



Report Type: Conservation Plan

Client Name: Latham

Site Address: Knolton Farm
Oswestry Road
Overton
Wrexham
LL13 0LG

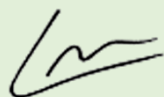
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The report should be read in its entirety

Questions arising from the survey report should be directed to the author of the report who will be pleased to clarify any technical issues raised.

Whilst the surveyors make every reasonable effort, Greenscape Environmental Ltd cannot guarantee that all protected species have been identified and survey results are definitive. Many species are cryptic and transitional in habit.

Reports are considered valid for one year for planning purposes, after which time further survey information may be required.

Greenscape Environmental Ltd can provide advice and support for recommendations and planning conditions.

The use of this report or survey data for any form of formal submission to an NGO or other authority implicitly implies acceptance of the terms and conditions.

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1 Executive Summary

1.1 Purpose of the Report

Greenscape Environmental Ltd was commissioned by clients, Mr and Mrs Latham, to produce a Conservation Plan for the development at Knolton Farm, planning permission for which has been granted for the conversion of an outbuilding into a dwelling and change of use of a Dutch Barn.

This document will outline the mitigation and compensation required and planned for the proposed development. It will also denote which party is responsible for each stage, and state how the progress of the development will be monitored.

This is in response to condition 7 of the planning permission document, P/2020/0198, which states:

7. No part of the development shall commence until a Conservation Plan has been submitted to and approved in writing by the Local Planning Authority. The Plan shall include (but not be limited to) details of bat mitigation and compensation measures, details of the person(s) who will implement these measures, details of post construction monitoring and record dissemination, and external lighting scheme. The approved Conservation Plan shall thereafter be fully implemented in all respects.

Reason: To protect named species / habitats / biodiversity which would otherwise be damaged / lost by the development hereby permitted in accordance with Policies GDP1 and EC6 of the Wrexham Unitary Development Plan.

2 Introduction

This report has been compiled by Ben Jones BSc (hons) MSc who has 5 years' experience conducting ecological appraisals. It has been reviewed in line with Greenscape's Quality Management System.

This document comprises a conservation plan covering the development at Knolton Farm. It identified the ecological management requirements to achieve the design goals in a pragmatic manner.

It should be recognised that the landscape is a living and changing environment, and therefore the management plans in this document should be seen as flexible, and one which may need updating during the life of the development.

This document aims to provide the council with confidence that the risk of capture, injury or killing of protected species, or the loss of their habitats, will be appropriately mitigated both during- and post-construction.

2.1 Project Background

Clwydian Ecology conducted the initial assessment of the site in March 2019, after which bat activity surveys were conducted. A report of findings, and a separate mitigation report were produced in September 2019 once all activity surveys had been completed. Greenscape Environmental Ltd were then employed in August 2020 to manage the application for the mitigation licence. An updated bat survey was conducted on 2nd September 2020, which backed up the 2019 results and gave no indication that conditions had changed.

The bat mitigation licence was prepared and is currently with NRW for consideration – a decision which may be delayed due to restrictions and limitations imposed by the Covid-19 situation.

2.2 Purpose of the Report

The purpose of this conservation plan is to:

- Detail appropriate mitigation and compensation measures, including those for the bat licence from NRW
- Clarify responsibilities throughout the development
- Outline ongoing monitoring of the site to ascertain the level of success
- Provide a lighting scheme to ensure maximum efficacy of those measures identified.

3 Site Plans

The proposal as agreed by the LPA is for the conversion of an agricultural building to a dwelling, and the change of use of a Dutch Barn to garaging.



Figure 3.1. Excerpt of site plans

4 Baseline Ecological Conditions

The site comprises a brick barn with a slate tile roof. It is set amongst other agricultural buildings, some barns that have been converted, and a farmhouse. The Dutch Barn to the south is included in the plans to be converted to garaging.



Figure 4.1. Barn from south



Figure 4.2. Northern side of barn



Figure 4.3. Other barns and farmhouse to north



Figure 4.4. Cattle shed (right) and Dutch barn to be converted (left)

The bat activity surveys conducted by Clwydian Ecology found a total of 14 common pipistrelle bats emerging from the building, with a peak count of five being seen at any one time. In 2020, lower numbers of common pipistrelles were seen, with the addition of one soprano pipistrelle. The 2020 survey was conducted later in the season which is likely the reason for the lower numbers.

Nesting swallows were identified within the barns and sealing the building with windows and doors will inevitably prevent access to those nests.

5 Conservation Plan

5.1 Bats

5.1.1 Background

As there are maternity numbers of common pipistrelle bats in the barn, and one soprano pipistrelle, the work is to be conducted under licence from Natural Resources Wales. This application was sent to NRW at the start of November and is under review at the time of writing.

5.1.2 Mitigation

Roost Spaces

As part of the proposed mitigation for bats a new bat loft is to be created over a linking section of roof between the barn to be converted and the neighbouring barn. The area for the proposed bat loft is open sided and has not been recorded supporting roosting bats previously.

Construction of the loft has commenced as it will not negatively impact on known bat roosts and does not need to be constructed under licence. The floor of the loft has already been installed and extends approximately 80% of the way across the gap, leaving access on the northern end. Within this loft space, a number of bat boxes will provide ongoing crevice opportunities for bats in perpetuity, as they will be sheltered from weather and damage. Another bat box will be erected on the exterior of the nearby buildings. Locations for the bat boxes can be seen in Figure 6.1.



Figure 5.1. The loft floor has already been installed

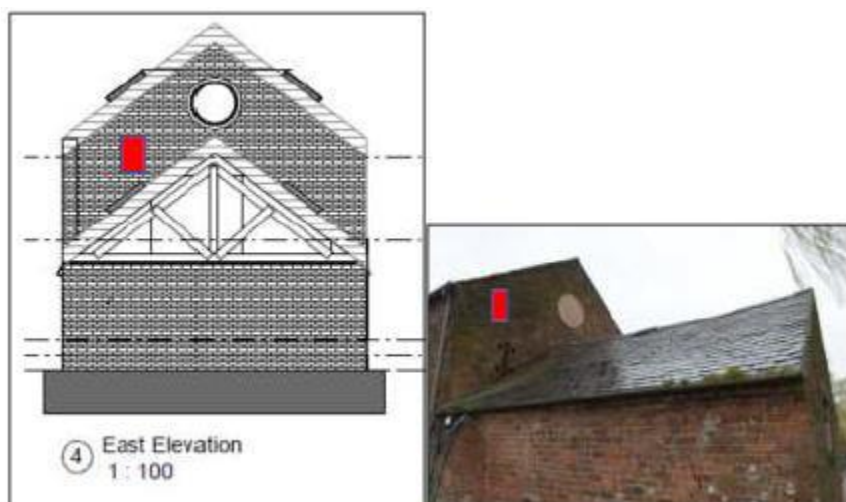


Figure 5.2. Additional bat box location on exterior

Open eaves access will also be created to allow access into parts of the building once the conversion is complete. If required, the soffit boards (preferably timber) will be set off from the wall by a minimum of 25mm. If soffit boards are not to be included, the plans below show a gap in the mortar to allow access onto the top of the wall plates for bats and small birds. This access would not extend into the complete loft space over the building.

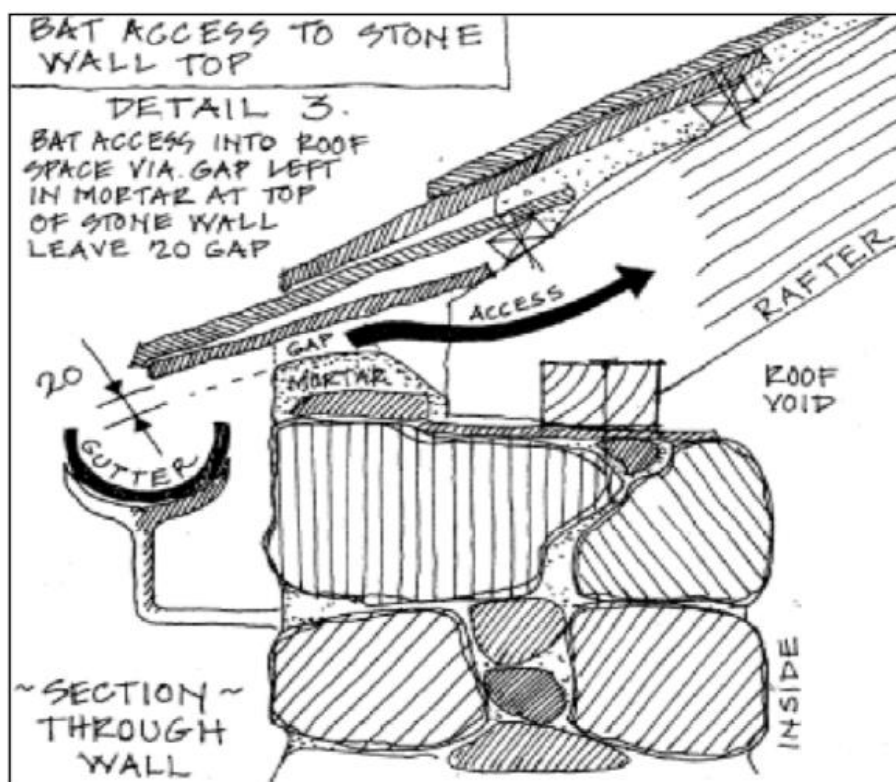


Figure 5.3. Bat access from Clwydian Mitigation Report

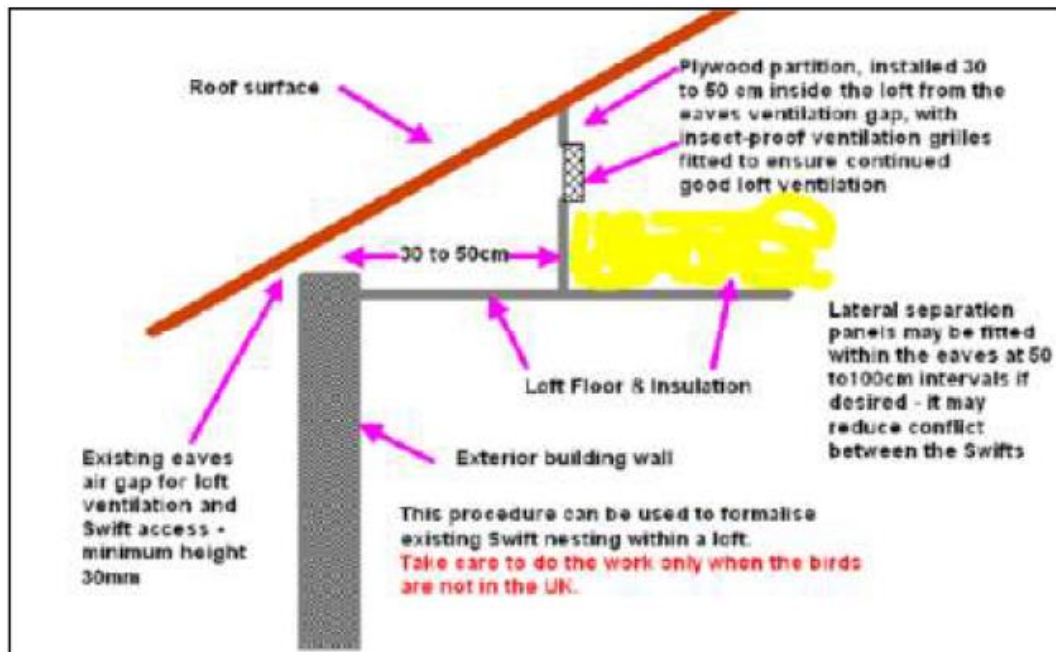


Figure 5.4. Further bat access information from Clwydian

Lighting Scheme

All external lighting will be down-facing and of low luminance; no more than 10 lux for any domestic lighting. A passive infra-red timer will be utilised where appropriate to ensure lights do not remain unnecessarily lit for extended periods.

None of the lighting, regardless of timers or luminance, will be directed towards or located in the same area as any mitigation features erected for bats. The loft area will remain dark as shown in Figure 6.2, as will the gable end shown in Figure 5.2.

5.1.3 Monitoring

Section F of the bat mitigation licence application states that post-construction monitoring of the bat roosts will be conducted in the summer following completion to determine the level of success. The findings of these surveys will be reported back to NRW.

5.1.4 Responsibilities

The loft floor has already been installed (Figure 5.1).

The bat licence has been applied for by Greenscape Environmental, with Ben Jones as the named ecologist, and Peta Marshall and Logan Maggs as accredited agents. Any of these three ecologists will be responsible for overseeing the works on site, and ensuring the method statement are followed at each point.

Peta Marshall will audit the work.

The site contractors and site foreman will hold the responsibility of working to the method statement when the ecologist is not present on site. They will also contact the ecologist with any concerns or queries, or to report an unexpected finding at any point through the development.

Greenscape Environmental are responsible for post-construction monitoring, as it is a requirement of the licence.

5.2 Birds

5.2.1 Background

Nesting swallows were identified during the internal search of the building, and activity was seen by Clwydian Ecology during their bat activity surveys. The work to seal the building will remove the access into the nesting area, and would therefore, if unmitigated, present a loss in usable habitat.

5.2.2 Mitigation

The redundant barn to the north has two porthole windows on the first floor which enter a disused loft space. The Clwydian report recommended that artificial swallow nest cups be installed within this loft, and these porthole windows are left open to ensure continued access to a sheltered nesting area.



Figure 5.5. Accesses into the loft which will be enhanced with swallow cups



Swallow Nest Cup

Figure 5.6. Example suitable artificial swallow habitat

The access into the loft as shown in Figure 5.1 will also provide sheltered space where swallows could make natural nests against the roof timbers. This is a typical behaviour of swallows, and the security provided by the loft floor may encourage the natural spread of nesting swallows into this area.

5.2.3 Monitoring

No specific monitoring will take place, but swallow activity will be monitored throughout the development period, and during the bat monitoring surveys conducted in the summer following completion.

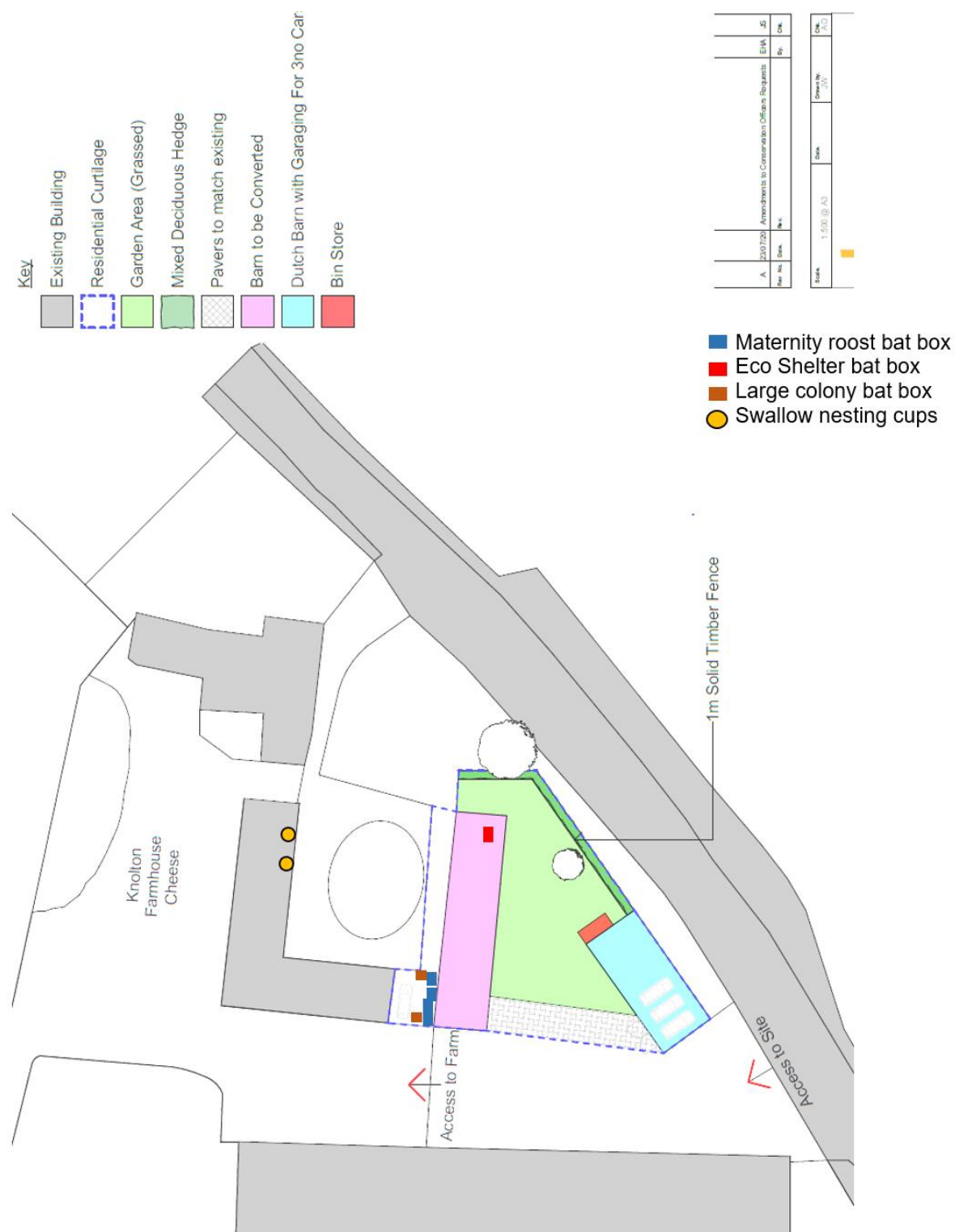
5.2.4 Responsibilities

Greenscape Environmental will be responsible for ensuring all ecological enhancements are erected in a suitable location. They will work with the site contractors to ensure the swallow cups are erected in a suitable location.

The site owner will be responsible for ensuring the access into enhanced areas remains open and clutter free and will contact a suitably experienced ecologist for advice if any threat or damage to these areas or their access is anticipated.

The site contractors and site foreman will be responsible for ensuring work follows all method statements and advice when the ecologist is not present on site. They will also stop work in areas where nesting birds are inadvertently found and contact the ecologist for advice.

6 Plans Showing Location of Mitigation Measures



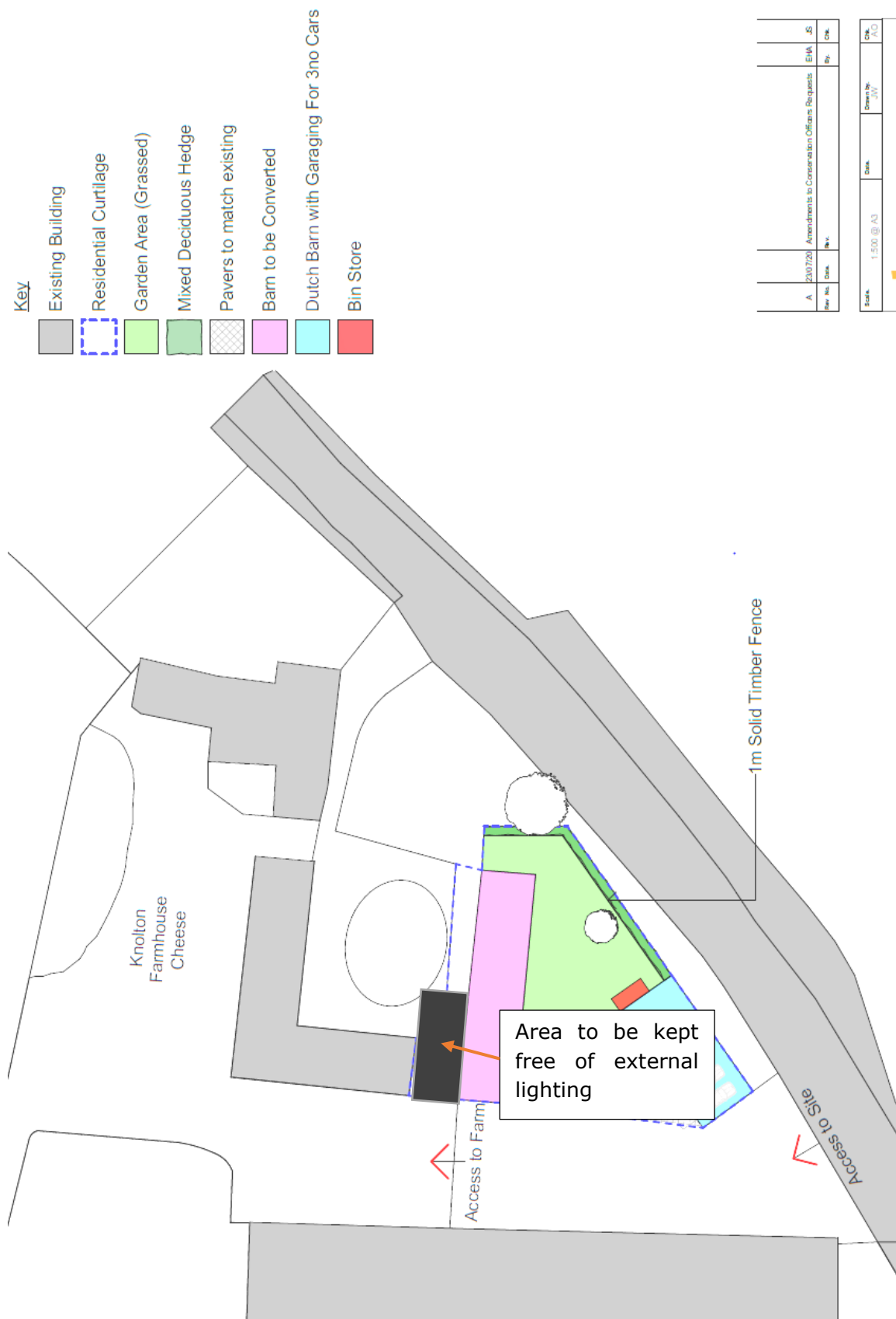


Figure 6.2. Lighting Scheme