

# Land at Upper Cosmeston Farm, Lavernock Road, Penarth Arboriculture Technical Note edp5187 r007c

# 1. Introduction

- 1.1 The Environmental Dimension Partnership Ltd (EDP) has been commissioned by Welsh Government ('the Applicant') to undertake a BS 5837:2012 Trees in Relation to Design, Demolition and Construction compliant survey of trees in relation to the proposed development of Land at Upper Cosmeston Farm, Lavernock Road, Penarth (hereafter referred to as 'the Application Site').
- 1.2 EDP is an independent environmental planning consultancy with offices in Cirencester, Cheltenham, Cardiff and Shrewsbury. The practice provides advice to private and public sector clients throughout the UK in the fields of landscape, ecology, archaeology, cultural heritage, arboriculture, rights of way and masterplanning. Details of the practice can be obtained at our website www.edp-uk.co.uk.
- 1.3 The Application Site is located to the south of Cosmeston which in turn is within the Local Planning Authority of Vale of Glamorgan Council (VoGC). The Application Site's boundary encompasses an area of approximately 25.2 hectares (ha), comprising a mixture of pasture and arable agriculture, the farm buildings of Lower Cosmeston Farm and the course of the disused railway route between Penarth and Sully, which dissects the Application Site at its centre from north to south. Field parcels within the Application Site are defined by a mixture of hedgerow boundaries and tree belts.

# 2. Methodology and Limitations

- 2.1 The methodology adopted for this survey is based on guidelines set out in *BS 5837:2012 Trees* in Relation to Design, Demolition and Construction, especially Section 4.4, 'Tree Survey'. Site trees and other significant vegetation are as noted on the Tree Constraints Plan (**Annex EDP 1**). This data has been derived from the topographic survey (**Annex EDP 2**). All surveyed items are detailed in **Schedule EDP 1** (**Annex EDP 3**). No other trees are covered by this survey.
- 2.2 All trees have been visually inspected from ground level unless otherwise stated, with no climbing or further detailed investigative tests being undertaken. The comments on their condition are based on observable factors present at the time of inspection. All measurements are metric and have been recorded in accordance with the measurement conventions set out in Section 4.4.2.6 of *BS* 5837:2012.



- 2.3 Any recommendations given regarding longer-term management are made on the basis of optimising the life expectancy of site trees, given their current situation and any effects that may result from the development proposals.
- 2.4 **Schedule EDP 1** provides information about the following factors in accordance with Section 4.4.2.5 of *BS* 5837:2012:
  - Sequential reference number (recorded on **Annex EDP 1**);
  - Species;
  - Height;
  - Stem diameter;
  - Branch spread;
  - Existing height above ground level;
  - Life stage;
  - Physiological condition;
  - Structural condition;
  - Preliminary management recommendations;
  - Estimated remaining contribution;
  - Category grading; and
  - Tree works priority codes.
- 2.5 Due to the changing nature of trees and other site circumstances, this report and any recommendations made are limited to a 24 month period from the survey date. Any alterations to the Application Site or the development proposals could change the current circumstances, and may invalidate this report and any recommendations made.
- 2.6 Trees are dynamic structures that can never be guaranteed 100% safe; even those in good condition can suffer damage under average conditions. Regular inspections can help to identify potential problems before they become acute.
- 2.7 A lack of recommended work does not imply that a tree is safe and likewise, it should not be implied that a tree will be made safe following the completion of any recommended work.



2.8 The subject trees have not been tagged for identification purposes.

# 3. Aims and Objectives

- 3.1 The purpose of this Technical Note is to:
  - Identify principal trees suitable for retention; and
  - Identify the constraints associated with retained trees to inform the conceptual design and layout of the proposed scheme and, in turn, inform the Arboricultural Impact Assessment.

# 4. Overview of Tree Stock

- 4.1 The survey has identified 10 individual trees, 29 hedgerows and nine groups, totalling 48 items. Of these 48 items, 25 have been categorised as B, of moderate quality; and 23 have been categorised as C and are of low quality.
- 4.2 All surveyed items are as noted on **Annex EDP 1** and detailed in **Schedule EDP 1** (**Annex EDP 3**).

#### 5. Site Constraints

- 5.1 As shown by **Annex EDP 1**, all surveyed items lie within the existing field boundaries of the site. The above- and below-ground constraints yielded by the identified items will need to be considered in during the design process.
- 5.2 Tree root morphology can be difficult to predict where constraints such as streams, watercourses and roads can influence root distribution, and the nominal circular root protection areas in line with *BS 5837:2012* must be regarded with some caution.
- 5.3 The required root protection area (RPA) for each item is as described in **Schedule EDP 1** (**Annex EDP 3**) and is depicted on **Annex EDP 1**. To ensure appropriate protection is afforded to the roots, the extent of the RPA shall be defined by means of the installation of protective barriers in accordance with the recommendations given in Section 6.2 of *BS* 5837:2012.
- 5.4 Consultation with the online resource provided by VoGC¹ has ascertained that there are no Tree Preservation Orders associated with the site, nor is any part of the site contained within a conservation area.

 $<sup>^1\,\</sup>text{Address: https://myvale.valeofglamorgan.gov.uk/myGlamorgan.aspx}\,\,\text{Accessed: 20.05.2019}$ 



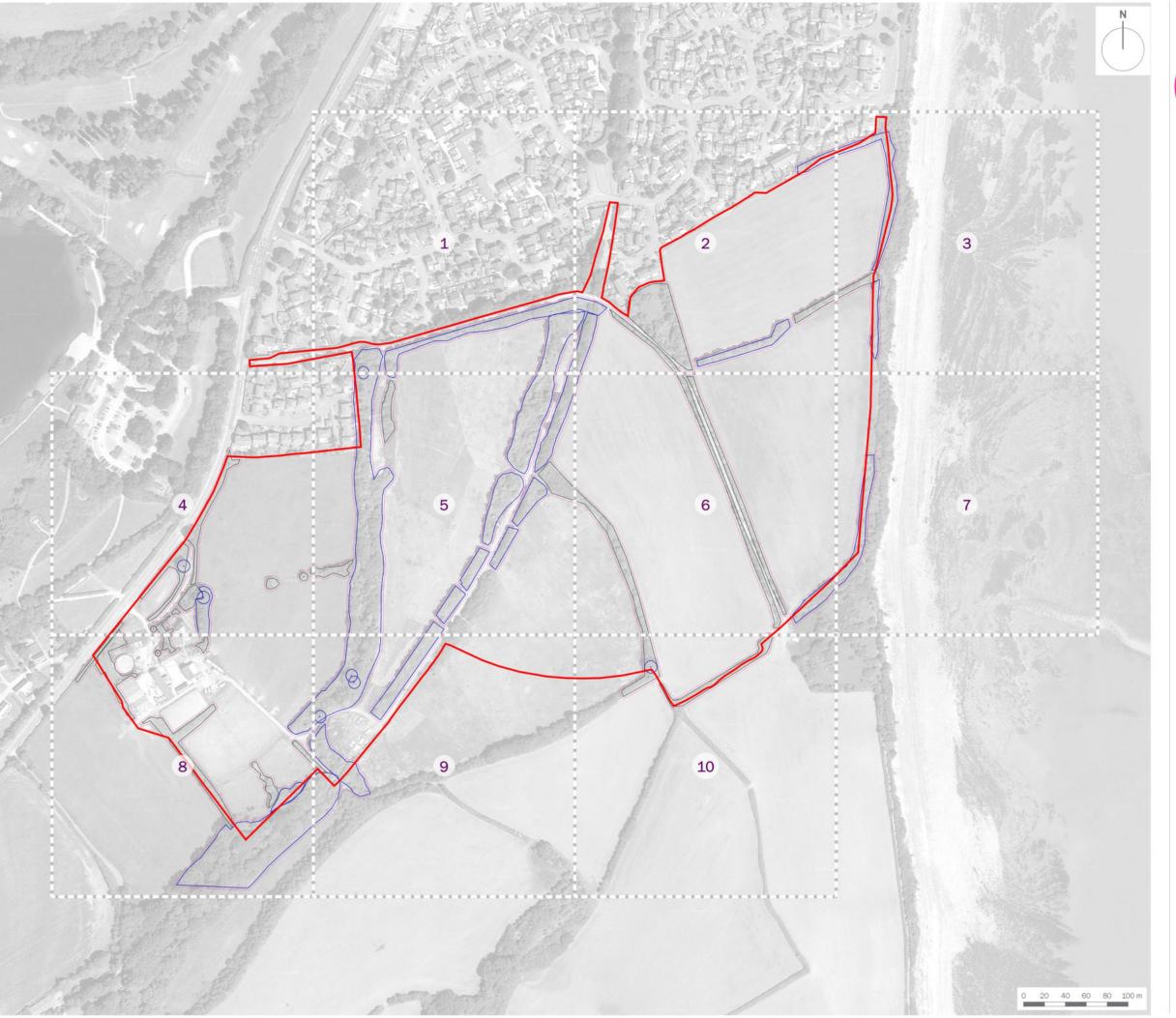
# 6. Conclusion

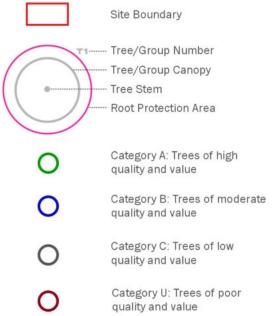
- 6.1 Of the items surveyed, 25 items categorised as B, of moderate quality. These items should be prioritised for retention, where practicable. However, the default position when designing any forthcoming scheme should be the retention of all items, as so far as is practicable, regardless of category grading. All trees provide positive environmental and ecological contributions, irrespective of current condition.
- 6.2 The arboricultural constraints information provided within this Technical Note will feed into the design and layout of the scheme and, in turn, will be used to undertake an Arboricultural Impact Assessment and Tree Protection Plan, to be submitted as part of the detailed planning application.

Land at Upper Cosmeston Farm, Lavernock Road, Penarth Arboriculture Technical Note edp5187\_r007c



Annex EDP 1
Tree Constraints Plan
(edp5187\_d017c 30 August 2019 TC/EB)





client

# Welsh Government

project title

Land at Upper Cosmeston Farm, Lavernock Road, Penarth

drawing title

Plan EDP 1: Tree Constraints Plan Overview

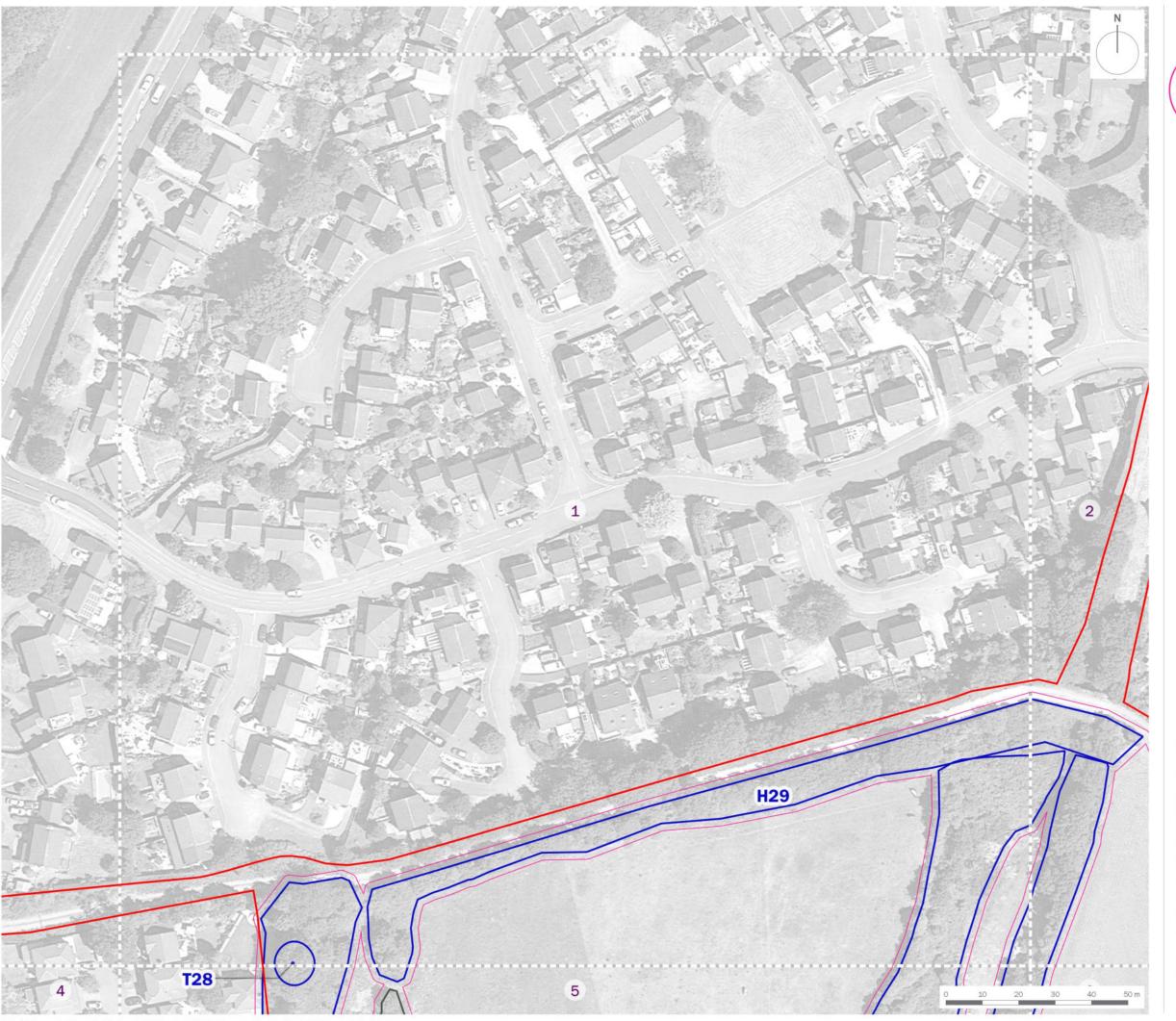
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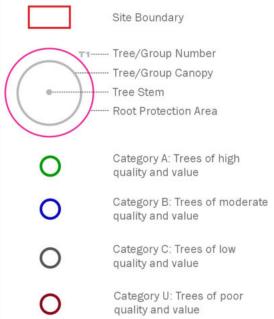
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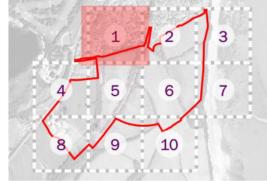


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client

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project title

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drawing title

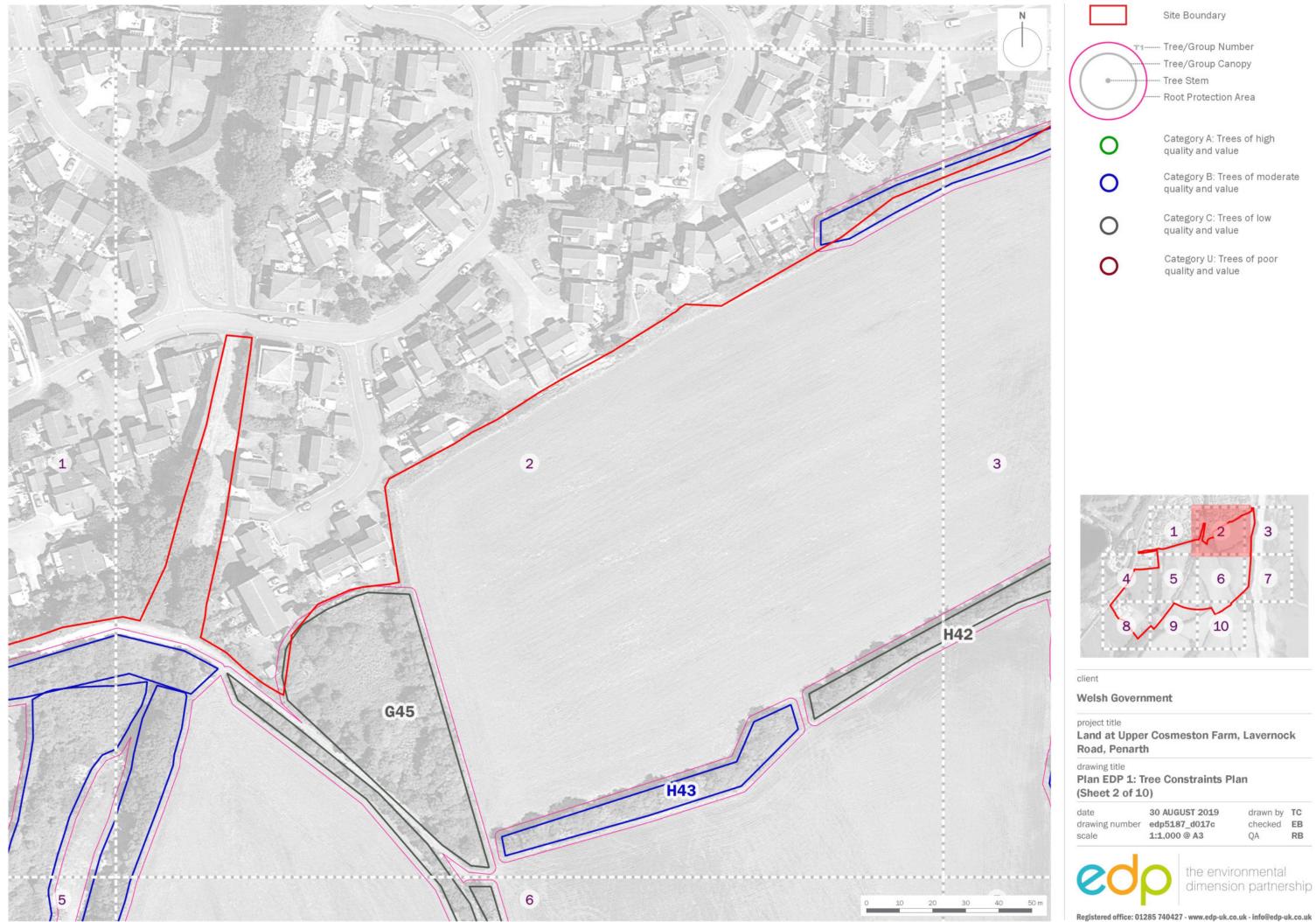
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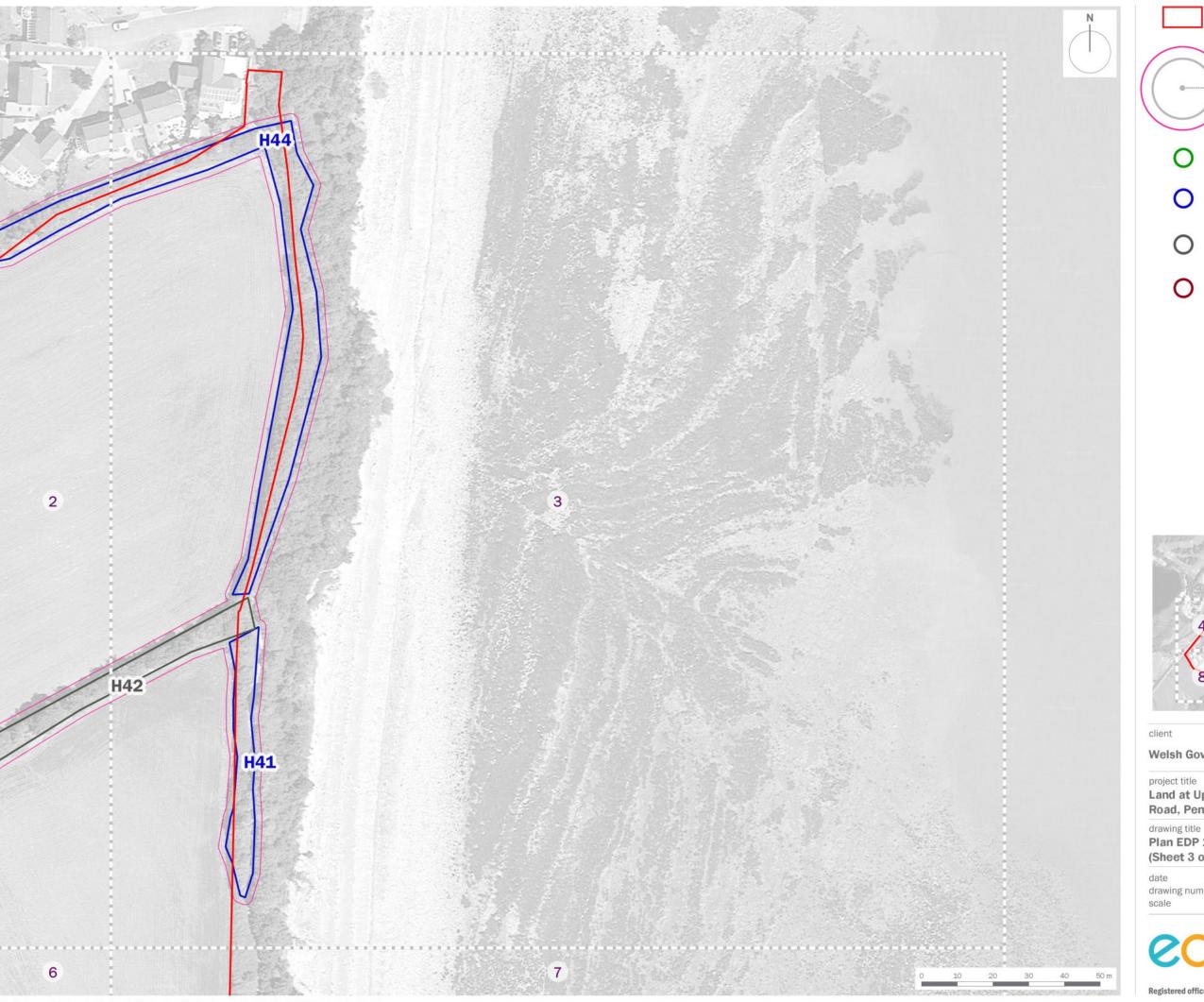
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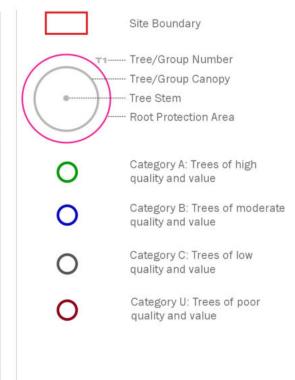


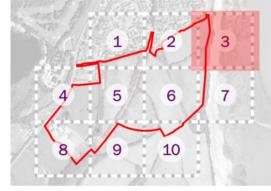
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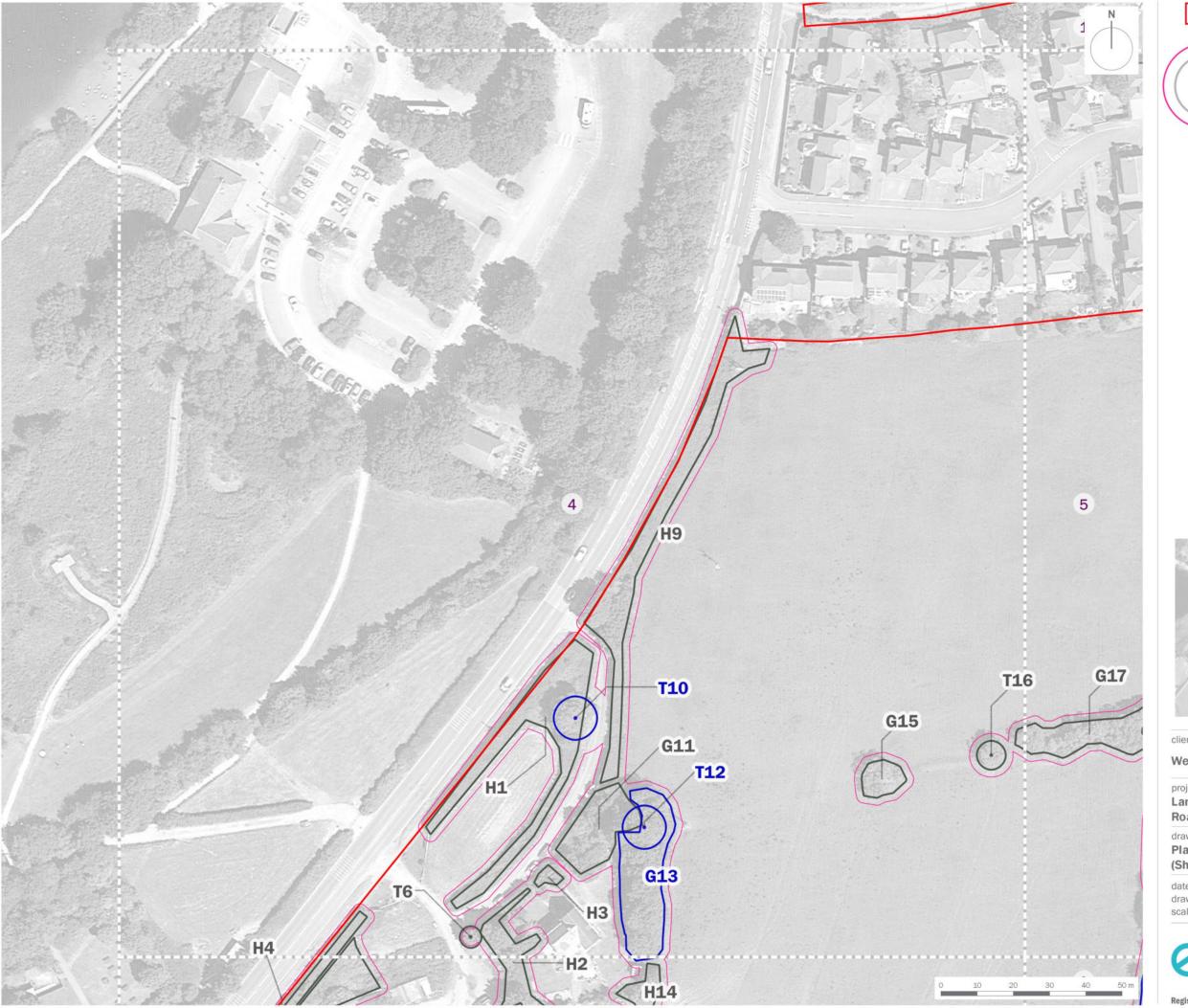
Land at Upper Cosmeston Farm, Lavernock Road, Penarth

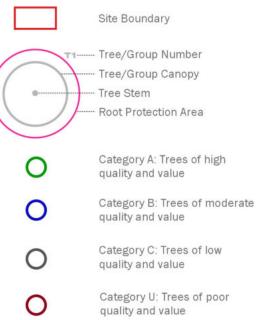
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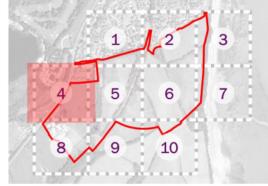
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project title

Land at Upper Cosmeston Farm, Lavernock Road, Penarth

drawing title

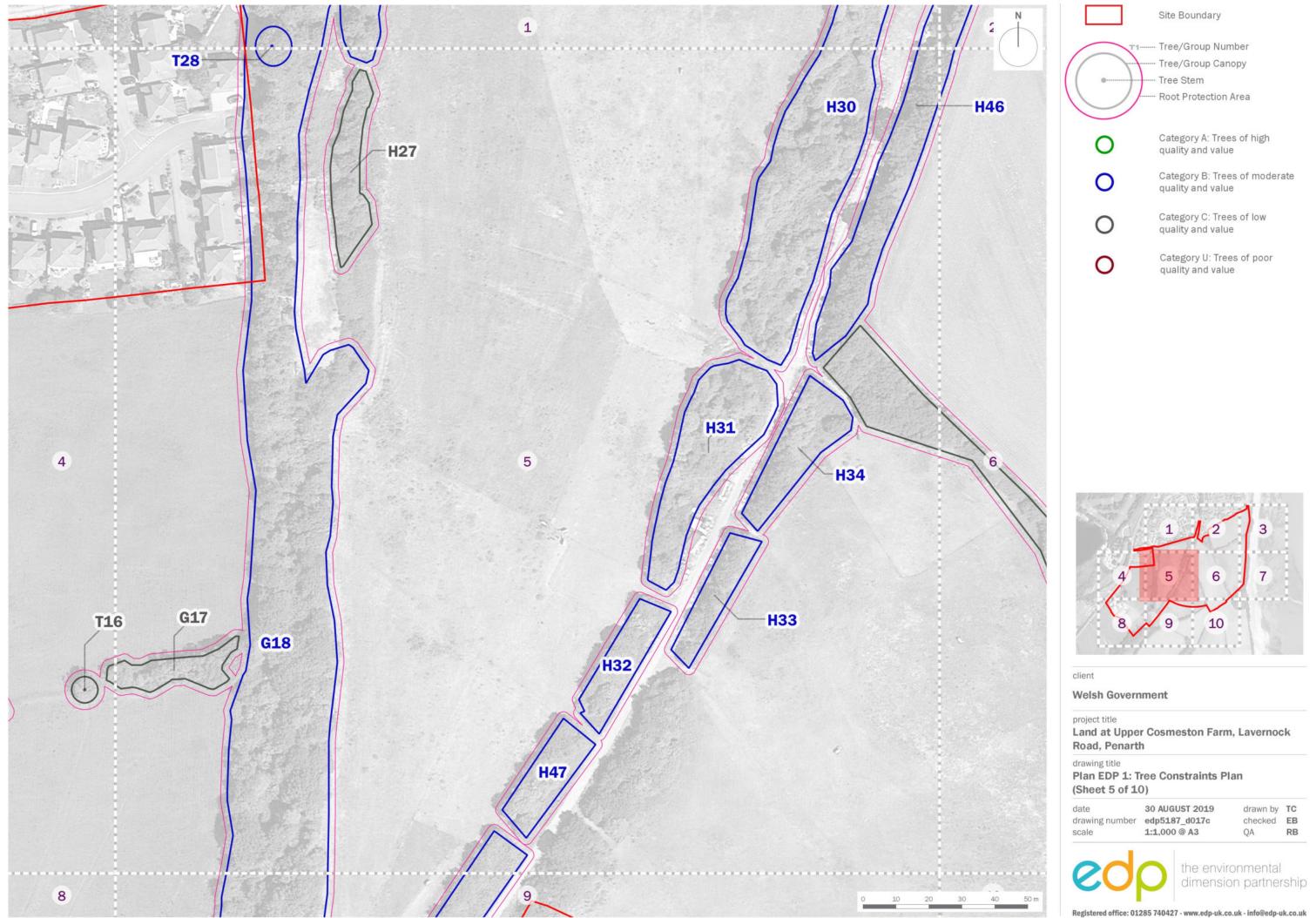
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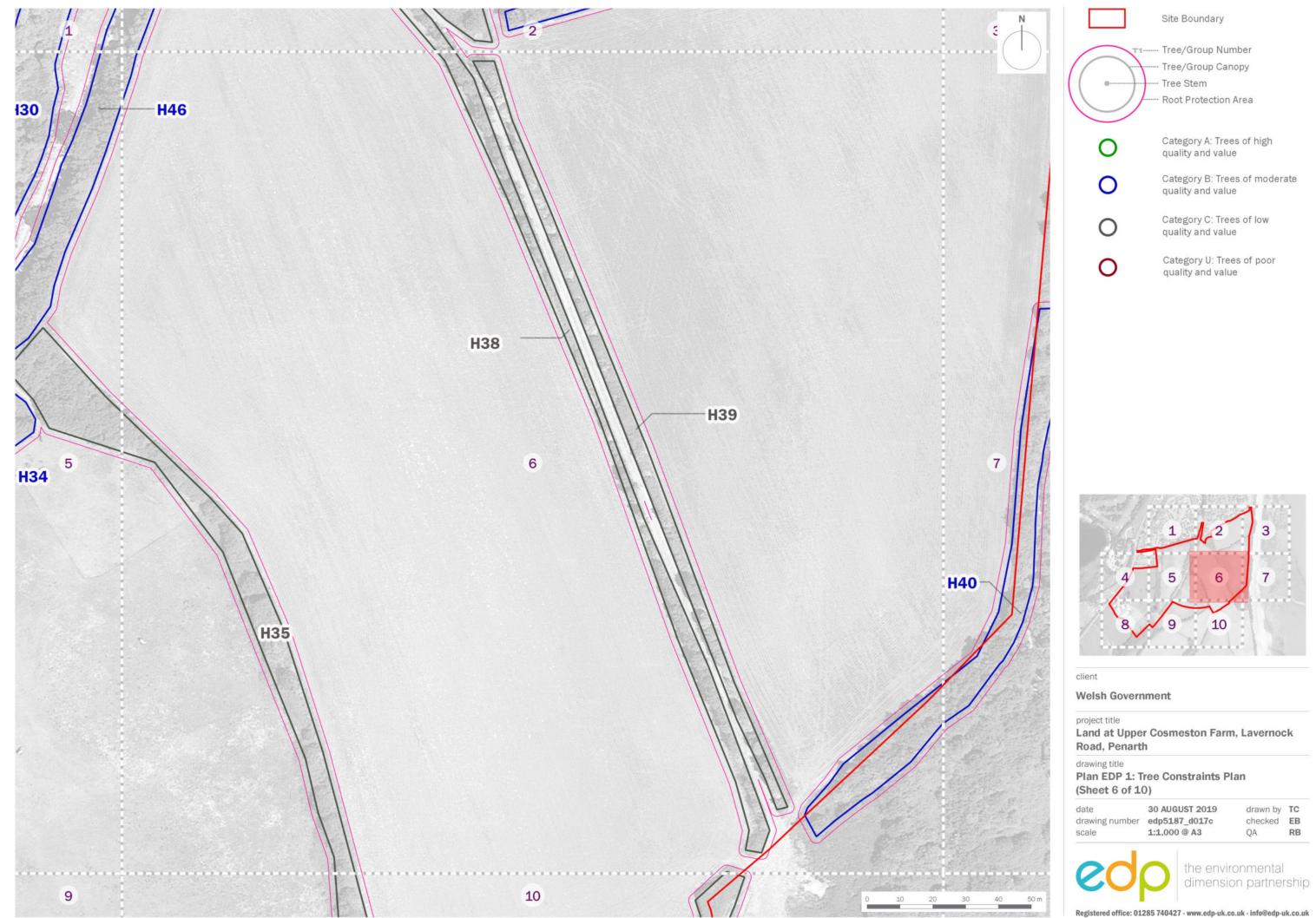
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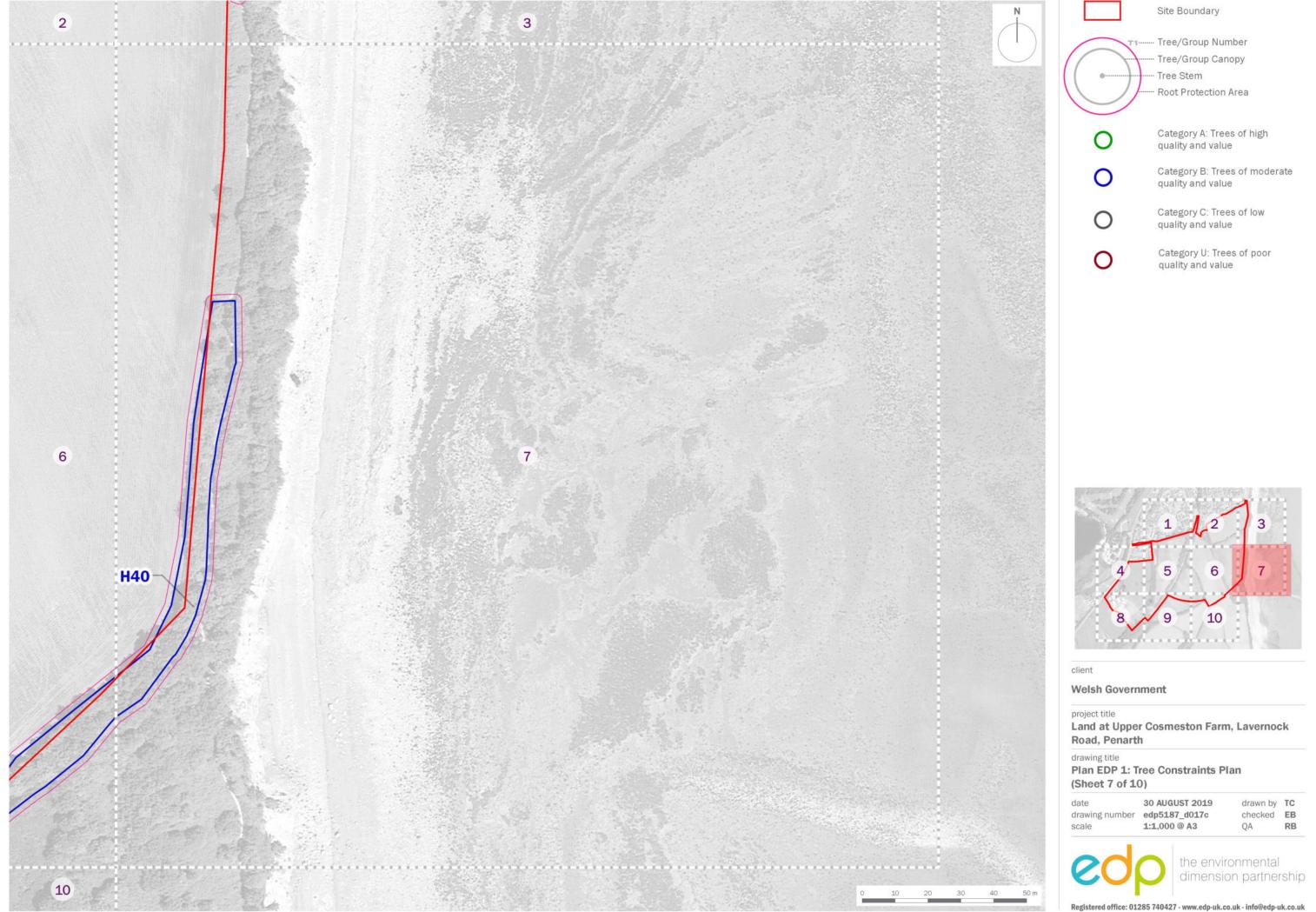


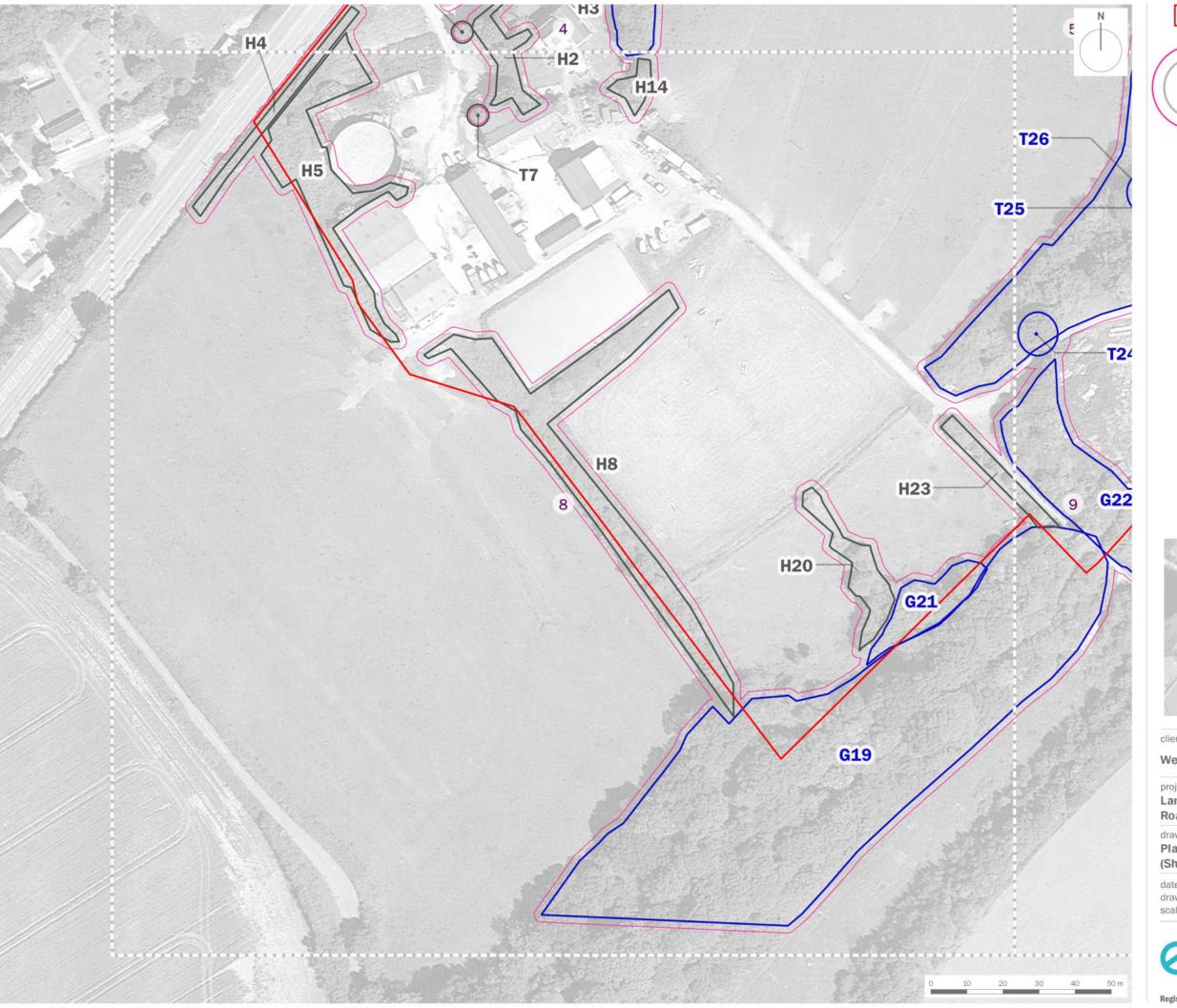
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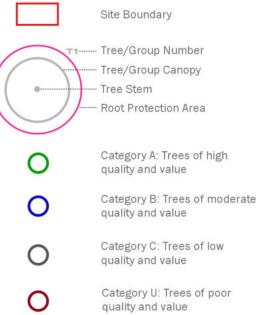
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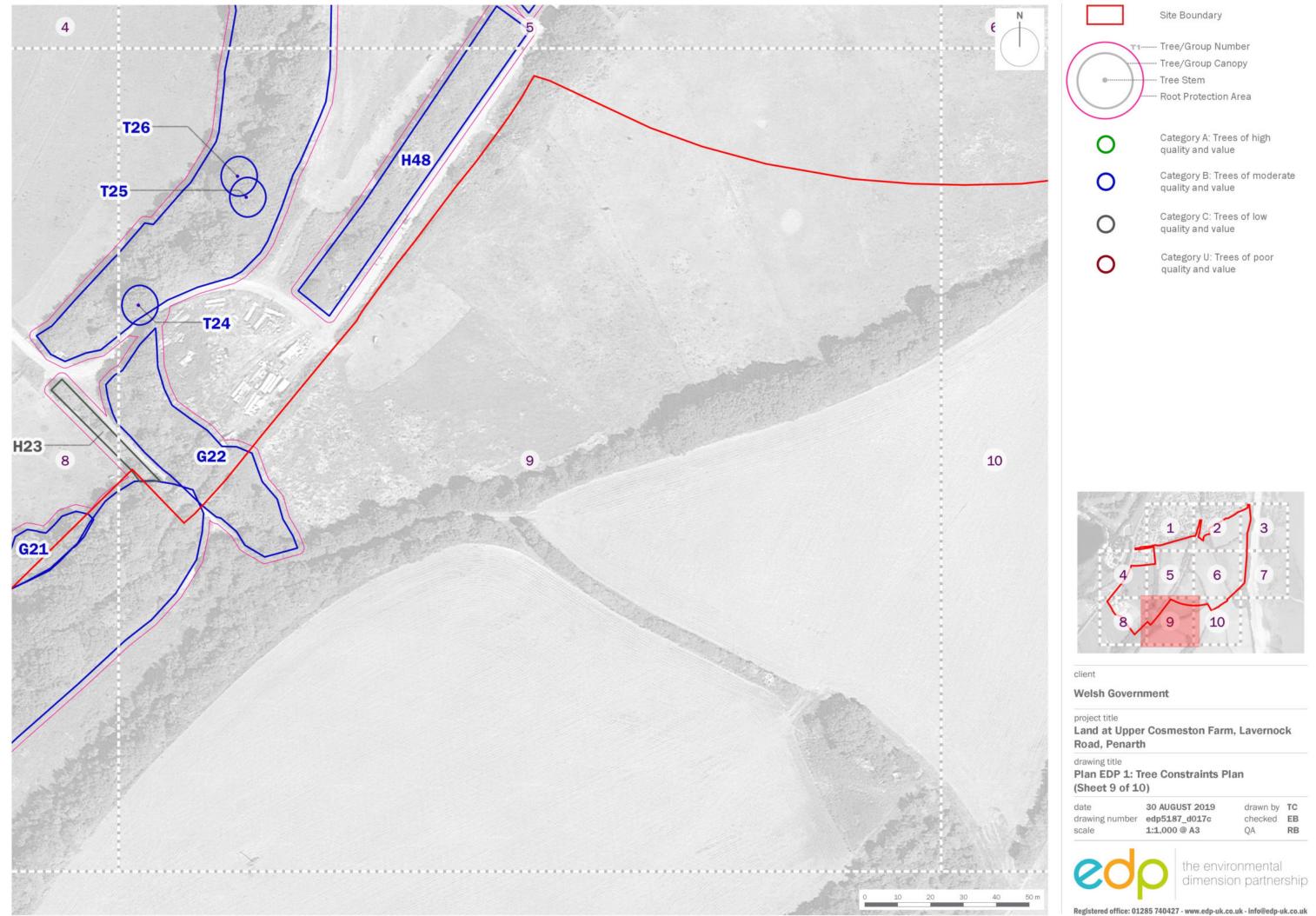
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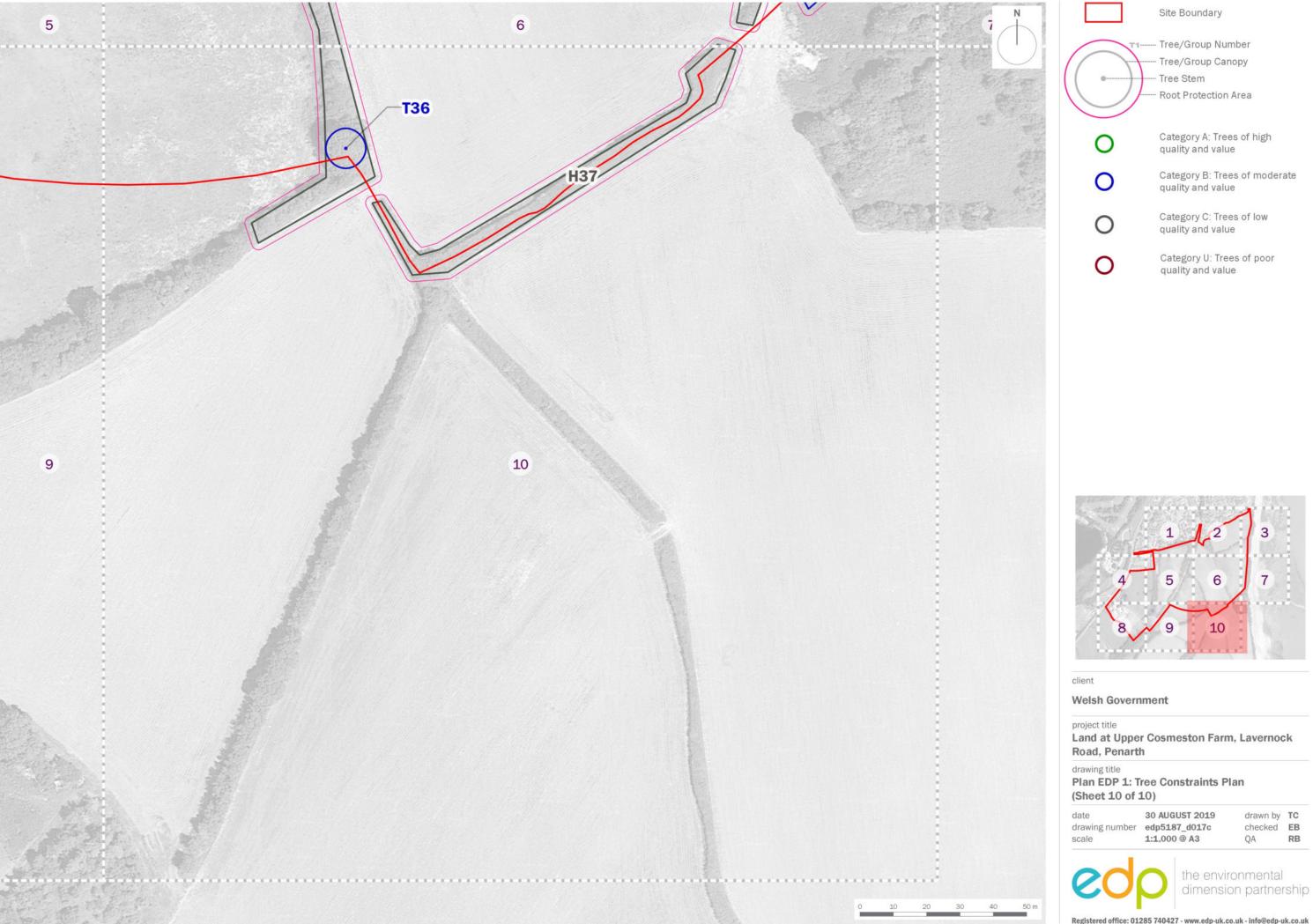
Plan EDP 1: Tree Constraints Plan (Sheet 8 of 10)

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the environmental dimension partnership





drawn by TC

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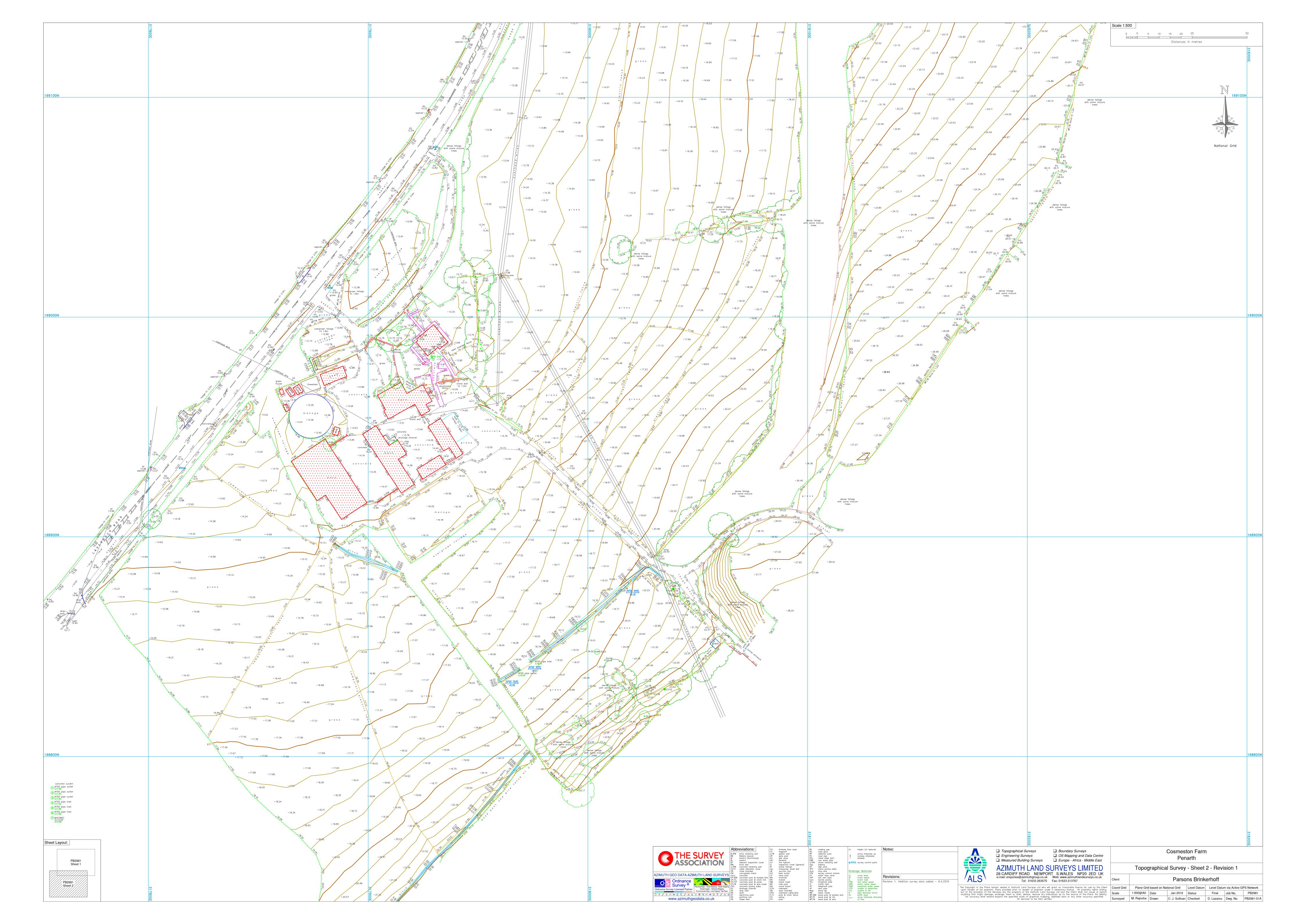
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Land at Upper Cosmeston Farm, Lavernock Road, Penarth Arboriculture Technical Note edp5187\_r007c



Annex EDP 2 Topographical Survey Ref: PB2981-01A





Land at Upper Cosmeston Farm, Lavernock Road, Penarth Arboriculture Technical Note edp5187\_r007c



# Annex EDP 3 Schedule EDP 1

Tree Survey Key and Schedule

| Sequential Reference         | T - Individual specimen;  |
|------------------------------|---|
| Number                       | G - Group, Trees that form cohesive arboricultural features either  |
|                              | aerodynamically, visually or culturally;  |
|                              | H - Linear group of specimens that form a hedge or boundary; and  |
|                              | W - A larger group or area of trees that should be regarded as a single                                   |
|                              | woodland unit.  |
| Species                      | Common English names are used wherever possible for simplicity.   |
| Height                       | An approximation of height (in metres) is provided for the highest point of the tree.                     |
| Stem Diameter                | This is the measurement of stem diameter in millimetres taken in accordance with Annex C of BS 5837:2012. |
| Branch Spread                | This is taken at four cardinal points, with a stated value in metres to enable an                         |
|                              | accurate representation of the crown, as shown on <b>Annex EDP 1</b> .                                    |
| <b>Existing Height Above</b> | An approximation of height (in metres) of crown clearance above adjacent ground                           |
| Ground Level                 | level.  |
| Life Stage                   | There are six classes to which trees are assigned:  |
|                              |   |
|                              | Young;  |
|                              |   |
|                              | Semi Mature;  |
|                              |   |
|                              | Early Mature;   |
|                              |   |
|                              | Mature;   |
|                              |   |
|                              | Over Mature; and  |
|                              |   |
|                              | Veteran.  |
| Physiological                | An indication of the tree's physiological condition is represented and classed as good,                   |
| Condition                    | fair, poor or dead, this is informed by the following:  |
|                              |   |
|                              | Canopy Density: It should be taken that, unless otherwise stated with each individual                     |
|                              | entry, the canopy density of the trees is typical of the species; and                                     |
|                              |   |
|                              | Leaf Size and Colouration: It should be taken that, unless otherwise stated with each                     |
|                              | individual entry, leaf size and colouration is typical of the species.                                    |
| Structural Condition         | Additional notes are provided giving details of the tree's structural condition. This is                  |
|                              | informed by "the presence of any decay and physical defect2".   |

<sup>&</sup>lt;sup>1</sup> BS 5837:2012 Section 4.4.2.5



| Preliminary         | These are made on the basis of optimising the life expectancy of site trees, given their |  |  |  |  |  |  |  |  |  |  |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|
| Management          | current situation and that which may result from the development proposals. The          |  |  |  |  |  |  |  |  |  |  |
| Recommendations     | survey process pays particular attention to implications for life and/or property;       |  |  |  |  |  |  |  |  |  |  |
|                     | defects recorded under the structural condition have the necessary mitigation            |  |  |  |  |  |  |  |  |  |  |
|                     | measures proposed within this section of the schedule.                                   |  |  |  |  |  |  |  |  |  |  |
| Estimated Remaining | The definitions of the terms used are as follows and describe the estimated length of    |  |  |  |  |  |  |  |  |  |  |
| _                   | time (in years) over which the tree can be expected to make a safe contribution to       |  |  |  |  |  |  |  |  |  |  |
| Contribution        |  |  |  |  |  |  |  |  |  |  |  |
|                     | local amenity:   |  |  |  |  |  |  |  |  |  |  |
|                     |  |  |  |  |  |  |  |  |  |  |  |
|                     | Less than 10;  |  |  |  |  |  |  |  |  |  |  |
|                     |  |  |  |  |  |  |  |  |  |  |  |
|                     | 10+;   |  |  |  |  |  |  |  |  |  |  |
|                     |  |  |  |  |  |  |  |  |  |  |  |
|                     | 20+; and   |  |  |  |  |  |  |  |  |  |  |
|                     |  |  |  |  |  |  |  |  |  |  |  |
|                     | 40+.   |  |  |  |  |  |  |  |  |  |  |
| Category Grading    | Trees have been assigned 'U' or Category Grading 'A' to 'C' in accordance with the       |  |  |  |  |  |  |  |  |  |  |
|                     | Cascade Chart given in BS 5837:2012.   |  |  |  |  |  |  |  |  |  |  |
| Tree Works Priority | Priority codes from 1 to 3 have been given for trees requiring work. The definition of   |  |  |  |  |  |  |  |  |  |  |
| Codes               | the codes used is as follows:  |  |  |  |  |  |  |  |  |  |  |
|                     |  |  |  |  |  |  |  |  |  |  |  |
|                     | Priority 1: Work that should be undertaken urgently due to the identification of a       |  |  |  |  |  |  |  |  |  |  |
|                     | potential hazard;  |  |  |  |  |  |  |  |  |  |  |
|                     | potential nazaru,  |  |  |  |  |  |  |  |  |  |  |
|                     | Driggity 2: Work that abould be undertaken prior to any works commonaing an aita         |  |  |  |  |  |  |  |  |  |  |
|                     | Priority 2: Work that should be undertaken prior to any works commencing on site;        |  |  |  |  |  |  |  |  |  |  |
|                     | and  |  |  |  |  |  |  |  |  |  |  |
|                     |  |  |  |  |  |  |  |  |  |  |  |
|                     | Priority 3: Work that should be undertaken following the completion of the               |  |  |  |  |  |  |  |  |  |  |
|                     | development.   |  |  |  |  |  |  |  |  |  |  |
|                     |  |  |  |  |  |  |  |  |  |  |  |

Land at Upper Cosmeston Farm, Lavernock

Date of Survey:

Tagged

Client:

18/04/2019

N/A

Thomas Cleeton Consultant

Weather

Site:

Overcast, Dry

| Sequential                  |  |            |                       | Branch S | pread (m) |       |      |                         |              |                            |                      |  | Estimated           |                                      |                     |                               |
|-----------------------------|--|------------|-----------------------|----------|-----------|-------|------|-------------------------|--------------|----------------------------|----------------------|--|---------------------|--------------------------------------|---------------------|-------------------------------|
| Sequential<br>Reference No. | Species  | Height (m) | Stem<br>Diameter (mm) | North    | East      | South | West | Canopy<br>Clearance (m) | Life Stage   | Physiological<br>Condition | Structural Condition | Comments / Notes   | Recommendations     | Remaining<br>Contribution<br>(Years) | Category<br>Grading | Root Protection<br>Radius (m) |
| H1                          | Common hawthorn (Crataegus monogyna)   | 2          | 150                   | 1        | 1         | 1     | 1    | 0                       | Early Mature | Fair                       | Fair                 | Hedgerow - Maintained  | No Work Recommended | 10+                                  | C1                  | 1.8                           |
| H2                          | Sycamore (Acer<br>pseudoplatanus);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior)                            | 5          | 150                   | 1        | 1         | 1     | 1    | 0                       | Early Mature | Fair                       | Fair                 | No Significant Faults Observed   | No Work Recommended | 10+                                  | C1                  | 1.8                           |
| Н3                          | Sycamore (Acer<br>pseudoplatanus);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior)                            | 5          | 150                   | 1        | 1         | 1     | 1    | 0                       | Early Mature | Fair                       | Fair                 | No Significant Faults Observed   | No Work Recommended | 10+                                  | C1                  | 1.8                           |
|                             | Sycamore (Acer<br>pseudoplatanus);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior)                            | 2          | 150                   | 1        | 1         | 1     | 1    | 0                       | Early Mature | Fair                       | Fair                 | Hedgerow - Maintained  | No Work Recommended | 10+                                  | C1                  | 1.8                           |
| Н5                          | Sycamore (Acer<br>pseudoplatanus);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior)                            | 5          | 150                   | 1        | 1         | 1     | 1    | 0                       | Early Mature | Fair                       | Fair                 | Hedgerow - Maintained  | No Work Recommended | 10+                                  | C1                  | 1.8                           |
| Т6                          | Sycamore (Acer pseudoplatanus)   | 7          | 200                   | 3        | 3         | 3     | 3    | 3                       | Early Mature | Fair                       | Fair                 | Access to inspect base - Not possible; multistem                               | No Work Recommended | 10+                                  | C1                  | 2.4                           |
| Т7                          | Sycamore (Acer pseudoplatanus)   | 7          | 200                   | 3        | 3         | 3     | 3    | 3                       | Early Mature | Fair                       | Fair                 | Access to inspect base - Not possible; multistem                               | No Work Recommended | 10+                                  | C1                  | 2.4                           |
|                             | Sycamore (Acer<br>pseudoplatanus);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior)                            | 5          | 150                   | 1        | 1         | 1     | 1    | 0                       | Early Mature | Fair                       | Fair                 | Hedgerow - Neglected / overgrown   | No Work Recommended | 10+                                  | C1                  | 1.8                           |
| Н9                          | Common hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior)   | 2          | 150                   | 1        | 1         | 1     | 1    | 0                       | Early Mature | Fair                       | Fair                 | Hedgerow - Maintained  | No Work Recommended | 10+                                  | C1                  | 1.8                           |
| T10                         | Common ash (Fraxinus excelsior)  | 12         | 850                   | 6        | 6         | 6     | 6    | 3                       | Mature       | Poor                       | Poor                 | Access to inspect base - Not possible; Ivy or climbing plant; Deadwood - Minor | No Work Recommended | 20+                                  | B1                  | 10.2                          |
| GII                         | Sycamore (Acer<br>pseudoplatanus);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Wych elm<br>(Ulmus glabra) | 7          | 200                   | 1        | 1         | 1     | 1    | 0                       | Early Mature | Fair                       | Fair                 | No Significant Faults Observed   | No Work Recommended | 10+                                  | C1                  | 2.4                           |
| T12                         | Common ash (Fraxinus excelsior)  | 12         | 750                   | 6        | 6         | 6     | 6    | 3                       | Mature       | Poor                       | Poor                 | Access to inspect base - Not possible  | No Work Recommended | 20+                                  | B1                  | 9                             |
| G13                         | Sycamore (Acer<br>pseudoplatanus);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Wych elm<br>(Ulmus glabra) | 12         | 500                   | 1        | 1         | 1     | 1    | 0                       | Early Mature | Fair                       | Fair                 | No Significant Faults Observed   | No Work Recommended | 20+                                  | B1                  | 6                             |

Sequential Reference Number -T - Individual specimen: G - Group, Trees that form cohesive arboricultural features either aerodynamically, visually or culturally; H - Linear group of specimens that form a hedge or boundary; W - A larger group or area of trees that should be regarded as a

that form a nedge or boundary, we harger group or discuss the same single woodland unit.

Species -Common English names are used wherever possible for simplicity.

Height -An approximation of height (in metres) is provided for the highest point of the tree.

Stem Diameter -This is the measurement of stem diameter in millimetres taken in accordance with Annex C of BS5837:2012.

Branch Spread -This is taken at four cardinal points, with a stated value in metres to enable an

accurate representation of the crown, as shown on Plan EDP 1.

First Significant Branch - Height of first significant branch and direction of growth e.g. 2.4 N,

measured from adjacent ground level.

Existing Height Above Ground Level -An approximation of height (in metres) of crown clearance

Life Stage -There are five classes to which trees are assigned: Young: Early Mature; Nature; Over Mature; Veteran.

Physiological Condition -An indication of the tree's physiological condition is represented and classed as good, fair, poor or dead, this is informed by the following: Canopy Density: It should be taken that, unless otherwise stated with each individual entry, the canopy density of the trees is typical of the species; and Leaf Size and Colouration: It should be taken that, unless otherwise stated with each individual entry, leaf size and colouration it typical of the species.

Structural Condition -Additional notes are provided giving details of the tree's structural condition. This is informed by "the presence of any decay and physical defect".

Preliminary Management Recommendations -These are made on the basis of optimising the life expectancy of site trees, given their current situation and that which may result from the development proposals. The survey process pays particular attention to implications for life and/or property; defects recorded under the structural condition have the necessary mitigation measures proposed within this section of the schedule.

|                             |  |            |                       |       | Branch S | pread (m) |      |                         |              |                            |                      |  |                     | Fatimatad   |                     |                               |
|-----------------------------|--|------------|-----------------------|-------|----------|-----------|------|-------------------------|--------------|----------------------------|----------------------|--|---------------------|---|---------------------|-------------------------------|
| Sequential<br>Reference No. | Species  | Height (m) | Stem<br>Diameter (mm) | North | East     | South     | West | Canopy<br>Clearance (m) | Life Stage   | Physiological<br>Condition | Structural Condition | Comments / Notes   | Recommendations     | Estimated<br>Remaining<br>Contribution<br>(Years) | Category<br>Grading | Root Protection<br>Radius (m) |
| H14                         | Sycamore (Acer<br>pseudoplatanus);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Wych elm<br>(Ulmus glabra)                                 | 4          | 200                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | No Significant Faults Observed   | No Work Recommended | 10+   | C1                  | 2.4                           |
| G15                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Wych elm (Ulmus<br>glabra)  | 6          | 250                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor   | No Work Recommended | 10+   | C1                  | 3                             |
| T16                         | Field maple (Acer campestre)   | 7          | 500                   | 4     | 4        | 4         | 4    | 2                       | Mature       | Poor                       | Poor                 | Access to inspect base - Not possible; Weak fork / branch union with included bark | No Work Recommended | 10+   | C1                  | 6                             |
| G17                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Wych elm<br>(Ulmus glabra)                                   | 6          | 250                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor   | No Work Recommended | 10+   | C1                  | 3                             |
| G18                         | Field maple (Acer<br>campestre);Sycamore (Acer<br>pseudoplatanus);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Wych elm<br>(Ulmus glabra) | 7          | 250                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; dense linear feature   | No Work Recommended | 20+   | B1                  | 3                             |
| G19                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Wych elm<br>(Ulmus glabra)                                   | 10         | 400                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; dense linear feature   | No Work Recommended | 20+   | B1                  | 4.8                           |
| H2O                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna)   | 4          | 200                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; lapsed hedge   | No Work Recommended | 10+   | C1                  | 2.4                           |
| G21                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);English<br>oak (Quercus robur);Wych elm<br>(Ulmus glabra)    | 8          | 400                   | 1     | 1        | 1         | 1    | 0                       | Mature       | Fair                       | Fair                 | Deadwood - Minor   | No Work Recommended | 20+   | B1                  | 4.8                           |
| G22                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);English<br>oak (Quercus robur);Wych elm<br>(Ulmus glabra)    | 6          | 200                   | 1     | 1        | 1         | 1    | 0                       | Mature       | Fair                       | Fair                 | Deadwood - Minor   | No Work Recommended | 20+   | B1                  | 2.4                           |

single woodland unit.

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measured from adjacent ground level.

Existing Height Above Ground Level -An approximation of height (in metres) of crown clearance

Category Grading - Trees have been assigned 'U' or Category Grading 'A' to 'C' in accordance with the tasted with each individual entry, leaf size and colouration: It should be taken that, unless otherwise structural Condition - Additional notes are provided giving details of the tree's structural condition. This is informed by 'the presence of any decay and physical defect'.

Preliminary Management Recommendations - These are made on the basis of optimising the life expectancy of site trees, given their current situation and that which may result from the development proposals. The survey process pays particular attention to implications for life and/or property; defects recorded under the structural condition have the necessary mitigation measures proposed within this section of the schedule.

Life Stage -There are five classes to which trees are assigned: Young: Early Mature; Over Mature; Veteran.

Physiological Condition -An indication of the tree's physiological condition is represented and classed as good, fair, poor or dead, this is informed by the following: Canopy Density: It should be

Estimated Remaining Contribution -The definitions of the terms used are as follows and describe the estimated length of time (in years) over which the tree can be expected to make a safe contribution to local amenity: Less than 10; 10+; 20+; and 40+.

Category Grading -Trees have been assigned 'U' or Category Grading 'A' to 'C' in accordance with

|                             |   |            |                       |       | Branch S | pread (m) |      |                         |              |                            |                      |  |                     | Follow Lad  |                     |                               |
|-----------------------------|---|------------|-----------------------|-------|----------|-----------|------|-------------------------|--------------|----------------------------|----------------------|--|---------------------|---|---------------------|-------------------------------|
| Sequential<br>Reference No. | Species   | Height (m) | Stem<br>Diameter (mm) | North | East     | South     | West | Canopy<br>Clearance (m) | Life Stage   | Physiological<br>Condition | Structural Condition | Comments / Notes   | Recommendations     | Estimated<br>Remaining<br>Contribution<br>(Years) | Category<br>Grading | Root Protection<br>Radius (m) |
| H23                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);English<br>oak (Quercus robur);Wych elm<br>(Ulmus glabra) | 5          | 150                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown                           | No Work Recommended | 10+   | C1                  | 1.8                           |
| 194                         | Sycamore (Acer pseudoplatanus)  | 11         | 800                   | 6     | 6        | 6         | 5    | 2                       | Mature       | Poor                       | Poor                 | Access to inspect base - Not possible; Ivy or climbing plant                 | No Work Recommended | 20+   | B1                  | 9.6                           |
| 125                         | Sycamore (Acer pseudoplatanus)  | 11         | 800                   | 6     | 6        | 6         | 5    | 2                       | Mature       | Poor                       | Poor                 | Access to inspect base - Not possible; Ivy or climbing plant                 | No Work Recommended | 20+   | B1                  | 9.6                           |
| 126                         | Sycamore (Acer pseudoplatanus)  | 11         | 800                   | 6     | 6        | 6         | 5    | 2                       | Mature       | Poor                       | Poor                 | Access to inspect base - Not possible; Ivy or climbing plant                 | No Work Recommended | 20+   | B1                  | 9.6                           |
| H27                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);English<br>oak (Quercus robur);Wych elm<br>(Ulmus glabra) | 5          | 150                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown                           | No Work Recommended | 10+   | C1                  | 1.8                           |
| 128                         | Common ash (Fraxinus excelsior)   | 12         | 800                   | 6     | 6        | 6         | 5    | 2                       | Mature       | Poor                       | Poor                 | Access to inspect base - Not possible; Ivy or climbing plant; multiple stems | No Work Recommended | 20+   | B1                  | 9.6                           |
| H29                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);English<br>oak (Quercus robur);Wych elm<br>(Ulmus glabra) | 5          | 200                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown                           | No Work Recommended | 20+   | B1                  | 2.4                           |
| Н30                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);English<br>oak (Quercus robur);Wych elm<br>(Ulmus glabra) | 5          | 200                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown                           | No Work Recommended | 20+   | B1                  | 2.4                           |
| H31                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);English<br>oak (Quercus robur);Wych elm<br>(Ulmus glabra) | 5          | 200                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown                           | No Work Recommended | 20+   | B1                  | 2.4                           |
| H32                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);English<br>oak (Quercus robur);Wych elm<br>(Ulmus glabra) | 5          | 200                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown                           | No Work Recommended | 20+   | B1                  | 2.4                           |

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measured from adjacent ground level.

Existing Height Above Ground Level -An approximation of height (in metres) of crown clearance

Life Stage -There are five classes to which trees are assigned: Young: Early Mature; Over Mature; Veteran.

Physiological Condition -An indication of the tree's physiological condition is represented and classed as good, fair, poor or dead, this is informed by the following: Canopy Density: It should be

Estimated Remaining Contribution -The definitions of the terms used are as follows and describe the estimated length of time (in years) over which the tree can be expected to make a safe contribution to local amenity: Less than 10; 10+; 20+; and 40+.

Category Grading -Trees have been assigned 'U' or Category Grading 'A' to 'C' in accordance with

|                             |  |            |                       |       | Branch S | pread (m) |      |                         |              |                            |                      |  |                     | Fatimated   |                     |                               |
|-----------------------------|--|------------|-----------------------|-------|----------|-----------|------|-------------------------|--------------|----------------------------|----------------------|--|---------------------|---|---------------------|-------------------------------|
| Sequential<br>Reference No. | Species  | Height (m) | Stem<br>Diameter (mm) | North | East     | South     | West | Canopy<br>Clearance (m) | Life Stage   | Physiological<br>Condition | Structural Condition | Comments / Notes   | Recommendations     | Estimated<br>Remaining<br>Contribution<br>(Years) | Category<br>Grading | Root Protection<br>Radius (m) |
| Н33                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);English<br>oak (Quercus robur);Wych elm<br>(Ulmus glabra)                                | 5          | 200                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown                           | No Work Recommended | 20+   | B1                  | 2.4                           |
| Н34                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);English<br>oak (Quercus robur);Wych elm<br>(Ulmus glabra)                                | 5          | 200                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown                           | No Work Recommended | 20+   | B1                  | 2.4                           |
| Н35                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Blackthorn<br>(Prunus spinosa);English oak<br>(Quercus robur);Wych elm<br>(Ulmus glabra) | 5          | 200                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown; gappy                    | No Work Recommended | 10+   | C1                  | 2.4                           |
| T36                         | Common ash (Fraxinus excelsior)  | 13         | 650                   | 6     | 6        | 6         | 6    | 2                       | Mature       | Poor                       | Poor                 | Access to inspect base - Not possible; Ivy or climbing plant; multiple stems | No Work Recommended | 20+   | B1                  | 7.8                           |
| Н37                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Blackthorn<br>(Prunus spinosa);English oak<br>(Quercus robur);Wych elm<br>(Ulmus glabra) | 2          | 150                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Maintained                                      | No Work Recommended | 10+   | C1                  | 1.8                           |
| Н38                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Blackthorn<br>(Prunus spinosa);English oak<br>(Quercus robur);Wych elm<br>(Ulmus glabra) | 2          | 150                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Maintained; gappy and unmaintained in places    | No Work Recommended | 10+   | C1                  | 1.8                           |
| Н39                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Blackthorn<br>(Prunus spinosa);English oak<br>(Quercus robur);Wych elm<br>(Ulmus glabra) | 2          | 150                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Maintained; gappy and unmaintained in places    | No Work Recommended | 10+   | C1                  | 1.8                           |

single woodland unit.

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|                             |  |            |                       |       | Branch S | pread (m) |      |                         | T            |                            |                      |  |                     |   |                     |                               |
|-----------------------------|--|------------|-----------------------|-------|----------|-----------|------|-------------------------|--------------|----------------------------|----------------------|--|---------------------|---|---------------------|-------------------------------|
| Sequential<br>Reference No. | Species  | Height (m) | Stem<br>Diameter (mm) | North | East     | South     | West | Canopy<br>Clearance (m) | Life Stage   | Physiological<br>Condition | Structural Condition | Comments / Notes   | Recommendations     | Estimated<br>Remaining<br>Contribution<br>(Years) | Category<br>Grading | Root Protection<br>Radius (m) |
| Н40                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Blackthorn<br>(Prunus spinosa);English oak<br>(Quercus robur);Wych elm<br>(Ulmus glabra) | 2          | 150                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown                               | No Work Recommended | 20+   | B1                  | 1.8                           |
| H41                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Blackthorn<br>(Prunus spinosa);English oak<br>(Quercus robur);Wych elm<br>(Ulmus glabra) | 2          | 150                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown                               | No Work Recommended | 20+   | B1                  | 1.8                           |
| H42                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Blackthorn<br>(Prunus spinosa);English oak<br>(Quercus robur);Wych elm<br>(Ulmus glabra) | 5          | 150                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown                               | No Work Recommended | 10+   | C1                  | 1.8                           |
| H43                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Blackthorn<br>(Prunus spinosa);English oak<br>(Quercus robur);Wych elm<br>(Ulmus glabra) | 5          | 150                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown                               | No Work Recommended | 20+   | B1                  | 1.8                           |
| Н44                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Blackthorn<br>(Prunus spinosa);English oak<br>(Quercus robur);Wych elm<br>(Ulmus glabra) | 5          | 150                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown                               | No Work Recommended | 20+   | B1                  | 1.8                           |
| G45                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Blackthorn<br>(Prunus spinosa);English oak<br>(Quercus robur);Wych elm<br>(Ulmus glabra) | 5          | 150                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown; dense overgrown with bramble | No Work Recommended | 10+   | C1                  | 1.8                           |

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|                             |  |            |                       |       | Branch S | pread (m) |      |                         |              |                            |                      | Comments / Notes                                   |                     | Estimated                            |                     |                              |
|-----------------------------|--|------------|-----------------------|-------|----------|-----------|------|-------------------------|--------------|----------------------------|----------------------|--|---------------------|--------------------------------------|---------------------|------------------------------|
| Sequential<br>Reference No. | Species  | Height (m) | Stem<br>Diameter (mm) | North | East     | South     | West | Canopy<br>Clearance (m) |              | Physiological<br>Condition | Structural Condition |  | Recommendations     | Remaining<br>Contribution<br>(Years) | Category<br>Grading | Root Protectio<br>Radius (m) |
| Н46                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Blackthorn<br>(Prunus spinosa);English oak<br>(Quercus robur);Wych elm<br>(Ulmus glabra) | 5          | 150                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown | No Work Recommended | 20+                                  | B1                  | 1.8                          |
| Н47                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Blackthorn<br>(Prunus spinosa);English oak<br>(Quercus robur);Wych elm<br>(Ulmus glabra) | 5          | 150                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown | No Work Recommended | 20+                                  | B1                  | 1.8                          |
| H48                         | Field maple (Acer<br>campestre);Common<br>hawthorn (Crataegus<br>monogyna);Common ash<br>(Fraxinus excelsior);Blackthorn<br>(Prunus spinosa);English oak<br>(Quercus robur);Wych elm<br>(Ulmus glabra) | 5          | 150                   | 1     | 1        | 1         | 1    | 0                       | Early Mature | Fair                       | Fair                 | Deadwood - Minor; Hedgerow - Neglected / overgrown | No Work Recommended | 20+                                  | B1                  | 1.8                          |

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