

Design & Access Statement

30 Mulberry Green, Old Harlow, Essex, CM17 0ET

For the proposed conversion and change of use of a Grade II listed barn to provide self-contained, 2-bedroom family living accommodation; together with associated external and necessary repair and remediation works.

Being a proposed renewal in part, of lapsed planning permission and listed building consent granted by the LPA on 8th January 2013 under references HW/PL/12/00415 and HW/PL/12/00419, respectively.

CONTENTS

- 1. INTRODUCTION**
- 2. DESIGN**
- 3. ACCESS**
- 4. CONCLUSION**

Appendices

- Appendix 1 – Arboricultural Impact Assessment
- Appendix 2 – Official List Entry
- Appendix 3 – Officer Report of Delegated Decision on Application
- Appendix 4 – Flood Map

1. INTRODUCTION

- 1.1 This Design & Access Statement has been prepared by Derrick Wade Waters Limited in support of a planning application submitted to Harlow Council on behalf of Mr John Fosh for the proposed development of a Grade II listed barn building located within the property and site known as “**30 Mulberry Green, Old Harlow, Essex, CM17 0ET**”.
- 1.2 The planning application seeks planning permission and listed building consent for:
- 1. Change of use from and conversion of the existing domestic garage and storage use of the application building to a proposed residential use to provide self-contained, 2-bedroom living accommodation.**
 - 2. Associated repair works.**
- 1.3 This statement accompanies the planning application and assesses the design principles and concepts that have been applied to the proposed development; and how issues relating to access to the development have been dealt with. This statement complies with the requirements of “The Town & Country Planning (Development Management Procedure) Order, 2015”.
- 1.4 This statement should be read in conjunction with the suite of submitted documents comprised in the planning application.
- 1.5 This statement is comprised of 3 further sections:
- Section 2 deals with design issues
 - Section 3 deals with access issues
 - Section 4 sets out the conclusions drawn from sections 2 and 3.

2. DESIGN

- 2.1 The development proposal, for which planning permission is now sought, is initially a response to the applicant's requirement to convert a little used domestic garage and stores building into self-contained family living accommodation.

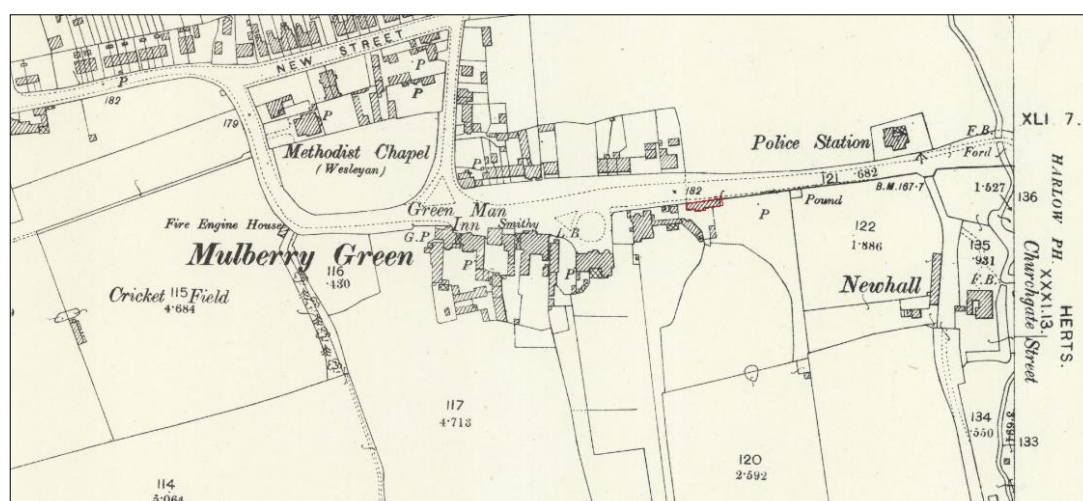


Planning context

- 2.2 Planning permission and listed building consent has previously been given, with conditions, for the proposed development by the LPA, albeit within the context of a wider proposal for the development of the applicant's property, having LPA references PL/12/00415 and HW/PL/12/00419 which was granted on 8th January 2013. The planning permission and listed building consent were not implemented within the statutory development period of 3 years from the date of the planning permission and have now accordingly lapsed.
- 2.3 The applicant acquired the property with the benefit of the planning permission and listed building consent in August 2014 from the prior owner, approximately midway through the life of the permission and consent and was accordingly unable to implement the permission and consent before expiry on 7th January 2016.
- 2.4 The applicant commissioned a condition survey, the latest version of which is submitted as part of this application as "Listed Barn Report, June 2023". This report identifies various building conditions requiring urgent or early repair and remediation and planning permission and listed building consent is also sought for this work as part of the current application.
- 2.5 In this connection, the Aboricultural Impact Assessment attached as Appendix 1 to this statement, attributes an increasing risk to the historic building's structure emanating from the row of lime trees planted immediately adjacent to the building's northern elevation, and lying within designated public highways land and control.
- 2.6 The requirement to preserve and protect the building from any deterioration can therefore be accommodated within the proposed conversion and change of use to residential living accommodation.
- 2.7 The proposed development therefore seeks a renewal in part at least, of the now lapsed planning permission and listed building consent. The application is accordingly made with reference to the "Town & Country Planning (Development Management Procedure) Order, 2015" which postdates the planning permission and listed building consent. Again, the planning application now made has regard to the "Harlow Local Development Plan, Adopted 2020" and also the "Old Harlow Conservation Area Character Appraisal, adopted December 2013". This statutory planning background is discussed in the Planning Statement accompanying the application.

Design context

- 2.8 The proposed design is effectively a re-submission of the development approved by the planning permission and the listed building consent under LPA references PL/12/00415 and HW/PL/12/00419 at least insofar as this concerns the current application site. As a result, the details of the proposal have previously been considered and approved, by the LPA albeit as noted within the context of the previous adopted Local Plan and Conservation Area framework.
- 2.9 In order to evaluate the proposal in the context of the latter framework, we may therefore reiterate the development constraints and the solutions leading to the development proposal.
- 2.10 The listed building is currently in use for as a domestic garage and for storage. This use has been carried on historically and evidently prior to the statutory listing of the building on 19th June 1981.
- 2.11 The Official List Entry (no1111690) and attached here as Appendix 2, unfortunately provides little background to the building other than that it is identified as “Granary Cottage” which may support the presumption that the building was historically in residential use although this is not capable of verification. The reference to “Granary” (cottage) may similarly hint at a previous, perhaps original, agricultural grain storage use and the extant dormers to the building’s southern elevation may have served as first floor goods’ loading prior to their fenestration. This again, is however unproven.
- 2.12 The building is said to date to the late 18th century and is otherwise only described as a “barn-like building”. Certainly, the building can be identified as extant on the Ordnance Survey carried out in and around 1873 and published in the 25” to 1 mile series edition in 1897:



- 2.13 The Official List Entry describes the building as being “timber-framed and black weatherboarded with ridged and gabled roof, peg-tiled and fly-hipped. Modern square access open at west end”. We may note that beyond these items, no architectural features are expressly identified as warranting special merit, either internally or externally. The relatively unadorned construction is in fact, confirmed in the “Listed Barn Report, June 2023” which is attached to this application.
- 2.14 In principle, the development proposal provides two-bedroom living accommodation arranged over one and a half storeys.
- 2.15 Full details of the applicant’s proposals are shown on the plans attached to this application.
- 2.16 When making the application, we have had regard to the local planning framework. We note in particular, that the abovementioned “Old Harlow Conservation Area Character Appraisal, adopted December 2013” (“CACA”) is a material consideration informing the LPA when it considers a planning application. The CACA identifies the building as falling within Mulberry Green, an ‘historic hamlet’ now in the larger Old Harlow district, that developed adjacent to the London-Cambridge-Norwich coaching route (broadly aligned with the ‘old’ A11 highway).

- 2.17 The CACA recognises that Mulberry Green is a distinct ‘character area’ within the Conservation Area where is some commonality of built form, layout, land uses and the historic and architectural features present. The CACA explains that Mulberry Green was historically, distinct from, and a separate entity to, (Old) Harlow which allowed the two adjacent but not adjoining, hamlets to develop and retain different identities.
- 2.18 The CACA identifies the hill that rises steeply to the east and a row of attractive mature trees to the northern side of the road as key features in the character area. The CACA also highlights the Green Man public house as a focal point alongside the triangular green.
- 2.19 The development proposal concerns a building that is located to the edge of the Conservation Area to its far eastern end. The key features and focal points identified in the CACA are not affected by the development proposal.
- 2.20 More broadly however, we note that the function of the Conservation Area is to preserve and enhance the area’s special architectural or historic character and appearance. The development proposal therefore mitigates the risk to the Conservation Area by minimalising the alterations that are to a point, an inevitable result of a conversion to residential use.
- 2.21 The appearance of the building’s north facing elevation is generally left unaltered by the development proposal save for betterment resulting from necessary repairs to the building’s structure and fabric, for which works planning permission is currently sought.
- 2.22 In this latter respect, the development proposes repair and cleaning work to the roof plan. This work requires first, the removal of the existing peg tiles prior to the introduction of a waterproof breathable roof membrane ahead of fixing roof battens before reinstatement of the existing pegs tiles. Aside from improving the building’s air and water tightness, these works are necessary to preserve the building and they represent a sensitive repair to the existing fabric.
- 2.23 The building’s north-facing elevation abuts Mulberry Green and will therefore be the side of the building that will continue to be the most obviously visible to users of the public highway. The development proposal will not therefore have a discernible effect on the character and appearance of the Conservation Area.
- 2.24 It is however proposed that other elevations will be subject to some limited external alteration albeit conscious effort has been made to minimise alterations and where unavoidably necessary, to mitigate any alterations by complimentary design and use of materials. Although subjective, it is not felt that these alterations are of themselves of sufficient impact to harm the character and appearance of the Conservation Area.
- 2.25 The proposed alterations to the southern elevation, chiefly concerns the proposed fenestration, the limited infill wall surfaces, and widening of the “modern” access opening.
- 2.26 Timber frame windows are chosen for installation into the 3 dormers to the southern elevation; and also as a direct replacement of the existing garage doors with the same. These are chosen in preference to say, metal framed windows as they are self-evidently more prevalent in the Conservation Area.
- 2.27 Infill walls are clad with black, stained weatherboarding primarily to match the existing elevational treatments in the building and to retain the existing character.
- 2.28 There is a proposed widening from 2.97m to 3.70m of the existing access way on the southern elevation only, at ground floor level only, which is necessary and sufficient to allow safe vehicular movement in the property. There is no effect on the appearance of the northern elevation. We reiterate that this alteration relates to what the Official List Entry calls the “modern square access open at west end” which by definition, does not comprise the historic fabric of the building.
- 2.29 We draw attention to advice received from Essex County Council’s Historic Buildings and Highways Team which is incorporated into the Officer Report of Delegated Decision on Application dated 7th January 2023 attached as Appendix 3, which confirms that the opening may be widened without damage to the historic listed structure.

- 2.30 The Victorian gates to the (modern) access are retained on the basis that these gates have become a characterful fixture of the building and respect condition 7 of the 2013 consent.
- 2.31 The proposed development requires some internal changes to the internal parts of the building beyond repair of the existing structure and fabric. Again, these changes are minimalised as before and mitigated where possible to respect the structure and fabric of the building, as confirmed by the Listed Barn Report attached to the planning application.
- 2.32 There are 5 principal internal areas of alteration. The first alteration results from the introduction of (non-structural) bathroom and wc facilities at first floor level which are of course, essential to the proposed change of use. The provision of these facilities is however proportionate to the scale of the proposed living accommodation.
- 2.33 As noted in the Listed Barn Report, the first floor constructed to the central area of the building (ie corresponding to the garage area below) is a modern installation which is not part of the original structure and fabric of the historic building. This floor is not structurally adequate to support the required domestic loading however and consequently the second internal alteration concerns the replacement of the existing modern first floor with a new (Building Regulation) compliant structure which will include a re-arrangement of the access to the first floor.
- 2.34 Similarly, the development proposal requires the removal of modern, non-loadbearing partitions at ground floor level. Again, these partitions are not part of the original structure and fabric of the historic building and their removal, as the third internal alteration, optimises the potential use of the ground floor as living accommodation and reinstates the original “open internal character” of the barn.
- 2.35 The development proposal also takes the opportunity to carry out remedial works within the first floor bedrooms, which are positioned at each end of the building as the fourth internal alteration. The proposed remediation comprises the introduction of 2, timber ‘A-frames’, of a slender and visually non-intrusive design, which are intended to safeguard the future stability of the structure. The remediation is necessary as the means to improve upon an earlier (ie late 20th century) but structurally inadequate attempt at achieving the same outcome.
- 2.36 The existing ground floor comprises a solid concrete subfloor, part of which has been tiled over with quarry tiles and part of which is left to a simple tamped finish. The fifth internal alteration proposes a retention of the subfloor, which may be tied into the structure of the historic building, with an overlay consisting of a damp proof membrane, insulation and screed; all ready to receive floor finishes.

3. ACCESS

- 3.1 The development proposal does not affect the existing highways arrangements into and out of the building (and indeed the larger property).
- 3.2 The development proposal incorporates a widening of the ‘modern’ access opening to southern elevation (only) at the west end of the building. The widening is necessary to improve visibility sight lines within the site and to ensure safe turning of vehicles into and out of the covered access way to mitigate any risk of either pedestrian or building impact.
- 3.3 Full details of this proposal are shown on the plans accompanying the current application. Essex County Council has confirmed that the proposed widening does not interfere with the historic structure and fabric of the building.
- 3.4 The development proposal does not introduce any additional flood risk but in any event, we are advised by the Environment Agency that the application site lies within “flood zone 1” where there is a ‘low’ probability of flooding from rivers and the sea. This advice is attached hereto as Appendix 4. The LPA has not identified any of the points that might be required in connection with flood risk as part of the application submission, and accordingly no Floor Risk Assessment is included in support of the application.

4. CONCLUSION

- 4.1 The proposed development represents a successful and therefore acceptable, repair, conversion and change of use of an existing listed building into a beneficial residential use. The development proposal has previously been approved by the LPA and may now be also be deemed acceptable having regard to the adopted local plan and the Conservation Area Character Appraisal.
- 4.2 The proposed does not impact the Conservation Area or undermine the objectives of the Conservation Area in this location. Visually, when seen from the public highway, there will be no discernible alteration to the existing conditions beyond the betterment that will result from the repair and remediation work for which planning permission and listed building consent is now sought.
- 4.3 Works of alteration necessary to facilitate the conversion and change of use are minimalised but where essential to the scheme have been dealt with sensitively and with due regard to complementary specifications and building finishes.
- 4.4 The proposed development does not affect the existing crossover with Mulberry Green and access and egress arrangements onto the public highway are not affected. There is a proposed widening of the existing ‘modern’ opening to the southern (ie non-street facing) elevation at its west end, necessary to improve existing sightlines and protect pedestrians and the building. This part of the proposed development is approved by Essex County Council.

Appendices

Appendix 1 – Aborigicultural Impact Assessment

Appendix 2 – Official List Entry

Appendix 3 – Officer Report of Delegated Decision on Application

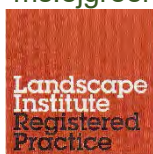
Appendix 4 – Flood Map

Granary Cottage, Mulberry Green, Harlow

BS5837 TREE
SURVEY,
ARBORICULTURAL
IMPACT
ASSESSMENT AND
METHOD
STATEMENT.

Conversion of a listed barn to a dwelling,

Elizabeth Greenwood CMLI, F Arbor A.
ms.ejgreenwood@gmail.com



Contents

1. Introduction	2
1.1 Contacts	2
1.2 Testimonials	2
1.3 Instruction	2
1.4 Scope	2
1.5 Background	3
1.6 Documentation	4
1.7 Survey.....	4
2. Tree Survey Criteria.....	4
2.1 Outline.....	4
2.2 Guidance	5
3. Tree Survey	6
3.1 Summary	6
3.2 Categories	7
4. Arboricultural Impact Assessment.....	7
4.1 Assessment	7
4.2 Mitigation.....	7
5. Arboricultural Method Statement	8
5.1 General.....	8
5.2 Tree Works.....	8
5.3 Tree Protection	9
5.4 Methods of Construction for Development.....	9
5.5 Post Construction and Landscaping near Trees.....	10
Appendix A: Photographs	12
Appendix B: Tree Survey Sheets	14
Appendix C: Copy of BS5837:2012 Table 1 “Cascade Chart for Tree Quality Assessment”	16
Appendix D: Indicative Arboricultural Supervision	17
Appendix E: Plan 1190.23.1 Tree Constraints and Surgery Plan.....	18
Appendix F: Plan 1190.23.2 Tree Protection Plan	20
References	22

1. Introduction

1.1 Contacts

Client - Mr. and Mrs Fosh

Architects - DWW Design

Arboriculturalist: Elizabeth Greenwood.

Council: Harlow Council.

1.2 Testimonials

- 1.2.1 I am a Chartered Landscape Architect with over 30 years of experience both in Local Government and in the private sector. My practice is registered with the Landscape Institute. I am also an arboriculturalist, holding the professional diploma in arboriculture. I am a Fellow of the Arboricultural Association.

1.3 Instruction

- 1.3.1 I have been appointed by Mr Fosh to resurvey and update the arboricultural report.
- 1.3.2 The development proposal is for conversion of a listed barn to a dwelling, with all the necessary improvements.

1.4 Scope

- 1.4.1 This report is carried out in accordance with BS5837. This document states the following with regard to scope:

'This British Standard gives recommendations and guidance on the relationship between trees and design, demolition, and construction processes.

It sets out the principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and structures.

The standard is applicable whether or not planning permission is required.' (The British Standards Institution, 2012)

- 1.4.2 This report is intended to be a working document to be used by the contractor and local authority to ensure the retention of the trees and provide a means of construction for the implementation of the proposed development with minimal disturbance to trees and notable vegetation.
- 1.4.3. The survey is to take the form of a visual assessment of trees recording their measurement, describing their age, amenity, condition and recommending work. Trees have been plotted on plan and full details of survey work are included in the appendices.
- 1.4.4. Limitations of this tree survey would include the lack of visibility of every tree owing to dense undergrowth and the presence of climbing plants such as ivy. There may be restrictions to the access within the site or from neighbouring land, and, in the case of trees growing on the boundary of the site only one side of the tree may be visible.
- 1.4.5. In the case of building within the vicinity of mature trees the owners must be made aware of their responsibility to maintain these trees in a safe condition. Their insurers should be made aware of the implications of the presence of these trees.

- 1.4.6. The report provides some background information on geology and soils; however, it is not within the remit of this commission to provide technical details of the foundations or structural design of the building which would comply with the requirements of building control.

1.5 Background

- 1.5.1. This detached property is set along Mulberry Green and its access is through the archway of a listed barn. The proposal is for renewal of planning permission (reference HW/PL/12?00415). This is described as *'Conversion of Grade II Barn/Stable to Provide 2-Bed Living Accommodation, Widening of Access Through Barn/Stable to 3.7m Internally.*
- 1.5.2. I have carried out two previous surveys of these trees, the first in July 2008 and prior to development of the rear part of this former garden. A second survey was carried in July 2020.
- 1.5.3. A site layout plan survey has been provided; ordnance survey maps show the ground levels are in the region of 55 metres above sea level. The ground levels are relatively flat. Since my last survey, a koi carp pool has been excavated within the eastern side of the garden with a single storey pool and garden room.
- 1.5.4. Much of the remaining garden is laid to lawn, with a small greenhouse and vegetable garden on the northern side. Owing to a boundary dispute with the adjacent landowner, a temporary fence is erected along the southern side of the garden with a selection of large and screening trees placed in pots awaiting planting once this dispute has been settled. Brick walls forms the boundaries to the north and east.
- 1.5.5. Two small trees are present within the eastern part of the garden, the other trees surveyed are the four pollarded limes owned by Harlow Council which are growing along the verge of Mulberry Green.
- 1.5.6. The property lies within the Old Harlow Conservation Area and as such the Local Authority has an interest in retaining tree cover as part of the character of the area. An application to the local authority should be made and consent received prior to any tree works being carried out. If poor quality trees are to be removed, then adequate provision should be made for replacement planting as part of the design proposals.
- 1.5.7 Geological Description:
Bedrock Geology: Lewes Nodular and Seaford chalk formation.
Superficial Deposits: Lowestoft Formation of glacial till
- 1.5.8 Soil
- **Soilscape 9:**
Lime-rich loamy and clayey soils with impeded drainage
 - **Texture:** Loamy.
 - **Drainage:** Freely draining
 - **Fertility:** High
 - **Habitats:**
Base-rich pastures and deciduous woodlands
 - **Landcover:** Arable and grassland
 - **Carbon:** Low

- **Drains to:** Groundwater.
- **Water protection:** Groundwater contamination with nitrate; siltation and nutrient enrichment of streams from soil erosion on certain of these soils.

1.6 Documentation

1.6.1. The following documents were provided by DWW Design.

- Base plan HD 23 0101 101 Existing layout

Previous survey plan 992.20,2B Tree Survey Plan

1.6.2. Plans showing the details as outlined in this method statement are included in the appendix to this report (Appendices G, and H)

1.7 Survey

- The site was visited on 8 June 2023
- Clear skies, sunny 16 degrees with a gentle breeze
- With good visibility
- Photographs were taken of the trees, which are included in Appendix A.
- The camera used to take these photographs was a Lumix digital camera with Leica zoom lens.

2. Tree Survey Criteria

2.1 Outline

2.1.1. Photographs of many of the trees and full details of this tree survey are included on tree survey sheets. (Appendices A and B) The information recorded complies with BS5837:2012, and is outlined as follows: -

- The species (English names), size and position of the trees within the site.
- The majority of large shrubs or trees with stem diameter of less than 150 mm have not been surveyed. According to the British Standard Recommendations. These trees can be transplanted or replaced.
- The dimensions of the trees are the height, and the girth measured at 1.5 metre above ground level. The spread is measured at the four points of the compass, and this is represented on plan. The lowest branch on the trunk is measured from ground level and the crown height is measured from the lowest point of the foliage.
- The maturity is recorded, and details of this classification are included on the tree survey sheets. (e.g., Y = young, SM = semi-mature, EM = early mature, M = mature, OM = over-mature).
- A description of the trees' condition includes any visual defects at the time of the survey. As this survey is conducted from ground level not all defects may be visible, and pathogens may not be apparent because of the season of inspection.
- General recommendations for each tree are outlined, which may need to be reviewed once development proposals are finalized.
- Estimated remaining contribution in years in view of the existing site conditions is classified as (less than 10 years; 10 to 20 years, 20 to 40 years, or more than 40 years).

- 2.1.2. Tree survey information has been added to the site layout plan and details have been amended for the purpose of this report. Appendix [G].
- 2.1.3. It is important to note that the survey and evaluation of trees is only relevant to site conditions at the time of survey. If there is any change in the site conditions, and especially within the root protection area the trees, the site may need to be re-surveyed, and the potential longevity of the trees re-evaluated. In the event of adverse weather conditions, the survey should be repeated or rescheduled.
- 2.1.4. Regardless of the development proposals there should be regular inspection and monitoring of trees at a frequency dependent on their condition and age. **This tree survey is only valid for a 3-year period from the date of the survey.**

2.2 Guidance

- 2.2.1. British Standard 5837:2012: 'Trees In relation to design, demolition, and construction – Recommendations'.

2.2.2 Categories:

The aim of the guidelines is to provide an assessment of the amenity values of the trees. The recommendations provide four categories in which trees should be placed for assessment purposes. These assessment categories are reproduced in Appendix C, Table 1, "Cascade Chart for Tree Quality Assessment", and simplified as:

- A. Trees of high quality with an estimated remaining life expectancy of at least 40 years
- B. Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
- C. Trees of low quality, with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter of below 150 mm
- U. Trees which have limited prognosis. Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.

These categories are subdivided into three sub-groups:

- 1. Trees of arboricultural value, good examples of their species or unusual specimens.
- 2. Mainly trees of landscape value, trees which are primarily of visual amenity.
- 3. Trees with mainly conservational value, for example veteran trees.

2.2.3. Root Protection Areas:

The British Standard Recommendations 5837:2012 provide a formula for calculating the Root Protection Area (RPA) required to be protected for existing trees that area to be retained.

- For single stem trees, the RPA (see 3.7) should be calculated as an area equivalent to a circle with a radius 12 times the stem diameter. For trees with more than one stem, one of the two calculation methods below should be used. In all cases, the stem diameter(s) should be measured in accordance with Annex C, and the RPA should be determined from Annex D. The calculated RPA for each tree should be capped to 707 square metres.
- For trees with two to five stems, the combined stem diameter should be calculated as follows:

$$\sqrt{(\text{stem diameter } 1)^2 + (\text{stem diameter } 2)^2 + \dots (\text{stem diameter } 5)^2}$$

- For trees with more than five stems (not illustrated in Annex C), the combined stem diameter should be calculated as follows: $\sqrt{(mean\ stem\ diameter)^2 \times number\ of\ stems}$

Root protection areas are indicated as a radius on plan. In the event of root restrictions from, for example, deep foundations or a retaining wall, topography, drainage, soil type, soil structure, or soil disturbance the approximate area is represented by a polygon, as dictated by this British Standard.

2.2.4. Protective Fencing and Root Protection:

Within development sites the British Standard recommends that trees are fenced off to ensure the root protection area is not damaged by construction works. In compliance with the British Standards, protective fencing should be erected at the edge of the root protection area. If access is required within this area, then the ground should be protected. Construction techniques using geo-web and geo-textile, in accordance with BS recommendations might be used to minimize damage to trees and enable working space for demolition or construction within the root protection area of trees.

Drainage and service runs need to be identified at this stage to ensure that if new service runs are to be excavated, they should be located outside the root protection zone of existing trees.

Building foundations can be specifically designed to reduce the impact of a building if there is a minor incursion into the root protection area of a tree.

2.2.5. Other Considerations:

In addition, the British Standard takes into account future growth of the crown of the tree, the spatial implications, and its effects on light.

Existing levels within the root protection areas of trees should be retained.

Some tree work might be required to ensure that the crowns of trees are cut back from working space and to provide access for construction vehicles.

There are adequate areas within the site to ensure that handling and storage of materials can be accommodated well outside the root protection areas.

3. Tree Survey

3.1 Summary

3.1.1 Of the six trees surveyed, only two lies within grounds of Granary Cottage. The poor-quality ornamental cherry (T1) has cankers on the trunk and is a small tree 4.5-metre-high of limited prognosis. With this amended development proposals this tree will not be affected by the proposals.

3.1.2. The other tree is a multi-stemmed bay tree (T2) growing close to the northern boundary wall, although of reasonable quality in its position close to the boundary it could be of potential nuisance to the listed wall. Since my survey in 2020 the tree has been pruned back with one of the stems removed and a reduced root protection area of 1.7 metre radius from the trunks and is assessed as being a C2 quality tree

3.1.3. The four lime trees are significant feature in this Old Harlow Conservation area, which enhances the historical context of the list barn and this local environment.

- 3.1.4. All four lime trees have previously been lopped with large diameter severed trunks- they are all now managed as Pollards. The first tree (T3) has extensive decay at the pollard head with hollowed trunk and heavy re-growth. Although formally classified as unsustainable its longevity and safe useful life may be prolonged if pollard management is continued on a regular cycle, and its' condition monitored.
- 3.1.5. The remaining three limes (T4, T5 and T6) are in better condition despite the severed trunks. All three have vigorous re-growth which touches the listed barn, potentially damaging the tiles and roof structure of this building. To prevent damage to the roof of the barn, they should be re-pollarded as a matter of some urgency. The cycle of pollarding should be reviewed to ensure that in future the re-growth of the crowns does not damage the roof of the barn.

3.2 Categories

Trees:

Category	No	Tag Number	Species
A			
B	3	T4, T5 and T6	Lime
C	3	T1 and T2 and T3	Cherry and bay and lime (if managed)
U			
Total	6		

4. Arboricultural Impact Assessment

4.1 Assessment

- 4.1.1 Three of the four limes overhang and have root protection area underlies the barn. They may be adversely affected if works are required to the foundation of the barn.
- 4.1.2 Management of their crowns is a matter of some urgency, as the overhanging branches of the trees are damaging the tiles and structure of the barn.

4.2 Mitigation

- 4.2.1. For protection of both tree some ground protection and hand digging will be necessary. A method statement may be required to
- 4.2.2 The impact of these proposals and mitigation requirements are as follows.

No.	Species	Effect	Tree Surgery	Mitigation	
				Foundation design/ method of underpinning	Hand Dig
T3, T4 and T5	Limes	Underlying roots and overhanging branches	Yes- urgency	Yes	Yes

- 4.2.3 If underpinning is required for the barn, then all works are to be carried out from inside the barn with minimum works carried out from the road verge. The design of the new foundations is minimising excavation within the RPA of the limes, with the option of above ground foundation design.
- 4.2.4. Works are to include ground protection and hand digging of the trial holes prior minimal excavations for the underpinning.

5. Arboricultural Method Statement

5.1 General

5.1.1 Issues Considered

Pre-construction works and site clearance:

- Tree protection
- Tree surgery
- Protective fencing
- Methods of ground protection construction during works

Construction works:

- Hand dig
- Foundation design/ underpinning
- Hard surfacing within the root protection area
- Location of underground services
- Contingency plans
- Site supervision

Post- Construction works:

- Removal of protective barrier etc...
- Remedial works
- Landscape works

5.2 Tree Works

5.2.1. As part of the application for planning permission the following tree surgery is outlined. All works will be carried out by a fully insured and competent tree surgeon in accordance with BS3889:2010 "Tree Work". The timing of tree surgery should also be carried out in accordance with the Wildlife and Countryside Act and in view of the nesting season of birds within the sites.

5.2.2 Management:

Tag	Species	Category	recommendation
T1	Prunus sp. Ornamental cherry	C2	Remove suckers
T2	Laurus nobilis (Bay)	C2	No work at present
T3	Tilia X europaea (Common Lime)	C2	Urgent- re-pollard tree- Remove basal growth. re-assess frequency of pollarding
T4	Tilia X europaea (Common Lime)	B2	Urgent- re-pollard tree-. re-assess frequency of pollarding
T5	Tilia X europaea (Common Lime)	B2	Urgent- re-pollard tree- Remove ivy. re-assess frequency of pollarding
T6	Tilia X europaea (Common Lime)	B2	Urgent- re-pollard tree- Remove ivy. re-assess frequency of pollarding

5.2.3. No trees will need to be removed as part of this application, however the health and safety of the lime tree T3 must be addressed by the council as a matter of some urgency.

5.3 Tree Protection

5.3.1. Protective Fencing/Protective Barrier

If protective fencing is required, it is to comply with British standards. All weather notices are to be affixed to this fencing with signage "CONSTRUCTION EXCLUSION ZONE – NO ACCESS".

5.3.2. Ground Protection

In the vicinity of the temporary unit working space will mainly be confined to existing hard surfacing. Where additional working space is required for construction within the root protection areas of retained trees, the British Standard specifies the following type of ground protection.

- a) For pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g., 100 mm depth of woodchip), laid onto a geo-textile membrane.
- b) For pedestrian-operated plant up to a gross weight of 2t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g., 150 mm depth of woodchip), laid onto a geo-textile membrane.
- c) For wheeled or tracked construction traffic exceeding 2t gross weight, an alternative system (e.g., proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

5.4 Methods of Construction for Development

5.4.1. Hand dig

Hand digging will also be required for all works within root protection areas of trees, including removal of surfacing, trenches, excavation for fence post and for cultivation for soft landscape areas. All hand digging within the root protection areas of trees should be supervised by a competent arboriculturalist.

Within root protection areas all excavation should be hand dug. A trench should be hand dug near the trees to ascertain whether roots are present. If roots over 25 mm are found these should, where possible, be bridged, and surrounded by sand- roots under this dimension should be cut to a clean cut and surrounded by sand. No roots are to be left exposed but covered with damp sand or hessian. The surface level of the path may need to be adjusted to retain these roots.

If on investigation of the hand dug trench there are no roots present mechanical excavation may be possible if a banksman is supervising the excavation to ensure that if roots are unearthed, they can be protected and clean cut and surrounded by sand. Hand digging may need to be resumed to complete the excavation.

This would include exploratory excavation by hand for the foundations of the paths and new hard surfacing within the root protection area of the trees.

5.4.2. Foundation design

Methods to mitigate foundations can be designed with virtually non-invasive techniques using a mini pile and above ground beam and raft construction; specialist companies can construct these foundations and are experienced at ensuring tree protection techniques are

deployed. By inserting gravel filter medium above ground and below the raft foundation some surface water ground filtration can provide moisture to the underlying tree roots.

Hand dig in area where indicated close to trees to minimize damage to tree roots. This is to ensure that large diameter structural roots are not damaged.

All pile rigs in vicinity of trees are to be positioned within the footprint of the building thus avoiding any damage to nearby trees.

If underpinning is required all works are to be carried out from within the footprint of the barn, with minimal excavation and hand digging if trial holes are required.

5.4.3. Surfacing within the Root Protection Area

Hand digging will also be required for any excavations. The following measures should also be employed to minimise damage to tree roots.

- a) Minimizing excavation within the root protection area by removing surfacing herbage and laying a geo-textile to stabilize the ground.
- b) Infill any irregularities with 50 mm sharp sand.
- c) On this lay a geo web, depth to be specified by the supplier to accommodate the proposed weight load.
- d) This will be filled with no fine's gravel/stone 20-40 mm.
- e) Lay final wearing surface on top of this base- for example permeable paving or porous tarmac.
- f) Use timber edging to avoid excessive excavation to facilitate haunching of edging.

5.4.4. Location of Underground Services

All drainage and below ground services will be designed to avoid tree protection zones. If there is no alternative but to site these within the root protection area of trees, then trenches excavation should be hand dug and comply with 'Hand dug ' as outlined in section 5.1 or the NJUG regulations.

5.4.5. Contingency Plans

If vehicular access is necessary within the root protection zone of any of the trees, in response to chemical spillage, collision or emergency access, the ground will be protected by geo-textile or boarding as outlined in the British Standard. Spillage and ground contamination will be prevented, and preparation of material carried out outside the root protection areas of tree.

5.4.6. Site Supervision

There will be full supervision on site from the site foreman and tree protection methods will be strictly adhered to. An arboricultural supervision schedule, if required by the local authority, is included in the appendices to this report.

5.5 Post Construction and Landscaping near Trees.

5.5.1. Removal of fencing and ground protection

On completion of works, protective fencing and the ground protection for temporary working space will be removed.

5.5.2. Remedial works and soil improvement

Exposed soils are easily compacted resulting in loss of water and gaseous exchange and leading to root deaths. To relieve ground compaction, which may have resulted from the overrun of vehicles or by storage of materials, the clay soils should be broken up to allow air to penetrate and for the soil structure to be restored.

Within the tree root protection area improve the soil structure by incorporating a compost or mulch within the topsoil, of 75-100 mm in depth. This can be spread over the surface and gently forked into the soil. If bark chip is used as a mulch NPK fertilizer should be added to counteract the nitrogen depletion of the soil. There are options for additives of mycorrhizal fungal which may also improve root function. Ground compaction will be addressed by either lightly forking over the area or by other techniques; for example, use of tree spade `` soil aeration.

5.5.3. New planting and soft landscape

New planting within the root protection areas of trees should be carried out to avoid mechanical cultivation and for plants to be notch planted. Shrub beds are to be mulched, which, in addition to reducing weed growth, will enhance soil conditions round trees. Within grass areas, the height of mower blades is to be set above the level of surface tree roots to avoid damage and soil level raised above surface roots with a sandy composition of topsoil.

Elizabeth Greenwood C.M.L.I., F. Arbor.A
Re-surveyed and updated June 2023

Appendix A: Photographs



Above left- the cherry (T1). **Above centre and right –** The twin stemmed bay with the foliage of the lime(T3) overhanging the wall. **Below-** the overhanging foliage of the limes



Below- Vigorous and overhanging crown of three of the limes over the barn (T4, T5 and T6)





Above - the amenity value of the line of lime

Below- the lime (T1) with basal growth and cavities within the crown



Appendix B: Tree Survey Sheets

Tag	Species	Age	Stem girth	Height	Lowest branch	Category	North	East	South	West	Condition	Life span	Notes	recommendation	RPA radius	RPA sqm
T1	Prunus sp. Ornamental cherry	M	260	4.75	1	C2	2.6	2.1	2.3	2.4	Fair	20+	disproportionate graft at 1.2 m, species cherry, double flower, wilt, suckers at graft, dead wood,	Remove suckers	3.12	30.59
T2	Laurus nobilis (Bay)	M	145	4.5	1.8	C2	1.8	1.2	0.75	1	Good	40+	suckers at base	No work at present	1.74	9.51
T3	Tilia X europaea (Common Lime)	M	655	12	2	C2	4	3.6	4	3.5	Good	40+	pollarded at trunk reduced at 3, pollarded at 5.5 m, regrowth 2-3 m, decay, basal growth, cavities within the trunk with lateral-major basal growth.	Urgent- re-pollard tree- Remove basal growth. re-assess frequency of pollarding	7.86	194.1
T4	Tilia X europaea (Common Lime)	M	390	9.5	2	B2	3	3.1	3.3	4.2	Good	40+	pollarded same as 1, canopy overhangs barn, minor ivy	Urgent- re-pollard tree-. re-assess frequency of pollarding	4.68	68.82
T5	Tilia X europaea (Common Lime)	M	500	12.5	2.8	B2	3.3	3.9	3.8	4.5	Good	40+	pollarded same as 1, canopy overhangs barn, minor ivy, basal growth,	Urgent- re-pollard tree- Remove ivy. re-assess frequency of pollarding	6	113.1

Tag	Species	Age	Stem girth	Height	Lowest branch	Category	North	East	South	West	Condition	Life span	Notes	recommendation	RPA radius	RPA sqm
T6	Tilia X europaea (Common Lime)	M	425	11	2	B2	4	3.6	4.5	4.5	Good	40+	basal growth, ivy, pollarded at 5 m,	Urgent- re-pollard tree- Remove ivy. re-assess frequency of pollarding	5.1	81.72

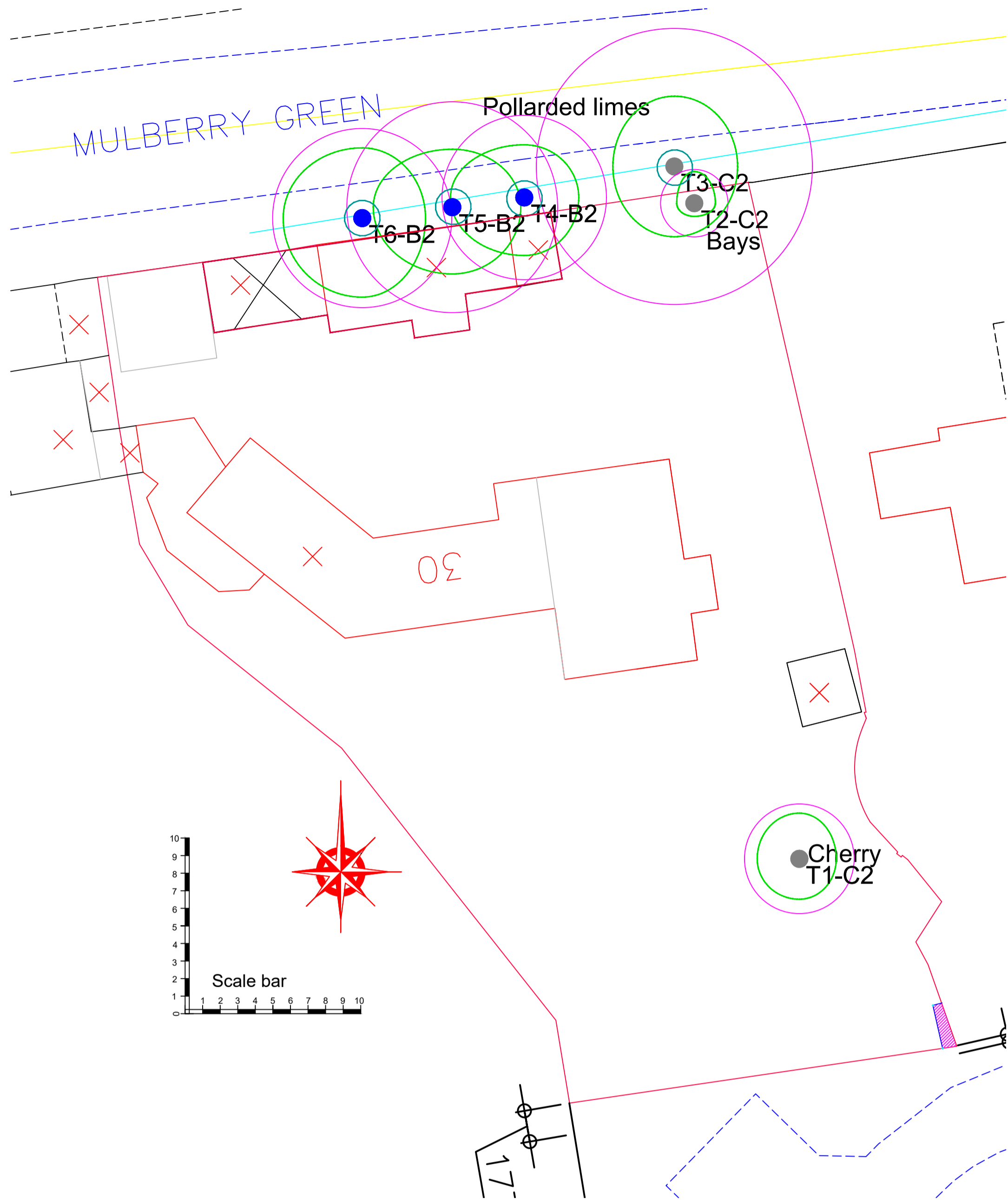
Appendix C: Copy of BS5837:2012 Table 1 “Cascade Chart for Tree Quality Assessment”

Category	Criteria			Identification on plan (RAB subject to legibility of the plan)
Category U (Formerly 'R')				
Those in such conditions that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	Trees that have a serious, irremediable, structural defect, such a that their early loss is expected due to collapse including those that will become unviable after removal of other category U trees (e.g. Where for whatever reason, the loss of companion shelter cannot be mitigated by pruning.) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline. Trees infected with pathogens of significance to the health and/or so safety p of other trees nearby, or very low quality trees suppressing adjacent trees of better quality potential conservation value which might be desirable to preserve NOTE Category U trees can have existing or			Dark red (RAB 127-000-000)
Trees to consider for retention				
	1. Mainly arboricultural qualities	2. Mainly landscape qualities	3. Mainly Conservation qualities	
Category A				
Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; those that are essential components of groups or formal or semi-formal arboricultural features. (e.g., The dominant and/or principal trees within an avenue	Trees, groups or woodlands of particular visual importance as arboricultural and /or landscape features	Trees, group, or woodlands of significant conservation , commemorative or other value (/e.g., Veteran trees or wood pasture)	Light Green (RAB 000-255-000)
Category B				
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but downgraded because of impaired cons conditions (e.g., Presence of significant though remediable defects, including unsympathetic past management and storm damage) such as that they are unlikely to be suitable for retention beyond 40 years; or trees lacking the special quality necessary to merit category A designation	Tree present in numbers, usually growing in groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collections but situated a so as to make little visual contribution to the wider locality	Trees with materials conservation or other cultural c value	Mid blue (RAB -000-000-255)
Category C				
Trees of low quality , with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter of below 150 mm	Unremarkable trees of limited merit such or such impaired condition that they do not qualify in higher categories.	Trees present in groups or woodlands but without this conferring on them significantly great collective landscape value; and/or tree offering low or only temporary/transient landscape benefits	Trees with no materials conservation or other cultural value	Grey (Rab 091-091-091)







Appendix D: Indicative Arboricultural Supervision

Item	*Site Supervision Visit Number	Estimated Timing	Inspection	Date of Visit
<p>Meet site foremen and discuss works and program. Setting out site and protective fencing, ground protection- site organization.</p>	<p>Visit 1</p>	<p>Prior to site clearance and demolition</p>	<p>1. Carry out tree removal and tree surgery and listed 2. Fence off all trees to be retained prior to demolition and site work 3. Provide and insert ground protection for the duration of construction works</p>	
<p>Setting out building, foundation excavation, trenches</p>		<p>Prior to construction</p>	<p>4. Carry out demolition and site clearance 5. Set up site working area</p>	
<p>Excavations/ changes of soil levels— and foundation and positioning of pile drivers details- inspect</p>	<p>Visit 2</p>	<p>During construction</p>	<p>6. Carry out construction 7. If underpinning is required all works are to be carried out from within the footprint of the barn, with minimal excavation and hand digging if trail holes are required. 8. For new surfacing insert ground protection as above for use of site works</p>	
<p>On completion- removal of tree protection, planting, and remedial works- removal</p>		<p>Post completion</p>	<p>9. On completion of works remove protective fencing and ground protection 10. Carry out remedial works as listed prior to landscape works 11. Carry out landscape works</p>	

Appendix E: Plan 1190.23.1 Tree Constraints and Surgery Plan



SCHEDULE

-  A Quality trees
-  B Quality trees
-  C Quality trees.
-  U Quality trees
-  Root Protection Areas (RPA)
-  Tree surgery- re-pollarding

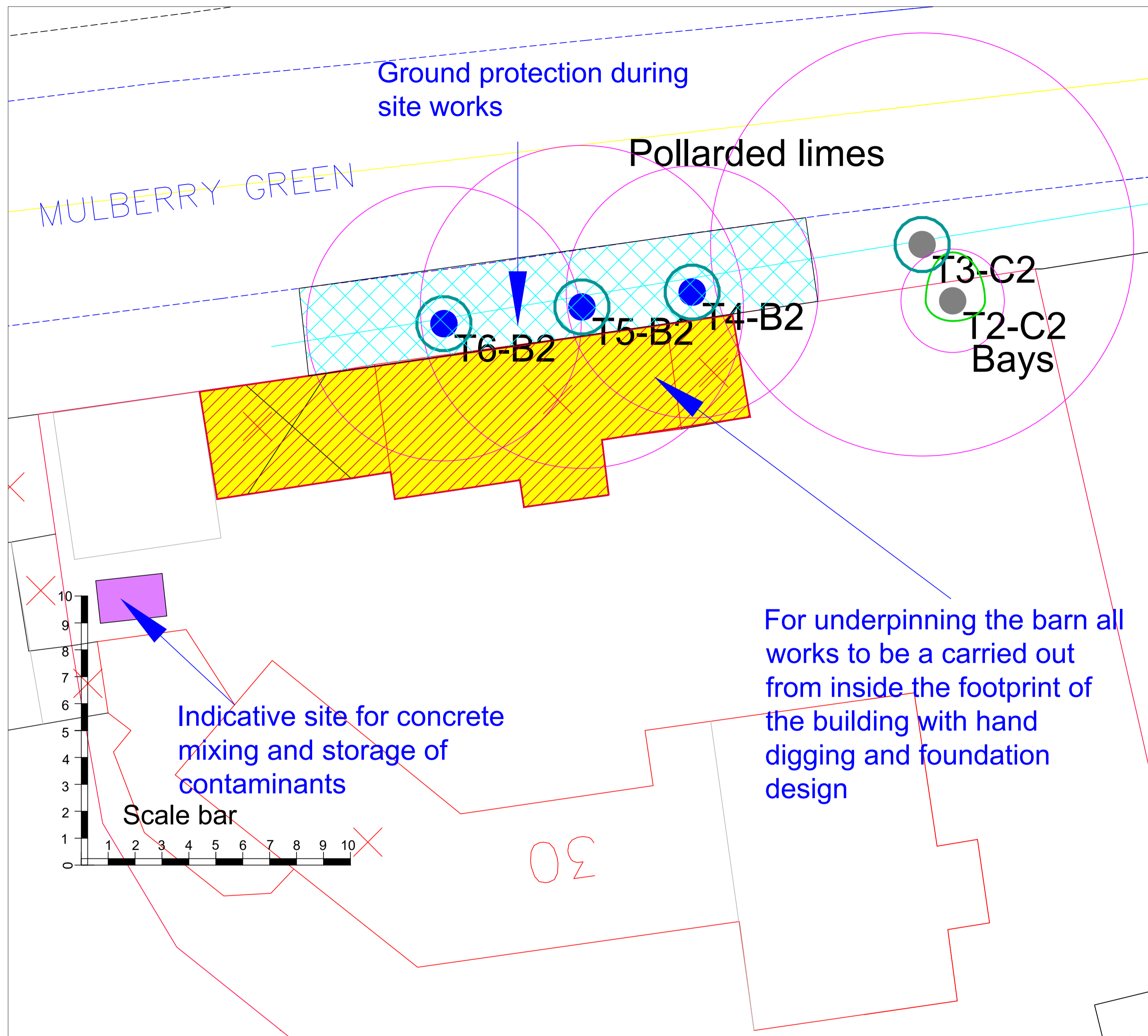
Tag	Species	Category	recommendation
T1	Prunus sp. Ornamental cherry	C2	Remove suckers
T2	Laurus nobilis (Bay)	C2	No work at present
T3	Tilia X europaea (Common Lime)	C2	Urgent- re-pollard tree- Remove basal growth. re-assess frequency of pollarding
T4	Tilia X europaea (Common Lime)	B2	Urgent- re-pollard tree- . re-assess frequency of pollarding
T5	Tilia X europaea (Common Lime)	B2	Urgent- re-pollard tree- Remove ivy. re-assess frequency of pollarding
T6	Tilia X europaea (Common Lime)	B2	Urgent- re-pollard tree- Remove ivy. re-assess frequency of pollarding

This drawing is the copyright of Elizabeth Greenwood C.M.L.I., F.Arbor.A and may not be reproduced in whole or in part without written permission



Scheme <i>Granary Cottage, Mulberry Green</i>	Date <i>June 2023</i>
Title <i>Tree Constraints and Tree Surgery Plan</i>	Drawn by <i>E.J.G</i>
Scale <i>1:200 @ A2.</i>	Job No <i>1190.23.</i>
Elizabeth Greenwood C.M.L.I., F.Arbor.A. 10 Knight Street, Sawbridgeworth, Herts, CM21 9AT. Tel 01279 722381 mobile 07746867402, email ms.ejgreenwood@gmail.com	Drg No <i>1190.23.1</i> <i>Appendix E</i>

Appendix F: Plan 1190.23.2 Tree Protection Plan



SCHEDULE

-  Barn to be converted
-  Trees to retain
-  Tree surgery
-  Root protection areas
-  Protective /barrier fencing
-  Ground protection & new surfacing
-  Hand dig
-  Concrete mixing and storage of contaminants



Ground Protection

In the vicinity of the temporary unit working space will mainly be confined to existing hard surfacing. Where additional working space is required for construction within the root protection areas of retained trees, the British Standard specifies the following type of ground protection.

- a) For pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100 mm depth of woodchip), laid onto a geo-textile membrane;
- b) For pedestrian-operated plant up to a gross weight of 2 t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geo-textile membrane;
- c) For wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

Hand dig

Hand digging will also be required for all works within root protection areas of trees, including removal of surfacing, trenches, excavation for fence post and for cultivation for soft landscape areas. All hand digging within the root protection areas of trees should be supervised by a competent arboriculturalist.

Within root protection areas all excavation should be hand dug. A trench should be hand dug near the trees to ascertain whether roots are present. If roots over 50mm are found these should, where possible, be bridged, and surrounded by sand- roots under this dimension should be cut to a clean cut and surrounded by sand. No roots are to be left exposed but covered with damp sand or hessian. The surface level of the path may need to be adjusted to retain these roots.

If on investigation of the hand dug trench there are no roots present mechanical excavation may be possible if a banksman is supervising the excavation to ensure that if roots are unearthed they can be protected and clean cut and surrounded by sand. Hand digging may need to be resumed to complete the excavation.

This would include exploratory excavation by hand for the foundations of the paths and new hard surfacing within the root protection area of the trees

Underpinning

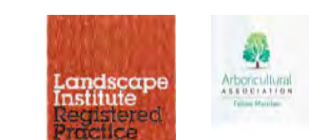
If underpinning is required for the barn, then all works are to be carried out from inside the barn with minimum works carried out from the road verge. The design of the new foundations are minimise excavation within the RPA of the limes, with the option of above ground foundation design

Works are to include ground protection and hand digging of the trial holes prior minimal excavations of the underpinning.

Method of working

- Fencing off the trees as marked on plan with Heras style fencing in accordance with British standard.
- Lay ground protection where required ground protection
- Hand dig within RPA of trees
- If underpinning is required execute all works from within the footprint of the barn and design works with minimal excavation below the existing foundation level of the barn.
- Continue with site works as agreed with the LPA, within the area marked site construction area and exclude any works from the SITES EXCLUSION ZONES.
- On completion of works remove ground protection and protective fencing and carry out additional remedial works.
- Cultivated by hand for all soft landscape works within the root protection areas of trees
- Monitor the condition of trees an annual basis

This drawing is the copyright of Elizabeth Greenwood C.M.L.I., F.Arbor.A and may not be reproduced in whole or in part without written permission



Scheme <i>Granary Cottage, Mulberry Green</i>	Date <i>June 2023</i>
Title <i>Tree Protection Plan</i>	Drawn by <i>E.J.G</i>
Scale <i>1:100 @ A1. or 1:200 @ A3</i>	Job No <i>1190.23</i>
Elizabeth Greenwood C.M.L.I., F.Arbor.A. 10 Knight Street, Sawbridgeworth, Herts, CM21 9AT. Tel 01279 722381 mobile 07746867402, email ms.ejgreenwood@gmail.com	Dwg No <i>1190.23.2</i> <i>Appendix F</i>

References

- British Geological Survey. (2018, 02 01). *Geology of Britain Viewer*. Retrieved from British Geological Survey: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>
- Dobson, M. (1995). *Arboriculture Research and Information Note: Tree Root Systems*. Farnham: Arboricultural Advisory and Information Service.
- Forestry Commision. (1998). *Estimating the Age of Large and Veteran Trees in Britain*. Stockport: Forestry Commision. Retrieved from Forestry Commision: <https://www.forestry.gov.uk/website/publications.nsf/DocsByUnique/D4AEAEB8EE5FE1180257EBB0046FA7E>
- Lonsdale, D. (1999). *The Principles of Tree Hazard Assessment and Management*. London: Stationary Office Books.
- Mattheck, C. (1995). *The Body Language of Trees: A Handbook for Failure Analysis*. London: Stationary Office Books.
- NJUG. (2007). *Volume 4 Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees*. London: National Joint Utilities Group.
- Roberts, J., Jackson, N., & Smith, M. (2013). *Tree Roots in the Built Environment*. London: Stationary Office Books.
- Soilscapes. (2018, 02 06). *Soilscapes Map*. Retrieved from Soilscapes: <http://www.landis.org.uk/soilscapes/>
- Strouts, R., & Winter, T. (1994). *Diagnosis of Ill-Health in Trees*. London: Stationary Office Books.
- The British Standards Institution. (2010). *Tree Work*. Milton Keynes: BSI Standards Limited.
- The British Standards Institution. (2012). *Trees in Relation to Design, Demolition and Construction - Recommendations*. Milton Keynes: BSI Standards Limited.
- Weber, K., & Mattheck, C. (2003). *Manual of Wood Decay in Trees*. Stonehouse: The Arboricultural Association.

GRANARY COTTAGE

Official list entry

Heritage Category: **Listed Building**

Grade: **II**

List Entry Number: **1111690**

Date first listed: **19-Jun-1981**

List Entry Name: **GRANARY COTTAGE**

Statutory Address 1: **GRANARY COTTAGE, 30, MULBERRY GREEN**

This List entry helps identify the building designated at this address for its special architectural or historic interest.

Unless the List entry states otherwise, it includes both the structure itself and any object or structure fixed to it (whether inside or outside) as well as any object or structure within the curtilage of the building.

For these purposes, to be included within the curtilage of the building, the object or structure must have formed part of the land since before 1st July 1948.

Understanding list entries (<https://historicengland.org.uk/listing/the-list/understanding-list-entries/>)

Corrections and minor amendments (<https://historicengland.org.uk/listing/the-list/minor-amendments/>)

Location

Statutory Address: **GRANARY COTTAGE, 30, MULBERRY GREEN**

The building or site itself may lie within the boundary of more than one authority.

County: **Essex**

District: **Harlow (District Authority)**

Parish: **Non Civil Parish**

National Grid Reference: **TL 47856 11554**

Details

1. 5216 MULBERRY GREEN (south side) No 30 (Granary Cottage) TL 4711 NE 6/6

II GV 2. Late C18 barn-like building. Timber-framed and black weatherboarded with ridged and gabled roof, peg-tiled and fly-hipped. Modern square access opening at west end.

Listing NGR: TL4785611554

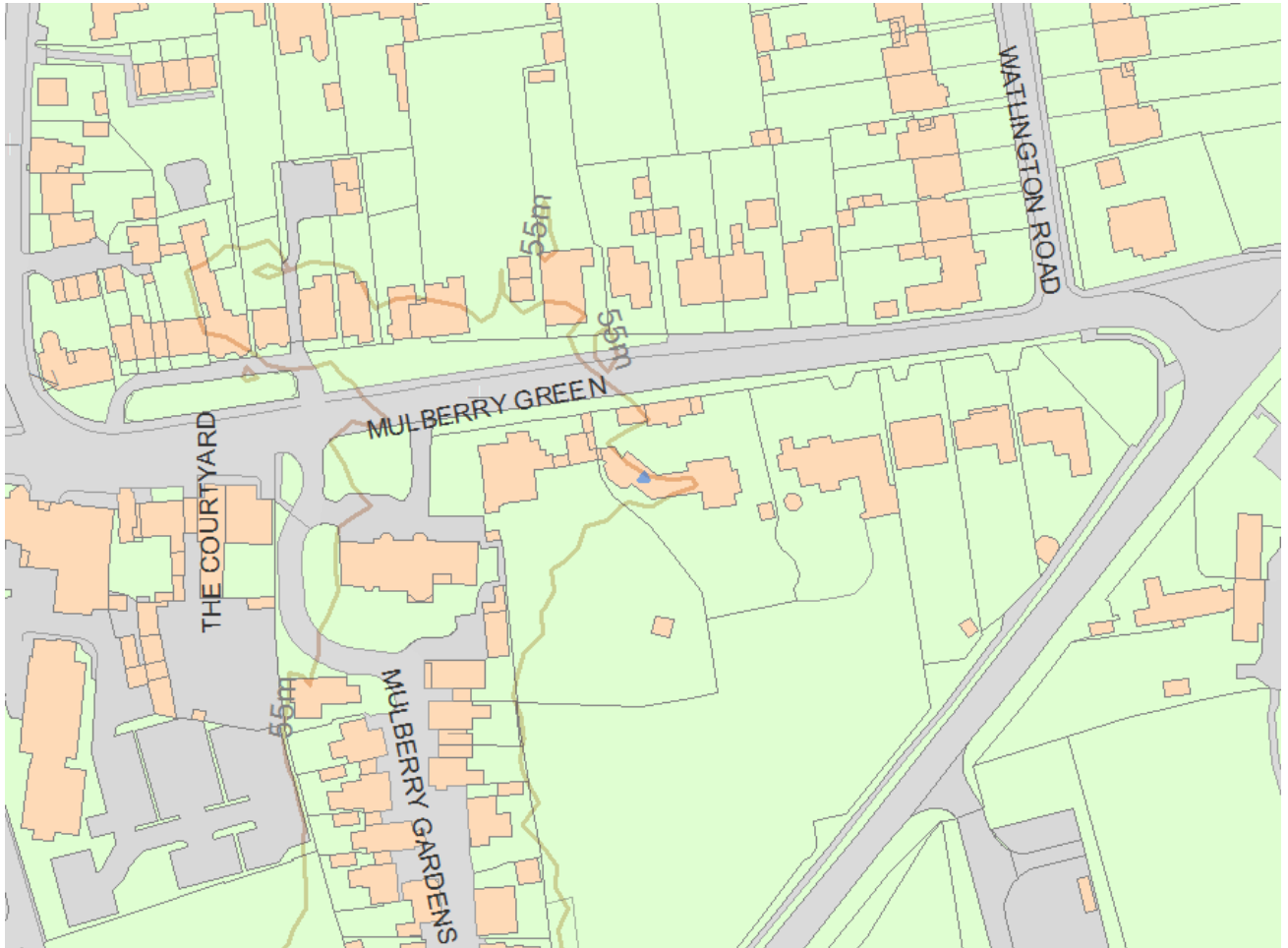
Legacy

The contents of this record have been generated from a legacy data system.
Legacy System number: **119511**

Legacy System: **LBS**

Legal

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.



Map

This map is for quick reference purposes only and may not be to scale.
This copy shows the entry on 04-Jul-2023 at 11:30:37.

© Crown Copyright and database right 2023. All rights reserved. Ordnance Survey
Licence number 100024900. © British Crown and SeaZone Solutions Limited 2023. All
rights reserved. Licence number 102006.006.

Use of this data is subject to **Terms and Conditions**
(<https://historicengland.org.uk/terms/website-terms-conditions/>).

End of official list entry

→ [Next - **Comments and Photos**](#)



[Back to top](#)

REPORT OF DELEGATED DECISION ON APPLICATION:

HW/PL/12/00415

DATED: 07 January 2013

OFFICER: Chris Gatland

APPLICANT: Mr N Paxman

LOCATION: 30 Mulberry Green, Harlow, CM17 0ET

PROPOSAL: Conversion of Grade II Barn/Stable to Provide 2-Bed Living Accommodation, Widening of Access Through Barn/Stable to 3.7m Internally. Demolition of Single Storey Pool and Garden Room and Construction of Cart Lodge. Erection of One 3-Bed New Dwellinghouse with Garaging/Car Port, Parking and Hard Landscaping

APPLICATION SITE & SURROUNDINGS:

The application site is an irregularly shaped plot located to the southern side of Mulberry Green in the Old Harlow Conservation Area. The site measures approximately 38m in width along its northern frontage with Mulberry Green, tapering to approximately 10.5m at the rear, and has a depth of 46m. The site is occupied by a detached house (Granary Cottage) which is set back some 15m from the highway, with a detached timber barn in front of the house, adjoining the highway boundary. Adjoining the application site to the east and west are large detached houses set on plots which have wide frontages. Directly opposite the application site, to the northern side of Mulberry Green, are detached dwellings.

The barn is listed as being of historic / architectural interest. Its description on the English Heritage website reads as follows:

'Late C18 barn-like building. Timber framed and black weatherboard with ridged and gabled roof, peg-tiled and fly-hipped. Modern square access opening at west end.'

DETAILS OF PROPOSAL:

Three applications have been received for this site. Application reference HW/PL/12/00415 is an application for a replacement planning permission seeking to extend the time in which development can occur. The original planning permission, which was granted in 2010 by the Development Management Committee under application reference HW/PL/09/00285, sought permission for the following works:

- The conversion of the barn to residential (a two storey, 2 bedroomed unit), the widening of the existing access through the barn to 3.7m at the rear, the demolition of a dilapidated greenhouse which is screened from the street by a grade II listed 2m high brick wall that abuts the highway, and the erection of a cart lodge (car port) attached to the western flank wall of the barn;
- The demolition of a 1960s single storey flat roofed swimming pool enclosure, two store rooms and a plant room attached to Granary Cottage;
- The erection of a 3-bedroomed 2 storey dwellinghouse with double garage and car port, parking and landscaping.

The existing access through the barn into the courtyard of Granary Cottage, which currently measures 2.9m at the front and 3m at the rear, will be widened by 0.7m at the rear and a Y-shaped turning area in the yard will be provided enabling cars to leave the site in forward gear. The cart lodge to be erected at the side of the barn will provide 2 no. parking spaces for the existing Granary Cottage whilst the proposed double garage will provide a parking space each for the proposed new dwelling and the converted barn, with an additional parking space in a proposed cart lodge (car port) for the proposed new house.

Application reference HW/PL/12/00419 and HW/PL/12/00420 are applications for a new Listed Building Consent and new Conservation Area Consent to replace extant listed building and conservation area consents for the same site which were granted under application references HW/PL/09/00286 and HW/PL/09/00299 respectively in order to extend the time limit for implementing this development.

RELEVANT PLANNING HISTORY:

HW/PL/09/00285 – Planning Application for the Conversion of Grade II Barn/Stable to Provide 2 - bed Living Accommodation, widening of access through Barn/Stable to 3.7m. Internally. Demolition of Single Storey Pool and Garden Room & Construction of Cart Lodge. Erection of One 3- Bed New Dwellinghouse with Garaging/Car Port, Parking & Hard Landscaping. Approved 14 February 2010.

HW/PL/09/00286 – Listed Building Consent Application for the Conversion of Grade II Barn/Stable to Provide 2 - Bed Living Accommodation, Widening of Access through Barn/Stable to 3.7m.internally. Demolition of Single Storey Pool and Garden Room & Construction of Cart Lodge. Erection of One 3- Bed New Dwellinghouse with Garaging/Car Port, Parking & Hard Landscaping. Approved 2 February 2010.

HW/PL/09/00299 – Conservation Area Consent for the Restoration of Listed Barn/Stable to Provide 2-Bed Living Accommodation. Widening of Existing Access through Barn/Stable to 3.7m and Adjustment of Existing Cottage to Include Demolition of Existing Single Storey Pool Room, Store and Greenhouse and Construction of Single Storey Car Lodge. Erection of 1 No. 3-Bed New Dwelling House Together with Private Garage/Car Port, Parking and Hard Landscaping. Approved 2 February 2010.

HW/PL/09/00019 Conversion of barn to living accommodation; closure of existing access through barn; formation of new access through listed wall, erection of two 5 bedroomed houses, together with garaging and parking. Following a 'non determination' appeal, planning permission was refused on 24 August 2009 by a Planning Inspector, primarily on the grounds of the demolition of part of the listed wall abutting Mulberry Green.

HW/PL/06/00430: Erection of garage and car port to east side of forecourt granted permission 2 February 2007. This permission expired on 2 February 2010.

HW/ST/03/00063: Proposed first floor (east) side addition over the former covered swimming pool of Granary Cottage, granted permission 3 July 2003. This permission expired on 3 July 2008.

CONSULTATIONS

Internal and External Consultees

Essex County Council Highways Division:

The Highway Authority would not wish to raise an objection to the above application subject

to the following:

No unbound material shall be used in the surface treatment of the vehicular access within 6 metres of the highway boundary of the site.

Reason: To avoid displacement of loose material onto the highway in the interests of highway safety.

The above condition is required to ensure that the development accords with the Highway Authority's Development Management Policies, adopted as County Council Supplementary Guidance in February 2011.

ECC - Listed Buildings and/or Conservation Areas:

These applications are for the renewal of time expired consents for the partial demolition of a house in the Old Harlow Conservation Area and the erection of a new house, and the conversion of a listed barn, probably originally a granary, to residential accommodation. The application plans are the same as those which have been approved previously apart from bringing a new garage up to current standards, and I therefore have no objection to the application. I would recommend that the same conditions as before be attached to any approval. Those relevant to the design of the new house, and the refurbishment of the listed building, include approval of the building materials to be used, of details of works to the external elevations of the barn, and a stipulation that the entrance through the barn should not be enlarged.

Neighbours and Additional Publicity

No. of letters sent: 27

Total no. of Representations received: 1

Date Site Notice Expired: 14/12/2012

Date Press Notice Expired: 20/12/2012

Summary of Representations Received

1 letter of representation has been received in connection with this application:

39 Mulberry Green:

- Is concerned about any changes being made to the frontage of No. 30.
- Feels the widening of the access opening will necessitate a huge amount of building work and the possible complete demolition of the existing barn structure.
- Does not believe that the existing buildings in Mulberry Green should be touched as it is located within a Conservation Area.
- Feels the area of Mulberry Green has been over-developed in recent years and is worried that further development would cause significant traffic and access problems.

PLANNING POLICY

Harlow Adopted Replacement Local Plan, July 2006

The following Adopted Replacement Local Plan policies apply:

101	BE1	New & Extd Buildings Relate to Setting BE1: "Character and Identity" new and extended buildings should relate to their setting to strengthen, enhance, protect or create local character.
-----	-----	--

Permission will be granted for new development providing: it is well connected to and integrated with the wider settlement; the height massing, layout, appearance and landscape makes an appropriate visual relationship with that of the form, grain, scale, materials and details of the surrounding area; building design is specific to the site and its context; it enhances the character, image and perception of the area when highly visible.

- 102 BE6 Harm to Statutory Listed Building
BE6: "Listed Buildings" proposals for the extension or alternation of any listed building, alteration of its setting, conversion or change of use should not adversely affect or harm any of the following: the character that forms its value as being of special architectural or historic interest; particular physical features that justify its protection; its setting in relation to its grounds, the surrounding area, other buildings and wider views and vistas.
- 103 BE9 Demolish/Rebuild in Conservation Area
BE9: "Conservation Areas" demolition and/or redevelopment of a building in a Conservation Area will be permitted if it is not detrimental to the architectural or historical character or appearance of the Conservation Area.
- 104 BE10 New Development in Conservation Area
BE10: "Conservation Areas" new development within or affecting a Conservation Area will be granted consent subject to: it not harming the character or appearance of the Conservation Area; the scale, height, form, massing, elevation, detailed design, materials and layout respect the character of the Conservation Area; the proposed land use is compatible with the function and activities of the Conservation Area; the proposed land use is compatible with the function and activities of the Conservation Area.
- 105 H10 Proposals for Infill Development
H10: "Existing Housing Areas" planning permission will be granted for infill development if: the proposal does not have an unacceptable adverse effect on the character of the locality, the appearance of the street scene or the amenities afforded to occupiers of adjacent dwellings; off street parking and access arrangements are acceptable and do not prejudice the potential for comprehensive development of adjacent land.

PLANNING STANDARDS

Other Material Considerations

National Planning Policy

National Planning Policy Framework: Consultation (2012) - sets out the Government's key economic, social and environmental objectives and the planning policies to deliver them. The intention is that these policies will provide local communities with the tools they need to energise their local economies, meet housing needs, plan for a low-carbon future and protect the environmental and cultural landscapes that they value. It seeks to free

communities from unnecessarily prescriptive central government policies, empowering local councils to deliver innovative solutions that work for their local area.

Supplementary Planning Document

Harlow Design Guide adopted October 2011.

Summary of Main Issues

The following policies have been revised since the grant of the original planning permission, listed building consent and conservation area consent for this proposed development:

All Planning Policy Guidance and Planning Policy Statements have been superseded by the National Planning Policy Framework (NPPF).

The Harlow Common Guidelines SPD has been replaced by Harlow Design Guide SPD.

The above changes in guidance and policy documentation do not significantly change the considerations relevant to this application and these are reiterated below.

PLANNING ASSESSMENT

The main planning issues to be considered in the determination of these applications are:

- (i) the principal of the development
- (ii) the impact of the proposed development on the listed barn and brick wall
- (iii) the impact of the proposal on the street scene and on the character and appearance of the Conservation Area
- (iv) the impact on residential amenity
- (v) parking considerations and the impact on the adjoining highway

(i) The principle of the development

The host site is located within Mulberry Green whereby the principle of development is acceptable, subject to compliance with the applicable development management policies. Since the determination of the original application the NPPF has been adopted which makes it clear that the Government favours a presumption in favour of sustainable development and a proactive drive towards supporting the development of new housing.

The NPPF, unlike the original version of PPS3 that was in place at the time the original planning, listed building and conservation area consent applications were determined, excludes back garden areas from the definition of 'previously developed land' and thus now the site would not be considered the most favourable location for new development, however notwithstanding this policy H10 of the Local Plan still needs to be considered which states that planning permission for residential infill development, including the subdivision of garden plots, will be granted provided that criteria set out within this policy are met.

The proposal will therefore not be considered objectionable in principle provided that it can be demonstrated that it still complies with the applicable criteria in the relevant Local Plan policies H10, BE1, BE6, BE9, BE10 and H10 and is still considered acceptable in all other respects.

(ii) The impact of the proposal on the character, appearance and setting of the listed barn and brick wall

The NPPF requires Local Planning Authorities to identify and assess the particular significance of any heritage asset that may be affected by a proposal and in determining planning applications should take account of the desirability of sustaining and enhancing the significance of heritage assets, the positive contributions that conservation of heritage assets can make to sustainable communities and the desirability of new development making a positive contribution to local character. A great deal of weight should be given to the assets' conservation.

Policy BE6 of the Local Plan specifies that extensions or alterations to listed buildings should not adversely affect or harm (1) the character of the building (2) particular physical features that justify its statutory protection, or (3) its setting.

The proposed 2 bedroomed conversion of the late C18 barn building fronting Mulberry Green will entail no window openings being created in the street (north) elevation of the building. In addition, the existing 2.9m wide square access way opening onto Mulberry Green will remain unchanged, although at the rear the access will be widened to 3.7m to enable cars to more easily manoeuvre within the site and into and out of the parking spaces that will be provided. The works will not lead to the loss of any features or structural components that are of significant historic interest, only relatively recent internal stud work. The character and appearance of the barn will, therefore, remain unchanged as viewed from the highway and will continue to be that of a timber framed, black weather boarded barn, with no obvious indication from the highway that it had been converted into a residential unit. The decorative iron gates to the front of the access opening will be retained. The listed old brick wall will also remain unaffected by the development scheme.

The design of the new cart lodge that will be erected at the western end of the barn is thought to be sympathetic to the character and appearance of this listed structure as the walls will be constructed of matching weatherboard and the roof will pitched and covered in natural slate roof which it is thought will contrast effectively with the roof of the barn. The proposed cart lodge will be read in association with the barn and will appear as a complementary addition to the frontage of the site.

The Conservation Officer notes that the scheme was the subject of extensive pre-application consultation and negotiation in 2009/2010 when the original application was approved and has no objection to the proposed extension of time applications.

It is considered that the proposed works will not compromise the historic interest or fabric of the listed barn or wall or the character, appearance and setting of these structures and thus the application remains in conformity with policy BE6 of the Local Plan. It is also apparent that the proposed works will prolong the beneficial use of the historic barn which is currently in a state of poor repair and thus the conversion will help to sustain and preserve this heritage asset and the positive contribution that it makes to the area so that it can be enjoyed by future generations which is in compliance with the NPPF.

(iii) The impact on the street scene and on the character and appearance of the Conservation Area

The existing 2m high wall and barn sited along the Mulberry Green frontage significantly restricts views from the highway of most of the application site. Only glimpses of the proposed new dwelling will be gained through the barn access way and the upper storey of the new dwelling will be visible from the north and eastern sides of Mulberry Green. Setting

aside its relatively limited visibility from the street, it is thought that the design of the proposed dwelling reflects, in broad terms, the general character and appearance of the adjoining property, Granary Cottage, and as noted was the result of pre-application discussions with Essex County Council's Senior Historic Buildings Advisor. The proposed new dwelling will occupy the site of the Granary Cottage's redundant swimming pool extension and east side utility wing and no encroachment will take place onto the attractively landscaped rear garden of Granary Cottage.

In order to enhance the appearance of Granary Cottage it is proposed that its Crittal metal framed windows and other asymmetrical windows are removed and replaced with side-hung casement windows which will match those of the proposed new dwelling.

In light of the above, it is thought that the proposal continues to comply with Policy BE1 of the Local Plan which states that new developments should '*enhance, protect or create local character*'. It is not considered that the proposal will be detrimental to the character and appearance of the Conservation Area and thus the scheme remains compliant with policy BE10 of the Local Plan. Furthermore, the removal of the poor quality pool house extension and other structures around the existing property, Granary Cottage, are not considered to be detrimental to the architectural or historic character or appearance of the Conservation Area, in accordance with policy BE9.

The proposal is thus considered to remain in compliance with policies BE1, BE9 and BE10 of the Local Plan. It is also considered to be in general compliance with the NPPF which stresses the importance of high quality design as one of its core planning principles.

(iv) The impact on residential amenity

The adjacent dwellings on either side of the host site are situated on plots which have wide frontages and the proposal would not have any detrimental impact on the amenities enjoyed by the occupiers of these neighbouring dwellings. The adjoining dwelling to the east has several trees growing in its front garden, close to the boundary with the application site, and as a result the projecting garage to the side of the new dwelling will be largely screened from the view of its occupiers. The bulk of the dwelling to the west is located to the western side of its plot with mainly outbuildings on its eastern side adjoining the application site. The proposed cart lodge on the western side of the barn will be the closest new structure to the adjacent dwelling on this side of the site however its impact will not be significant or detrimental to any of the amenities of the occupiers of this dwelling.

Given the minimal impact of the proposal on residential amenity, the proposal is thought to continue to remain compliant with point 1 of policy H10 of the Local Plan and with Principle 28 of the Harlow Design Guide SPD.

The siting of the new dwelling on the site of the old pool house will rule out the possibility of any future housing development on the rest of the long rear garden of Granary Cottage which extends back to Gilden Way. This could be considered contrary to point 3 of policy H10 which states that planning consent should not be granted for proposals which would '*prejudice the potential for comprehensive development of adjacent land*' however this does not appear to have been an issue which was considered at the time the original planning consent was granted and cannot therefore be introduced as a consideration for these extension of time limits applications as policy H10 has not been revised since the original application was approved.

(v) Parking considerations and the impact on the adjacent highway

The parking provision for the new 3 bedroom dwelling and the existing dwelling (Granary Cottage) will comply with the adopted 2009 parking standards as these will both be served by 2 No. parking spaces. The converted barn will only be served by 1 No. parking space which does not conform with the parking standards which require a minimum of 2 No. spaces for any 2+ bedroomed dwelling. Despite having a shortfall of 1 No. space it is not thought to be reasonable to refuse the renewal of this permission based on this issue as the parking provision for the barn conversion was originally deemed to be adequate and in accordance with the minimum standards set out in the parking standards and policy T9 and neither the proposal nor the parking standard have changed since the time of the original planning permission was granted.

The impact of the vehicular traffic generated by the development of a new dwelling and the residential conversion of an existing barn on traffic levels on Mulberry Green are thought to be so slight as to not raise any serious issues in relation to highway or traffic safety.

The only highway issue of significance is the relatively narrow access way through the barn. The access measures 2.9m at the front and 3m at the rear and will be increased to 3.7m at the rear to enable cars to turn in the courtyard. The access would need to be increased to 4.1m at the rear to enable 2 cars to pass through it simultaneously however this would entail the unacceptable demolition of a substantial part of the listed barn and would result in an access that would look incongruous from the street. On balance it is thought preferable to leave the access more or less in tact as proposed with only a small widening at the rear although occasionally a car entering the site may have to wait on the highway for another car to pass through the access onto the road.

The Highways Authority has no objection to the granting of a new consent for this proposal, subject to the re-addition of a condition to ensure that no unbound material is used in the surface treatment of the vehicular access within 6m of the highway.

(vi) Other matters

Emergency Access

Essex County Council Fire & Rescue was consulted on the original application and commented that the access for fire service purposes would be satisfactory despite the limited height and width of the access as there would be vehicle access for a pump appliance within 45m of the proposed new dwelling.

CONCLUSIONS

It is considered that the proposal entailing the conversion of the listed barn to residential, the construction of a new cart lodge, the demolition of various structures around Granary Cottage and the construction of a 2 storey 3 bedroomed dwelling with double garage and cart lodge is an acceptable development for the site. The development poses no significant detrimental impact on the character, appearance and setting of the listed barn or listed brick wall fronting Mulberry Green, and will have little, if any, adverse effect on the street scene or on the character and appearance of the Conservation Area, and will have no material impact on residential amenity, or highway safety. The development is therefore thought to be in general compliance with saved policies BE1, BE6, BE9, BE10 and H10 of the Local Plan as well as with the more recently adopted NPPF.

It is therefore recommended that planning permission, listed building consent and conservation area consent be approved to extend the time limit in which the development previously approved under HW/PL/09/00285, HW/PL/09/00286 and HW/PL/09/00299 can commence.

RECOMMENDATION

GRANT PERMISSION subject to the following conditions;

- 1 T001 The development hereby permitted shall be begun before the expiration of three years from the date of this permission.
REASON: In order to comply with Section 91(1) of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

- 2 P004 Notwithstanding any of the provisions of the Town and Country Planning (General Permitted Development) Order 1995, or any order revoking or amending that order, the garage and cart lodges shall be provided and maintained in their approved form for the benefit of occupiers of the attached residential accommodation for the parking of vehicles and for no other purpose.
REASON: To ensure adequate car parking provision is made at all times and to accord with policy T9 of the adopted Replacement Harlow Local Plan (2006).

- 3 C003 No development, demolition or preliminary groundworks of any kind shall take place until the applicant has secured the implementation of a programme of archaeological work and recording in accordance with a written scheme of investigation which has been submitted by the applicant, and approved by the Local Planning Authority.
REASON: To allow for proper investigation and recording of the site which is of potential archaeological interest and historic significance.

- 4 U01A Notwithstanding the details shown on the approved plans, no works shall commence on site until details (including samples of brick and timber materials) of the external elevations (walls, cladding, pointing, roof materials, door and window details, rainwater goods and new pavings) of the of the new house, garage and cart lodges, shall be submitted to and approved by the Local Planning Authority in writing prior to the commencement of development.
REASON: To preserve and enhance the setting of the Listed Building to comply with Policy BE6 of the Adopted Replacement Harlow Local Plan, July 2006.

- 5 U02A Full details of the works to the external elevations of the barn shall be submitted to and approved in writing by the Local Planning Authority prior to the commencement of the development hereby approved.
REASON: To ensure the retention of the historic character of the

Listed Building and to comply with Policy BE6 of the Adopted Replacement Harlow Local Plan, July 2006.

- 6 U03A Notwithstanding the submitted drawings, the entrance to the barn from Mulberry Green shall not be enlarged, but shall remain intact. The opening at the rear of the barn shall not be enlarged on its southern elevation to more than 3.7m in width.
REASON: To retain, as far as possible, the historic character of this listed building and to comply with Policy BE6 of the Adopted Replacement Harlow Local Plan July 2006.
- 7 U04A Notwithstanding the submitted plans hereby approved, the cast iron gates currently erected at the front of the access opening to the front of the listed barn shall not be removed from their current location on the listed building.
REASON: To ensure the retention of the historic character of the Listed Building and to comply with Policy BE6 of the Adopted Replacement Harlow Local Plan, July 2006.

INFORMATIVE CLAUSES:

- 1 This application, which includes the conversion of the barn to residential, the construction of a new cart lodge, the demolition of various structures around Granary Cottage and the construction of a 2 storey 3 bedroomed dwelling with double garage and cart lodge is considered to be an acceptable development for the site as the principle of the development is in accordance with all relevant Development Plan policies. The development poses no significant detrimental impact on the character, appearance and setting of the listed barn or listed brick wall fronting Mulberry Green, will have little, if any, adverse effect on the street scene or the character and appearance of the Conservation Area, and will have no material impact on residential amenity, or highway safety. The development is therefore considered to be in accordance with saved policies BE1, BE6, BE9, BE10 and H10 of the Local Plan as well as with the NPPF and the adopted Harlow Design Guide SPD. It is therefore recommended that planning permission be approved to extend the time limit in which the development previously approved under HW/PL/09/00285 can commence.
- 2 The Local Planning Authority has acted positively and proactively in determining this application by assessing the proposal against all material considerations, including planning policies and any representations that may have been received and subsequently determining to grant planning permission in accordance with the presumption in favour of sustainable development, as set out within the National Planning Policy Framework.



Elizabeth Fitzgerald
Development Manager

Contributing Officer
Chris Gatland

Flood map for planning

Your reference
Mulberry Gn

Location (easting/northing)
547865/211562

Created
5 Jul 2023 15:05

Your selected location is in flood zone 1, an area with a low probability of flooding.

You will need to do a flood risk assessment if your site is **any of the following:**

- bigger than 1 hectare (ha)
- In an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence **which** sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2022 OS 100024198. <https://flood-map-for-planning.service.gov.uk/os-terms>

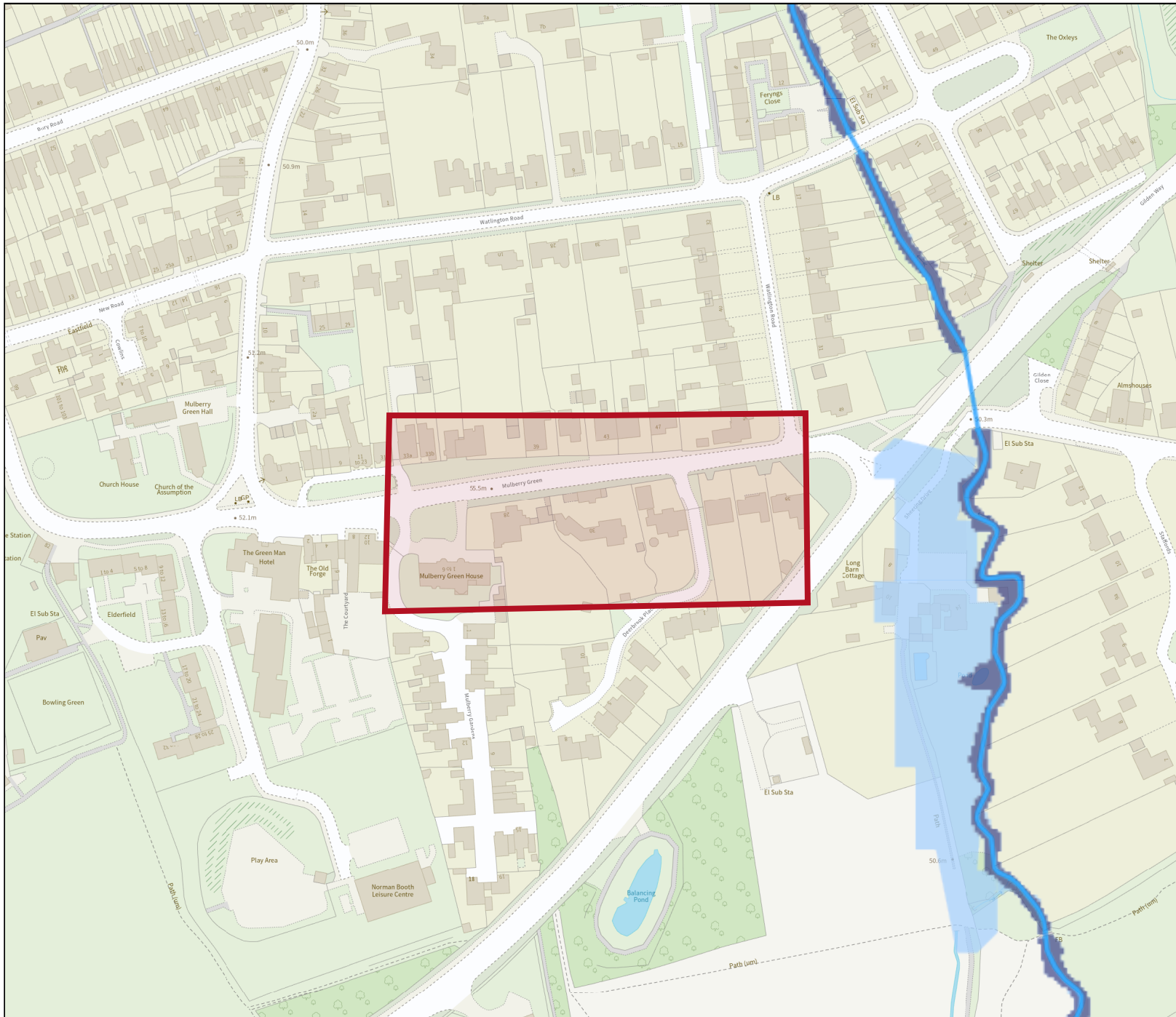
Flood map for planning

Your reference
Mulberry Gn

Location (easting/northing)
547865/211562

Scale
1:2500

Created
5 Jul 2023 15:05



-  Selected area
-  Flood zone 3
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Water storage area

