

Preliminary Arboricultural Impact Assessment



Land at Junction 10, M40
13th September 2021



**Tyler
Grange**

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Summary

- S.1. This report details the findings of a tree survey and the potential impacts towards existing trees to accompany proposals for new development at Land at J10, M40.
- S.2. The survey and assessment have been completed in accordance with BS5837 (2012) by a suitably qualified Arboricultural Consultant.
- S.3. Boundary hedgerows and tree groups are located at the perimeter of the Sites. There are also several hedgerows located internally within the Sites however limited trees are present.
- S.4. There are no Tree Preservation Orders administered to trees located on the site or within influence of the boundaries to be affected by the proposed development. There are no designated ancient woodlands present and no ancient or veteran trees were identified.
- S.5. Two high value English oak trees are present at the boundary of the Western Site however these will remain unaffected by the development.
- S.6. The potential tree and hedgerow loss requirements to accommodate the development has been assessed based on the proposed development parameters. This includes the removal of the internal hedgerows and trees, and a section of hedgerow and tree group to facilitate access. The value of the features to be removed is low to moderate in arboricultural terms. There are no trees of notable amenity value proposed for removal.
- S.7. The opportunities for new tree planting as part of the development is expected to provide a future net-gain in tree cover despite the tree loss predictions. The new planting will also serve to strengthen the boundary hedgerows and tree groups. The development is therefore considered consistent with the NPPF and local planning policy as it relates to trees.
- S.8. Further work is recommended to include a full Arboricultural Impact Assessment once detailed designs have been prepared. This should include an Arboricultural Method Statement detailing procedures for tree protection throughout the construction stage of the Site.



Section 1: Introduction

Context

- 1.1 This Preliminary Arboricultural Impact Assessment has been prepared by Tyler Grange Group Ltd on behalf of Albion Land to accompany two outline planning applications and one enabling works application for Land at J10, M40 site (the 'Site') to Cherwell District Council (CDC).
- 1.2 This report forms a Supporting Technical Appendix to the Environmental Impact Assessment for the applications.

Purpose

- 1.3 This report:
 - Provides the findings of a field-based tree survey and the associated tree constraints towards new development; and
 - addresses the potential arboricultural impacts of the proposed development based on its parameters and in the context of local and national planning policy.
- 1.4 Local planning policy and national planning policy pertinent to trees and the new development is set out at **Appendix 1**. The tree survey and assessment has been guided by the recommendations set out within the British Standard 5837 (2012) 'Trees in relation to design, demolition and construction – recommendations' (hereafter 'BS5837') to accord with industry best practice.



Section 2: Tree Survey Findings

Site Description

- 2.1 The planning application sites comprise two parcels of agricultural land adjacent to Junction 10 of the M40 motorway either side of the A43. The land parcels are referred to as the 'Western Site' and 'Eastern Site' and extend to approximately 43.9 and 24.2 hectares (ha) respectively. Collectively they are referred to the 'Site'.

Tree Survey Summary

- 2.2 A tree survey was completed in accordance with BS5837 and the methodology as detailed at **Appendix 2**. The survey was completed by a suitably qualified Arboricultural Consultant of Tyler Grange in July 2021. A measured topographical survey (supplied by others) was used to inform the location of trees and their surrounding context.
- 2.3 The distribution of the trees surveyed across the Site is illustrated on the **Tree Constraints Plan (TCP) (See Plan 1)**, which includes plotted details of their constraints to new development in accordance with BS5837, including:
- Tree quality gradings¹;
 - Root Protection Areas (RPAs)²; and
 - Tree canopy spreads³;
- 2.4 Findings for each of the trees surveyed are detailed in the Tree Survey Schedule (**See Appendix 4**). This provides a tabulated record of the trees surveyed, including; reference numbers, species composition, tree dimensions, life stage, physiological and structural condition, and the arboricultural value of each survey entry.
- 2.5 The trees surveyed have been categorised using the 'cascade chart for tree quality assessment' (**See Appendix 3**) recommended by the BS5837. The grading system allows informed decisions to be made concerning the design and impact of the development in relation to the arboricultural value of the trees surveyed.
- 2.6 No ancient woodlands, ancient trees, or veteran trees are present on / adjacent the site to be affected by the proposed development.
- 2.7 Trees of high arboricultural value are denoted by a Green tree canopy outline as illustrated on the TCP. This includes trees T7 and T8 located at the northern boundary of the western site. Both trees are fully mature English oak trees which represent the principal trees of the Site.

¹ The value of arboricultural features surveyed in accordance with the methodology set-out Appendix 3.

² a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority. See further explanation at Appendix 3.

³ Dimensions of the trees crown spread and clearance from ground level. See further explanation at Appendix 3.



2.8 Trees of moderate arboricultural value (Category B) are denoted by a Blue tree canopy outline, as illustrated on the TCP. This includes following:

- Trees T5 and T6 which are semi-mature and mature English oak trees located within an internal hedgerow of the Western site. They are average examples of the species and lack any special quality and landscape presence to warrant higher value classification.
- Tree T9 which is a fully mature apple tree located at the southern boundary of the eastern site.
- Hedgerows H7, H9, H11, H12, H15 and H17 are considered to be of moderate value as mature collective features.
- Tree Groups G3, G4, G6 and G8 are considered to be of moderate value as collective features with individual component trees being of low value.

2.9 Trees, groups and hedgerows of low arboricultural value trees are denoted by a Grey tree canopy outline as illustrated on the TCP. Such features are considered to provide limited or transient benefits which may be readily replaced in the existing context. These predominantly comprise lower value hedgerows which have reduced continuity, are poorer quality trees and groups with limited value.

2.10 No trees were identified as Category U however tree T2 was observed to be in particularly poor condition.

Tree-related Designations

2.11 Following a background check of available online mapping, the presence or absence of tree-related designations is detailed in **Table 2** below.

Table 2: Tree-related Designations

Designation Type	Tree Reference Numbers
Tree Preservation Order ⁴	None
Conservation Area ⁵	None
Ancient Woodland ⁶	None
Woodland Habitat ⁷	Woodland W1 - Priority Habitat Inventory - Deciduous Woodland (England). Located off-site at the southern boundary of the Eastern site.

⁴ According to online check of CEC Council's interactive mapping system conducted 14th July 2021. A Tree Preservation Order is an order made by a local planning authority in England to protect specific trees, groups of trees or woodlands in the interests of amenity. An Order prohibits the any works and damage to trees (with some exceptions) without the local planning authority's written consent. More information can be found online <https://www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas#tree-preservation-orders--general>.

⁵ According to online check of CEC Council's interactive mapping system conducted 14th July 2021. Trees in a conservation area that are not protected by an Order are protected by the provisions in section 211 of the Town and Country Planning Act 1990. These provisions require people to notify the local planning authority, using a 'section 211 notice', 6 weeks before carrying out certain work on such trees, unless an exception applies. More information can be found online <https://www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas#tree-preservation-orders--general>.

⁶ Ancient woods are areas of woodland that have persisted since 1600 in England and Wales, and 1750 in Scotland. The Magic Maps website <https://magic.defra.gov.uk/MagicMap.aspx> has been used to search for ancient woodland on or adjacent to a site.

⁷ Spatial data of woodlands identified under the Priority Habitat Inventory (England) Published by Natural England. The Magic Maps website <https://magic.defra.gov.uk/MagicMap.aspx> has been used to search for woodland on or adjacent to a site.



Section 3: Preliminary Arboricultural Impact Assessment

- 3.1. The assessment of arboricultural impacts has been based on the proposed development parameters for the Western and Eastern site's. Given the outline nature of the design (and in the absence of detailed proposals for layout and engineering etc), this report seeks to present a worse-case scenario of potential tree removal to accommodate the development, based on its parameters alone. It is therefore reasonable to expect that, as part of future detailed designs, the implications of the development towards trees will be refined further and could be subject to change.
- 3.2. The assessment is informed by a composite overlay of the BS5837 tree survey information and proposed development parameters which is shown on the following plans enclosed to the rear of this report:
- Western Site - Tree Retention and Removal Plan (TRRP) (ref. 14047/P02) **(See Plan 2)**
 - Eastern Site - Tree Retention and Removal Plan (TRRP) (ref. 14047/P03) **(See Plan 3)**

Expected Tree Retention and Removal

- 3.3. The areas identified for new built development on the parameter drawing signifies where existing trees would either require removal or be impacted by new development if retained, which has informed which trees are likely to require removal. The likely extent of tree and hedgerow removal required to accommodate the development parameters is shown on the TRRPs **(See Plans 2 and 3)**. The removals are identified by a dashed tree canopy outline in the colour of the tree, group and hedgerows grading category. **Table 3 and 4** below lists the potential removals by order of category grading for the Western and Eastern sites respectively.

Table 3: Tree Loss Requirements based on Proposed Development Parameters (Western Site)

Category Grading	Tree Reference Numbers	Description
Category A		None – trees T7 and T8 will be retained and remain unaffected by the proposed development. They will form part of the retained section of existing trees along the boundary.
Category B	<p>Individual Trees: T5 and T6</p> <p>Groups: Partial removal within group G6</p> <p>Hedgerows: H7, H8 and H9</p>	<p>Trees T5 and T6 is located internally within the site and are not possible to retain as part of the development parameters due to their location.</p> <p>Approximately 115m of group G6 and the entirety of H7 (217m) will require removal for the proposed access arrangement, which includes a new roundabout, realignment of the highway and new footpaths. Group G6 predominantly comprises ash which had symptoms of ash dieback, with denser infill understory of hawthorn.</p> <p>Hedgerows H7 (approx. 380m) and H8 (approx. 187m) require removal due to direct conflict with the proposed development parameters.</p>
Category C	<p>Individual Trees: T2</p> <p>Tree Groups: G7</p> <p>Hedgerows: H5, H6, H10, H11</p>	<p>Tree T2 is a poor-quality mature ash which requires removal due to direct conflicts with the proposed development parameters.</p> <p>Group G7 comprises self-seeded elder around existing farm buildings. It requires removal due to direct conflicts with the development parameters.</p> <p>Hedgerows H5 (approx. 380m) and H8 (approx. 187m) require removal due to direct conflict with the proposed development parameters.</p>

Table 4: Tree Loss Requirements based on Proposed Development Parameters (Eastern Site)

Category Grading	Tree Reference Numbers	Description
Category A		None – no high value trees are present to be affected.
Category B	<p>Individual Trees: None</p> <p>Tree Groups: None</p> <p>Hedgerows: H12 (partial), H15</p>	<p>Trees T5 and T6 is located internally within the site and are not possible to retain as part of the building zone parameters due to their location.</p> <p>Approximately 115m of group G6 and the entirety of H7 (217m) will require removal for the proposed access arrangement, which includes a new roundabout, realignment of the highway and new footpaths. Group G6 predominantly comprises ash which had symptoms of ash dieback, with denser infill understory of hawthorn.</p> <p>Hedgerows H7 (approx. 380m) and H8 (approx. 187m) require removal due to direct conflict with the proposed building zone parameters.</p>

<p>Category C</p>	<p>Individual Trees: None</p> <p>Tree Groups: G5</p> <p>Hedgerows: H14, H16 (partial)</p>	<p>Removal of group G5 which comprises small-stature trees established at the perimeter of a dry pond / ground undulation, due to direct conflicts with the proposed building zone parameters.</p> <p>Hedgerow H14 (approx. 288m) requires removal due to direct conflicts with the proposed building zone parameters.</p> <p>A partial section (79m) of H16 requires removal to facilitate the proposed access and new landscaping zone to the boundary.</p>
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New Tree Planting Opportunities

- 3.4. A Landscape Strategy Plan will be submitted separately as part of the application for the Site. This illustrates the approach to incorporating existing and new green and blue infrastructure across the proposed development. This includes new tree planting across the soft-landscape zone parameters, comprising a mix of woodlands, individual trees and hedgerows. The extent of new tree and hedgerow planting within the Site suggests that an overall net-gain in tree canopy cover can be achieved.

Construction Mitigation

- 3.5. A detailed methodology for tree protection during the site preparation and construction stages will be required once final detailed scheme designs have been prepared.
- 3.6. It is recommended that arboricultural advice continues into the detailed design stage of the development to ensure that trees are duly considered in terms of site layout, engineering, landscape, and future management. It is therefore recommended that a full Arboricultural Impact Assessment and Arboricultural Method Statement (AMS) is prepared as part of a reserved matters application or to discharge applicable and suitably worded planning Conditions should the proposals be consented.
- 3.7. An AMS will set out a practical methodology to the protection of retained trees based on fully detailed designs, phasing and construction management. The AMS will typically include the following key items:
- A schedule and specification of tree removal and pruning works;
 - Specifications for tree protection barriers and ground protection;
 - Procedures for any specialist construction techniques / any supervised excavations within RPAs (if required)
 - Phasing of work;
 - Site monitoring (where required); and
 - A Tree Protection Plan.

Conclusion

- 3.8. The proposed development, as presented in outline, requires the removal of internal hedgerows and few trees of low to moderate value. It is not possible to retain the internal features due to the nature of the development. Access into each site will require the removal of trees and hedgerows of low to moderate value. The high value trees present will remain unaffected by the development parameters. The strategy for new tree planting across the site's green spaces and internally within the development areas suggest that a net-gain in tree cover is achievable despite the removals required.
- 3.9. The proposed scheme is therefore considered to demonstrate accordence with national and local planning policy as it relates to trees. Further work is recommended to include an arboricultural assessment through the detailed design stage and an adoption of tree protection measures throughout the construction stages. An Arboricultural Method Statement is therefore recommended to be secured as a suitably worded planning conditions should consent be granted.



Appendix 1: Planning Policy Context



Appendix 1: Planning Policy Context

National and Local Planning Policy

- A1.1 The consideration for existing trees and woodlands in relation to planning and new is set out within Section 15 'Conservation and Enhancing the Natural Environment' within the NPPF.
- A1.2 The consideration for existing trees and woodlands in relation to planning and new development is set out within Sections 12 and 15 of the NPPF published in July 2021.
- A1.3 Section 12, paragraph 131 states that "Trees make an important contribution to the character and quality of urban environments and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users."
- A1.4 Section 15, paragraph 174 states that "Planning policies and decisions should contribute to and enhance the natural and local environment by:" Subsection B; "recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland"
- A1.5 Section 15, paragraph 180 states that "When determining planning applications, local planning authorities should apply the following principles:" Subsection C; "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". No trees ancient woodland, ancient trees, or veteran trees are present on / adjacent to the Site to be affected by the proposed development.
- A1.6 Local planning policy relating to tree and new development is set out in CDC's Adopted local plan (2011-2031), which reads:

"Policy ESD 10: Protection and Enhancement of Biodiversity and the natural Environment

B.236 It is not just designated sites that are of importance to the biodiversity resource of the District. Areas adjacent to designated sites can be of value as they can form part of the overall ecological unit and may provide important linkages. Also landscape features such as hedgerows, woods, trees, rivers and riverbanks, ponds and floodplains can be of importance both in urban and rural areas, and often form wildlife corridors and stepping stones. Similarly it is not just greenfield sites that can be of value; previously developed land can also make an important contribution to biodiversity. Some development can remediate contaminated land which may be having an adverse impact on ecology. It is important that any features of value are identified early in the planning process so that adequate measures can be taken to secure their protection. Developers will be expected to incorporate and enhance such features within a site wherever possible and



adequate measures should be taken to protect them from damage during construction. Networks of habitats will be protected from development and where possible strengthened by it.

Policy ESD 10: Protection and Enhancement of Biodiversity and the Natural Environment. Protection and enhancement of biodiversity and the natural environment will be achieved by the following: The protection of trees will be encouraged, with an aim to increase the number of trees in the District

Policy ESD 13: Local Landscape Protection and Enhancement B.253 The Council will seek to retain woodlands, trees, hedges, ponds, walls and any other features which are important to the character or appearance of the local landscape as a result of their ecological, historic or amenity value. Proposals which would result in the loss of such features will not be permitted unless their loss can be justified by appropriate mitigation and/or compensatory measures to the satisfaction of the Council."



Appendix 2: Tree Survey Methodology, Constraints Mapping and Report Limitations



Appendix 2: Tree Survey Methodology, Constraints Mapping and Report Limitations

Field Work

- A2.1 In accordance BS5837, the tree survey included all trees within / in influence of the site and the site boundaries that were over 75mm diameter at breast height (1.5m).
- A2.2 Measured topographical survey data (supplied by others) was used to inform tree locations their surrounding context. Any trees not identified on the topographical survey are prefixed with (*) and their locations have been approximated using measurements during the tree survey and further informed by aerial photography where required.
- A2.3 The trees surveyed were visually inspected from ground level only. No invasive investigations or climbing inspections were necessary to confirm visual or audible signs of defect or debility and no tissue or soil samples were undertaken. For further clarification please refer to the tree survey explanatory notes in below.

Tree Numbers

- 'T' prefixes have been used to identify individual trees and commence with 'T1'.
'G' prefixes have been used to identify groups of trees.
'H' prefixes have been used to identify hedgerows.
'W' prefixes have been used to identify woodlands.

Species

- A2.4 Species are listed by their common name, both in the schedule and in the report text.

Height and Stem Diameter

- A2.5 The stem diameter is measured at 1.5m above ground level and given in millimetres (mm). Tree heights are measured in metres (m) using a clinometer where access and land topography allowed. In instances where access to tree's stem and height measurements were not possible, the dimensions have been estimated by eye.

Crown Spread and Height of Crown Clearance

- A2.6 Radial crown spread is measured in metres and is listed for each of the four cardinal points where access has been possible to obtain a measurement. Where access was not possible to measure the spread of the canopy, such distances have been estimated by eye or informed by aerial photography.
- A2.7 The measured canopy shapes have been plotted on the Tree Constraints Plan at the four cardinal points. For groups of trees, the extent of the canopy has been measured as an average across the group and plotted using the topographical survey mapping. In some instances, Tyler Grange will use aerial photography to inform the canopy spread of larger tree groups and woodlands where topographical data is limited for such features.
- A2.8 The distance between the ground level and the first significant branch or radial tree crown, whichever is the lower, has been measured in metres.



Age Class

The age of each tree is defined as follows:

Young - within the first third of reaching full maturity;

Semi-Mature - within the second third of reaching full maturity;

Early-Mature - within the last third of reaching full maturity;

Mature - specimen at full maturity; and

Veteran - tree that, by recognised criteria, shows features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.

Physiological and Structural Condition

A2.9 The physiological or structural condition of each tree is defined as either; good, fair, poor or dead. For each tree, where appropriate, notes on the structural integrity are provided on form, taper, forking habit, storm damage, decay, fungi, pests, etc.

An assessment of a tree's physiological condition is defined as:

Good - fully functioning biological system showing expectant vitality for the species i.e. normal bud growth, leaf size, crown density and wound closure.

Fair - fully functioning biological system showing below average vitality i.e. reduced bud growth, smaller leaf size, lower crown density and reduced wound closure.

Poor - a biological system with limited functionality showing clear physiological decline, disease or significantly below average vitality i.e. limited bud growth, small and chlorotic leaves, low crown density and limited wound closure.

Dead - tree observed to fully dead with no living parts.

An assessment of a tree's structural condition is defined as:

Good - no significant structural defects.

Fair - structural defects which could be alleviated through remedial tree surgery or arboricultural management practices

Poor - structural defects which cannot be alleviated through tree surgery or arboricultural management practices.

Tree Quality Gradings

A2.10 The value of trees has been assessed in accordance with the BS5837 Cascade Chart for Tree Quality Assessment (See Appendix 4). Grading subcategories (1, 2 and 3) reflect arboricultural, landscape and cultural values, respectively.



Root Protection Areas

- A2.11 The Tree Constraints Plan shows the approximate extent of Root Protection Areas (RPAs). The RPAs have been plotted and calculated in accordance with the methodology set out in Appendices C and D of BS5837, using the tree stem diameter dimensions obtained during the site visit.
- A2.12 Plotted RPAs serve as a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.
- A2.13 Where pre-existing site conditions or other factors indicate that rooting may occur asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution observed on-site. Any deviation in the RPA from the original circular plot should take account of the following factors whilst still providing adequate protection for the root system:
- a) the morphology and disposition of the roots, when influenced by past or existing site conditions (e.g. the presence of roads, structures and underground apparatus);
 - b) topography and drainage;
 - c) the soil type and structure;
 - d) the likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.
- A2.14 The plotted RPAs have therefore informed the design of the proposed development where possible. While developing within RPAs should be avoided, special working methods can be adopted to alleviate the RPA disturbance for cases where the development is considered necessary and unavoidable.

Tree Canopies

- A2.15 The distribution of tree canopy cover on and within influence of the site is illustrated on the TCP. Canopies have been plotted at cardinal points for individual and groups of trees. The Tree Survey Schedule included at Appendix 5 to the rear of this report lists the vertical clearance from site ground level to significant tree branching of individual trees. This measurement informs the impacts of accessibility and development beneath tree canopies.

Limitations

- A2.16 The comments made are based on observable factors present at the time of inspection. Although the health and stability of trees in their current context is an integral part of their suitability for retention, it must be understood that this report is not a tree risk assessment and should not be construed as such. While every attempt has been made to provide a realistic and accurate assessment of the trees' condition at the time of inspection, it may have not been appropriate, or possible, to view all parts or all sides of every tree to fulfil the assessment criteria of a risk assessment.



A2.17 No tree can be considered entirely safe, given the possibility that exceptionally strong winds could damage or uproot even a mechanically 'perfect' specimen. It is therefore usually accepted that hazards are only recognisable from distinct defects or from other failure-prone characteristics of the tree or the site. An assessment of the potential influence of trees upon existing buildings or other structures resulting from the effects of trees upon shrinkable load-bearing soils or the effects of incremental root or branch growth, are specifically excluded from this report.

Un-assessable Risks

A2.18 Any alteration to the application site or development proposals could change the current circumstances and may invalidate this report and any recommendations made.

A2.19 The Wildlife and Countryside Act (WCA) 1981 (as amended) makes it an offence to disturb nesting birds or recklessly endanger a bat or its roost. Bats are also a European protected species and are additionally protected under the Conservation (Habitats & c) Regulations 1994 and 2010 (as amended). The survey findings, constraints, opportunities and design or mitigation recommendations included within that report must be read alongside this document.

A2.20 A lack of recommended work does not imply that a tree does not pose an unacceptable level of risk and likewise, it should not be implied that a tree will present an acceptable level of risk following the completion of any recommended work.



Appendix 3: Cascade Chart for Tree Quality Assessment



Appendix 3: Cascade Chart for Tree Quality Assessment

TREES FOR REMOVAL				
Category and Definition	Criteria			Identification on Plan
<p>Category U</p> <p>Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years</p>	Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning).			DARK RED
	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 or very low-quality trees suppressing adjacent trees of better quality.			
	(NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve)			
TREES TO BE CONSIDERED FOR RETENTION				
Category and Definition	Criteria - Subcategories			Identification on Plan
	1. Mainly Arboricultural Values	2. Mainly Landscape Values	3. Mainly Cultural Values, including Conservation	
<p>Category A</p> <p>Trees of high quality with an estimated remaining life expectancy of at least 40 years</p>	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	LIGHT GREEN
<p>Category B</p> <p>Trees of moderate quality with an estimated remaining life expectancy of at least 20 years</p>	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remedial defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing 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 benefits.	MID BLUE
<p>Category C</p> <p>Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm</p>	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 temporary/transient landscape benefit.	Trees with no material conservation or other cultural value.	GREY



Appendix 4: Tree Survey Schedule



Tree Number	Common Species Name	Height (m)	Trunk Diameter (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	BS5837 Category	RPA Radius (m)	Root Protection Area (m ²)
				N	E	S	W							
T1	Ash	6m	250	2.75	2.75	2.75	2.75	5.00	Semi Mature	Fair	Fair	C2	3.0	28
T2	Ash	3.0	600	0.50	0.50	0.50	0.50	3.00	Mature	Poor	Poor	C1	7.2	163
T3	Ash	7.0	250	4.00	4.00	4.00	4.00	4.00	Early Mature	Fair	Fair	C2	3.0	28
T4	Ash	7.0	250	4.00	5.00	4.00	5.00	4.00	Mature	Good	Good	C2	3.0	28
T5	English Oak	7.0	250	3.50	3.50	3.50	3.50	3.00	Semi Mature	Good	Good	B1	3.0	2289
T6	English Oak	8.0	600	5.25	5.25	5.25	5.25	3.00	Mature	Good	Good	B1	7.2	163
T7	English Oak	11.0	950	5.00	7.00	6.50	5.50	0.00	Mature	Good	Good	A2	11.4	408
T8	English Oak	13.0	1050	4.50	8.00	8.50	7.50	5.00	Mature	Good	Good	A2	12.6	499

Tree Number	Common Species Name	Height (m)	Trunk Diameter (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	BS5837 Category	RPA Radius (m)	Root Protection Area (m2)
				N	E	S	W							
T9	Apple	7.0	600	6.00	7.00	4.50	5.00	1.00	Mature	Good	Good	B2	7.2	163
H1	Hawthorn, Elder,	3.0	100	0.00	0.00	0.00	0.00	1.00	mature	Good	Fair	C2	1.2	N/a
H2	Hawthorn, Elder	6.0	100	0.00	0.00	0.00	0.00	0.00	Mature	Good	Good	C1	1.2	N/a
H3	Elder, Hawthorn	6.0	100	0.00	0.00	0.00	0.00	0.00	Mature	Good	Good	C2	1.2	N/a
H4	Elder, Hawthorn,	6.0	100	0.00	0.00	0.00	0.00	0.00	Mature	Good	Good	C2	1.2	N/a
H5	Hawthorn, Elder, Blackthorn, Ash, Field maple, Elm	7.0	100	0.00	0.00	0.00	0.00	0.00	Mature	Fair	Fair	C2	1.2	N/a
H6	Hawthorn, Elder	3	75	0	0	0	0	0	Mature	Good	Good	C2	.9	N/a
H7	orn, Blackthorn, Ash	3	150	0	0	0	0	0	Mature	Good	Good	B2	1.8	N/a
H8	Lawson Cypress	5	100	0	0	0	0	1	Mature	Fair	Fair	C2	1.2	N/a
H9	Hawthorn, English Elm, Ash.	6.0	150	0.00	0.00	0.00	0.00	0.00	Early Mature	Good	Good	B2	1.8	N/a

Tree Number	Common Species Name	Height (m)	Trunk Diameter (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	BS5837 Category	RPA Radius (m)	Root Protection Area (m ²)
				N	E	S	W							
H10	Hawthorn, Blackthorn, Elder, Privet	5.0	100	0.00	0.00	0.00	0.00	0.00	mature	Good	Good	C2	1.2	N/a
H11	Elm, Hazel, English Oak, field maple, Ash	4.0	100	1.50	1.50	1.50	1.50	3.00	Mature	Good	Good	B2	1.2	N/a
H12	Hawthorn, Blackthorn, Elder, Ash	3.0	75	0.75	0.75	0.75	0.75	0.00	Mature	Good	Good	B2	.9	N/a
H13	Hawthorn, Elder, Ash, Blackthorn	2.0	75	0.50	0.50	0.50	0.50	0.00	Mature	Good	Good	C2	.9	N/a
H14	Hawthorn, Elder, Dog wood	2.0	75	0.50	0.50	0.50	0.50	0.00	Mature	Good	Good	C2	.9	N/a
H15	Hawthorn, Dogwood, Field maple, Hazel, Elder	4.0	100	1.00	1.00	1.00	1.00	0.00	Early Mature	Good	Good	B2	1.2	N/a
H16	Hawthorn, Elder, Blackthorn	2.0	75	0.50	0.50	0.50	0.50	0.00	Mature	Fair	Fair	C1	.9	N/a
H17	Hawthorn, Elder, Blackthorn	7.0	250	3.50	3.50	3.50	3.50	3.00	Semi Mature	Good	Good	B2	3.0	N/a
G1	Hawthorn, Elder, Field maple	3.0	100	1.00	1.00	1.00	1.00	1.00	Mature	Good	Good	C2	1.2	N/a
G2	English oak	7.0	220	3.00	3.00	3.00	3.00	1.00	Semi Mature	Good	Good	C1.2	2.6	N/a

Tree Number	Common Species Name	Height (m)	Trunk Diameter (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	BS5837 Category	RPA Radius (m)	Root Protection Area (m2)
				N	E	S	W							
G3	English Oak, English Elm, Blackthorn, Elder, Goat willow, Dog Wood, Hazel	7.0	200	0.00	0.00	0.00	0.00	7.00	Early Mature	Good	Good	B2	2.4	N/a
G4	Apple, Ash, Elder, Hawthorn, Dogwood, Sycamore	10.0	250	2.00	2.00	2.00	2.00	3.00	Early Mature	Good	Good	B2	3.0	N/a
G5	Ash, Elder, Hawthorn, Holly, Willow	7.0	250	3.00	3.00	3.00	3.00	0.00	Early Mature	Good	Good	C2	3.0	N/a
G6	Maple, Hawthorn, Blackthorn, Ash, Hazel, English Oak, ash, goat willow	6.0	250	3.00	3.00	3.00	3.00	0.00	Mature	Good	Good	B2	3.0	N/a
G7	Elder	6.0	100	1.50	1.00	1.50	1.50	5.00	mature	Good	Good	C2	1.2	N/a
G8	Ash	9.0	350	3.50	3.50	3.50	3.50	3.5	Early Mature	Fair	Fair	B2	4.2	N/a
W1	Ash, field maple, Cherry, aspen, English Oak	12.0	275	/	/	/	/	1.75	Early Mature	Good	Good	B2	3.3	N/a

Plans:

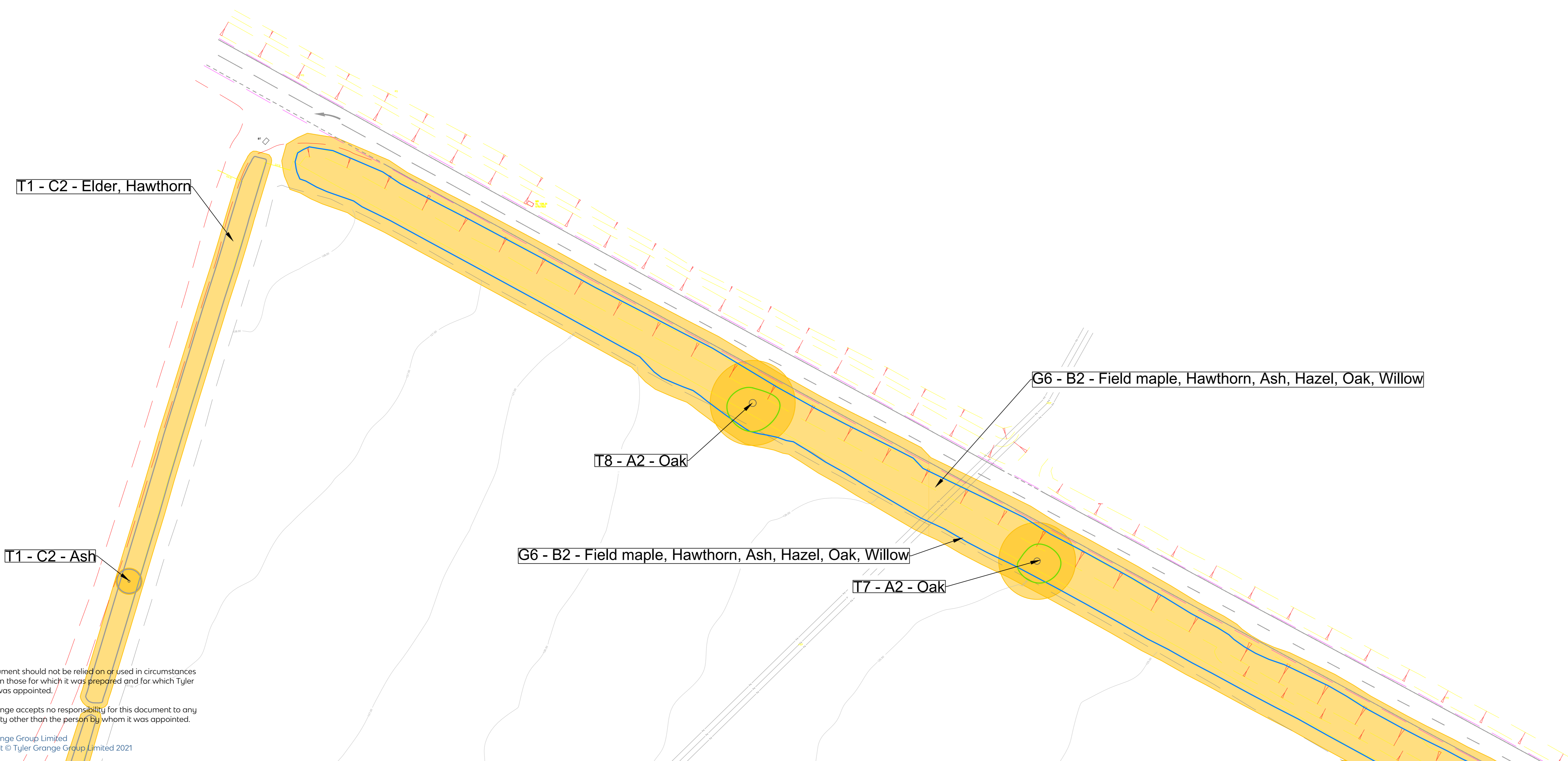
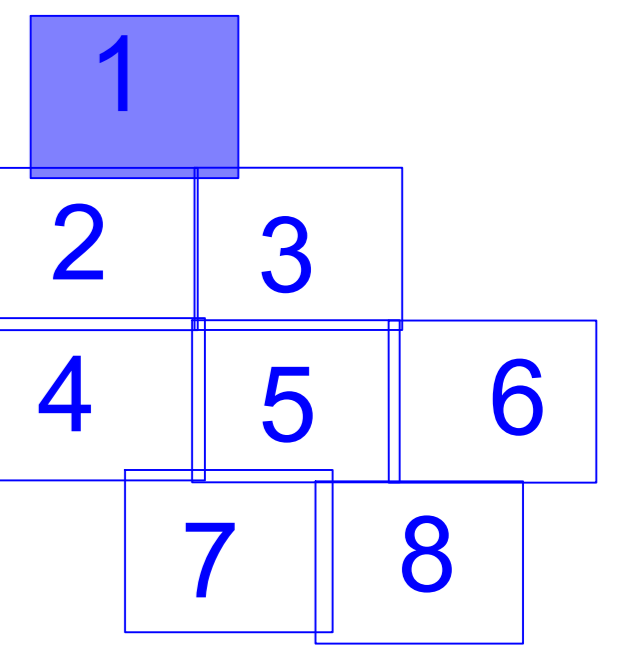
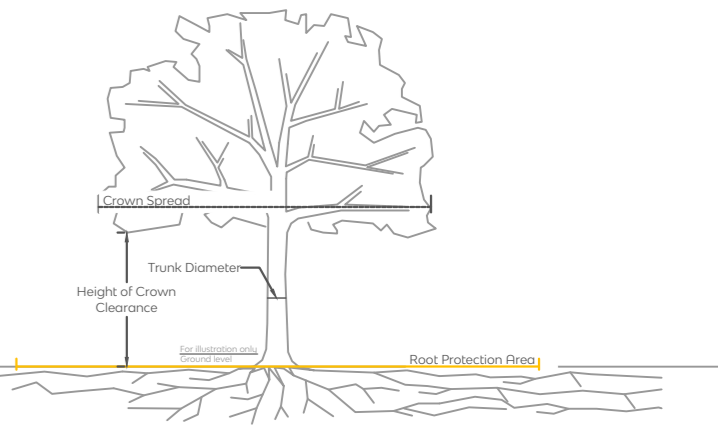


Plan 1: Tree Constraints Plan (14047/P01)



- Category A - Trees of High Quality and Value
- Category B - Trees of Moderate Quality and Value
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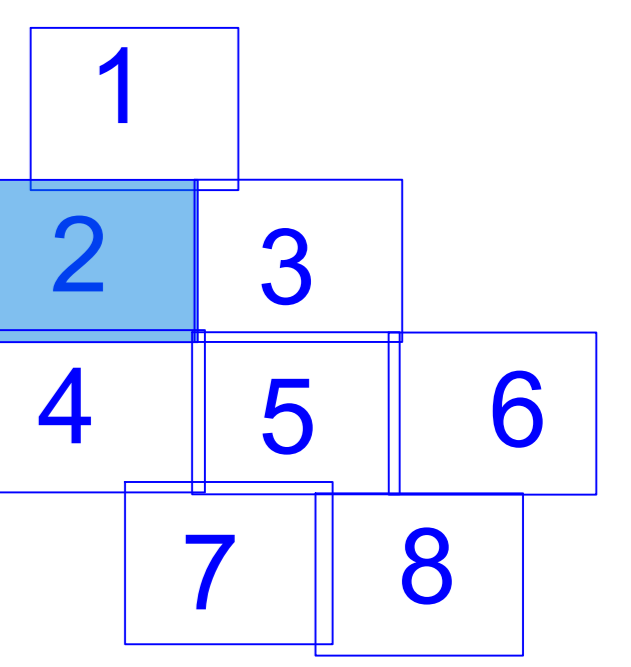
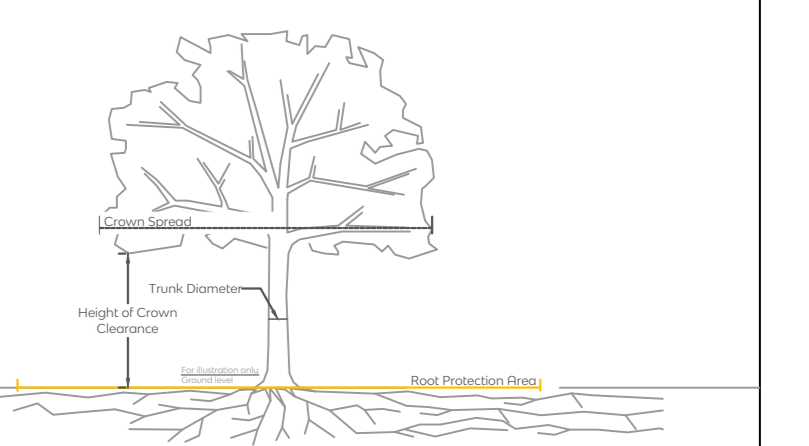


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Drawing title		Tree Constraints Plan	
Scale	1:500 @ A0	Drawn	MA
Date	13.09.2021	Checked	JP
Drawing number	14047/P05	Revision	-
	Sheet 1 of 8		



- Category A - Trees of High Quality and Value
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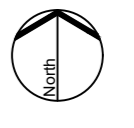


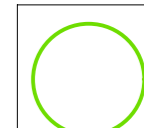
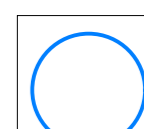
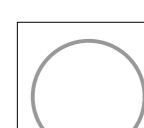
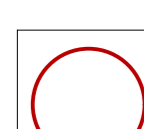

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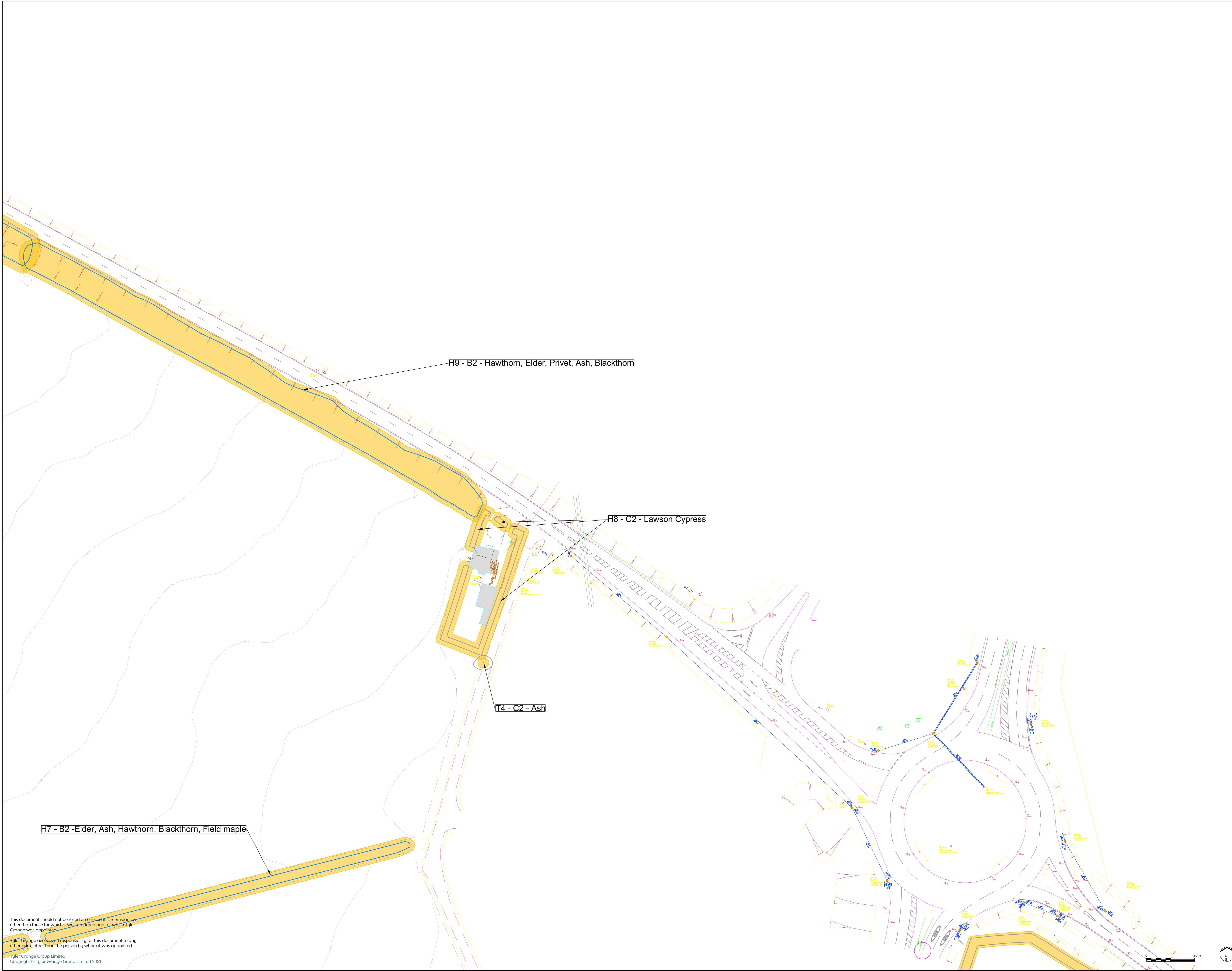
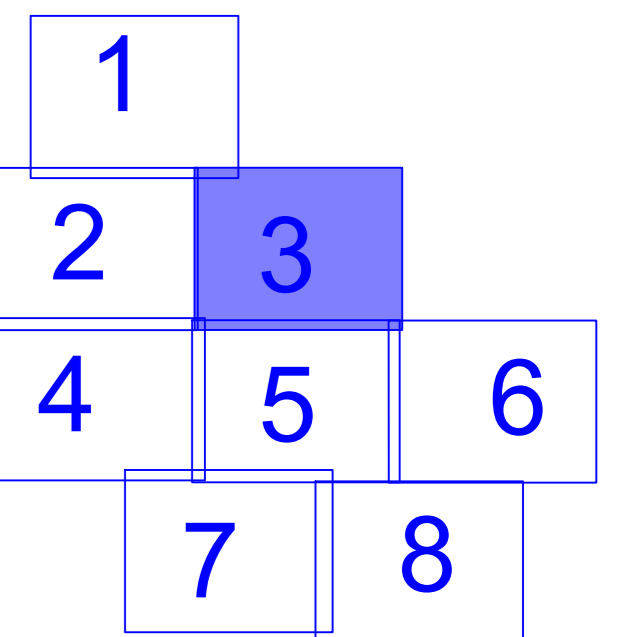
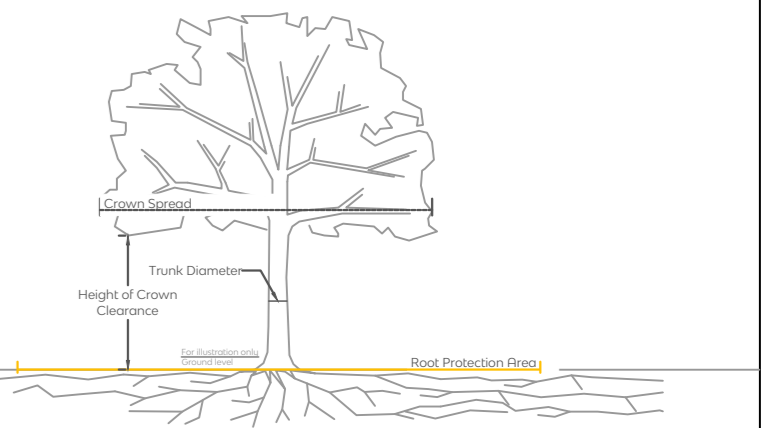


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Drawing title Tree Constraints Plan	
Scale Date	1:500 @ A0 13.09.2021
Drawn Checked	MA JP
Drawing number 14047/P03	Sheet 2 of 8
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-  Category A - Trees of High Quality and Value
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-  Category C - Trees of Low Quality and Value
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-  Root Protection Areas

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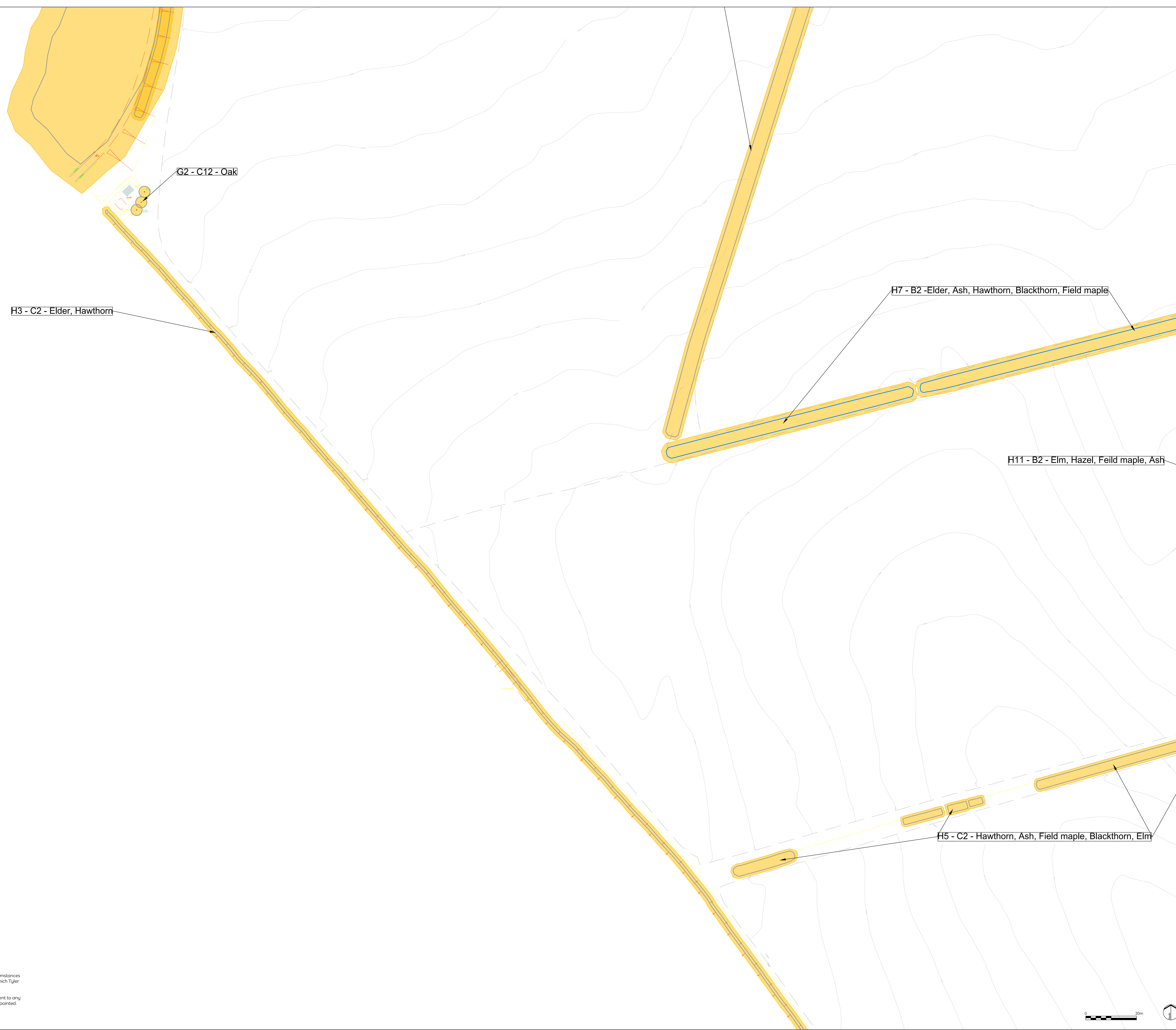


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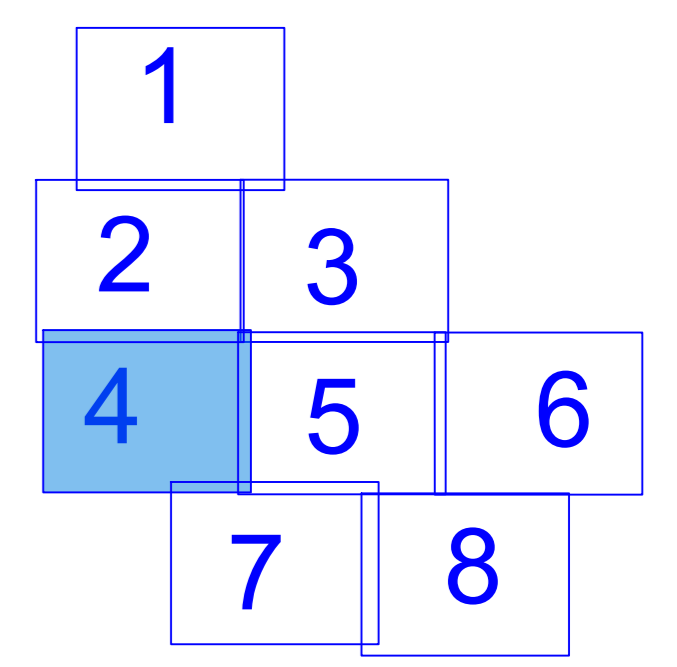
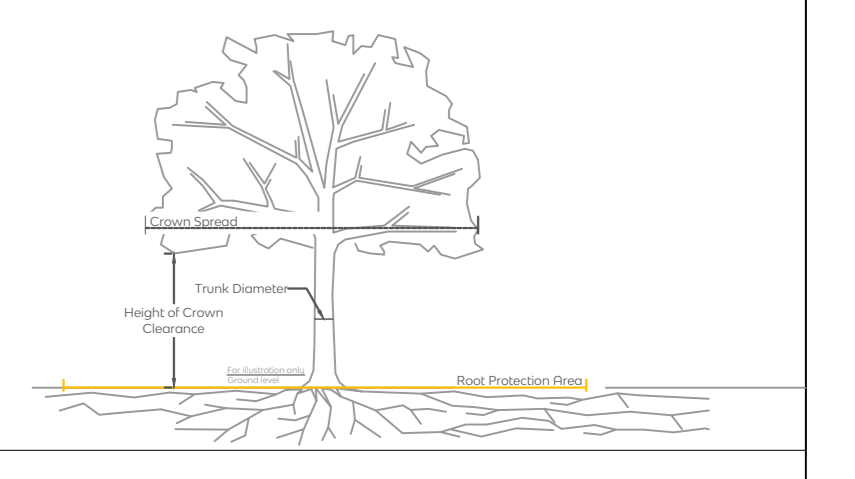


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Scale Date	1:500 @ A0 13.09.2021
Drawn Checked	MR JP
Drawing number 14047/P03	Revision A
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- Category A - Trees of High Quality and Value
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G2 - C12 - Oak

H3 - C2 - Elder, Hawthorn

H7 - B2 - Elder, Ash, Hawthorn, Blackthorn, Field maple

H11 - B2 - Elm, Hazel, Field maple, Ash

H5 - C2 - Hawthorn, Ash, Field maple, Blackthorn, Elm

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Project title
Land North of J10_J40

Drawing title
Tree Constraints Plan

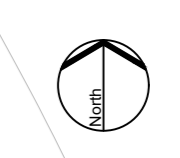
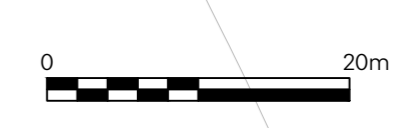
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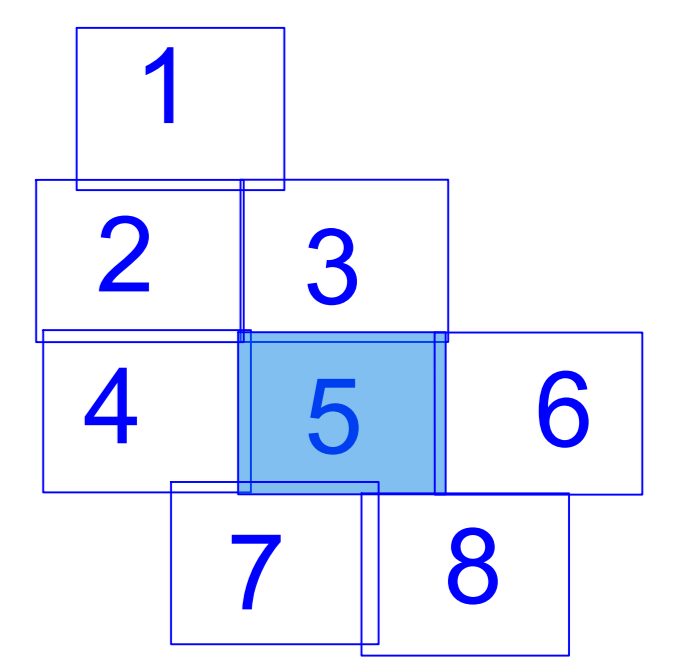
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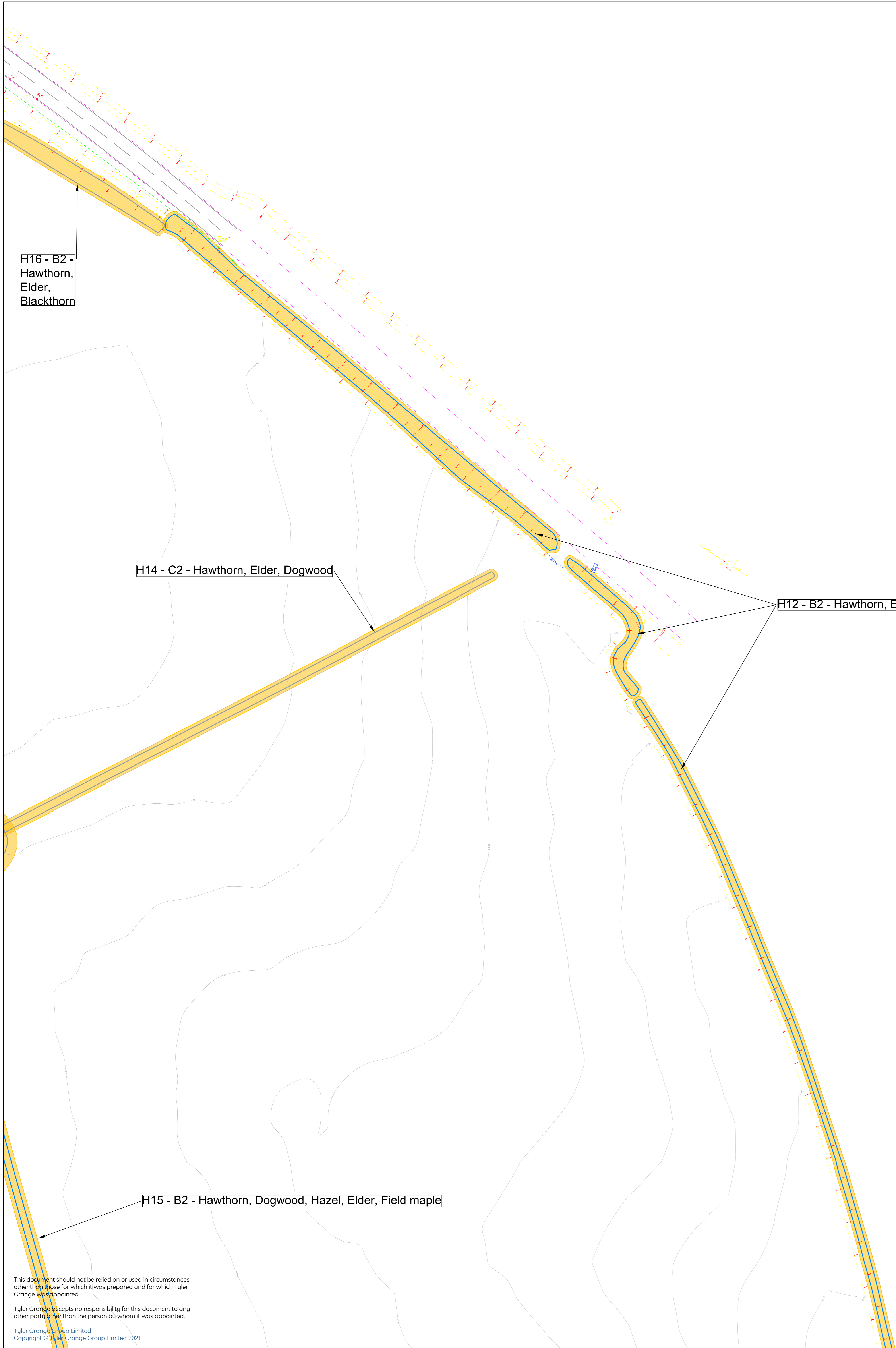


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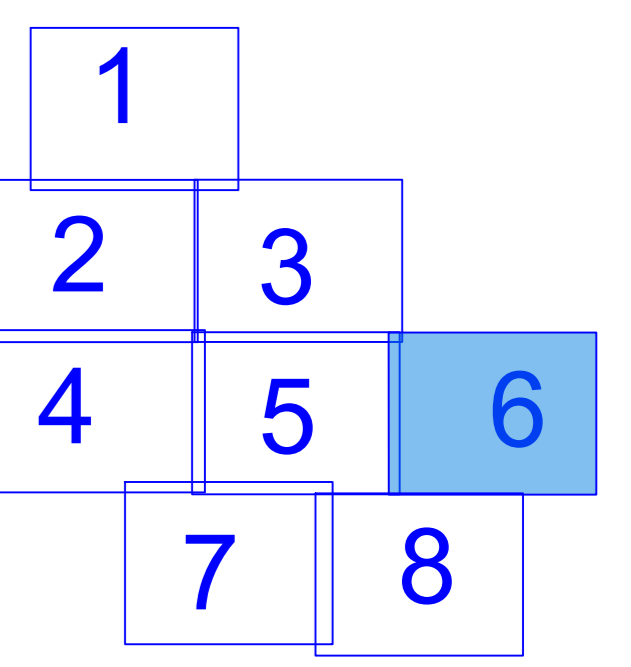
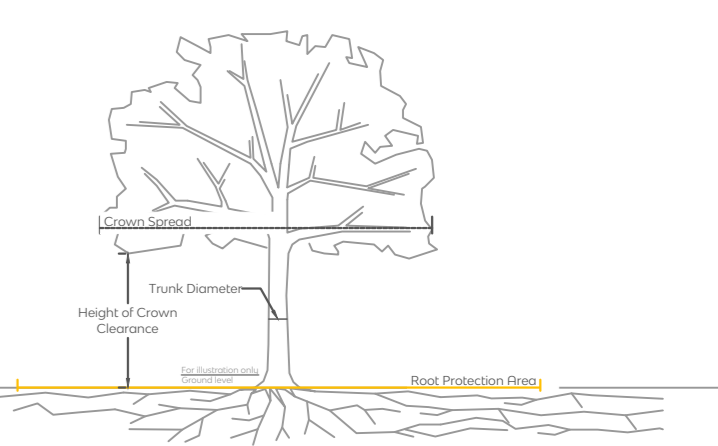
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- Category A - Trees of High Quality and Value
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Denotes trees and groups not identified on topographical survey. Locations approximated using measurements taken on site.



H16 - B2 - Hawthorn, Elder, Blackthorn

H14 - C2 - Hawthorn, Elder, Dogwood

H12 - B2 - Hawthorn, Elder, Blackthorn, Ash

H15 - B2 - Hawthorn, Dogwood, Hazel, Elder, Field maple

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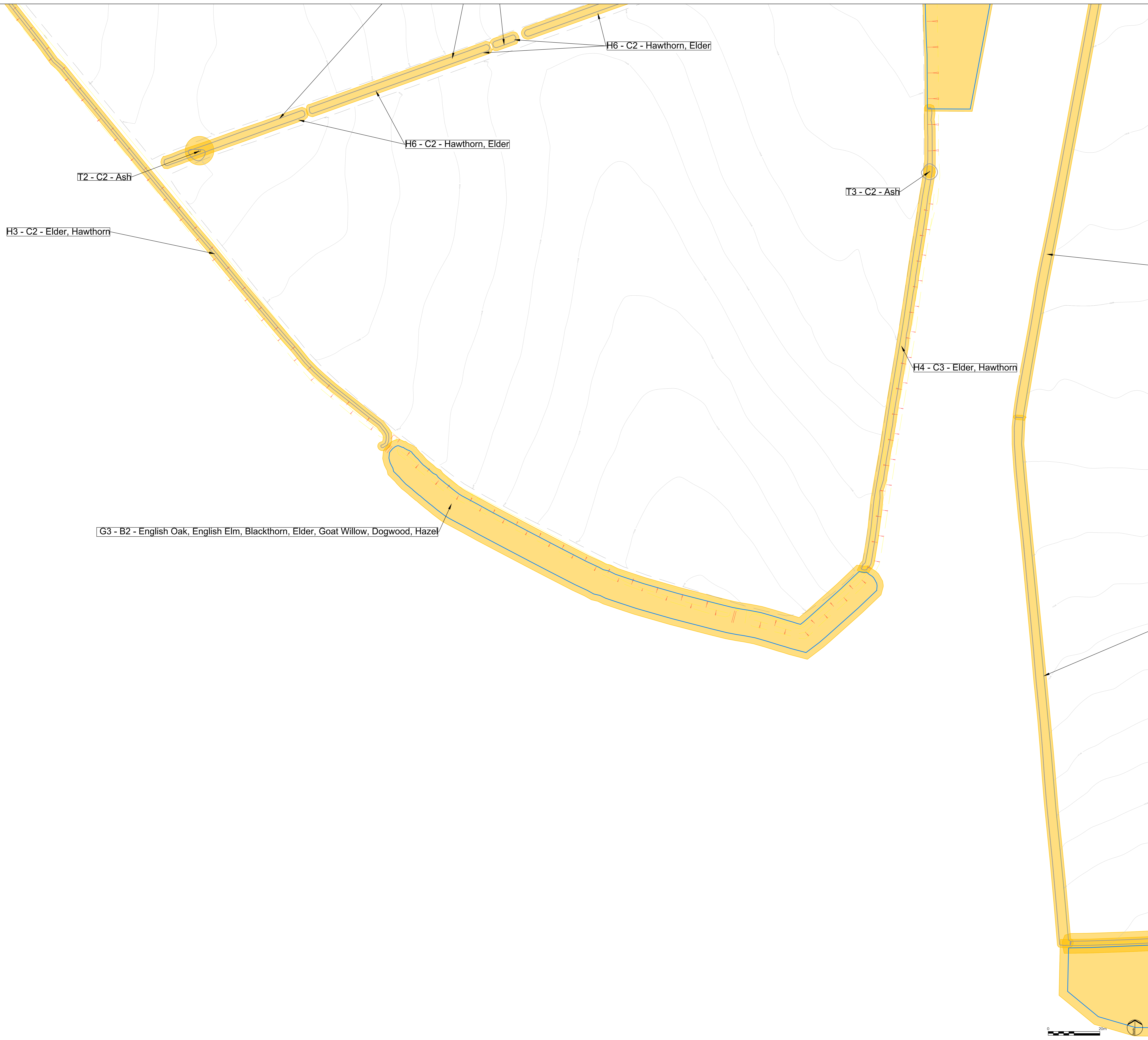
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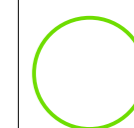
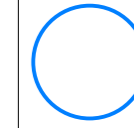
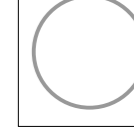
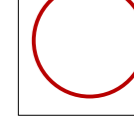

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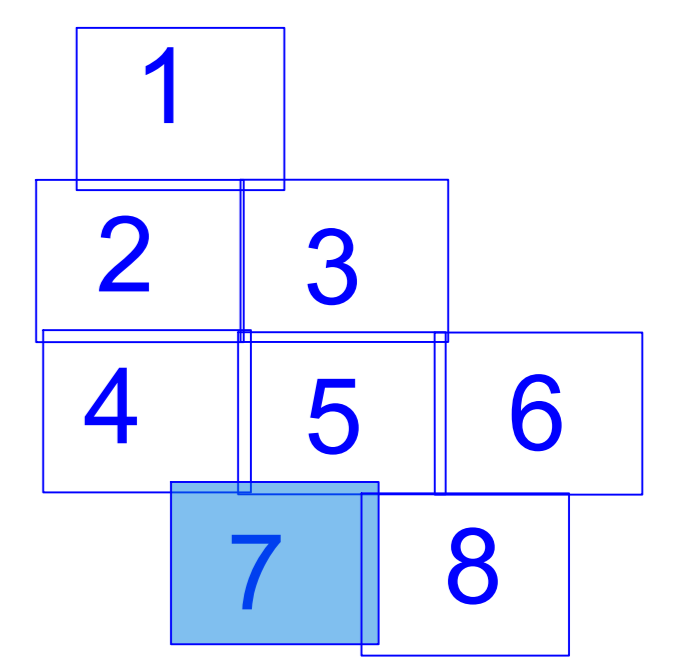
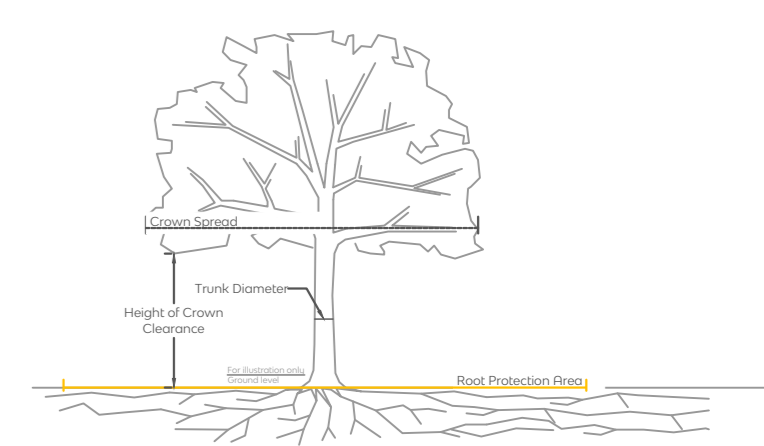
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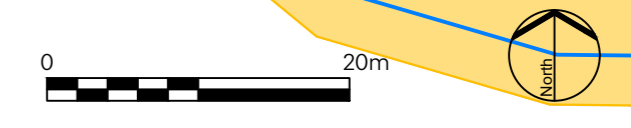


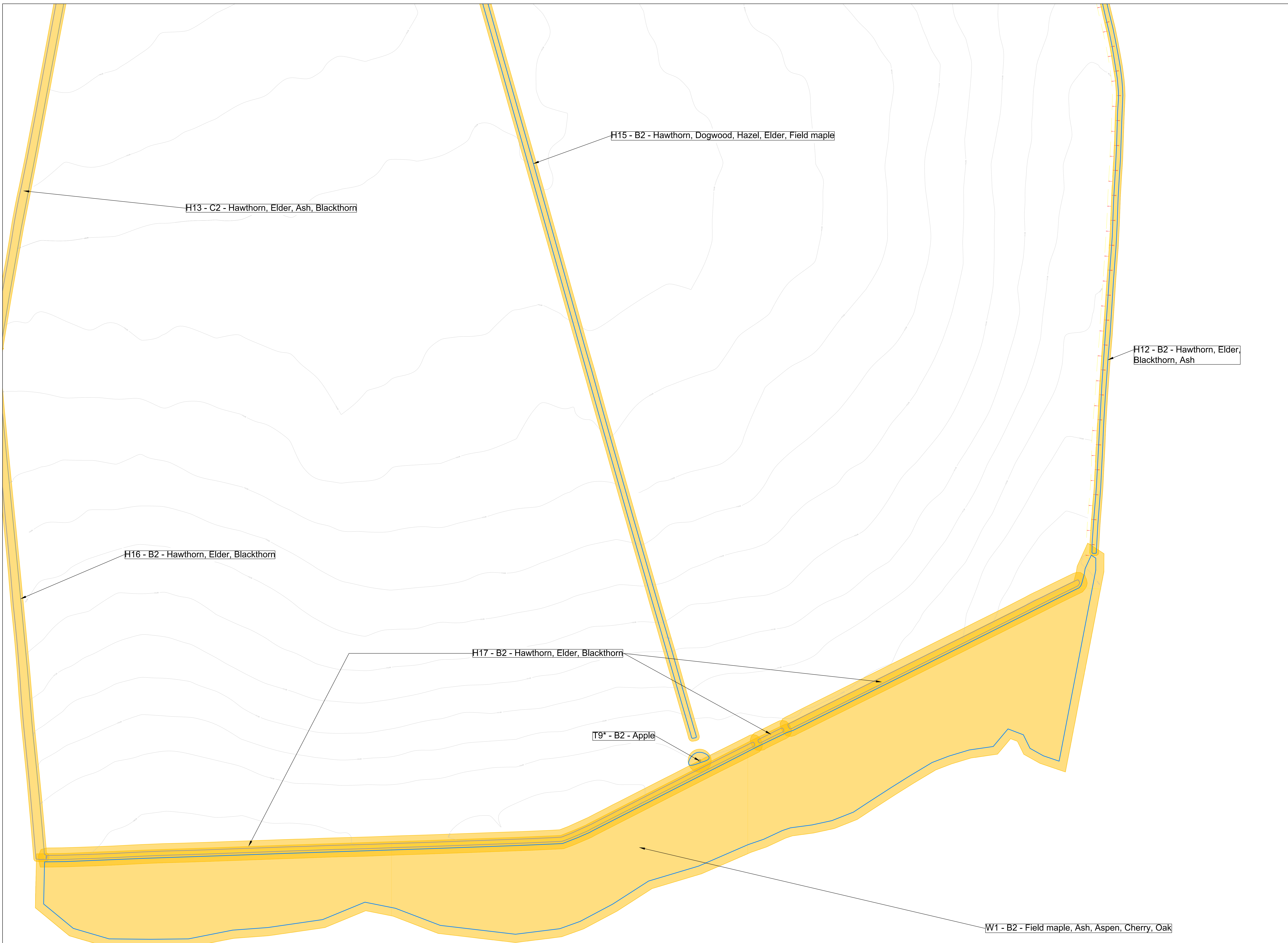
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Land North of J10_J40

Drawing title
Tree Constraints Plan

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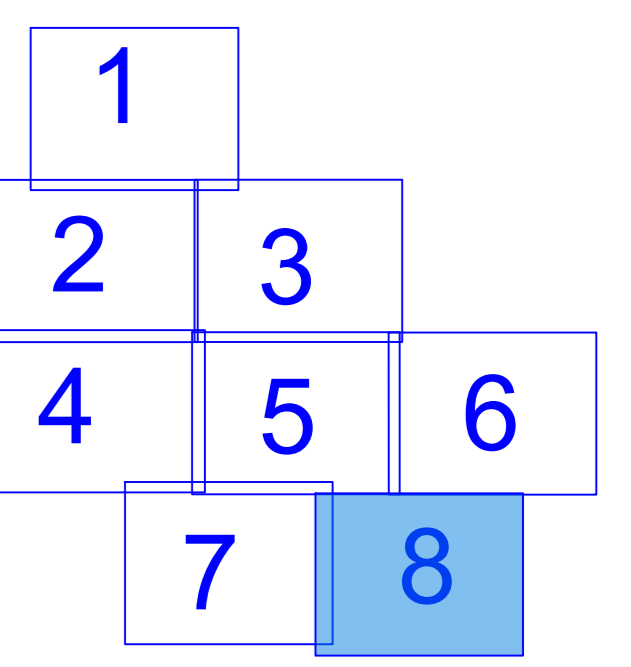
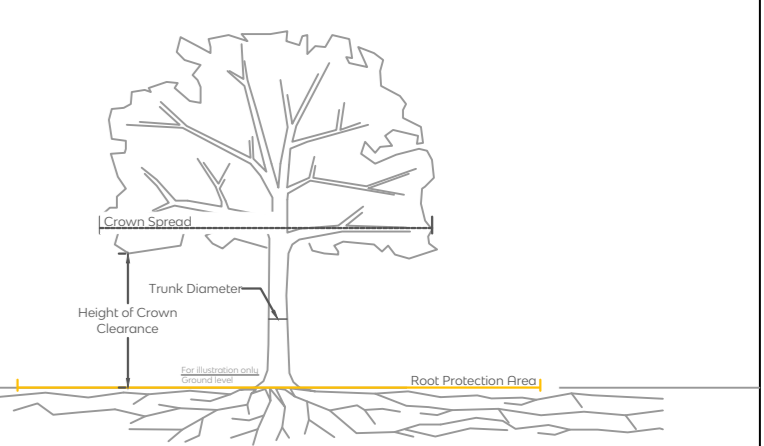
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Plan 2: Tree Retention and Removal Plan (14047/P05)

