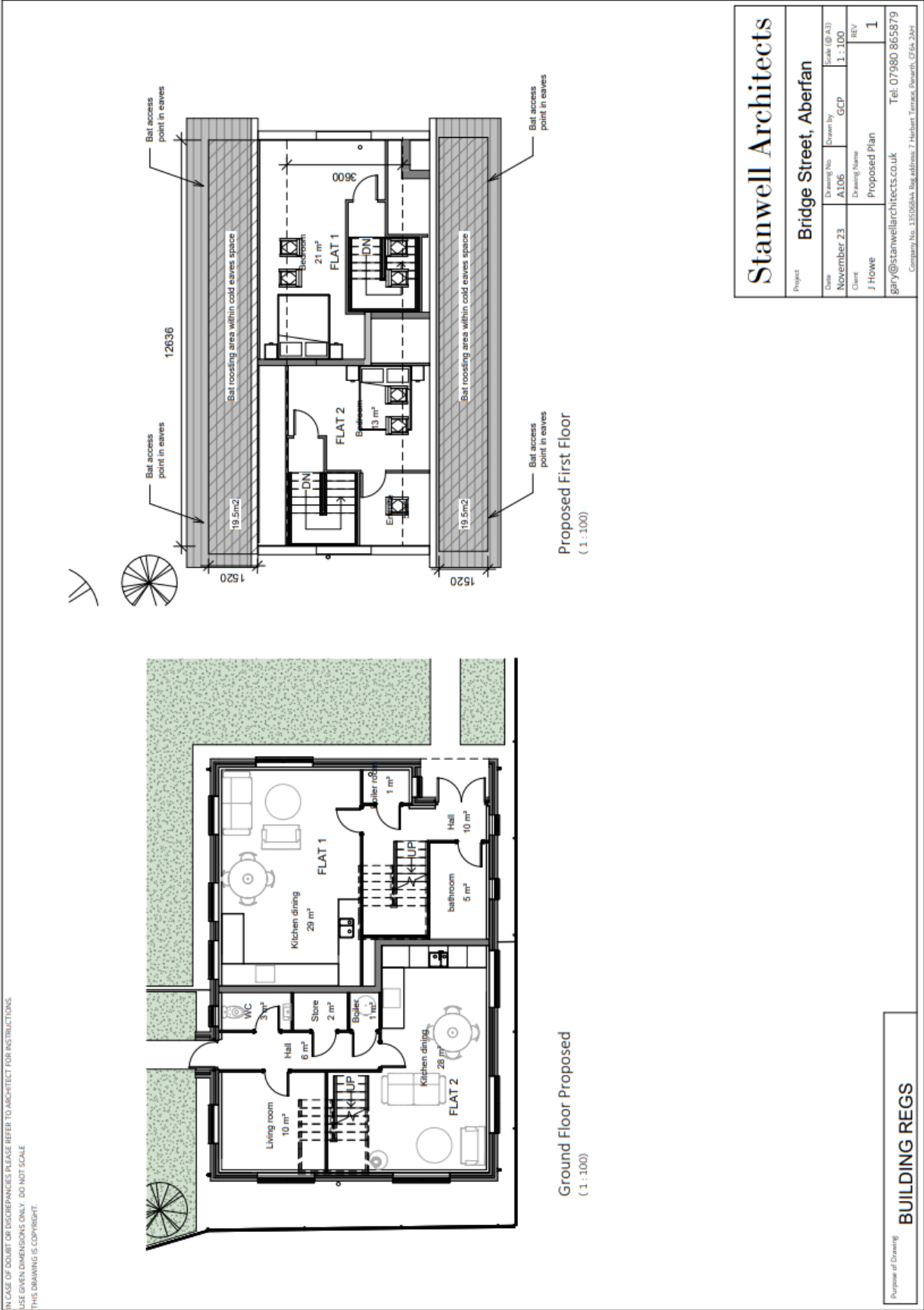
Plan 1: Location Plan



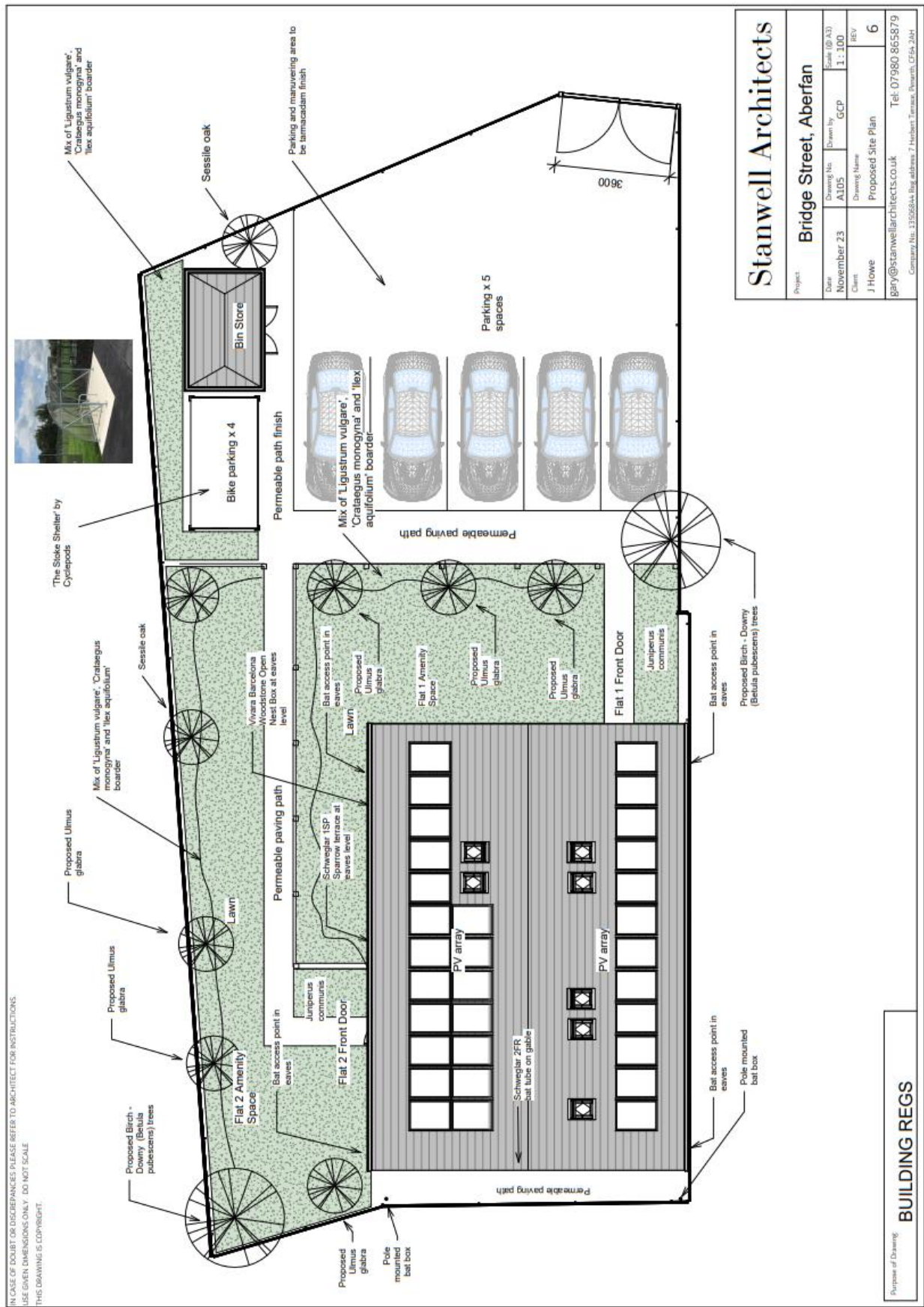
Plan 2: Development Proposals



Plan 3: Floor Plans



Plan 4: Mitigation Plan



Plan 5: Lighting Plan

