

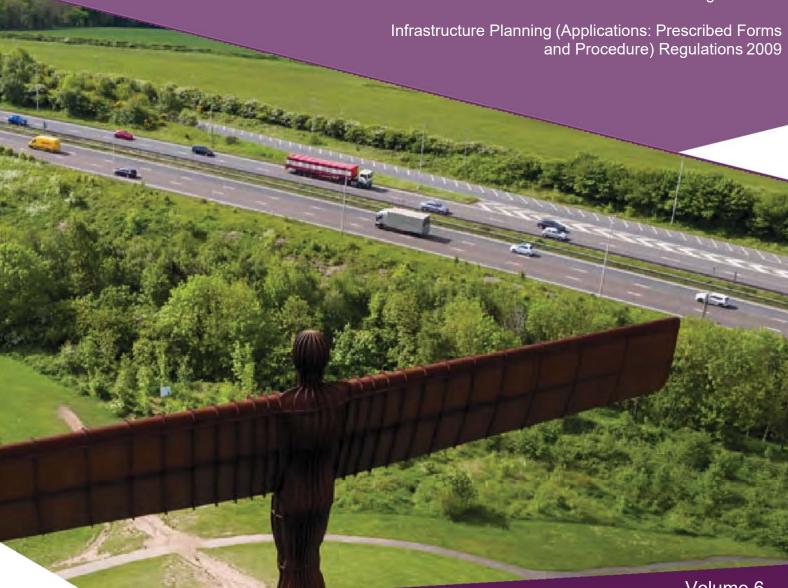
# **A1** Birtley to Coal House

**Scheme Number: TR010031** 

6.3 Environmental Statement – Appendix 7.2 Arboricultural Report

APFP Regulation 5(2)(a)

Planning Act 2008



Volume 6



## Infrastructure Planning

Planning Act 2008

# The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009

# **A1** Birtley to Coal House

Development Consent Order 20[xx]

# Environmental Statement - Appendix

Regulation Reference:	APFP Regulation 5(2)(a)
Planning Inspectorate Scheme	TR010031
Reference	
Application Document Reference	TR010031/APP/6.3
Author:	A1 Birtley to Coal House Project Team,
	Highways England

Version	Date	Status of Version
Rev 0	14 August 2019	Application Issue



# **CONTENTS**

1	INTRODUCTION	1
1.1	INTRODUCTION	1
1.2	COMPETENT EXPERT EVIDENCE	1
1.3	DESCRIPTION OF THE SCHEME	1
1.4	LEGISLATIVE AND POLICY FRAMEWORK	2
2	METHODOLOGY	8
2.1	ASSESSMENT METHODOLOGY	8
2.2	STUDY AREA	12
2.3	METHOD OF BASELINE DATA COLLECTION	13
2.4	ASSESSMENT ASSUMPTIONS AND LIMITATIONS	14
3	BASELINE CONDITIONS	16
3.1	DESK STUDY	16
3.2	SITE VISIT / SURVEY	17
3.3	FUTURE BASELINE	21
4	POTENTIAL IMPACTS	22
4.1	CONSTRUCTION	22
4.2	OPERATION	24
5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	26
5.2	CONSTRUCTION	26
5.3	OPERATION	26
6	ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS	29

# A1 Birtley to Coal House Environmental Statement Appendix 7.2



6.1	ASSESSMENT OF EFFECTS	29
6.2	CONSTRUCTION	29
6.3	OPERATION	30
7	CONCLUSIONS	32

# **TABLES**

Table 1-1 - Arboricultural professional competence	1
Table 1-2 - Relevant national policy	5
Table 1-3 - Relevant local policy	6
Table 2-1 - Description of the value (sensitivity) of the arboricultural resource	8
Table 2-2 - Sub-categories associated with high value category A arboricultural features	11
Table 2-3 - Sub-categories associated with low value category B arboricultural features	11
Table 2-4 - Sub-categories associated with very low-value C category arboricultural featu	ıres 12
Table 3-1 - Arboricultural features covered by a TPO	16
Table 3-2 - Arboricultural features located within a conservation area	16
Table 3-3 - Ancient woodland sites	17
Table 3-4 - Summary of surveyed arboricultural features	17
Table 4-1 - Data relating to the removal of arboricultural features as linear items and area	
	23
Table 4-2 - Potential arboricultural impacts during construction of the Scheme	23
Table 4-3 - Potential arboricultural impacts during operation of the Scheme	25
Table 5-1 - Summary of landscape mitigation elements of arboricultural interest	27
Table 6-1 - Potential arboricultural effects likely to arise during construction of the Schem	ne 29
Table 6-2 - Potential arboricultural effects during operation of the Scheme	31



# **APPENDICES**

**APPENDIX A** 

ARBORICULTURAL SURVEY SCHEDULE

APPENDIX B

ARBORICULTURAL SURVEY PLANS

APPENDIX C

ARBORICULTURAL PROTECTION PLANS



### 1 INTRODUCTION

#### 1.1 INTRODUCTION

- 1.1.1 This report describes the outcome of the assessment of likely significant arboricultural effects arising from the A1 Birtley to Coal House Scheme (the Scheme) upon the existing baseline arboricultural resource.
- 1.1.2 This report describes the baseline arboricultural conditions within the Study Area, the mitigation measures required to prevent, reduce or offset any significant adverse arboricultural effects and the likely residual effects after these measures have been employed.
- 1.1.3 This report (and its associated figures and appendices) is intended to be read as part of the wider Environmental Statement (ES).

#### 1.2 COMPETENT EXPERT EVIDENCE

1.2.1 As detailed in **Table 1-1** demonstrates that the professionals contributing to the production of this ES Appendix have sufficient expertise to ensure the completeness and quality of this ES.

Table 1-1 - Arboricultural professional competence

Name	Role	Qualifications and Professional Membership	Experience
John Mitchener	Author	BSc (Hons) Countryside Management Arboricultural Association (Professional Member) Institute of Chartered Foresters (Associate Member)	Three years of experience relevant to EIA including: M3 Junction 9 East West Rail
Neil Davies	Reviewer	BSc Forestry – pending Level 4 diploma in Arboriculture (tech Cert) Member of Royal Forestry Society	7 of years of experience relevant to EIA including: Thorpe Marsh to Stalybridge (overhead power line renewal) A30 Higher Carblake to Temple East West Rail

#### 1.3 DESCRIPTION OF THE SCHEME

1.3.1 The Scheme is 6.5km in length and will include replacement of Allerdene Bridge. Most of the work will take place within the highway boundary, however, some additional land will be required alongside the A1 at certain points to enable the additional lanes to be constructed.



- 1.3.2 The Scheme will provide additional capacity by widening to four lanes between junction 65 and 67 on the southbound carriageway and three lanes with an additional lane to help manage traffic joining and leaving the A1 between junctions on the northbound carriageway. It also includes a replacement structure of Allerdene Bridge to the immediate south of the current structure, which will tie in to the existing junction 67 Coal House roundabout. The Scheme will also look to install electronic signage to provide driver information along the road
- A full description of the Scheme is provided in Chapter 2: The Scheme of this ES 1.3.3 (Application Document Reference TR010031/APP/6.1).

#### 1.4 LEGISLATIVE AND POLICY FRAMEWORK

1.4.1 The following guidelines, legislation and planning policy documents provide the framework for the protection and conservation of Arboricultural features within the Study Area.

#### **LEGISLATION**

#### **Tree Preservation Orders**

The Town and Country Planning Act 1990 places a duty upon local planning authorities to 1.4.2 make provision for the preservation and planting of trees when granting permission for new development<sup>1</sup>. It also affords local planning authorities with the power to make Tree Preservation Orders (TPO) where it is expedient in the interests of amenity to make provision for the preservation of trees and woodlands<sup>2</sup>.

#### **Purpose of a Tree Preservation Order**

- 1.4.3 The purpose of a TPO is to protect specific trees, groups of trees and woodlands for the purpose of amenity. In the Secretary of State's view 'Orders should be used to protect trees and woodlands if their removal would have a significant negative impact on the local environment and its enjoyment by the public'3.
- 1.4.4 A TPO does not prevent the removal of trees in order to implement development. It does however prevent their unauthorised removal and ensures that they can be fully considered when determining whether development is appropriate and acceptable.

<sup>&</sup>lt;sup>1</sup> Town and Country Planning Act 1990. s.13(197)(a)(b). Norwich: TSO

<sup>&</sup>lt;sup>2</sup> Town and Country Planning Act 1990. s.13(198). Norwich: TSO

<sup>&</sup>lt;sup>3</sup> Department for Communities and Local Government, 2014. Conserving and Enhancing the Historic Environment. [Online] Available at: https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment#what-is-aconservation-area [Accessed 14 November 2017]



- 1.4.5 A TPO makes it a statutory offence to carry out any of the following works to trees without the formal consent of the Local Planning Authority (LPA):
  - Cutting down
  - Topping
  - Lopping
  - Uprooting
  - Wilful damage
  - Wilful destruction

#### **Amenity Value**

1.4.6 Trees which are to be included within a TPO should exhibit a minimum level of current or future amenity value. This should be assessed by the LPA in a structured and consistent manner with Government advice making reference to the following requirements.

#### **Visibility**

1.4.7 Trees should be visible, in whole or in part, from a public place such as a road, footpath or publicly accessible land.

#### **Value**

- 1.4.8 Public visibility is in itself not sufficient to warrant inclusion within a TPO. Arboricultural features should also exhibit merit in terms of one or more of the following criteria:
  - Size and form
  - Future potential
  - Rarity, cultural or historical value
  - Contribution to, and relationship with, the landscape
  - Contribution to the character or appearance of a conservation area

#### **Other Factors**

1.4.9 Other factors such as nature conservation may be considered when making a TPO but on their own would not warrant making an Order.

#### **Conservation Areas**

1.4.10 A conservation area is an area which has been designated because of its special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance.<sup>4</sup>. Trees have the ability to positively contribute towards the character,

<sup>&</sup>lt;sup>4</sup> Department for Communities and Local Government, 2014. Conserving and Enhancing the Historic Environment. [Online] Available at: <a href="https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment#what-is-aconservation-area">https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment#what-is-aconservation-area</a> [Accessed 14 November 2017]



appearance or general amenity of a conservation area and, if not protected by a tree preservation order, are protected by the provisions in section 211 of the Town and Country Planning Act 1990.

- 1.4.11 Section 211 of the Town and Country Planning Act 1990 makes it a statutory offence to carry out any of the following works to trees.<sup>5</sup> located within a conservation area without first providing the LPA with six weeks' notice of intent<sup>6</sup>:
  - Cutting down
  - Topping
  - Lopping
  - Uprooting
  - Wilful damage
  - Wilful destruction
- 1.4.12 Although the LPA must normally be given six weeks' notice of intent to carry out work to trees in a conservation area certain exemption do exist. These include, but are not limited to, the following criteria:
  - The making safe of dangerous trees where there is an immediate risk of serious harm
  - The removal of dead wood or dead trees
  - Work necessary to abate an actionable legal nuisance
  - Where work is necessary to implement a grant of full planning consent
- 1.4.13 It is therefore essential that, unless a valid exemption applies, Gateshead Council is given six weeks' notice prior to undertaking any pruning or felling works to, or any development activities within the Root Protection Area (RPA), of any tree protected by virtue of a conservation area.

#### **POLICY FRAMEWORK**

1.4.14 National planning policies of specific relevance to this report are outlined below:

#### **National**

1.4.15 National policy relevant to the potential effects on arboricultural features is outlined in **Table**1-2 below:

<sup>&</sup>lt;sup>5</sup> Except for trees whose stem diameter at 1.5 metres (m) above ground level:

<sup>•</sup> does not exceed 75 mm; or

<sup>•</sup> has a stem diameter of 100 mm of less and is to be removed for the sole purpose of improving the growth of other trees (e.g. thinning as part of forestry operations).

<sup>&</sup>lt;sup>6</sup> This does not apply to trees which are already protected by a TPO; these trees are subject to the procedures and controls for any tree covered by such an Order.



## Table 1-2 - Relevant national policy

Policy	Relevant Policy Objectives	Significance of impact of the Scheme on policy objective	
National			
National Policy Statement for National Networks (NPSNN)	The National Policy Statement for National Networks (NN NPS) also includes relevant guidance in chapter 5: Generic impacts. Paragraph 5.32 of this chapter supports the NPPF by stating: The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the national need for and benefits of the development, in that location, clearly outweigh the loss."  Paragraph 5.32 of the NN NPS further states that in instances where such trees would be affected by the proposed development then the applicant should either provide proposals for their conservation or give reasons for their loss.	The Scheme has avoided the deterioration or loss of ancient woodland and ancient or veteran trees.	
National Planning Policy Framework (2019)	The National Planning Policy Framework (NPPF) includes relevant guidance in chapter 15: Conserving and Enhancing the Natural Environment.  Paragraph 170(b) recognises the economic and other benefits that trees and woodlands provide and the fact that they should be considered as part of a planning decision; Paragraph 175(c) identifies the principle that 'development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists'.	Arboricultural features have been given due consideration during the design and approvals process.  The Scheme has avoided the deterioration or loss of ancient woodland and ancient or veteran trees.	



#### Local

1.4.16 Local policy relevant to the potential effects on arboricultural features is outlined in **Table 1- 3** below:

Table 1-3 - Relevant local policy

Policy	Relevant Policy Objectives	Significance of impact of the Scheme on policy objective
Core Strategy and urban Core plan (2010-2030) Policy CS18 Green Infrastructure and the Natural Environment	Green infrastructure assets to include trees, woodlands and hedgerows shall be protected, enhanced and managed.	The removal of arboricultural assets has been minimised. Retained assets will be protected during construction. A Landscape Mitigation Design Figure 7-6 (Application Document Reference TR010031/APP/6.2) has been developed to ensure that there is no overall loss of arboricultural feature.

#### **Other Guidance**

1.4.17 Other guidance of specific relevance to this report is outlined below:

#### **British Standard BS 5837:2012**

1.4.18 British Standard BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations (BS 5837:2012) provides recommendations and guidance on the relationship between trees and design, demolition and construction processes. It sets out principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and structures and is applicable whether or not planning consent is required.



#### **Ancient Woodland and Veteran Trees: Protecting them from Development**

- 1.4.19 The Forestry Commission and Natural England provides guidance on 13 October 2013 the protection of ancient woodland and veteran trees from development<sup>7</sup>. This guidance was updated on 05 November 2018 and advises the following:
  - A buffer zone of semi-natural habitat should be left of at least 15 metres between any development and ancient woodland
  - A buffer zone should be left between any veteran, ancient or aged tree and proposed development of at least 15 times the diameter of its stem or 5m from the edge of its canopy, if that is greater

<sup>&</sup>lt;sup>7</sup> https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences, updated 05 November 2018, accessed 18 November 2018



#### 2 METHODOLOGY

#### 2.1 ASSESSMENT METHODOLOGY

- 2.1.1 This assessment has been undertaken in accordance with guidance provided within The Design Manual for Roads and Bridges. Volume 11: Environmental Assessment Section 2, Part 5<sup>8</sup>; the significance of arboricultural effects has been identified using guidance provided within **Table 2-1**.
- 2.1.2 This assessment identifies the arboricultural impacts and effects of The Scheme during both construction and operation. For the purposes of this assessment construction is defined as the period during which all site clearance, development and soft-landscaping activities are taking place; operation is defined as 15 years after construction works have ceased.
- 2.1.3 This assessment takes the form of a assessment to provide an understanding of the likely arboricultural effects associated with the Scheme. It utilises information which is available readily available either as a desk-study or from the walkover survey. This form of assessment represents an effective method of highlighting potentially significant impacts which may influence detailed design and identifying areas where a more detailed assessment will be required whilst also avoiding unnecessary survey work.
- 2.1.4 In accordance with relevant guidance. 9.10 topic specific descriptors and criteria for identifying the value of arboricultural features has been utilised details of which are provided in **Table 2-1**.

Table 2-1 - Description of the value (sensitivity) of the arboricultural resource

Sensitivity (Value)	BS 5837 Category	Remaining Life Expectancy	Typical Tree Quality and Value Descriptors
Very High	N/A	N/A	Unlikely to apply to arboricultural elements. Includes features of international value and importance.

<sup>8</sup> The Design Manual for Roads and Bridges. Volume 11: Environmental Assessment Section 2, Part 5, Highways Agency (2008).

<sup>&</sup>lt;sup>9</sup> BS 5837:2012 Trees in relation to design, demolition and construction. Recommendations

The Design Manual for Roads and Bridges. Volume 11: Environmental Assessment Section 2, Part 5, Highways Agency (2008).



Sensitivity (Value)	BS 5837 Category	Remaining Life Expectancy	Typical Tree Quality and Value Descriptors
High	A	>40 years	Trees, groups or woodlands which, because of their great age, size or habitat continuity are of exceptional value as arboricultural, landscape, conservation or cultural features (e.g. ancient or veteran trees and ancient woodland).
Medium	A	>40 years	Trees, groups or woodlands of identifiable arboricultural, landscape or cultural value.  Trees that are of particularly good examples of their species, especially if rare or unusual (e.g. notable specimens);  Trees that are essential components of groups, or of formal or semi-formal arboricultural features;  Trees, groups, or woodlands of particular visual importance as arboricultural and/or landscape features.
Low	В	20+ years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. the presence of significant though remediable defects including unsympathetic past management and storm damage);  Trees lacking the special quality necessary to merit category A designation;  Trees present in numbers, usually as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality;  Trees with material conservation or other cultural value.



Sensitivity (Value)	BS 5837 Category	Remaining Life Expectancy	Typical Tree Quality and Value Descriptors
Very Low	С	<20 years	Trees with a stem diameter of less than 150mm;  Unremarkable trees of very limited merit 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 greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits;  Trees with no material conservation or other cultural value.  Trees 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;  Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse;  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 safety of other trees nearby.

#### **Sub-categories**

- 2.1.5 The value associated with each arboricultural feature is defined by its sub-category. Sub-categories vary depending upon the overall value of the arboricultural feature, carry equal weight, do not influence retention priority and are simply included to indicate the primary value(s) associated with each surveyed item. The sub-category assigned to each arboricultural feature are identified within the Arboricultural Survey Schedule included in **Appendix A** of this report.
- 2.1.6 Sub-categories are defined as follows:



Table 2-2 - Sub-categories associated with high value category A arboricultural features

Sub- category	Area of value	Estimated remaining life expectancy (years)	Description
3	Cultural	>40	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. ancient trees, veteran trees and ancient woodland).

Table 2-3 - Sub-categories associated with low value category B arboricultural features

Sub- category	Area of value	Estimated remaining life expectancy (years)	Description
1	Arboricultural	>20	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. the presence of significant though remediable defects including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention beyond 40 years; or trees lacking the special quality necessary to merit category A designation.
2	Landscape	>20	Trees present in numbers, usually as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.



Table 2-4 - Sub-categories associated with very low-value C category arboricultural features

Sub- category	Area of value	Estimated remaining life expectancy (years)	Description
1	Arboricultural	>20	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.
2	Landscape	>20	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits.
3	Cultural	>20	Trees with no material conservation or other cultural value.

2.1.7 Arboricultural effects have been identified on the basis that all relevant mitigation measures have been undertaken. All likely significant effects will be discussed (see **paragraph 3.3.6**) below.

#### **ASSESSMENT OF SIGNIFICANT EFFECTS**

2.1.8 Significant effects are defined on a basis of professional judgement. They include those which affect nationally or locally important receptors. These include not only ancient or veteran trees and ancient woodland but also effects which are potentially important to local stakeholders in terms of public and private amenity. These effects may include impacts to protected trees or the loss of large numbers of very low-quality features where this may affect the enjoyment of the area by residents or members of the travelling public. Significant arboricultural effects are those which should be considered as part of the design or decision-making process.

#### 2.2 STUDY AREA

- 2.2.1 The arboriculture Study Area is defined as the area within which arboricultural features may experience effects associated with the construction of the Scheme.
- 2.2.2 The arboricultural Study Area is defined as the Scheme Footprint plus a 15-metre buffer. This buffer ensures that arboricultural features which are outside the Scheme Footprint but whose RPAs may be affected by construction activities are recorded and considered. The 15 metre buffer accounts for the maximum size of a RPA as specified in British Standard BS 5837:2012 *Trees in relation to design, demolition and construction Recommendations*.



#### 2.3 METHOD OF BASELINE DATA COLLECTION

#### **DESK STUDY**

2.3.1 A desk-study has been undertaken as a means of identifying any statutory and nonstatutory constraints which may apply to arboricultural features within the Study Area. The desk-based review has considered the following sources:

#### **Tree Preservation Orders and Conservation Areas**

2.3.2 Gateshead Council is responsible for implementing any legal controls imposed through TPOs and conservation areas within the Study Area. Confirmation regarding the statutory status of arboricultural features within the Study Area was obtained from Chris Redfern (Arboricultural Officer, Gateshead Council, Development Management) on 21 November 2017 with further updates received 16 November 2018.

#### Notable, Ancient and Veteran Trees

2.3.3 The presence of locally notable, ancient and veteran trees within the Study Area was checked using the Woodland Trust's Ancient Tree Inventory. 11 on 30 July 2018.

#### **Ancient Woodland**

2.3.4 The presence of ancient woodlands within the Study Area was checked using Natural England's Multi Agency Geographical Information for the Countryside (MAGIC) map. 12 on 30 July 2018.

#### SITE VISIT / SURVEYS

- 2.3.5 A walkover survey of arboricultural features within the Study Area was undertaken on 25 to 29 June 2018.
- 2.3.6 The arboricultural survey was undertaken in accordance with British Standard BS 5837:2012 (BS 5837) with Ordnance Survey MasterMap forming the base mapping. The arboricultural survey was undertaken in accordance with the following criteria:
  - Arboricultural features have been recorded as groups or wooded areas where this has been deemed appropriate. Groups have been recorded on the basis that they form distinct arboricultural features either aerodynamically, visually or because they contain trees of similar cultural and biodiversity value.
  - Arboricultural features have been inspected using the Visual Tree Assessment methodology as purported by Mattheck and Breloer (Mattheck & Breloer, 2006).

<sup>11</sup> www.ati.woodlandtrust.org.uk

<sup>12</sup> www.magic.gov.uk



- Arboricultural features have been awarded a quality (sensitivity) value based upon guidance provided within British Standard BS 5837:2012 Trees in relation to design, demolition and construction – Recommendation (BS 5837:2012) Table 1.
- The walkover survey was carried out from ground level only.
- No tissue samples were taken nor was any internal investigation of the subject trees undertaken.
- Tree heights and canopy spreads have been estimated to the nearest metre.
- 2.3.7 Stem diameters have been measured in accordance with Annex C of BS 5837:2012. Diameters of single stem trees on level ground have been measured at 1.5m above ground level. The diameters of other commonly encountered stems have been measured where most appropriate and this is recorded within the schedule.
- 2.3.8 The combined stem diameters for multi-stemmed trees have been calculated in accordance with BS 5837:2012 paragraph 4.6.1. Apart from ancient and veteran trees all root protection areas have been calculated as an area equivalent to a circle with a radius 12 times the stem diameter. For ancient and veteran trees root protection areas have been calculated as an area equivalent to a circle with a radius 15 times the stem diameter.

#### 2.4 ASSESSMENT ASSUMPTIONS AND LIMITATIONS

- 2.4.1 This assessment has been undertaken based upon the following assumptions:
  - That all arboricultural features within the footprint of the highway will need to be removed
  - That a minimum working area of five metres will be required around the Scheme footprint and that all arboricultural features within this area will need to be removed
  - That an increased working area of up to ten metres around the Scheme footprint will be required in certain areas (such as around the replacement Allerdene Railway Bridge) and that all arboricultural features within these areas will need to be removed
  - That where the proposed working area encroaches into the root protection area of adjacent arboricultural features then this will result in adverse impacts including root severance and soil compaction. It is further assumed that these impacts will have such a large adverse impact on affected trees that they will become unsustainable and therefore need to be removed.
  - That in instances where a substantial proportion of a tree group or wooded area is to be removed then the remaining portion will become potentially susceptible to uprooting and collapse during high winds or extreme adverse weather events. In these situations, the remaining part of the tree group or wooded area has been identified as unsustainable and has also been identified as needing to be removed.
  - That arboricultural features outside of the Scheme Footprint cannot be removed.
  - That all arboricultural features identified for retention can be sustainably protected during construction period and can therefore be retained.
- 2.4.2 The following limitations apply to this assessment:



- Arboricultural survey data is of a preliminary nature and has been collected during a walkover survey. Only defects visible from the ground have been noted and some features may not have been inspected closely due to access difficulties, the presence of dense ivy or vegetation or safety constraints. However, this it would not be expected that this would affect the outcome of the assessment.
- The survey has only been undertaken from land within the client's ownership, from public land or from areas where formal access has been arranged.
- Safety related features have recorded on the basis that the arboricultural features will be subject to a normal programme of tree hazard assessment and only those features which materially affect the quality of the feature or pose a real and immediate safety concern have been recorded.
- The assessment has been undertaken without the benefit of a detailed design. Design information relating to items such as sightlines, signs, street lighting, fences, underground services, ancillary structures and permanent access routes. Features such as these may all require additional tree removal which has not been considered at this stage.
- Working space requirements greater or smaller than those which have been assumed may increase or decrease the number and area of arboricultural features which have been identified as needing to be removed. Working space requirements will be further developed during detailed design and construction and specific areas of tree removal will be finalised.
- Arboricultural survey data is typically valid for a period of two years unless otherwise stated. Significant environmental events (such as extreme weather conditions) or changes to the Scheme may render it invalid within a shorter timescale.
- Records held on the Ancient Tree Inventory are collected on a voluntary basis, therefore the absence of records does not demonstrate the absence of ancient, veteran or notable trees but may simply indicate a gap in recording coverage.
- Whilst arboricultural surveys are not seasonally limited it is the case that certain pests and diseases may be more or less evident at different times of the year. This is especially true of certain wood decaying fungi such as the Giant Polypore (*Meripilus giganteus*) where fruiting bodies are short-lived and the early stages of root decay may not result in other identifiable symptoms. Walkover survey data is therefore based upon observations made at the time of the site visit and may be subject to change should further or more detailed inspections be undertaken.
- The position of arboricultural features has not been recorded on a topographical survey but has been estimated using aerial photography. The position and extent of these features should be regarded as approximate only.



#### 3 BASELINE CONDITIONS

#### 3.1 DESK STUDY

3.1.1 The desk study confirmed the absence of any ancient or veteran trees within the arboricultural study area. It did however confirm the presence of a single TPO, two separate conservation areas and one area of ancient woodland. Further details of which are provided below.

#### TREE PRESERVATION ORDERS

3.1.2 The arboricultural features listed in **Table 3-1** have been identified as having the potential to be afforded statutory protection by virtue of a TPO.

Table 3-1 - Arboricultural features covered by a TPO

Reference number	TPO Name
G64, G65, G66, T79, T80, T81 T85, T86, G227, G228, G229,	

- 3.1.3 Tree Preservation Order No. 21 **(Figure 1)** applies to various arboricultural features located within and outside of the arboricultural Study Area. The Order was made in 1975 and includes reference to three 'areas' of protected trees (A1, A2 and A3) all of which are within the study area and correspond with the location of the features identified in Table 3.
- 3.1.4 The use of an 'area' designation to protect trees means that only those specimens present in 1975 are afforded statutory protection and that precise details relating to the species and location of the protected specimens is not provided. Thus, although the arboricultural features identified in Table 3 have the potential to be protected their statutory status will be reliant upon evidence which places their date of germination at, before or after 1975.

#### **Conservation Areas**

3.1.5 Two conservation areas were identified parts of which extend into the arboricultural study area – Ravensworth and Lamesley Conservation Areas (**Figure 1**). Following completion of the walkover arboricultural survey the arboricultural features listed in **Table 3-2** have been identified as being within a designated conservation area.

Table 3-2 - Arboricultural features located within a conservation area

Reference number	Conservation area name
T81, T86, G64, G65, G227, G228, G229	Ravensworth Conservation Area



3.1.6 The walkover arboricultural survey did not identify any arboricultural features within the bounds of the Lamesley Conservation Area.

#### **ANCIENT WOODLAND**

3.1.7 A single area of ancient woodland was identified part of which extends into the arboricultural study area. Following completion of the walkover arboricultural survey the arboricultural features listed in **Table 3-3** have been identified as ancient woodland.

Table 3-3 - Ancient woodland sites

Reference number	Name	Status
G87.1, W88.1	Longacre Dene	Ancient semi-natural woodland

#### 3.2 SITE VISIT / SURVEY

3.2.1 A total of 447 arboricultural features were surveyed details of which are provided within the Arboricultural Survey Schedule included in **Appendix A** and the Arboricultural Survey plans (**Figure 1**) included in **Appendix B**. A summary of the surveyed features including their type, category.<sup>13</sup> and value is provided in **Table 3-4**.

Table 3-4 - Summary of surveyed arboricultural features

BS 5837 Category	Value	Trees	Tree Group	Woodlands	Hedges
Α	High	1	1	1	0
В	Low	4	5	1	0
С	Very Low	143	246	13	32
TOTAL		148	252	15	32

#### HIGH VALUE ARBORICULTURAL FEATURES

3.2.2 A total of three high value features were identified during the desk-study and subsequent walkover survey (**Figure 1**). These include a single veteran tree (T18) and two treed areas

<sup>&</sup>lt;sup>13</sup> Categories are assigned based upon the criteria described within British Standard BS 5837:2012 Table 1.



(G87.1 and W88.1) both of which form part of the larger Longacre Dene area of ancient woodland. In terms of numbers high value arboricultural features make up 0.67% of the baseline resource.

#### **Veteran Tree T18**

- 3.2.3 Veteran tree T18 is a mature ash (*Fraxinus excelsior*) with a stem diameter of 1025 millimetres and an estimated retention span in excess of 20 years. This tree has been identified as a veteran specimen based on its large stem diameter, obvious age and the presence of other veteran features including substantive stem decay, roughened bark and an 'old look'.<sup>14</sup>.
- 3.2.4 A veteran tree is one that possesses the physical characteristics of an ancient tree but which is not aged in comparison with other trees of the same species. Thus, a veteran tree may not necessarily be particularly old but, due to the rigours of life, may exhibit signs of ancientness. The main characteristics of a veteran tree include one or more of the following features:
  - A large stem diameter (girth)
  - Major trunk cavities or progressive hollowing
  - Decay holes
  - Physical damage to the stem
  - Bark loss
  - Major dead wood
  - Bark crevices and sap runs
- 3.2.5 Veteran trees are of considerable interest due to their cultural, historical, landscape and conservation values. These values mean that they should automatically be assigned category A3 when undertaking a quality assessment in accordance with BS 5837:2012 Table 1.15. The ability of such trees to provide many important benefits even if not alive means that this assessment criterion should apply whether physiologically declining or dead.16.
- 3.2.6 For the purposes of this report veteran trees are regarded as high value features and form part of a finite resource which is of national importance.

<sup>&</sup>lt;sup>14</sup> Lonsdale, D., 2013. Ancient and other veteran trees: further guidance on management. Gloucester: Severnprint.

<sup>&</sup>lt;sup>15</sup> British Standards Institute, 2012. *BS* 5837:2012 *Trees in relation to design, demolition and construction – Recommendations*. London: BSI.

<sup>16</sup> The woodland Trust. Ancient Tree Guides No.3: Trees and development. [pdf] Ancient Tree Forum. Available at: <a href="http://www.ancienttreeforum.co.uk/wp-content/uploads/2015/02/ancient-tree-guide-3-development.pdf">http://www.ancienttreeforum.co.uk/wp-content/uploads/2015/02/ancient-tree-guide-3-development.pdf</a> [Accessed 13 December 2017].



#### **ANCIENT WOODLAND**

- 3.2.7 Tree group G87.1 and wooded area W88.1 both form part of Longacre Dene which is recorded on the Natural England ancient woodland inventory as an area of ancient seminatural woodland. These two areas comprise of native trees including ash, alder (*Alnus spp.*), blackthorn (*Prunus spinosa*), oak (*Quercus spp.*) and Scots pine (*Pinus sylvetris*). In both instances the trees are youngish specimens with stem diameters of up to 225 millimetres and anticipated retention spans in excess of ten years.
- 3.2.8 Ancient woodland is defined as any area that has been continuously wooded. It since 1600 AD and accounts for approximately 2% of the United Kingdom's land area. It is valued for its wildlife which may include rare or threatened species, its soils, its amenity value and its importance as a cultural, historical and landscape resource. Ancient woodland takes hundreds of years to establish and is an irreplaceable resource.
- 3.2.9 Tree group G87.1 and wooded area W88.1 are considered high value features on the basis of their conservation and historical value and as such should automatically be assigned category A3 when undertaking a quality assessment in accordance with BS 5837:2012 Table 1.19. The existing condition of either feature has not influenced its quality assessment as both could be improved with appropriate management.20.
- 3.2.10 Due to the irreplaceable nature of ancient woodland any loss or deterioration can only be partially compensated. Compensation measures must be determined on a site-specific basis and may include planting new native woodland and the implementation of positive management activities.
- 3.2.11 For the purposes of this report ancient woodland is regarded as part of a high value finite resource which is of national importance.

#### LOW VALUE ARBORICULTURAL FEATURES

3.2.12 The walkover survey identified ten low value arboricultural features including four trees (T41, T48, T79 and T111), five tree groups (G98, G143, G147, G151 and G213), one

<sup>&</sup>lt;sup>17</sup> This excludes the presence of open areas within the woodland and the periodic felling of trees either over its full extent or in part. Neither of these features/actions will necessarily negatively impact upon the value of the woodland and, in the instance of open areas, often has a positive effect on diversity of habitat.

<sup>&</sup>lt;sup>18</sup> The Woodland Trust. *Ancient Woodland*. [online] Available at: <a href="https://www.woodlandtrust.org.uk/visiting-woods/trees-woods-and-wildlife/woodland-habitats/ancient-woodland/">https://www.woodlandtrust.org.uk/visiting-woods/trees-woodland/</a> [Accessed 7 December 2017].

<sup>&</sup>lt;sup>19</sup> British Standards Institute, 2012. *BS 5837:2012 Trees in relation to design, demolition and construction* – *Recommendations*. London: BSI.

<sup>&</sup>lt;sup>20</sup> Department for Communities and Local Government, Guidance – *Ancient woodland and veteran trees; protecting them from development* [Online] Available at: <a href="https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences">https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences</a> [Accessed 13 December 2017].



wooded area (W127). Low value features include a range of native tree species including ash, beech ((Fagus sylvatica), birch (Betula spp.), hawthorn (Crataegus monogyna), lime (Tilia spp.), elm (Ulmus spp.), oak, willow (Salix spp.) and Scots pine. Sycamore trees (Acer pseudoplatanus) are also recorded and, whilst not a true native tree species, should be considered as naturalised, have some conservation benefits and are generally acceptable outside areas of ancient woodland.

- 3.2.13 Low value features have been identified on the basis of their arboricultural and landscape values. For individual trees these include moderately sized specimens with stem diameters of between 600-850 millimetres and which exhibit only minor or remediable defects. For tree groups and woodlands these include smaller specimens whose collective value lies in their generally localised amenity and landscape benefits.
- 3.2.14 Low value arboricultural features are all mature in age, have an estimated retention span in excess of 20 years and make up 2.24% of the overall number of trees, tree groups, wooded areas and hedges which have been recorded.

#### **VERY LOW VALUE ARBORICULTURAL FEATURES**

- 3.2.15 Very low value arboricultural features include 143 individual trees, 246 tree groups, 13 wooded areas and 32 hedges. Very low-value features make up the vast majority of the baseline arboricultural resource and include 97.09% of those that have been recorded.
- 3.2.16 Very low-value features are formed almost exclusively from native tree species. Only a few instances of non-native species occur and include the occasional reference to horse chestnut (*Aesculus hippocastanum*), Leyland cypress (*x Cupressocyparis leylandii*), whitebeam (*Sorbus aria*) Norway maple (*Acer platenoides*) and Lombardy poplar (*Poplus nigra 'Italica'*).
- 3.2.17 Very low-value features have been identified on the basis of their arboricultural, landscape and cultural merits. They include features that are either of little arboricultural interest, have identified structural or physiological defects, provide only very localised or temporary landscape benefits or those with no identifiable cultural and conservation value.
- 3.2.18 Very low value arboricultural features consist predominately of semi-mature specimens whose average retention span has been identified as in excess of 20 years.
- 3.2.19 Very low-value features T81, T86, G64, G65, G227, G228, G229 are positioned within the bounds of the Lamesley Conservation Area and by default are afforded a degree of statutory protection. However, these features are considered as being insufficient value for them to contribute positively towards the character, appearance or general amenity of the conservation area and as such should not be viewed as having elevated status or warrant any form of special consideration.

#### **ASH DIEBACK**

3.2.20 Ash dieback (*Hymenoscyphus fraxineus*) has been identified across the site. Arboricultural Features of the genus *Fraxinus* may be in impaired condition. The disease causes



progressive death of leaf and branch tissue. It is dispersed by wind therefore it is likely to be endemic across the site. The disease is subject to full restriction of movement of Ash material under The Plant Health (Forestry) (Amendment) Order 2012. This may consequently present a constraint to development.

#### 3.3 FUTURE BASELINE

- 3.3.1 Trees and woodlands within the United Kingdom are currently under threat from a range of different environmental factors including pests, diseases and the effects of climate change. Resilience to threats at a population level can be achieved by ensuring that there is a diverse range of species present, that trees are adequately represented in all age groups from young to old and that those present are well suited to local environmental conditions.
- 3.3.2 Whilst the baseline arboricultural resource does offer a degree of diversity in terms of age and species this is somewhat limited in certain respects. Specifically, this includes a heavy reliance on hawthorn as a hedgerow component and upon ash trees as a significant constituent within tree groups, wooded areas and as a standalone individual specimen.
- 3.3.3 Given the likely long-term impacts associated with diseases such as Chalara dieback of ash (*Hymenoscyphus fraxineus*) it would be reasonable to assume that this disease will have some detrimental impact on the future value of the baseline arboricultural resource. Whether this impact is significant will depend on a number of factors including the genetic resistance of the local ash trees to the disease and the ability of other tree species to self-seed or grow such that they replace any ash that die or become severely diseased.
- 3.3.4 It is anticipated that Chalara dieback of ash will result in the loss of a number of ash trees from within the study area and this in turn will lead to a short to medium term reduction in the overall quality and value of the baseline arboricultural resource. However, in the absence of their being any other significant outbreaks of disease affecting other native tree species then this potentially adverse effect will most likely decline over the long-term as other trees increase in both numbers and size.



#### 4 POTENTIAL IMPACTS

#### 4.1 CONSTRUCTION

- 4.1.1 Potential arboricultural impacts during construction have been identified with reference to British Standard BS 5837:2012. Potential impacts during construction are wholly adverse and have been identified as including the following:
  - The removal of arboricultural features to facilitate construction.
  - The removal of arboricultural features to create a temporary construction compound to the north of the A1 and south of Salcombe Gardens.
  - Damage to retained trees resulting from:
    - Severance of roots caused by excavation
    - Damage to soil and roots caused by compaction
    - Damage to soil and roots caused by pollutants and contaminated surface run-off
    - · The smothering of trees due to significant accumulations of dust
    - The inappropriate pruning of trees to facilitate access
- 4.1.2 The impacts associated with the construction of the Scheme are illustrated in the Arboricultural Protection Plans (**Figure 2**) included in **Appendix B** of this report. At the time of construction landscape mitigation planting will have been only recently implemented, will not have had a chance to become established and will not be of sufficient value to offset the adverse effects associated with the removal of existing arboricultural features. Adverse arboricultural effects at the time of construction will therefore be directly related to the sensitivity of the resource and the magnitude of impact caused by construction activities alone.
- 4.1.3 Impacts to high value arboricultural features include the removal of veteran ash tree T18. The removal of this feature is necessary to provide adequate access during construction. Opportunities to retain this tree should be explored during detailed design and must include the identification of its precise location via topographical survey and the exclusion of all construction related activities from within its root protection area.
- 4.1.4 Arboricultural impacts directly related to trees covered by Tree Preservation Order No. 21 have been identified as potentially including the partial removal of tree group G66 and the loss of tree T82. These effects cannot be fully quantified due to uncertainties regarding the age of the arboricultural features and specifically whether they were in existence in 1975 and are therefore protected by the Order. This matter will require further discussion, during detailed design with Gateshead Council both as a means of identifying which trees are likely to be protected and what, if any, mitigation is likely to be required to compensate for their loss.



4.1.5 A summary of existing and removed arboricultural features can be found in **Table 4-1**.

Table 4-1 - Data relating to the removal of arboricultural features as linear items and areas

Туре	Existing		Removed	
	Area (m²)	Length (m)	Area (m²)	Length (m)
Tree Group	136,950	3,703	66,900	1,740
Wood	75,920	_	17,253	-
Hedge	-	2,077	-	1,222

- 4.1.6 In addition to the loss of one high value, one low value and 85 very low-value trees construction of the Scheme will require the removal of approximately 66,900m² of tree groups and 17,253m² of woodland. It will also require the removal of 1,222 linear metres of hedges and a further 1,740 linear metres of trees. Woodland removal includes the loss of 229m² and 17,024m² of low and very-low quality features respectively.
- 4.1.7 A summary of the potential impacts on arboricultural features during construction is included in **Table 4-2**.

Table 4-2 - Potential arboricultural impacts during construction of the Scheme

Feature	Sensitivity (Value)	Retain	Remove	Partially Remove	Magnitude of impact (construction)
Tree	High	0	1	0	Major adverse
	Low	3	1	0	Minor adverse
	Very Low	57	85	0	Moderate adverse
Tree Group	High	1	0	0	No change
	Low	5	0	0	No change
	Very Low	87	121	38	Moderate adverse
Wood	High	1	0	0	No change
	Low	0	0	1	Minor adverse



Feature	Sensitivity (Value)	Retain	Remove	Partially Remove	Magnitude of impact (construction)
	Very Low	4	2	6	Moderate adverse
Hedge	Very Low	14	13	4	Moderate adverse

#### 4.2 OPERATION

- 4.2.1 Potential arboricultural impacts associated with the operation of The Scheme are likely to be wholly beneficial and have been identified as including the following:
  - The creation of opportunities for the planting of new trees either as individuals, as groups of trees or as wooded areas. The benefits associated with new planting may include:
    - Opportunities to improve species diversity
    - Opportunities to increase age diversity
    - Opportunities to select tree species which are more suited to current and predicted environmental conditions
- 4.2.2 Potentially beneficial impacts include the opportunity to build resilience to pests, disease and climate change into the baseline arboricultural resource. Improved resilience to these factors will reduce the likelihood that the value of the arboricultural resource will become significantly reduced by a future outbreak of pests or disease or extreme weather event. This will assist in ensuring that the arboricultural continues to provide valuable ecosystem services and public amenity over the medium and long term.



4.2.3 A summary of the potential arboricultural impacts during operation is included in **Table 4-3**.

Table 4-3 - Potential arboricultural impacts during operation of the Scheme

Feature	Sensitivity (Value)	Removed Features	Magnitude of impact (Operation)
Tree	High	1	Major adverse
	Low	1	Minor adverse
	Very Low	85	Moderate beneficial
Tree Group	Very Low	1,740m	Negligible adverse
	Very Low	66,900m²	Negligible beneficial
Wood	Very Low	17,024m²	
	Low	229m²	Minor adverse
Hedge	Very Low	1,222m	Moderate beneficial



## 5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 5.1.1 The following measures have been identified as avoiding or reducing the impacts identified as potentially arising, as detailed in **Section 4**.
- 5.1.2 The measures are categorised as embedded mitigation i.e. that which has been identified during design development and incorporated into the design, and non-embedded mitigation i.e. identified during the assessment process to mitigate specific identified impacts

#### 5.2 CONSTRUCTION

#### **RETENTION OF VETERAN TREE T18**

5.2.1 Opportunities to retain this high value tree should be explored. These should include its accurate positioning in relation to proposed works combined with a detailed assessment as to which construction activities can be fully excluded from its root protection area. In instances where activities cannot be fully excluded from the root protection area then a further impact assessment should be undertaken. This should identify how these activities will impact the sustainable retention of tree T18 and what, if any, tree protection measures can be employed to reduce impacts to a tolerable level.

#### PROTECTION OF RETAINED ARBORICULTURAL FEATURES

- 5.2.2 Mitigation measures in accordance with British Standard BS 5837:2012 shall be employed during construction. These shall include the identification of a Construction Exclusion Zone around retained features and its robust protection through the use of suitable measures such as tree protection fencing ground protection and the direct supervision of arboriculturally sensitive works.
- 5.2.3 Full details relating to the type, extent and precise location of these mitigatory protection measures can only be defined cannot be determined until a detailed design has been completed and the construction methodology is known.
- 5.2.4 Full details of all necessary tree protection measures should be provided in the form of an Arboricultural Method Statement and a Tree Protection Plan. Details of the proposed tree protection measures should be incorporated into all relevant project documents including those informing site clearance, design and environmental management.

#### 5.3 OPERATION

#### **EMBEDDED MITIGATION**

- 5.3.1 Mitigation in the form of new tree planting shall be provided, details of which are provided on Figure 7-6 Landscape Mitigation Design (Application Document Reference TR010031/APP/6.2).
- 5.3.2 Landscape mitigation planting has been designed with reference to the following principles which are of relevance to this assessment:
  - New planting should be native species and locally sourced (where practicable)



- Planting of native trees and hedgerows between Longacre Wood and Longacre Dene and to enhance the Dunkirk Farm West and Bowes Railway wildlife corridors
- Additional planting of strategically placed native hedgerows to increase diversity of native species and strengthen wildlife corridors
- 5.3.3 Landscape mitigation planting includes the establishment of various elements with relevance to this assessment. Specifically, these include the planting of scattered trees, linear tree belts, woodland and native hedgerow with and without scattered trees.
- 5.3.4 Landscape mitigation planting which is of arboricultural relevance has been summarised in **Table 5-1** and includes approximate figures relating to the number, area or length of each proposed feature.

Table 5-1 - Summary of landscape mitigation elements of arboricultural interest

Description	Number of Individuals	Area (m²)	Length (m)
Scattered Trees (LE2.7)	330	-	-
Linear Belts (LE2.4)	-	7,760	-
Woodland (LE2.1)	-	34,631	-
Woodland edge (LE2.2)	-	25,728	-
Native Species Hedge (LE4.2)	-	-	3,003
Native Hedgerow with Trees (LE4.4)			1,255

- 5.3.5 It is envisaged that after 15 years newly planted individual trees will have reached a height and width whereby they form distinct visual features within the local landscape although this is unlikely to exceed a value that can be described as 'very low'. It is also envisaged that groups of trees and hedges will have grown sufficiently for them to have acquired a measurable degree of arboricultural, landscape and conservation interest. At this stage all previously planted trees and hedges are likely to be of an arboricultural value which can be described as 'very low'.
- 5.3.6 For the purpose of this assessment the following correlation between arboricultural features to be removed and landscape mitigation planting has been applied.<sup>21</sup>:

<sup>&</sup>lt;sup>21</sup> Design Manual for Roads and Bridges, Volume 10, Part 3 Landscape Elements



- Scattered trees (LE2.7) include trees planted as individuals or as part of small, dispersed groups of trees. Scattered trees are deemed capable of mitigating the loss of individual trees on a 'one for one' basis.
- Linear belts (LE2.4) are defined as 'linear belts of trees and shrubs too narrow to be considered woodland but more substantial than a hedgerow'. The presence of trees within linear belts is considered likely to be such that they can provide a direct replacement for those linear tree groups which are likely to be removed.
- Woodland (LE2.1) is defined as 'vegetation dominated by tree and shrub species with a species composition, age and structural diversity capable of forming identifiable tree, shrub and field layers'. Woodland (LE2.1) is considered capable of providing a direct replacement for existing wooded areas and non-linear tree groups where they are to be removed.
- Native species hedge (LE4.2) and native hedgerow with trees (LE4.4) are deemed to comprise predominately either maintained or informally managed hedgerows. On this basis they have the ability to provide a direct replacement for existing hedges which are to be removed. Although 'native hedgerows with trees' are defined as containing intermittent standard trees the number of new trees which are to be included is as yet unknown. As a precautionary measure this form of mitigatory planting has therefore been deemed unable to mitigate directly for the removal of existing trees and groups of trees. This approach has been adopted due to the uncertainty of the precise number or size of trees to be planted at this stage.



#### 6 ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS

#### 6.1 ASSESSMENT OF EFFECTS

- 6.1.1 The effects of The Scheme on the baseline arboricultural resource have been assessed.

  The assessment identifies the likely effects during both construction and operation.

  Operation is defined for arboriculture purposes as a period of 15 years following completion of construction work.
- 6.1.2 The effects associated with construction and operation of the Scheme assumes implementation of the tree protection and mitigation measures identified in **Section 5** of this report.

#### 6.2 CONSTRUCTION

6.2.1 A summary of the potential arboricultural effects likely to arise during construction of the Scheme is included in **Table 6-1** 

Table 6-1 - Potential arboricultural effects likely to arise during construction of the Scheme

Feature	Sensitivity (Value)	Significance of effect (construction)	
Tree	High	Very large adverse	
	Low	Slight adverse	
	Very Low	Slight adverse	
Tree Group	High	Neutral	
	Low	Neutral	
	Very Low	Slight adverse	
Wood	High	Neutral	
	Low	Slight adverse	
	Very Low	Slight adverse	
Hedge	Very Low	Slight adverse	

6.2.2 At the time of construction, The Scheme will have a slight adverse effect (not significant) on very low value trees, tree groups, wooded areas and hedges within the study area. There



will also be a slight adverse effect (not significant) on low value wooded areas within the study area due to the loss of approximately 0.36 hectares from feature W127.

- 6.2.3 There will be no impacts associated with high and low value trees and tree groups with effects of these receptors identified as **neutral** (not significant). The Scheme will not impact upon Longacre Dene ancient woodland as represented by features G87.1 and W88.1. In each instance it appears to be possible to establish suitable protection distances around each of the woodland features.<sup>22</sup> such that national planning policy requirements can be adhered to and the necessary compliances achieved.
- 6.2.4 Significant arboricultural effects during construction include a **very large adverse** impact on high value trees. This is directly related to the removal of veteran ash tree T18 and represents the loss of an irreplaceable resource of national significance. Other significant arboricultural effects are **slight** adverse (not significant) and relate to the removal, in whole or in part, of individual trees linear groups of trees, hedges and treed and wooded areas. Whilst these adverse effects will be detrimental to public amenity and the quality and value of the baseline arboricultural resource they are not sufficiently large for them to be a material consideration in the decision-making process.

#### 6.3 OPERATION

- 6.3.1 Likely significant effects associated with the operation of the Scheme have been assessed at a time when landscape mitigation planting will have become established and when trees will have increased in size and presence. However, although mitigatory planting will have established and grown specimens will still only be semi-mature in age and are therefore unlikely to have developed many of the qualities associated with older, mature examples. Because of this, beneficial effects are only likely to compensate fully for the loss of smaller or poorer quality very low value trees, tree groups, wooded areas and hedges. The loss of older, more established and higher quality low value specimens will not be meaningfully mitigated and will therefore remain unchanged.
- 6.3.2 At the time of operational assessment landscape mitigation planting will ensure that there are an additional 245 very low-quality trees and a further 3.306 linear metres of hedge than currently exists with the Scheme Footprint. There will however be a deficit of 4.15 ha of very low-quality tree groups and wooded areas and 1,740 linear metres of very low quality tree groups.

<sup>&</sup>lt;sup>22</sup> A root protection area of 15.4 metres is required around T18 whilst a buffer of 15 metres should be established around G87.1 and W88.1.



6.3.3 A summary of the likely significant arboricultural effects during operation is included in **Table 6-2**.

Table 6-2 - Potential arboricultural effects during operation of the Scheme

Feature	Sensitivity (Value)	Significance of effect (Operation)
Tree	High	Very large adverse
	Low	Slight adverse
	Very Low	Slight beneficial
Tree Group	Very Low	Neutral
	Very Low	Neutral
Wood	Very Low	
	Low	Slight adverse
Hedge	Very Low	Slight beneficial

- 6.3.4 The effects of operational impacts will be **slight** beneficial (not significant) in terms of individual trees, **neutral** (not significant) in terms of areas of tree groups and woodland and **slight** beneficial (not significant) where they apply to hedges.
- 6.3.5 Further operational impacts are however adverse and relate to the loss of high value veteran tree T18 and 229m² of low quality woodland. The effects associated with these impacts are **very large adverse** (significant) and **slight** adverse (not significant).
- The potential benefits associated with the establishment of woodland outside the Scheme Footprint have not been included in this assessment due to uncertainty over the viability of implementation. However, even if included whilst it would provide a beneficial effect (not significant) in terms of very low-quality tree groups and woodland it would not influence the very large adverse (significant) and slight adverse (not significant) effects associated with high quality trees and low quality woodland. This is due to the far larger timespan that will be required for trees to achieve the size, condition and value associated with low quality features and which cannot be replicated by younger, less mature specimens.



## 7 CONCLUSIONS

- 7.1.1 The baseline arboricultural resource comprises predominately of very low-quality features although there are a limited number of higher value trees, tree groups and wooded areas. High value features include a single veteran tree and Longacre Dene area of ancient woodland. It is anticipated that there will be a short to medium term reduction to the value of the baseline resource associated with Chalara ash dieback with adverse effects gradually reducing over time.
- 7.1.2 Some arboricultural features are afforded statutory protection by virtue of the Ravensworth Conservation Area and Tree Preservation Order No. 21. Whilst features within the Ravensworth Conservation Area will remain unaffected by the Proposed Scheme some trees protected by Tree Preservation Order No. 21 may need to be removed. These potential adverse impacts should be discussed with Gateshead Council due to current uncertainties associated with identifying the age of trees which will be affected and therefore whether they are covered by the Order or not.
- 7.1.3 Potential impacts during construction are adverse and are directly related to tree removals and other possible damage to the above and below ground parts of retained trees. Potential impacts during operation are wholly beneficial and relate to benefits which can be provided through the implementation of appropriate landscape mitigation planting. These include increased diversity in terms of species and age and opportunities to ensure trees are well suited to their environment.
- 7.1.4 Mitigation of potential adverse impacts can be provided in the form of suitable and sufficient tree protection measures during construction and the implementation of an appropriate post-development scheme of landscape mitigation planting. Opportunities to remove significant effects associated with the loss of veteran tree T18 should be explored during detailed design and will require construction activities to be wholly or substantially excluded from its root protection area.
- 7.1.5 Effects at the time of construction will not be mitigated by landscape planting. They include **neutral** effects to high value woodlands and low value trees and tree groups but with **slight** adverse impacts to low value woodled areas and very low trees, tree groups, woods and hedges. The removal of high value veteran tree T18 is **major adverse**.
- 7.1.6 Effects at the time of operation will be mitigated by landscape planting the value of which is likely to be very low. Effects are likely to be **slight** beneficial in terms of very low value trees and hedges with **slight** adverse effects to very low value tree groups and low value wooded areas and a persistent **major adverse** impact associated with the loss of high value veteran tree T18.

## Appendix A

ARBORICULTURAL SURVEY SCHEDULE



## A1 Birtley to Coal House Environmental Statement Appendix 7.2



Key:					
REFERENCE NUMBER:	Individual	reference nu	mber		
TYPE:	T - Tree	G - Group	W - Woodland	H - Hedge	
SPECIES:	Species li	sted by comn	non name		
HEIGHT:	Overall he	eight (m)			
DIAMETER:			alculated in accordance with podlands and hedges. * Der		6.1. An average stem diameter is n diameter
NO. OF STEMS:	Number o	f stems (indiv	ridual trees only)		
N, E, S, W:	Crown sp	read taken at	each cardinal point (m)		
LCH:	Lowest cr	own height (n	n)		
FSB:	Height of	lowest signific	cant branch (m)		
AGE CLASS:	Young - < estimated expectance	life	Semi-mature – 1/3rd to 2/3rd estimated life expectancy	Mature - > 2/3rd estimated life expectancy	Veteran – a tree which exists significantly beyond its normal life expectancy
PHYSIOLOGICAL CONDITION:	Good		Fair	Poor	Dead
STRUCTURAL CONDITION:	Good		Fair	Poor	

## A1 Birtley to Coal House Environmental Statement Appendix 7.2



Key:				
ESTIMATED REMAINING CONTRIBUTION:	>10 years	10+ years	20+ years	40+ years
CATEGORY:	BS 5837 Category - A, B, C, U	BS 5837 Sub-category - 1	, 2, 3	
RPA RADIUS	The radius of the circul stem (m)	ar Root Protection Area ass	sociated with the tree as	measured from the centre of the



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
1	G	Ash; Birch; Hawthorn; Alder	7	75- 250	2.5	2.5	2.5	2.5	0.5	0.5	Semi- Mature	Poor	Poor	<10	C2	Stand of mostly dead trees	3.0
2	G	Hawthorn	3	125	2.5	2.5	2.5	2.5	0.5	0.5	Mature	Fair	Fair	10+	C2	Scrubby self-set trees	1.5
3	G	Hawthorn	4	75	2	2	2	2	0.5	0.5	Mature	Fair	Fair	10+	C2	Self-set scrubby trees	0.9
4	G	Willow	16	500	6	6	6	6	1.5	0.5	Mature	Fair	Fair	10+	C2	Major deadwood in the crown	6.0
5	G	Alder; Hawthorn; Ash	4	75- 250	1.5	1.5	1.5	1.5	0.5	1	Semi- Mature	Fair	Fair	10+	C2	Self-set scrubby trees	3.0
6	G	Cherry	16	100- 300	4	4	4	4	2.5	1	Semi- Mature	Fair	Fair	10+	C2	Dense group	3.6
7	G	Ash; Hawthorn; Birch; Oak	3.5	100	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	1.2
8	G	Hawthorn	3.5	100	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	1.2
9	G	Hawthorn	4	125	2.5	2.5	2.5	2.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Highways amenity planting	1.5
10	G	Hawthorn	4	125	2.5	2.5	2.5	2.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Highways amenity planting	1.5
11	G	Ash; Hawthorn	4	75- 200	3	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	2.4
12	G	Ash; Hawthorn; Elm	11	100- 250	3	3	3	3	4	1.5	Mature	Fair	Fair	20+	C2	Dense scrubby understorey; Dense ivy to stems	3.0
13	G	Ash; Willow; Hawthorn	11	100- 350	3.5	3.5	3.5	3.5	2	1.5	Semi- Mature	Fair	Fair	20+	C2	Dense group of trees	4.2
14	G	Hawthorn	5	100	2.5	2.5	2.5	2.5	0.5	0.5	Mature	Fair	Fair	20+	C2	Scrubby self-set trees	1.2



	i		1	i	1						i	1			i		
TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	W	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
15	G	Ash; Cherry; Willow	8	100- 300	2.5	2.5	2.5	2.5	1	1.5	Semi- Mature	Fair	Fair	20+	C2	Dense layering trees within group	3.6
16	G	Willow; Elder	6	75- 200	3	3	3	3	0.5	0.5	Mature	Fair	Fair	10+	C2	Dense unmanaged growth	2.4
17	G	Willow; Ash; Sycamore; Oak; Field Maple	14	100- 400	3.5	3.5	3.5	3.5	3	1.5	Mature	Fair	Fair	20+	C2	Environmental screening	4.8
17	G	Willow; Ash; Sycamore; Oak; Field Maple	14	100- 400	3.5	3.5	3.5	3.5	3	1.5	Mature	Fair	Fair	20+	C2	Environmental screening	4.8
18	G	Willow	5	175	2.5	2.5	2.5	2.5	0.5	0.5	Semi- Mature	Poor	Poor	10+	C2	Environmental screening	2.1
19	G	Scots Pine; Ash	10	250	2.5	2.5	2.5	2.5	4	1.5	Semi- Mature	Fair	Fair	10+	C2	Highways amenity planting	3.0
20	G	Corsican Pine	7	150	2	2	2	2	2	2.5	Semi- Mature	Fair	Fair	10+	C2	Topped from the power lines	1.8
21	G	Scots Pine; Field Maple; Sycamore; Ash	11	75- 250	3	3	3	3	4	1.5	Semi- Mature	Fair	Fair	20+	C2	Signs of management	3.0
22	G	Scots Pine; Ash; Sycamore	9	75- 225	1.5	1.5	1.5	1.5	4	1.5	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	2.7
23	G	Ash; Poplar; Sycamore; Willow	9	75- 300	2.5	2.5	2.5	2.5	5	4	Semi- Mature	Fair	Fair	10+	C2	Trees have been felled and scrubby understory has been removed	3.6
26	G	Willow; Alder; Sycamore	9	175	2.5	2.5	2.5	2.5	1.5	2	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	2.1
27	G	Birch; Alder; Haze	7	125	2	0	0	0	1	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby unmanaged trees	1.5



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
28	G	Scots Pine; Birch; Sycamore; Alder	7	150	2.5	2.5	2.5	2.5	2	0.5	Semi- Mature	Fair	Fair	20+	C2	Young tree plantation	1.8
28	G	Scots Pine; Birch; Sycamore; Alder	7	150	2.5	2.5	2.5	2.5	2	0.5	Semi- Mature	Fair	Fair	20+	C2	Young tree plantation	1.8
30	G	Oak	10	300	4	4	4	4	2	2	Mature	Good	Good	20+	C2	Linear group of trees; Minor deadwood in the crown	3.6
31	G	Birch; Field Maple; Ash	13	75- 250	2.5	2.5	2.5	2.5	2.5	1	Semi- Mature	Fair	Fair	20+	C2	Plantation group; Signs of no management	3.0
33	G	Ash; Alder; Hawthorn	7	75- 200	2	2	2	2	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	2.4
34	G	Cherry; Ash; Beech; Oak; Hawthorn	10	75- 200	2	2	2	2	2.5	1.5	Semi- Mature	Fair	Fair	20+	C2	Highways amenity planting	2.4
36	G	Ash; Hawthorn; Oak; Elder	7	75- 200	3	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	2.4
37	G	Hawthorn; Elder; Cherry	4	150	2.5	2.5	2.5	2.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Trees with limited landscape value	1.8
40	G	Ash; Alder; Sycamore	9	175	2	2	2	2	1.5	1	Semi- Mature	Fair	Fair	20+	C2	Dense ivy to stems; Fallen dead trees throughout	2.1
41	G	Hawthorn; Field Maple; Ash	-	75- 200	1.5	1.5	1.5	1.5	2.5	1.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby unmanaged trees	2.4
42	G	Oak; Ash; Alder	7	75- 150	1.5	1.5	1.5	1.5	1.5	1	Young	Fair	Fair	20+	C2	Self-set trees amid a plantation	1.8
43	G	Oak; Ash; Alder	8	75- 150	1.5	1.5	1.5	1.5	1.5	1	Young	Fair	Fair	20+	C2	Self-set trees amid a plantation	1.8



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
43	G	Oak; Ash; Alder	8	75- 150	1.5	1.5	1.5	1.5	1.5	1	Young	Fair	Fair	20+	C2	Self-set trees amid a plantation	1.8
44	G	Oak; Ash; Alder	9	75- 150	1.5	1.5	1.5	1.5	1.5	1	Young	Fair	Fair	20+	C2	Self-set trees amid a plantation	1.8
46	G	Oak; Willow; Hawthorn; Beech	9	100- 275	3	3	3	3	2	1.5	Semi- Mature	Fair	Fair	20+	C2	Self-set trees around a culvert a	3.3
46	G	Oak; Willow; Hawthorn; Beech	9	100- 275	3	3	3	3	2	1.5	Semi- Mature	Fair	Fair	20+	C2	Self-set trees around a culvert a	3.3
47	G	Oak; Willow; Hawthorn; Beech	10	100- 275	3	3	3	3	2	1.5	Semi- Mature	Fair	Fair	20+	C3	Self-set trees around a culvert a	3.3
48	G	Corsican Pine; Ash; Field Maple	8	150	2	2	2	2	2.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Dense mixed environmental screening	1.8
48	G	Corsican Pine; Ash; Field Maple	8	150	2	2	2	2	2.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Dense mixed environmental screening	1.8
49	G	Hawthorn	7	275	1.5	1.5	1.5	1.5	1.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Minor stem wounds	3.3
50	G	Scots Pine; Ash	9	225	3	3	3	3	2	2.5	Semi- Mature	Fair	Fair	20+	C2	Limited access prevented full inspection	2.7
51	G	Willow	9	150	3	3	3	3	4.5	2.5	Semi- Mature	Fair	Fair	20+	C2	Environmental screening from the gas works	1.8
52	G	Alder; Willow; Beech; Sycamore	9	175	2	2	2	2	1.5	2	Semi- Mature	Fair	Fair	20+	C2	Highways amenity screening	2.1
53	G	Poplar	10	225	5	5	5	5	5	3	Semi- Mature	Fair	Fair	20+	C2	Minor deadwood in the crowns	2.7
54	G	Norway Maple	10	225	3	3	3	3	3	2	Semi- Mature	Fair	Fair	20+	C2	Minor stem wounds	2.7



			Ì	1 _			Ì						1		İ		
TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	W	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
55	G	Ash	9	250	4	4	4	4	1	1.5	Mature	Fair	Fair	20+	C2	Insignificant defects	3.0
56	G	Birch; Ash; Sycamore; Lime; Scots Pine	9	75- 275	2.5	2.5	2.5	2.5	5	2.5	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	3.3
56	G	Birch; Ash; Sycamore; Lime; Scots Pine	9	75- 275	2.5	2.5	2.5	2.5	5	2.5	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	3.3
57	G	Horse Chestnut	8	325	4	4	4	4	5	4	Mature	Fair	Fair	10+	C2	Minor stem wounds; Trees have previously been pruned	3.9
58	G	Willow; Alder	4	150	2	2	2	2	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Limited access prevented full inspection	1.8
59	G	Ash; Oak; Sycamore; Scots Pine; Birch; Hawthorn	9	175	2	2	2	2	0.5	2	Semi- Mature	Fair	Fair	20+	C2	Highways amenity screening; Planted on a steep slope	2.1
59	G	Ash; Oak; Sycamore; Scots Pine; Birch; Hawthorn	9	175	2	2	2	2	0.5	2	Semi- Mature	Fair	Fair	20+	C2	Highways amenity screening; Planted on a steep slope	2.1
59	G	Ash; Oak; Sycamore; Scots Pine; Birch; Hawthorn	9	175	2	2	2	2	0.5	2	Semi- Mature	Fair	Fair	20+	C2	Highways amenity screening; Planted on a steep slope	2.1
60	G	Oak; Birch; Alder; Hawthorn; Ash	8	75- 260	1.5	1.5	1.5	1.5	0.5	1	Semi- Mature	Poor	Fair	20+	C2	Limited screening value	3.3
61	G	Ash	14	150- 300	3.5	3.5	3.5	3.5	2	1.5	Mature	Fair	Fair	20+	C2	Dense ivy to the stem	3.6
62	G	Scots Pine; Oak; Ash; Field Maple	9	100- 250	2	2	2	2	1	1.5	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	3.0



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
62	G	Scots Pine; Oak; Ash; Field Maple	9	100- 250	2	2	2	2	1	1.5	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	3.0
63	G	Willow	13	350	7	7	7	7	2.5	2	Mature	Fair	Fair	20+	C2	Leaning stems; Hanging broken branches in the crown	4.2
63	G	Willow	13	350	7	7	7	7	2.5	2	Mature	Fair	Fair	20+	C2	Leaning stems; Hanging broken branches in the crown	4.2
64	G	Ash; Sycamore; Oak	14	100- 250	3	3	3	3	2	1.5	Mature	Fair	Fair	20+	C2	Third party land	3.0
65	G	Ash; Beech; Elm; Oak	8	75- 250	2	2	2	2	1.5	1	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	3.0
66	G	Sycamore; Oak: Ash; Beech	15	100- 400	3	3	3	3	5	2.5	Semi- Mature	Fair	Fair	20+	C2	Unmanaged trees; Limited screening value	4.8
66	G	Sycamore; Oak: Ash; Beech	15	100- 400	3	3	3	3	5	2.5	Semi- Mature	Fair	Fair	20+	C2	Unmanaged trees; Limited screening value	4.8
67	G	Norway Maple; Hawthorn	7	150- 250	3	3	3	3	1	1.5	Semi- Mature	Fair	Fair	20+	C2	Highways amenity planting	3.0
68	G	Sycamore; Hawthorn	5	75- 200	2	2	2	2	0.5	1	Semi- Mature	Fair	Fair	20+	C2	Highways amenity planting	2.4
69	G	Ash; Field Maple; Sycamore; Hawthorn; Oak	8	100- 350	3	3	3	3	2	1.5	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	4.2
69	G	Ash; Field Maple; Sycamore; Hawthorn; Oak	8	100- 350	3	3	3	3	2	1.5	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	4.2



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
70	G	Ash; Scots Pine; Lime; Sycamore; Oak; Hawthorn	9	100- 250	2	2	2	2	0.5	1	Semi- Mature	Fair	Fair	20+	C2	Highways amenity planting	3.0
71	G	Ash; Field maple; Oak; Beech	5	125	1	1	1	1	0.5	0.5	Young	Fair	Fair	20+	C2	Limited access prevented full inspection	1.5
72	G	Ash; Field Maple; Sycamore; Oak	8	100- 200	2	2	2	2	1	1	Semi- Mature	Fair	Fair	20+	C2	Highways amenity planting	2.4
73	G	Ash	7	150	4	4	4	4	4	0.5	Semi- Mature	Fair	Fair	20+	C2	Multistemmed ash trees	1.8
74	G	Hawthorn; Ash	5	150	2	2	2	2	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	1.8
74	G	Hawthorn; Ash	5	150	2	2	2	2	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	1.8
75	G	Ash; Sycamore; Field Maple; Hawthorn	7	200	3	3	3	3	0.5	0.5	Mature	Fair	Fair	20+	C2	Highways amenity trees	2.4
75	G	Ash; Sycamore; Field Maple; Hawthorn	7	200	3	3	3	3	0.5	0.5	Mature	Fair	Fair	20+	C2	Highways amenity trees	2.4
76	G	Ash; Beech; Birch; Sycamore; Field Maple	12	175	3	3	3	3	4	2.5	Mature	Fair	Fair	20+	C2	Trees have previously been pruned	2.1
76	G	Ash; Beech; Birch; Sycamore; Field Maple	12	175	3	3	3	3	4	2.5	Mature	Fair	Fair	20+	C2	Trees have previously been pruned	2.1
77	G	Ash; Beech; Birch; Sycamore; Field Maple	9	100- 250	2.5	2.5	2.5	2.5	3	1	Semi- Mature	Fair	Fair	20+	C2	Highways amenity planting	3.0



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
78	G	Beech; Birch; Sycamore; Ash	9	75- 250	1.5	1.5	1.5	1.5	1.5	1	Semi- Mature	Fair	Fair	20+	C2	Highways amenity planting	3.0
79	G	Hawthorn; Ash; Sycamore; Birch; Beech	7	75- 200	2	2	2	2	3	0.5	Semi- Mature	Fair	Fair	20+	C2	Highways amenity planting	2.4
80	G	Hawthorn	4	150	1.5	1.5	1.5	1.5	1	0.5	Semi- Mature	Fair	Fair	20+	C2	Highways amenity planting	1.8
81	G	Oak; Hawthorn	5	75- 150	4	4	4	4	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Dense ivy to stem and crown	1.8
82	G	Elm; Elder; Hawthorn	9	75- 150	2	2	2	2	1	1.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	1.8
83	G	Beech; Elm: Birch; Ash; Sycamore	9	100- 200	2.5	2.5	2.5	2.5	5	1.5	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	2.4
84	G	Ash; Elm; Beech; Cherry	9	200	2	2	2	2	2.5	1.5	Semi- Mature	Fair	Fair	20+	C2	Highways amenity planting	2.4
85	G	Scots Pine; Corsican Pine; Oak; Cherry; Sycamore	8	100- 250	2.5	2.5	2.5	2.5	1	0.5	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	3.0
86	G	Hawthorn; Birch; Ash; Oak	7	125	1.5	1.5	1.5	1.5	0.5	1	Semi- Mature	Fair	Fair	20+	C2	Scrubby unmanaged trees	1.5
87	G	Blackthorn; Ash	4	100	1	1	1	1	0.5	0.5	Semi- Mature	Poor	Poor	10+	C2	Scrubby self-set trees	1.2
87	G	Blackthorn; Ash	4	100	1	1	1	1	0.5	0.5	Semi- Mature	Poor	Poor	10+	A3	Scrubby self-set trees	1.2
89	G	Hawthorn; Oak; Ash	5	75- 175	2	2	2	2	0.5	1	Semi- Mature	Fair	Fair	20+	C2	Dense scrubby growth	2.1



			1						i	ĺ							
TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
90	G	Hawthorn; Hazel	5	100	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Self-set scrubby trees	1.2
91	G	Scots Pine	9	75- 200	2.5	2.5	2.5	2.5	1.5	1	Semi- Mature	Fair	Fair	20+	C2	Some low-level screening value	2.4
92	G	Scots Pine; Ash; Oak; Sycamore; Field Maple	8	75- 200	3	3	3	3	1.5	1	Semi- Mature	Fair	Fair	20+	C2	Some low-level screening value	2.4
93	G	Sycamore	10	150- 350	5	5	5	5	5	2	Mature	Fair	Fair	20+	C2	Environmental screening	4.2
94	G	Hawthorn; Hazel; Birch; Ash; Oak; Beech	11	100- 300	2.5	2.5	2.5	2.5	4	2	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	3.6
95	G	Hawthorn; Elder	6	175	1.5	1.5	1.5	1.5	1.5	1	Semi- Mature	Fair	Fair	20+	C2	Low level screening value	2.1
96	G	Sycamore; Norway Maple; Cherry; Field Maple	11	150- 350	4	4	4	4	5	2.5	Mature	Fair	Fair	20+	C2	Environmental screening from the a1	4.2
97	G	Ash	17	300	3	3	3	3	5	3	Mature	Fair	Fair	20+	C2	Low level screening value	3.6
98	G	Sycamore; Oak; Ash	12	500	4	4	4	4	4	0	Mature	Good	Good	40+	B2	Area of remnant woodland between residential development	6.0
99	G	Hawthorn; Ash; Cherry	6	75- 200	2	2	2	2	0.5	1	Mature	Fair	Fair	20+	C2	Some low-level screening value	2.4
100	G	Ash	16	350	5	5	5	5	5	4	Mature	Fair	Fair	20+	C2	Part of landscape integration planting of highway verge	4.2
101	G	Norway Maple; Lime	19	250	3	3	3	3	4	3	Mature	Fair	Fair	20+	C2	Low level screening value	3.0



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	s	w	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
102	G	Whitebeam	7	150- 300	4	4	4	4	2.5	2.5	Mature	Fair	Fair	20+	C2	Area of amenity planting	3.6
103	G	Whitebeam	8	300	3	3	3	3	3	2	Mature	Fair	Fair	20+	C2	Public amenity planting	3.6
104	G	Hawthorn	3	175	2	2	2	2	2.5	0.5	Mature	Fair	Fair	20+	C2	Some low-level screening value	2.1
105	G	Birch; Ash; Hawthorn	10	75- 200	3	3	3	3	1.5	2	Semi- Mature	Fair	Fair	20+	C2	Low level screening value	2.4
106	G	Hawthorn	5	125	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Screening vale	1.5
107	G	Ash	13	250	3	3	3	3	5	2	Mature	Fair	Fair	20+	C2	Low level screening value	3.0
108	G	Scots Pine	9	250	3.5	3.5	3.5	3.5	1.5	1	Semi- Mature	Fair	Fair	20+	C2	Conifer plantation	3.0
108	G	Scots Pine	9	250	3.5	3.5	3.5	3.5	1.5	1	Semi- Mature	Fair	Fair	20+	C2	Conifer plantation	3.0
108	G	Scots Pine	9	250	3.5	3.5	3.5	3.5	1.5	1	Semi- Mature	Fair	Fair	20+	C2	Conifer plantation	3.0
109	G	Oak	7	250	4	4	4	4	2.5	1.5	Semi- Mature	Fair	Fair	20+	C2	Self-trees around a Stream	3.0
109	G	Oak	7	250	4	4	4	4	2.5	1.5	Semi- Mature	Fair	Fair	20+	C2	Self-trees around a Stream	3.0
110	G	Oak; Ash; Birch	9	250	3	3	3	3	2	1.5	Semi- Mature	Fair	Fair	20+	C2	Minimal screening value	3.0
110	G	Oak; Ash; Birch	9	250	3	3	3	3	2	1.5	Semi- Mature	Fair	Fair	20+	C2	Minimal screening value	3.0
111	G	Oak; Ash; Beech; Hawthorn; Birch; Alder	5	100	1.5	1.5	1.5	1.5	1	0.5	Young	Fair	Fair	20+	C2	Young unmanaged plantation; Many dead trees amongst mix	1.2



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	s	w	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
111	G	Oak; Ash; Beech; Hawthorn; Birch; Alder	5	100	1.5	1.5	1.5	1.5	1	0.5	Young	Fair	Fair	20+	C2	Young unmanaged plantation; Many dead trees amongst mix	1.2
113	G	Hawthorn; Blackthorn; Elder	4	150	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby highways planting; Minimal screening value	1.8
113	G	Hawthorn; Blackthorn; Elder	4	150	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby highways planting; Minimal screening value	1.8
114	G	Hawthorn	5.5	125	2	2	2	2	1	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	1.5
115	G	Scots Pine; Willow	9	150	2	2	2	2	2	1.5	Semi- Mature	Fair	Fair	20+	C2	Limited access prevented full inspection	1.8
116	G	Ash; Sycamore; Lime	10	250	4	4	4	4	0	0	Semi- Mature	Fair	Fair	40+	C2	Landscape integration planting	3.0
117	G	Scots Pine; Hawthorn; Cherry; Alder	4	175	2	2	2	2	0	0	Semi- Mature	Good	Good	10+	C2	Scrubby unmanaged trees	2.1
118	G	Ash; Sycamore; Alder; Hawthorn	12	275	3	3	3	3	0	0	Semi- Mature	Fair	Fair	20+	C2	Emerging woodland group	3.3
119	G	Sycamore; Ash; Beech; Norway Maple; Oak	10	300	4	4	4	4	4	0	Semi- Mature	Good	Good	40+	C2	Emerging woodland, would benefit from thinning	3.6
119	G	Sycamore; Ash; Beech; Norway Maple; Oak	10	300	4	4	4	4	4	0	Semi- Mature	Good	Good	40+	C2	Emerging woodland, would benefit from thinning	3.6
120	G	Mixed	12	200	4	4	4	4	0	0	Mature	Good	Good	40+	C2	Mature area of trees with scrubby understory, some evidence of management;	2.4



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	s	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
121	G	Birch; Ash; Willow	10	225	2	2	2	2	4	1.5	Semi- Mature	Fair	Fair	20+	C2	Low level screening value	2.7
122	G	Willow; Ash	11	300	3	3	3	3	2.5	1.5	Semi- Mature	Fair	Fair	20+	C2	Limited access prevented full inspection	3.6
123	G	Willow; Poplar	16	100- 350	4	4	4	4	4	2	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	4.2
124	G	Alder; Ash; Scots Pine; Willow	5	125	1.5	1.5	1.5	1.5	1	0.5	Semi- Mature	Fair	Fair	20+	C2	Low level screening value	1.5
125	G	Alder; Ash; Scots Pine; Willow	5	125	1.5	1.5	1.5	1.5	1	0.5	Semi- Mature	Fair	Fair	20+	C3	Low level screening value	1.5
126	G	Ash	9	225	4	4	4	4	5	3	Semi- Mature	Fair	Fair	10+	C2	Historic limb failure	2.7
130	G	Cherry; Birch; Ash; Sycamore	8	225	2.5	2.5	2.5	2.5	2	1.5	Semi- Mature	Fair	Fair	20+	C2	Limited access prevented full inspection	2.7
131	G	Poplar	12	200	4	4	4	4	4	2.5	Mature	Fair	Fair	20+	C2	Limited access prevented full inspection	2.4
132	G	Scots Pine	8	200	2.5	2.5	2.5	2.5	2.5	1.5	Semi- Mature	Fair	Fair	20+	C2	Older conifer plantation	2.4
133	G	Alder; Ash; Sycamore; Oak; Field Maple; Birch	9	100- 225	2	2	2	2	2.5	2	Semi- Mature	Fair	Fair	20+	C2	Limited access prevented full inspection	2.7
135	G	Birch; Scots Pine; Ash; Oak; Sycamore	6	100- 225	1.5	1.5	1.5	1.5	3	2	Semi- Mature	Fair	Fair	20+	C2	Limited screening value	2.7
136	G	Hawthorn; Birch; Sycamore	5	150	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Low level screening value;	1.8



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
137	G	Hawthorn; Blackthorn; Hazel	5	150	1.5	1.5	1.5	1.5	2	1.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby shrub bank	1.8
137	G	Hawthorn; Blackthorn; Hazel	5	150	1.5	1.5	1.5	1.5	2	1.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby shrub bank	1.8
138	G	Hazel; Field Maple; Hawthorn	4	125	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Low level screening value	1.5
139	G	Scots Pine; Norway Maple; Ash; Oak	7	100- 250	2	2	2	2	4	2.5	Semi- Mature	Fair	Fair	20+	C2	Highways amenity screening	3.0
140	G	Willow; Poplar; Alder	12	200	2	2	2	2	3	2	Semi- Mature	Fair	Fair	20+	C2	Limited access prevented full inspection	2.4
141	G	Ash; Oak; Beech; Scots Pine; Birch; Sycamore	11	300	4	4	4	4	0	0	Semi- Mature	Good	Good	20+	C2	Emerging woodland group, potential for higher retention value if managed correctly	3.6
142	G	Pine, Hazel, Sycamore, Ash, Cherry, Thorn, Oak	11	300	4	4	4	4	4	0	Semi- Mature	Good	Good	40+	C2	Mixed plantation	3.6
143	G	Birch; Hawthorn; Sycamore, Elm, Oak	11	250	3	3	3	3	0	0	Mature	Good	Good	40+	B2	Emerging woodland compartment, has been thinned recently, good structure and age diversity	3.0
144	G	Hawthorn; Ash; Oak; Sycamore	5	175	3	3	3	3	0	0	Semi- Mature	Good	Good	40+	C2	Emerging woodland belt / screen	2.1
145	G	Mixed	10	200	4	4	4	4	0	0	Semi- Mature	Good	Good	40+	C2	Area of highway planting intended as landscape integration, in need of woodland management	2.4
146	G	Beech; Ash; Oak; Birch; Hawthorn	12	250	3	3	3	3	0	0	Semi- Mature	Good	Good	40+	C2	Area planted in racks atop ridge and furrow, would benefit from thinning	3.0



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
147	G	Thorn, Oak, Birch	10	175	1.5	3	3	3	0	0	Mature	Good	Good	40+	B2	-	2.1
148	G	Hawthorn	6	150	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Hedge planting at highway boundary, occasional larger self-set willow also of low retention value	1.8
149	G	Hawthorn	6	125	2	2	2	2	0	0	Mature	Good	Good	40+	C2	Landscape integration planting;	1.5
150	G	Hawthorn	4	125	2	2	2	2	0	0	Mature	Good	Good	20+	C2	Scrubby self-set trees	1.5
151	G	Hawthorn	4	125	2.5	2.5	2.5	2.5	2.5	0	Mature	Good	Good	20+	B2	Self-set scrub encroachment on grassland plot	1.5
152	G	Hawthorn; Privet	5	175	2	2	2	2	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Third party trees; Limited access prevented full inspection	2.1
153	G	Hawthorn	4	175	2.5	2.5	2.5	2.5	1	0.5	Mature	Fair	Fair	10+	C2	Minor stem wounds	2.1
155	G	Hawthorn	4	150	3	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	10+	C2	Insignificant defects	1.8
156	G	Hawthorn	5	175	3.5	3.5	3.5	3.5	0.5	0.5	Mature	Fair	Fair	20+	C2	Snapped branches in the crown	2.1
157	G	Hawthorn	3	125	3	3	3	3	0.5	0.5	Mature	Fair	Fair	20+	C2	Insignificant defects	1.5
158	G	Hawthorn	4	100	2.5	2.5	2.5	2.5	0.5	0.5	Mature	Fair	Fair	20+	C2	Highways amenity planting	1.2
159	G	Hawthorn	4	100	2.5	2.5	2.5	2.5	0.5	0.5	Mature	Fair	Fair	20+	C2	Above	1.2
160	G	Hawthorn	4	100	2.5	2.5	2.5	2.5	0.5	0.5	Mature	Fair	Fair	20+	C2	Above	1.2
161	G	Ash	8	250	5	5	5	5	1	1.5	Semi- Mature	Fair	Fair	20+	C2	Minor stem wounds	3.0
162	G	Hawthorn; Ash; Norway Maple	7	175	3	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	10+	C2	-	2.1



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
163	G	Ash; Hawthorn	5	125	3	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	10+	C2	Minor stem wounds	1.5
164	G	Ash	8	175	4	4	4	4	1	1.5	Semi- Mature	Fair	Fair	20+	C2	Self-set scrubby trees	2.1
165	G	Hawthorn	4	125	3	3	3	3	0.5	0.5	Mature	Fair	Fair	10+	C2	Trees have previously been pruned	1.5
166	G	Ash; Hawthorn	4	175	3	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	10+	C2	-	2.1
167	G	Ash; Hawthorn	4	150	4	4	4	4	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	1.8
167	G	Ash; Hawthorn	4	150	4	4	4	4	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	1.8
168	G	Hawthorn; Elder	5	100	4	4	4	4	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby unmanaged trees	1.2
169	G	Hawthorn	11	225	5	5	5	5	0.5	0.5	Mature	Fair	Fair	10+	C2	Unmanaged hedge	2.7
170	G	Hawthorn	4	175	2.5	2.5	2.5	2.5	0.5	0.5	Mature	Fair	Fair	20+	C2	Minor stem wounds	2.1
175	G	Ash	11	250	3	3	3	3	1.5	2	Mature	Fair	Fair	20+	C2	Crossing/rubbing branches in the crown	3.0
176	G	Mixed	11	225	3.5	3.5	3.5	3.5	1.5	1	Mature	Fair	Fair	10+	C2	Minor stem wounds	2.7
177	G	Cherry	7	250	3.5	3.5	3.5	3.5	3.5	1.5	Mature	Fair	Fair	20+	C2	Environmental screening	3.0
178	G	Hawthorn	3	175	2.5	2.5	2.5	2.5	0.5	0.5	Mature	Fair	Fair	10+	C2	Scrubby self-set trees	2.1
181	G	Mixed	5	175	2.5	2.5	2.5	2.5	0.5	0.5	Semi- Mature	Fair	Fair	10+	C2	Scrubby self-set trees	2.1
182	G	Hawthorn	3	100	2.5	2.5	2.5	2.5	2	0.5	Mature	Fair	Fair	10+	C2	Scrubby self-set trees	1.2



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	s	w	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
183	G	Alder	-	125	4	0	4	4	1.5	1	Semi- Mature	Fair	Fair	20+	C2	-	1.5
184	G	Poplar	14	250	3	3	3	3	5	4	Semi- Mature	Fair	Fair	20+	C2	Trees with minimal landscape value	3.0
185	G	Willow	19	200- 500	5	5	5	5	9	7	Mature	Fair	Fair	20+	C2	-	6.0
186	G	Oak; Alder; Field Maple; Birch	6	75- 200	4	4	4	4	3	1.5	Semi- Mature	Fair	Fair	20+	C2	Linear group due to the powerlines	2.4
188	G	Hawthorn	4	100	1.5	1.5	1.5	1.5	0.5	0.5	Mature	Fair	Fair	20+	C2	Managed hedge	1.2
189	G	Ash	10	275	4	0	4	4	2	4	Semi- Mature	Fair	Fair	20+	C2	Linear group of Ash trees	3.3
190	G	Alder	9	275	4	0	4	4	1	2	Mature	Fair	Fair	20+	C2	Minor deadwood in the crown	3.3
191	G	Willow	5	200	4	1	4	4	0.5	0.5	Mature	Fair	Fair	20+	C2	Layering trees	2.4
192	G	Poplar	17	200- 500	8	8	8	8	2.5	2	Mature	Fair	Fair	20+	C2	Minor deadwood in the crown	6.0
193	G	Poplar	17	175- 350	8	8	8	8	2.5	1.5	Mature	Fair	Fair	20+	C2	Leaning stems; Subsiding major limbs	4.2
194	G	Ash; Oak	9	200- 500	6	6	6	6	4	2	Mature	Fair	Fair	20+	C2	Major stem wounds	6.0
195	G	Ash; Cherry; Sycamore; Hawthorn	9	100- 350	5.5	0.5	5.5	5.5	4	1.5	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	4.2
196	G	Alder	9	200	3	3	3	3	0.5	1	Semi- Mature	Fair	Fair	20+	C2	Suckering trees	2.4
197	G	Ash	11	325	5	5	5	5	4	2.5	Semi- Mature	Fair	Fair	20+	C2	Leaning stems	3.9



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	s	w	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
198	G	Oak	11	300	6	1.5	6	6	2	1	Mature	Fair	Fair	20+	C2	Dense ivy in the crown	3.6
199	G	Field Maple	10	175	2.5	2.5	2.5	2.5	3.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Linear group of F Maple	2.1
200	G	Alder	10	250	4	4	4	4	2.5	3	Mature	Fair	Fair	20+	C2	Dense ivy to stem; Topped trees	3.0
201	G	Hawthorn	6	150	2	2	2	2	0.5	0.5	Mature	Fair	Fair	20+	C2	Scrubby self-set trees	1.8
202	G	Alder	4	100	4	4	4	4	0.5	0.5	Young	Fair	Fair	20+	C2	Suckering cut back Alder	1.2
202	G	Alder	4	100	4	4	4	4	0.5	0.5	Young	Fair	Fair	20+	C2	Suckering cut back Alder	1.2
203	G	Willow	15	325	6	6	6	6	5	1.5	Mature	Fair	Fair	20+	C2	Hanging broken branches in the crown	3.9
204	G	Corsican Pine	7	225	2	2	2	2	1.5	2.5	Semi- Mature	Fair	Fair	10+	C2	Dense ivy to stem	2.7
205	G	Hawthorn	4	100	2.5	2.5	2.5	2.5	0.5	1	Semi- Mature	Fair	Fair	10+	C2	Dense ivy to stems	1.2
206	G	Ash	11	225	3	3	3	3	4	2	Semi- Mature	Fair	Fair	20+	C2	Dense ivy to stems	2.7
207	G	Alder; Ash; Field Maple	11	175	3	3	3	3	4	2	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	2.1
208	G	Field Maple	5	150	2	2	2	2	0.5	0.5	Young	Fair	Fair	20+	C2	Highways amenity planting	1.8
209	G	Sycamore; Oak; Ash	13	350	6	6	6	6	5	2.5	Mature	Fair	Fair	20+	C2	Deadwood in the crown	4.2
211	G	Alder; Birch	6	125	3	3	3	3	2.5	1	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	1.5
212	G	Scots Pine; Sycamore	9	250	3	3	3	3	3	2	Semi- Mature	Fair	Fair	20+	C2	Linear group; Limited safe access prevented full inspection	3.0



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
213	G	Beech; Sycamore; Lime	16	400- 500	6	6	6	6	7	4	Mature	Good	Fair	20+	B2	Limited access prevented full inspection of the trunk	6.0
215	G	Cherry; Ash; Sycamore	9	250	7	7	7	7	4	2	Semi- Mature	Fair	Fair	20+	C2	Dense ivy to stems	3.0
216	G	Oak; Ash; Sycamore; Hawthorn	9	75- 250	5	5	5	5	3.5	1.5	Semi- Mature	Fair	Fair	20+	C2	Some low-level screening value	3.0
217	G	Ash; Sycamore	9	75- 150	2.5	2.5	2.5	2.5	5	1	Semi- Mature	Fair	Fair	20+	C2	Linear group of predominantly Ash with self-set sycamore	1.8
218	G	Sycamore	3	100	2	2	2	2	0.5	1	Semi- Mature	Fair	Fair	20+	C2	Hazel; 100; Self-set scrubby trees	1.2
219	G	Hawthorn	4	175	2.5	2.5	2.5	2.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	2.1
220	G	Hawthorn	6	150	3	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Flailed on the field side	1.8
221	G	Hawthorn	6	150	3	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Above	1.8
222	G	Hawthorn	6	150	3	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Above	1.8
223	G	Hawthorn	4	150	2	2	2	2	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Minor stem wounds	1.8
224	G	Ash; Beech; Sycamore	10	75- 175	2.5	2.5	2.5	2.5	2	1	Semi- Mature	Fair	Fair	20+	C2	Some low-level screening value	2.1
225	G	Lawson Cypress	9	250	2.5	2.5	2.5	2.5	4	2	Mature	Fair	Fair	10+	C2	Third party tree	3.0
226	G	Ash	17	300	6	6	6	6	6	3	Mature	Fair	Fair	20+	C2	Minor stem wounds	3.6



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	W	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
227	G	Ash; Oak	8	75- 175	2	2	2	2	5	1.5	Semi- Mature	Fair	Fair	10+	C2	Scrubby unmanaged trees	2.1
228	G	Hawthorn	11	175	5	5	5	5	2	2.5	Semi- Mature	Fair	Fair	20+	C2	Third party trees	2.1
229	G	Hawthorn	7	175	2	2	2	2	2	1	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	2.1
230	G	Norway Maple	6	250	4	4	4	4	0.5	1	Semi- Mature	Fair	Fair	20+	C2	Minor stem wounds	3.0
231	G	Ash	7	125	2.5	2.5	2.5	2.5	0.5	1	Semi- Mature	Fair	Fair	20+	C2	Multistemmed trees	1.5
232	G	Ash	9	200	4	4	4	4	1.5	2	Mature	Fair	Fair	20+	C2	Limited safe access prevented full inspection	2.4
233	G	Hawthorn	3	125	3	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Limited access prevented full inspection	1.5
234	G	Ash	12	200	6	6	6	6	7	4	Mature	Fair	Fair	20+	C2	Multistemmed trees	2.4
234	G	Ash	12	200	6	6	6	6	7	4	Mature	Fair	Fair	20+	C2	Multistemmed trees	2.4
235	G	Birch; Ash	9	100- 250	6	6	6	6	6	2.5	Semi- Mature	Fair	Fair	20+	C2	Leaning stems	3.0
235	G	Birch; Ash	9	100- 250	6	6	6	6	6	2.5	Semi- Mature	Fair	Fair	20+	C2	Leaning stems	3.0
236	G	Hawthorn	4	150	3	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	1.8
237	G	Hawthorn	4	125	2	2	2	2	0.5	1	Mature	Fair	Fair	20+	C2	Scrubby self set trees	1.5
238	G	Ash	9	175	4	4	4	4	4	1	Semi- Mature	Fair	Fair	20+	C2	Linear group of Multistemmed ash trees	2.1



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
241	G	Hawthorn	6	100	2	2	2	2	3	0.5	Semi- Mature	Fair	Fair	20+	C2	Hawthorn; Ash; Hazel	1.2
242	G	Hawthorn; Ash; Birch	11	250	5	5	5	5	5	1.5	Semi- Mature	Fair	Fair	20+	C2	Linear group of environmental screening	3.0
243	G	Whitebeam; Birch	7	450	4	4	4	4	2.5	3	Semi- Mature	Fair	Fair	20+	C2	Minor stem wounds	5.4
245	G	Hawthorn	5	175	3	3	3	3	0.5	0.5	Mature	Fair	Fair	20+	C2	Scrubby self-set trees	2.1
247	G	Willow	7	200	5	5	5	5	0.5	1	Mature	Fair	Fair	20+	C2	Scrubby self-set trees	2.4
248	G	Alder Hawthorn	5	200	4	4	4	4	0.5	0.5	Mature	Fair	Fair	20+	C2	Scrubby self-set trees	2.4
249	G	Hawthorn	5	150	4	4	4	4	0.5	0.5	Mature	Fair	Fair	20+	C2	Some low-level screening value	1.8
255	G	Hawthorn	4	175	2	2	2	2	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Self-set scrubby trees	2.1
256	G	Hawthorn	3.5	100	2	2	2	2	0.5	0.5	Semi- Mature	Fair	Fair	10+	C2	Some low-level screening value	1.2
258	G	Lime; Whitebeam	8	250	3	3	3	3	3	2.5	Semi- Mature	Fair	Fair	10+	C2	Minor stem wounds	3.0
259	G	Hawthorn	5	150	2	2	2	2	0.5	0.5	Mature	Fair	Fair	20+	C2	Unmanaged hedge	1.8
260	G	Ash	14	250	4	4	4	4	1.5	2	Semi- Mature	Fair	Fair	20+	C2	Linear group of Multistemmed ash	3.0
261	G	Sycamore	14	250	3	3	3	3	2	1	Mature	Fair	Fair	20+	C2	Linear group Multistemmed trees	3.0
262	G	Ash; Hawthorn; Elder; Oak	6	175	5	5	5	5	0.5	1	Semi- Mature	Fair	Fair	20+	C2	Highways amenity planting; Merged with hedge behind	2.1
263	G	Ash	12	225	4	4	4	4	3	2	Semi- Mature	Fair	Fair	20+	C2	Self-set trees; Insignificant defects	2.7



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
266	G	Ash; Oak; Hawthorn; Elm	7	175	2.5	2.5	2.5	2.5	2	1.5	Semi- Mature	Fair	Fair	20+	C2	Low level screening value	2.1
267	G	Sycamore; Elder; Hawthorn	6	75- 150	2.5	2.5	2.5	2.5	0.5	1	Semi- Mature	Fair	Fair	20+	C2	Self-set scrubby trees	1.8
268	G	Hawthorn	5	100	2	2	2	2	1.5	1.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	1.2
269	G	Willow	8	125	2	2	2	2	2	2	Semi- Mature	Fair	Fair	20+	C2	Limited access prevented full inspection	1.5
270	G	Hawthorn	3	100	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	10+	C2	Scrubby self-set trees	1.2
271	G	Hawthorn	3	100	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	10+	C2	Scrubby self-set trees	1.2
274	G	Hawthorn	4	200	3	3	3	3	2.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Low level screening value	2.4
275	G	Hawthorn	4	200	3	3	3	3	2.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Low level screening value	2.4
278	G	Hawthorn	5	100	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	10+	C2	Scrubby self-set trees	1.2
280	G	Ash; Willow; Hawthorn	5	75- 175	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	2.1
281	G	Ash; Willow; Hawthorn	6	75- 175	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees	2.1
282	G	Hawthorn; Willow; Ash	4	100	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	10+	C2	Some low-level screening value	1.2
285	G	Field Maple; Ash; Cherry; Birch	6	175	2	2	2	2	2	1.5	Semi- Mature	Fair	Fair	10+	C1	Limited access prevented full inspection	2.1



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	s	w	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
286	G	Hawthorn; Cherry; Birch; Sycamore	6	175	2	2	2	2	1.5	1	Semi- Mature	Fair	Fair	10+	C2	Limited access prevented full inspection	2.1
286	G	Hawthorn; Cherry; Birch; Sycamore	6	175	2	2	2	2	1.5	1	Semi- Mature	Fair	Fair	10+	C2	Limited access prevented full inspection	2.1
287	G	Hawthorn	3	125	2	2	2	2	0.5	0.5	Mature	Fair	Fair	20+	C2	Scrubby self-set trees	1.5
288	G	Hawthorn	2	125	2	2	2	2	0.5	0.5	Semi- Mature	Fair	Fair	10+	C2	Scrubby self-set trees	1.5
289	G	Elm; Hawthorn	3	150	1.5	1.5	1.5	1.5	1	1.5	Semi- Mature	Fair	Fair	10+	C2	Scrubby self-set trees	1.8
290	G	Lawson Cypress	7	200	2.5	2.5	2.5	2.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Limited screening value	2.4
291	G	Lawson Cypress	7	150	2	2	2	2	1	0.5	Semi- Mature	Fair	Fair	20+	C2	Limited screening value	1.8
294	G	Sycamore; Hawthorn; Ash	6	175	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Scrubby self-set trees; Minimal screening value	2.1
295	G	Lawson Cypress	6	200	2	2	2	2	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Limited screening value	2.4
112	Н	Hawthorn	2	100	1	1	1	1	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Unmanaged hedge; Re draw	1.2
154	Н	Hawthorn	3	100	1.5	1.5	1.5	1.5	0.5	0.5	Mature	Fair	Fair	10+	C2	Unmanaged hedge	1.2
171	Н	Hawthorn	6	125	2.5	2.5	2.5	0.5	0.5	0.5	Mature	Fair	Fair	20+	C2	Unmanaged hedge	1.5
172	Н	Hawthorn	5	100	3	3	3	3	0.5	0.5	Mature	Fair	Fair	20+	C2	Unmanaged hedge	1.2
173	Н	Hawthorn	5	100	3	3	3	3	0.5	0.5	Mature	Fair	Fair	20+	C2	Unmanaged hedge	1.2
174	Н	Hawthorn	5	100	3	3	3	3	0.5	0.5	Mature	Fair	Fair	20+	C2	Unmanaged hedge	1.2



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
179	Н	Hawthorn	3.5	100	2	2	2	2	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Unmanaged hedge	1.2
180	Н	Hawthorn	4.5	150	2.5	2.5	2.5	2.5	2.5	1.5	Mature	Fair	Fair	10+	C2	Trees have previously been pruned	1.8
187	Н	Hawthorn	4	100	1.5	1.5	1.5	1.5	0.5	0.5	Mature	Fair	Fair	20+	C2	Managed hedge	1.2
210	Н	Beech	2	125	0.5	0	0.5	0.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Managed hedge	1.5
214	Н	Hawthorn; Cherry; Ash; Sycamore	6	75- 175	2	2	2	2	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Environmental screening	2.1
239	Н	Hawthorn	3	100	2	2	2	2	0.5	0.5	Semi- Mature	Fair	Fair	10+	C2	Unmanaged hedge	1.2
240	Н	Hawthorn	4	100	2.5	2.5	2.5	2.5	3.5	1.5	Semi- Mature	Fair	Fair	20+	C2	Managed hedge	1.2
244	Н	Elder; Hawthorn	3	100	1.5	1.5	1.5	1.5	0.5	0.5	Mature	Fair	Fair	20+	C2	Managed hedge	1.2
244	Н	Elder; Hawthorn	3	100	1.5	1.5	1.5	1.5	0.5	0.5	Mature	Fair	Fair	20+	C2	Managed hedge	1.2
246	Н	Hawthorn	2	75	0.5	0.5	0.5	0.5	0.5	0.5	Semi- Mature	Fair	Fair	10+	C2	Managed hedge	0.9
250	Н	Hawthorn	3	100	0.5	0.5	0.5	0.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Managed hedge	1.2
252	Н	Hawthorn	5	125	1	1	1	1	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Unmanaged hedge	1.5
253	Н	Hawthorn	3	75	1	1	1	1	0.5	0.5	Mature	Fair	Fair	20+	C2	Managed hedge	0.9
254	Н	Privet	4	100	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Third party hedge	1.2



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
254	Н	Privet	4	100	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Third party hedge	1.2
254	Н	Privet	4	100	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Third party hedge	1.2
257	Н	Hawthorn	2	75	1	1	1	1	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Self-set scrubby trees	0.9
264	Н	Hawthorn	2	100	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Unmanaged hedge	1.2
265	Н	Hawthorn	2	100	1.5	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Unmanaged hedge	1.2
272	Н	Leyland cypress	5	175	1.5	1.5	1.5	1.5	0.5	0.5	Mature	Fair	Fair	20+	C2	Managed hedge	2.1
272	Н	Leyland cypress	5	175	1.5	1.5	1.5	1.5	0.5	0.5	Mature	Fair	Fair	20+	C2	Managed hedge	2.1
273	Н	Hawthorn	3	75	0.5	0.5	0.5	0.5	0.5	0.5	Semi- Mature	Fair	Fair	10+	C2	Managed hedge	0.9
276	Н	Hawthorn	2.5	75	0.5	0.5	0.5	0.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Managed hedge	0.9
277	Н	Hawthorn	2.5	75	0.5	0.5	0.5	0.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Managed hedge	0.9
279	Н	Hawthorn	2.5	75	0.5	0.5	0.5	0.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Unmanaged hedge	0.9
283	Н	Leyland cypress	12	175	4	4	4	4	0.5	0.5	Mature	Good	Good	20+	C2	Line of screen planting	2.1
284	Н	Lawson Cypress	8	150	2	2	2	2	0.5	0.5	Mature	Fair	Fair	20+	C2	Limited screening value	1.8
292	Н	Hawthorn	2	100	2	2	2	2	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Managed hedge	1.2



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	W	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
293	Н	Hawthorn	2	75	0.5	0.5	0.5	0.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Managed hedge	0.9
1	Т	Lombardy Poplar	16	250	1.5	1.5	1.5	1.5	3	4	Mature	Fair	Fair	10+	C1	Leaning stem	3.0
2	Т	Lombardy Poplar	18	550	2.5	2.5	2.5	2.5	3	2	Mature	Fair	Fair	10+	C1	Minor deadwood in the crown	6.6
3	Т	Lombardy Poplar	20	600	3	3	3	3	1	2	Mature	Fair	Fair	10+	C1	Minor deadwood in the crown	7.2
4	Т	Hawthorn	4	150	3	3	3	3	0.5	0.5	Mature	Fair	Fair	10+	C1	Scrubby self-set tree	1.8
5	Т	Hawthorn	4	75	3	3	3	3	0.5	0.5	Mature	Fair	Fair	10+	C1	Scrubby self-set tree	0.9
6	Т	Hawthorn	4	75	3	3	3	3	0.5	0.5	Mature	Fair	Fair	10+	C1	Scrubby self-set tree	0.9
7	Т	Willow	17	670	8	5	6	3	1.5	2.5	Mature	Fair	Fair	10+	C1	Multi stemmed tree	8
8	Т	Willow	17	425	4	2.5	4	5	2	2.5	Mature	Fair	Fair	10+	C1	Minor stem wounds	5.1
9	Т	Willow	17	250	4	4	3	4	2.5	0.5	Mature	Poor	Poor	<10	C1	Declining tree; Major deadwood in the crown	3.0
10	Т	Willow	13	500	5	5	4	4	2	0.5	Mature	Fair	Fair	10+	C1	Declining tree; Major deadwood in the crown	6.0
11	Т	Hawthorn	5	200	2.5	3	3	2.5	0.5	0.5	Mature	Fair	Fair	10+	C1	Crossing/rubbing branches in the crown	2.4
12	Т	Hawthorn	5	200	2.5	3	2.5	3	0.5	0.5	Mature	Fair	Fair	20+	C1	Crossing/rubbing branches in the crown	2.4
13	Т	Ash	8	200	3	3	3	3.5	1.5	2	Semi- Mature	Fair	Fair	10+	C1	Leaning stem	2.4
14	Т	Hawthorn	7	225	5	5	5	5	0.5	1	Mature	Fair	Fair	10+	C1	Minor stem wounds	2.7
15	Т	Hawthorn	3	125	3	3	3	3	0.5	0.5	Mature	Fair	Fair	20+	C1	Scrubby self-set tree	1.5



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	s	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
16	Т	Hawthorn	4	100	3	3	3	3	0.5	0.5	Mature	Fair	Fair	20+	C1	Scrubby self-set tree	1.2
17	Т	Norway Maple	9	175	4	4	3.5	4	2	1.5	Mature	Fair	Fair	20+	C1	Co-dominant stem from 0.5m	2.1
18	Т	Ash	12	###	7	5	6	7	4	1.5	Mature	Good	Good	20+	A3	Veteran Tree; Major stem cavity; Tree has previously been pruned	15
19	Т	Ash	7	450	2	3	8	5	3	1.5	Mature	Fair	Poor	10+	C1	Major stem cavity at the base; Leaning stem; Tree has previously been pruned	5.4
20	Т	Ash	9	350	4	4.5	5	4	4	1.5	Semi- Mature	Fair	Fair	10+	C1	Tree has previously been pruned	4.2
21	Т	Sycamore	10	350	3	3	3	3	1.5	1.5	Mature	Fair	Fair	20+	C1	Minor stem wounds	4.2
22	Т	Willow	11	###	6	6	7	4	4	4	Mature	Fair	Fair	10+	C1	Major section of exposed heartwood; Major historic limb failure; Leaning stem; Dysfunctional bark to stem	13
23	Т	Ash	10	825	6	4	6.5	5	5	4	Mature	Good	Fair	20+	C1	Major deadwood in the crown; Cavities to the stem	9.9
24	Т	Ash	7	400	5	2	4	5	1.5	1.5	Mature	Fair	Fair	10+	C1	Previously topped at 1.5m	4.8
25	Т	Apple	5	175	2.5	2.5	2.5	2.5	2.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Minor deadwood in the crown	2.1
26	Т	Hawthorn	5	225	3	3	3	1.5	0.5	0.5	Mature	Fair	Fair	20+	C1	Leaning stem	2.7
27	Т	Hawthorn	4	200	3	3	3	3	0.5	0.5	Mature	Fair	Fair	20+	C1	Insignificant defects	2.4
28	Т	Willow	7	250	3	3	3	3	1.5	2	Semi- Mature	Fair	Fair	10+	C1	Subsiding major limb	3



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	НОП	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
29	Т	Hawthorn	3	175	3.5	3.5	3	1.5	0.5	0.5	Mature	Fair	Fair	20+	C1	Broken hanging branches	2.1
30	Т	Hawthorn	3	175	3.5	3.5	3	1.5	0.5	0.5	Mature	Fair	Fair	20+	C1	Broken hanging branches	2.1
31	Т	Hawthorn	4	100	2.5	2.5	2.5	2.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Minor stem wounds	1.2
32	Т	Hawthorn	4	100	2.5	2.5	2.5	2.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Minor stem wounds	1.2
33	Т	Willow	15	350	5	5	5	5	4	3	Mature	Fair	Fair	10+	C1	Major deadwood in the crown	4.2
34	Т	Willow	14	250	4	5	6	5	2	2.5	Mature	Fair	Fair	20+	C1	Cavities to the stem	3
35	Т	Hawthorn	3	175	2.5	2.5	2.5	2.5	0.5	0.5	Mature	Fair	Fair	10+	C1	Scrubby self-set tree	2.1
36	T	Willow	17	350	5	5	5	5	3	1.5	Mature	Fair	Fair	10+	C1	Minor deadwood in the crown	4.2
37	Т	Hawthorn	4	150	2	2	2	2	0.5	0.5	Mature	Fair	Fair	10+	C1	Scrubby self-set trees	1.8
38	Т	Hawthorn	4	150	2	2	2	2	0.5	0.5	Mature	Fair	Fair	10+	C1	Scrubby self-set trees	1.8
39	Т	Hawthorn	4	150	2	2	2	2	0.5	0.5	Mature	Fair	Fair	10+	C1	Scrubby self-set trees	1.8
40	Т	Hawthorn	4	150	2	2	2	2	0.5	0.5	Mature	Fair	Fair	10+	C1	Scrubby self-set trees	1.8
41	Т	Oak	8	850	6	6	5	5	3	3.5	Mature	Good	Good	20+	B1	Major deadwood in the crown; A tree with potential ecological interest	10
42	Т	Lombardy Poplar	19	375	4	4	5	4	3	2	Semi- Mature	Fair	Fair	20+	C1	Multi-stemmed tree	4.5
43	Т	Oak	17	680	7	7	6	7	4	2.5	Mature	Good	Fair	20+	C1	Tree has previously been pruned	8.2
44	Т	Oak	16	640	7	7	7	7	4	2	Mature	Fair	Fair	20+	C1	Co-dominant stem from 0.5m	7.7



						•									İ		
TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL CONDITION	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
45	Т	Willow	7	175	4	4	4	4	1	1.5	Semi- Mature	Fair	Fair	20+	C1		2.1
46	Т	Willow	4	200	4	3	5	2	0.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Fallen layering tree	2.4
47	Т	Poplar	7	400	6	4	5	4	2	1.5	Semi- Mature	Poor	Poor	<10	C1	Fallen tree; Fire damage to trunk	4.8
48	Т	Oak	13	800	7	7	7	7	3.5	2	Mature	Good	Good	20+	B1		9.6
49	Т	Alder	7	325	5	5	5	5	1.5	0.5	Semi- Mature	Fair	Fair	10+	C1	Dense ivy to stem	3.9
50	Т	Hawthorn	4	125	3	3	3	3	1	0.5	Mature	Fair	Fair	10+	C1	Scrubby self-set tree	1.5
51	Т	Ash	14	700	7	8	6	7	3.5	2.5	Mature	Fair	Fair	10+	C1	Dense ivy to stem and crown	8.4
52	Т	Willow	12	425	6	6	6	6	5	1.5	Mature	Fair	Fair	10+	C1	Stem leaning towards gas works	5.1
53	Т	Corsican Pine	6.5	200	2.5	0.5	0.5	0.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Insignificant defects	2.4
54	Т	Corsican Pine	6.5	200	2.5	0.5	0.5	0.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Insignificant defects	2.4
55	Т	Corsican Pine	6.5	200	2.5	0.5	0.5	0.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Insignificant defects	2.4
56	Т	Oak	11	625	7	7	7	7	5	2.5	Mature	Fair	Fair	20+	C1	Dense ivy to the stem	7.5
57	Т	Willow	16	625	7	7	7	7	4	3	Mature	Fair	Fair	20+	C1	Dense ivy to stem; Deadwood in the crown	7.5
58	Т	Weeping Willow	9	600	7	5	5	5	3	2.5	Mature	Fair	Fair	20+	C1	Tree has previously been pruned	7.2
59	Т	Whitebeam	5	425	7	3	3	3	3	2	Mature	Fair	Fair	20+	C1	Minor stem wounds	5.1



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
60	Т	Whitebeam	8	600	7	5	5	5	1.5	2	Mature	Good	Good	20+	C1	Insignificant defects	7.2
61	Т	Cherry	4	325	7	2.5	2.5	2.5	3.5	1.5	Mature	Poor	Fair	20+	C1	Minor stem wounds; Leaning stem	3.9
62	Т	Sycamore	9	325	7	6	6	4	4	0.5	Mature	Fair	Fair	20+	C1	Major deadwood in the crown	3.9
63	Т	Hawthorn	4	175	7	2	2	2	0.5	0.5	Mature	Fair	Fair	20+	C1	Leaning stem	2.1
64	Т	Hawthorn	3	100	7	1.5	1.5	1.5	0.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Minor stem wounds	1.2
65	Т	Hawthorn	3	250	7	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Minor stem wounds	3
66	Т	Ash	7	125	7	3	4	4	5	2	Semi- Mature	Fair	Fair	10+	C1	Broken hanging branches in the crown	1.5
67	Т	Hawthorn	3.5	175	7	2	2	2	0.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Dense canopy	2.1
68	Т	Ash	6	200	7	4	4	4	5	2	Semi- Mature	Fair	Fair	20+	C1	Co-dominant stem from the base	2.4
69	Т	Hawthorn	3	175	7	3	3	3	0.5	0.5	Mature	Fair	Fair	20+	C1	Scrubby self-set tree	2.1
70	Т	Hawthorn	3	175	7	3	3	3	0.5	0.5	Mature	Fair	Fair	20+	C1	Scrubby self-set trees; Limited access prevented full inspection	2.1
71	Т	Ash	12	350	7	4	4	4	4	2	Semi- Mature	Fair	Fair	20+	C1	Hanging broken branches in the crown; Limited access	4.2
72	Т	Ash	6	200	7	5	5	5	4	2	Semi- Mature	Fair	Fair	20+	C1	Limited access prevented full inspection	2.4
73	Т	Hawthorn	4	125	7	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Scrubby self-set tree; Limited access	1.5



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
74	Т	Hawthorn	4	125	7	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Scrubby self-set tree; Limited access	1.5
75	Т	Hawthorn	4	125	7	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Scrubby self-set tree; Limited access	1.5
76	Т	Ash	4	125	7	3	3	3	1	2	Semi- Mature	Fair	Fair	10+	C1	Limited access prevented full inspection	1.5
77	Т	Ash	9	325	7	3	3	3	3	2	Semi- Mature	Fair	Fair	20+	C1	Minor stem wounds	3.9
78	Т	Sycamore	9	250	7	4	4	4	0.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Minor stem wounds	3
79	Т	Ash	17	700	7	5	8	8	7	5	Mature	Good	Fair	20+	B1	Co-dominant stem at 4m	8.4
80	Т	Oak	14	400	7	7	7	7	4	2	Mature	Good	Fair	20+	C1	Multistemmed tree	4.8
81	Т	Sycamore	19	700	7	5	7	8	2	2.5	Mature	Fair	Fair	20+	C1	Co-dominant stem at 0.5m	8.4
82	Т	Oak	18	350	7	7	7	7	7	5	Semi- Mature	Fair	Fair	20+	C1	Multistemmed from the base; Minor deadwood in the crown	4.2
83	Т	Hawthorn	4	125	7	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Scrubby self-set tree	1.5
84	Т	Scots Pine	6	250	7	3	3	3	2	1.5	Semi- Mature	Fair	Fair	20+	C1	Insignificant defects	3
85	Т	Oak	6	150	7	2	2	2	1	1.5	Young	Fair	Fair	20+	C1	Young tree with potential future	1.8
86	Т	Oak	14	400	7	7	7	7	6	5	Semi- Mature	Good	Good	20+	C1	A tree with potential future	4.8
87	Т	Ash	8	250	7	4	4	4	3	3	Semi- Mature	Fair	Fair	20+	C1	Snapped branch within the crown	3



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
88	Т	Sycamore	5	400	7	3	3	3	2.5	0.5	Mature	Fair	Fair	10+	C1	Minor stem wounds	4.8
89	Т	Apple	5	350	7	2	3	3	2.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Leaning stem	4.2
90	Т	Hawthorn	5	175	7	2.5	2.5	2.5	2.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Minor stem wounds	2.1
91	Т	Hawthorn	5	175	7	2.5	2.5	2.5	2.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Minor stem wounds	2.1
92	Т	Whitebeam	7	350	7	3	3	3	3	0.5	Semi- Mature	Fair	Fair	20+	C1	Minor stem wounds	4.2
93	Т	Ash	9	820	7	6	7	6	3	2.5	Mature	Fair	Fair	20+	C1	Suckering tree; Evidence of Inonotus hispidus	9.8
94	Т	Ash	7	175	7	5	5	5	5	0.5	Semi- Mature	Fair	Fair	20+	C1	Exposed roots	2.1
95	Т	Oak	8	300	7	4	4	4	4.5	1	Semi- Mature	Fair	Fair	20+	C1	Multi-stemmed tree	3.6
96	Т	Whitebeam	5	150	7	3.5	3.5	3.5	3	0.5	Semi- Mature	Fair	Fair	20+	C1	Crossing/rubbing branches in the crown	1.8
97	Т	Ash	9	200	7	5	5	5	2.5	1.5	Semi- Mature	Fair	Fair	20+	C1	Insignificant defects	2.4
98	Т	Ash	8	125	7	5	5	5	3	1	Semi- Mature	Fair	Fair	20+	C1	Multistemmed tree	1.5
99	Т	Ash	7	175	7	3	3	3	3	2.5	Semi- Mature	Fair	Fair	20+	C1	Tree with potential future	2.1
100	Т	Birch	10	350	7	6	6	6	2.5	1	Mature	Fair	Fair	20+	C1	Co-dominant stem at 0.5m	4.2
101	Т	Hawthorn	4	200	7	3.5	3.5	3.5	2.5	1	Mature	Fair	Fair	20+	C1	Leaning stem	2.4



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
102	Т	Whitebeam	7	550	7	6	6	6	0.5	1	Mature	Fair	Fair	20+	C1	Surface roots present	6.6
103	Т	Sycamore	15	890	7	11	11	11	0.5	0.5	Mature	Fair	Fair	20+	C1	Minor deadwood in the crown	11
104	Т	Hawthorn	4	125	7	7	7	7	0.5	0.5	Mature	Fair	Fair	20+	C1	Scrubby self-set trees	1.5
105	Т	Ash	13	700	7	6	5	6	5	4	Mature	Fair	Fair	20+	C1	Major branch failure at 4m	8.4
106	Т	Ash	9	600	7	6	7	5	3	5	Mature	Fair	Fair	20+	C1	Three major branch failures	7.2
107	Т	Ash	7	100	7	5	5	5	2.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Multistemmed tree	1.2
108	Т	Sycamore	9	300	7	4	4	4	3	1	Semi- Mature	Fair	Fair	20+	C1	Minor deadwood in the crown	3.6
109	Т	Hawthorn	4	175	7	3	3	3	0.5	0.5	Mature	Fair	Fair	20+	C1	Scrubby self-set tree	2.1
110	Т	Ash	6	175	7	4	4	4	1.5	1.5	Semi- Mature	Fair	Fair	20+	C1	Co-dominant stem at 2m	2.1
111	Т	Oak	12	600	7	7	7	7	1.5	3	Mature	Good	Good	20+	B1	Dense ivy to stem and crown	7.2
112	Т	Corsican Pine	8	250	7	2.5	2.5	2.5	2.5	1.5	Semi- Mature	Fair	Fair	20+	C1	Minor stem wounds	3
113	Т	Corsican Pine	8	275	7	3	3	3	2.5	1.5	Semi- Mature	Fair	Fair	20+	C1	Insignificant defects	3.3
114	Т	Sycamore	11	525	7	4	4	4	5	2.5	Mature	Fair	Fair	20+	C1	Co-dominant stem at 3m	6.3
115	Т	Apple	6	250	7	3	3	3.5	2	0.5	Mature	Fair	Fair	20+	C1	Minor stem wounds	3.0
116	Т	Norway Maple	16	550	7	7	7	7	6	2	Mature	Fair	Fair	20+	C1	Co-dominant stem at 2m; Minor stem wounds	6.6
117	Т	Cherry	16	500	7	6	6	6	5	2	Mature	Fair	Fair	10+	C1	Minor stem wounds	6.0



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
118	Т	Willow	15	250	7	5	5	5	5	2	Semi- Mature	Fair	Fair	20+	C1	Tree has previously been topped	3.0
119	Т	Oak	9	350	7	4	4	4	4	3	Semi- Mature	Good	Good	20+	C1	Minor deadwood in the crown	4.2
120	Т	Sycamore	14	325	7	6	5	6	2.5	2.5	Semi- Mature	Fair	Fair	20+	C1	Leaning stem	3.9
121	Т	Sycamore	15	450	7	7	7	7	3.5	4	Mature	Fair	Fair	20+	C1	Minor deadwood in the crown	5.4
122	Т	Ash	8	425	7	4	4	4	5	3	Mature	Fair	Fair	20+	C1	Branch wounds	5.1
123	Т	Ash	13	300	7	6	6	6	5	4	Mature	Fair	Fair	20+	C1	Co-dominant stem from 0.5m	3.6
124	Т	Cherry	7	300	7	3	3	3	3	3	Mature	Fair	Fair	20+	C1	Tree has been heavily pruned	3.6
125	Т	Poplar	17	800	7	7	7	7	5	3.5	Mature	Fair	Fair	20+	C1	Leaning stem; Snapped branch in the crown	9.6
126	Т	Poplar	20	800	7	9	7	6	5	4	Mature	Fair	Fair	20+	C1	Leaning stem; Deadwood in the crown	9.6
127	Т	Hawthorn	6	175	7	2	2	2	0.5	0.5	Mature	Fair	Fair	20+	C1	Scrubby self-set tree	2.1
128	Т	Elder	6	175	7	2	2	2	0.5	0.5	Mature	Fair	Fair	20+	C1	Scrubby self-set tree	2.1
129	Т	Elder	6	175	7	2	2	2	0.5	0.5	Mature	Fair	Fair	20+	C1	Scrubby self-set tree	2.1
130	Т	Lime	6	200	7	3	3	3	1.5	2.5	Semi- Mature	Fair	Fair	20+	C1	Epicormic growth	2.4
131	Т	Oak	6	175	7	3	3	3	1	0.5	Semi- Mature	Fair	Fair	20+	C1	Leaning stem	2.1
132	Т	Lime	7	175	7	2	2	2	2.5	2	Semi- Mature	Fair	Fair	20+	C1	Epicormic growth	2.1



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
133	Т	Oak	6	175	7	2.5	2.5	2.5	2.5	2	Semi- Mature	Fair	Fair	10+	C1	Minor stem wounds	2.1
134	Т	Oak	6	175	7	2.5	2.5	2.5	2.5	2	Semi- Mature	Fair	Fair	10+	C1	Minor stem wounds	2.1
135	Т	Cherry	6	175	7	2.5	2.5	2.5	2.5	2	Semi- Mature	Fair	Fair	10+	C1	Minor stem wounds	2.1
136	Т	Sycamore	7	300	7	4	4	4	4	2	Semi- Mature	Fair	Fair	20+	C1	Crossing/rubbing branches in the crown	3.6
137	Т	Hawthorn	4	175	7	2.5	2.5	2.5	3	1	Semi- Mature	Fair	Fair	10+	C1	Scrubby self-set trees	2.1
138	Т	Sycamore	4	225	7	1	1.5	1.5	3	0.5	Semi- Mature	Fair	Fair	<10	C1	Major stem wounds	2.7
139	Т	Ash	5	150	7	1.5	1.5	1.5	2	2	Semi- Mature	Fair	Fair	10+	C1	Obstructing the fence	1.8
140	Т	Willow	14	425	7	4	6	5	4	2.5	Mature	Fair	Fair	10+	C1	Co-dominant stem at 0.5m	5.1
141	Т	Hawthorn	3	175	7	3	3	3	0.5	0.5	Semi- Mature	Fair	Fair	20+	C1	Limited access prevented full inspection	2.1
142	Т	Hawthorn	3	150	7	3	3	3	0.5	0.5	Mature	Fair	Fair	20+	C1	Limited access prevented full inspection	1.8
143	Т	Scots Pine	5	150	7	2	2	2	2	1.5	Semi- Mature	Fair	Fair	20+	C1	Minor stem wounds	1.8
144	Т	Scots Pine	5	150	7	2	2	2	2	1.5	Semi- Mature	Fair	Fair	20+	C1	Minor stem wounds	1.8
145	Т	Scots Pine	5	150	7	2	2	2	2	1.5	Semi- Mature	Fair	Fair	20+	C1	Minor stem wounds	1.8



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	W	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
146	Т	Scots Pine	5	150	7	2	2	2	2	1.5	Semi- Mature	Fair	Fair	20+	C1	Minor stem wounds	1.8
147	Т	Scots Pine	5	150	7	2	2	2	2	1.5	Semi- Mature	Fair	Fair	20+	C1	Minor stem wounds	1.8
251	Т	Ash	8	150	4	4	4	4	3	1	Semi- Mature	Fair	Fair	20+	C2	Trees have previously been pruned	1.8
24	W	Ash; Alder; Oak; Willow	9	75- 300	1.5	1.5	1.5	1.5	0.5	1.5	Semi- Mature	Fair	Fair	20+	C2	Dense scrubby understory; Natural regeneration mainly alder	3.6
25	W	Ash; Alder; Willow	11	75- 300	2.5	2.5	2.5	2.5	2	1.5	Semi- Mature	Fair	Fair	20+	C2	Unmanaged woodland; new trees have been planted; Deadwood left in-situ	3.6
29	W	Ash; Field Maple; Sycamore; Oak	9	75- 300	2.5	2.5	2.5	2.5	3	2.5	Semi- Mature	Good	Good	20+	C2	Mixed species plantation; No evidence of any management practices	3.6
29	W	Ash; Field Maple; Sycamore; Oak	9	75- 300	2.5	2.5	2.5	2.5	3	2.5	Semi- Mature	Good	Good	20+	C2	Mixed species plantation; No evidence of any management practices	3.6
32	W	Alder; Ash; Birch; Cherry; Hawthorn	9	100- 250	2	2	2	2	2	1.5	Semi- Mature	Fair	Fair	20+	C2	Long Acre Wood; No signs of management	3.0
35	W	Ash; Scots Pine; Beech; Field Maple; Oak	9	100- 250	3	3	3	3	1.5	1	Semi- Mature	Fair	Fair	20+	C2	Environmental screening; No signs of management	3.0
35	W	Ash; Scots Pine; Beech; Field Maple; Oak	9	100- 250	3	3	3	3	1.5	1	Semi- Mature	Fair	Fair	20+	C2	Environmental screening; No signs of management	3.0
35	W	Ash; Scots Pine; Beech; Field Maple; Oak	9	100- 250	3	3	3	3	1.5	1	Semi- Mature	Fair	Fair	20+	C2	Environmental screening; No signs of management	3.0



TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	S	w	ГСН	LBH	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
35	W	Ash; Scots Pine; Beech; Field Maple; Oak	9	100- 250	3	3	3	3	1.5	1	Semi- Mature	Fair	Fair	20+	C2	Environmental screening; No signs of management	3.0
38	W	Ash; Hawthorn; Alder; Oak; Norway Maple	8	75- 250	2	2	2	2	1.5	0.5	Semi- Mature	Fair	Fair	20+	C2	Dense understory; no signs of management	3.0
39	W	Ash; Oak; Hawthorn; Sycamore; Norway Maple; Oak	11	100- 250	1.5	1.5	1.5	1.5	2	1.5	Semi- Mature	Fair	Fair	20+	C2	Occasional larger oak standard; Evidence of burning and fly tipping throughout	3.0
45	W	Ash; Oak; Alder; Beech; Sycamore	7	175	1.5	1.5	1.5	1.5	1	0.5	Semi- Mature	Fair	Fair	20+	C2	Young woodland; Limited access prevented full inspection	2.1
45	W	Ash; Oak; Alder; Beech; Sycamore	7	175	1.5	1.5	1.5	1.5	1	0.5	Semi- Mature	Fair	Fair	20+	C2	Young woodland; Limited access prevented full inspection	2.1
88	W	Scots Pine; Oak; Ash; Alder	9	75- 225	2	2	2	2	1.5	3	Semi- Mature	Fair	Fair	20+	C2	Young plantation	2.7
88	W	Scots Pine; Oak; Ash; Alder	9	75- 225	2	2	2	2	1.5	3	Semi- Mature	Fair	Fair	20+	A3	Young plantation	2.7
127	W	Willow; Oak; Ash; Scots Pine; Beech; Birch	8	350	4	4	4	4	0	0	Mature	Good	Good	40+	B2	Woodland with good structure species and age diversity;	4.2
127	W	Willow; Oak; Ash; Scots Pine; Beech; Birch	8	350	4	4	4	4	0	0	Mature	Good	Good	40+	B2	Woodland with good structure species and age diversity;	4.2
128	W	Ash; Oak; Field Maple; Sycamore; Birch	9	150	2	2	2	2	2.5	1.5	Semi- Mature	Fair	Fair	20+	C2	Young plantation; No signs of management	1.8

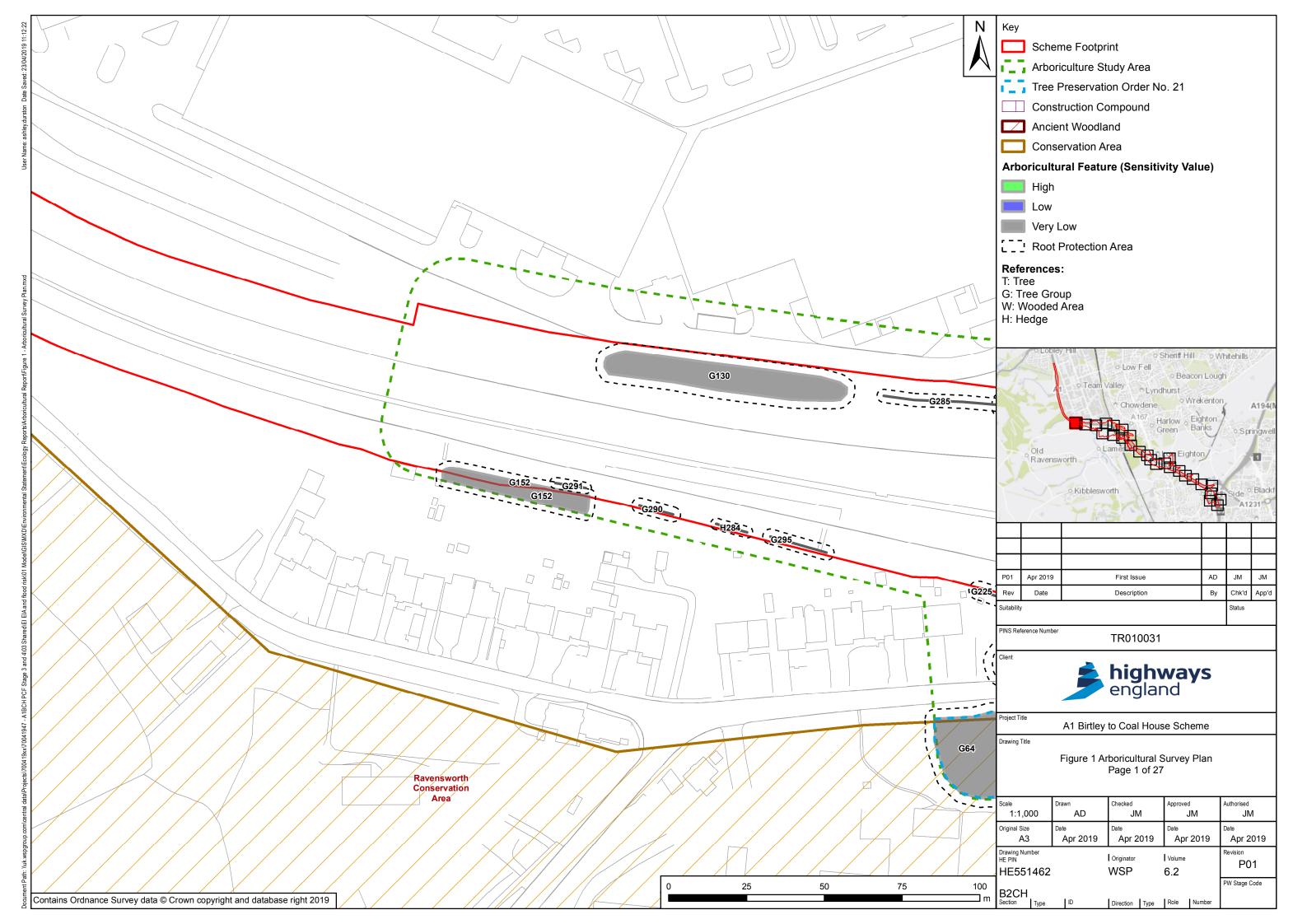


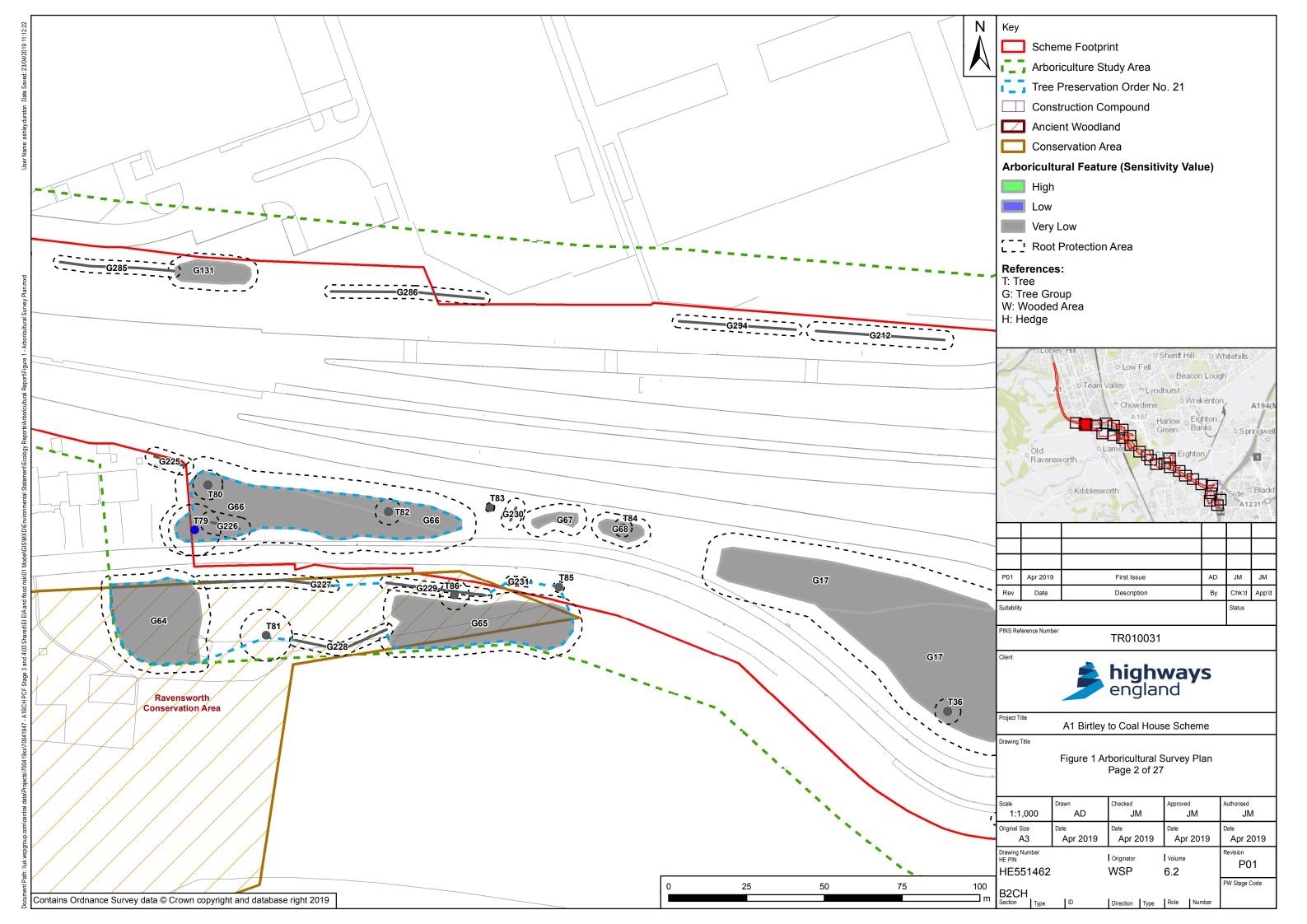
TREE NO	TYPE	SPECIES	HEIGHT (m)	STEM DIAMETER (mm)	N	E	s	w	ГСН	ГВН	AGE CLASS	PHYSIOLOGICAL CONDITION	STRUCTURAL	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	NOTES AND PRELIMINARY MANAGEMENT RECOMMENDATIONS	RPA RADIUS (m)
129	W	Ash; Oak; Sycamore; Beech	12	150- 400	3	3	3	3	3	2.5	Semi- Mature	Fair	Fair	20+	C2	Wood has been thinned; No signs of natural regeneration	4.8
129	W	Ash; Oak; Sycamore; Beech	12	150- 400	3	3	3	3	3	2.5	Semi- Mature	Fair	Fair	20+	C2	Wood has been thinned; No signs of natural regeneration	4.8
134	W	Ash; Oak; Sycamore; Birch; Field Maple; Norway Maple	7	100- 225	1.5	1.5	1.5	1.5	4	2.5	Semi- Mature	Fair	Fair	20+	C2	Young plantation; No signs of management	2.7

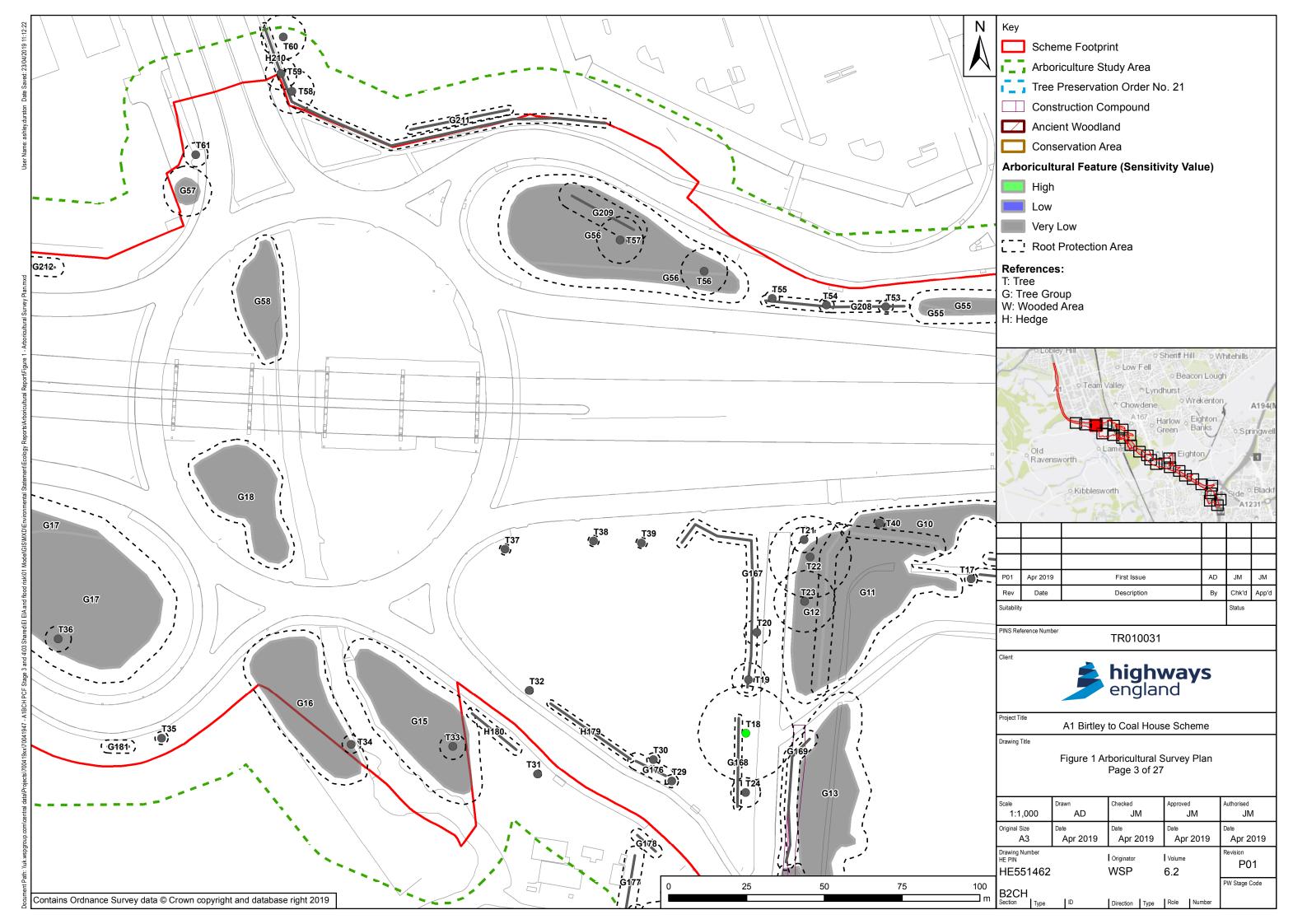
## **Appendix B**

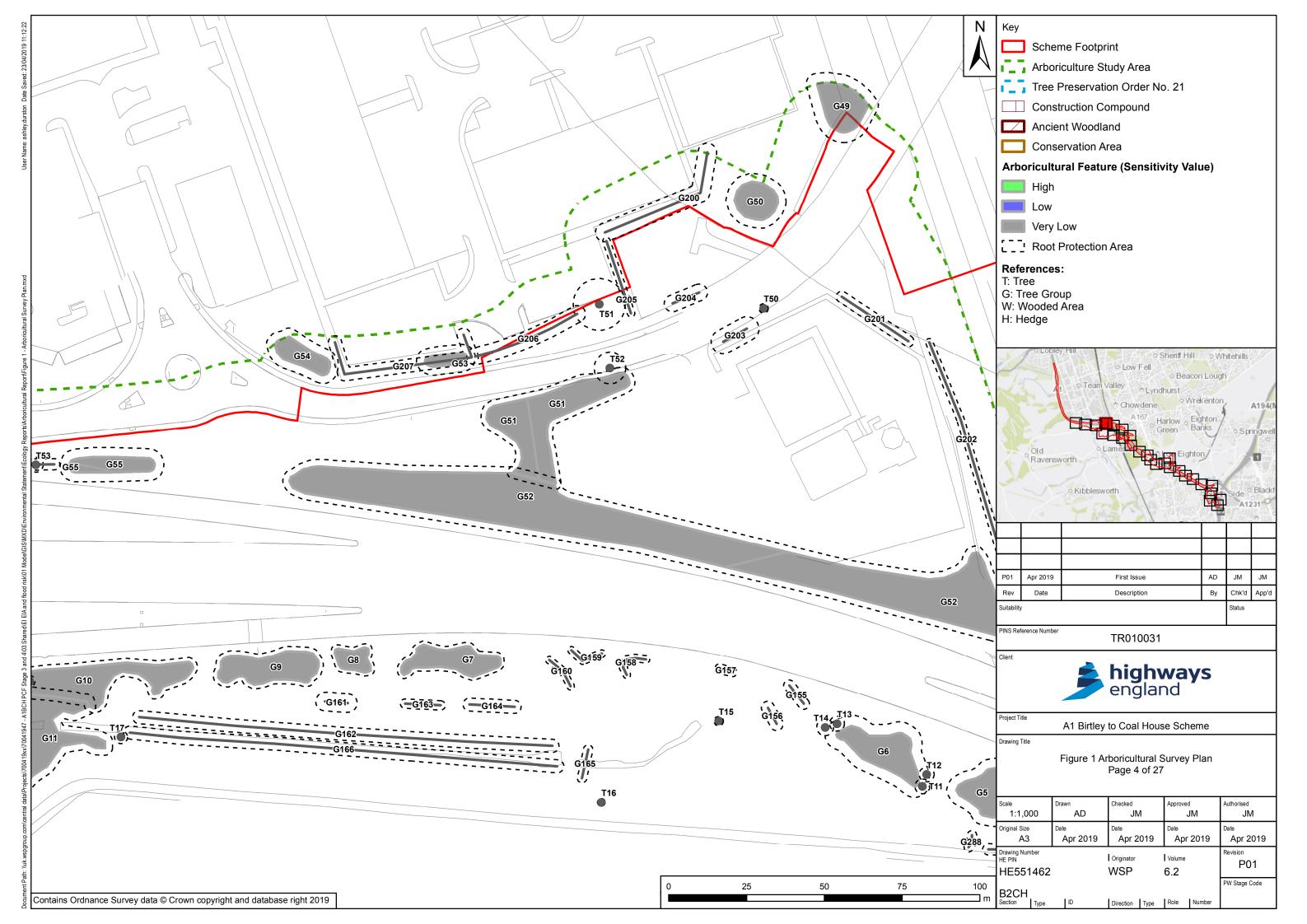
**ARBORICULTURAL SURVEY PLANS** 

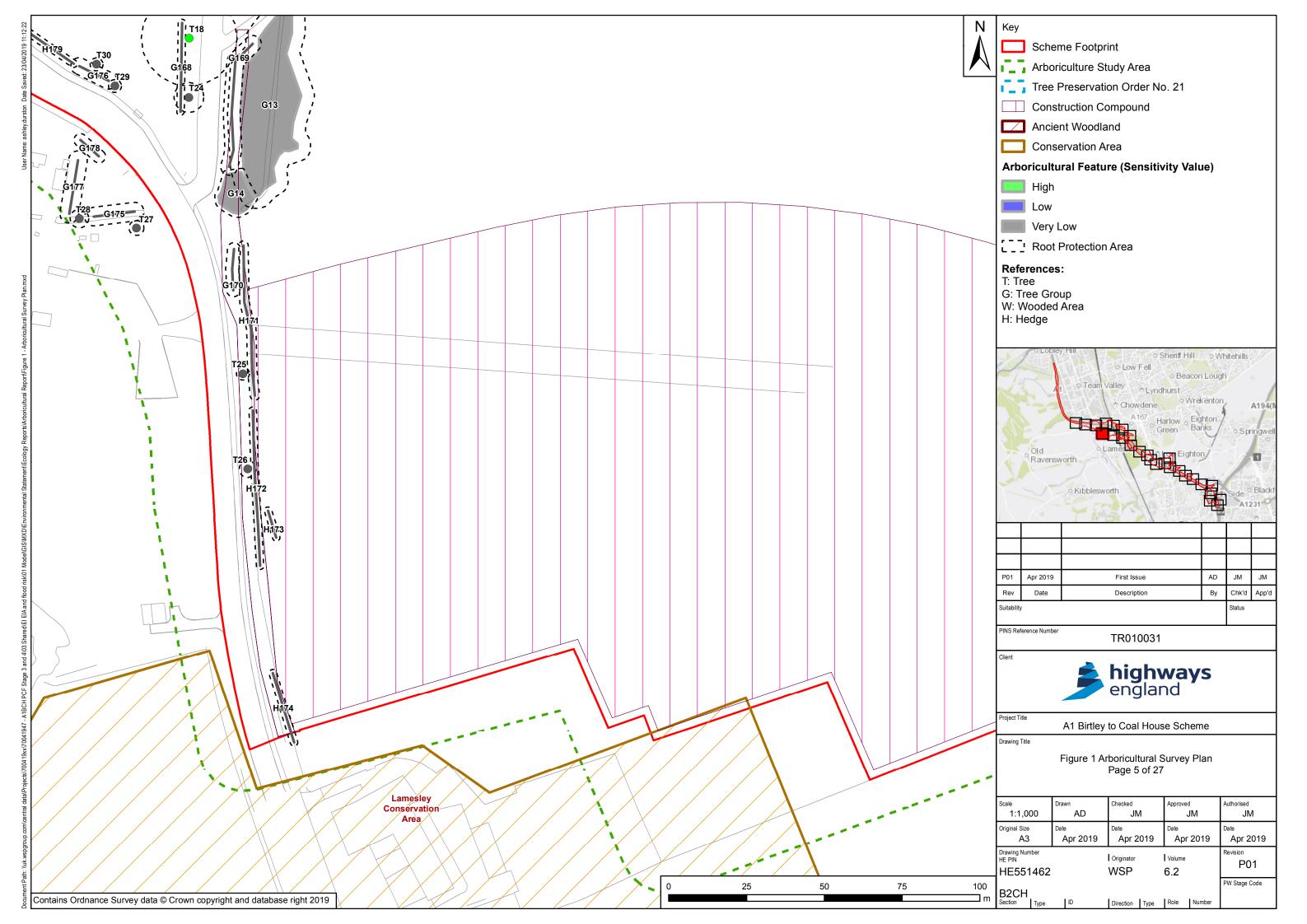


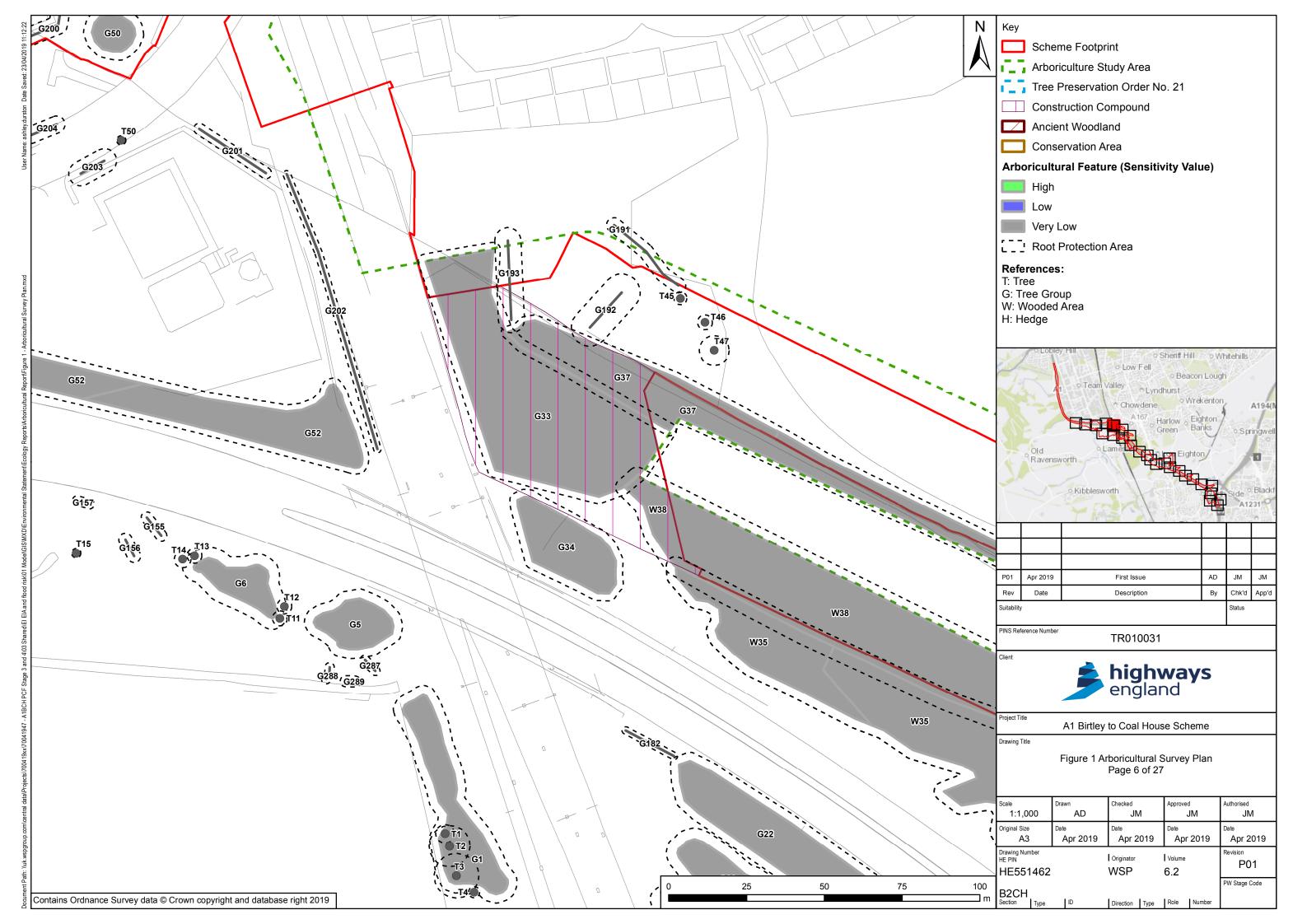


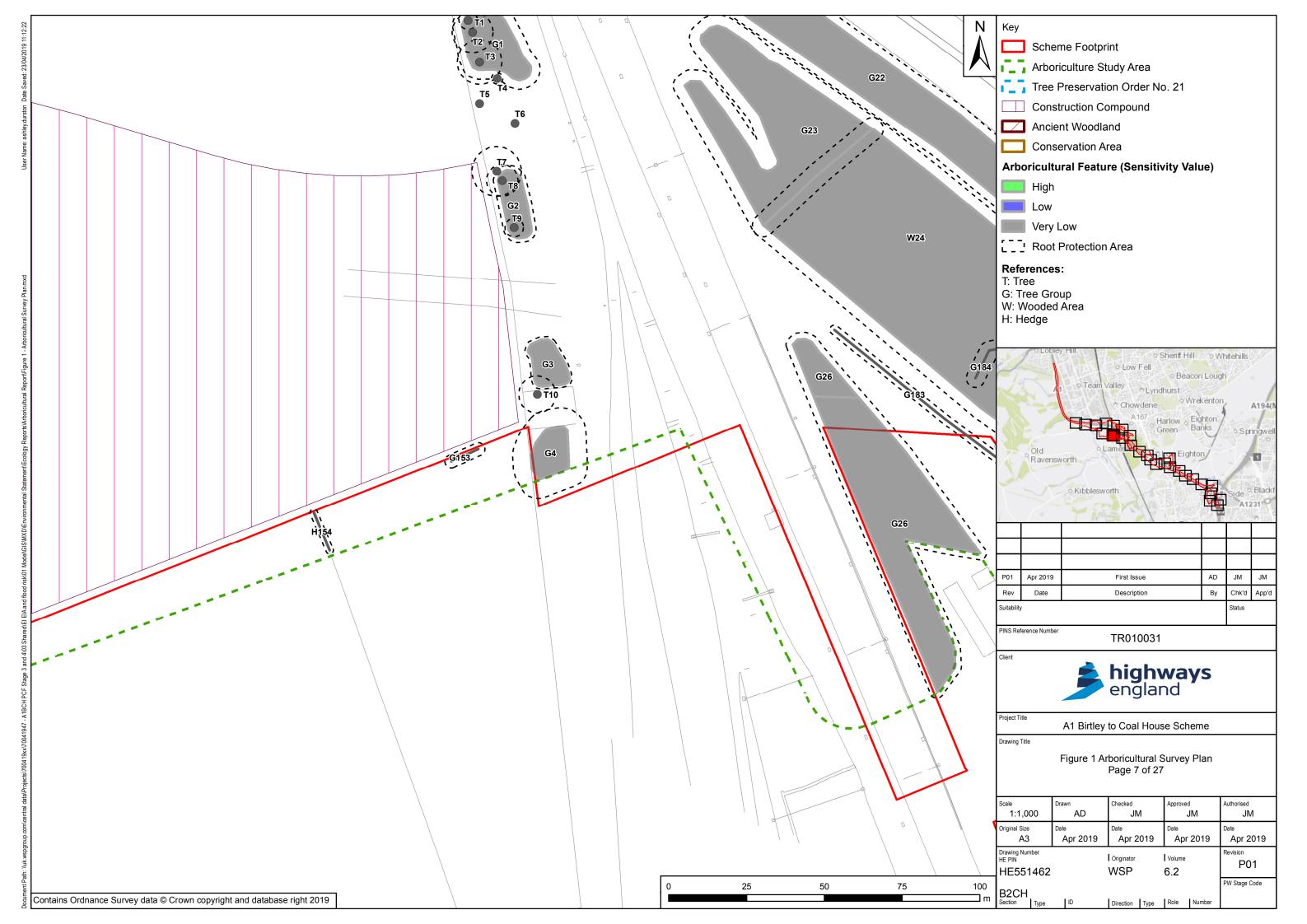


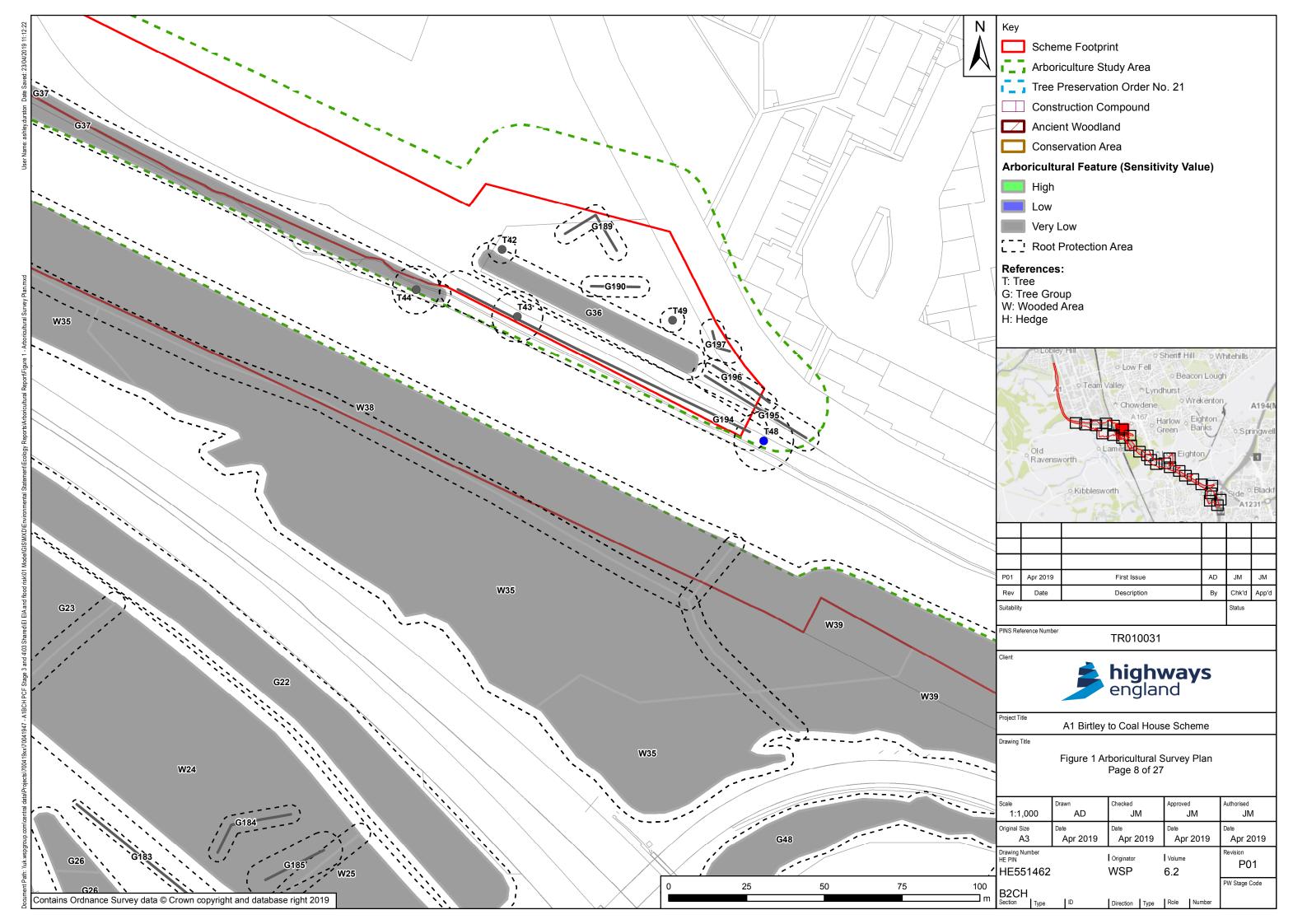


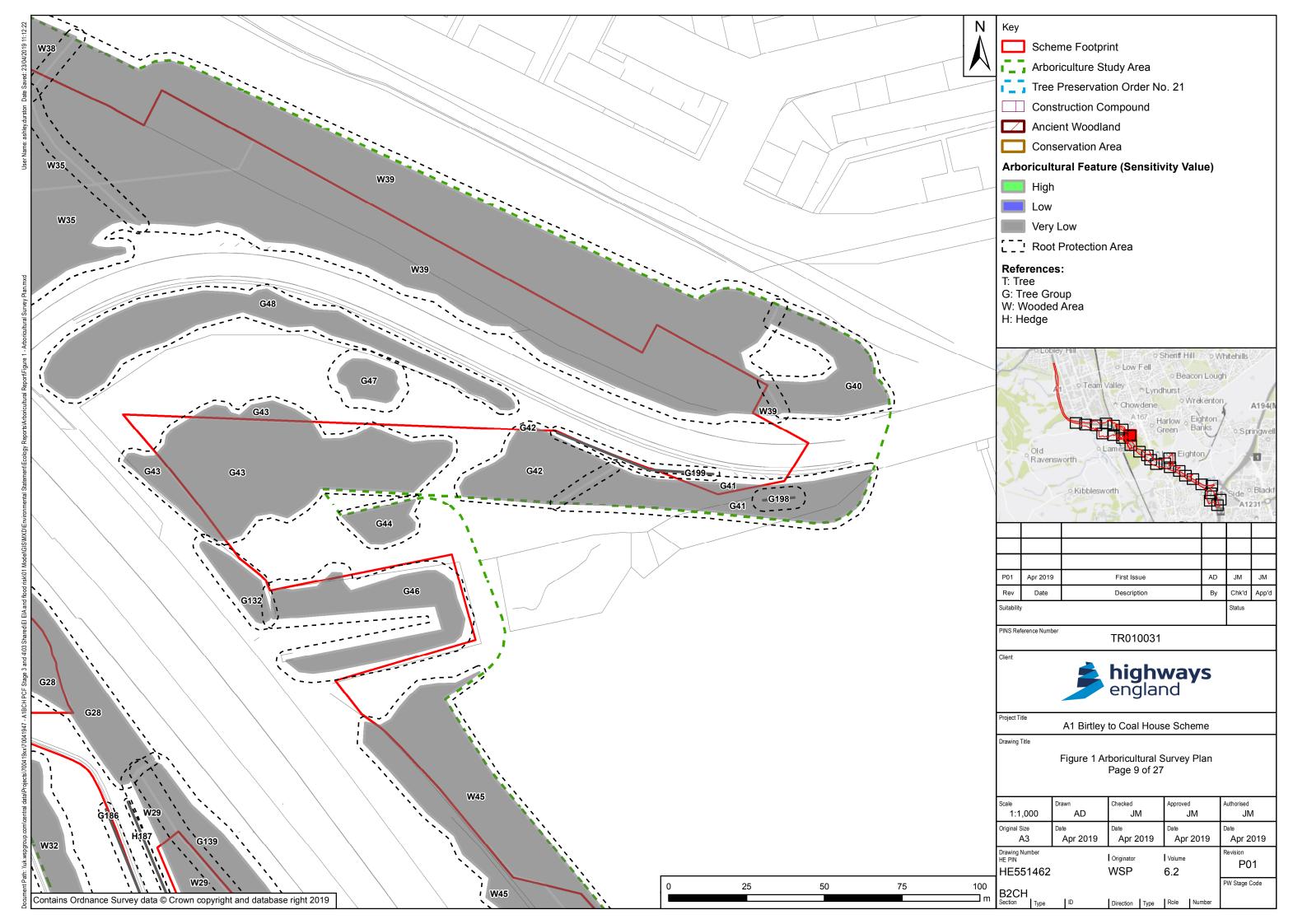


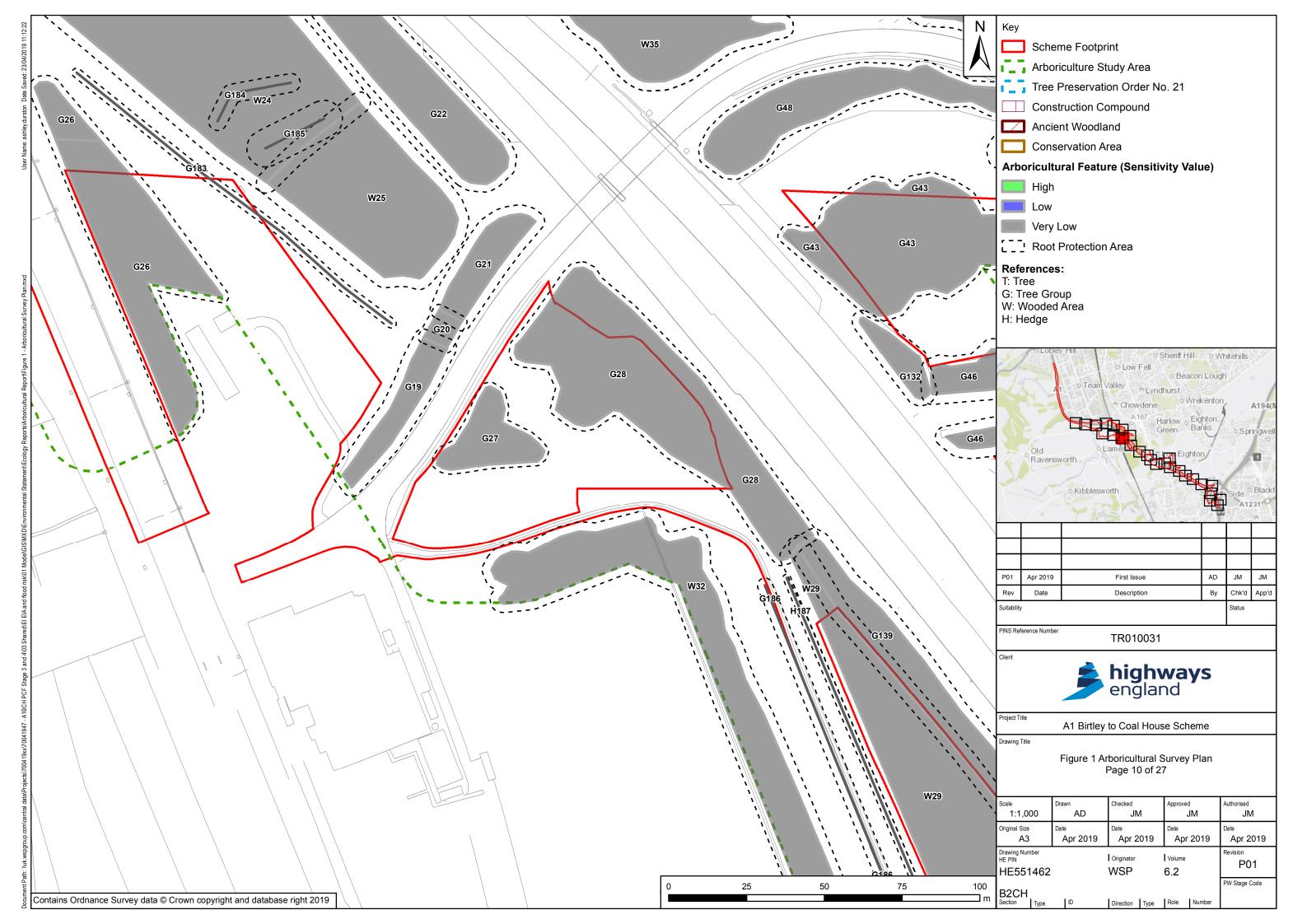


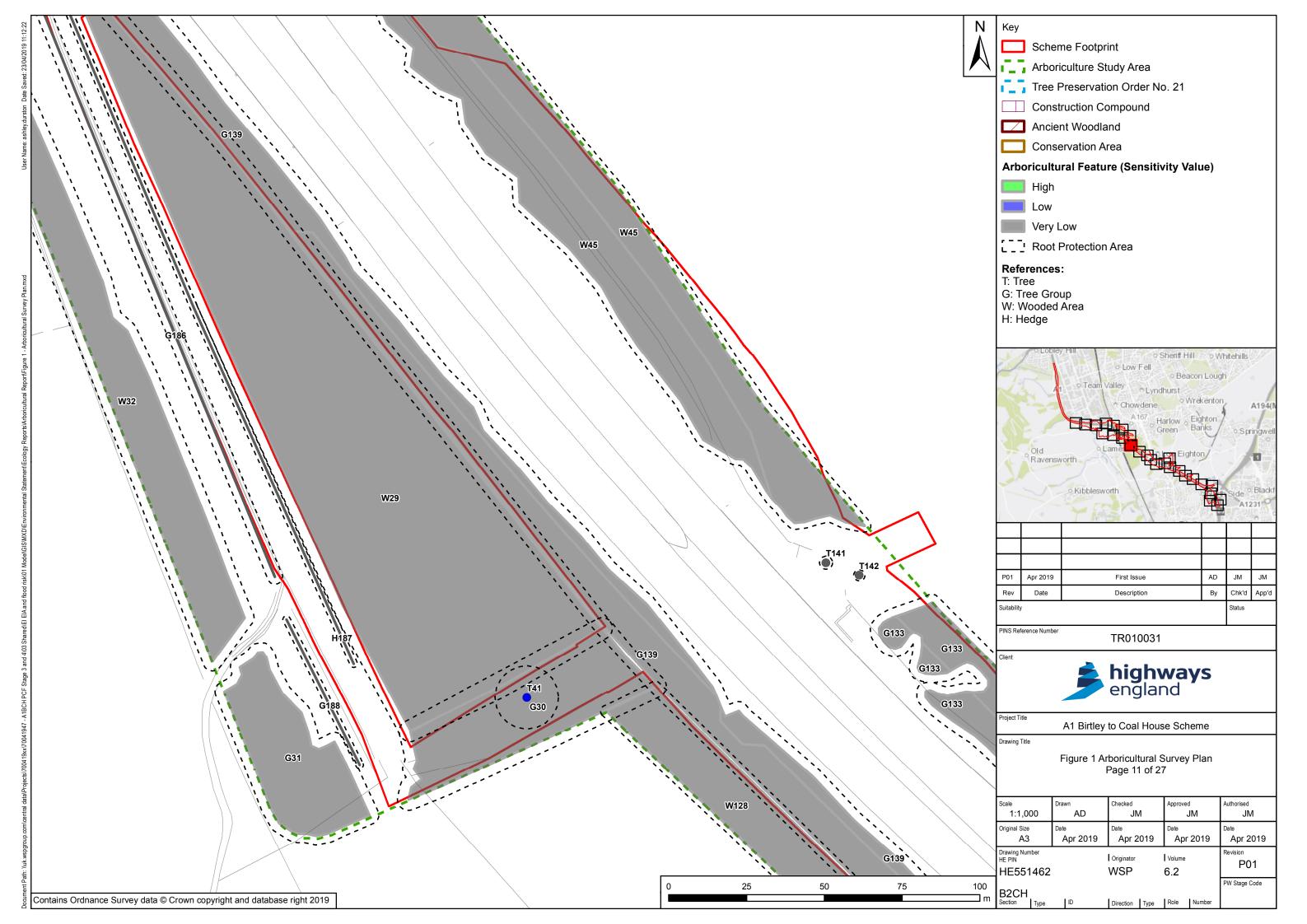


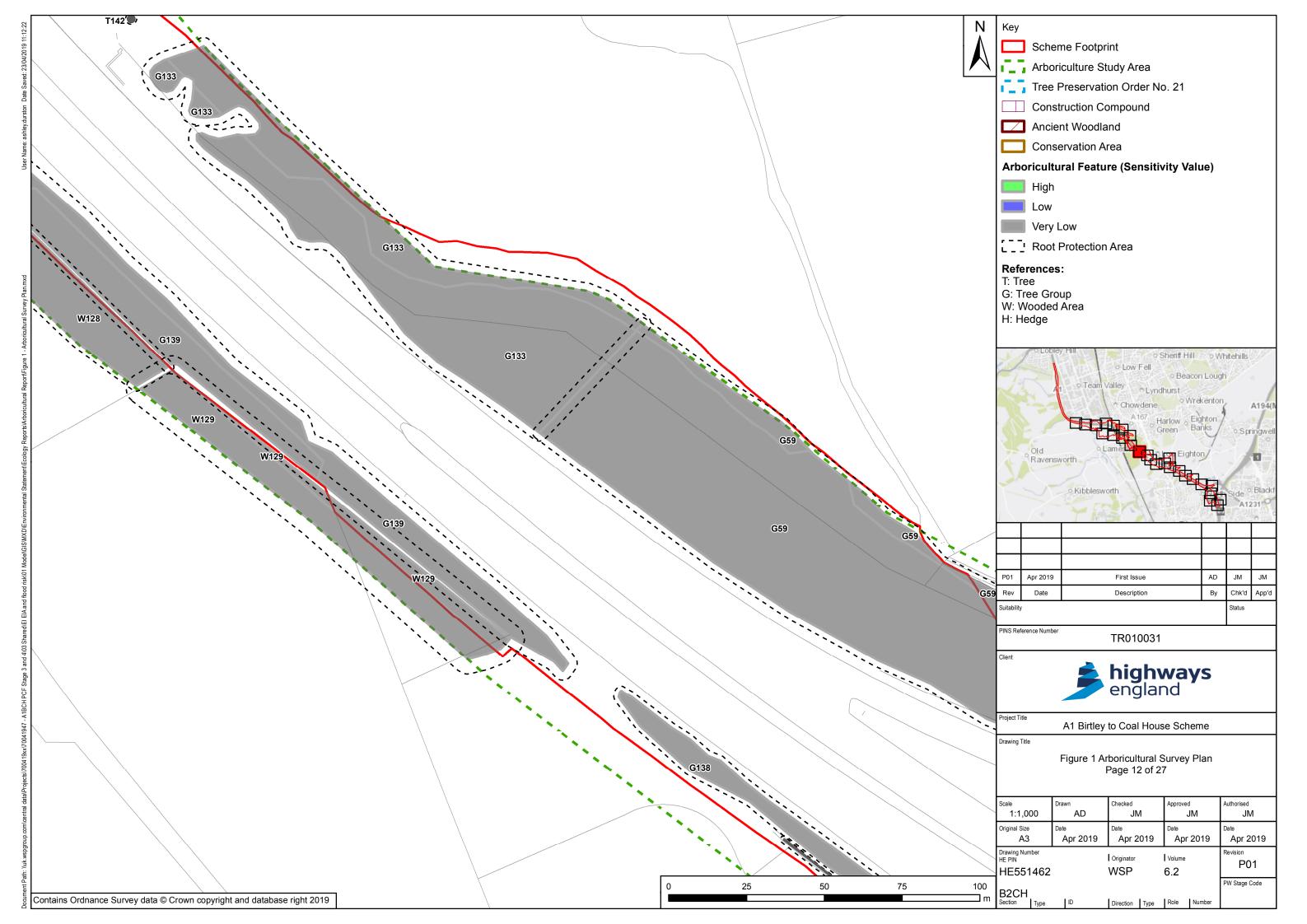


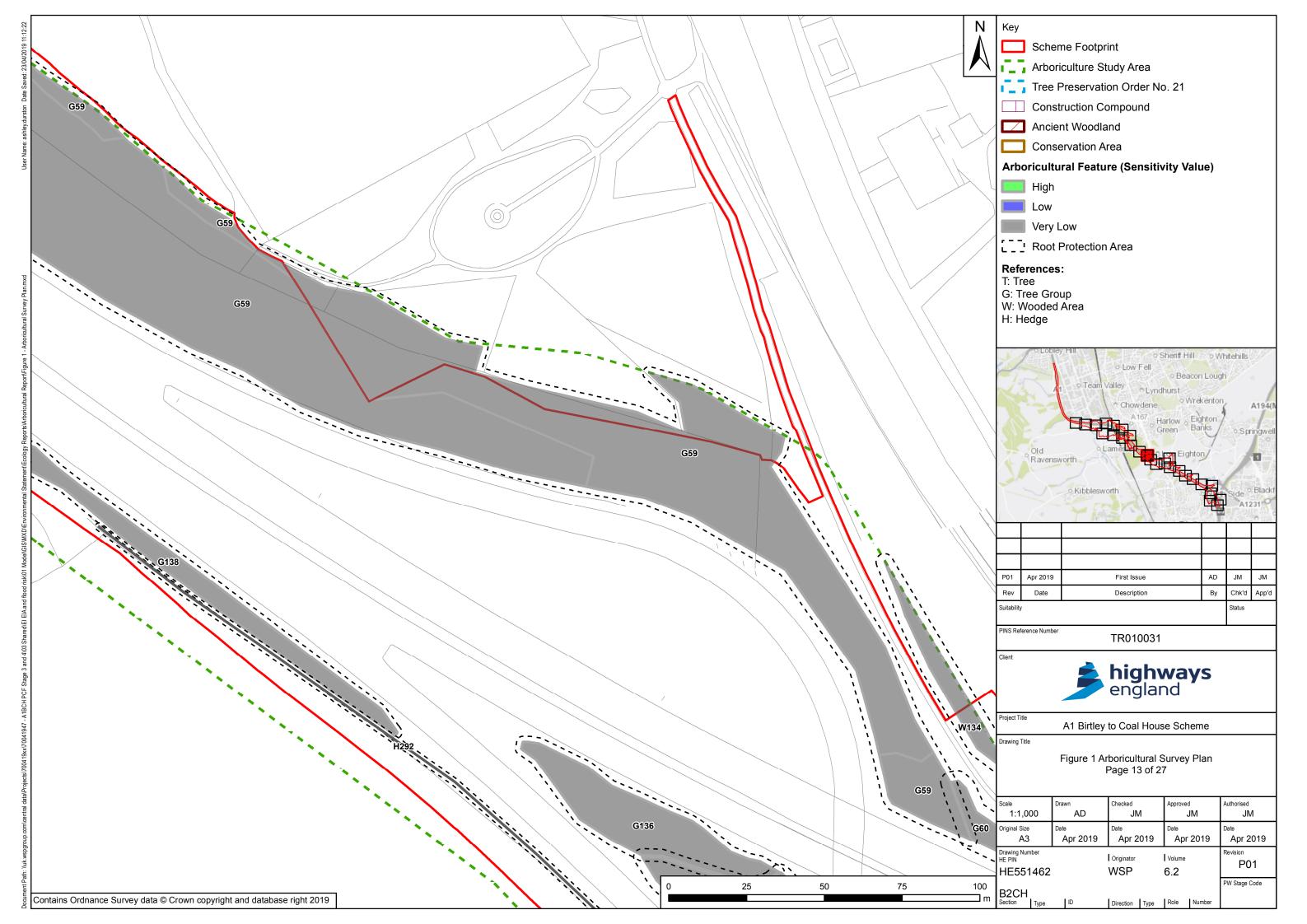


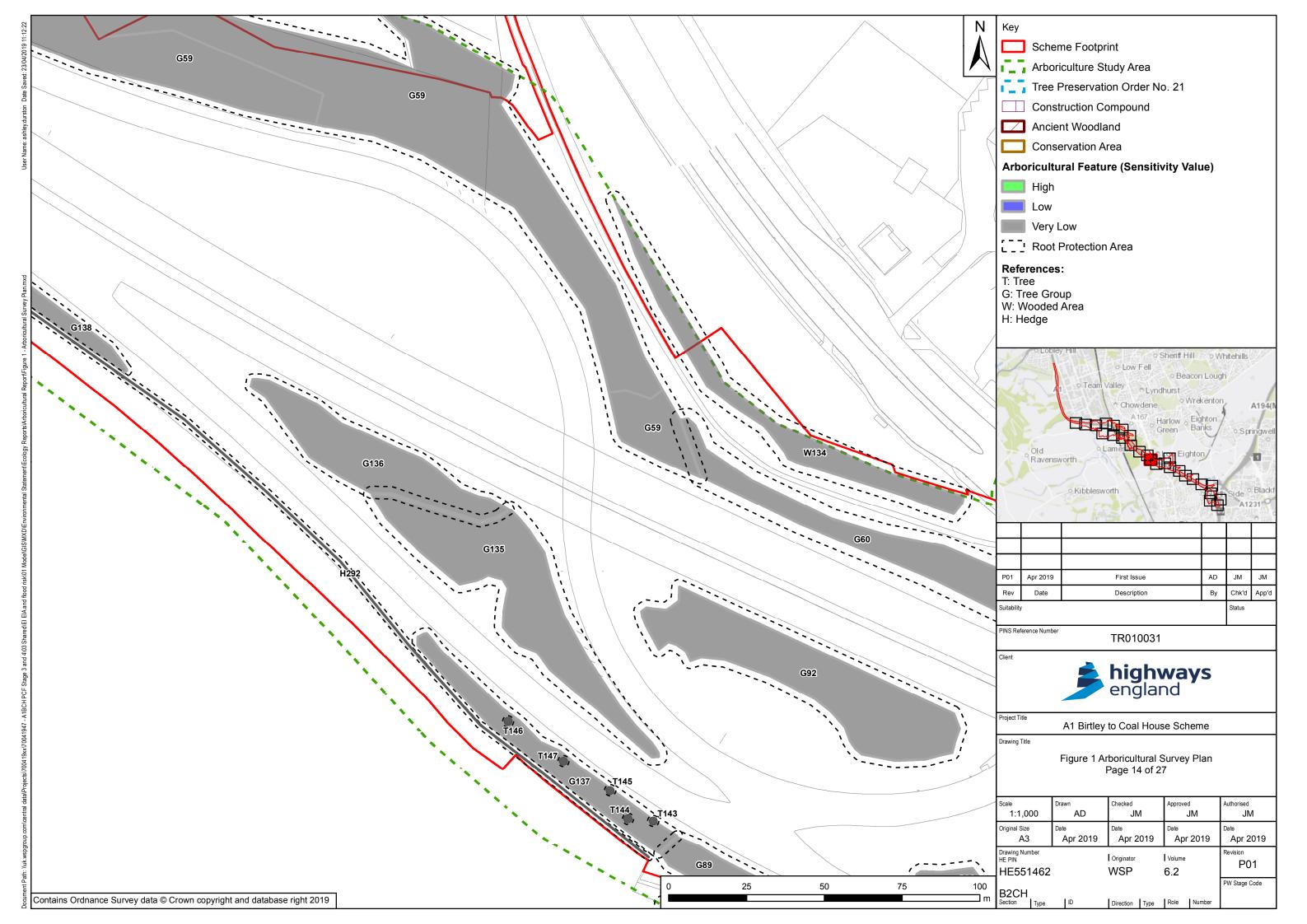


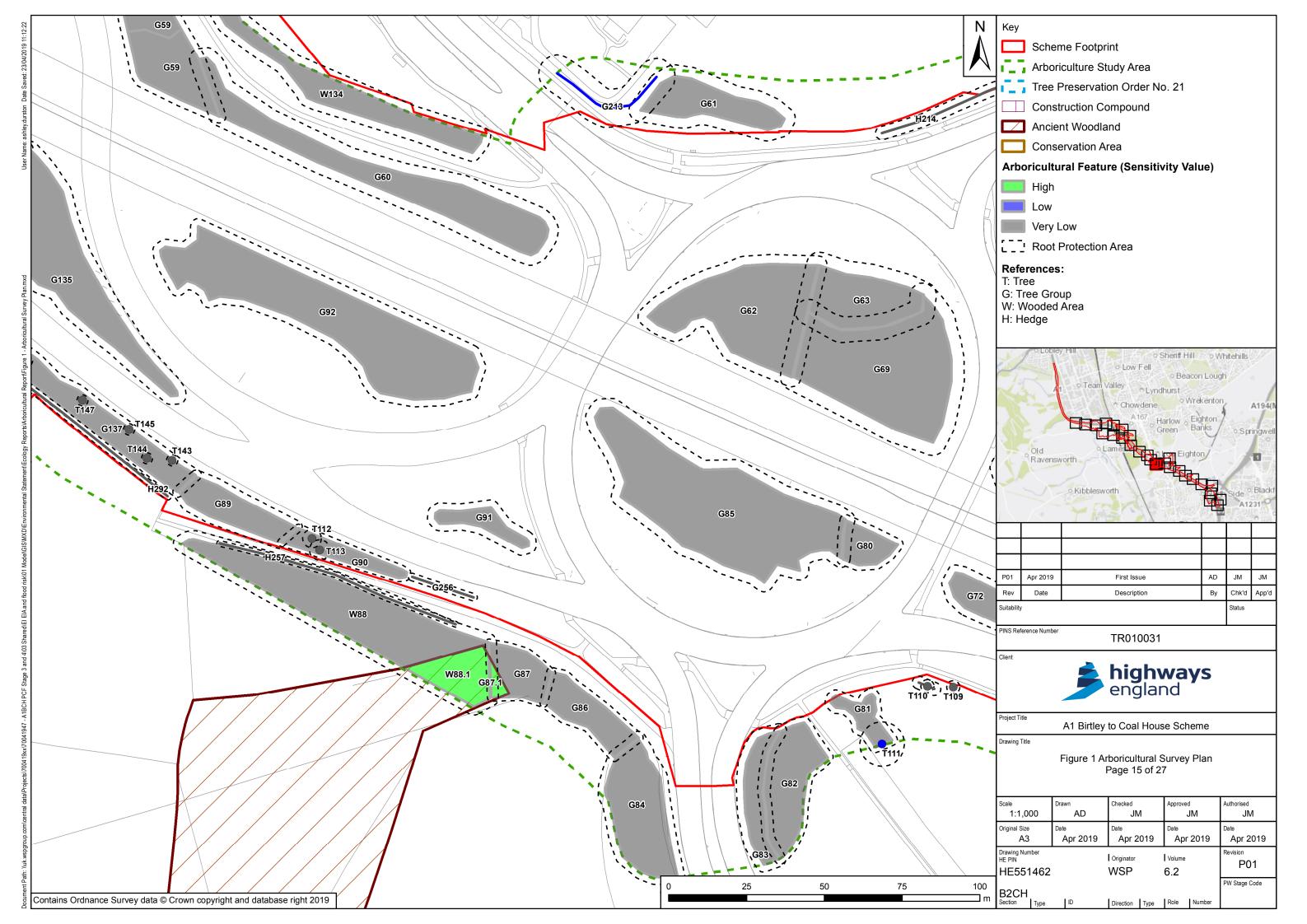


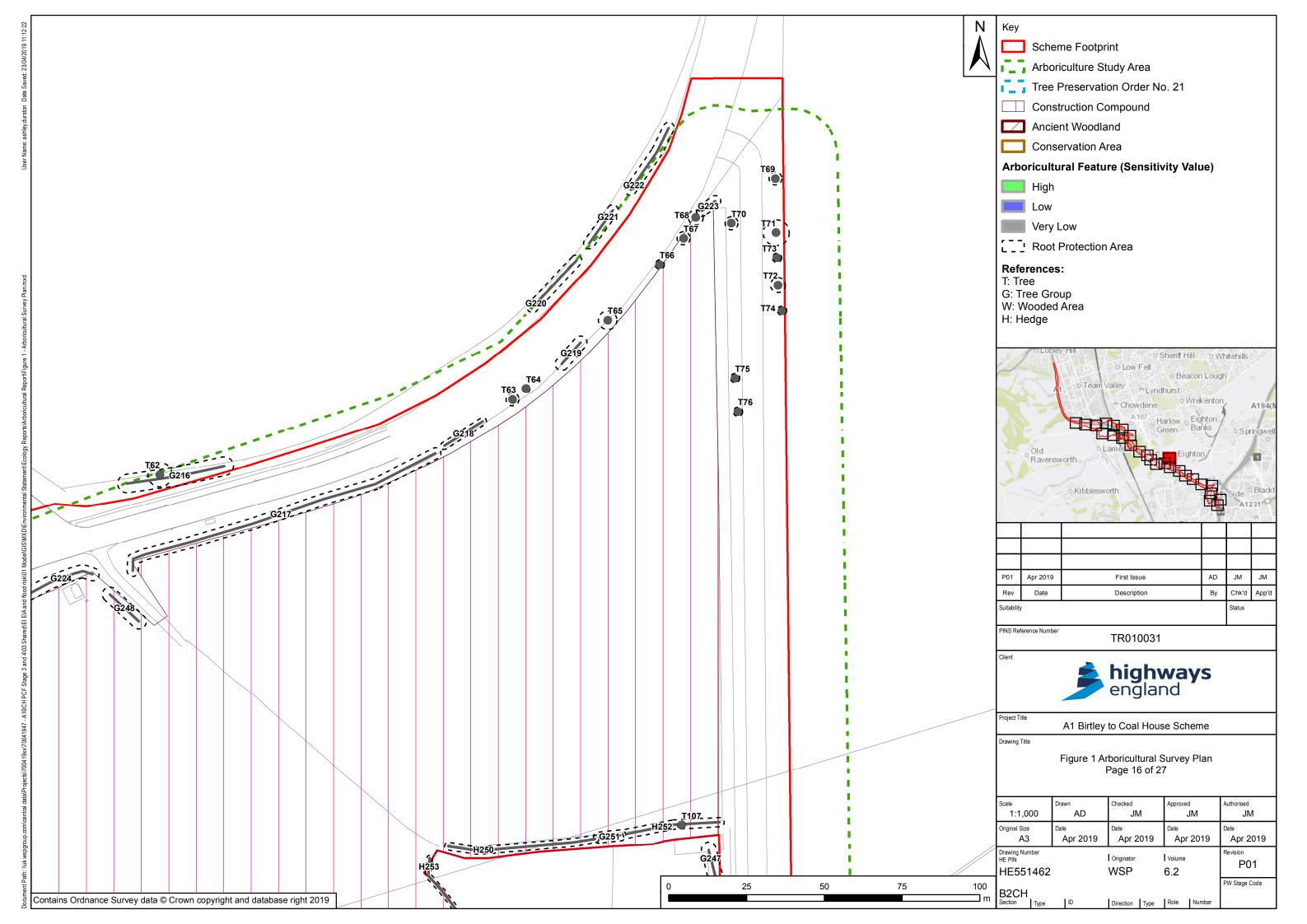


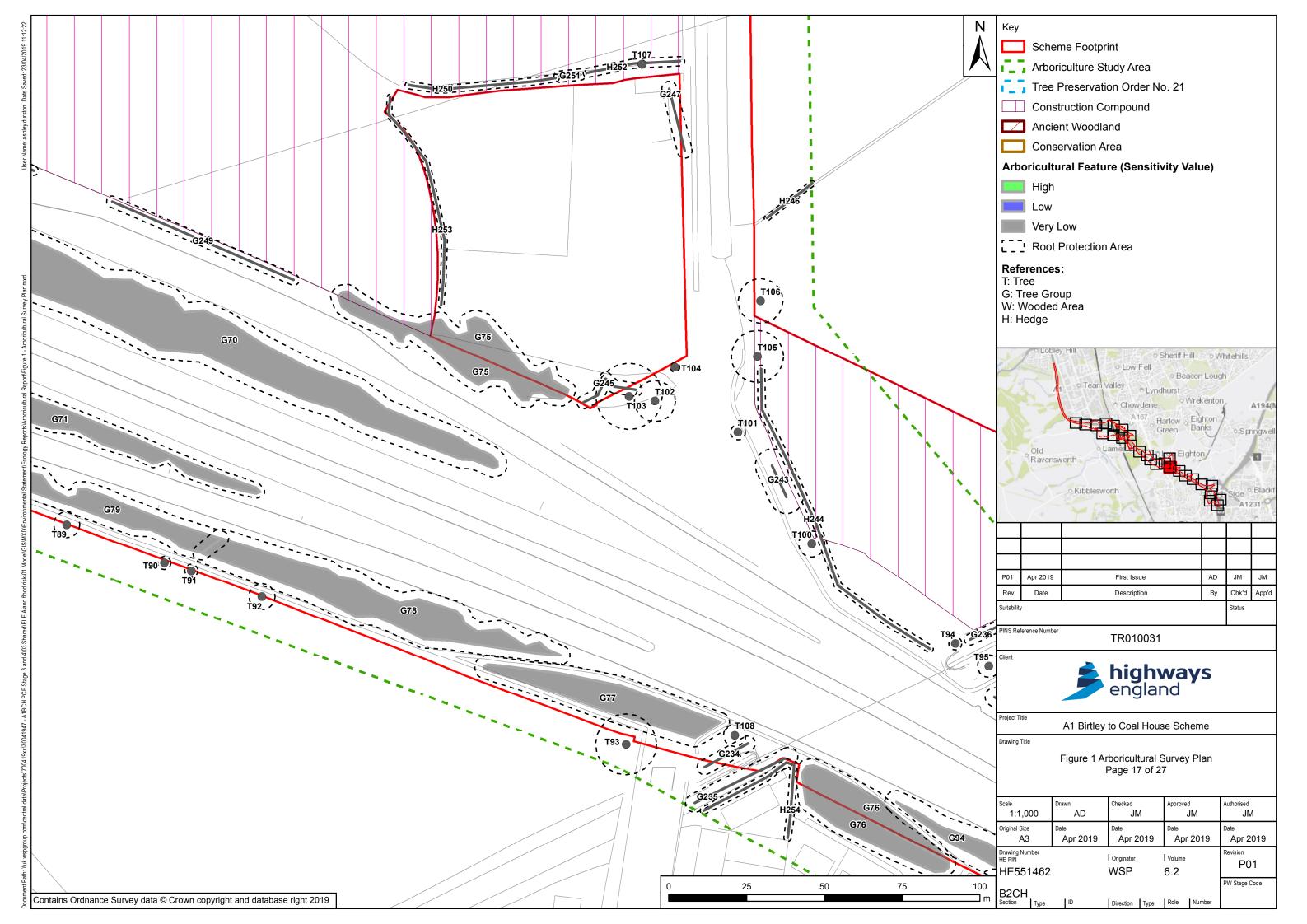


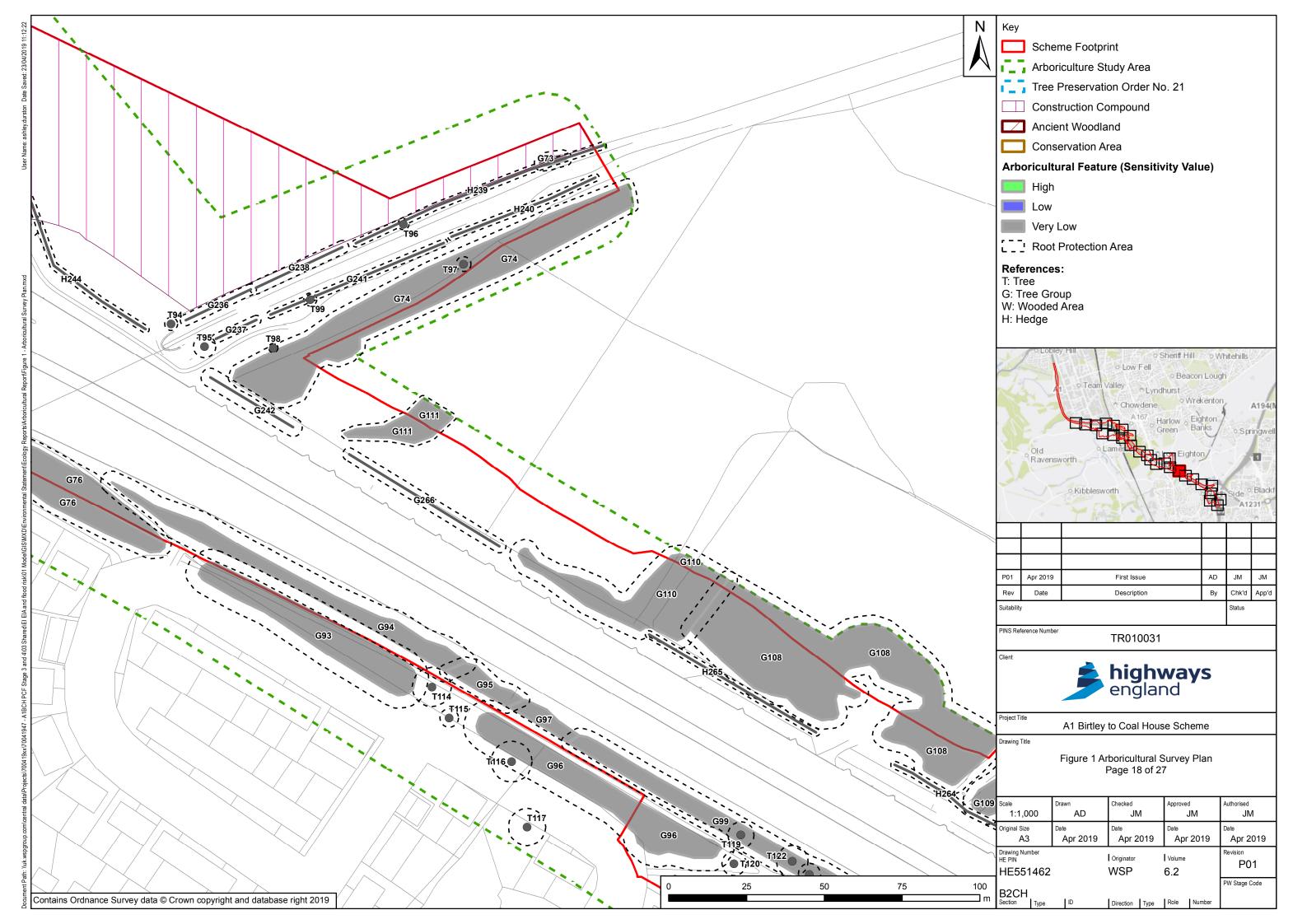


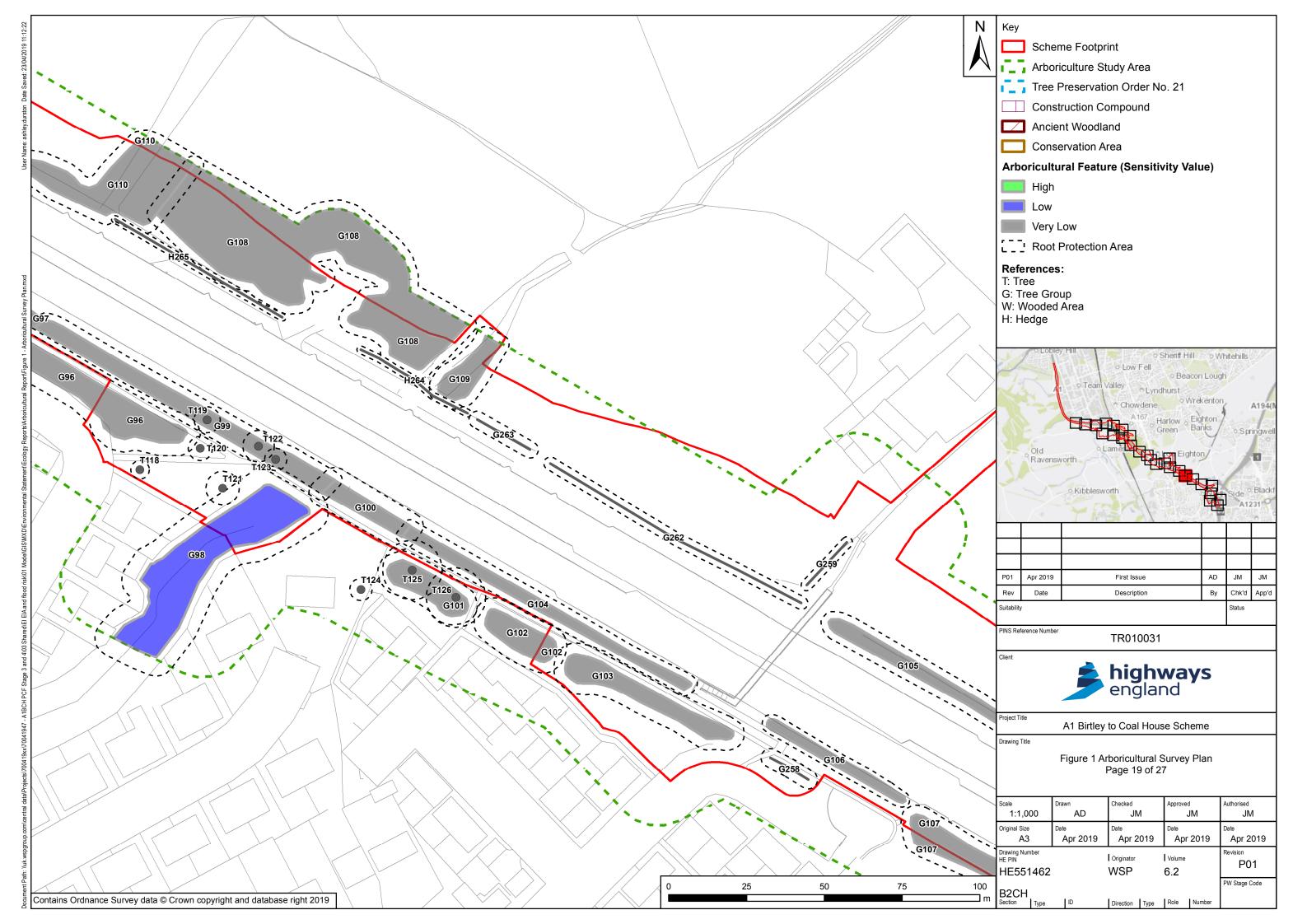


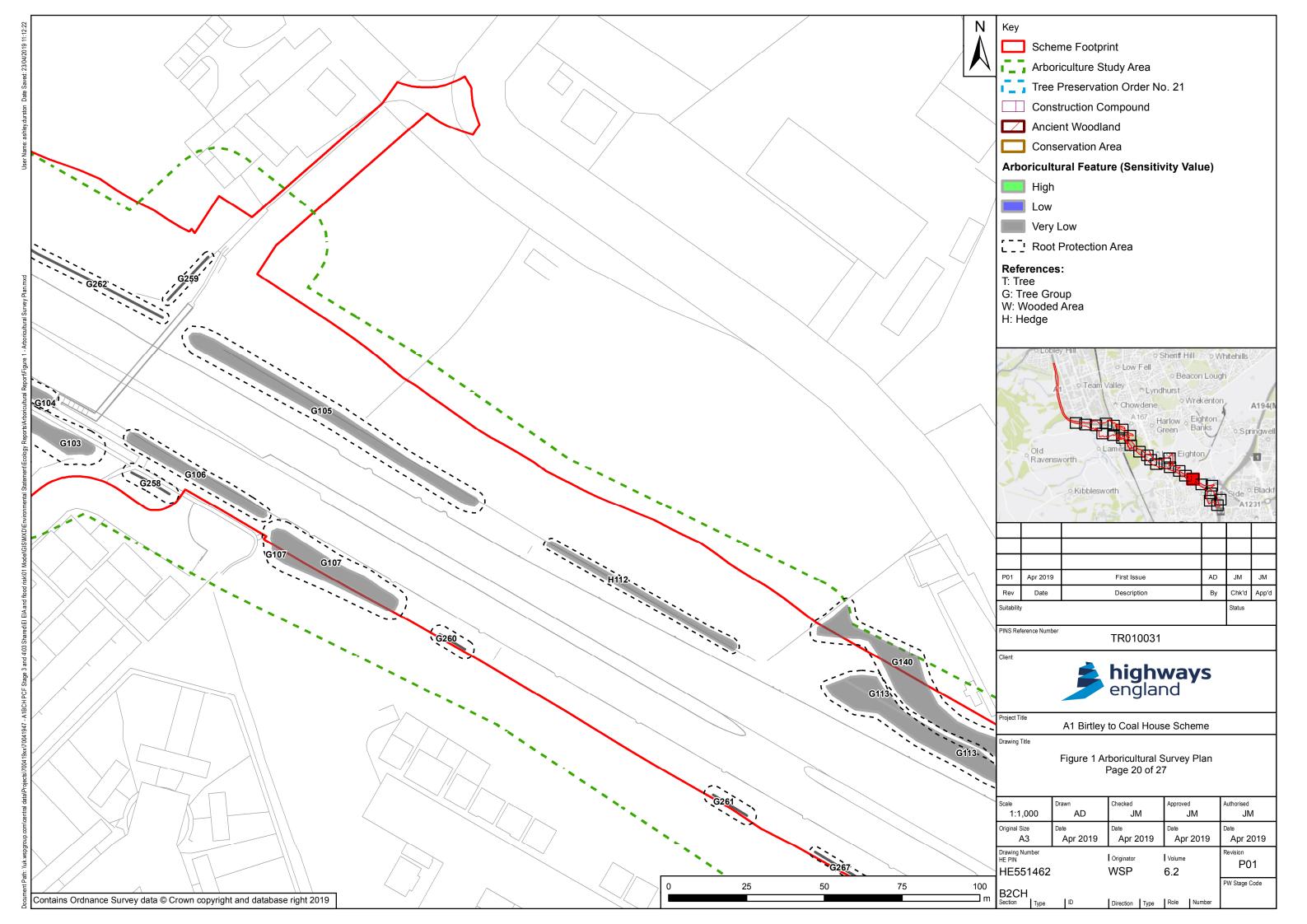


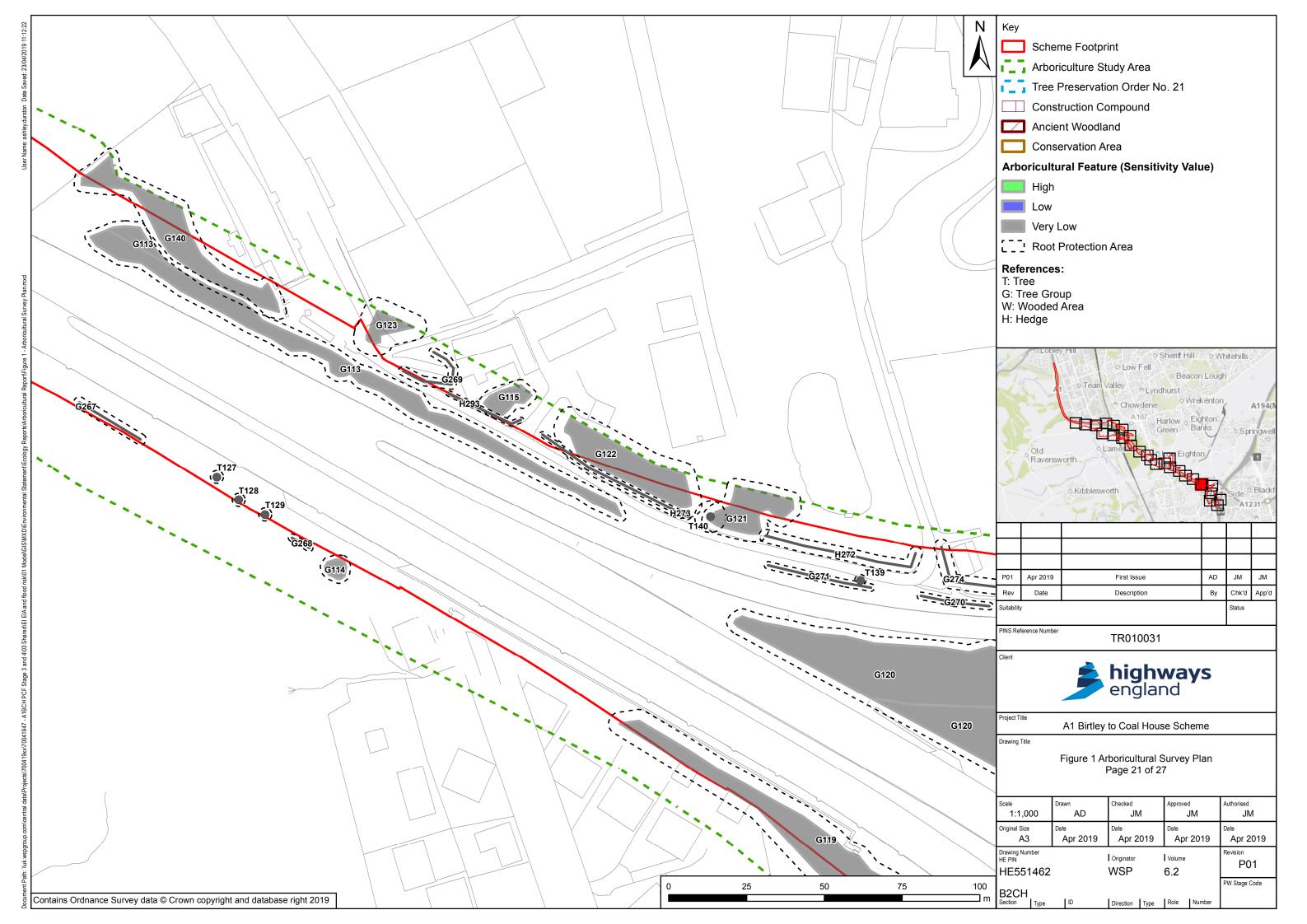


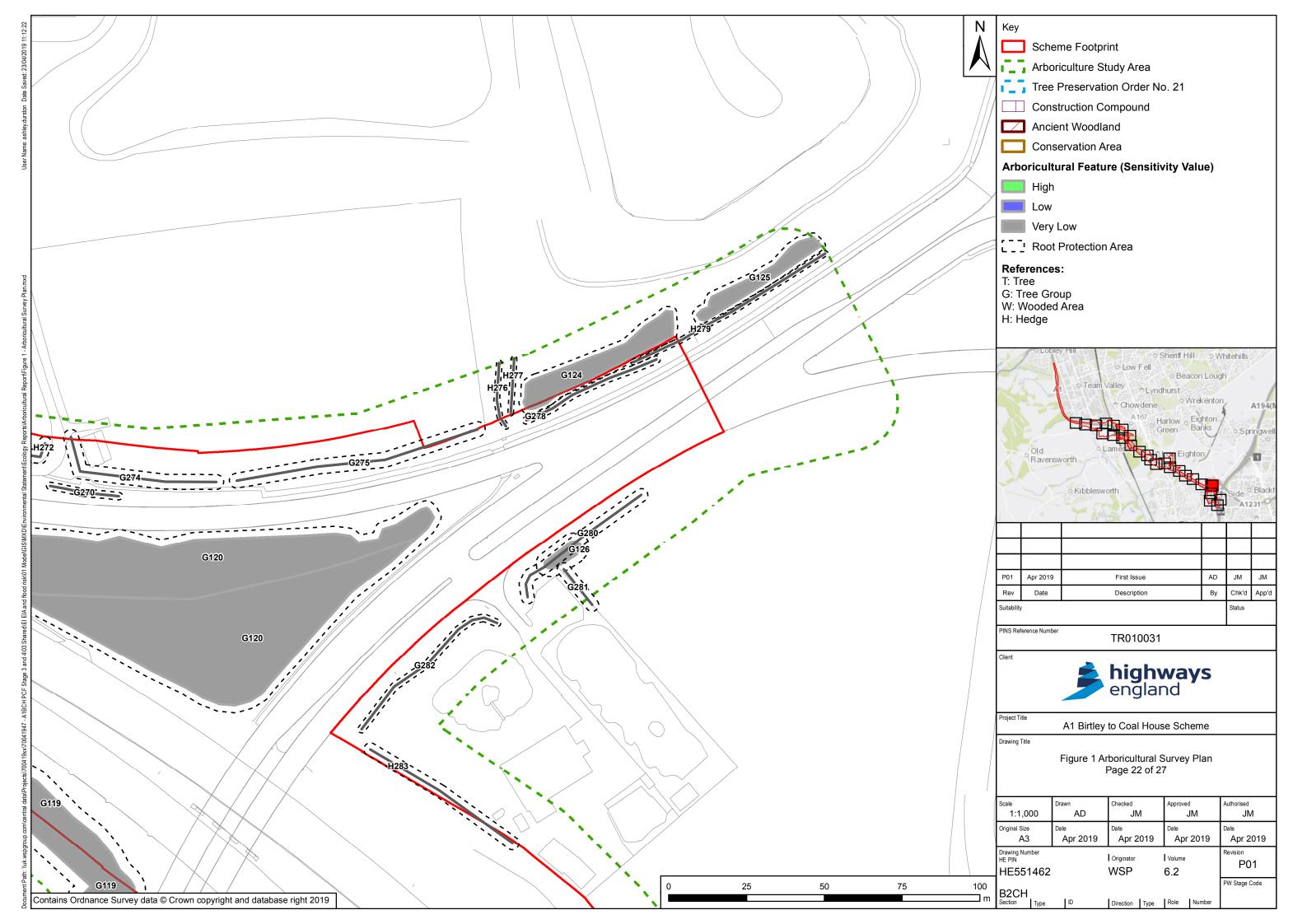


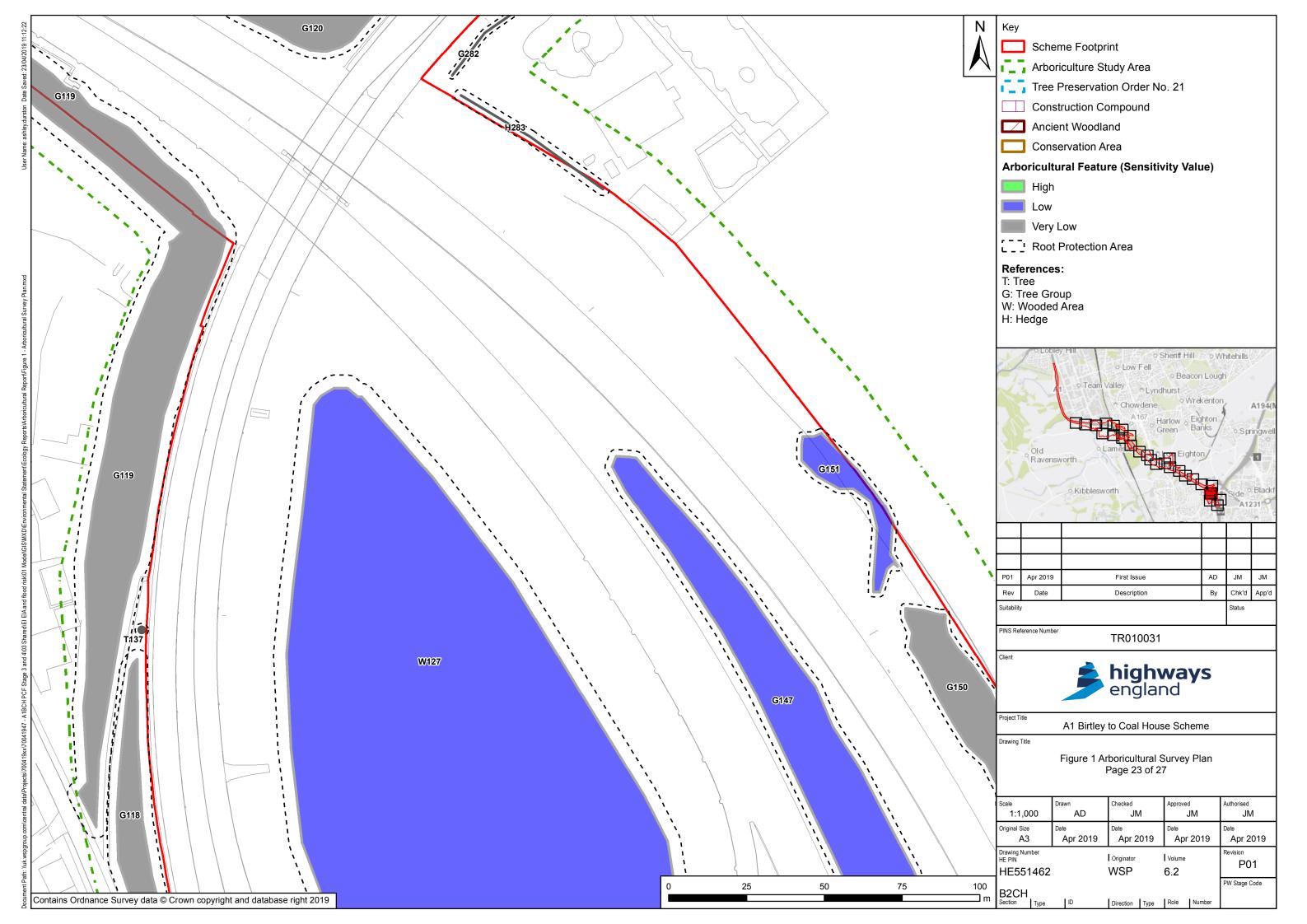


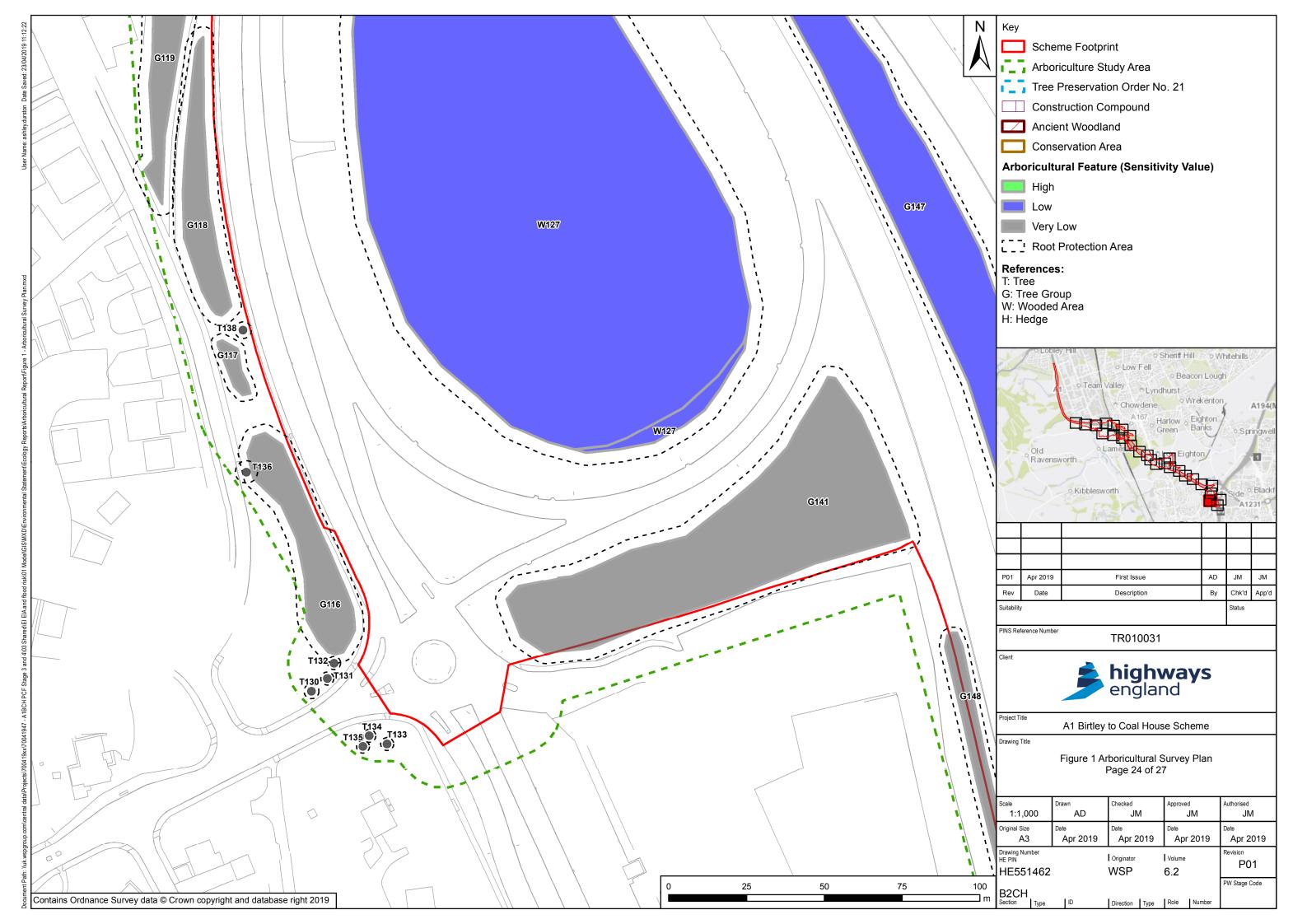


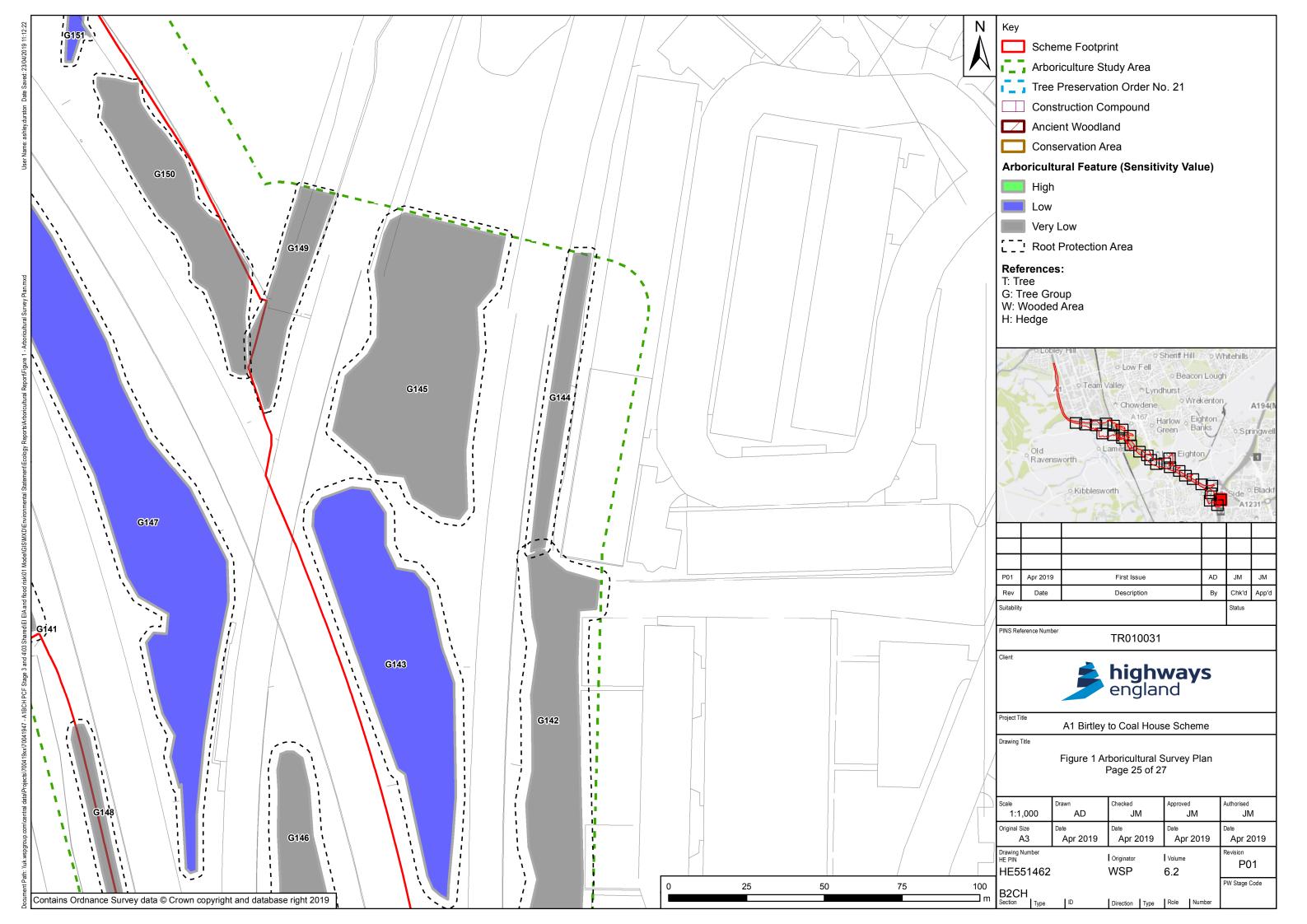


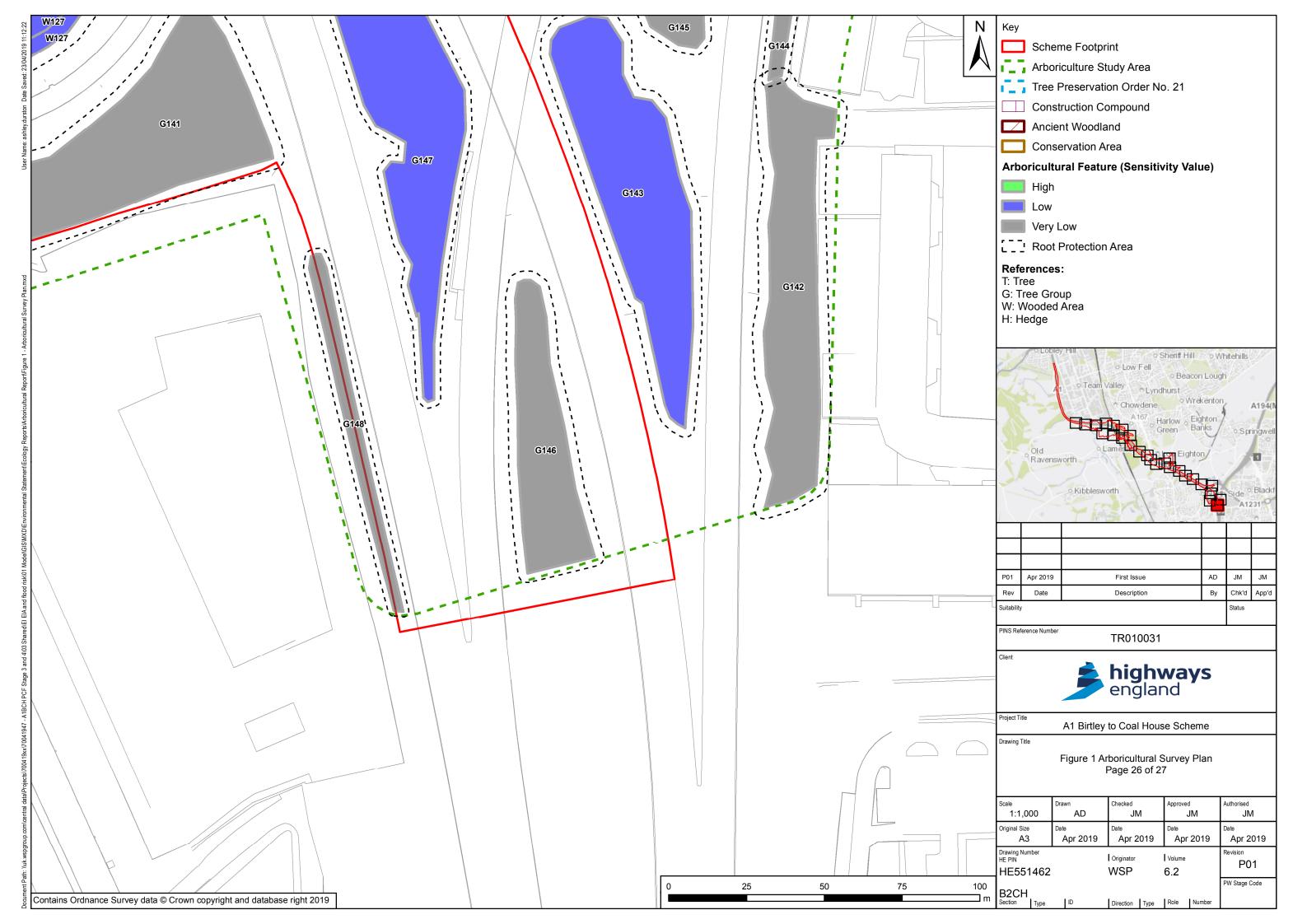


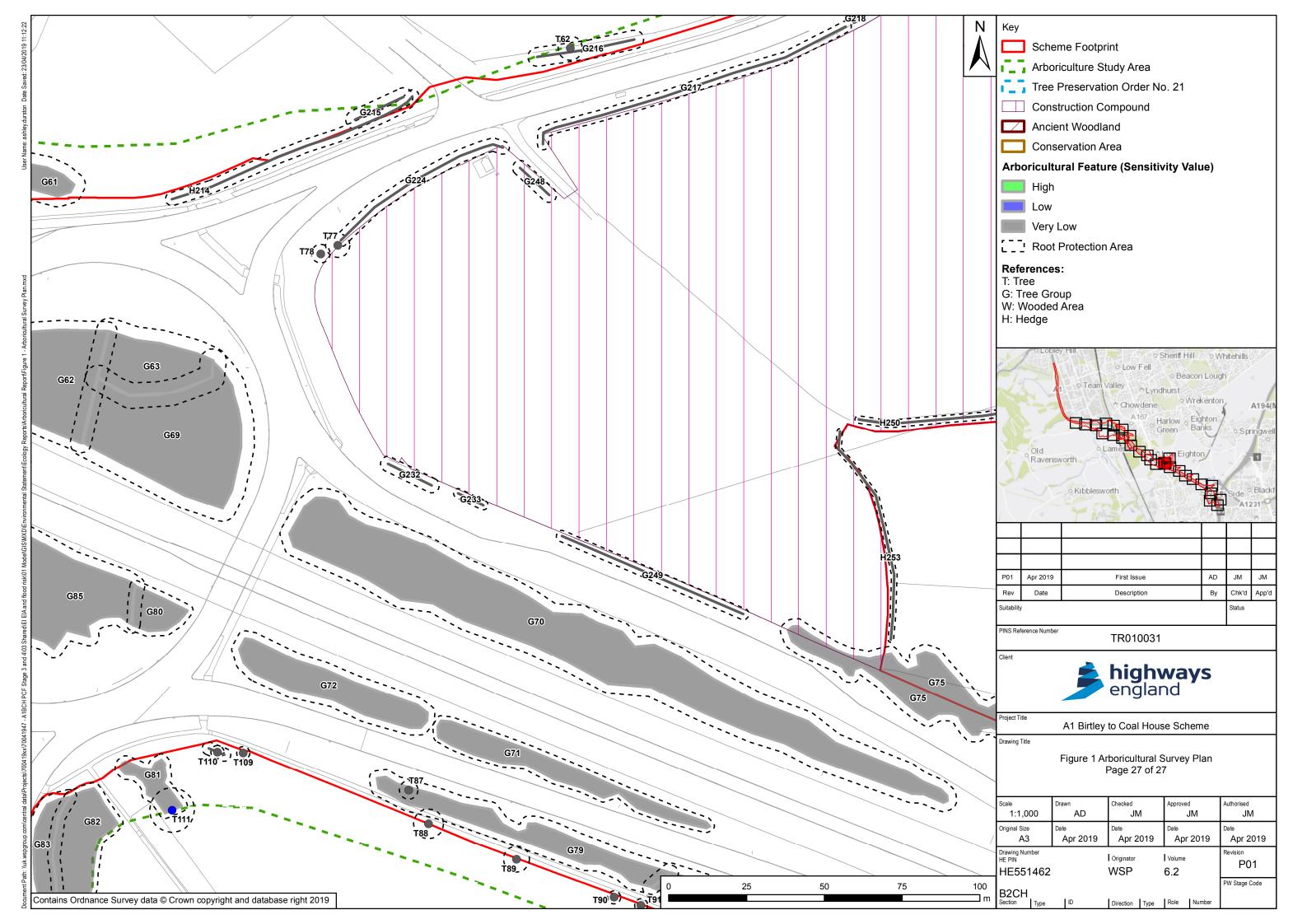








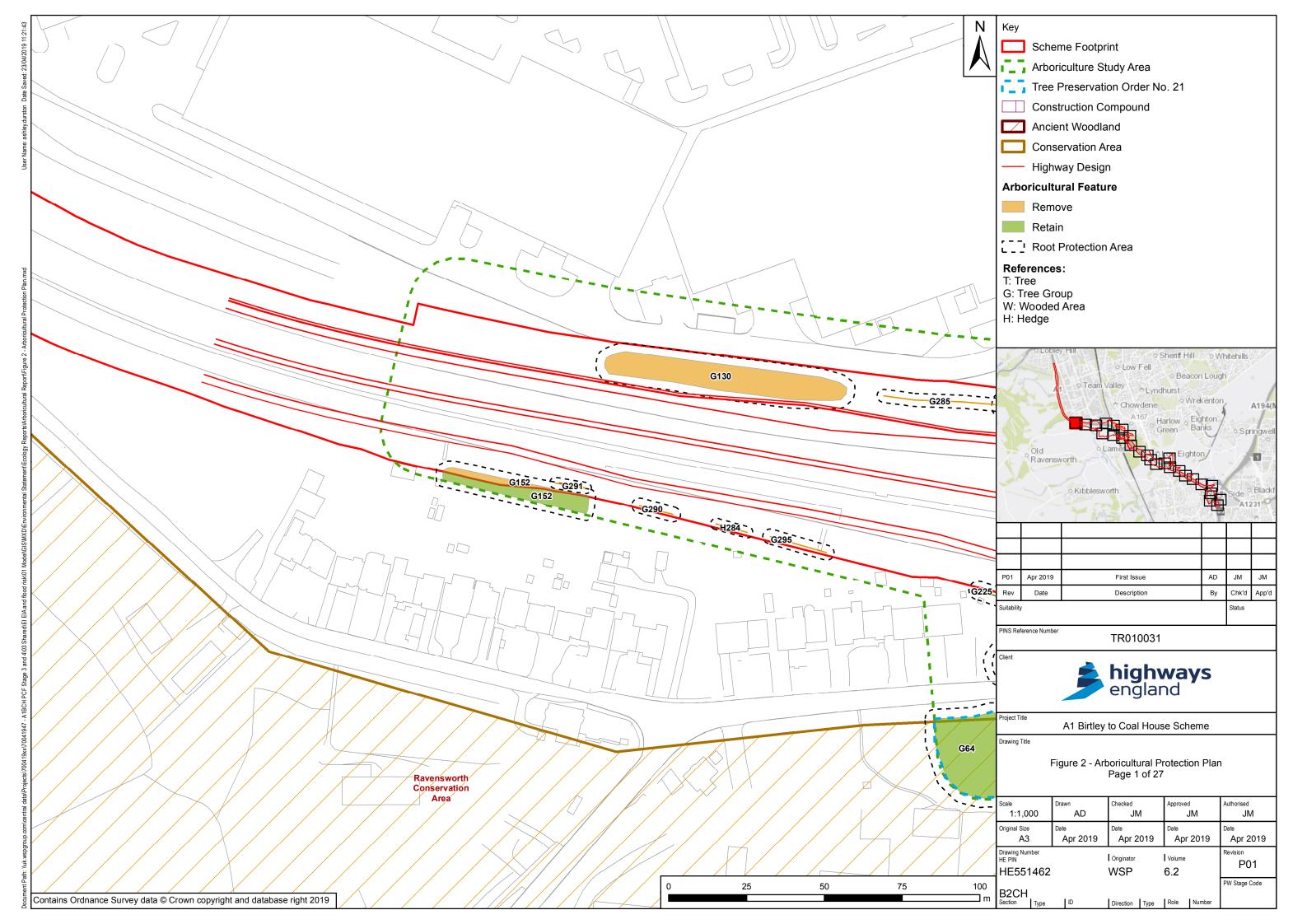


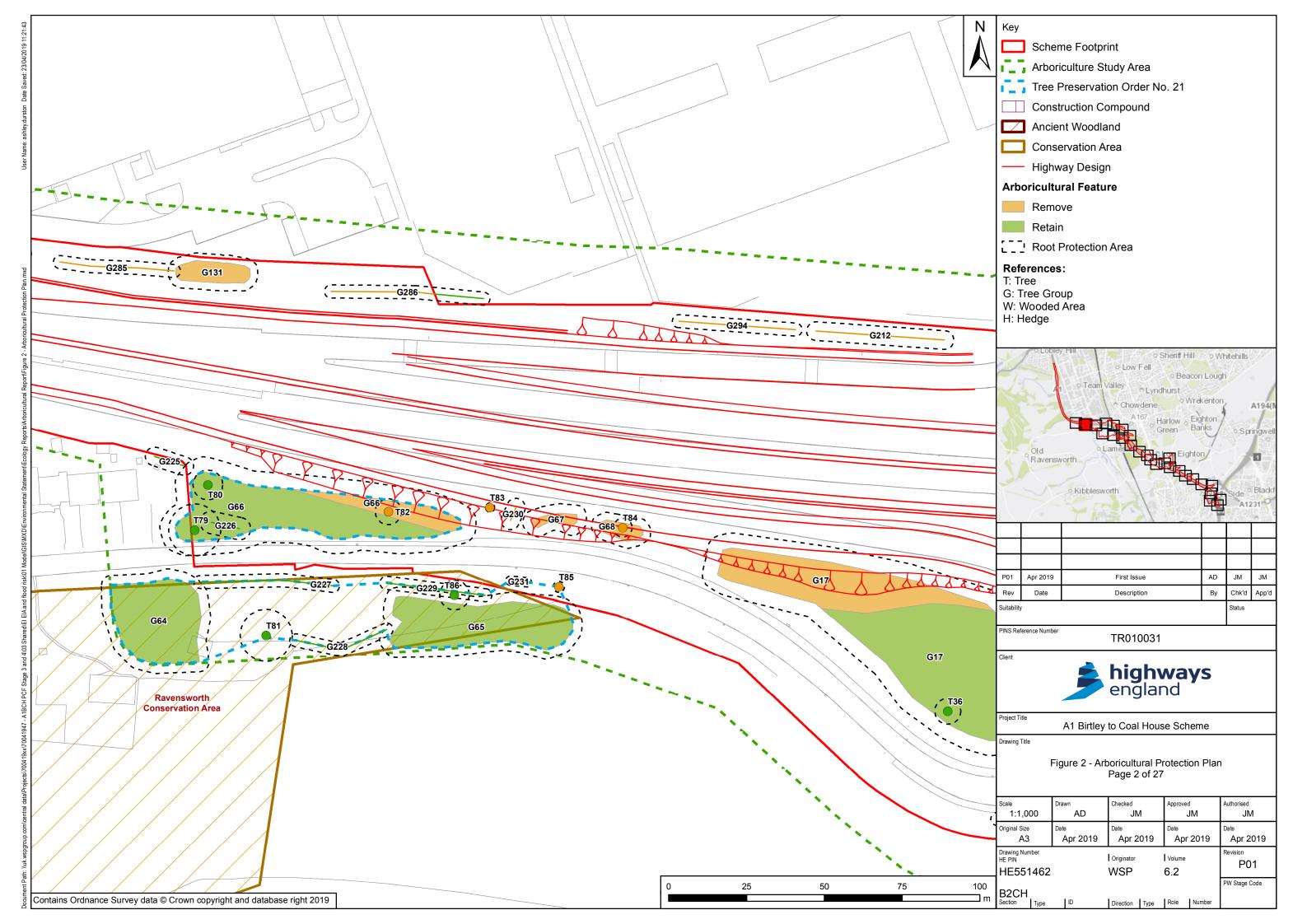


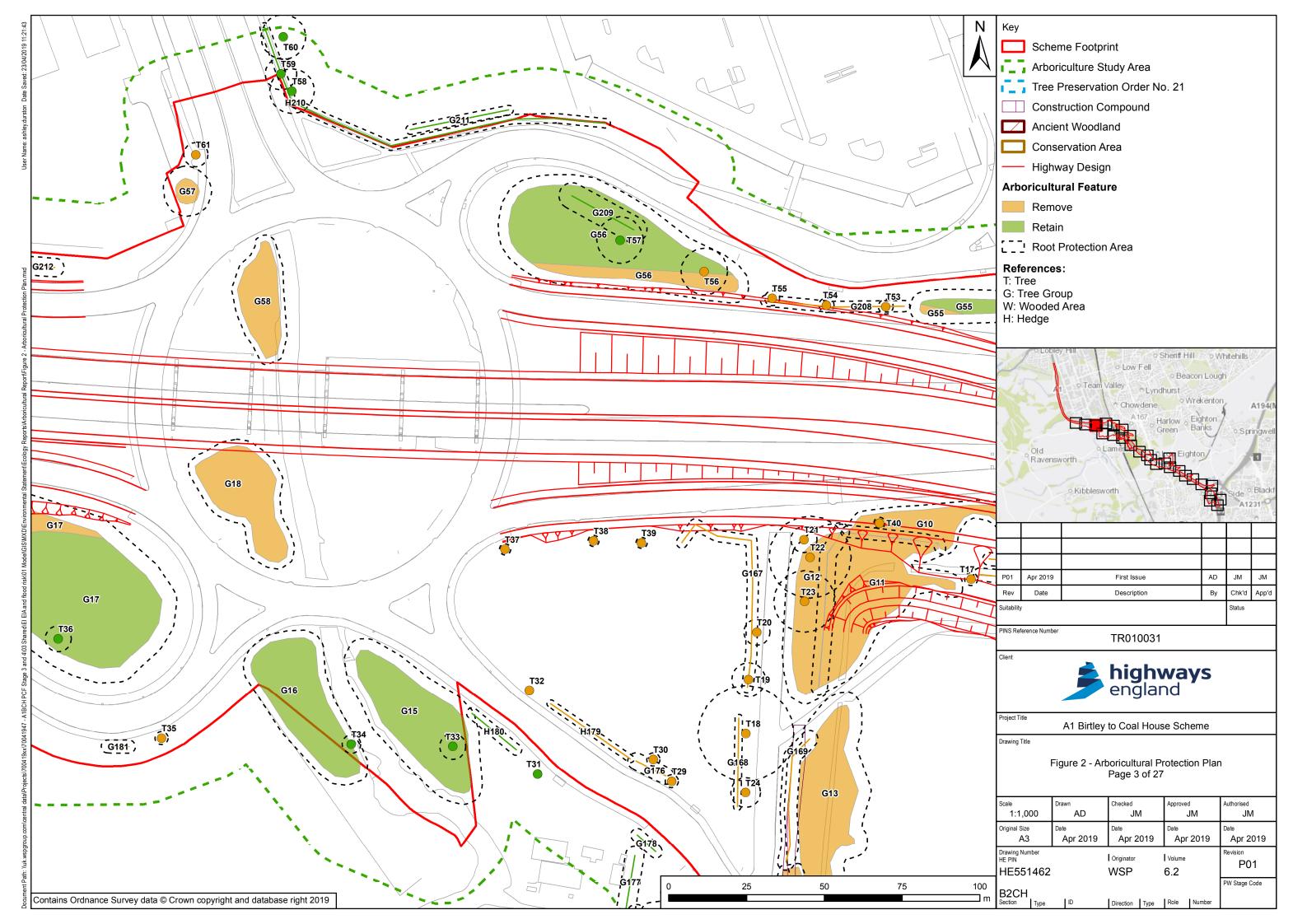
## **Appendix C**

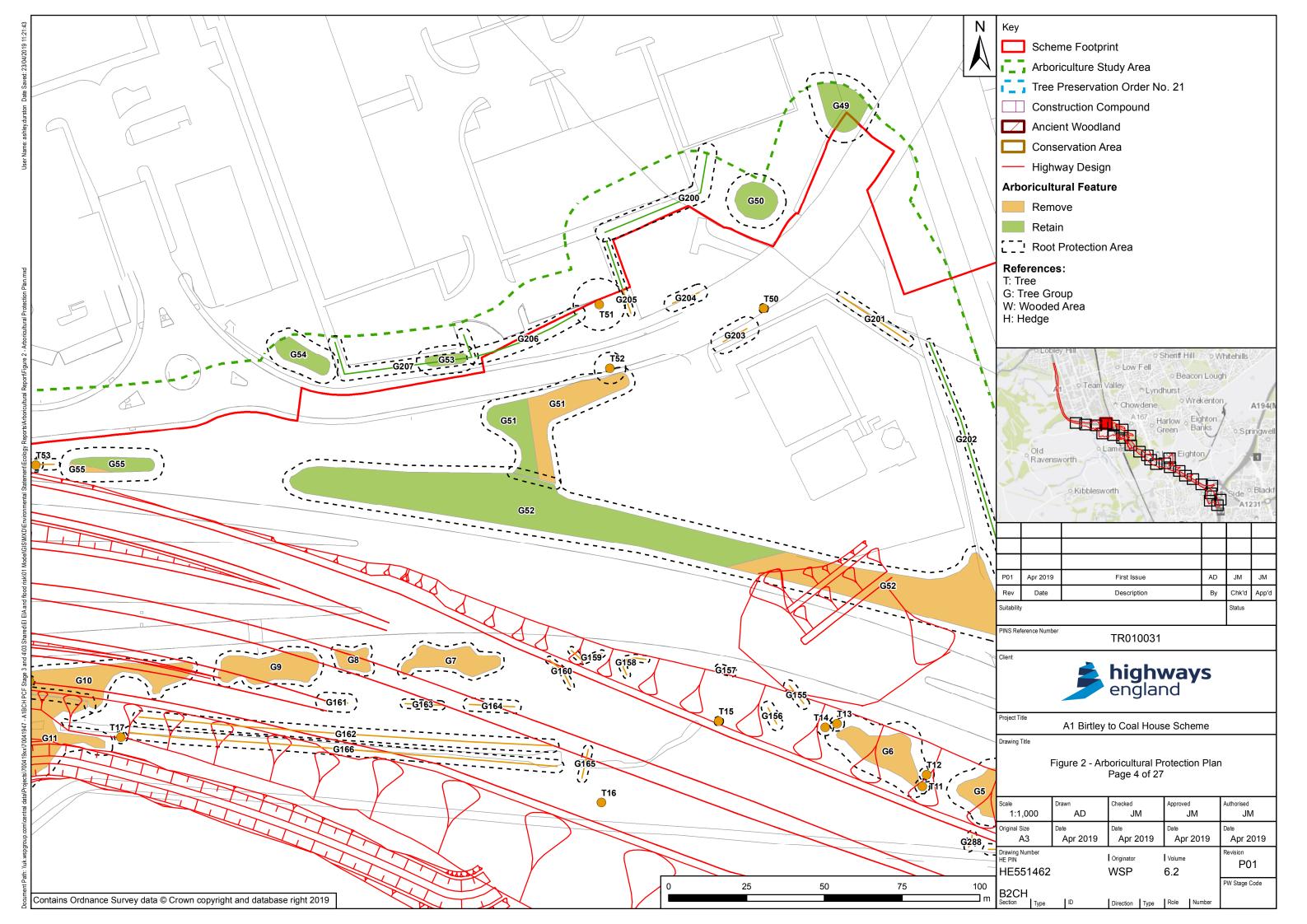
ARBORICULTURAL PROTECTION PLANS

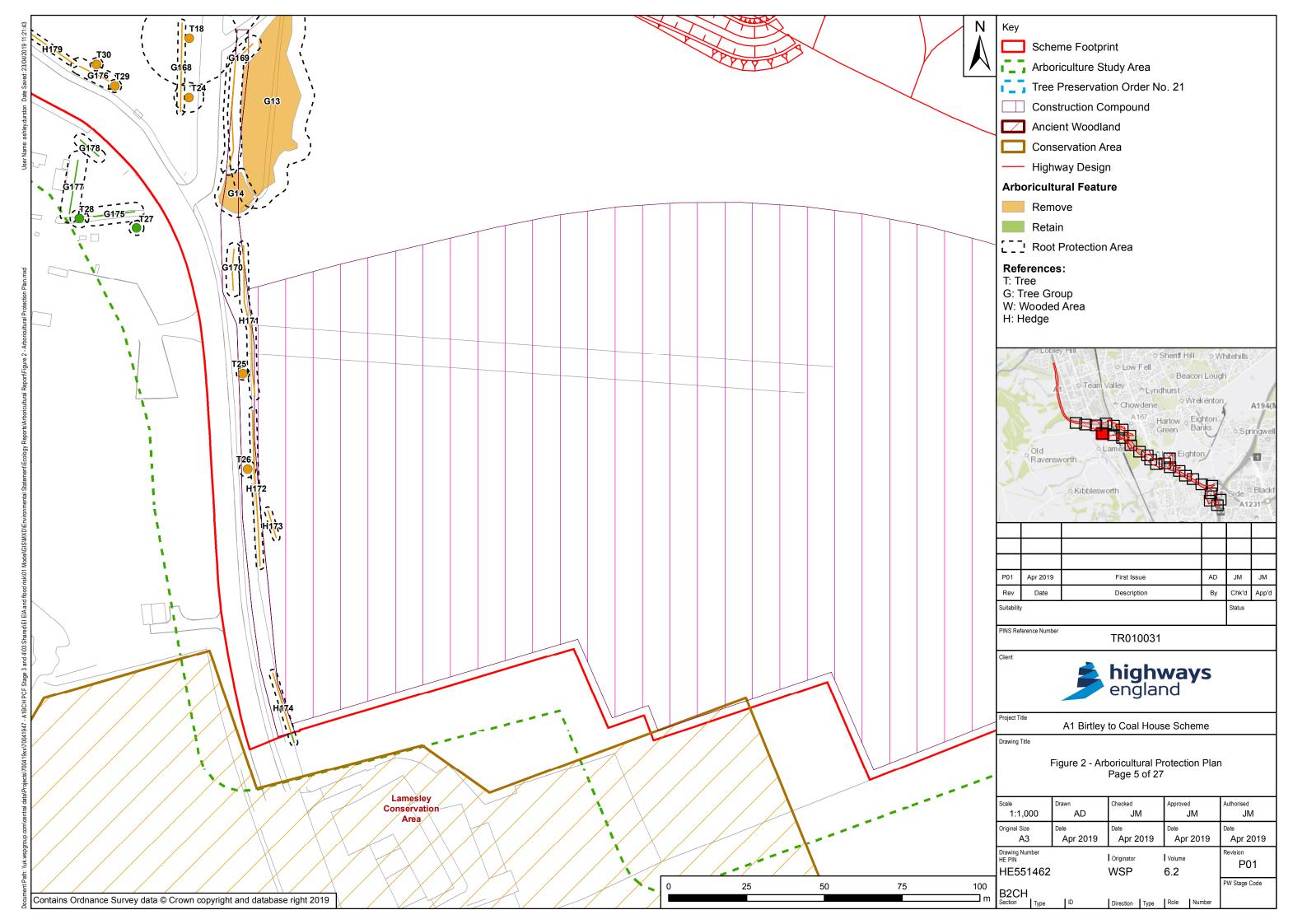


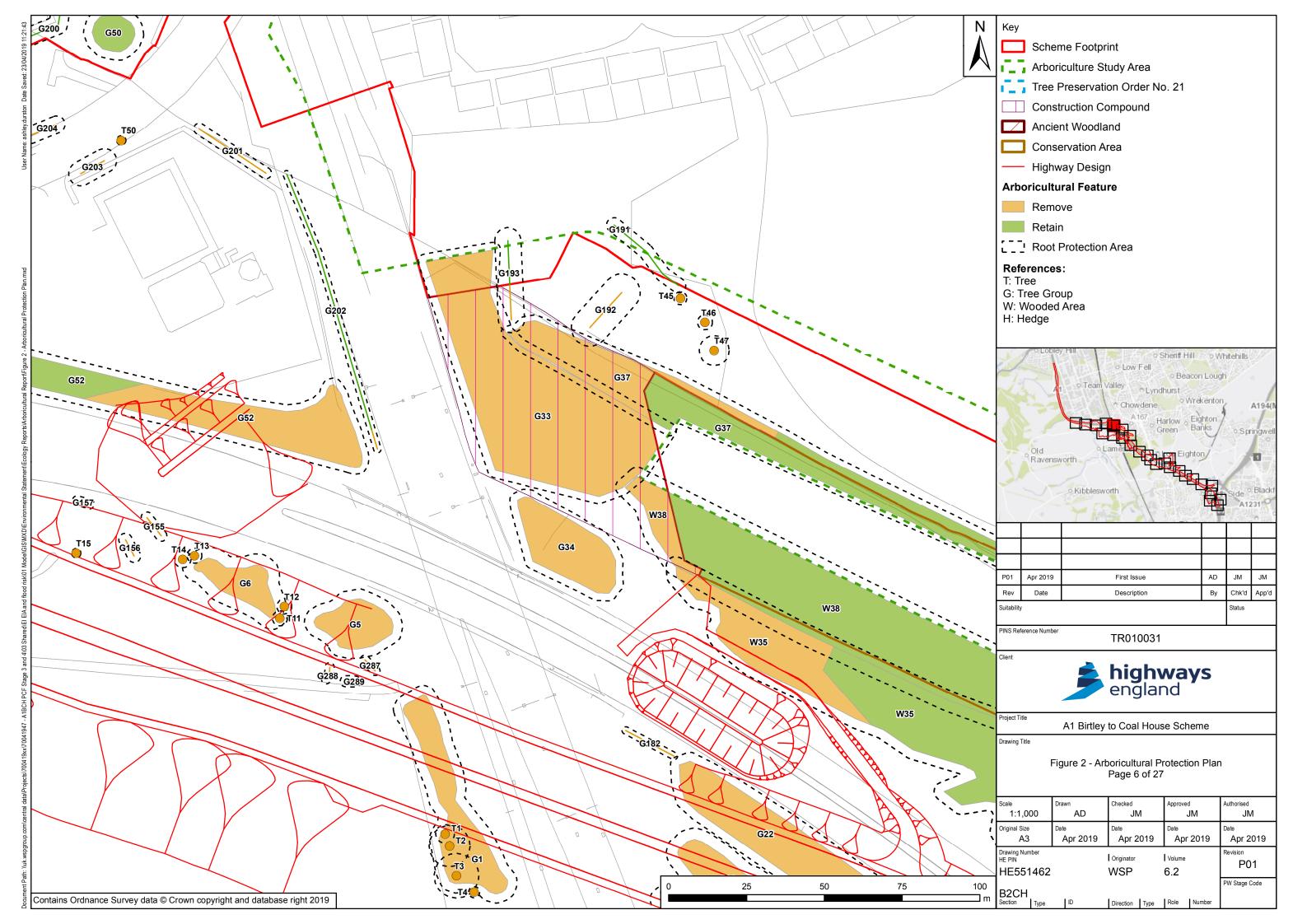


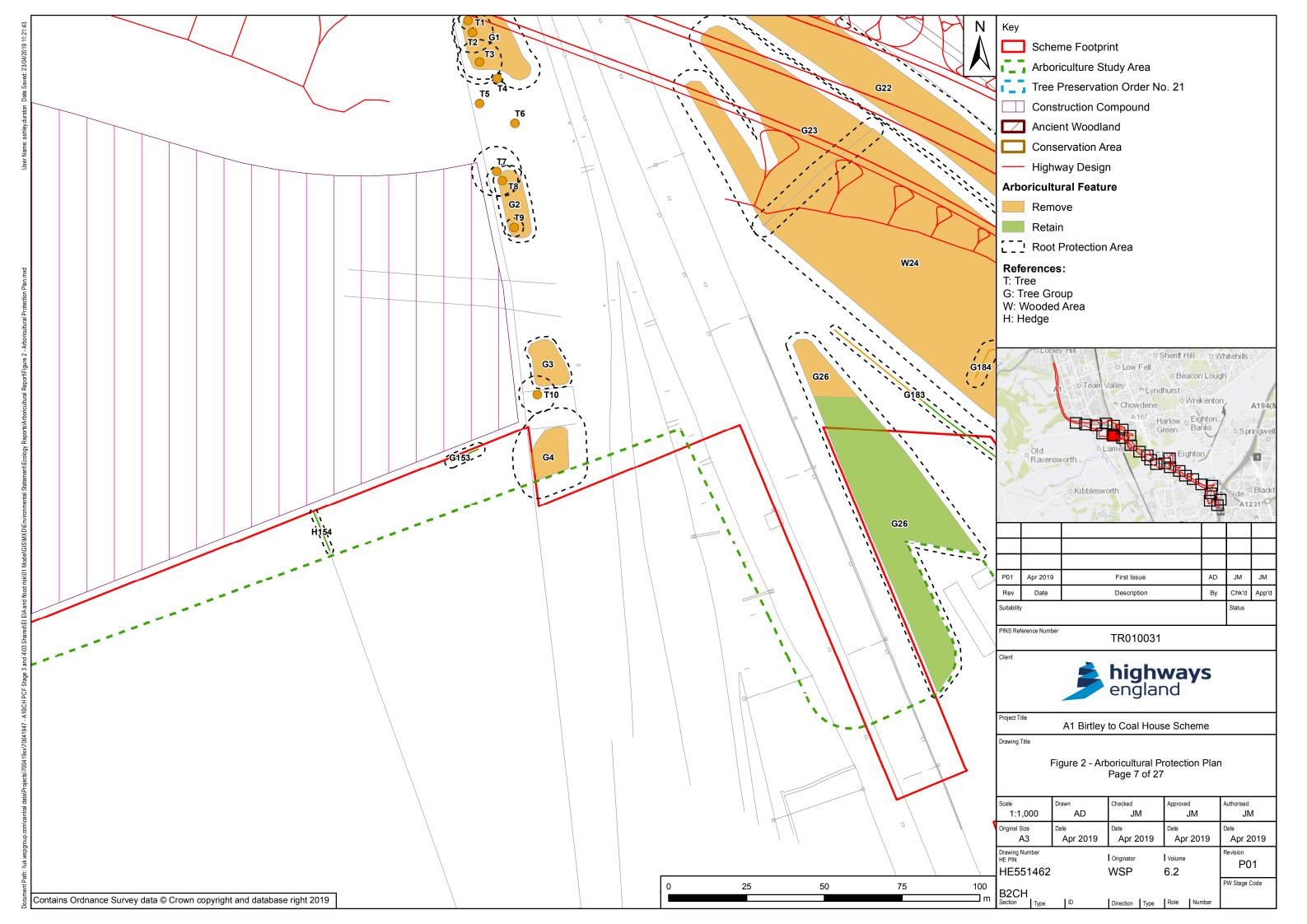


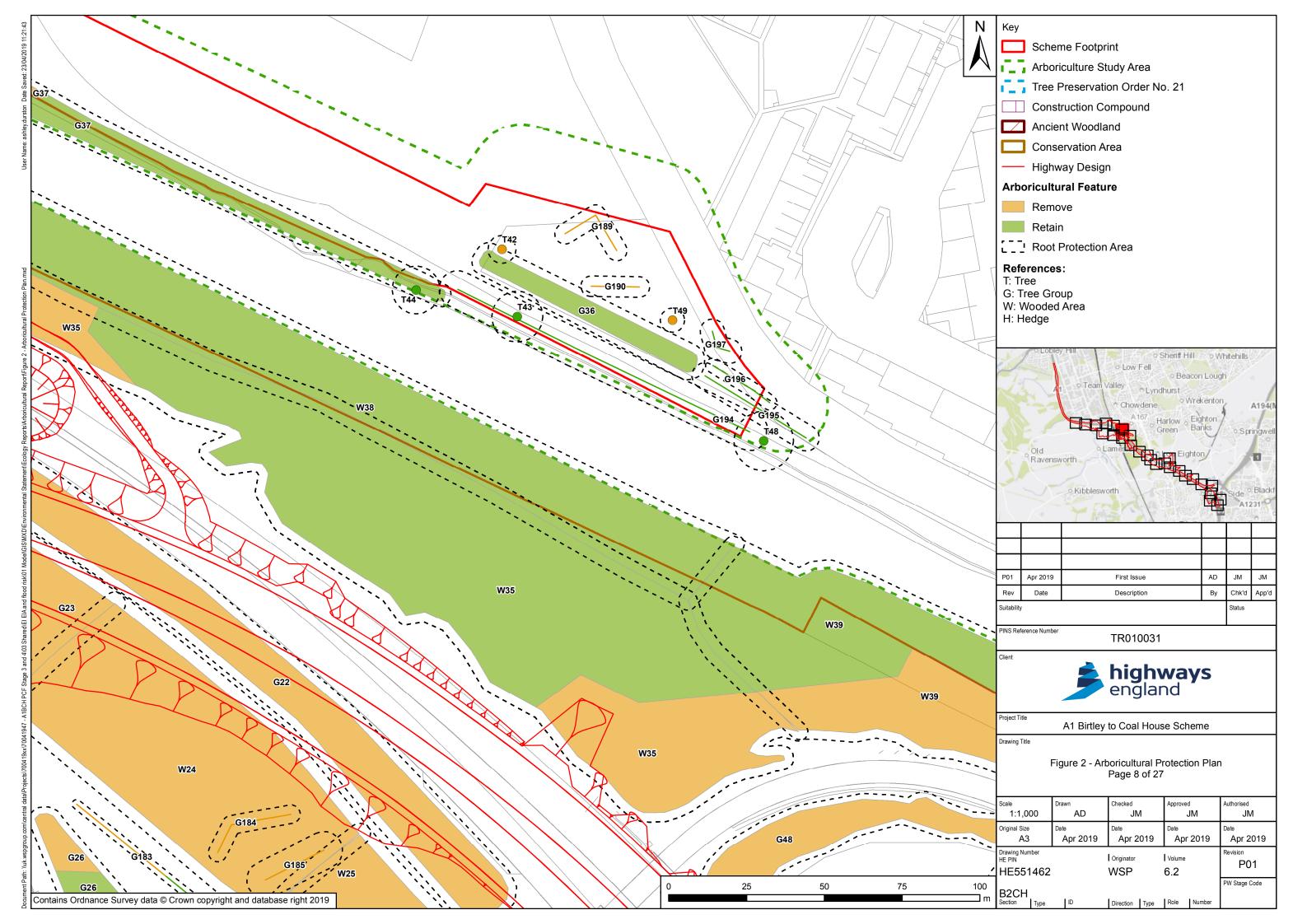


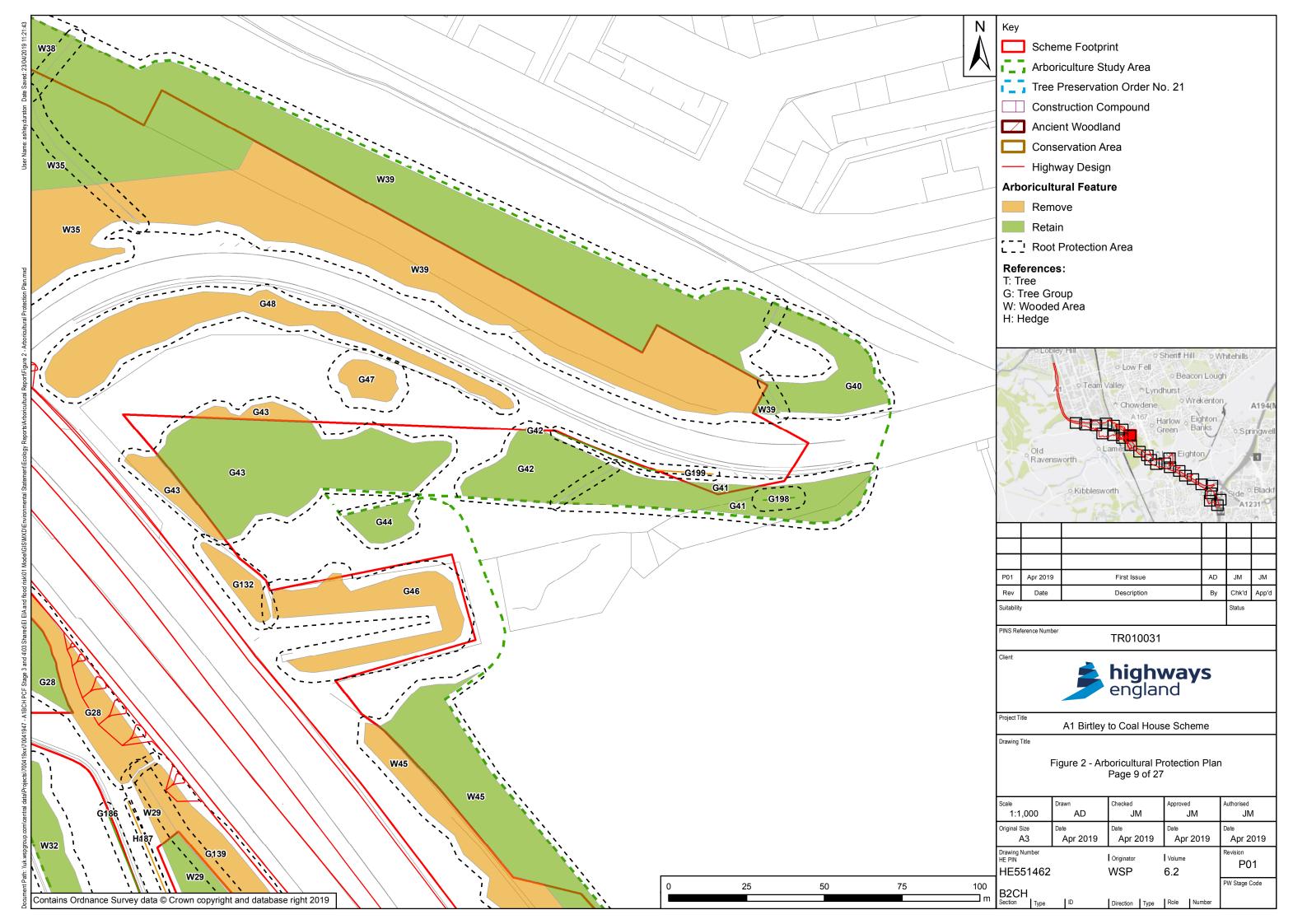


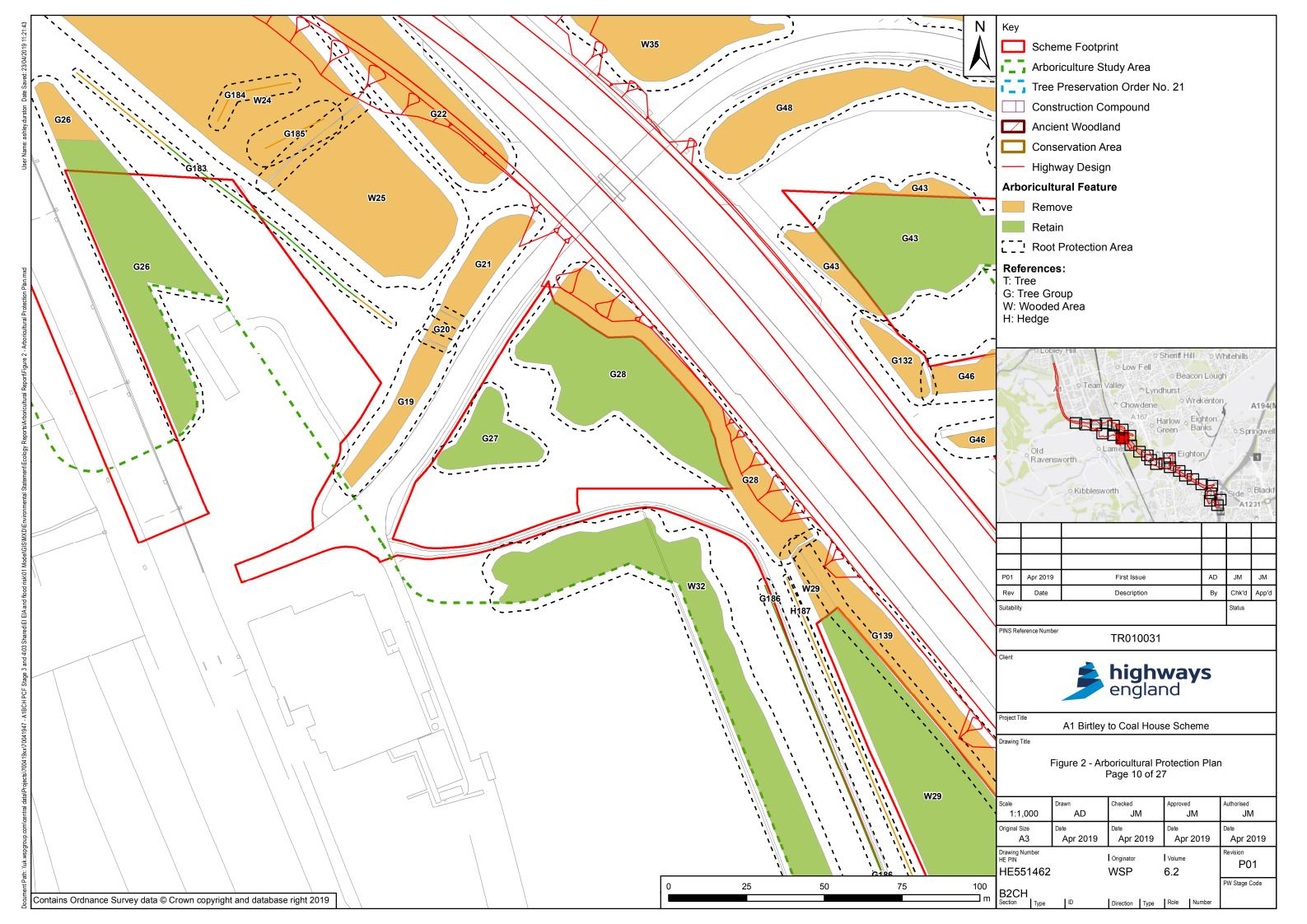


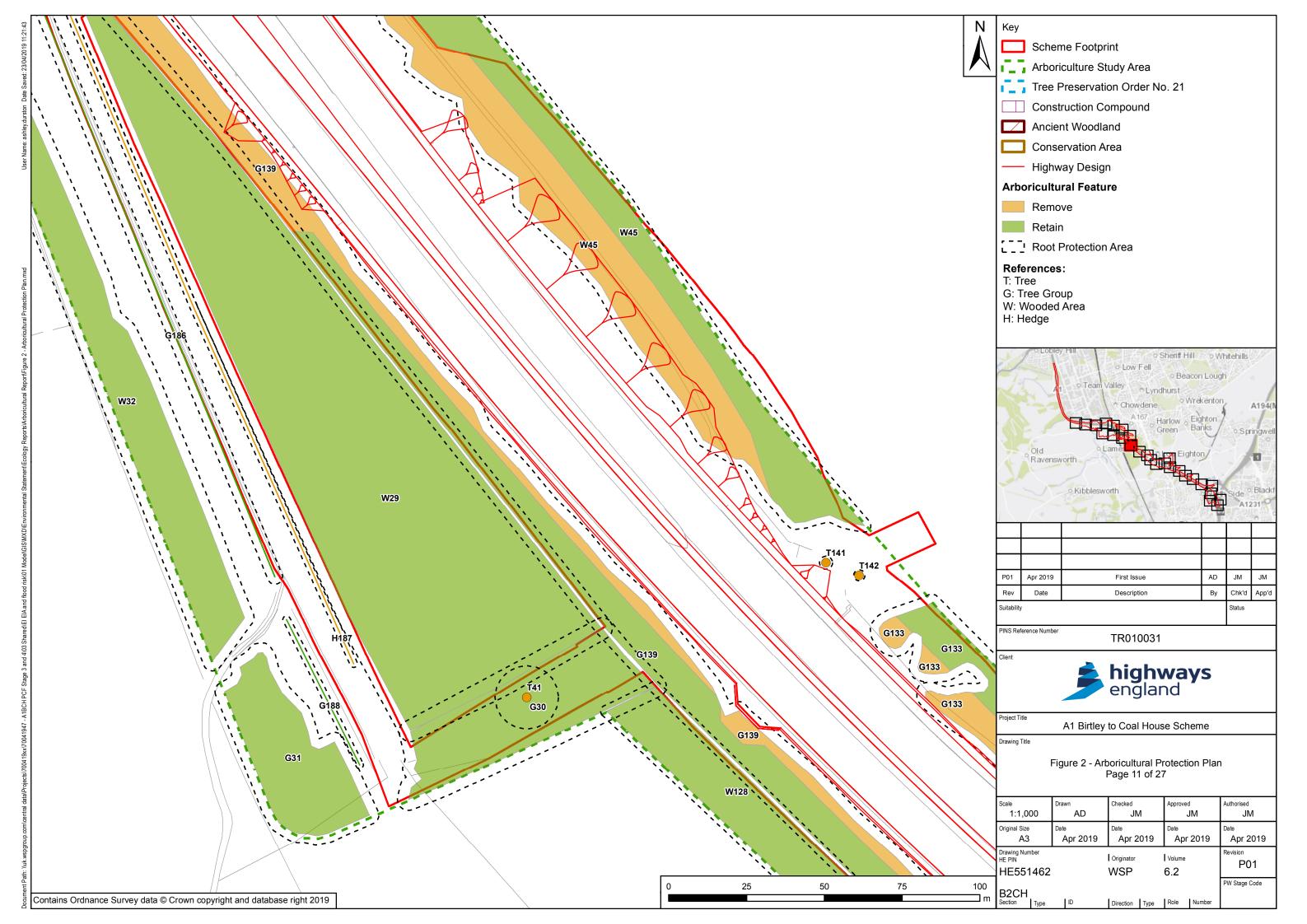


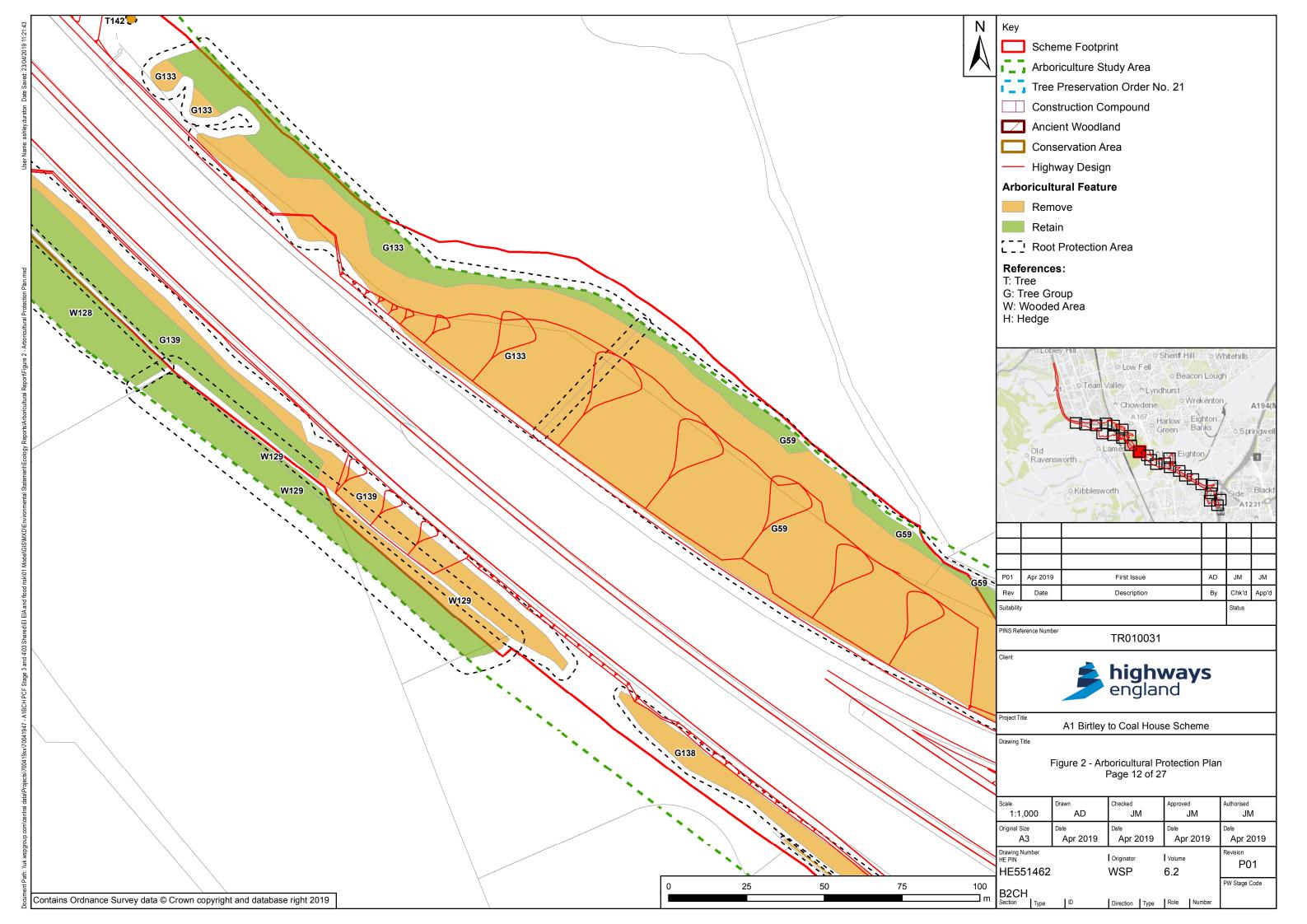


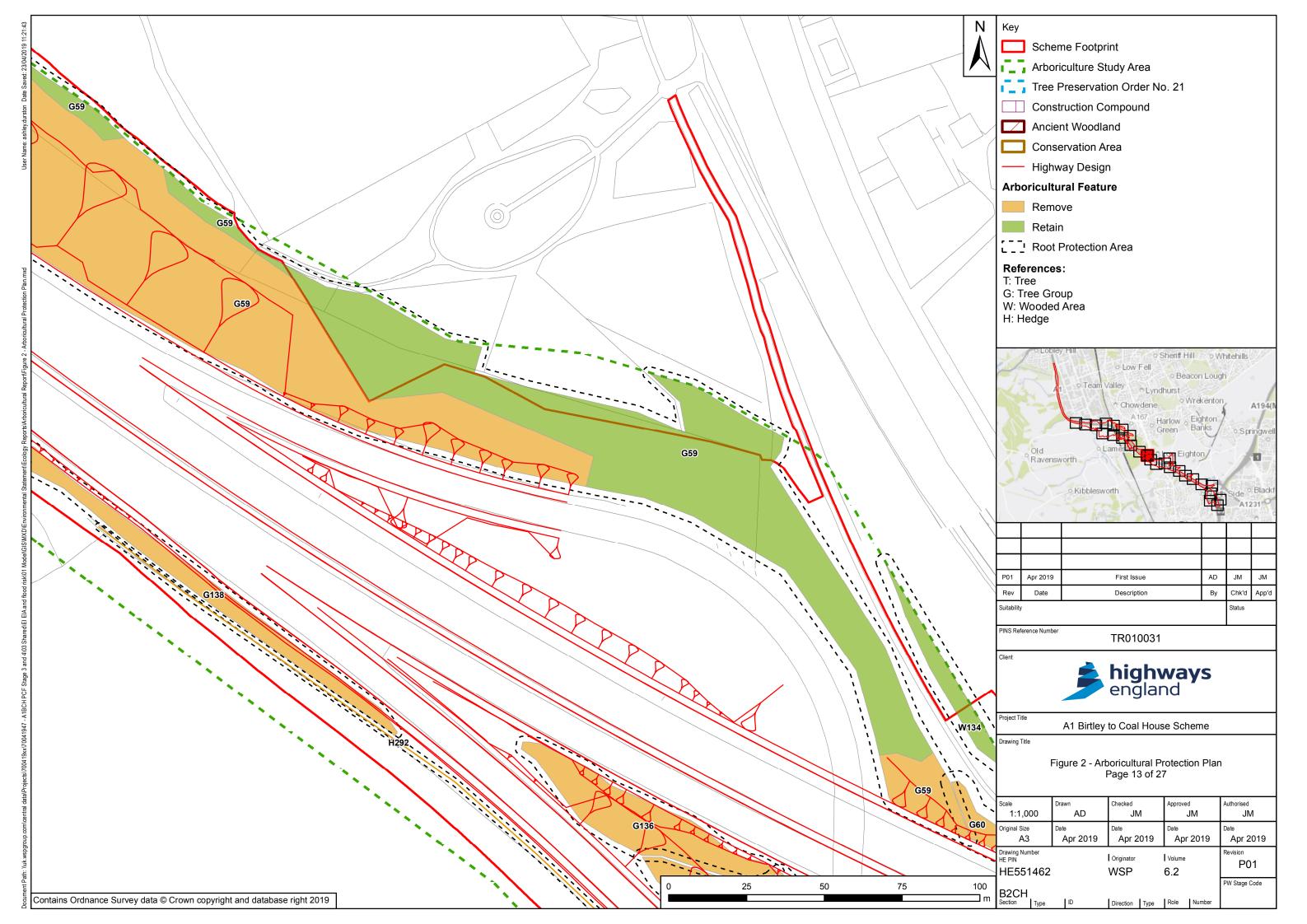


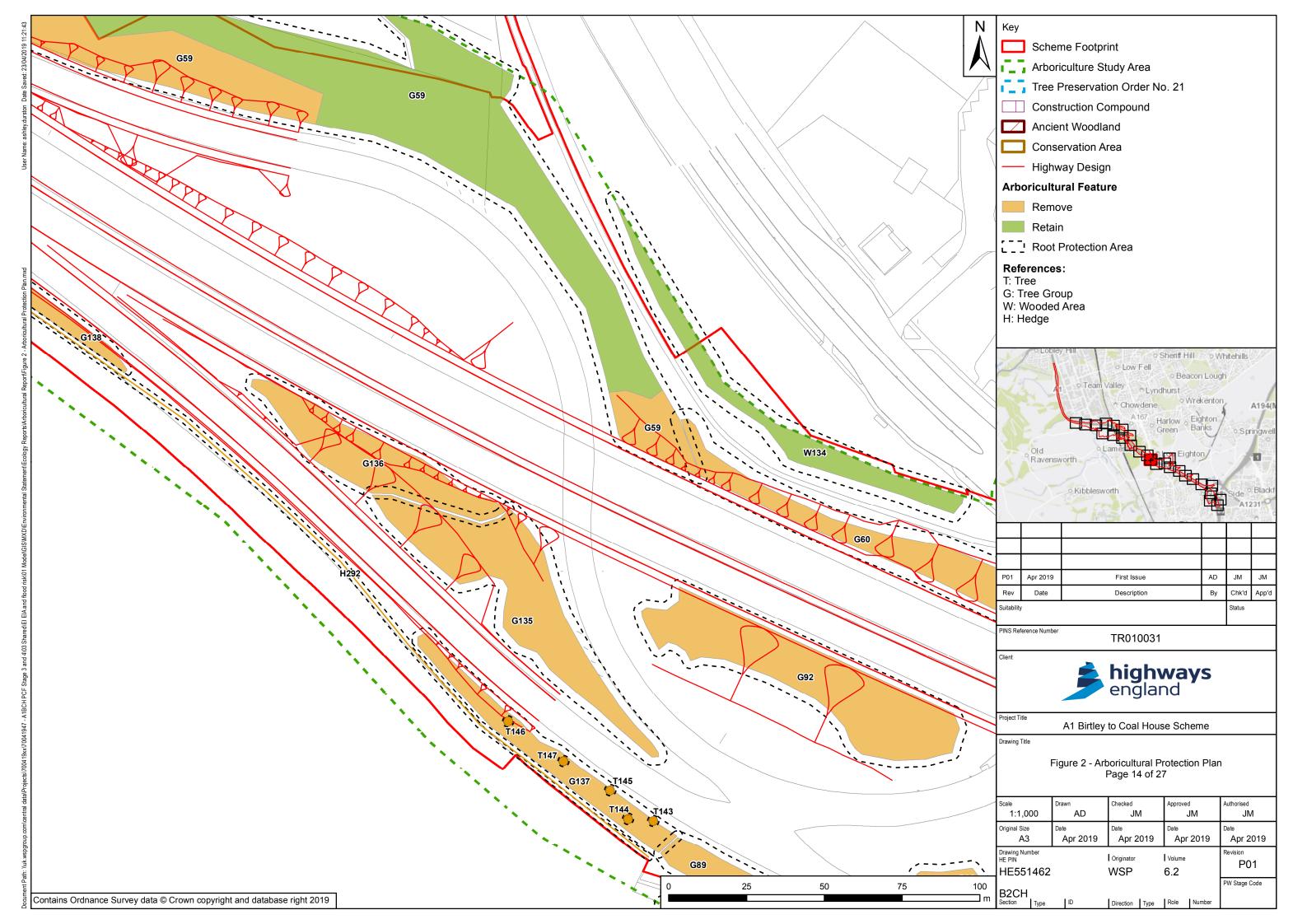


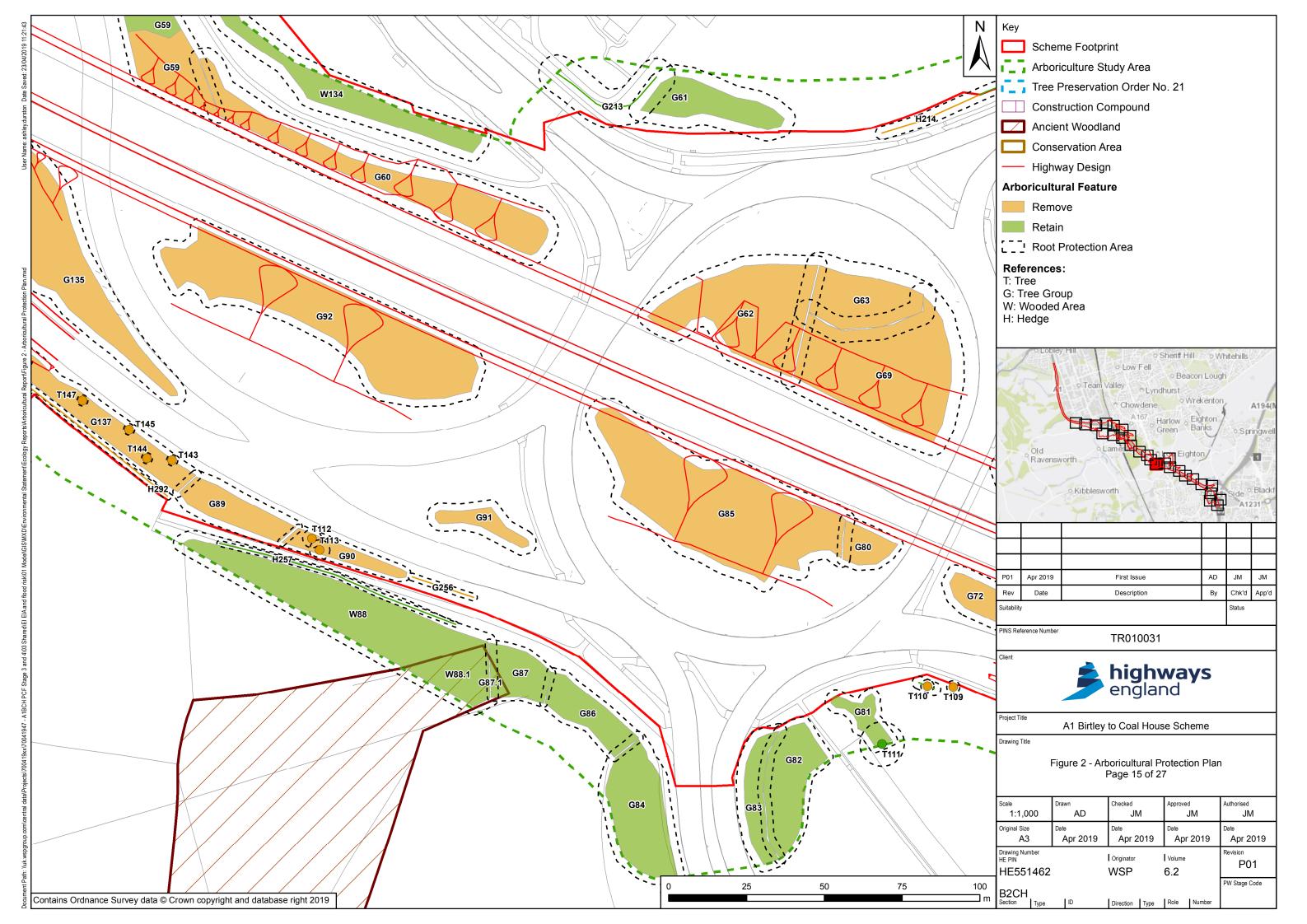


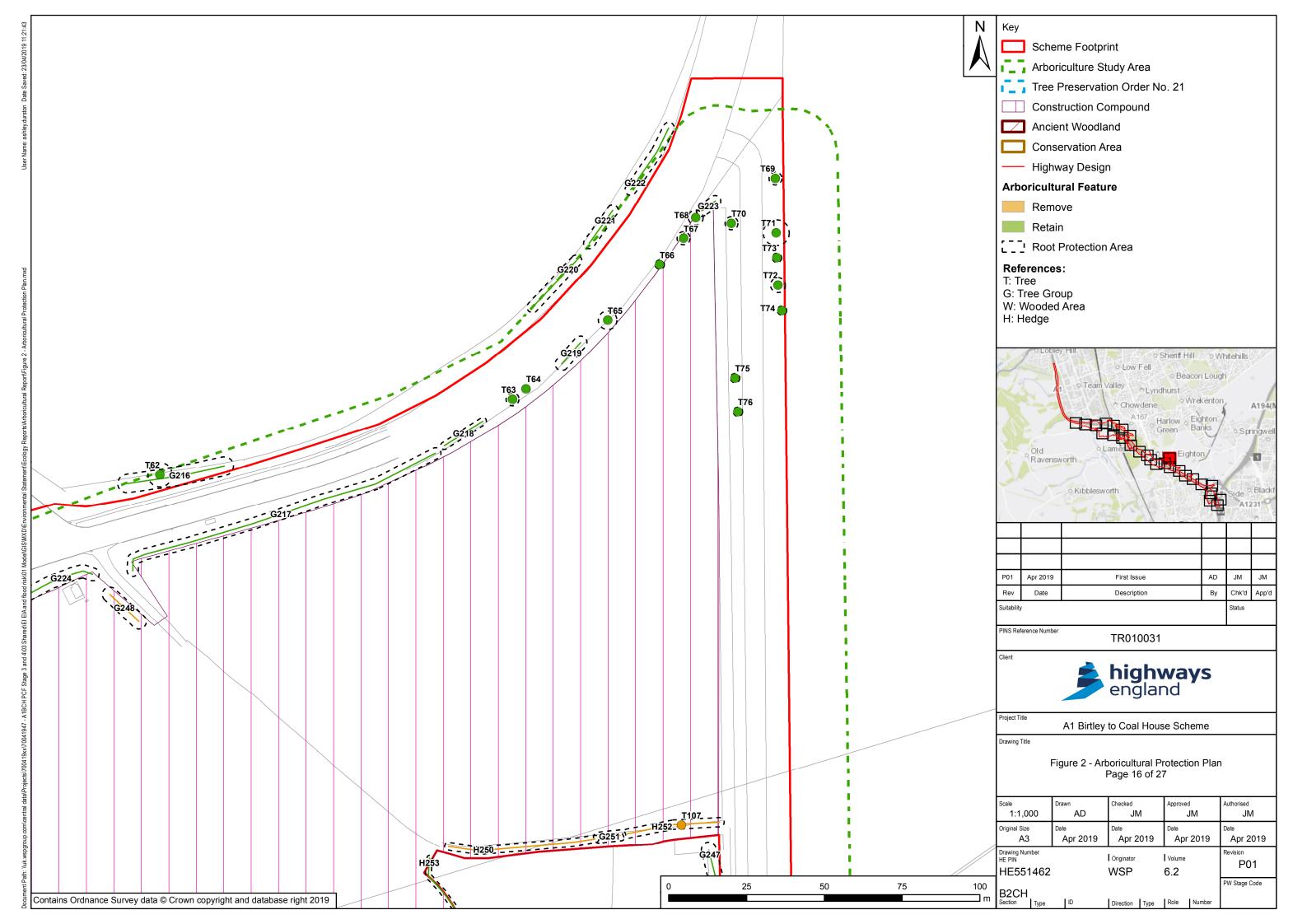


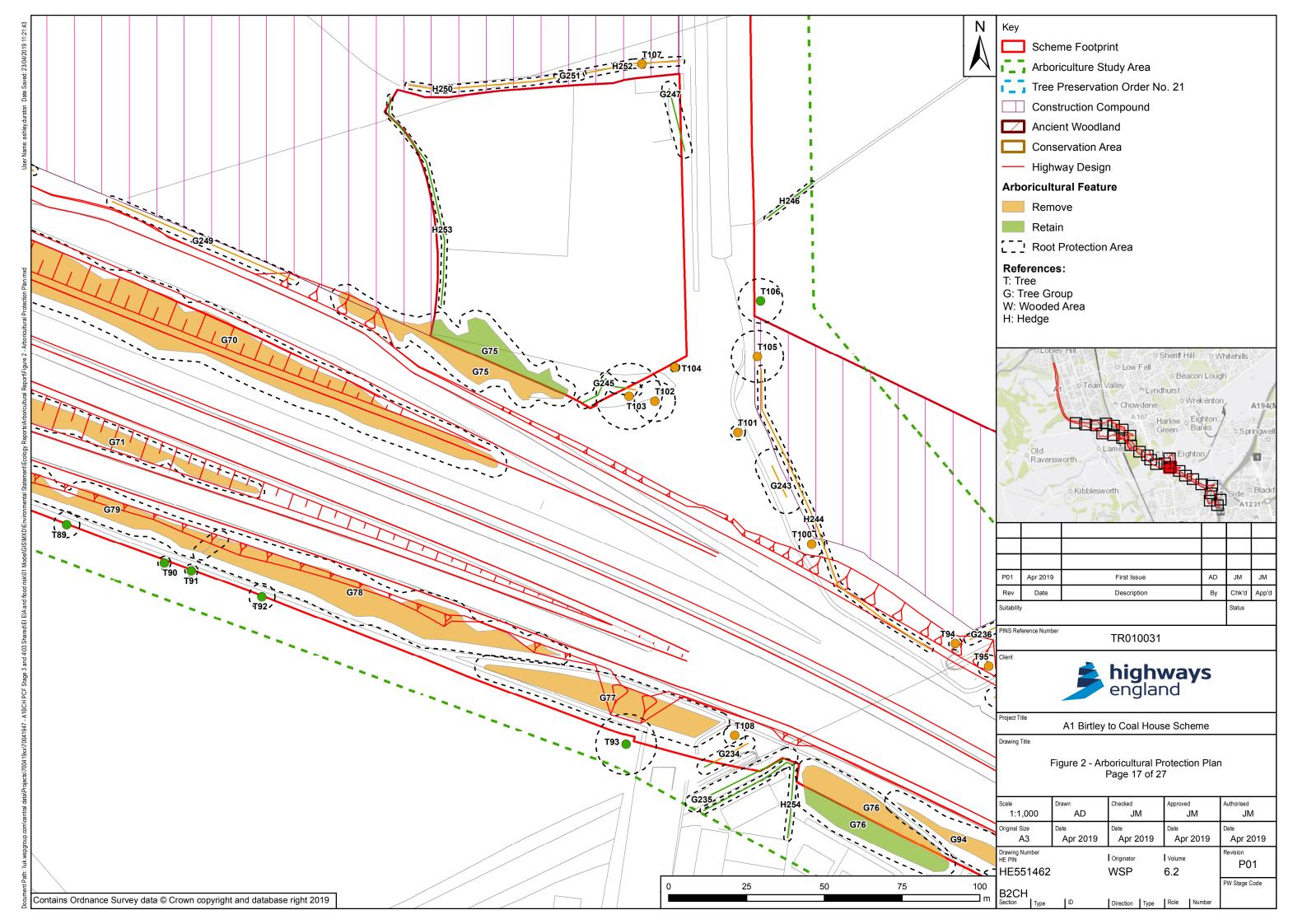


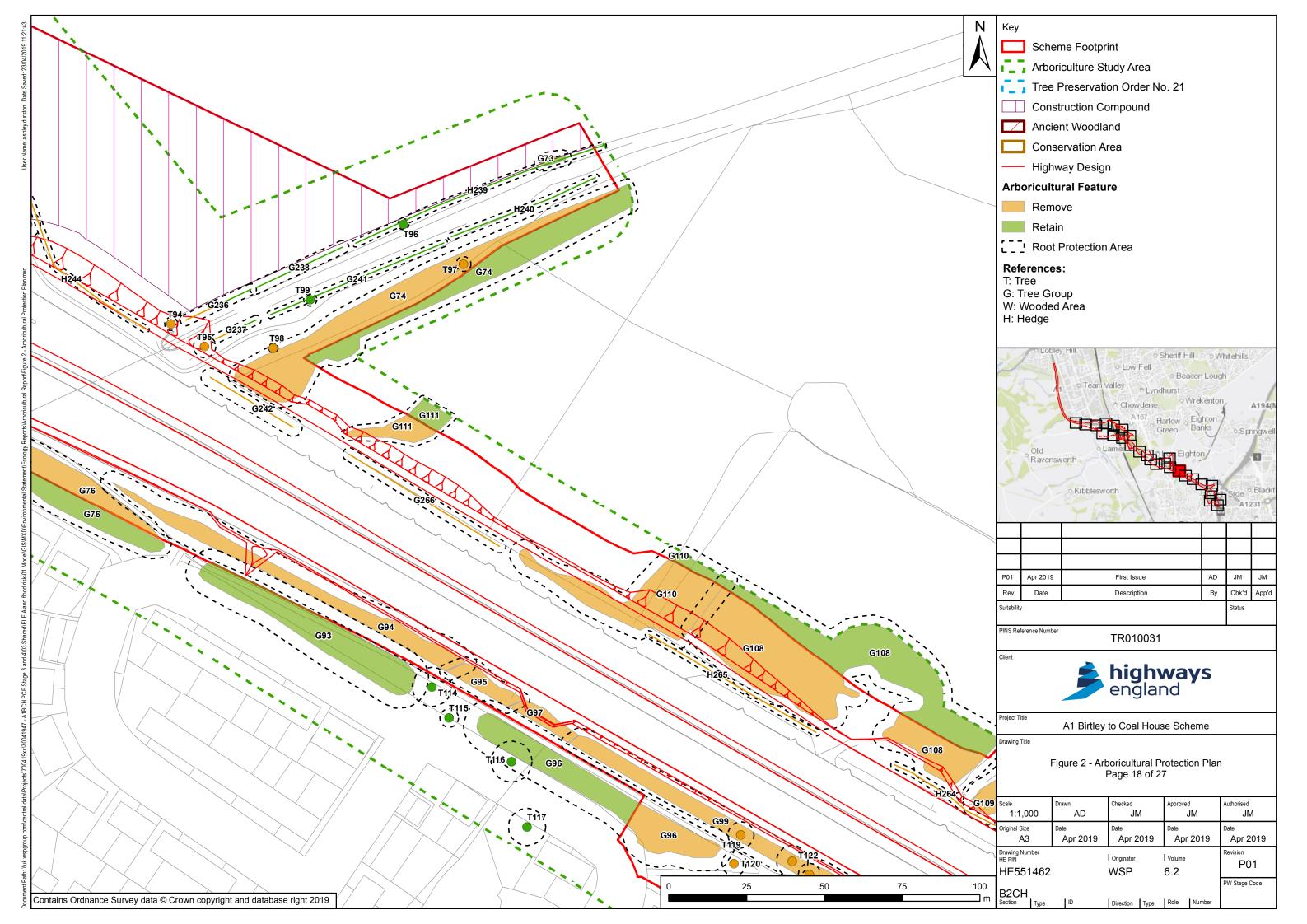


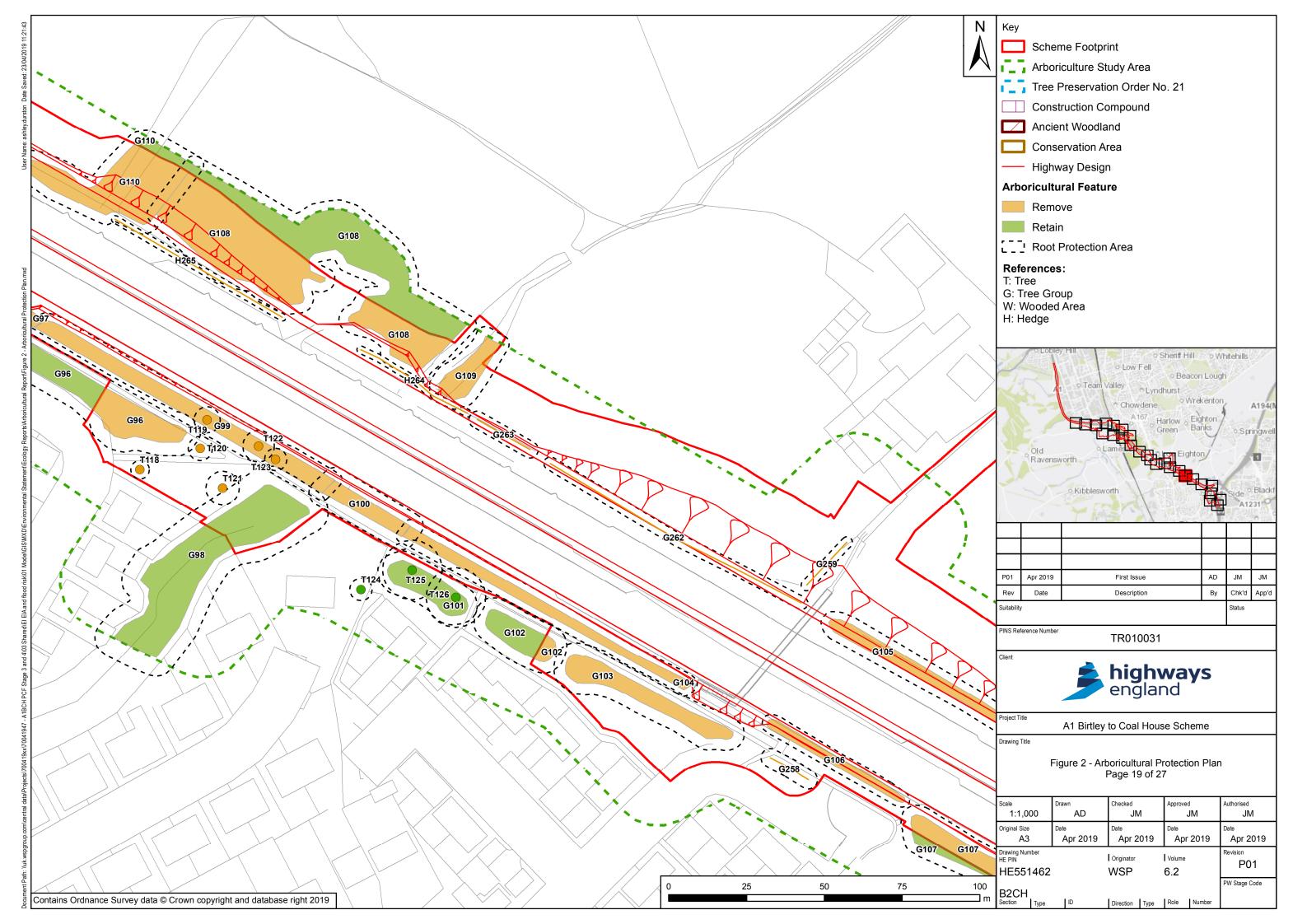


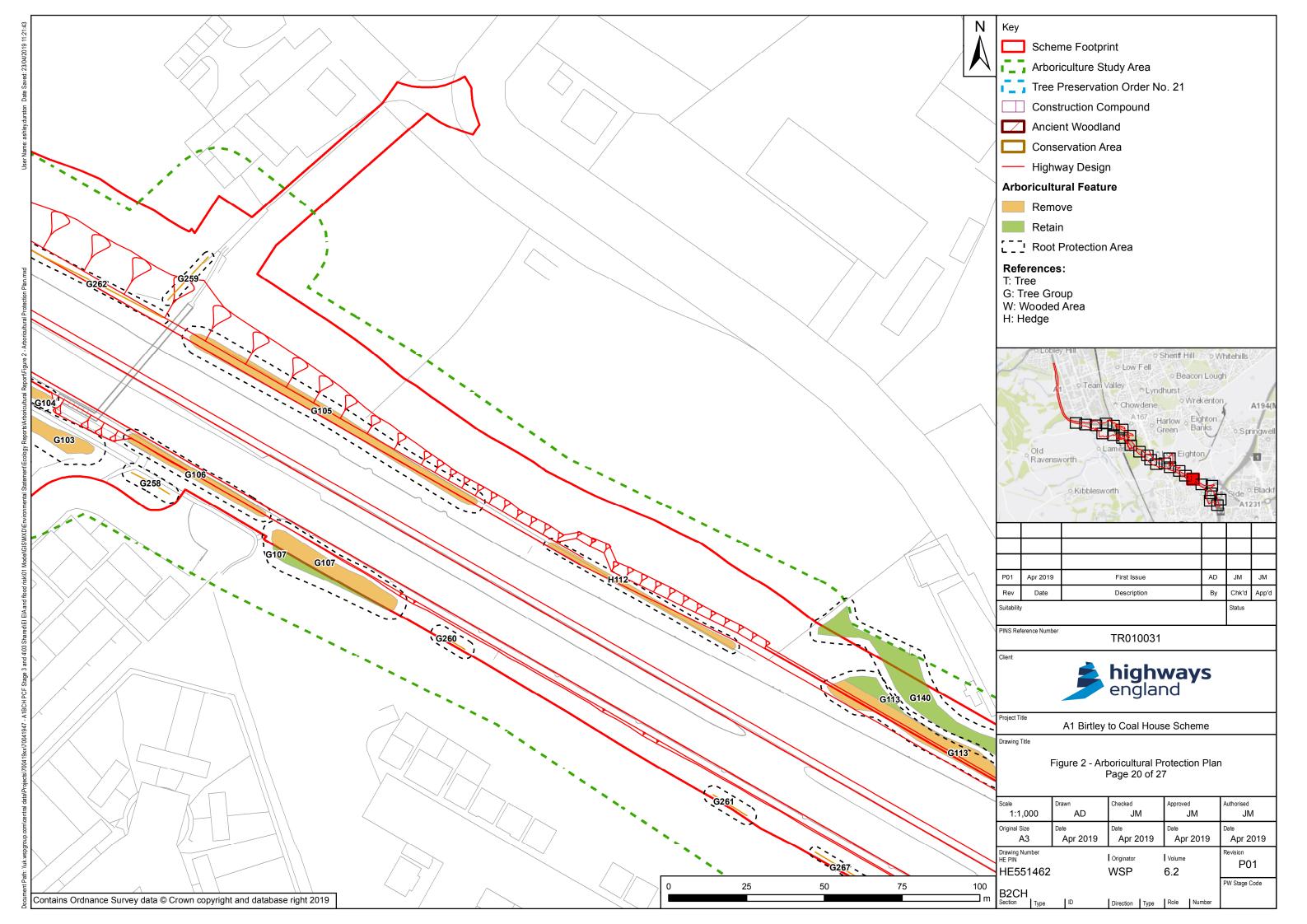


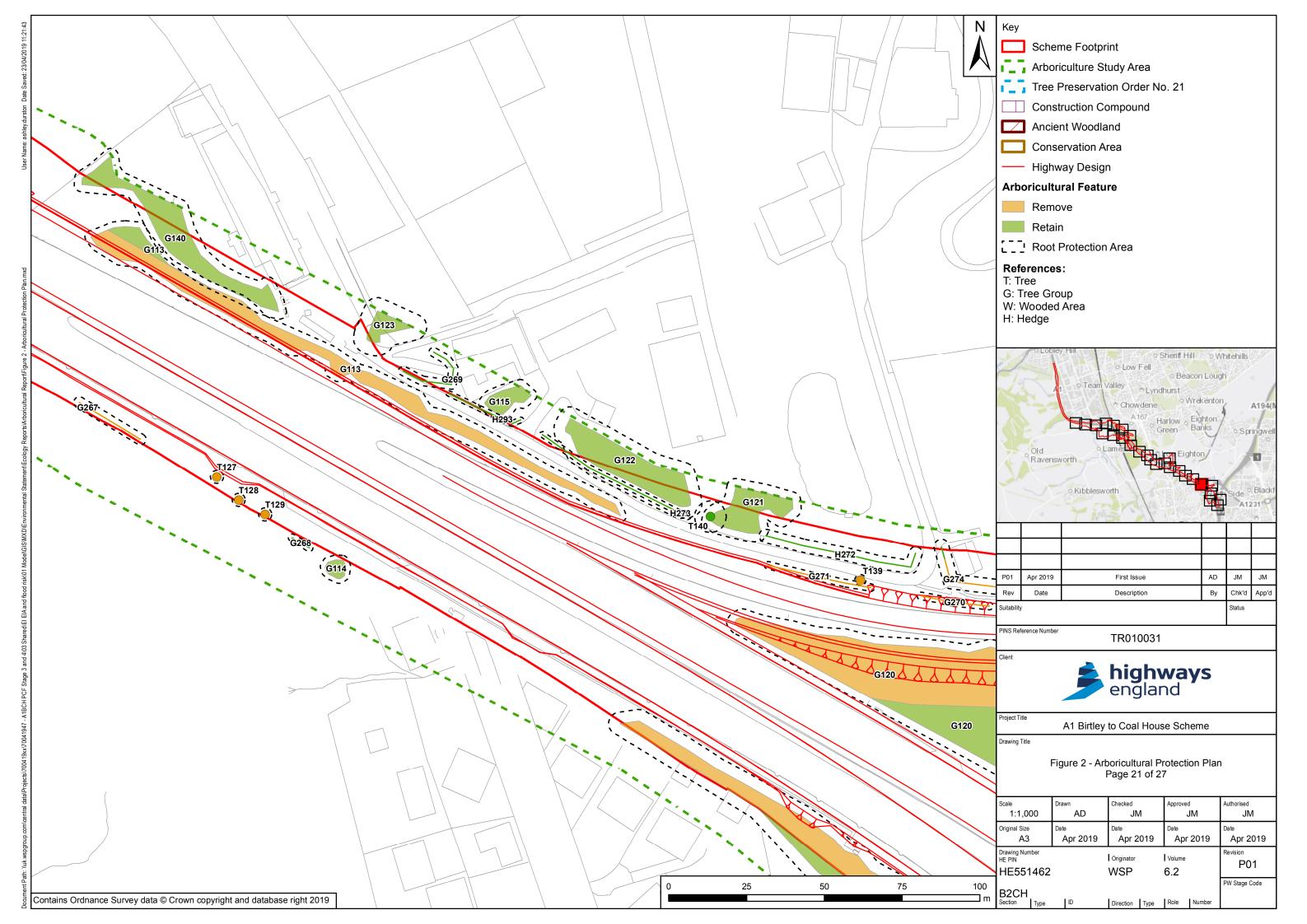


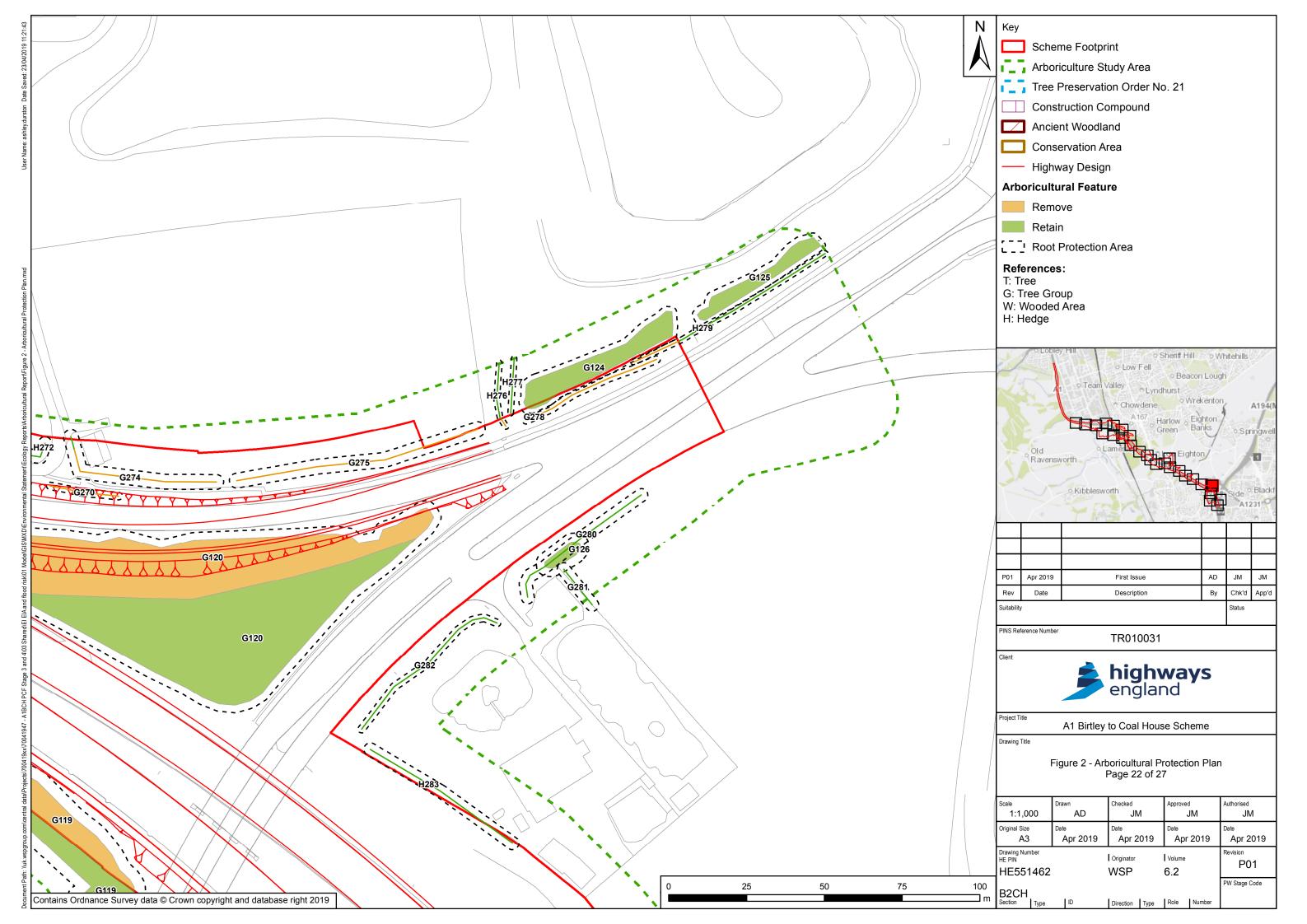


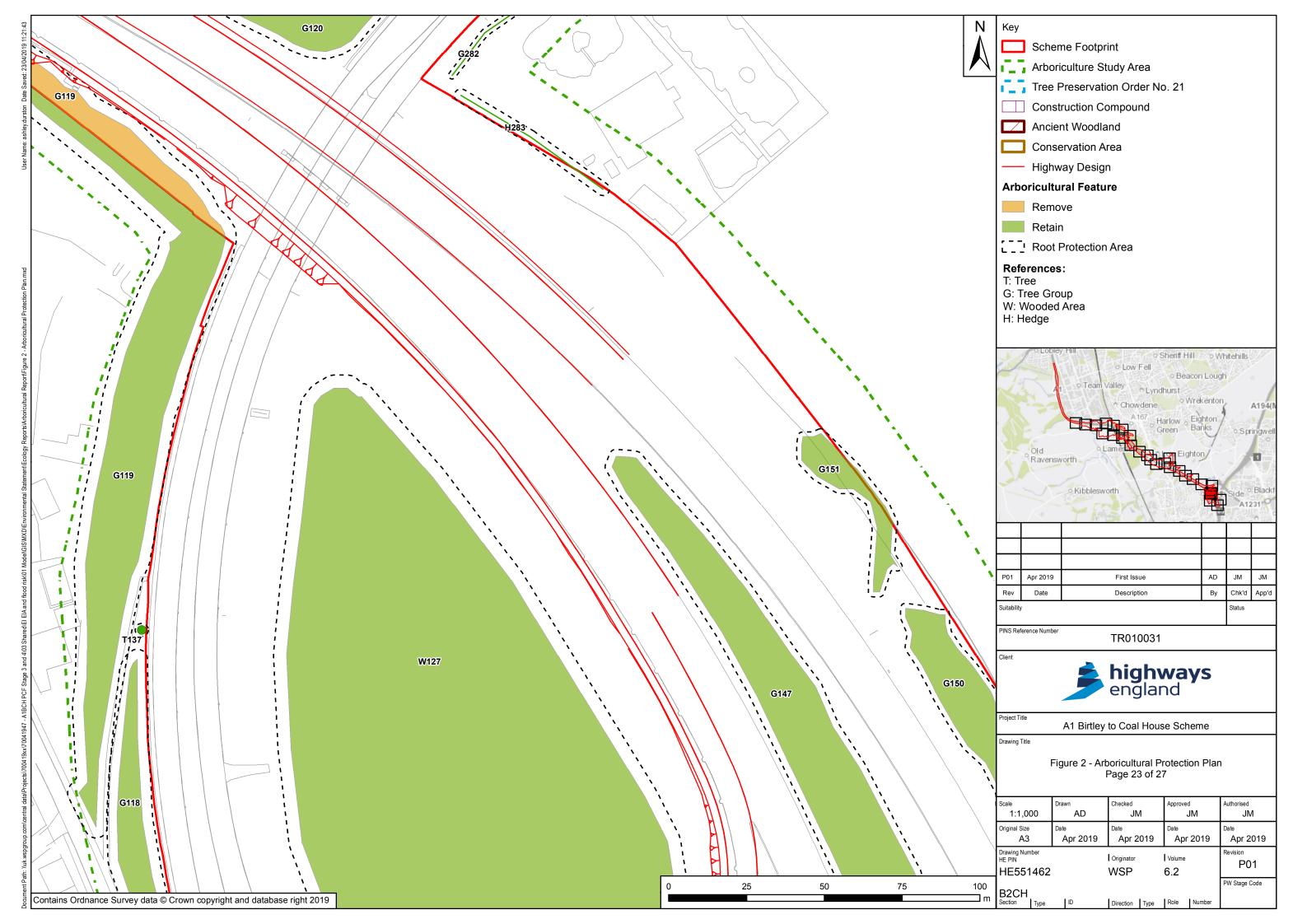


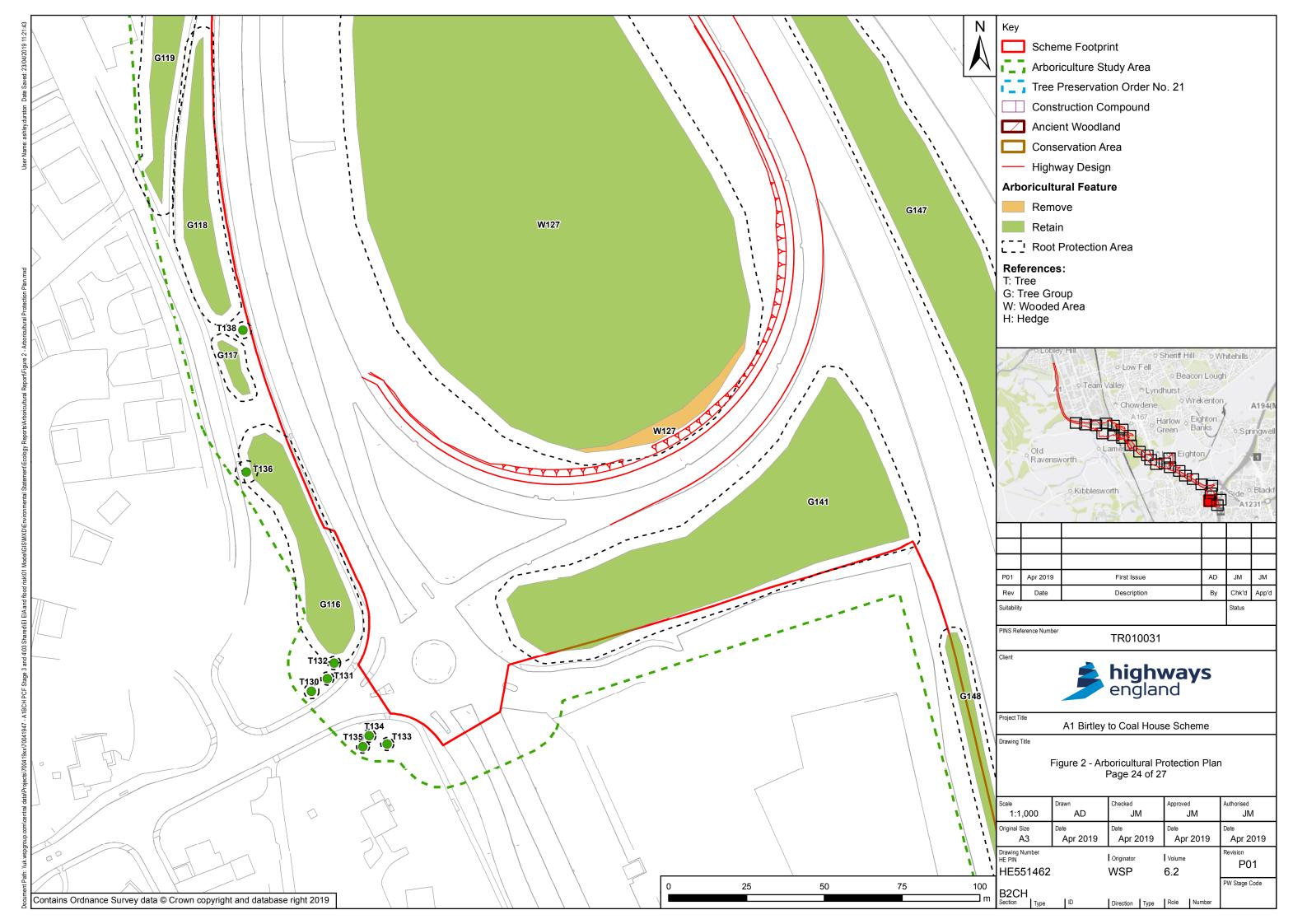


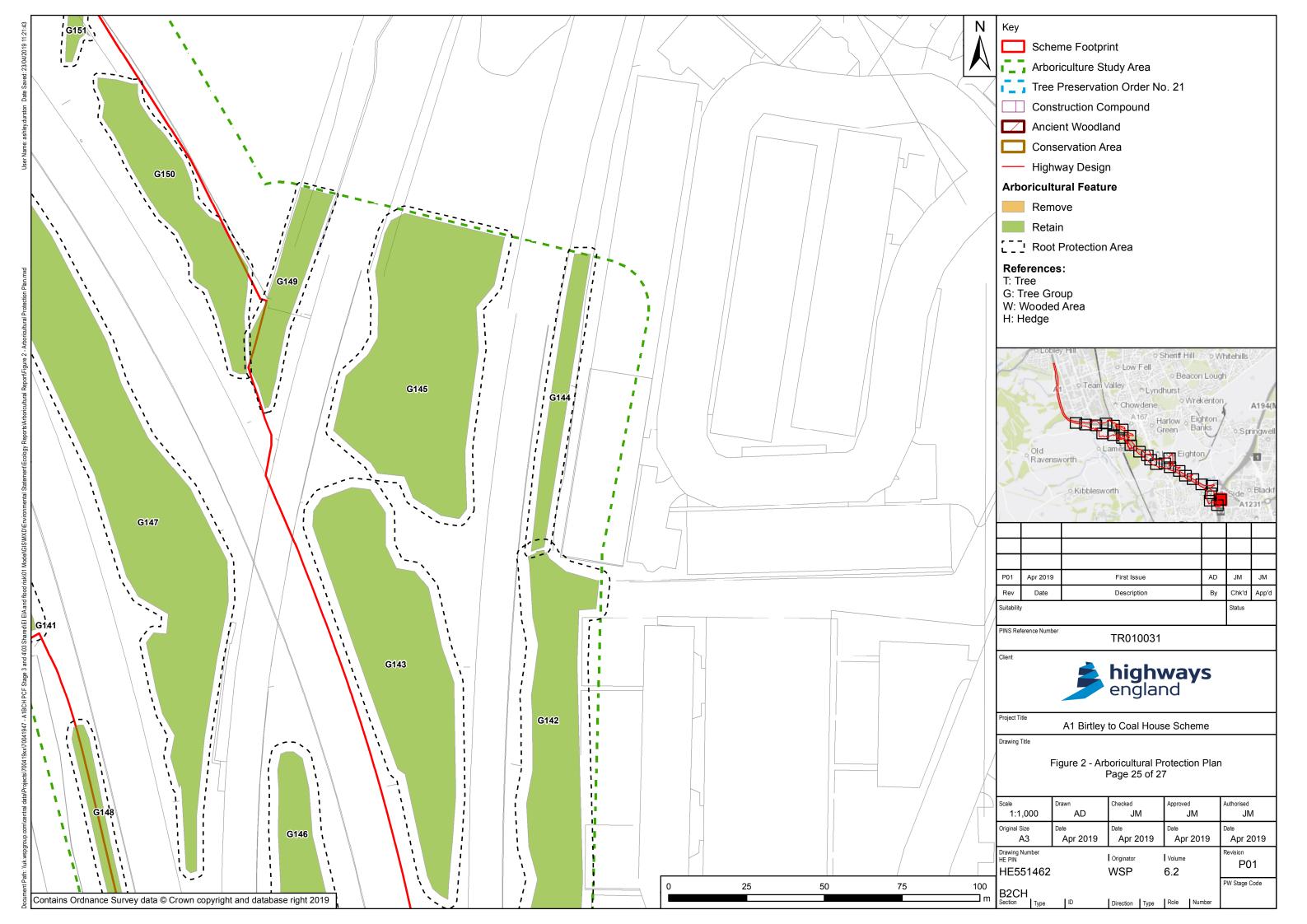


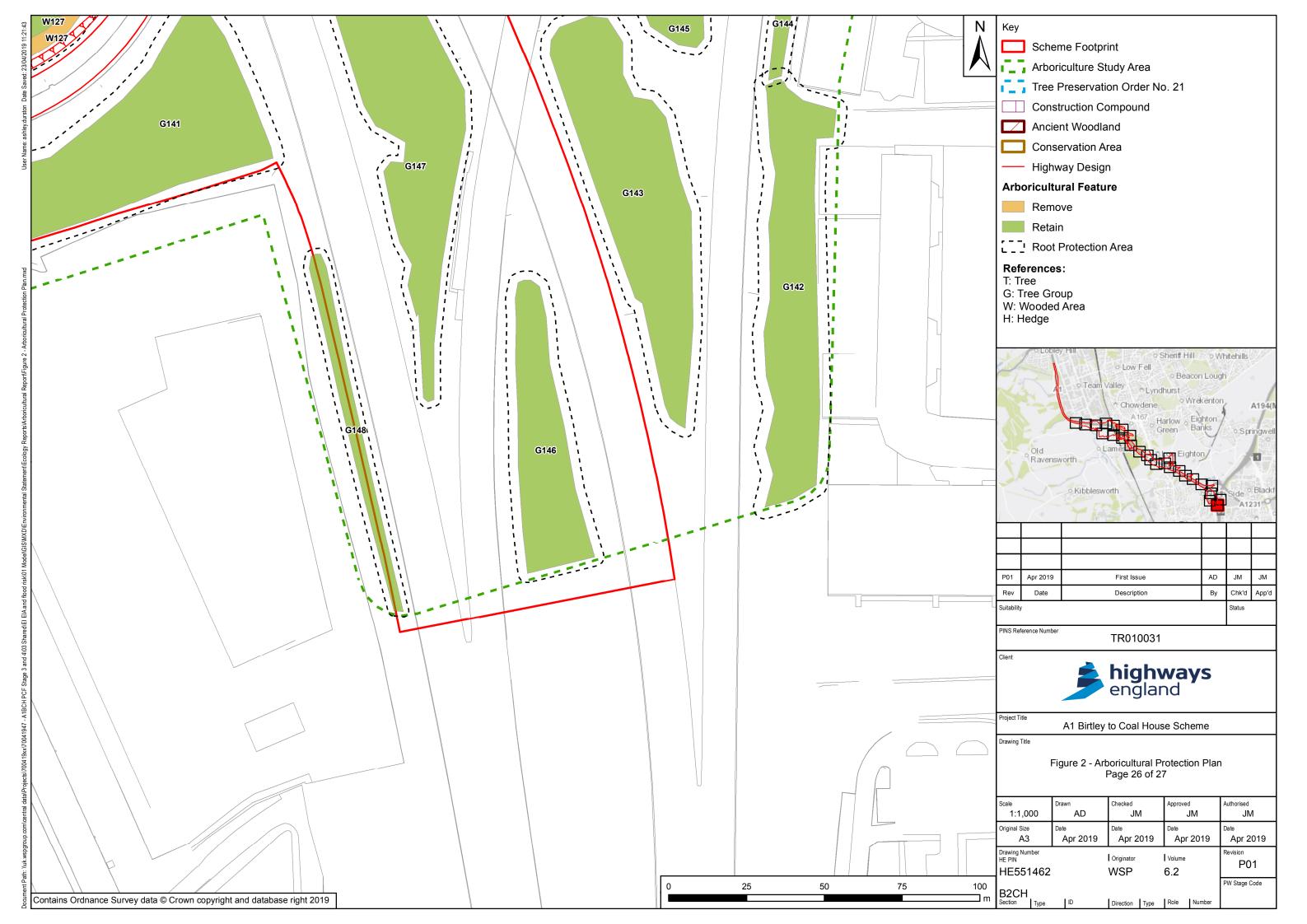


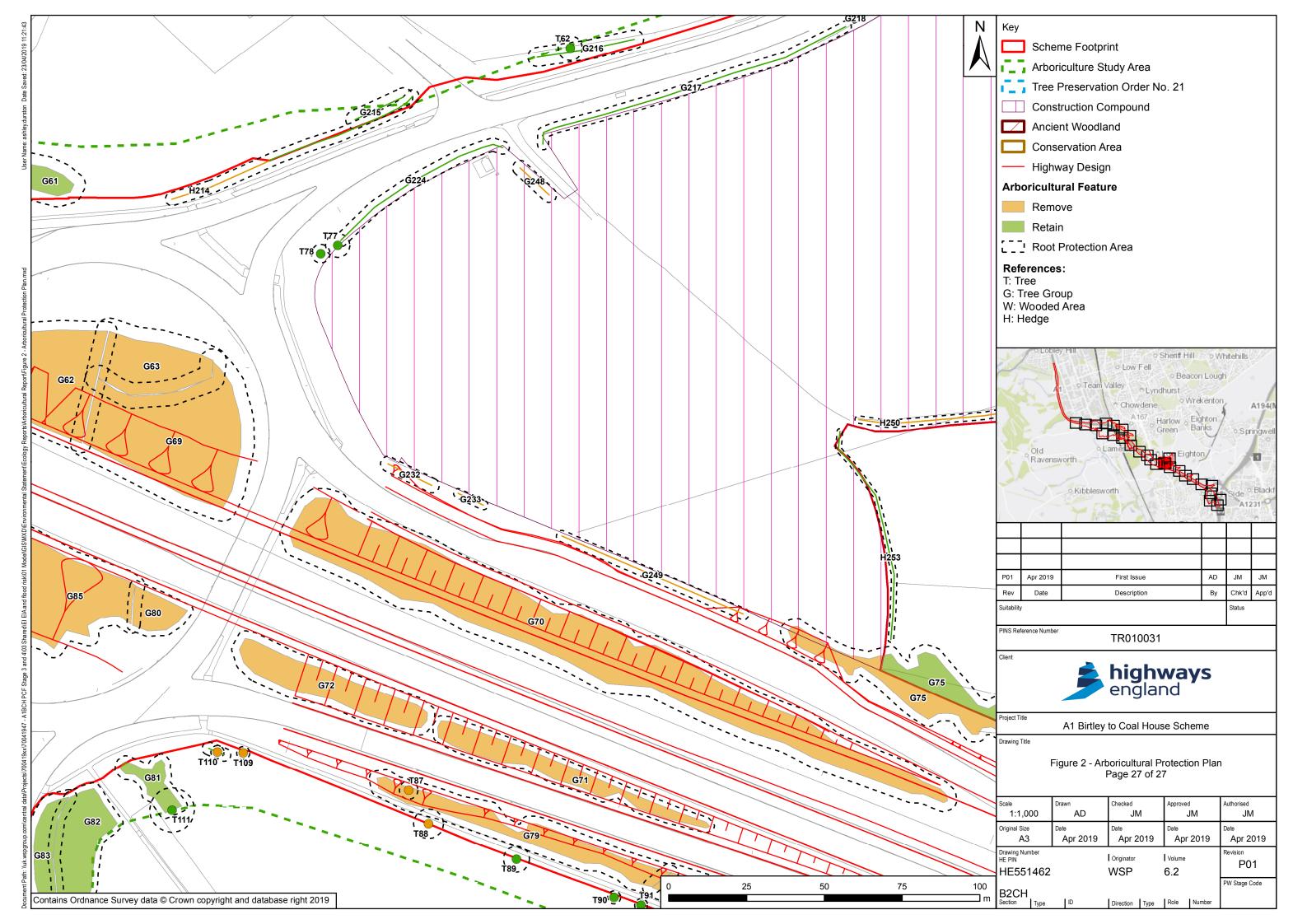












If you need help accessing this or any other Highways England information, please call **0300 470 4580** and we will help you.

© Crown copyright 2019.

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence:

visit www.nationalarchives.gov.uk /doc/open-government-licence/ write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email psi@nationalarchives.gsi.gov.uk.

This document is also available on our website at www.gov.uk /highways

If you have any enquiries about this document A1BirtleytoCoalhouse@highwaysengland.co.uk or call **0300 470 4580\***.

\*Calls to 03 numbers cost no more than a national rate call to an 01 or 02 number and must count towards any inclusive minutes in the same way as 01 and 02 calls.

These rules apply to calls from any type of line including mobile, BT, other fixed line or payphone. Calls may be recorded or monitored.

Registered office Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ Highways England Company Limited registered in England and Wales number 09346363