



**Glen Dimplex Site
Stoney Lane, Rainhill**

Arboricultural Impact Assessment and Method Statement

Report Ref: 411/R/200

November 2025

Glen Dimplex Site Stoney Lane, Rainhill Arboricultural Impact Assessment and Method Statement

Report Reference: 411/R/200

Version P02

November 2025

Prepared by:

Marianne Dobson CMLI, BA Hons, FdScArb, MARborA

Lantra certified in Professional Tree Inspection

Landscape Architect and Arboricultural Consultant

mdlandscape

6 Kinderton Close

High Legh

Knutsford

Cheshire

WA16 6LZ

Document Issue and Revision Information

Revision	Date	Details	Status	Author	Check	Review
P01	22/08/2025	Arboricultural Impact Assessment and Method Statement	First issue	Marianne Dobson	xx	Marianne Dobson
P01	10/11/2025	Minor amendment to site layout	Second issue	Marianne Dobson	xx	Marianne Dobson



Contents

EXECUTIVE SUMMARY	1
1 INTRODUCTION	2
1.1 Scope of assessment.....	2
2 THE SITE AND SURROUNDINGS	3
2.2 The Development Proposals.....	4
2.3 Ancient Woodland, Veteran and Ancient Trees	4
2.4 Protected Species	4
3 PLANNING CONSIDERATIONS	5
3.1 Planning Policy.....	5
4 TREE POPULATION AND CONDITION	7
4.1 Tree species and population.....	7
4.2 Categorisation and value	7
5 ARBORICULTURAL IMPACTS OF THE PROPOSED DEVELOPMENT	9
5.1 The proposed development	9
5.2 Trees to be removed to facilitate development.....	9
5.3 Trees on third party land adjacent to the development site	9
5.4 Impacts as a result of tree removal	9
6 ARBORICULTURAL METHOD STATEMENT.....	10
6.1 General requirements	10
7 ARBORICULTURAL METHOD STATEMENT WORKS TO EXISTING TREES	12
7.1 Tree works	12
7.2 Tree and root protection	12
7.3 Topsoil storage	13
7.4 Temporary pedestrian access during construction	13
7.5 Vehicular access.....	14
7.6 Additional precautions outside the CEZ	14
7.7 Site compounds, cabins, storage of materials and spoil	14
7.8 Installation of services and excavation within the RPA	14
7.9 Demolition and new surfacing within the CEZ	15
7.10 Reinstatement and soft landscaping within the CEZ.....	16
7.11 Arboricultural watching brief and supervision of excavations	16

8	MITIGATION PLANTING & LANDSCAPING.....	18
8.1	Mitigation	18
9	INSPECTIONS	19
9.1	Prior to commencement of construction	19
9.2	Reinspection	19
10	FIGURES.....	20
11	APPENDICES	21

Figures	Document/Drawing Title	Document/Drawing Reference
1.0	Site Location Plan	
2.0	Tree Constraints Plan	411 /TCP/T/100 to 106
3.0	Arboricultural Impact Assessment - Tree Removals Plan	411 /AIA/T/200 to 206
4.0	Arboricultural Method Statement - Tree Works and Protection Plan	411 /AMS/T/300 to 306
5.0	Arboricultural Method Statement – Proprietary Tree Protection Measures	411 /AMS/T/500
6.0	Topographical survey	G24907
7.0	Proposed Site Plan	25053-1000V- Site Layout
Tables		
1.0	Baseline of the existing tree and hedgerow population	
Appendices		
1	Arboricultural survey data sheets	
2	Site photographs	
3	Tree Quality Assessment Chart	
4	National Joint Utilities Group (NJUG) Guidelines	
5	Common causes of tree death poster	
6	Glossary of Terms	



EXECUTIVE SUMMARY

1. This report has been produced to detail the arboricultural impacts of a proposed residential development at Glen Dimplex Site, Stoney Lane, Rainhill.
2. A tree survey has been carried out and the tree data schedule and plan have been produced for the site reference 411/TCP/T/100 to 106.
3. Based on an objective assessment of the trees and groups of trees made in accordance with *BS5837:2012 Trees in relation to design, demolition and construction – Recommendations*. A total of 35 individual trees and nine groups of trees and scrub were recorded. The features fall within category A, B and C of the BS5837:2012 cascade chart for tree categories.
4. A review of the St Helens Borough Council interactive mapping system has revealed that there are no trees that are the subject of a Tree Preservation Order (TPO) at the site and no Conservation Areas are affected by the proposals.
5. Several trees were observed to have arboricultural features suitable for bats and a separate ecological inspection should be undertaken for trees that may require pruning or removal. The capacity of any trees potentially affected by the works to support roosting bats, should be confirmed by an Ecologist prior to undertaking tree works. The trees also provide nesting opportunities for birds and any tree works should occur between September to February to avoid the nesting and breeding bird season from March to August inclusive.
6. A total of 18 individual trees and two groups of trees and shrubs would be removed to facilitate the works. Several trees on third party land would need to be crown lifted and crown reduced to facilitate construction and occupation of the development. Agreement from the relevant land owners would need to be sought prior to carrying out any works to trees on third party land.
7. Tree protection would be required to demarcate a Construction Exclusion Zone (CEZ) around trees to be retained prior to site establishment and commencement of construction. This would take the form of temporary tree protection fencing and ground protection to confine site access and avoid detrimental impact on the retained trees.
8. An arboricultural watching brief may be required for works to trees where excavation is required within Root Protection Areas (RPA).
9. A proposal for replacement planting and habitat enhancement is indicated on the proposed site layout, reference 25053-1000V, figure 7.0.
10. This assessment considers potential impacts based on the proposed construction and is valid for two years from the date of the report. Changes to trees can occur as a result of natural processes and disease, as well as the influences of development, therefore regular tree inspections at least every two years are recommended to monitor the health and condition of the tree groups and individual trees.

1 INTRODUCTION

1.1 Scope of assessment

- 1.1.1 MDLandscape have been commissioned by Taylor Wimpey to undertake an Arboricultural Impact Assessment (AIA) and Method Statement (AMS) of a proposed development at Glen Dimplex Site, Stoney Lane, Rainhill. It has been compiled to help ensure the successful retention of trees on site during the proposed construction of development, and details the arboricultural impact to the trees and groups of trees, the proposed protection measures and mitigation.
- 1.1.2 Tree surveys at the site were conducted on 13th August 2025 by M Dobson (FdScArb, MARborA, Lantra certified Professional Tree Inspector) in accordance with *BS5837:2012 Trees in relation to design, demolition and construction – Recommendations*.
- 1.1.3 A topographical survey G24097, was available at the time of the tree survey and has been used to verify tree positions and crown spread. The drawing is included in Figure 2.0 at the end of this report. Several trees were recorded on site that were not picked up on the topographical survey and the stem locations were estimated.
- 1.1.4 This report includes:
- The tree data schedule and constraints plan for trees present within the survey and assessment area;
 - An assessment of trees and impacts on trees in relation to development and requirements for protection during construction; and
 - Recommendations for tree removal, retention and management.
- 1.1.5 This report should be read in conjunction with the following arboricultural reports and drawings and relevant ecology reports by UES Ltd:
- Tree Constraints Plans 411/TCP/T/100 to 106;
 - Arboricultural Impact Assessment Plans 411/AIA/T/200 to 206;
 - Arboricultural Method Statement Plans 411/AMS/T/300 to 306 and 400.

2 THE SITE AND SURROUNDINGS

- 2.1.1 The assessment area is located on land centred on grid reference SJ 48005 91547, as shown in Figure 1.0 and is located off Stoney Lane, Rainhill.
- 2.1.2 The site is a former light industrial complex, where appliances were manufactured. The majority of the site is taken over by buildings and hard standing.



Figure 1.0 Site location - Contains ordnance survey data (OpenStreetMap)

- 2.1.3 All trees over 75mm stem diameter at breast height (DBH) and potentially impacted by development, were surveyed. Individual stem diameters of trees in groups were not plotted unless they were particularly notable individuals or had a stem of 150mm DBH and above¹ in accordance with BS5837:2012 recommendations.
- 2.1.4 The north site boundary is formed by a brick wall that runs alongside the roadside footpath to Stoney Lane. To the north east, east and south east, the site boundary is formed by palisade fencing. At the east of the site is an area of hard standing and former social club. The area around the social club is grassed. To the south and west the site boundary is formed by a brick wall.
- 2.1.5 The only trees within the site boundary are to the north between the site boundary wall and existing buildings and former delivery bays. At the time of the survey this area was partially flooded and access to the west of the tree group was impeded by difficult access.

¹ Clause 4.2.4 of BS5837:2012 states that *In the case of woodlands or substantial tree groups, only individual trees with stem diameters greater than 150mm usually need to be plotted.*

- 2.1.6 The site benefits from areas of generous tree cover beyond the site boundary to the south and east, forming a buffer and screen to the adjacent land.
- 2.1.7 There are views into the site through the access gates and palisade fencing to the north east and east boundaries and through gaps in the vegetation. Several ground level and roadside views are obstructed by the brick boundary wall, however there are views into the site from surrounding residential properties at first floor level and above.

2.2 The Development Proposals

- 2.2.1 The AIA and MS have been prepared in relation to a planning application for residential development at the site.
- 2.2.2 The proposed site layout is shown on drawing 25053-1000V, figure 7.0.
- 2.2.3 A review of the St Helens Borough Council interactive mapping system has revealed that there are no trees that are the subject of a Tree Preservation Order (TPO) at the site and no Conservation Areas are affected by the proposals.

2.3 Ancient Woodland, Veteran and Ancient Trees

- 2.3.1 There are no trees with veteran or ancient tree characteristics in the vicinity of the survey area.

2.4 Protected Species

- 2.4.1 Trees and hedges are a potential habitat for nesting birds and roosting habitat for bats, both of which are protected under the *Wildlife and Countryside Act 1981* (as amended) and certain species under the *Conservation of Species and Habitat Regulations 2010*. This makes it an offence to intentionally or recklessly, damage or destroy an active birds' nest.
- 2.4.2 Several trees within the survey boundary may be suitable habitat for nesting birds and roosting habitat for bats, therefore all trees should be inspected for the absence or presence of nesting bird activity or presence of bats, before removal or major pruning work is carried out. A qualified Ecologist should be appointed to ensure a preliminary ecological assessment is undertaken.

3 PLANNING CONSIDERATIONS

3.1 Planning Policy

3.1.1 In addition to statutory designations and protection, the planning system also confers importance on trees and woodland in the context of potential development.

3.1.2 The National Planning Policy Framework² states the importance of trees in the following paragraphs that:

136. 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.

180. Planning policies and decisions should contribute to and enhance the natural and local environment by:

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;

186. When determining planning applications, local planning authorities should apply the following principles:

c) 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.

3.1.3 St Helens Borough Council Local Plan (up to 2037) includes specific policies related to trees and the importance of trees and tree provision within development and Green Infrastructure Plans:

Policy LPA04.1: Strategic Housing Sites

2f - Green Infrastructure Plan addressing biodiversity, geodiversity, greenways, (including any proposed new greenways as referred to in Policy LPC07), ecological network, landscape character, trees, woodland and water storage in a holistic and integrated way;

Policy LPA08: Green Infrastructure

Green Infrastructure in St Helens Borough comprises a network of multi functional natural assets, including green space, trees, woodlands, mosslands, grasslands and wetlands, located within urban, semi-urban and rural areas. This network is capable of delivering a wide range of

² National Planning Policy Framework, (NPPF), Ministry of Housing, Communities & Local Government December 2024 [National Planning Policy Framework](#)

environmental and quality of life benefits for local communities and forms an important element of the Liverpool City Region (LCR) Ecological Network.

Policy LPC10: Trees and Woodland

The Council will, working where necessary with the Mersey Forest and other partner organisations, seek to increase the extent of tree cover across the Borough and to protect and enhance the multi-purpose value of trees, woodlands, and hedgerows.

2. New development, as appropriate having regard to its scale and nature, will be required to include the planting of new trees, woodlands, hedgerows and / or financial contributions towards off-site provision. Arrangements should be made for any tree(s) or hedgerow(s) that are planted to be replaced in the event of failure or damage within a prescribed period.

3. Proposals for new development will only be permitted if they would conserve, enhance and / or manage existing trees, woodlands, and hedgerows as appropriate, for example by being laid out to provide adequate spacing between existing trees and buildings and including long term management proposals.

4. Any development proposal that would affect a site containing tree(s) or woodland must be accompanied by a tree survey and an arboricultural constraints/implications report, produced to the current British Standard, to enable the effect of the development on the tree(s) to be properly assessed and appropriate tree protection measures to be identified. Any approved tree protection measures must then be maintained throughout the period of any demolition and / or construction works.

5. Development resulting in the loss or deterioration of any area of ancient woodland or of any ancient or veteran tree will be refused unless there are wholly exceptional circumstances in which the need for, and benefits of, the development would clearly outweigh any resultant loss and a suitable mitigation strategy exists.

6. Development proposals should be designed and laid out in a manner that would retain any tree subject to a Tree Preservation Order, any other protected tree, any other tree of value including any veteran tree, trees of value as a group, any tree of substantive heritage value or any length of hedgerow, unless it can be justified for good arboricultural reasons or there is a clearly demonstrated public benefit that would outweigh the value of the tree(s) and or hedgerow(s). Where any tree is justifiably lost its replacement will normally be required on at least a 2 for 1 ratio, with impacts on woodlands mitigated in line with Policy LPC06. Any tree(s) planted must be replaced in the event of failure or damage during a prescribed period.

7. Proposals that would enhance the value and / or contribution of woodland in respect of recreational or educational needs; health; the landscape or townscape; heritage; biodiversity; tourism; and / or economic regeneration will be supported.

4 TREE POPULATION AND CONDITION

4.1 Tree species and population

- 4.1.1 The trees surveyed included the following species: Lombardy poplar, grey poplar, white poplar, oak, ash, rowan, blackthorn, hawthorn, goat willow, crack willow, osier, hornbeam, silver birch, field maple, wild cherry, alder, Norway maple, sycamore, small leaved-lime, hazel, dogwood, elder, beech, Lawsons cypress and holly.
- 4.1.2 A total of 35 individual trees and nine groups of trees and scrub were recorded.
- 4.1.3 During the assessment, the overall tree population, composition of groups, arboricultural, landscape and conservation qualities have been considered. A full description of the groups of trees and individual trees, is given in the tree data schedule in Appendix 1 and is not repeated in the body of the report.
- 4.1.4 Access for survey of trees to the north boundary was partly impeded by steep ground and flooding. Trees in the west group were not surveyed individually.
- 4.1.5 Trees on third party land to the east and south were not accessible to take measurements and a detailed visual inspection could not be carried out. Measurements for crown spread were partially estimated and stem diameters were estimated. If there is an opportunity to gain access to third party land for closer inspection and detailed survey, this would be beneficial to better ascertain the health and condition of trees and potential impacts of the proposed development.

4.2 Categorisation and value

- 4.2.1 Trees, groups of trees and woodland compartment within the survey area have been identified within categories A, B and C.
- 4.2.2 The trees surveyed are detailed in the tree data schedule in Appendix 1. Photographs of notable trees, groups and general character of the site vegetation are illustrated in Appendix 2.
- 4.2.3 A summary of the cascade chart for tree categories is given below. The full table is included in Appendix 3.
- Category A Trees of high value including those that are particularly good examples of their species and/or those that have visual importance or significant conservation or other value.
 - Category B Trees of moderate value including those that do not qualify as Category A due to impaired condition and/or those that collectively have higher value than they would as individuals; also trees with material conservation or other value.
 - Category C Trees of low value including those with very limited merit or impaired condition; trees offering transient or temporary landscape benefits.
 - Category U Trees with irremediable defects and anticipated early loss due to collapse; dead trees or those in immediate decline and those with infectious pathogens that threaten other trees.

4.2.4 A summary of the baseline of the existing tree population within the site is given in Table 1.0 below. Due to overlapping canopy cover and to avoid double counting, the individual category B and C crown area is included within the two category B groups:

BASELINE TREE AND HEDGEROW POPULATION		CATEGORY A High quality		CATEGORY B Moderate quality		CATEGORY C Low quality		CATEGORY U Unsuitable for retention		HEDGEROW (Not categorised under BS5837:2012; formal hedgerow survey not undertaken)	
FEATURE	Total Number	Quantity	Area of crown/ canopy spread (m2)	Quantity	Area of crown/ canopy spread (m2)	Quantity	Area of crown/ canopy spread (m2)	Quantity	Area of crown/ canopy spread (m2)	Quantity	Total length (m)
TREE	17	0		4	Included in group	13	Included in group	0			
GROUP	2	0		2	696.5	0		0			
WOODLAND		0		0		0		0			
HEDGEROW										0	
TOTAL				2	696.5						

Table 1.0 Baseline of the existing tree population within the site with reference to BS5837:2012 category rating and as a measure of canopy/crown cover.

5 ARBORICULTURAL IMPACTS OF THE PROPOSED DEVELOPMENT

5.1 The proposed development

- 5.1.1 The existing units within the site would be demolished and areas of hard standing removed prior to development.
- 5.1.2 The residential development includes construction of new dwellings, access roads and parking provision, public open space and soft landscaping and drainage attenuation features.

5.2 Trees to be removed to facilitate development

- 5.2.1 The proposed site layout has been overlaid onto the Tree Constraints Plan to identify the potential impact of the permanent works on existing trees. All trees within the site would be removed to facilitate development.

5.3 Trees on third party land adjacent to the development site

- 5.3.1 Several trees on third party land would be impacted by the residential development. It is recommended that the developer liaise with the adjacent landowners to discuss requirements for advance works to trees to minimise adverse impacts on trees during construction. This may include tree root pruning, crown reduction and crown lifting.
- 5.3.2 Crown reduction and crown pruning in advance of construction would also be beneficial to reduce the future pressure on trees and risk of inappropriate pruning during occupation of the development.

5.4 Impacts as a result of tree removal

- 5.4.1 The loss of trees to the north boundary would open up views above the height of the existing brick wall. There would be a change to the streetscape with the losses most noticeable from existing residential properties and buildings to the north, north west and north east along Stoney Lane.
- 5.4.2 The proposed site layout shown on drawing 25053-1000V, figure 7.0, indicates replacement tree planting throughout the site and within areas of public open space as mitigation for the tree removal and impact on landscape, visual amenity and biodiversity.

6 ARBORICULTURAL METHOD STATEMENT

6.1 General requirements

- 6.1.1 A copy of this document should be provided to the Project Manager and retained at the site office, with all relevant drawings included in the appendices clearly displayed on site notice boards. The method statement must be made freely available for inspection to contractors and sub-contractors. The document shall be introduced to all new contractors as part of the general site induction.
- 6.1.2 An Arboricultural Consultant shall be appointed to inspect the tree works and protection measures to ensure compliance with this method statement in accordance with the draft Arboricultural Inspection Proforma in Appendix 5 and reporting procedures. Timing of inspections would generally be every 6-8 weeks, timed to coincide with planned work stages and include ad-hoc inspections.
- 6.1.3 All proposed tree works shall be carried out by a suitably qualified, competent and insured contractor, preferably an Arboricultural Association approved contractor. Tree work should be undertaken in accordance with BS 3998:2010 – “Tree Work - Recommendations” and current issued FISA Safety Guides (Forestry Industry Safety Accord). No tree works shall be undertaken by construction personnel.
- 6.1.4 All tree works to be carried out shall comply with all appropriate legislation, including planning application decision notices and conditions, felling licences, statutory Tree Preservation Order and Conservation Area constraints and requirements.
- 6.1.5 The felling of trees in England is regulated by the Forestry Act (1967), the provisions of which are enforced by the Forestry Commission. Advice should be sought from a suitably qualified arboriculturist at least six months before any anticipated felling work is carried out to allow sufficient time to consult with the Forestry Commission, prepare documentation and apply for a felling licence. Exceptions to the need for a felling licence may apply, as specified under the Forestry Act, however it is still advisable to consult with the Forestry Commission to ask advice on whether a specific tree felling exception can be used.³
- 6.1.6 Prior to any development and removal of trees, the protected status of trees on site should be assessed again in the event of any changes since the survey and assessment were undertaken.
- 6.1.7 Permission from other organisations may be required before trees are felled, for example within locally or nationally designated sites, Sites of special Scientific Interest and ancient woodland. Any tree works must comply with the Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000, which provides statutory protection to protected species and birds. All tree work operations are covered by these provisions and advice from an Ecologist should be obtained before undertaking any works that might constitute an offence.
- 6.1.8 The proposed tree works are shown on the Arboricultural Method Statement Plans 411/AMS/T/300 to 306, figure 4.0.

³ [Tree felling: Getting permission - updated 2023 \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/84444/tree_felling_getting_permission_updated_2023.pdf) Forestry Commission (England)

- 6.1.9 No tree removal or pruning works other than those identified in this method statement, are to be carried out as further permissions from St Helens Borough Council, Third Parties or the Forestry Commission in relation to felling licences may be required and ecological constraints may be present.
- 6.1.10 All proposed tree pruning and tree removal, shall be undertaken in accordance with the approved schedule and plans appended within this report and in consultation with the Arboricultural Consultant and Ecologist. No works are to be undertaken on trees that are shown to be retained and protected without prior consultation with the Arboricultural Consultant and Ecologist.
- 6.1.11 Trees to be removed shall be spray painted in accordance with the drawings and accompanying schedule.
- 6.1.12 The Site Manager shall be responsible for daily compliance with this method statement and shall contact the Arboricultural Consultant as required for general queries, ad-hoc inspections and unexpected occurrences affecting trees during the course of the works, such as encountering large roots over 25mm diameter or if additional pruning is required.
- 6.1.13 The tree works and subsequent installation of protection must be carried out prior to the commencement of construction, ground preparation works, establishment of site compounds, delivery of construction plant and materials or other investigation works.
- 6.1.14 All tree works should be undertaken outside of the nesting bird season which is between 1st March to 1st September, however it should be noted, that should warm weather be prevalent at the end of February, it is possible that bird nesting activity may start early.
- 6.1.15 If any tree works are to take place between March and August, a suitably qualified Ecologist should check the tree works area a maximum of 24 hours before any works commence. Should any nesting birds be found, or suspected to be present, advice should be sought from the Ecologist before proceeding.
- 6.1.16 If nesting birds are found, the tree should be marked with tape or spray paint to prevent the tree from being removed until the young have fledged the nest. The drawing displayed in the site office and showing the relevant tree should be marked to identify the presence of a birds nest and the date noted. This would allow forward planning for reinspection and removal once the young have fledged the nest.

7 ARBORICULTURAL METHOD STATEMENT WORKS TO EXISTING TREES

7.1 Tree works

- 7.1.1 In addition to the tree removals, tree surgery works are recommended to allow clearance for construction access, to prevent potential damage from construction vehicles and as remedial or formative pruning. The tree works proposed are shown in Table 1.0 and on the Arboricultural Method Statement Plans 411/AMS/T/300 to 306, figure 4.0.
- 7.1.2 All operations must be carried out to avoid damaging neighbouring retained trees. Trees to be retained must not be used for anchorage or winching purposes.
- 7.1.3 Any pruning to facilitate access must ensure there is no significant adverse impact on tree physiology or amenity value. A suitable working area may be created by temporarily tying back tree branches to avoid excessive pruning. The visual appearance, health and stability of a tree must be considered when undertaking pruning works and remedial pruning may be required as part of the tree works.
- 7.1.4 All trees that have been approved for removal shall be cut down to a low stump. All arising timber shall be removed from site.
- 7.1.5 Tree protection fencing and ground protection measures shall be installed following completion of the tree works and prior to any other construction or clearance works taking place.
- 7.1.6 All tree work should be undertaken with due regard to ecological constraints and any mitigation requirements.

7.2 Tree and root protection

- 7.2.1 Following completion of the tree works, and subsequent inspection and sign off by the Arboricultural Consultant, the Site Manager shall arrange installation of the temporary tree protection.
- 7.2.2 Tree protection fencing in accordance with BS5837:2012 (See Appendix 2 for details) or other suitable robust and immovable fence to minimum 2m in height to be approved by the Arboricultural Consultant and St Helens Borough Council Tree Officer, shall be erected prior to the commencement of any of the following activities:
- Soil stripping;
 - Delivery of any plant or materials;
 - Demolition and site clearance;
 - Commencement of construction works;
 - Installation of any utilities;
 - Soiling / ground reinstatement; and
 - Landscape works.

- 7.2.3 The protective fencing shall be erected to the alignment as shown on the Arboricultural Method Statement Plans 411/AMS/T300 to 306, figure 4.0. The temporary tree protection fencing shall tie into the existing site fencing and wall where appropriate.
- 7.2.4 Weather proof tree protection fence signs (See Appendix 3) shall be attached to the fencing at 15m intervals and positioned at eye level. These signs must be replaced if they are removed or become illegible.
- 7.2.5 Once erected these fenced areas should be respected and after installation, barriers and ground protection should not be removed or altered without prior recommendation by the Arboricultural Consultant and must remain in place until completion of all construction works on site.
- 7.2.6 No works are proposed within the CEZ once the fence and ground protection measures are installed. The CEZ must not be altered and the following restrictions shall apply:
- No change in ground level, reprofiling or mechanical excavations;
 - No excavations by other means without the advice and agreement of the Arboricultural Consultant;
 - No removal of grass areas by mechanical means;
 - No storage of plant or materials;
 - No storage or handling of any chemicals, fuels, wash out areas; and
 - No vehicular access.
- 7.2.7 Where the Root Protection Areas (RPA) for retained trees extends beyond the tree protection fencing, temporary ground protection shall be installed in accordance with BS5837:2012. Such ground protection must ensure that there is no soil compaction and root growth is uninhibited.
- 7.2.8 The ground protection shall consist of the following as relevant to the proposed site layout and construction requirements:

7.3 Topsoil storage

- 7.3.1 Topsoil storage within the RPA of existing trees to be retained should be avoided. It is recommended that geotextile be laid below the proposed topsoil storage bund to segregate existing and stored soils to prevent inadvertent excavation at reinstatement. Topsoil should not be stored more than 1m in height.

7.4 Temporary pedestrian access during construction

- 7.4.1 Single thickness non-slip boards on a 100mm compression-resistant layer of woodchip, over a robust geo/textile membrane; or, geotextile laid over existing ground with 100mm depth clean inert hardcore; or, non-slip boards laid on a purpose formed scaffold frame, creating a suspended walkway. Alternative proposals may be submitted to the Arboricultural Consultant.

7.5 Vehicular access

- 7.5.1 Where vehicular construction access is required within the RPA of trees to be retained, an above ground protection system shall be provided. This shall be installed to accommodate the potential loading within the RPA (e.g. proprietary systems as shown in Appendix 4) and shall be designed to an engineering specification in conjunction with arboricultural advice.
- 7.5.2 On completion of construction and reinstatement works the above ground protection systems shall be removed only with the approval of the Arboricultural Consultant. Surface de-compaction and root zone enhancement measures may be required and can then be undertaken.

7.6 Additional precautions outside the CEZ

- 7.6.1 Care should be taken when planning site operations to ensure that all types of machinery can operate without encountering retained trees. Such contact can result in significant damage and compromise safe retention of the tree. It is recommended that a banksman is employed to ensure adequate clearance from trees is always maintained. Where this is not possible, access facilitation pruning in consultation with the Arboricultural Consultant may be required. No signs, apparatus or any other services shall be attached to any part of a retained tree.

7.7 Site compounds, cabins, storage of materials and spoil

- 7.7.1 Temporary site compounds, including portable welfare facilities and temporary service connections, are to be positioned clear of the RPA of retained trees. The site poster 'Common causes of tree death' (see Appendix 6) shall be posted in the site cabin(s).
- 7.7.2 The delivery, storage, mixing and discharge of concrete and all other cement based materials shall be carried out away from retained trees, so that there is no risk of runoff and spillage in the RPA. No substances that are potentially injurious to trees (including fuels, building materials and other phyto-toxic materials) shall be stored or used in the vicinity of retained trees where there is a risk of injurious contact. Emergency spillage kits must be available to minimise the impacts of any accidental spillages to the local environment.
- 7.7.3 No materials shall be stored within the RPA of retained trees. Spoil from any site activity shall be removed or if to be retained for reuse, stored or piled outside the CEZ.

7.8 Installation of services and excavation within the RPA

- 7.8.1 Underground services should be routed outside the RPA of all retained trees to avoid risk of roots being severed during excavation. Mechanical trenching can also affect local soil hydrology. Common ducts should be used to minimise disturbance and segregated from the RPA.
- 7.8.2 Where there is no alternative and new services are to pass within the RPA, the service plans should be developed with input from the Arboricultural Consultant. Trenchless insertion methods should be used where possible, with the entry and exit pits situated outside the RPA.

- 7.8.3 Where this is not possible the NJUG 10 Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees should be adopted, refer to Appendix 6. Hand excavation may be acceptable for shallow service runs, where they can be undertaken with the supervision of the Arboricultural Consultant and where roots can be retained and suitably protected. Where possible an air spade or air lance should be used to loosen the soil and removed using a vacuum excavator. Soils should be stored and retained on site for reinstatement on completion of the works. This may also involve wrapping or covering exposed roots to prevent desiccation and the effects of rapid temperature change. All wrappings must be removed prior to backfilling.
- 7.8.4 Prior to backfilling of soils the installation of a root protection barrier may be required to ensure there are no long-term effects of root growth on buried assets. Backfilling to trenches should ensure that subsoils are replaced first in 300mm layers and soils consolidated but not compacted. The final 300mm of soil backfill to ground level should be topsoil excavated from the trench or a 50/50 mix by volume of as dug topsoil and proprietary tree and shrub compost with organic matter content to replicate the upper soil profile. Injection of soils with mycorrhizal inoculant may also be considered where fibrous roots have been lost due to excavation.

7.9 Demolition and new surfacing within the CEZ

- 7.9.1 Demolition of existing structures in close proximity to retained trees should be carried out under the supervision of the Arboricultural Consultant with works planned to avoid deposition of material within the CEZ and to avoid damage to retained trees. Mechanical plant access within the CEZ should be avoided. Temporary pedestrian access shall be allowed within the CEZ to carry out these operations. A temporary breach in the fencing shall be created to facilitate pedestrian access only.
- 7.9.2 Removal of the existing hard surfacing adjacent to the RPA should be undertaken first, working away from the retained tree to allow any exposed roots to be appropriately covered and protected as work proceeds. Debris within the RPA should be removed by hand and transported clear of the protective fencing using wheelbarrows.
- 7.9.3 Where roots are encountered during the course of the works, they shall be retained and carefully worked around, wherever practicable. No root greater than 25mm dia. shall be cut without advice from the Arboricultural Consultant. If damage does occur to a root greater than 25mm diameter, then advice must be sought from the Arboricultural Consultant. Where it is essential to sever roots, they shall be cleanly cut, using an appropriate, sharp clean bladed hand tool. Roots that are to be retained shall be covered with hessian, or similar, to protect from desiccation. Prior to backfilling, any hessian wrapping should be removed and retained roots should be surrounded with sharp sand, or other loose granular fill before soil or other material is replaced.
- 7.9.4 To minimise risk of damage to tree roots to be retained, an air spade or vacuum excavator may be used to loosen and remove soils, in order to identify the location of roots adjacent to a planned excavation. Roots may then be pruned as previously described.

- 7.9.5 Where there is a deficit of cover due to removal of existing surfacing, inert sandy subsoil shall be placed where the depth exceeds 300mm. Where the depth of cover is 300mm or less, a loam-sand-based topsoil shall be placed to provide at least 300mm of cover. Grading shall be undertaken using hand tools only to avoid compaction. No reduction of levels of the underlying soil surface shall be carried out. Soiling shall be undertaken in accordance with the Construction code of practice for the sustainable use of soils on construction sites.⁴

7.10 Reinstatement and soft landscaping within the CEZ

- 7.10.1 Reinstatement and soft landscape works, excavation and ground preparation within the CEZ shall be carried out using hand tools to minimise risk of damage to roots. Mechanical cultivation and rotovation shall be avoided.
- 7.10.2 Chemical application for treatment of woody plant matter shall be minimised. Where used, all instructions, warnings and other relevant information from manufacturers should be strictly observed and followed. Care must be taken to avoid damage to adjacent vegetation and trees to be retained.
- 7.10.3 During reinstatement, there must be no unplanned changes in ground levels within the RPA and works should only be carried out when ground conditions are suitable to avoid risk of compaction. Final grading to marry in new levels with existing ground with imported soils shall be carried out by hand tools only. Cultivations for seeding shall also be by hand.
- 7.10.4 All new tree planting should be undertaken in accordance with *BS8545:2014 Trees: from nursery to independence in the landscape - Recommendations*. Planting pits for hedgerows, shrubs or trees within the RPA of existing retained trees, must be hand excavated. If substantial roots are encountered, the planting pit should be relocated if possible.
- 7.10.5 Plants and materials for the landscape works should be transported in wheelbarrows and must be moved across existing hard surfacing where possible, or via temporary ground protection minimise risk of compaction.

7.11 Arboricultural watching brief and supervision of excavations

- 7.11.1 The Site Manager shall inform the Arboricultural Consultant as soon as possible of the need to undertake excavation works within the RPA of existing trees and programme in an arboricultural watching brief. All watching briefs must be performed by an Arboricultural Consultant. This should be a planned activity and relates specifically to excavation with the RPA of trees to be retained.
- 7.11.2 An arboricultural watching brief is required to ensure the pruning of roots is minimised, kept to within acceptable limits and to supervise the reinstatement of soils. Where possible, root pruning should be carried out at the same time as the installation of the temporary fencing to ensure the fence is in the correct position immediately after the root pruning and reinstatement of soils has been completed.

⁴ Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, www.defra.gov.uk September 2009

- 7.11.3 The root pruning work should be undertaken in dry conditions, ideally whilst the ground is moist. Reinstatement of soils, should be carried out as soon as possible after root pruning to avoid drying out of roots to retained trees. There should be at least 300mm of topsoil cover over tree roots to the final ground profile and levels should marry in with existing ground levels. The watching brief would also ensure that roots of trees to be retained at the edge the area to be regraded are not damaged.

8 MITIGATION PLANTING & LANDSCAPING

8.1 Mitigation

- 8.1.1 On completion of construction, soil stored within the working area would be reinstated to marry in levels with the adjacent soils. Temporary geotextile membranes and temporary surfacing shall be lifted and removed, and the soil surface beneath shall be lightly raked over. Works are to be carried out in accordance with section 7.10 and the reseeding and replanting requirements would be detailed on the proposed landscape plan.
- 8.1.2 Plants and materials for the landscape works shall be transported along the new footpaths and hard surfacing areas to avoid trafficking over existing soils.
- 8.1.3 Soils to either side of the hard surfacing areas shall be graded to smooth, flowing contours, suitable for seeding and planting as per the reinstatement proposals. Care shall be taken not to overwork soils.
- 8.1.4 Replacement tree planting is recommended to mitigate for the tree losses and to replace amenity or biodiversity value that may be lost because of the tree removal. There are opportunities on site to improve the tree cover across the site and therefore enhance screening, biodiversity value and visual amenity.
- 8.1.5 Native trees and shrubs appropriate to the area are recommended to be consistent with the vegetation of the locality and for the benefit of biodiversity and site ecology, however it is appreciated that ornamental planted and cultivated tree species would be appropriate within the context of the proposed land use.
- 8.1.6 Planting works would be undertaken between November to March.

9 INSPECTIONS

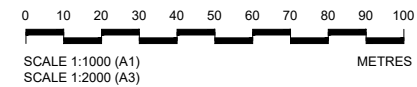
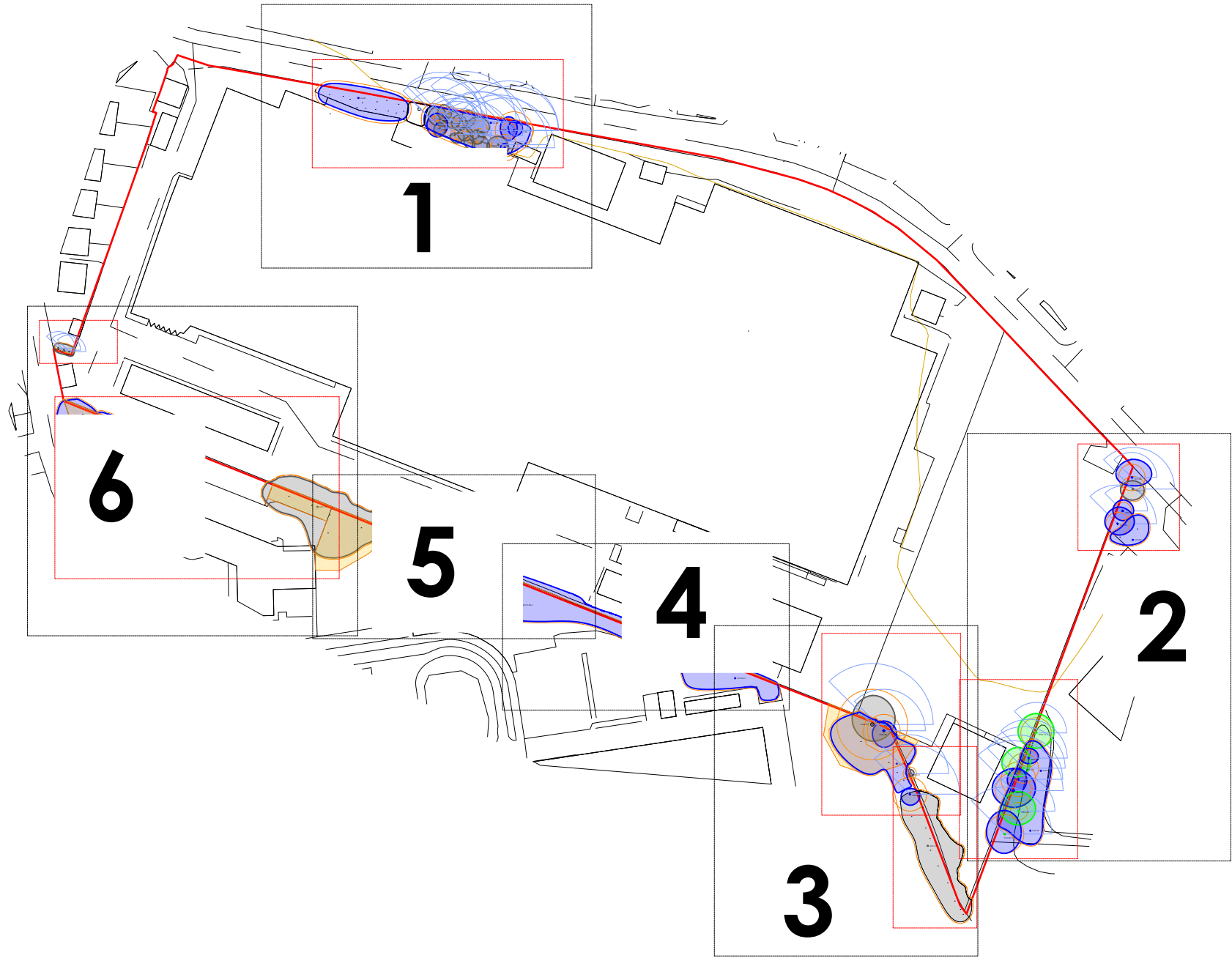
9.1 Prior to commencement of construction

- 9.1.1 Once the protective fencing and ground protection measures have been installed but prior to the commencement of the development a site inspection should be undertaken by the Arboricultural Consultant. This is to confirm that all protection measures have been installed in accordance with the Tree Works and Protection Plan and the method statement.
- 9.1.2 Checks of the tree fence and ground protection should be carried out by the contractor at regular intervals during the development to ensure trees remain adequately protected.
- 9.1.3 On completion of the development a general survey of the trees by the Arboricultural Consultant is recommended to identify any remedial action necessary as a result of the works. Note that permission for any additional tree works not included in the original development consent may need to be obtained through application to St Helens Borough Council and other permissions and consents may be required.
- 9.1.4 If any arboricultural issues arise during the development then the site manager should immediately contact the Arboricultural Consultant for advice on how to proceed.

9.2 Reinspection

- 9.2.1 It is recommended that trees are inspected every two years, particularly after storms or other extreme weather events, to identify potential new hazards or changes to known defects. Annual inspections have been recommended for specific trees where defects are known to be present. Inspections of all retained trees should be undertaken by a qualified Arboriculturist/Arboricultural Consultant and records of inspection held at the site or with the landowner.
- 9.2.2 Hazard recommendations are based on observations at the time of survey. Trees are dynamic living organisms whose structure is constantly changing. Even those in good condition can suffer from damage or stress. Following site development, regular (annual or biennial) inspections of all retained trees should be undertaken by a qualified Arboricultural Consultant.

10 FIGURES

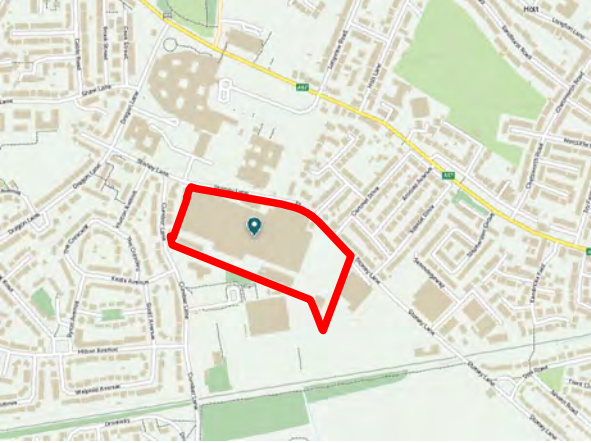


**TREE CONSTRAINTS PLAN
OVERVIEW AND SHEET PLAN**

Notes

1. Dimensions are given in metres and millimetres as stated on the drawing.
2. Centre of site is located at approximately grid reference SJ 48005 91547.
3. Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
4. Drawing must be reproduced in colour.

Location Plan



Legend

Trees categorised in accordance with BS5837:2012 Tree Preservation to design, demolition and construction - Recommendations. This drawing must be reproduced in colour.

- CATEGORY A - high quality tree / group
- CATEGORY B - moderate quality tree / group
- CATEGORY C - low quality tree / group
- CATEGORY U - unsuitable for retention
- ROOT PROTECTION AREA (RPA)
- ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
- TREE REFERENCE, TAG NUMBER, CATEGORY AND SUN SHADOW
- T, G TREE, GROUP # OFF SITE
- SCRUB
- SURVEY BOUNDARY
- T1 Red line / Legal Ownership
- Boundary with boundaries
- Width (metres)
- Pollution Risk Fencing
- RPS / SSS Area
- Existing Tree / Vegetation to be retained
- Existing Tree / Vegetation to be lost
- Existing Tree / Vegetation to be removed
- Affordable house types

OS LICENCE
© Crown copyright and database rights [2025] AC0000807948

Drawing references	
411/TCP/T/100	TREE CONSTRAINTS PLAN OVERVIEW AND SHEET PLAN
411/TCP/T/101	TREE CONSTRAINTS PLAN SHEET 1
411/TCP/T/102	TREE CONSTRAINTS PLAN SHEET 2
411/TCP/T/103	TREE CONSTRAINTS PLAN SHEET 3
411/TCP/T/104	TREE CONSTRAINTS PLAN SHEET 4
411/TCP/T/105	TREE CONSTRAINTS PLAN SHEET 5
411/TCP/T/106	TREE CONSTRAINTS PLAN SHEET 6

Project	GLEN DIMPLEX SITE STONEY LANE	Dwg No	411/TCP/T/100	Revision	P01
Title	TREE CONSTRAINTS PLAN OVERVIEW AND SHEET PLAN	Scale	1:1000 @ A1 / 1:2000 @ A3	Date	21/08/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	21/08/2025	FOR INFORMATION	MD	XX	MD

mdlandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231



Legend

Trees categorised in accordance with BS5837:2012 Tree Preservation to design, demolition and construction: Recommendations. This drawing must be reproduced in colour.

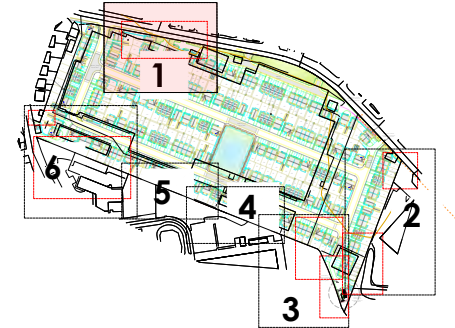
- CATEGORY A - high quality tree / group
- CATEGORY B - moderate quality tree / group
- CATEGORY C - low quality tree / group
- CATEGORY U - unsuitable for retention
- ROOT PROTECTION AREA (RPA)
- ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
- TREE REFERENCE, TAG NUMBER, CATEGORY AND SUN SHADOW
- T, G TREE, GROUP OFF SITE
- SCRUB
- SURVEY BOUNDARY



Notes

- Dimensions are given in metres and millimetres as stated on the drawing.
- Centre of site is located at approximately grid reference SJ 48005 91547.
- Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
- Drawing must be reproduced in colour.

Location Plan



0 1 2 3 4 5 6 7 8 9 10
SCALE 1:125 (A1)
SCALE 1:250 (A3)
METRES

TREE CONSTRAINTS PLAN SHEET 1

Drawing references	
411/TCP/T/100	TREE CONSTRAINTS PLAN OVERVIEW AND SHEET PLAN
411/TCP/T/101	TREE CONSTRAINTS PLAN SHEET 1
411/TCP/T/102	TREE CONSTRAINTS PLAN SHEET 2
411/TCP/T/103	TREE CONSTRAINTS PLAN SHEET 3
411/TCP/T/104	TREE CONSTRAINTS PLAN SHEET 4
411/TCP/T/105	TREE CONSTRAINTS PLAN SHEET 5
411/TCP/T/106	TREE CONSTRAINTS PLAN SHEET 6

Project	GLEN DIMPLEX SITE STONE LANE	Dwg No	411/TCP/T/101	Revision	P01
Title	TREE CONSTRAINTS PLAN SHEET 1	Scale	1:125 @ A1 / 1:250 @ A3	Date	21/08/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	21/08/2025	FOR INFORMATION	MD	XX	MD



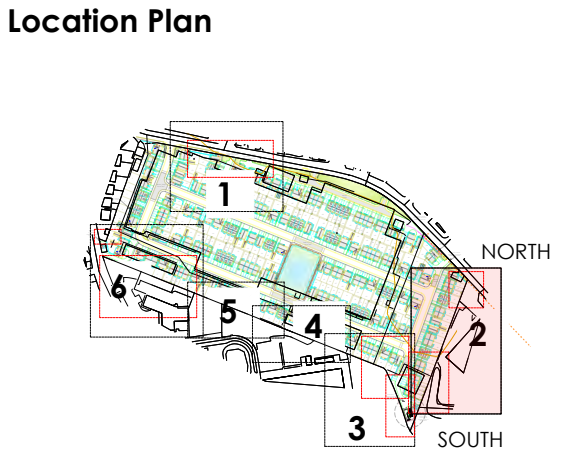
mdandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231



mdandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231



- ### Notes
1. Dimensions are given in metres and millimetres as stated on the drawing.
 2. Centre of site is located at approximately grid reference SJ 48005 91547.
 3. Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
 4. Drawing must be reproduced in colour.



Legend

Trees categorised in accordance with BS5837:2012 Tree Preservation to design, demolition and construction - Recommendations. This drawing must be reproduced in colour.

- CATEGORY A - high quality tree / group
- CATEGORY B - moderate quality tree / group
- CATEGORY C - low quality tree / group
- CATEGORY U - unsuitable for retention
- ROOT PROTECTION AREA (RPA)
- ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
- TREE REFERENCE, TAG NUMBER, CATEGORY AND SUN SHADOW
- T, G TREE, GROUP
- # OFF SITE
- SCRUB
- SURVEY BOUNDARY

0 1 2 3 4 5 6 7 8 9 10 METRES
SCALE 1:125 (A1)
SCALE 1:250 (A3)

TREE CONSTRAINTS PLAN SHEET 2

Project	GLEN DIMPLEX SITE STONEY LANE	Dwg No	411/TCP/T/102	Revision	P01
Title	TREE CONSTRAINTS PLAN SHEET 2	Scale	1:125 @ A1 / 1:250 @ A3	Date	21/08/2025

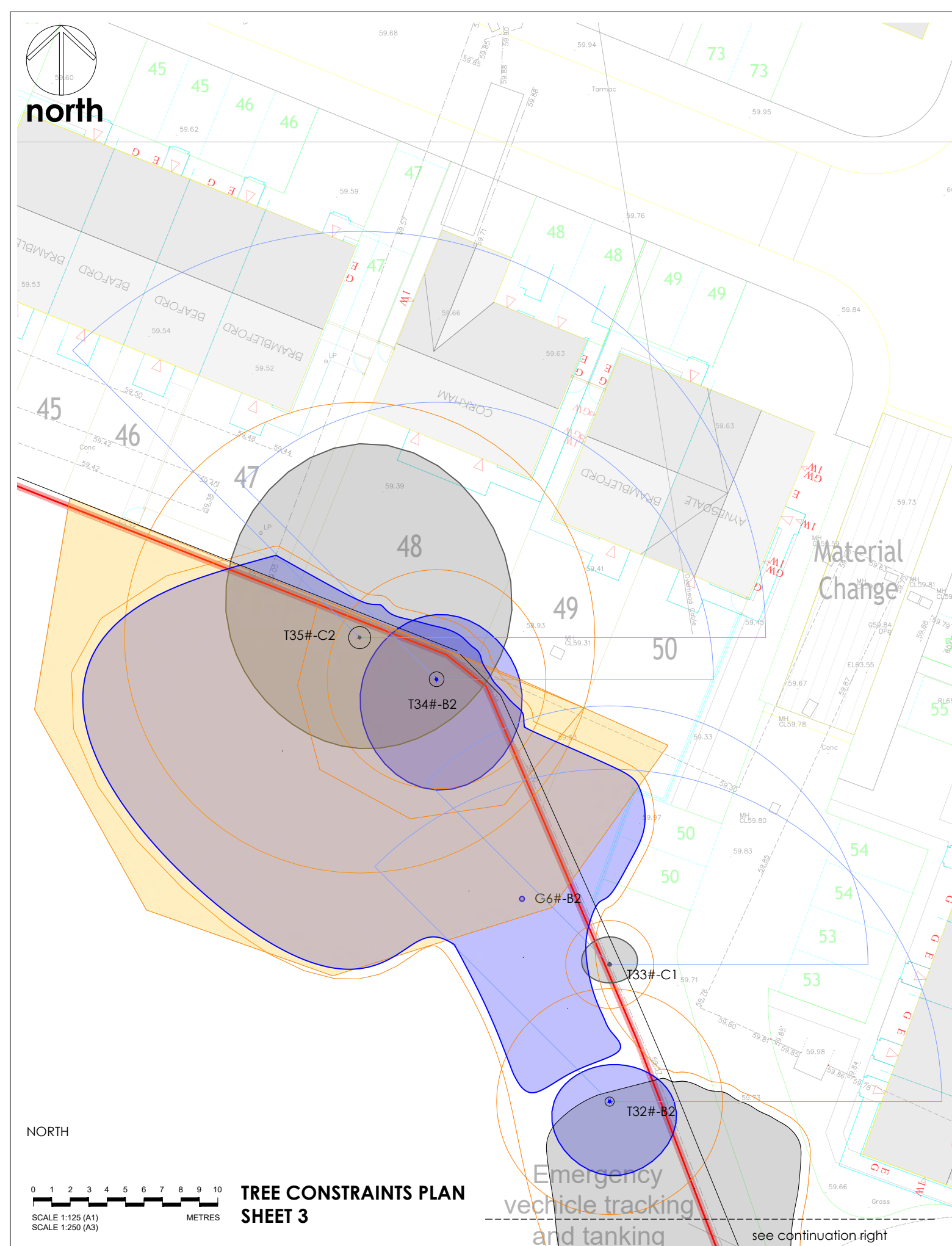
Revision	Date	Details	Drawn	Checked	Reviewed
P01	21/08/2025	FOR INFORMATION	MD	XX	MD

Drawing references	
411/TCP/T/100	TREE CONSTRAINTS PLAN OVERVIEW AND SHEET PLAN
411/TCP/T/101	TREE CONSTRAINTS PLAN SHEET 1
411/TCP/T/102	TREE CONSTRAINTS PLAN SHEET 2
411/TCP/T/103	TREE CONSTRAINTS PLAN SHEET 3
411/TCP/T/104	TREE CONSTRAINTS PLAN SHEET 4
411/TCP/T/105	TREE CONSTRAINTS PLAN SHEET 5
411/TCP/T/106	TREE CONSTRAINTS PLAN SHEET 6

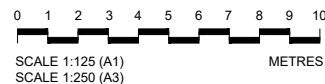
malandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231



NOTES



NORTH



TREE CONSTRAINTS PLAN SHEET 3

Emergency vehicle tracking and tanking

see continuation right

Dwg No 411/TCP/T/103

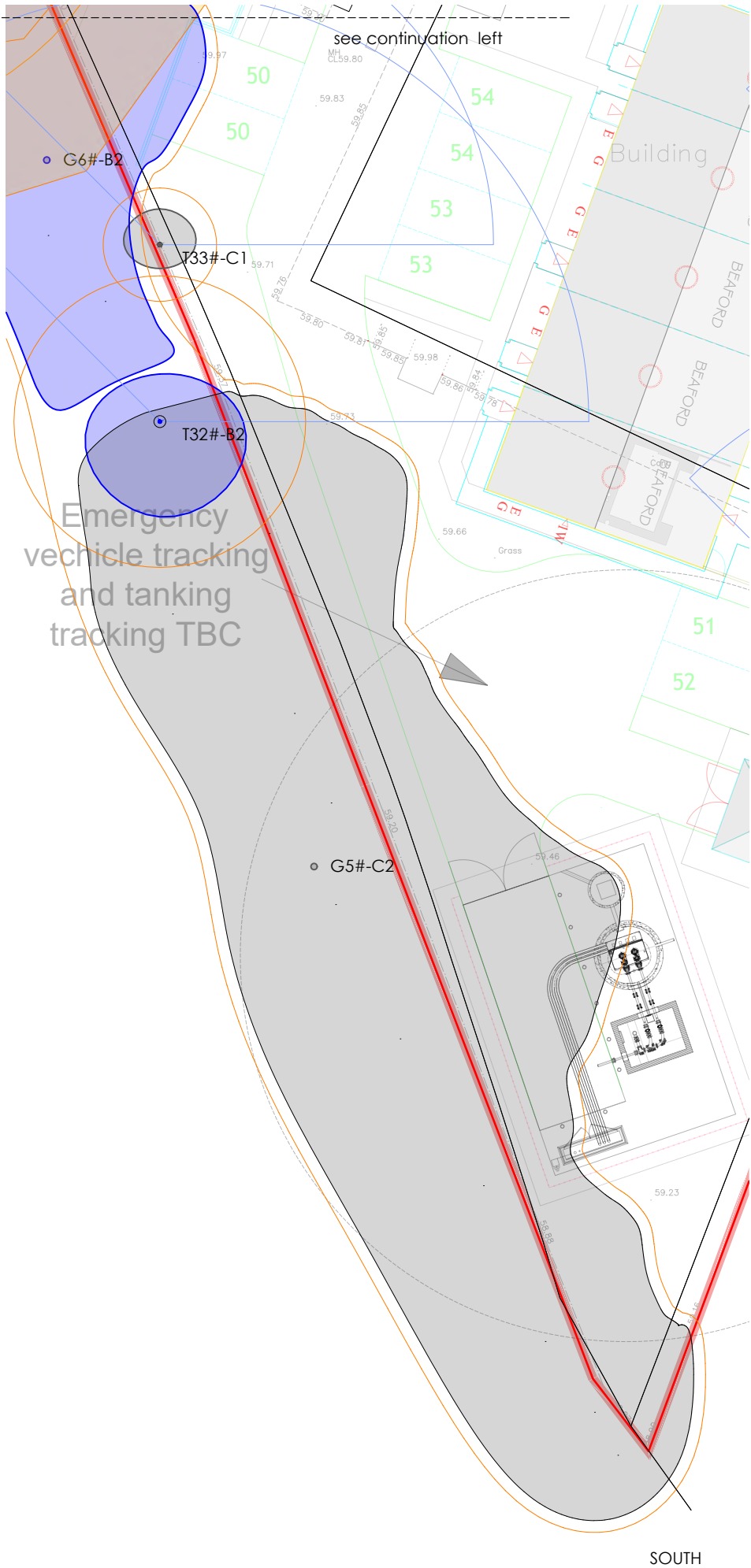
Revision P01

Scale 1:125 @ A1 / 1:250 @ A3

Date 21/08/2025

Project GLEN DIMPLEX SITE
STONEY LANE

Title TREE CONSTRAINTS PLAN
SHEET 3



see continuation left



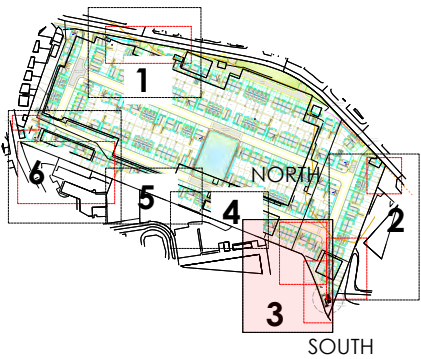
Emergency vehicle tracking and tanking tracking TBC

SOUTH

Notes

1. Dimensions are given in metres and millimetres as stated on the drawing.
2. Centre of site is located at approximately grid reference SJ 48005 91547.
3. Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
4. Drawing must be reproduced in colour.

Location Plan



Legend

Trees categorised in accordance with BS5837:2012 Trees in relation to design, demolition and construction : Recommendations
This drawing must be reproduced in colour



- | | | | |
|---|--|---|---|
|  | CATEGORY A - high quality tree / group |  | The Red line / Large Overlap |
|  | CATEGORY B - moderate quality tree / group |  | |
|  | CATEGORY C - low quality tree / group |  | Fencing - plate boundaries
Bird Screens |
|  | CATEGORY U - unsuitable for retention |  | |
|  | ROOT PROTECTION AREA (RPA) |  | Palisade Mesh Fencing
RPS / SDS Area |
|  | ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING |  | |
|  | TREE REFERENCE, TAG NUMBER
CATEGORY AND SUN SHADOW |  | Existing Tree / Vegetation to be retained
To be cut back |
|  | TREE, GROUP
OFF SITE |  | Existing Tree / Vegetation to be retained |
|  | SCRUB |  | Adjoining house / types |
|  | SURVEY BOUNDARY |  | |

OS LICENCE
© Crown copyright and database rights [2025] AC0000807948

Drawing references	
411/TCP/T/100	TREE CONSTRAINTS PLAN OVERVIEW AND SHEET PLAN
411/TCP/T/101	TREE CONSTRAINTS PLAN SHEET 1
411/TCP/T/102	TREE CONSTRAINTS PLAN SHEET 2
411/TCP/T/103	TREE CONSTRAINTS PLAN SHEET 3
411/TCP/T/104	TREE CONSTRAINTS PLAN SHEET 4
411/TCP/T/105	TREE CONSTRAINTS PLAN SHEET 5
411/TCP/T/106	TREE CONSTRAINTS PLAN SHEET 6






 mdlandscape
 6 Kinderton Close | High Legh | Knutsford
 Cheshire | WA16 6LZ | 07710 498231



north



TREE CONSTRAINTS PLAN SHEET 4

Project GLEN DIMPLEX SITE
STONEY LANE

Title	TREE CONSTRAINTS PLAN SHEET 4
--------------	----------------------------------

Dwg No 411/TCP/T/104

Revision P01

Scale 1:125 @ A1 / 1:250 @ A3

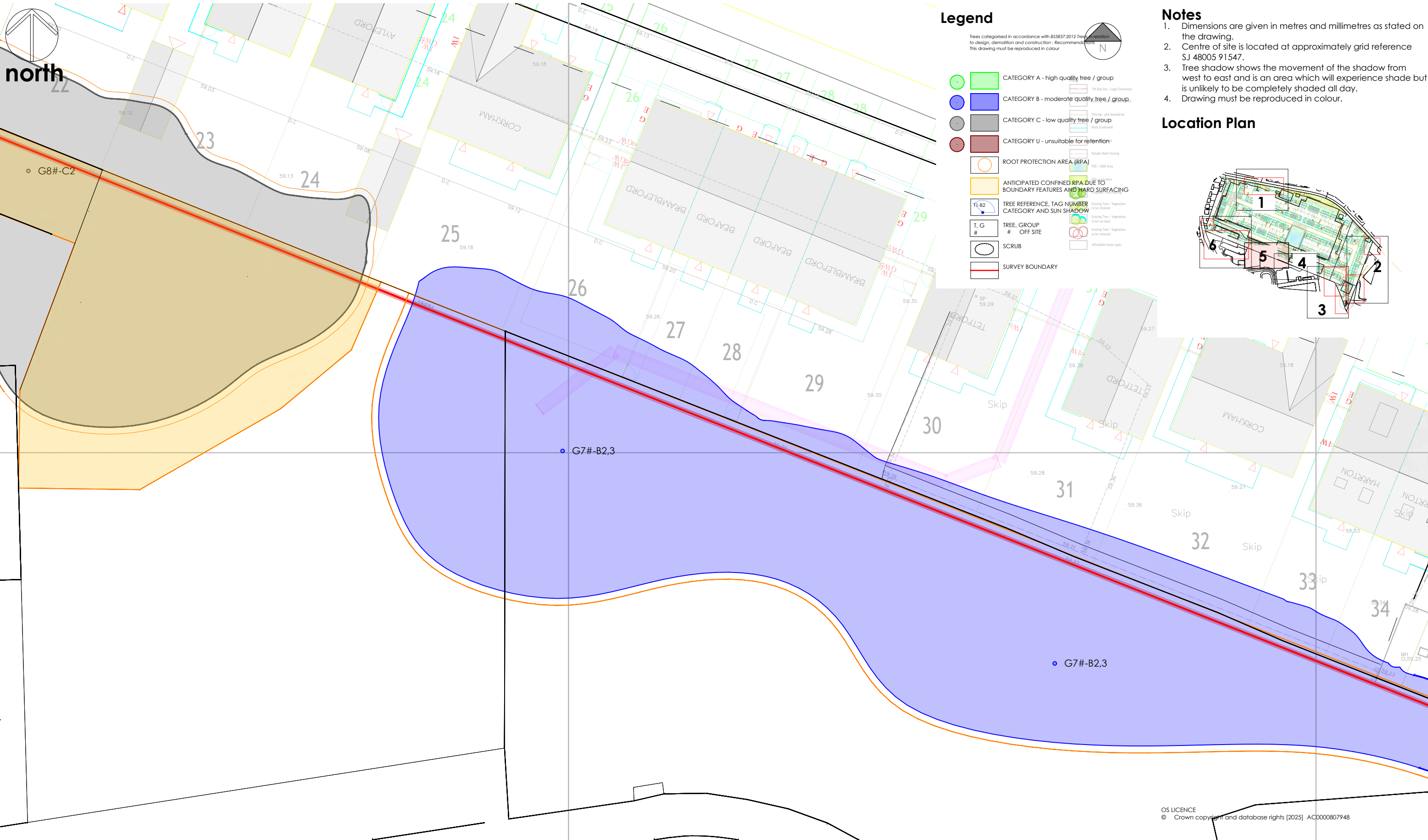
Date 21/08/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	21/08/2025	FOR INFORMATION	MD	XX	MD

Drawing references	
411/TCP/T/100	TREE CONSTRAINTS PLAN OVERVIEW AND SHEET PLAN
411/TCP/T/101	TREE CONSTRAINTS PLAN SHEET 1
411/TCP/T/102	TREE CONSTRAINTS PLAN SHEET 2
411/TCP/T/103	TREE CONSTRAINTS PLAN SHEET 3
411/TCP/T/104	TREE CONSTRAINTS PLAN SHEET 4
411/TCP/T/105	TREE CONSTRAINTS PLAN SHEET 5
411/TCP/T/106	TREE CONSTRAINTS PLAN SHEET 6



©The Copyright of this drawing belongs to mdandscape. This drawing is issued by mdandscape subject to the condition that it is not copied either in whole or in part, or disclosed to third parties unless prior written authorisation is given by mdandscape. Do not scale from this drawing - refer to noted dimensions on drawing: all dimensions to be confirmed on site prior to execution of the works. All dimensions are shown in metres and millimetres unless otherwise stated. Where Ordnance Survey data is used the relevant licence is stated on the drawing.



Legend

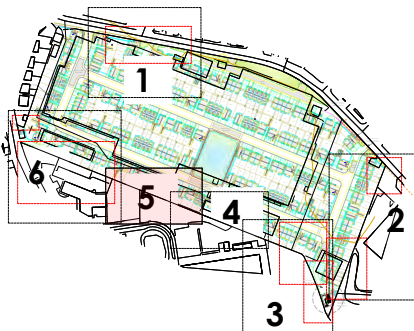
Trees categorised in accordance with BS5837:2012 Tree Preservation to design, demolition and construction : Recommendations
This drawing must be reproduced in colour

- CATEGORY A - high quality tree / group
- CATEGORY B - moderate quality tree / group
- CATEGORY C - low quality tree / group
- CATEGORY U - unsuitable for retention
- ROOT PROTECTION AREA (RPA)
- ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
- TREE REFERENCE, TAG NUMBER CATEGORY AND SUN SHADOW
- TREE, GROUP # OFF SITE
- SCRUB
- SURVEY BOUNDARY

Notes

- Dimensions are given in metres and millimetres as stated on the drawing.
- Centre of site is located at approximately grid reference SJ 48005 91547.
- Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
- Drawing must be reproduced in colour.

Location Plan



0 1 2 3 4 5 6 7 8 9 10
SCALE 1:125 (A1)
SCALE 1:250 (A3)
METRES

TREE CONSTRAINTS PLAN
SHEET 5

OS LICENCE
© Crown copyright and database rights [2025] AC0000807948

Drawing references	
411/TCP/T/100	TREE CONSTRAINTS PLAN OVERVIEW AND SHEET PLAN
411/TCP/T/101	TREE CONSTRAINTS PLAN SHEET 1
411/TCP/T/102	TREE CONSTRAINTS PLAN SHEET 2
411/TCP/T/103	TREE CONSTRAINTS PLAN SHEET 3
411/TCP/T/104	TREE CONSTRAINTS PLAN SHEET 4
411/TCP/T/105	TREE CONSTRAINTS PLAN SHEET 5
411/TCP/T/106	TREE CONSTRAINTS PLAN SHEET 6

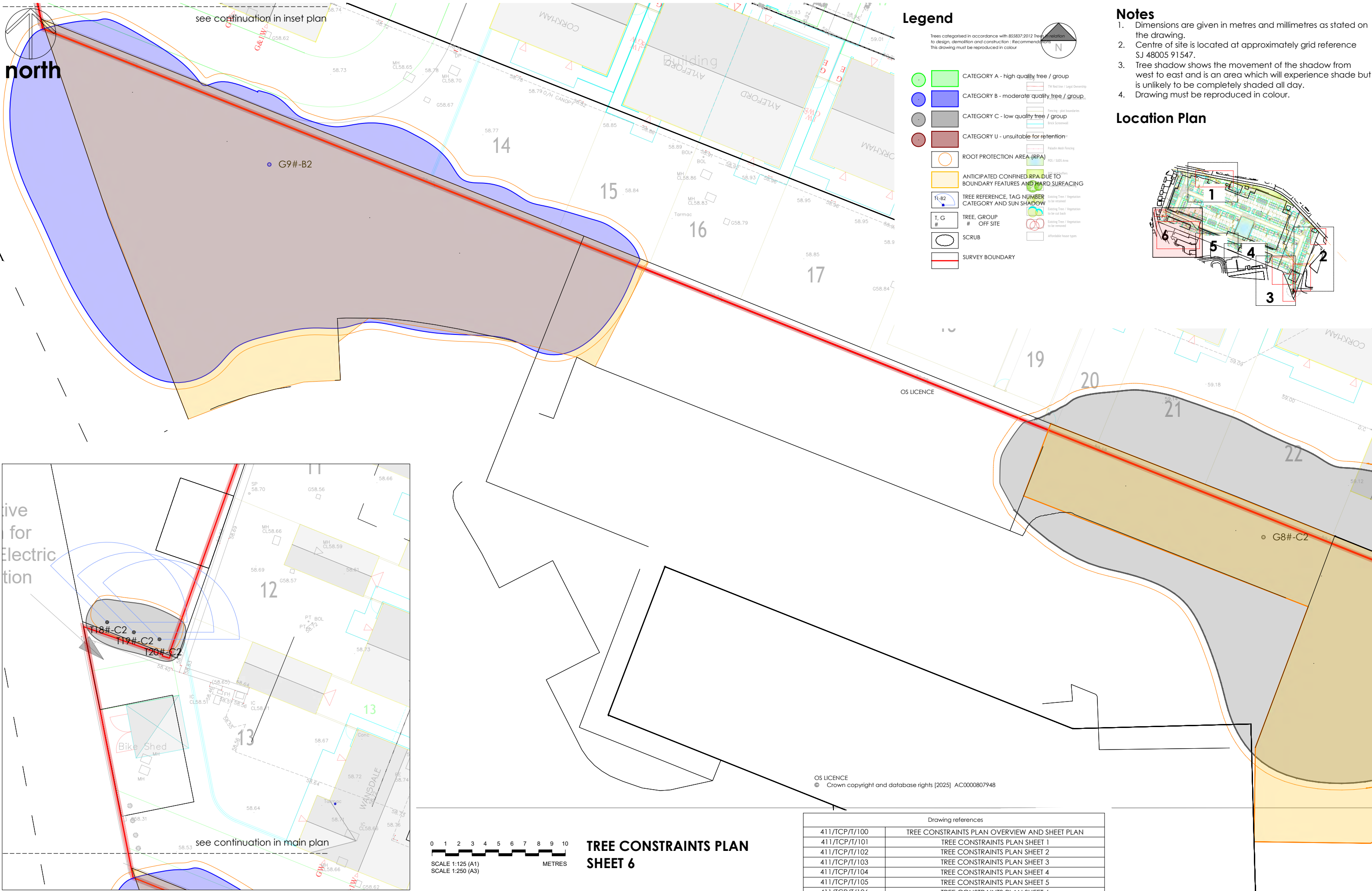
Project	GLEN DIMPLEX SITE STONEY LANE	Dwg No	411/TCP/T/105	Revision	P01
Title	TREE CONSTRAINTS PLAN SHEET 5	Scale	1:125 @ A1 / 1:250 @ A3	Date	21/08/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	21/08/2025	FOR INFORMATION	MD	XX	MD



mdlandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231





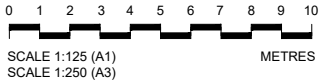
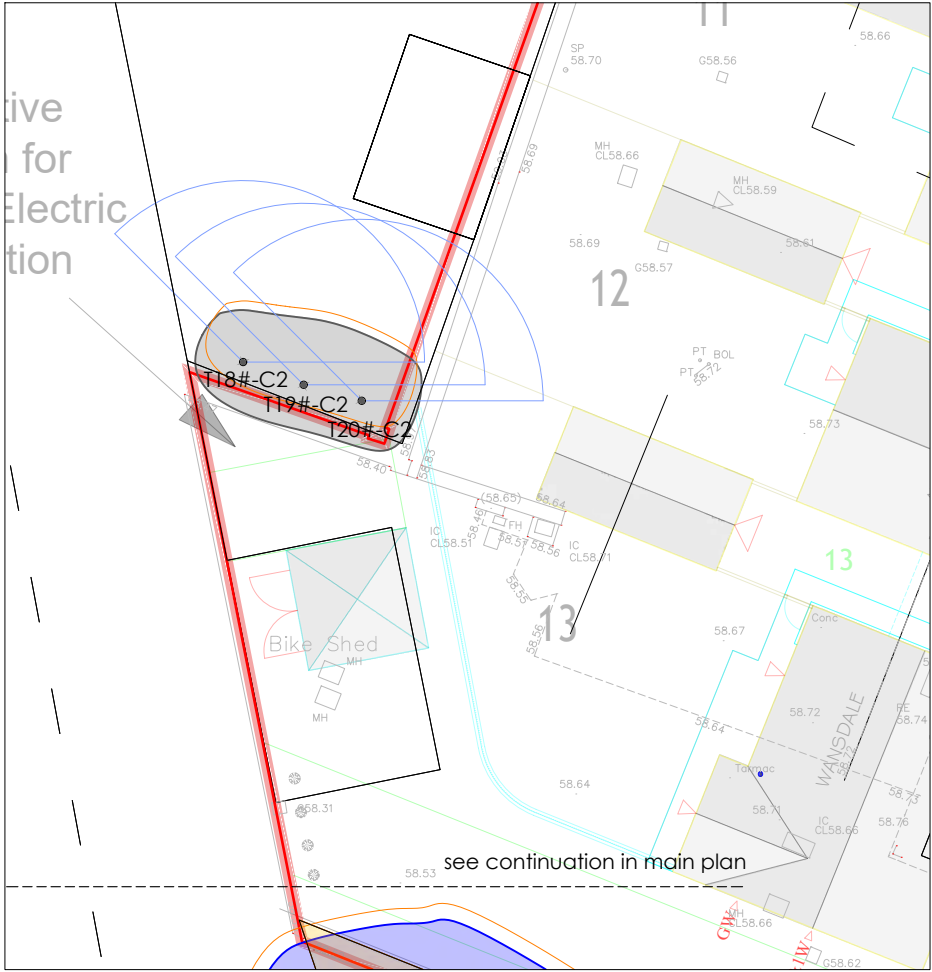
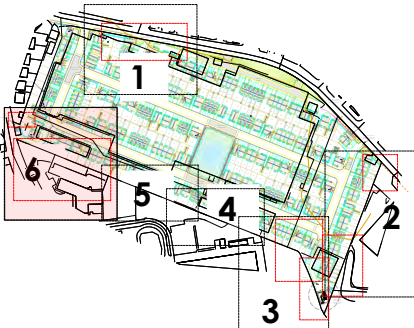
Legend

- Trees categorised in accordance with BS5837:2012 Tree Preservation to design, demolition and construction - Recommendations. This drawing must be reproduced in colour.
- CATEGORY A - high quality tree / group
- CATEGORY B - moderate quality tree / group
- CATEGORY C - low quality tree / group
- CATEGORY U - unsuitable for retention
- ROOT PROTECTION AREA (RPA)
- ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
- TREE REFERENCE, TAG NUMBER, CATEGORY AND SUN SHADOW
- TREE, GROUP, OFF SITE
- SCRUB
- SURVEY BOUNDARY

Notes

- Dimensions are given in metres and millimetres as stated on the drawing.
- Centre of site is located at approximately grid reference SJ 48005 91547.
- Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
- Drawing must be reproduced in colour.

Location Plan



TREE CONSTRAINTS PLAN SHEET 6

Drawing references					
411/TCP/T/100	TREE CONSTRAINTS PLAN OVERVIEW AND SHEET PLAN				
411/TCP/T/101	TREE CONSTRAINTS PLAN SHEET 1				
411/TCP/T/102	TREE CONSTRAINTS PLAN SHEET 2				
411/TCP/T/103	TREE CONSTRAINTS PLAN SHEET 3				
411/TCP/T/104	TREE CONSTRAINTS PLAN SHEET 4				
411/TCP/T/105	TREE CONSTRAINTS PLAN SHEET 5				
411/TCP/T/106	TREE CONSTRAINTS PLAN SHEET 6				
Revision	Date	Details	Drawn	Checked	Reviewed
P01	21/08/2025	FOR INFORMATION	MD	XX	MD

Project	GLEN DIMPLEX SITE STONE LANE	Dwg No	411/TCP/T/106	Revision	P01
Title	TREE CONSTRAINTS PLAN SHEET 6	Scale	1:125 @ A1 / 1:250 @ A3	Date	21/08/2025

mdlandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231

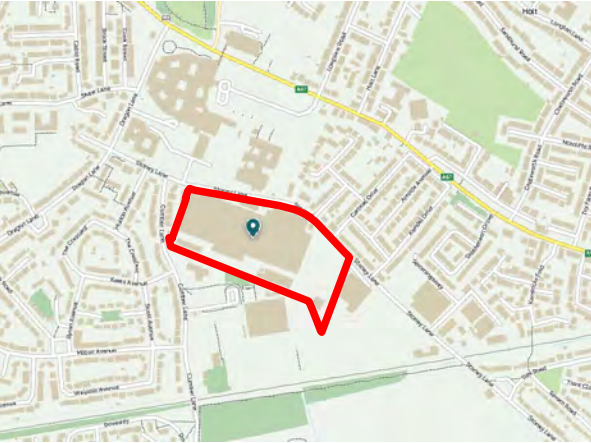
©The Copyright of this drawing belongs to mdlandscape. This drawing is issued by mdlandscape subject to the condition that it is not copied either in whole or in part, or disclosed to third parties unless prior written authorisation is given by mdlandscape. Do not scale from this drawing - refer to noted dimensions on drawing; all dimensions to be confirmed on site prior to execution of the works. All dimensions are shown in metres and millimetres unless otherwise stated. Where Ordnance Survey data is used the relevant licence is stated on the drawing.



Notes

- 1. Dimensions are given in metres and millimetres as stated on the drawing.
- 2. Centre of site is located at approximately grid reference SJ 48005 91547.
- 3. Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
- 4. Drawing must be reproduced in colour.

Location Plan



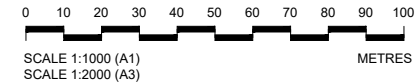
Legend

Trees categorised in accordance with BS5837:2012 Trees in relation to design, demolition and construction - Recommendations
This drawing must be reproduced in colour

- CATEGORY A - high quality tree / group to be retained
- CATEGORY B - moderate quality tree / group to be retained
- CATEGORY C - low quality tree / group to be retained
- CATEGORY U - unsuitable for retention
- CATEGORY A - high quality tree / group to be removed
- CATEGORY B - moderate quality tree / group to be removed
- CATEGORY C - low quality tree / group to be removed
- CATEGORY U - to be removed
- ROOT PROTECTION AREA (RPA)
- ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
- TREE REFERENCE, TAG NUMBER CATEGORY
- TREE, GROUP # OFF SITE
- SCRUB
- PROPOSED DEVELOPMENT BOUNDARY
- PROPOSED DEVELOPMENT

OS LICENCE
© Crown copyright and database rights [2025] AC0000807948

Drawing references	
411/AIA/T/200	AIA TREE REMOVALS PLAN OVERVIEW AND SHEET PLAN
411/AIA/T/201	AIA TREE REMOVALS PLAN SHEET 1
411/AIA/T/202	AIA TREE REMOVALS PLAN SHEET 2
411/AIA/T/203	AIA TREE REMOVALS PLAN SHEET 3
411/AIA/T/204	AIA TREE REMOVALS PLAN SHEET 4
411/AIA/T/205	AIA TREE REMOVALS PLAN SHEET 5
411/AIA/T/206	AIA TREE REMOVALS PLAN SHEET 6



ARBORICULTURAL IMPACT ASSESSMENT
OVERVIEW AND SHEET PLAN

Project	GLEN DIMPLEX SITE STONEY LANE	Dwg No	411/AIA/T/200	Revision	P02	Revision	Date	Details	Drawn	Checked	Reviewed
						P01	21/08/2025	FOR INFORMATION	MD	XX	MD
Title	ARBORICULTURAL IMPACT ASSESSMENT OVERVIEW AND SHEET PLAN	Scale	1:1000 @ A1 / 1:2000 @ A3	Date	10/11/2025	P02	10/11/2025	REVISED SITE LAYOUT	MD	XX	MD



mdlandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231





Legend

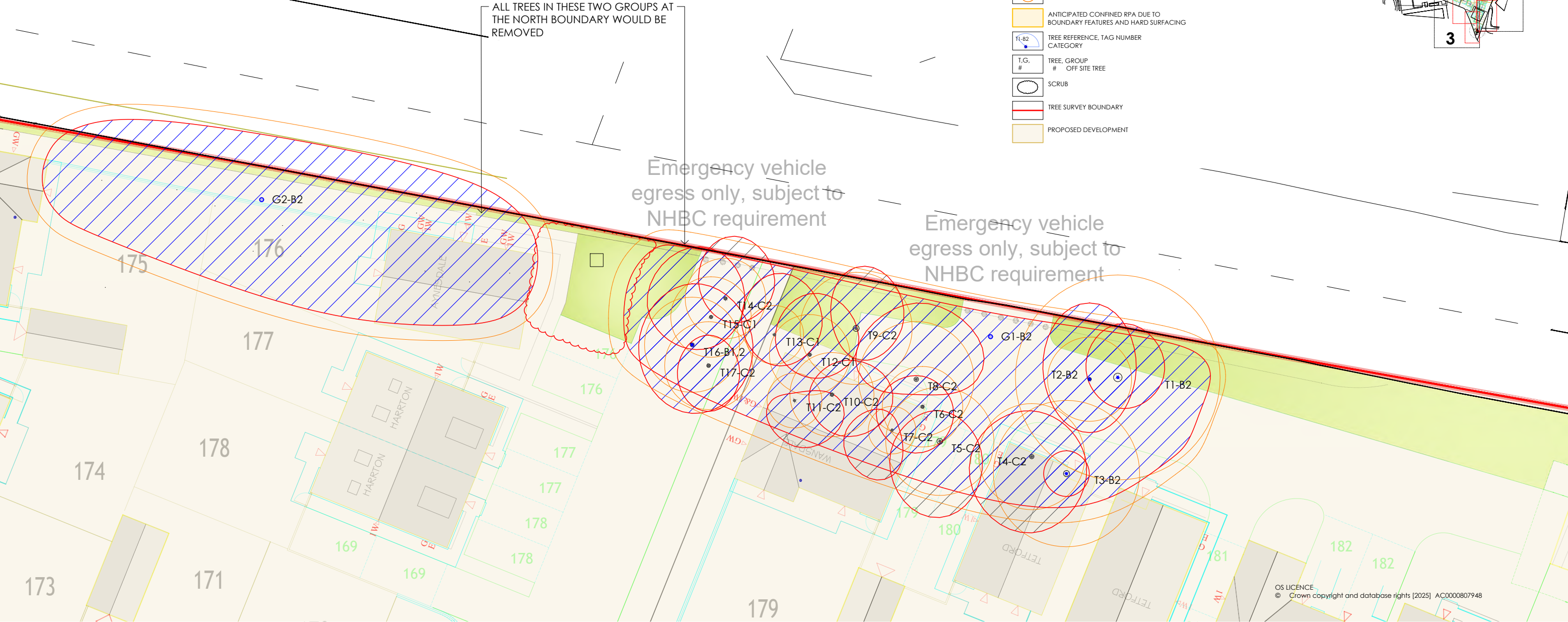
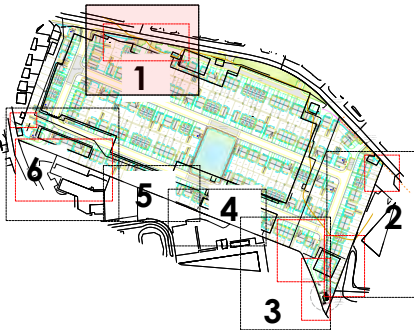
Trees categorised in accordance with BS5837:2012 Trees in relation to design, demolition and construction - Recommendations
This drawing must be reproduced in colour

- CATEGORY A - high quality tree / group to be retained
- CATEGORY B - moderate quality tree / group to be retained
- CATEGORY C - low quality tree / group to be retained
- CATEGORY U - unsuitable for retention
- CATEGORY A - high quality tree / group to be removed
- CATEGORY B - moderate quality tree / group to be removed
- CATEGORY C - low quality tree / group to be removed
- CATEGORY U - to be removed
- SCRUB TO BE REMOVED
- ROOT PROTECTION AREA (RPA)
- ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
- TREE REFERENCE, TAG NUMBER CATEGORY
- TREE, GROUP # OFF SITE TREE
- SCRUB
- TREE SURVEY BOUNDARY
- PROPOSED DEVELOPMENT

Notes

1. Dimensions are given in metres and millimetres as stated on the drawing.
2. Centre of site is located at approximately grid reference SJ 48005 91547.
3. Tree shadow not shown as all trees in this area are to be removed.
4. Drawing must be reproduced in colour.

Location Plan



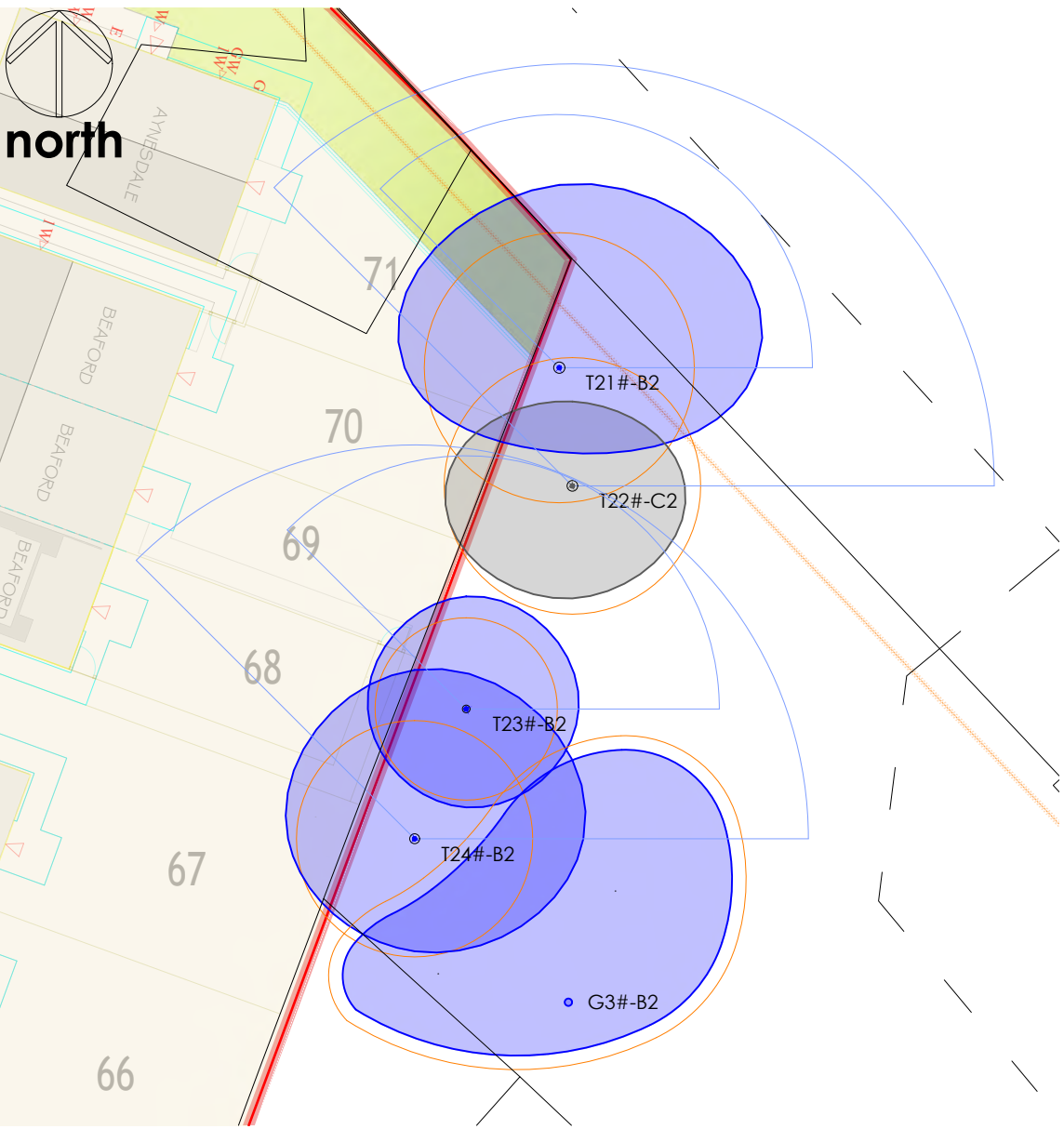
OS LICENCE
© Crown copyright and database rights [2025] AC0000807948

0 1 2 3 4 5 6 7 8 9 10
SCALE 1:125 (A1)
SCALE 1:250 (A3)
METRES

ARBORICULTURAL IMPACT ASSESSMENT
TREE REMOVAL PLAN SHEET 1

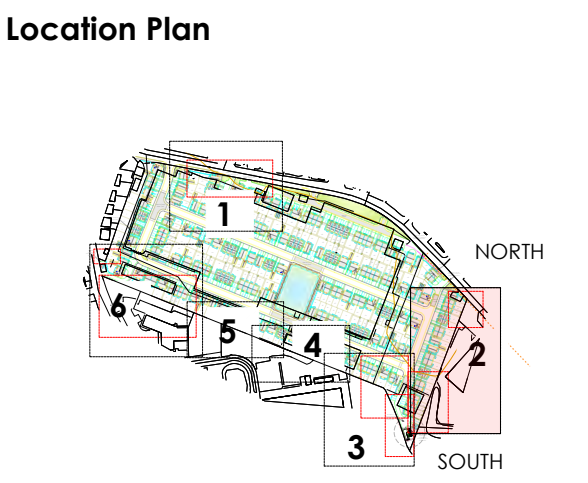
Project	GLEN DIMPLEX SITE STONEY LANE	Dwg No	411/AIA/T/201	Revision	P02	Revision	Date	Details	Drawn	Checked	Reviewed	mdlandscape 6 Kinderton Close High Legh Knutsford Cheshire WA16 6LZ 07710 498231
						P01	21/08/2025	FOR INFORMATION	MD	XX	MD	
Title	ARBORICULTURAL IMPACT ASSESSMENT TREE REMOVAL PLAN SHEET 1	Scale	1:125 @ A1 / 1:250 @ A3	Date	10/11/2025	P02	10/11/2025	REVISED SITE LAYOUT	MD	XX	MD	

Drawing references	
411/AIA/T/200	AIA TREE REMOVALS PLAN OVERVIEW AND SHEET PLAN
411/AIA/T/201	AIA TREE REMOVALS PLAN SHEET 1
411/AIA/T/202	AIA TREE REMOVALS PLAN SHEET 2
411/AIA/T/203	AIA TREE REMOVALS PLAN SHEET 3
411/AIA/T/204	AIA TREE REMOVALS PLAN SHEET 4
411/AIA/T/205	AIA TREE REMOVALS PLAN SHEET 5
411/AIA/T/206	AIA TREE REMOVALS PLAN SHEET 6



Notes

1. Dimensions are given in metres and millimetres as stated on the drawing.
2. Centre of site is located at approximately grid reference SJ 48005 91547.
3. Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
4. Drawing must be reproduced in colour.



Legend

Trees categorised in accordance with BS5837:2012 Trees in relation to design, demolition and construction : Recommendations
This drawing must be reproduced in colour

- CATEGORY A - high quality tree / group to be retained
- CATEGORY B - moderate quality tree / group to be retained
- CATEGORY C - low quality tree / group to be retained
- CATEGORY U - unsuitable for retention
- ROOT PROTECTION AREA (RPA)
- ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
- T1-B2 TREE REFERENCE, TAG NUMBER CATEGORY
- T.G. TREE, GROUP # OFF SITE TREE
- TREE SURVEY BOUNDARY
- PROPOSED DEVELOPMENT

OS LICENCE
© Crown copyright and database rights [2025] AC0000807948

Drawing references	
411/AIA/T/200	AIA TREE REMOVALS PLAN OVERVIEW AND SHEET PLAN
411/AIA/T/201	AIA TREE REMOVALS PLAN SHEET 1
411/AIA/T/202	AIA TREE REMOVALS PLAN SHEET 2
411/AIA/T/203	AIA TREE REMOVALS PLAN SHEET 3
411/AIA/T/204	AIA TREE REMOVALS PLAN SHEET 4
411/AIA/T/205	AIA TREE REMOVALS PLAN SHEET 5
411/AIA/T/206	AIA TREE REMOVALS PLAN SHEET 6

Project	GLEN DIMPLEX SITE STONEY LANE	Dwg No	411/AIA/T/202	Revision	P02	Revision	Date	Details	Drawn	Checked	Reviewed
						P01	21/08/2025	FOR INFORMATION	MD	XX	MD
Title	ARBORICULTURAL IMPACT ASSESSMENT TREE REMOVAL PLAN SHEET 2	Scale	1:125 @ A1 / 1:250 @ A3	Date	10/11/2025	P02	10/11/2025	REVISED SITE LAYOUT	MD	XX	MD

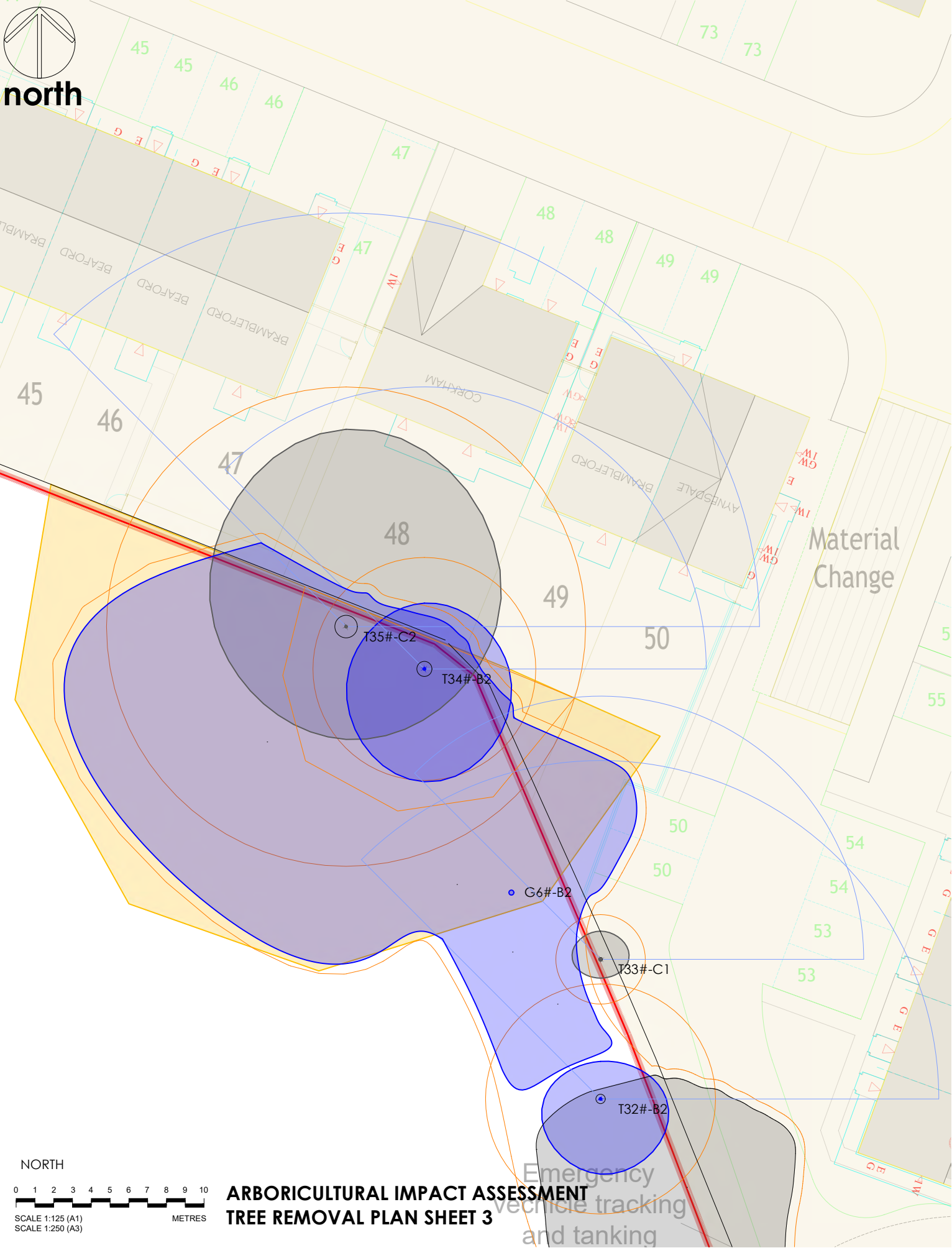
mdlandscape

mdlandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231

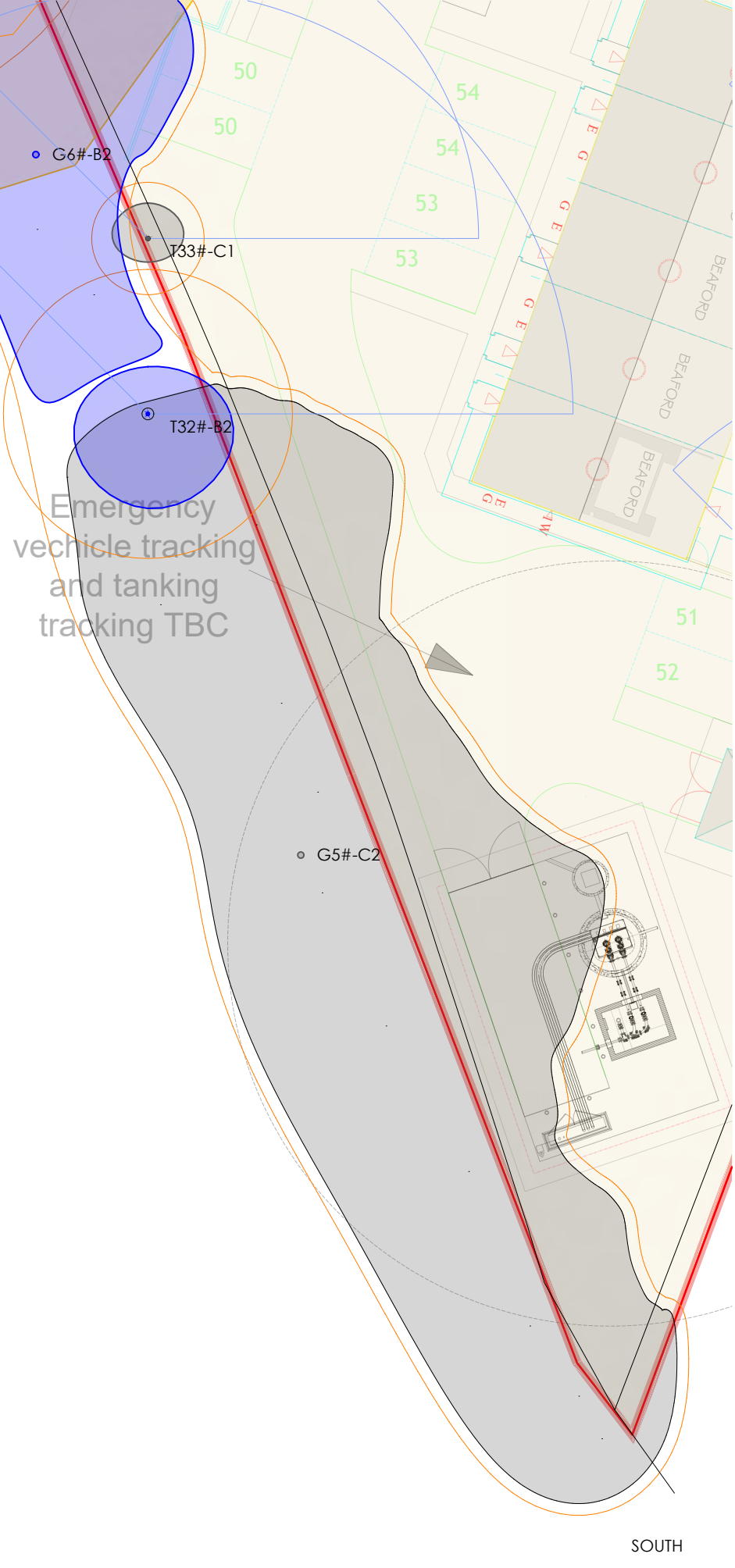
Landscape Institute Chartered Member
Landscape Institute Registered Practitioner
Arboricultural Association Endorsed Member



north



Project	GLEN DIMPLEX SITE STONEY LANE	Dwg No	411/AIA/T/203	Revision	P02
Title	ARBORICULTURAL IMPACT ASSESSMENT TREE REMOVAL PLAN SHEET 3	Scale	1:125 @ A1 / 1:2500 @ A3	Date	10/11/2025

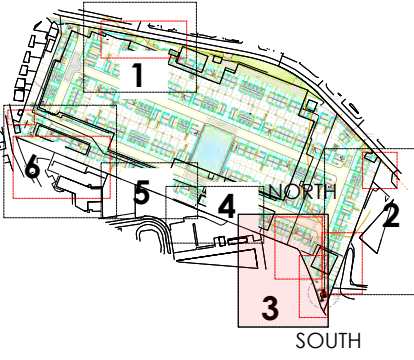


Revision	Date	Details	Drawn	Checked	Reviewed
P01	21/08/2025	FOR INFORMATION	MD	XX	MD
P02	10/11/2025	REVISED SITE LAYOUT	MD	XX	MD

Notes

- Dimensions are given in metres and millimetres as stated on the drawing.
- Centre of site is located at approximately grid reference SJ 48005 91547.
- Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
- Drawing must be reproduced in colour.

Location Plan



Legend

Trees categorised in accordance with BS5837:2012 Trees in relation to design, demolition and construction - Recommendations This drawing must be reproduced in colour	
	CATEGORY A - high quality tree / group to be retained
	CATEGORY B - moderate quality tree / group to be retained
	CATEGORY C - low quality tree / group to be retained
	CATEGORY U - unsuitable for retention
	ROOT PROTECTION AREA (RPA)
	ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
	TREE REFERENCE, TAG NUMBER CATEGORY
	TREE, GROUP # OFF SITE TREE
	TREE SURVEY BOUNDARY
	PROPOSED DEVELOPMENT

OS LICENCE
© Crown copyright and database rights [2025] AC0000807948

Drawing references	
411/AIA/T/200	AIA TREE REMOVALS PLAN OVERVIEW AND SHEET PLAN
411/AIA/T/201	AIA TREE REMOVALS PLAN SHEET 1
411/AIA/T/202	AIA TREE REMOVALS PLAN SHEET 2
411/AIA/T/203	AIA TREE REMOVALS PLAN SHEET 3
411/AIA/T/204	AIA TREE REMOVALS PLAN SHEET 4
411/AIA/T/205	AIA TREE REMOVALS PLAN SHEET 5
411/AIA/T/206	AIA TREE REMOVALS PLAN SHEET 6



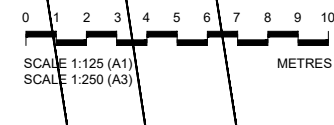
mdandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231



mdandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231



north



ARBORICULTURAL IMPACT ASSESSMENT TREE REMOVAL PLAN SHEET 4

Legend

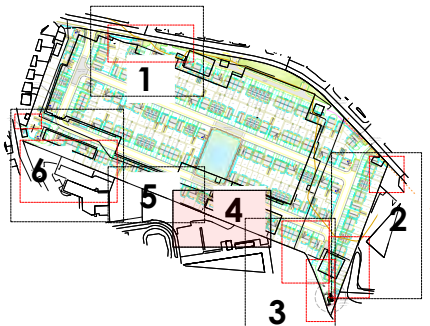
Trees categorised in accordance with BS5837:2012 Trees in relation to design, demolition and construction : Recommendations
This drawing must be reproduced in colour

- | | | |
|---|---|--|
|  |  | CATEGORY A - high quality tree / group to be retained |
|  |  | CATEGORY B - moderate quality tree / group to be retained |
|  |  | CATEGORY C - low quality tree / group to be retained |
|  |  | CATEGORY U - unsuitable for retention |
|  | | ROOT PROTECTION AREA (RPA) |
|  | | ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING |
|  | | T1-82 TREE REFERENCE, TAG NUMBER CATEGORY |
|  | | T.G.# TREE, GROUP # OFF SITE TREE |
|  | | TREE SURVEY BOUNDARY |
|  | | PROPOSED DEVELOPMENT |

Notes

1. Dimensions are given in metres and millimetres as stated on the drawing.
2. Centre of site is located at approximately grid reference SJ 48005 91547.
3. Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
4. Drawing must be reproduced in colour.

Location Plan



OS LICENCE
© Crown copyright and database rights [2025] AC0000807948

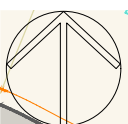
Drawing references	
411/AIA/T/200	AIA TREE REMOVALS PLAN OVERVIEW AND SHEET PLAN
411/AIA/T/201	AIA TREE REMOVALS PLAN SHEET 1
411/AIA/T/202	AIA TREE REMOVALS PLAN SHEET 2
411/AIA/T/203	AIA TREE REMOVALS PLAN SHEET 3
411/AIA/T/204	AIA TREE REMOVALS PLAN SHEET 4
411/AIA/T/205	AIA TREE REMOVALS PLAN SHEET 5
411/AIA/T/206	AIA TREE REMOVALS PLAN SHEET 6



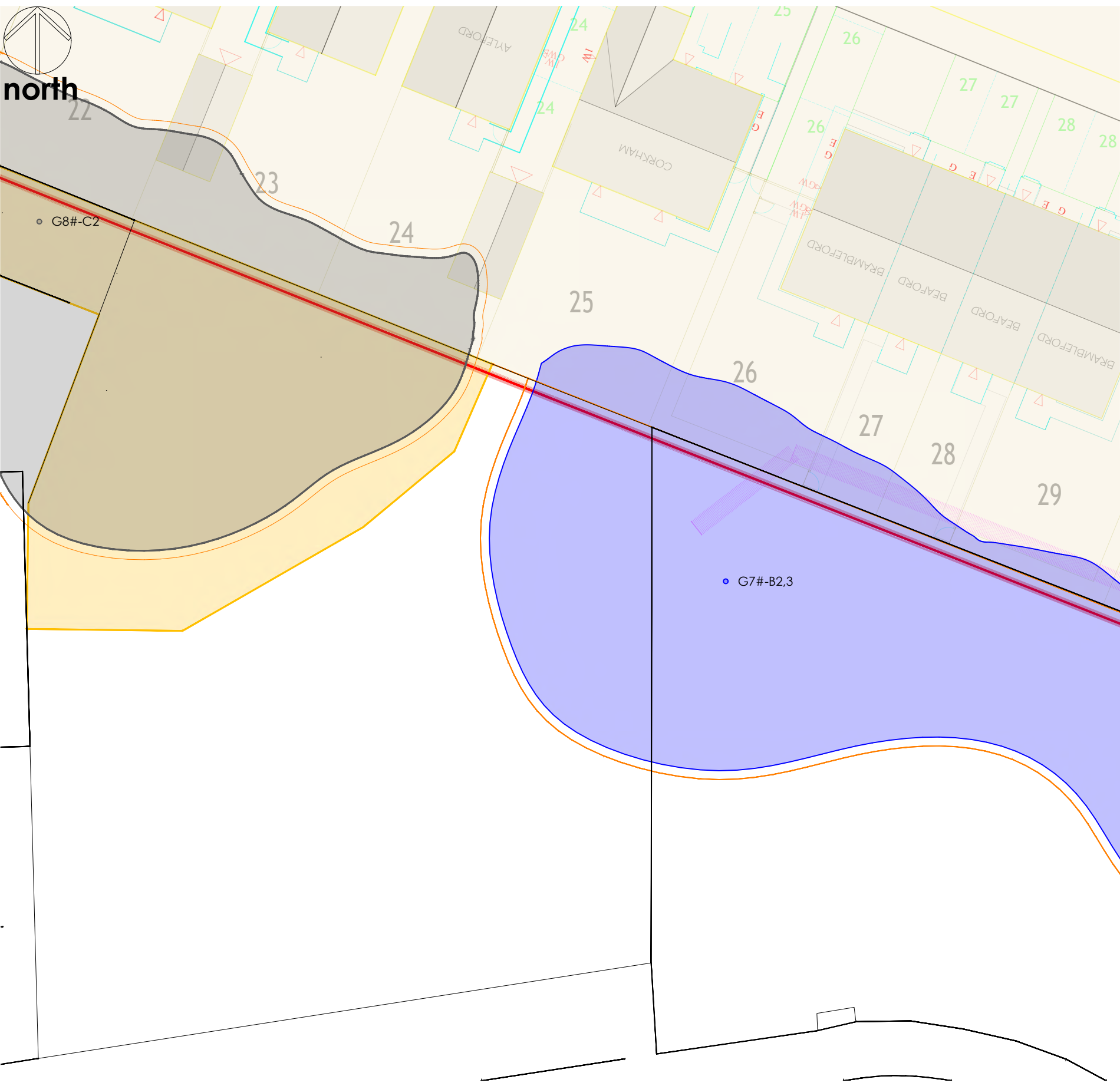



 mdlandscape
 6 Kinderton Close | High Legh | Knutsford
 Cheshire | WA16 6LZ | 07710 498231

Project	GLEN DIMPLEX SITE STONEY LANE	Dwg No	411/AIA/T/204	Revision	P02	Revision	Date	Details	Drawn	Checked	Reviewed
						P01	21/08/2025	FOR INFORMATION	MD	XX	MD
						P02	10/11/2025	REVISED SITE LAYOUT	MD	XX	MD
Title	ARBORICULTURAL IMPACT ASSESSMENT TREE REMOVAL PLAN SHEET 4	Scale	1:125 @ A1 / 1:250 @ A3	Date	10/11/2025						



north



Legend

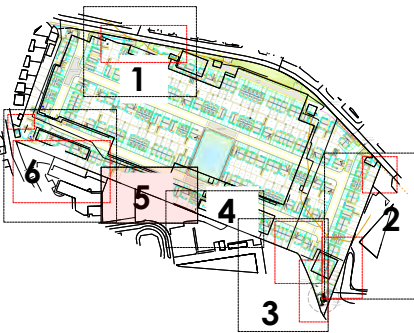
Trees categorised in accordance with BS5837:2012 Trees in relation to design, demolition and construction - Recommendations
This drawing must be reproduced in colour

- CATEGORY A - high quality tree / group to be retained
- CATEGORY B - moderate quality tree / group to be retained
- CATEGORY C - low quality tree / group to be retained
- CATEGORY U - unsuitable for retention
- ROOT PROTECTION AREA (RPA)
- ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
- TREE REFERENCE, TAG NUMBER CATEGORY
- TREE, GROUP # OFF SITE TREE
- TREE SURVEY BOUNDARY
- PROPOSED DEVELOPMENT

Notes

- Dimensions are given in metres and millimetres as stated on the drawing.
- Centre of site is located at approximately grid reference SJ 48005 91547.
- Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
- Drawing must be reproduced in colour.

Location Plan



OS LICENCE
© Crown copyright and database rights [2025] AC0000807948

0 1 2 3 4 5 6 7 8 9 10
SCALE 1:125 (A1)
SCALE 1:250 (A3)
METRES

ARBORICULTURAL IMPACT ASSESSMENT TREE REMOVAL PLAN SHEET 5

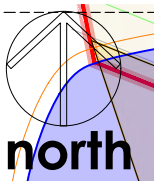
Drawing references	
411/AIA/T/200	AIA TREE REMOVALS PLAN OVERVIEW AND SHEET PLAN
411/AIA/T/201	AIA TREE REMOVALS PLAN SHEET 1
411/AIA/T/202	AIA TREE REMOVALS PLAN SHEET 2
411/AIA/T/203	AIA TREE REMOVALS PLAN SHEET 3
411/AIA/T/204	AIA TREE REMOVALS PLAN SHEET 4
411/AIA/T/205	AIA TREE REMOVALS PLAN SHEET 5
411/AIA/T/206	AIA TREE REMOVALS PLAN SHEET 6

Project	GLEN DIMPLEX SITE STONEY LANE	Dwg No	411/AIA/T/205	Revision	P02	Revision	Date	Details	Drawn	Checked	Reviewed
						P01	21/08/2025	FOR INFORMATION	MD	XX	MD
Title	ARBORICULTURAL IMPACT ASSESSMENT TREE REMOVAL PLAN SHEET 5	Scale	1:125 @ A1 / 1:250 @ A3	Date	10/11/2025	P02	10/11/2025	REVISED SITE LAYOUT	MD	XX	MD



mdlandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231





see continuation in inset plan

G9#-B2

14

15

16

17

Legend

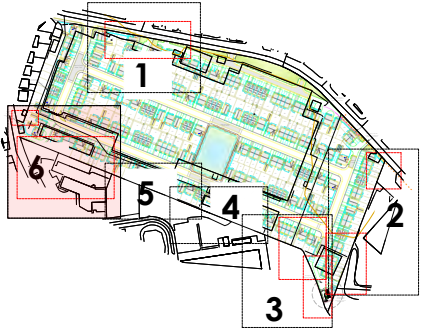
Trees categorised in accordance with BS5837:2012 Trees in relation to design, demolition and construction : Recommendations
This drawing must be reproduced in colour

- CATEGORY A - high quality tree / group to be retained
- CATEGORY B - moderate quality tree / group to be retained
- CATEGORY C - low quality tree / group to be retained
- CATEGORY U - unsuitable for retention
- ROOT PROTECTION AREA (RPA)
- ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
- TREE REFERENCE, TAG NUMBER CATEGORY
- TREE, GROUP # OFF SITE TREE
- TREE SURVEY BOUNDARY
- PROPOSED DEVELOPMENT

Notes

- Dimensions are given in metres and millimetres as stated on the drawing.
- Centre of site is located at approximately grid reference SJ 48005 91547.
- Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
- Drawing must be reproduced in colour.

Location Plan



ive
for
Electric
tion

T18#-C2
T19#-C2
T20#-C2

12

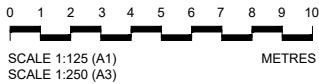
13

13

WANSDALE

see continuation in main plan

ARBORICULTURAL IMPACT ASSESSMENT TREE REMOVAL PLAN SHEET 6



OS LICENCE
© Crown copyright and database rights [2025] AC0000807948

Drawing references					
411/AIA/T/200	AIA TREE REMOVALS PLAN OVERVIEW AND SHEET PLAN				
411/AIA/T/201	AIA TREE REMOVALS PLAN SHEET 1				
411/AIA/T/202	AIA TREE REMOVALS PLAN SHEET 2				
411/AIA/T/203	AIA TREE REMOVALS PLAN SHEET 3				
411/AIA/T/204	AIA TREE REMOVALS PLAN SHEET 4				
411/AIA/T/205	AIA TREE REMOVALS PLAN SHEET 5				
411/AIA/T/206	AIA TREE REMOVALS PLAN SHEET 6				

Revision	Date	Details	Drawn	Checked	Reviewed
P01	21/08/2025	FOR INFORMATION	MD	XX	MD
P02	10/11/2025	REVISED SITE LAYOUT	MD	XX	MD

Project GLEN DIMPLEX SITE
STONEY LANE

Title ARBORICULTURAL IMPACT ASSESSMENT
TREE REMOVAL PLAN SHEET 6

Dwg No 411/AIA/T/206

Revision P02

Scale 1:125 @ A1 / 1:250 @ A3

Date 10/11/2025



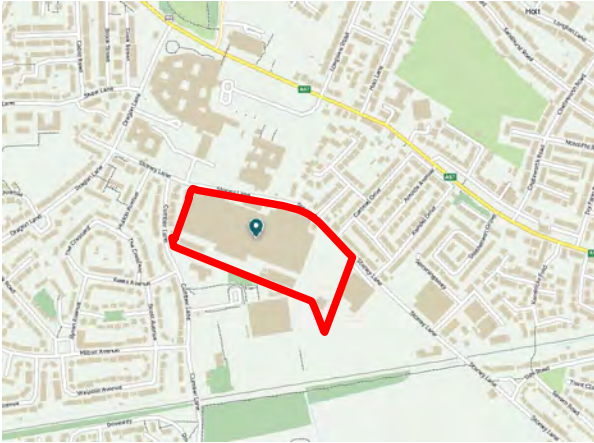
mdlandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231



Notes

1. Dimensions are given in metres and millimetres as stated on the drawing.
2. Centre of site is located at approximately grid reference SJ 48005 91547.
3. Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
4. Drawing must be reproduced in colour.

Location Plan



Legend

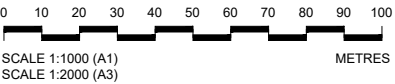
Trees categorised in accordance with BS5837:2012 Trees in relation to design, demolition and construction - Recommendations
This drawing must be reproduced in colour

- TREE / GROUP TO BE RETAINED
- TREE / GROUP TO BE REMOVED
- TREE TO BE CROWN LIFTED / CROWN REDUCED SUBJECT TO AGREEMENT WITH LANDOWNER
- ROOT PRUNING TO BE CARRIED OUT UNDER AN ARBORICULTURAL WATCHING BRIEF
- TEMPORARY TREE PROTECTION FENCE
- ROOT PROTECTION AREA (RPA)
- ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
- T25#-A1.2 TREE REFERENCE, TAG NUMBER CATEGORY
- T.G # TREE, GROUP OFF SITE TREE
- PROPOSED DEVELOPMENT BOUNDARY
- PROPOSED DEVELOPMENT

OS LICENCE
© Crown copyright and database rights [2025] AC0000807948

Drawing references

411/AMS/T/300	AMS TREE WORKS AND PROTECTION PLAN OVERVIEW AND SHEET PLAN
411/AMS/T/301	AMS TREE WORKS AND PROTECTION PLAN SHEET 1
411/AMS/T/302	AMS TREE WORKS AND PROTECTION PLAN SHEET 2
411/AMS/T/303	AMS TREE WORKS AND PROTECTION PLAN SHEET 3
411/AMS/T/304	AMS TREE WORKS AND PROTECTION PLAN SHEET 4
411/AMS/T/305	AMS TREE WORKS AND PROTECTION PLAN SHEET 5
411/AMS/T/306	AMS TREE WORKS AND PROTECTION PLAN SHEET 6



ARBORICULTURAL METHOD STATEMENT OVERVIEW AND SHEET PLAN

Project	GLEN DIMPLEX SITE STONEY LANE	Dwg No	411/AMS/T/300	Revision	P02
Title	ARBORICULTURAL METHOD STATEMENT OVERVIEW AND SHEET PLAN	Scale	1:1000 @ A1 / 1:2000 @ A3	Date	10/11/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	21/08/2025	FOR INFORMATION	MD	XX	MD
P02	10/11/2025	REVISED SITE LAYOUT	MD	XX	MD



mdlandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231



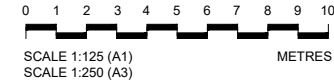
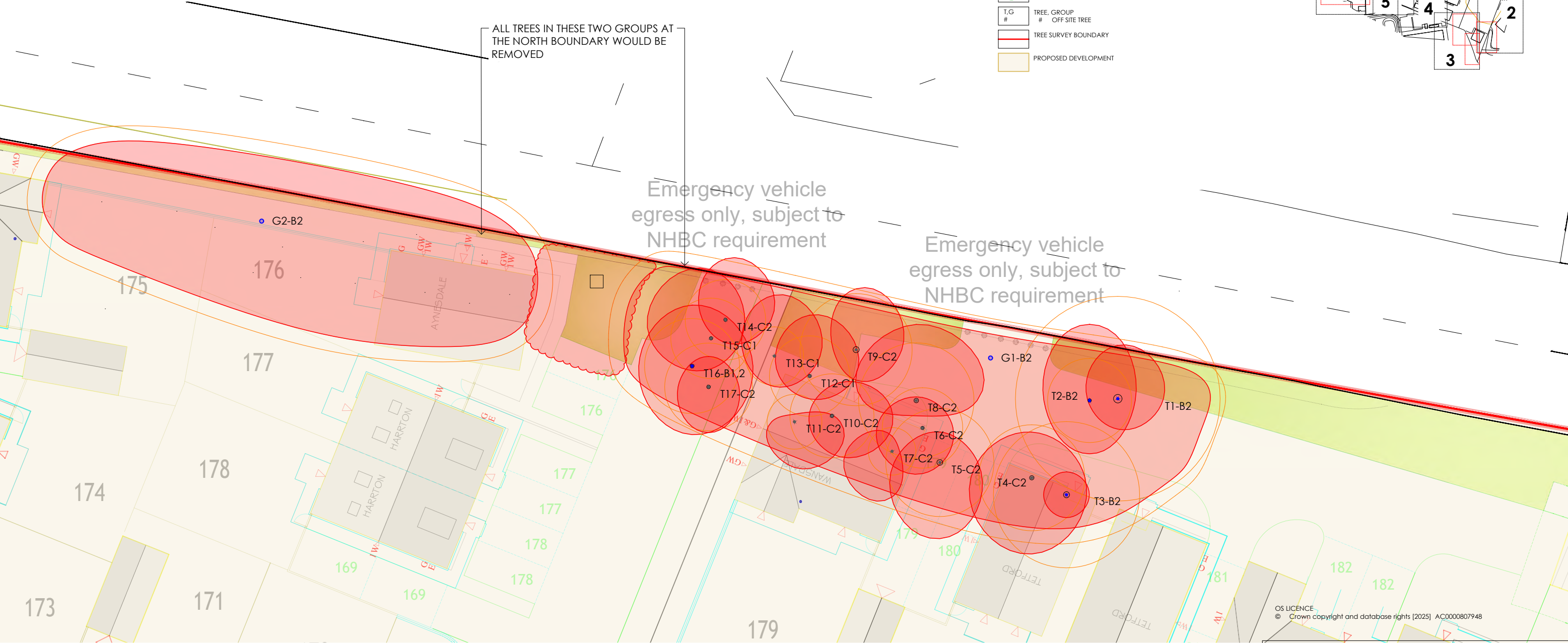
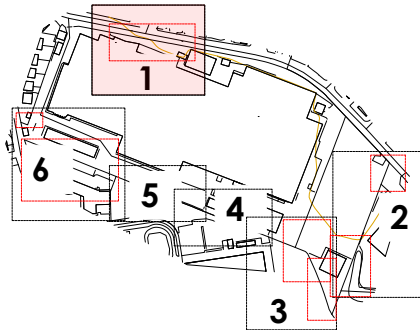
Legend

- Trees categorised in accordance with BS5837:2012 Trees in relation to design, demolition and construction - Recommendations
This drawing must be reproduced in colour
- TREE / GROUP TO BE RETAINED
 - TREE / GROUP TO BE REMOVED
 - TREE TO BE CROWN LIFTED / CROWN REDUCED SUBJECT TO AGREEMENT WITH LANDOWNER
 - ROOT PRUNING TO BE CARRIED OUT UNDER AN ARBORICULTURAL WATCHING BRIEF
 - TEMPORARY TREE PROTECTION FENCE
 - ROOT PROTECTION AREA (RPA)
 - ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
 - TREE REFERENCE, TAG NUMBER CATEGORY
 - T, G
OFF SITE TREE
 - TREE SURVEY BOUNDARY
 - PROPOSED DEVELOPMENT

Notes

- Dimensions are given in metres and millimetres as stated on the drawing.
- Centre of site is located at approximately grid reference SJ 48005 91547.
- Tree shadow not shown as all trees in this area are to be removed.
- Drawing must be reproduced in colour.

Location Plan



ARBORICULTURAL METHOD STATEMENT TREE WORKS AND PROTECTION PLAN SHEET 1

OS LICENCE.
© Crown copyright and database rights [2025] AC0000807948

Drawing references	
411/AMS/T/300	AMS TREE WORKS AND PROTECTION PLAN OVERVIEW AND SHEET PLAN
411/AMS/T/301	AMS TREE WORKS AND PROTECTION PLAN SHEET 1
411/AMS/T/302	AMS TREE WORKS AND PROTECTION PLAN SHEET 2
411/AMS/T/303	AMS TREE WORKS AND PROTECTION PLAN SHEET 3
411/AMS/T/304	AMS TREE WORKS AND PROTECTION PLAN SHEET 4
411/AMS/T/305	AMS TREE WORKS AND PROTECTION PLAN SHEET 5
411/AMS/T/306	AMS TREE WORKS AND PROTECTION PLAN SHEET 6

Project	GLEN DIMPLEX SITE STONEY LANE	Dwg No	411/AMS/T/301	Revision	P02
Title	ARBORICULTURAL METHOD STATEMENT TREE WORKS AND PROTECTION PLAN SHEET 1	Scale	1:125 @ A1 / 1:250 @ A3	Date	10/11/2025

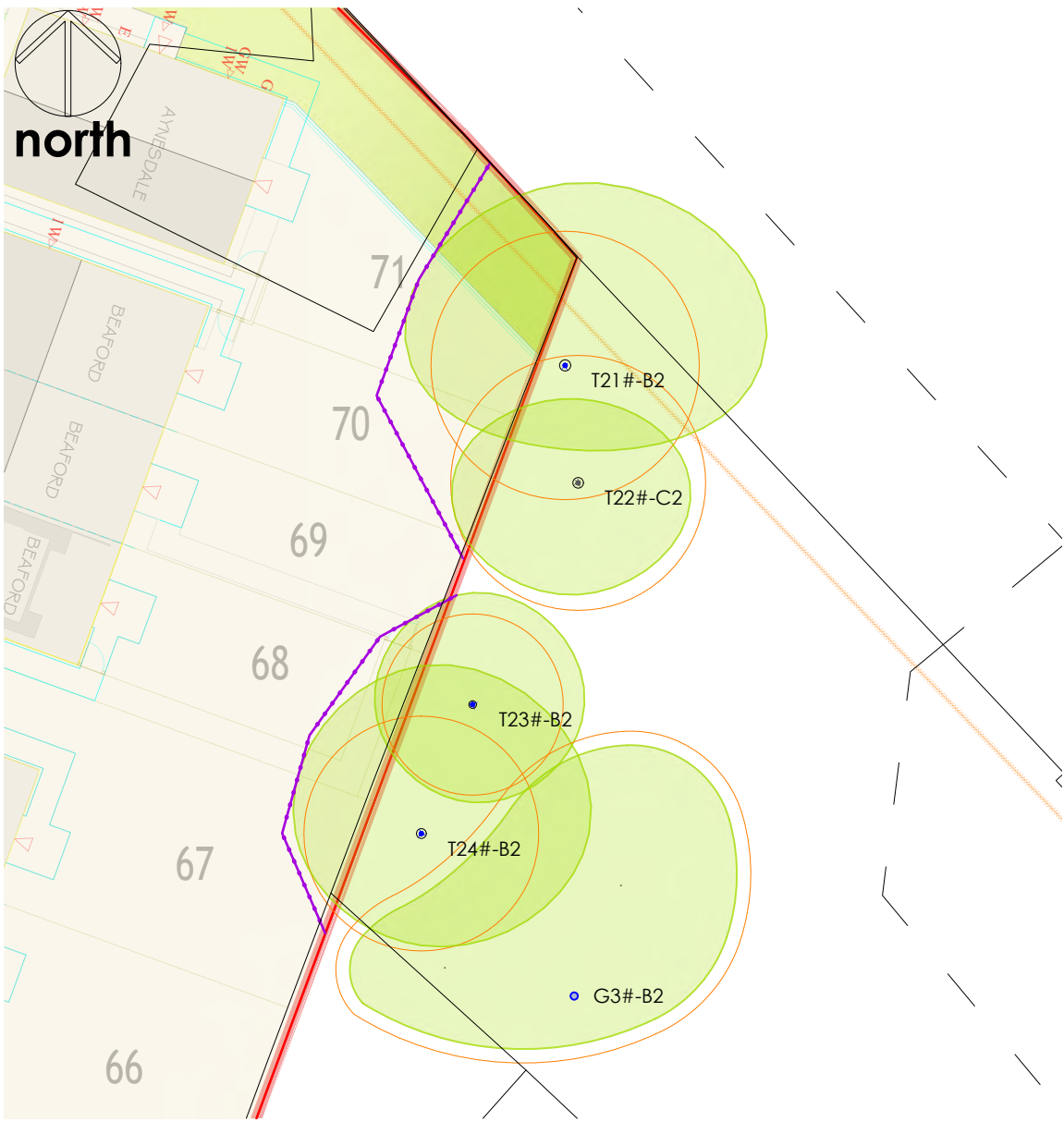
Revision	Date	Details	Drawn	Checked	Reviewed
P01	21/08/2025	FOR INFORMATION	MD	XX	MD
P02	10/11/2025	REVISED SITE LAYOUT	MD	XX	MD



mdlandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231



©The Copyright of this drawing belongs to mdlandscape. This drawing is issued by mdlandscape subject to the condition that it is not copied either in whole or in part, or disclosed to third parties unless prior written authorisation is given by mdlandscape. Do not scale from this drawing - refer to noted dimensions on drawing: all dimensions to be confirmed on site prior to execution of the works. All dimensions are shown in metres and millimetres unless otherwise stated. Where Ordnance Survey data is used the relevant licence is stated on the drawing.



NORTH

0 1 2 3 4 5 6 7 8 9 10
SCALE 1:125 (A1)
SCALE 1:250 (A3)
METRES

ARBORICULTURAL METHOD STATEMENT TREE WORKS AND PROTECTION PLAN SHEET 2

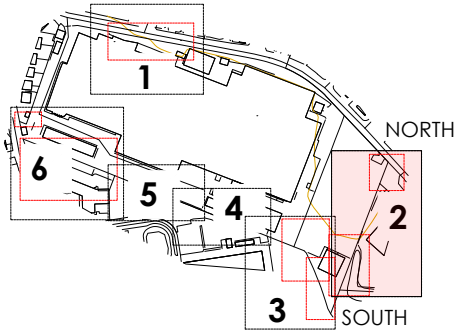


SOUTH

Notes

1. Dimensions are given in metres and millimetres as stated on the drawing.
2. Centre of site is located at approximately grid reference SJ 48005 91547.
3. Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
4. Drawing must be reproduced in colour.

Location Plan



Legend

Trees categorised in accordance with BS5837:2012 Trees in relation to design, demolition and construction - Recommendations
This drawing must be reproduced in colour

- TREE / GROUP TO BE RETAINED
- TREE / GROUP TO BE REMOVED
- TREE TO BE CROWN LIFTED / CROWN REDUCED SUBJECT TO AGREEMENT WITH LANDOWNER
- ROOT PRUNING TO BE CARRIED OUT UNDER AN ARBORICULTURAL WATCHING BRIEF
- TEMPORARY TREE PROTECTION FENCE
- ROOT PROTECTION AREA (RPA)
- ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
- TREE REFERENCE, TAG NUMBER CATEGORY
- TREE, GROUP # OFF SITE TREE
- TREE SURVEY BOUNDARY
- PROPOSED DEVELOPMENT

OS LICENCE
© Crown copyright and database rights [2025] AC0000807948

Drawing references

411/AMS/T/300	AMS TREE WORKS AND PROTECTION PLAN OVERVIEW AND SHEET PLAN
411/AMS/T/301	AMS TREE WORKS AND PROTECTION PLAN SHEET 1
411/AMS/T/302	AMS TREE WORKS AND PROTECTION PLAN SHEET 2
411/AMS/T/303	AMS TREE WORKS AND PROTECTION PLAN SHEET 3
411/AMS/T/304	AMS TREE WORKS AND PROTECTION PLAN SHEET 4
411/AMS/T/305	AMS TREE WORKS AND PROTECTION PLAN SHEET 5
411/AMS/T/306	AMS TREE WORKS AND PROTECTION PLAN SHEET 6



malandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231

Project GLEN DIMPLEX SITE
STONEY LANE

Dwg No 411/AMS/T/302

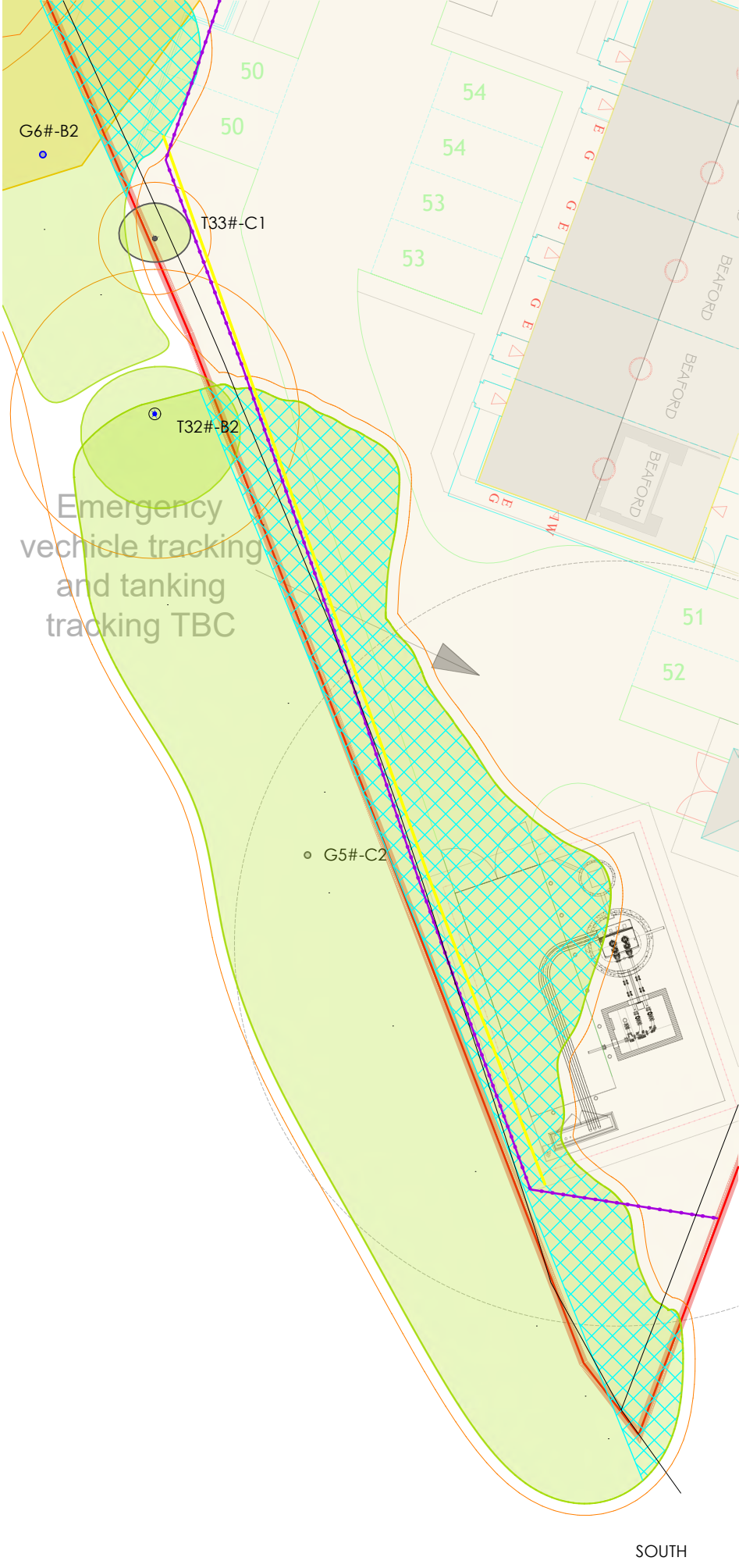
Revision P02

Title ARBORICULTURAL METHOD STATEMENT
TREE WORKS AND PROTECTION PLAN SHEET 2

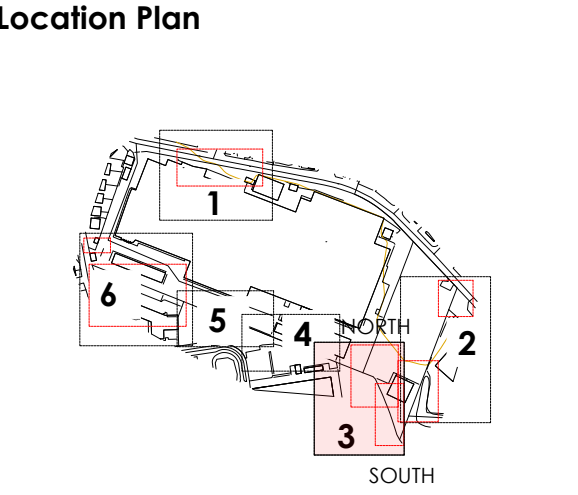
Scale 1:125 @ A1 / 1:250 @ A3

Date 10/11/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	21/08/2025	FOR INFORMATION	MD	XX	MD
P02	10/11/2025	REVISED SITE LAYOUT	MD	XX	MD



- Notes**
1. Dimensions are given in metres and millimetres as stated on the drawing.
 2. Centre of site is located at approximately grid reference SJ 48005 91547.
 3. Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
 4. Drawing must be reproduced in colour.



- Legend**
- Trees categorised in accordance with BS5837:2012 Trees in relation to design, demolition and construction : Recommendations
This drawing must be reproduced in colour
 - Tree / Group to be retained
 - Tree / Group to be removed
 - Tree to be crown lifted / crown reduced subject to agreement with landowner
 - Root pruning to be carried out under an arboricultural watching brief
 - Temporary tree protection fence
 - Root protection area (RPA)
 - Anticipated confined RPA due to boundary features and hard surfacing
 - Tree reference, tag number category
 - Tree, group # off site tree
 - Tree survey boundary
 - Proposed development

OS LICENCE
© Crown copyright and database rights [2025] AC0000807948

Drawing references	
411/AMS/T/300	AMS TREE WORKS AND PROTECTION PLAN OVERVIEW AND SHEET PLAN
411/AMS/T/301	AMS TREE WORKS AND PROTECTION PLAN SHEET 1
411/AMS/T/302	AMS TREE WORKS AND PROTECTION PLAN SHEET 2
411/AMS/T/303	AMS TREE WORKS AND PROTECTION PLAN SHEET 3
411/AMS/T/304	AMS TREE WORKS AND PROTECTION PLAN SHEET 4
411/AMS/T/305	AMS TREE WORKS AND PROTECTION PLAN SHEET 5
411/AMS/T/306	AMS TREE WORKS AND PROTECTION PLAN SHEET 6

Project	GLEN DIMPLEX SITE STONEY LANE	Dwg No	411/AMS/T/303	Revision	P02
Title	ARBORICULTURAL METHOD STATEMENT TREE WORKS AND PROTECTION PLAN SHEET 3	Scale	1:125 @ A1 / 1:250 @ A3	Date	10/11/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	21/08/2025	FOR INFORMATION	MD	XX	MD
P02	10/11/2025	REVISED SITE LAYOUT	MD	XX	MD



mdlandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231

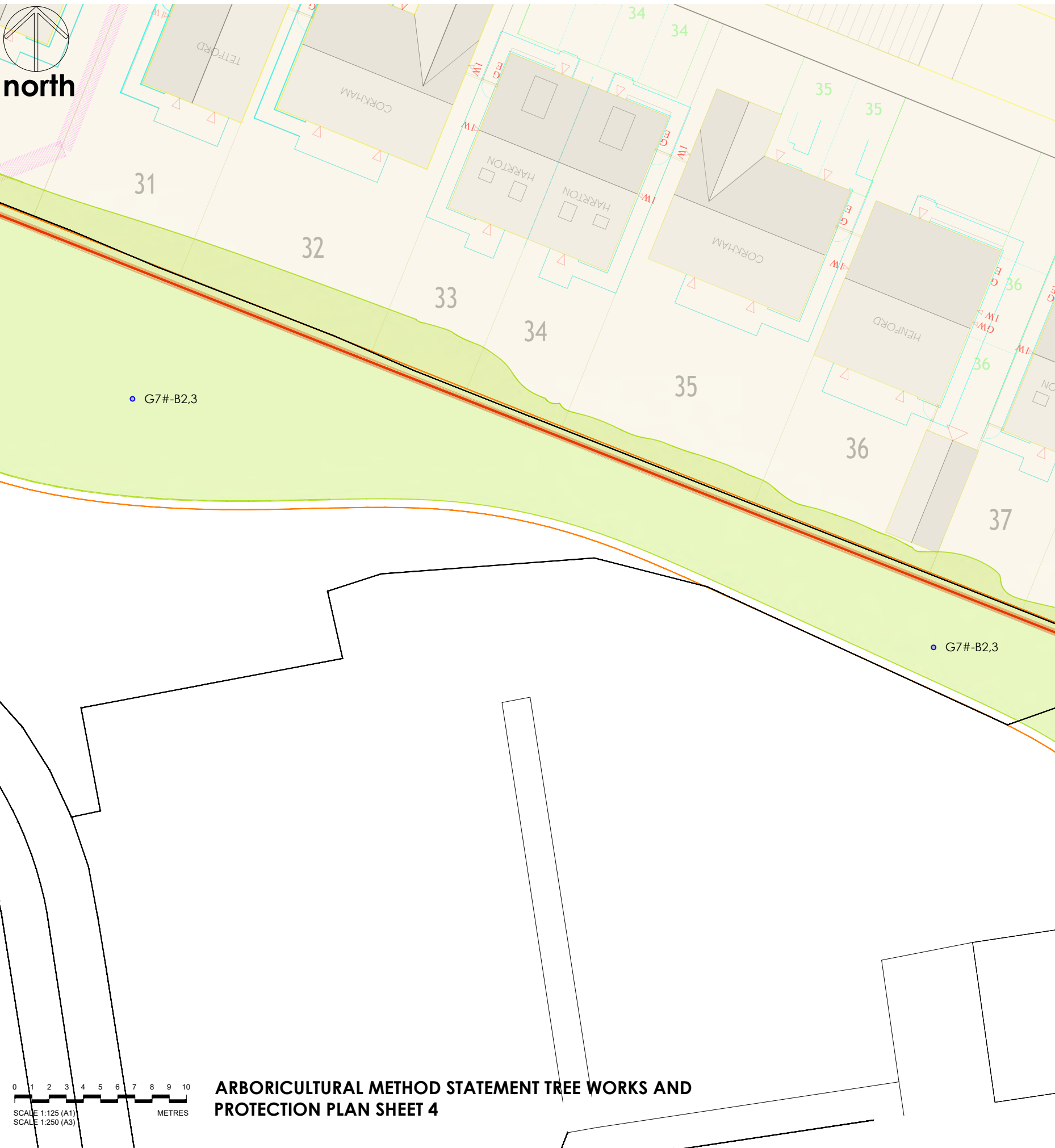


Landscape Institute
Chartered Member

Arboricultural Association
Professional Member



north



Legend

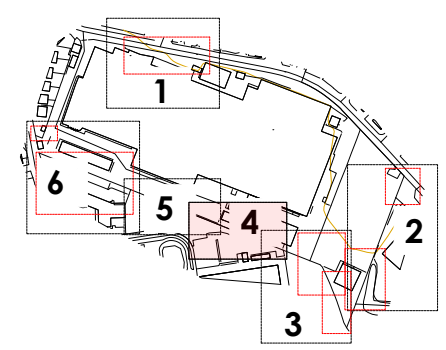
Trees categorised in accordance with BS5837:2012 Trees in relation to design, demolition and construction - Recommendations
This drawing must be reproduced in colour

- TREE / GROUP TO BE RETAINED
- TREE / GROUP TO BE REMOVED
- TREE TO BE CROWN LIFTED / CROWN REDUCED SUBJECT TO AGREEMENT WITH LANDOWNER
- ROOT PRUNING TO BE CARRIED OUT UNDER AN ARBORICULTURAL WATCHING BRIEF
- TEMPORARY TREE PROTECTION FENCE
- ROOT PROTECTION AREA (RPA)
- ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
- TREE REFERENCE, TAG NUMBER CATEGORY
- TREE, GROUP # OFF SITE TREE
- TREE SURVEY BOUNDARY
- PROPOSED DEVELOPMENT

Notes

- Dimensions are given in metres and millimetres as stated on the drawing.
- Centre of site is located at approximately grid reference SJ 48005 91547.
- Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
- Drawing must be reproduced in colour.

Location Plan



ARBORICULTURAL METHOD STATEMENT TREE WORKS AND PROTECTION PLAN SHEET 4

OS LICENCE
© Crown copyright and database rights (2025) AC0000807948

Drawing references	
411/AMS/T/300	AMS TREE WORKS AND PROTECTION PLAN OVERVIEW AND SHEET PLAN
411/AMS/T/301	AMS TREE WORKS AND PROTECTION PLAN SHEET 1
411/AMS/T/302	AMS TREE WORKS AND PROTECTION PLAN SHEET 2
411/AMS/T/303	AMS TREE WORKS AND PROTECTION PLAN SHEET 3
411/AMS/T/304	AMS TREE WORKS AND PROTECTION PLAN SHEET 4
411/AMS/T/305	AMS TREE WORKS AND PROTECTION PLAN SHEET 5
411/AMS/T/306	AMS TREE WORKS AND PROTECTION PLAN SHEET 6

Project	GLEN DIMPLEX SITE STONEY LANE	Dwg No	411/AMS/T/304	Revision	P02
Title	ARBORICULTURAL METHOD STATEMENT TREE WORKS AND PROTECTION PLAN SHEET 4	Scale	1:125 @ A1 / 1:250 @ A3	Date	10/11/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	21/08/2025	FOR INFORMATION	MD	XX	MD
P02	10/11/2025	REVISED SITE LAYOUT	MD	XX	MD



mdlandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231





north



Legend

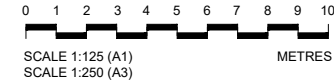
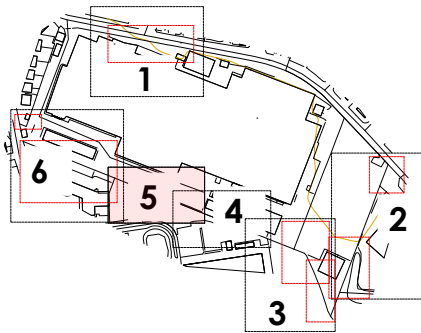
Trees categorised in accordance with BS5837:2012 Trees in relation to design, demolition and construction - Recommendations. This drawing must be reproduced in colour.

- TREE / GROUP TO BE RETAINED
- TREE / GROUP TO BE REMOVED
- TREE TO BE CROWN LIFTED / CROWN REDUCED SUBJECT TO AGREEMENT WITH LANDOWNER
- ROOT PRUNING TO BE CARRIED OUT UNDER AN ARBORICULTURAL WATCHING BRIEF
- TEMPORARY TREE PROTECTION FENCE
- ROOT PROTECTION AREA (RPA)
- ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
- TREE REFERENCE, TAG NUMBER CATEGORY
- TREE, GROUP # OFF SITE TREE
- TREE SURVEY BOUNDARY
- PROPOSED DEVELOPMENT

Notes

- Dimensions are given in metres and millimetres as stated on the drawing.
- Centre of site is located at approximately grid reference SJ 48005 91547.
- Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
- Drawing must be reproduced in colour.

Location Plan



ARBORICULTURAL METHOD STATEMENT TREE WORKS AND PROTECTION PLAN SHEET 5

OS LICENCE
© Crown copyright and database rights [2025] AC0000807948

Drawing references	
411/AMS/T/300	AMS TREE WORKS AND PROTECTION PLAN OVERVIEW AND SHEET PLAN
411/AMS/T/301	AMS TREE WORKS AND PROTECTION PLAN SHEET 1
411/AMS/T/302	AMS TREE WORKS AND PROTECTION PLAN SHEET 2
411/AMS/T/303	AMS TREE WORKS AND PROTECTION PLAN SHEET 3
411/AMS/T/304	AMS TREE WORKS AND PROTECTION PLAN SHEET 4
411/AMS/T/305	AMS TREE WORKS AND PROTECTION PLAN SHEET 5
411/AMS/T/306	AMS TREE WORKS AND PROTECTION PLAN SHEET 6

Project	GLEN DIMPLEX SITE STONEY LANE	Dwg No	411/AMS/T/305	Revision	P02
Title	ARBORICULTURAL METHOD STATEMENT TREE WORKS AND PROTECTION PLAN SHEET 5	Scale	1:125 @ A1 / 1:250 @ A3	Date	10/11/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	21/08/2025	FOR INFORMATION	MD	XX	MD
P02	10/11/2025	REVISED SITE LAYOUT	MD	XX	MD



mdlandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231





see continuation in inset plan

G9#-B2

14

15

16

17

Legend

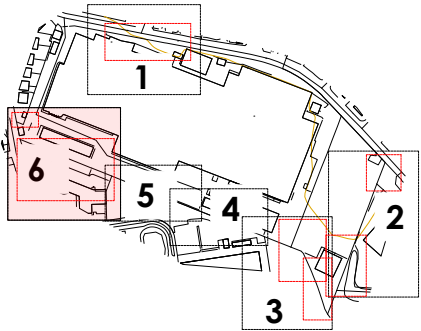
Trees categorised in accordance with BS5837:2012 Trees in relation to design, demolition and construction : Recommendations
This drawing must be reproduced in colour

- TREE / GROUP TO BE RETAINED
- TREE / GROUP TO BE REMOVED
- TREE TO BE CROWN LIFTED / CROWN REDUCED SUBJECT TO AGREEMENT WITH LANDOWNER
- ROOT PRUNING TO BE CARRIED OUT UNDER AN ARBORICULTURAL WATCHING BRIEF
- TEMPORARY TREE PROTECTION FENCE
- ROOT PROTECTION AREA (RPA)
- ANTICIPATED CONFINED RPA DUE TO BOUNDARY FEATURES AND HARD SURFACING
- TREE REFERENCE, TAG NUMBER CATEGORY
- TREE, GROUP # OFF SITE TREE
- TREE SURVEY BOUNDARY
- PROPOSED DEVELOPMENT

Notes

- Dimensions are given in metres and millimetres as stated on the drawing.
- Centre of site is located at approximately grid reference SJ 48005 91547.
- Tree shadow shows the movement of the shadow from west to east and is an area which will experience shade but is unlikely to be completely shaded all day.
- Drawing must be reproduced in colour.

Location Plan



19

20

21

22

G8#-C2

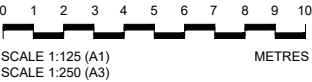
12

13

WANSDALE

see continuation in main plan

ARBORICULTURAL METHOD STATEMENT TREE WORKS AND PROTECTION PLAN SHEET 6



OS LICENCE
© Crown copyright and database rights [2025] AC0000807948

Drawing references					
411/AMS/T/300	AMS TREE WORKS AND PROTECTION PLAN OVERVIEW AND SHEET PLAN				
411/AMS/T/301	AMS TREE WORKS AND PROTECTION PLAN SHEET 1				
411/AMS/T/302	AMS TREE WORKS AND PROTECTION PLAN SHEET 2				
411/AMS/T/303	AMS TREE WORKS AND PROTECTION PLAN SHEET 3				
411/AMS/T/304	AMS TREE WORKS AND PROTECTION PLAN SHEET 4				
411/AMS/T/305	AMS TREE WORKS AND PROTECTION PLAN SHEET 5				
411/AMS/T/306	AMS TREE WORKS AND PROTECTION PLAN SHEET 6				

Revision	Date	Details	Drawn	Checked	Reviewed
P01	21/08/2025	FOR INFORMATION	MD	XX	MD
P02	10/11/2025	REVISED SITE LAYOUT	MD	XX	MD

Project GLEN DIMPLEX SITE
STONEY LANE

Dwg No 411/AMS/T/306

Revision P02

Title ARBORICULTURAL METHOD STATEMENT
TREE WORKS AND PROTECTION PLAN SHEET 6

Scale 1:125 @ A1 / 1:250 @ A3

Date 10/11/2025



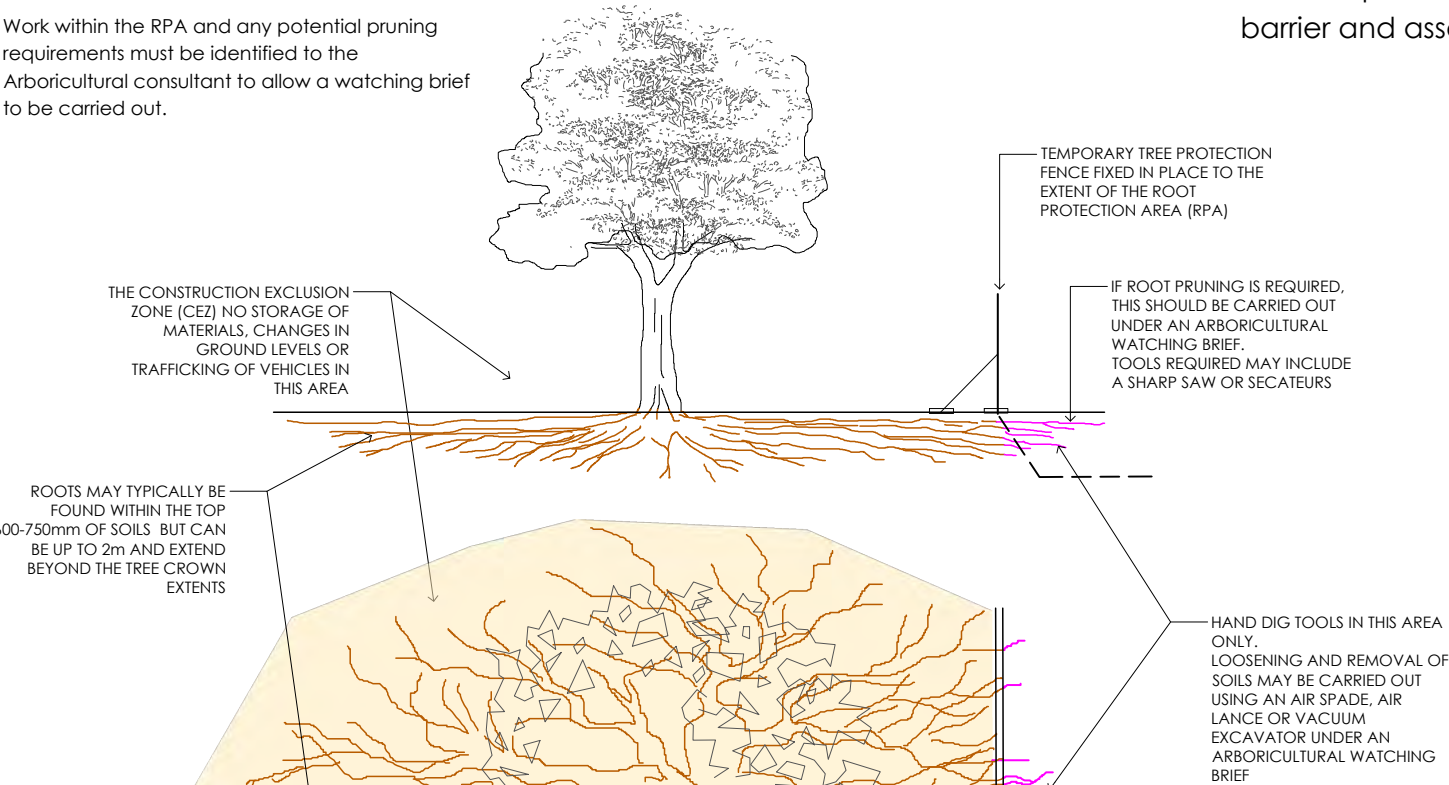
andscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231



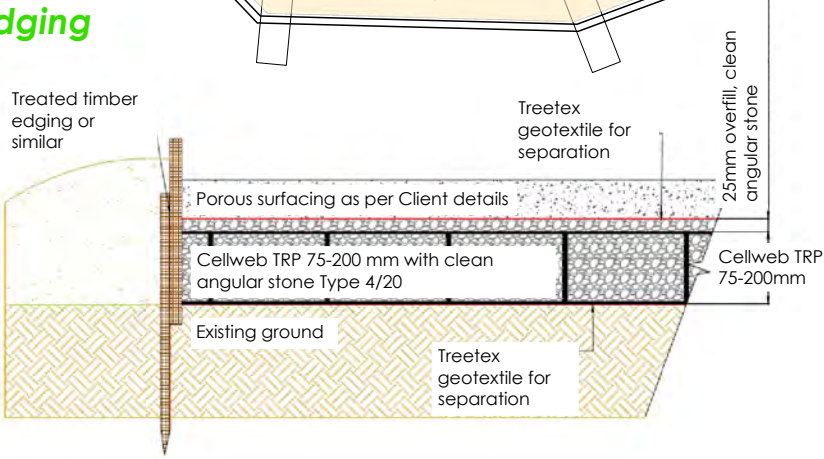
Establishment of the tree root protection area

Work within the RPA and any potential pruning requirements must be identified to the Arboricultural consultant to allow a watching brief to be carried out.

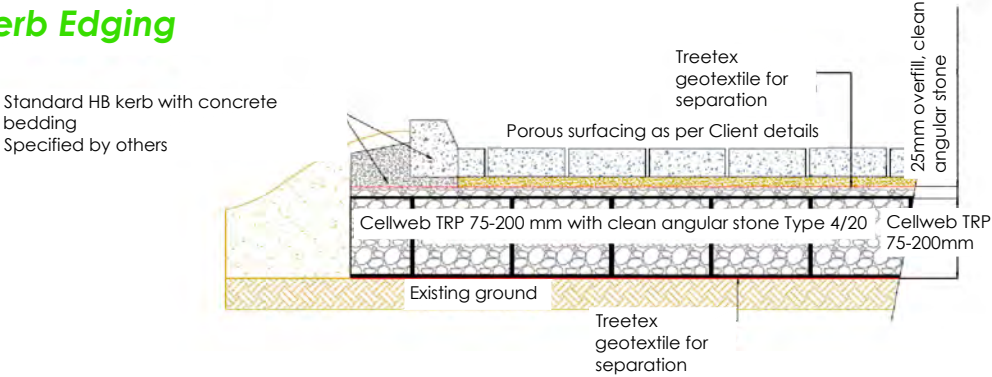
Default specification for protective barrier and associated signage



Timber Edging



Kerb Edging



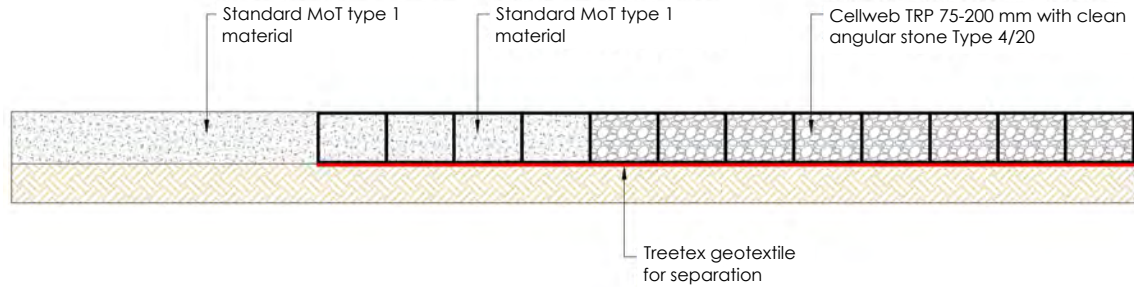
TREE PROTECTION FENCING

THIS FENCE MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED METHOD STATEMENT AND DRAWINGS FOR THIS DEVELOPMENT



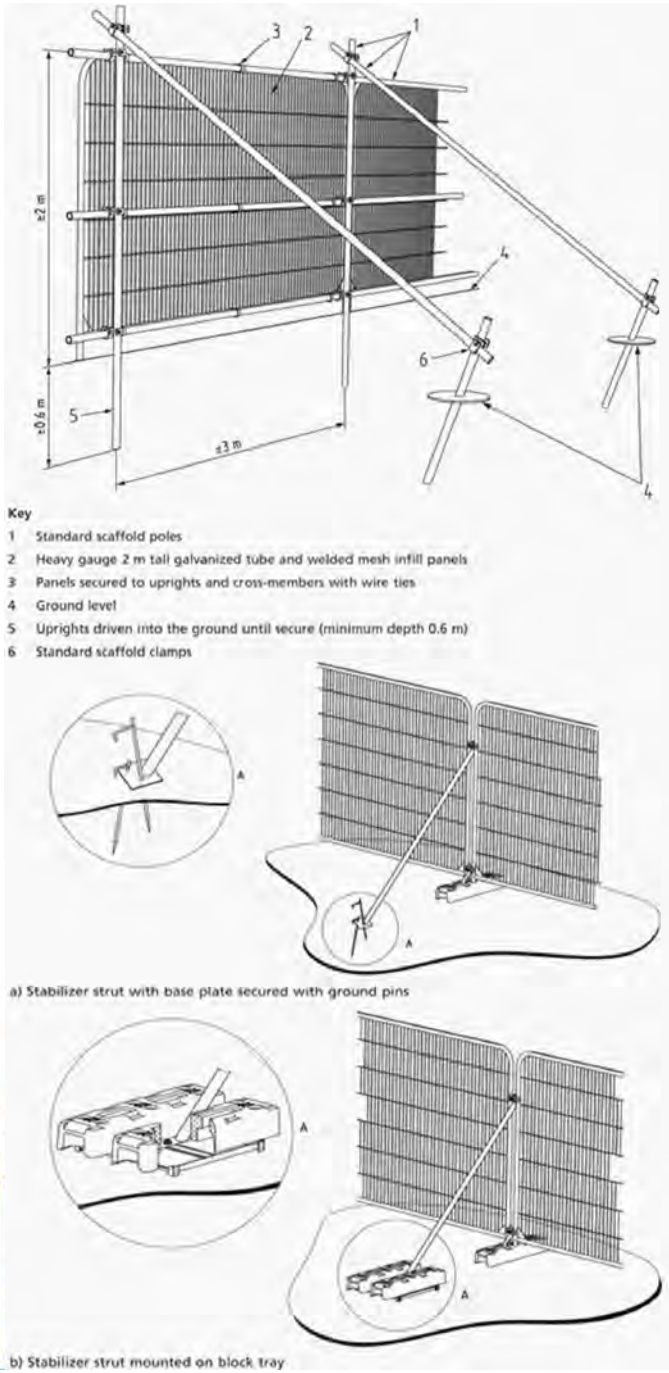
TREE PROTECTION AREA

ACCESS INTO THIS AREA IS PROHIBITED FOR THE DURATION OF THE DEVELOPMENT IN ACCORDANCE WITH THE APPROVED METHOD STATEMENT FOR THIS DEVELOPMENT



Transition from Cellweb TRP to Crushed Hardcore or MoT Surfacing

Information taken from Cellweb TRP Product Information; please refer to website and Manufacturer for further information and specification



Tufftrak

GRASSFORM GROUP

Installation Guide

1. Tufftrak Panels are delivered by HGV vehicle accompanied by specialist forklifts to unload and lay panels to clients instructions.

2. Each forklift is equipped with a specialist clamp to hold and secure the panels during unloading and laying.

3. This minimises any manual handling and ensures the panels are laid precisely and accurately into position.

4. Once the panels are laid in position, each panel is connected to the adjoining panel by means of a steel strap connector.

5. Panels can be placed in the 3 meter or the 2.5 meter direction to make roads of varying widths and they can be laid in single or double configuration depending on the weight or loadings going over the panels.

6. Each Panel has a maximum weight loading of 150 tonnes and will flex to the ground conditions on site.

7. If the surface is uneven an amount of levelling may be required by the client prior to install.

8. The panels are not suitable as road plates or bridges.

9. Typical install times: 200 panels per crew per day depending upon site access and location.

10. These panels must be laid by Grassforms specialist team.

www.grassform.co.uk

Example of heavy duty ground protection matting for temporary vehicular access



Example of temporary and permanent ground protection systems such as CellwebTRP

ARBORICULTURAL METHOD STATEMENT
PROPRIETARY TREE PROTECTION MEASURES

Revision	Date	Details	Drawn	Checked	Reviewed
P01	22/08/2025	FOR INFORMATION	MD	XX	MD

Drawing references	

mdlandscape

mdlandscape
6 Kinderton Close | High Legh | Knutsford
Cheshire | WA16 6LZ | 07710 498231

11 APPENDICES

APPENDIX 1 - ARBORICULTURAL SURVEY DATA SHEETS – refer to Tree Constraints Plan 411/TCP/T/100 to 106 inclusive.



mdlandscape



Tree ref: T - Individual tree, G - group, W - Woodland, H - Hedge | tree tag number | * TPO | # - off site tree | () estimated measurements
 Maturity: Young; Semi-mature; Early mature; Middle age; Mature; Over mature
 Structural condition: Good; Fair; Poor; Veteran
 Physiological condition: Good; Fair; Poor; Veteran
 Estimated remaining contribution: less than 10yrs, 10-20, 20-40, 40yrs+

6 Kinderton Close High Legh Knutsford Cheshire WA16 6LZ mdlandscape@btinternet.com 07710 498231									
Site	Glen Dimplex, Stoney Lane	Surveyor	M Dobson	Date	13.08.2025	Weather	dry and sunny	Drawing	411-TCP-T-100

The information in the data sheets is correct as of time of survey. Trees are dynamic organisms and their condition can change as a result of changes in their environment, stress factors, physical and man-made conditions.

The information in the data sheets is correct as of time of survey. Trees are dynamic organisms and their condition can change as a result of changes in their environment, stress factors, physical and man-made conditions.																			
Tree ref	Species Common name (Latin name)	Height (m)	Number of stems	Stem dia. (mm) <i>estimated dbh in italics</i>	Crown spread N E S W				Height of crown clearance (m)	Direction and height of lowest branch (m)	Maturity	Structural condition	Physiological condition	Comments on form condition, health and significant defects	BS5837 Tree Quality Category A, B, C, U	1,2,3	Radius of RPA (m)	Management recommendations Reinspect all retained trees two years from survey date	Estimated remaining contribution
TREES																			
T1	Lombardy Poplar (Populus nigra 'Italica')	16	1	560	3.5	3	2	2	5	N5	Middle Age	Good	Good	Visualisation of crown impeded by dense shrub layer and low crown cover	B	2	6.72		20-40 years
T2	Common Ash (Fraxinus excelsior)	18	1	230	5	3	3.5	3	6	B2	Semi-mature	Good	Good	Biased crown spread to north; minimal dieback; inspection impeded by dense vegetation	B	2	2.76		20-40 years
T3	Lombardy Poplar (Populus nigra 'Italica')	18	1	400	1.5	1.5	1.5	1.5	8	na	Middle Age	Good	Good	On edge of bank; inspection impeded by dense vegetation and flooded area to south	B	2	4.8		20-40 years
T4	Common Ash (Fraxinus excelsior)	18	1	290	3	3.5	5	4	8	na	Early Mature	Good	Fair	Minor dieback to crown; inspection impeded by dense vegetation and flooded area to south	C	2	3.48		10-20 years
T5	Norway Maple (Acer platanoides)	16	2	270 120	2	2.5	5	3	0.5	S0.5	Middle Age	Fair	Good	Low side stem with included bark and bifurcate at 2m with codominant stems; inspection impeded by dense vegetation and flooded area to south	C	2	3.55		10-20 years
T6	Common Ash (Fraxinus excelsior)	16	1	220	2	2	3	3	8	na	Early Mature	Fair	Fair	Dieback to crown not fully inspected dense lower shrub layer	C	2	2.64		10-20 years
T7	Silver Birch (Betula pendula)	14	1	130	1	0.5	3	3	3	na	Young	Good	Good	At edge of bank biased crown to south west; inspection impeded by dense vegetation and flooded area to south	C	2	1.56		10-20 years
T8	Goat Willow (Salix caprea)	18	2	260 180	5	4	1	3.5	7	na	Middle Age	Fair	Good	Broken branch at 0.5m ; dense vegetation impeded inspection	C	2	3.79		10-20 years
T9	Goat Willow (Salix caprea)	18	3	110 120 260	4	3	2	1.5	5	na	Middle Age	Fair	Good	Three stems arising below 1m one stem to east is dead	C	2	3.68		10-20 years

Tree ref	Species Common name (Latin name)	Height (m)	Number of stems	Stem dia. (mm) <i>estimated dbh in italics</i>	Crown spread N E S W				Height of crown clearance (m)	Direction and height of lowest branch (m)	Maturity	Structural condition	Physiological condition	Comments on form condition, health and significant defects	BS5837 Tree Quality Category A, B, C, U	1,2,3	Radius of RPA (m)	Management recommendations Reinspect all retained trees two years from survey date	Estimated remaining contribution
T10	Goat Willow (<i>Salix caprea</i>)	9	1	230	2	4	2.5	1.5	3	na	Semi- mature	Fair	Fair	At edge of group and at edge of bank to flooded area inspection impeded by dense vegetation	C	2	2.76		10-20 years
T11	Common Alder (<i>Alnus glutinosa</i>)	13	1	150	0.5	3	3	1.5	1	na	Semi- mature	Good	Good	At edge of bank to flooded area; inspection impeded by dense vegetation and flooded area to south	C	2	1.8		10-20 years
T12	Goat Willow (<i>Salix caprea</i>)	9	1	220	4	3	1.5	2	3	S2	Semi- mature	Poor	Poor	Dieback and dysfunctional wood	C	1	2.64		<10 years
T13	Goat Willow (<i>Salix caprea</i>)	10	1	160	4	3	2	2	2	na	Semi- mature	Fair	Fair	Poor condition with dieback	C	1	1.92		<10 years
T14	Goat Willow (<i>Salix caprea</i>)	9	1	220	4	3	1.5	1.5	0.5	basal growth	Semi- mature	Fair	Fair	Poor condition with dieback	C	2	2.64		10-20 years
T15	Common Ash (<i>Fraxinus excelsior</i>)	17	1	220	4.5	2	2	4	6	na	Early Mature	Fair	Fair	Deback to crown, large nest in tree	C	1	2.64		<10 years
T16	Beech (<i>Fagus sylvatica</i>)	17	1	260	4	4	4.5	3.5	1	N2	Early Mature	Good	Good	At edge of bank to flooded area not fully inspected side stem at 3m west with included back	B	1,2	3.12		20-40 years
T17	Grey Poplar (<i>Populus incana</i>)	14	1	240	2	2	3	2	8	na	Early Mature	Good	Good	At edge of group and flooded area not fully inspected	C	2	2.88		10-20 years
T18#	<i>Chamaecyparis lawsoniana</i> (Lawson cypress)	9									Early Mature	Good	Good	Off site tree with no access for survey; location of stems estimated; no visibility of stems to estimate dbh	C	2			10-20 years
T19#	<i>Chamaecyparis lawsoniana</i> (Lawson cypress)	9									Early Mature	Good	Good	Off site tree with no access for survey; location of stems estimated; no visibility of stems to estimate dbh	C	2			10-20 years
T20#	<i>Chamaecyparis lawsoniana</i> (Lawson cypress)	9									Early Mature	Good	Good	Off site tree with no access for survey; location of stems estimated; no visibility of stems to estimate dbh	C	2			10-20 years
T21#	Common Ash (<i>Fraxinus excelsior</i>)	9	1	400	6.5	7	3	5.5	2	E2.5	Middle Age	Good	Good	In grass verge on third party land; spreading crown good condition minimal dieback	B	2	4.8		20-40 years
T22#	Common Ash (<i>Fraxinus excelsior</i>)	15	1	380	3	4	4	4.5	2	N2	Middle Age	Fair	Fair	Dieback to outer crown and epicormic growth to branches	C	2	4.56		10-20 years
T23#	Small leaved Lime (<i>Tilia cordata</i>)	9	1	270	4	4	3.5	3.5	0	SE2.5	Early Mature	Good	Good	Basal shooting epicormic growth, good tree form and condition; in grass verge	B	1,2	3.24		20-40 years
T24#	Sycamore (<i>Acer pseudoplatanus</i>)	14	1	350	6	6	4	4.5	1.6	N2	Middle Age	Good	Good	Cultivated form of <i>Acer</i> with pink tinges to leaves; on adjacent land in grass verge along with three wild cherry to the east of smaller dbh	B	2	4.2		20-40 years
T25#	English Oak (<i>Quercus robur</i>)	11	1	460	7	6.5	5.5	6.5	0.5	S1	Middle Age	Good	Good	On third party land on mound with low branch structure and spreading crown, branches and crown spread into site, attractive tree at edge of boundary group	A	2	5.52		40 yrs Plus

Tree ref	Species Common name (Latin name)	Height (m)	Number of stems	Stem dia. (mm) <i>estimated dbh in italics</i>	Crown spread N E S W				Height of crown clearance (m)	Direction and height of lowest branch (m)	Maturity	Structural condition	Physiological condition	Comments on form condition, health and significant defects	BS5837 Tree Quality Category A, B, C, U	1,2,3	Radius of RPA (m)	Management recommendations Reinspect all retained trees two years from survey date	Estimated remaining contribution
T26#	Norway Maple Crimson King (<i>Acer platanoides</i> 'Crimson King')	14	1	260	3.5	3.5	2	3	2	W3	Early Mature	Good	Good	Planted tree at base of mound with old stake at base good form and condition	B	1,2	3.12		20-40 years
T27#	English Oak (<i>Quercus robur</i>)	15	1	450	7	2	2.5	7.5	1.2	SE1.5	Middle Age	Good	Good	On mound; good form; crown spread extends over site fence	A	2	5.4		40 yrs Plus
T28#	Small leaved Lime (<i>Tilia cordata</i>)	16	1	520	4	3	4.5	4	1.2	S1.2	Middle Age	Good	Good	Stems arising at 1.5m with splaying habit and spreading crown	B	2	6.24		20-40 years
T29#	Norway Maple Crimson King (<i>Acer platanoides</i> 'Crimson King')	18	3	280 300 350	8	8	6	7.5	2	S0.5	Middle Age	Fair	Good	Three stems arising at 0.5m with included bark and rib formation, spreading crown extends over into site	B	2	6.47		20-40 years
T30#	English Oak (<i>Quercus robur</i>)	13	1	260	7	6	5	6.5	2	NW1	Middle Age	Good	Good	On mound attractive tree with low branching structure	A	2,1	3.12		40 yrs Plus
T31#	Common Ash (<i>Fraxinus excelsior</i>)	17	1	580	8.5	6	7	6.5	0.5	NW1.8	Mature	Good	Good	Heavily clad in ivy no access for inspection, smaller cherries under 150dbh in the vicinity	B	1,2	6.96		20-40 years
T32#	Lombardy Poplar (<i>Populus nigra</i> 'Italica')	18	2	500 100	2	3.5	4	3	8	S1.5	Middle Age	Good	Good	Off site tree no access for inspection	B	2	6.12		20-40 years
T33#	Lombardy Poplar (<i>Populus nigra</i> 'Italica')	14	2	150 130	1.5	1.5	1	1.5	3	S2	Young	Fair	Good	Two stems at ground level and vigorous growth	C	1	2.38		10-20 years
T34#	Small leaved Lime (<i>Tilia cordata</i>)	15	5	250 230 220 210 190	3.5	4.5	6	4	1.5	na	Middle Age	Fair	Good	Five stems at base with spreading crown no access for inspection	B	2	5.93		20-40 years
T35#	Grey Poplar (<i>Populus incana</i>)	22	3	780 600 400	10.5	8	6	7	2	NW2.5	Mature	Fair	Good	Three stems within 1m and spreading crown, recent branch failures of up to 150mm diameter, potential for further failures due to heavy scaffold branches	C	2	12.75		10-20 years
GROUPS																			
G1	Alder glutinosa, Crataegus monogyna, Corylus avellana, Cornus sanguinea, Fraxinus excelsior, Prunus avium, Betula pendula, Sorbus aucuparia, Acer platanoides, Populus nigra 'Italica', Salix caprea	up to 18		up to 560							young to mature	Fair	Good	Group of trees including individually recorded trees and smaller individuals under 150mm dbh; establishing oak, rowan, with holly, hawthorn, hazel and dogwood understorey. Higher value as a group and landscape screen than as individual trees.	B	2		Thin to remove poplar to promote establishment of oak, rowan, cherry, beech	20-40 years

Tree ref	Species Common name (Latin name)	Height (m)	Number of stems	Stem dia. (mm) <i>estimated dbh in italics</i>	Crown spread N E S W				Height of crown clearance (m)	Direction and height of lowest branch (m)	Maturity	Structural condition	Physiological condition	Comments on form condition, health and significant defects	BS5837 Tree Quality Category A, B, C, U	1,2,3	Radius of RPA (m)	Management recommendations Reinspect all retained trees two years from survey date	Estimated remaining contribution
G2	Ash (<i>Fraxinus excelsior</i>), Common Dogwood (<i>Swida sanguinea</i>), Goat willow (<i>Salix caprea</i>), Lombardy Poplar (<i>Populus nigra - Italica</i>), Sycamore (<i>Acer pseudoplatanus</i>), Wild cherry (<i>Prunus avium</i>), Hazel (<i>Corylus avellana</i>), Silver birch (<i>Betula pendula</i>), Hawthorn (<i>Crataegus monogyna</i>)	18	15	<i>up to 400</i>							Early Mature	Good	Good	Group of trees at close spacing, good species diversity, visual inspection from adjacent area only due to difficult access and flooding. Higher value as a group and landscape screen than as individual trees.	B	2			20-40 years
G3#	<i>Tilia cordata</i> (small leaved lime); <i>Carpinus betulus</i> (hornbeam)	12	2	<i>up to 350</i>							Early Mature	Good	Good	Offsite trees in verge; RPA and crown spread not within influencing distance of the site	B	2			20-40 years
G4#	Wild cherry (<i>Prunus avium</i>), Elder (<i>Sambucus nigra</i>), <i>Crataegus monogyna</i> (hawthorn), <i>Quercus robur</i> (pedunculate oak)	8	20	<i>up to 200</i>							Semi Mature	Good	Good	Establishing understorey and within larger group to east of trees surveyed	B	2			10-20 years
G5#	Wild cherry (<i>Prunus avium</i>), Elder (<i>Sambucus nigra</i>)	up to 9m	15	<i>up to 150</i>							Semi Mature	Good	Fair	Group of self set cherry and occasional elder on adjacent land with drought stress to several trees; crown spread of elder extends into site	C	2			10-20 years
G6#	Ash (<i>Fraxinus excelsior</i>), Lombardy Poplar (<i>Populus nigra - Italica</i>), Scots pine (<i>Pinus sylvestris</i>), Elder (<i>Sambucus nigra</i>), Wild cherry (<i>Prunus avium</i>), Small leaved lime (<i>Tilia cordata</i>), White poplar (<i>Populus alba</i>)	8 - 22	8	<i>up to 600</i>							Mature	Good	Fair	Establishing trees forming screen along site boundary; poplar are mature to overmature and shedding branches; tree nearest boundary T35# has been individually surveyed	B	2			20-40 years

Tree ref	Species Common name (Latin name)	Height (m)	Number of stems	Stem dia. (mm) <i>estimated dbh in italics</i>	Crown spread N E S W				Height of crown clearance (m)	Direction and height of lowest branch (m)	Maturity	Structural condition	Physiological condition	Comments on form condition, health and significant defects	BS5837 Tree Quality Category A, B, C, U	1,2,3	Radius of RPA (m)	Management recommendations Reinspect all retained trees two years from survey date	Estimated remaining contribution
G7#	Beech (<i>Fagus sylvatica</i>), Alder (<i>Alnus glutinosa</i>), Ash (<i>Fraxinus excelsior</i>), Hawthorn (<i>Crataegus monogyna</i>), Hazel (<i>Corylus avellana</i>), Elder (<i>Sambucus nigra</i>), Silver birch (<i>Betula pendula</i>), Beech (<i>Fagus sylvatica</i>), Crack willow (<i>Salix fragilis</i>), Downy birch (<i>Betula pubescens</i>), Elder (<i>Sambucus nigra</i>), Field maple (<i>Acer campestre</i>), Silver birch (<i>Betula pendula</i>), Common or Cherry laurel (<i>Prunus laurocerasus</i>), Wild cherry (<i>Prunus avium</i>)	up to 7m									Semi Mature	Good	Good	Group forming effective screen on land to the west; no access for visual inspection; stem dbh not measured or estimated	B	2,3			20-40 years
G8#	White poplar (<i>Populus alba</i>), Field maple (<i>Acer campestre</i>), Wild cherry (<i>Prunus avium</i>), Elder (<i>Sambucus nigra</i>), Small leaved lime (<i>Tilia cordata</i>), Sycamore (<i>Acer pseudoplatanus</i>)	6 - 20									Middle Age to Over-mature	Good	Fair	Mature to over mature white poplar with splaying habit and spreading crown and small scrub and establishing trees within group forming lower canopy spread; condition of the poplar and stem dbh not known; no access for visual inspection; Potential for branch failures due to weight of scaffold branches and vigorous growth of poplars; stem dbh not measured or estimated	C	2			10-20 years
G9#	Field maple (<i>Acer campestre</i>), Small leaved lime (<i>Tilia cordata</i>), Wild cherry (<i>Prunus avium</i>), Osier (<i>Salix viminalis</i>), Blackthorn (<i>Prunus spinosa</i>)	5 - 13									Early Mature	Good	Good	Group forming effective screen on land to the west; no access for visual inspection; stem dbh not measured or estimated	B	2			20-40 years

APPENDIX 2 – SITE PHOTOGRAPHS



Group to north at boundary wall G1 and G2, trees T1 to T17



Trees T18#, T19#, T20#



T22#



T21#



T23#



Tree group to north east corner



T26#



T28#



T30#



T25#



T27#



T29#



T31#



T32#



T34#



T35#



South boundary



T33#



T35#





White poplar group G8# to south
boundary

APPENDIX 3 – CASCADE CHART FOR TREE QUALITY ASSESSMENT

Table 1 Cascade chart for tree quality assessment

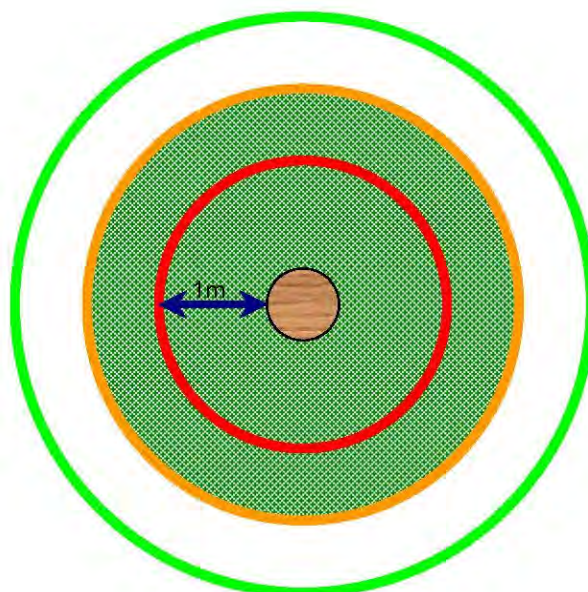
Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	• 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 (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to the health and/or safety of other trees nearby; or very low quality trees suppressing adjacent trees of better quality <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>			See Table 2
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; 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)	See Table 2
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable 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 value	See Table 2
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	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	See Table 2

Summary of BS 5837:2012 tree quality categorisation criteria

APPENDIX 4 – NATIONAL JOINT UTILITIES GROUP (NJUG) GUIDELINES



NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees – Issue 2



TREE PROTECTION ZONE

Key to Diagram



Trunk of Tree



Spread of canopy or branches



PROHIBITED ZONE – 1m from trunk. Excavations of any kind must not be undertaken within this zone unless full consultation with Local Authority Tree Officer is undertaken. Materials, plant and spoil must not be stored within this zone.



PRECAUTIONARY ZONE – 4 x tree circumference. Where excavations must be undertaken within this zone the use of mechanical excavation plant should be prohibited. Precautions should be undertaken to protect any exposed roots. Materials, plant and spoil should not be stored within this zone. Consult with Local Authority Tree Officer if in any doubt.



PERMITTED ZONE – outside of precautionary zone. Excavation works may be undertaken within this zone however caution must be applied and the use of mechanical plant limited. Any exposed roots should be protected.



NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees – Issue 2

DAMAGE TO TREES

Tree roots keep a tree healthy and upright. Most roots are found in the top 600mm of soil and often grow out further than the tree's height. The majority of these roots are very fine; even close to a tree few will be thicker than a pencil. Most street tree roots grow under the footway but may also extend under the carriageway. If roots are damaged the tree may suffer irreversible harm and eventually die.

PROTECTING ROOTS - DO'S and DON'TS

There are three designated zones around a tree each of which has its own criteria for working practices.

THE PROHIBITED ZONE

- Don't** excavate within this zone.
- Don't** use any form of mechanical plant within this zone
- Don't** store materials, plant or equipment within this zone.
- Don't** move plant or vehicles within this zone.
- Don't** lean materials against, or chain plant to, the trunk.
- Do** contact the local authority tree officer or owner of the tree if excavation within this zone is unavoidable.
- Do** protect any exposed roots uncovered within this zone with dry sacking.
- Do** backfill with a suitable inert granular and top soil material mix as soon as possible on completion of works.
- Do** notify the local authority tree officer or the tree's owner of any damage.

THE PRECAUTIONARY ZONE

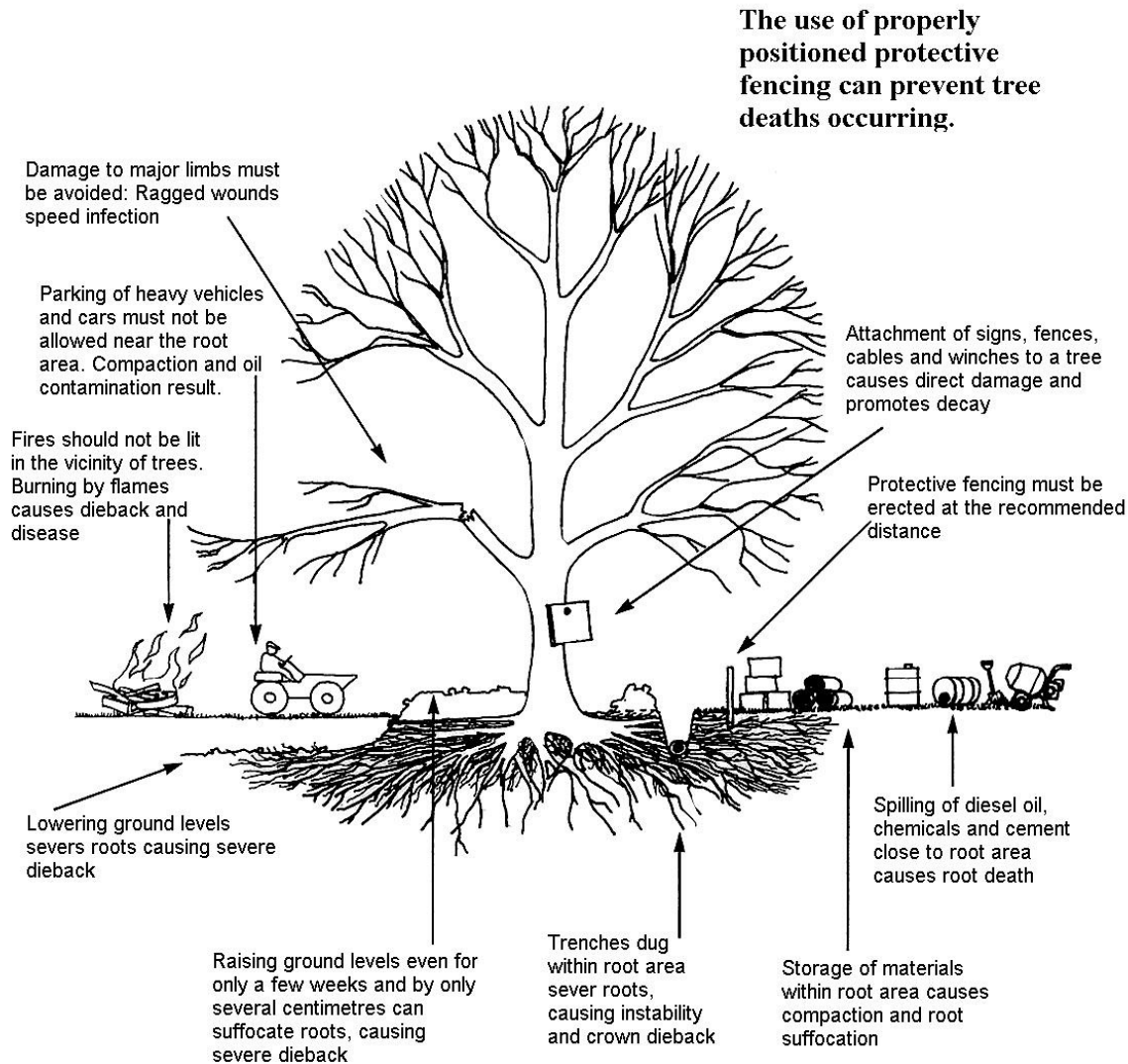
- Don't** excavate with machinery. Where excavation is unavoidable within this zone excavate only by hand or use trenchless techniques.
- Don't** cut roots over 25mm in diameter, unless advice has been sought from the local authority tree officer.
- Don't** repeatedly move / use heavy mechanical plant except on hard standing.
- Don't** store spoil or building material, including chemicals and fuels, within this zone.
- Do** prune roots which have to be removed using a sharp tool (e.g. secateurs or handsaw). Make a clean cut and leave as small a wound as possible.
- Do** backfill the trench with an inert granular material and top soil mix. Compact the backfill with care around the retained roots. On non highway sites backfill only with excavated soil.
- Do** protect any exposed roots with dry sacking ensuring this is removed before backfilling.
- Do** notify the local authority tree officer or the tree's owner of any damage.

THE PERMITTED ZONE

- Don't** cut roots over 25mm in diameter, unless advice has been sought from the local authority tree officer.
- Do** use caution if it is absolutely necessary to operate mechanical plant within this zone.
- Do** prune roots which have to be removed using a sharp tool (e.g. secateurs or handsaw). Make a clean cut and leave as small a wound as possible.
- Do** protect any exposed roots with dry sacking ensuring this is removed before backfilling.
- Do** notify the local authority tree officer or the tree's owner of any damage.

APPENDIX 5 – COMMON CAUSES OF TREE DEATH POSTER

Common causes of Tree Death



Please use copies of this as an on-site poster for personnel

APPENDIX 6 - GLOSSARY OF TERMS

Maturity	Newly planted - Not fully established and capable of being transplanted or easily replaced
	Young - Establishing, usually with good vigour, still capable of being transplanted or replaced
	Early mature - Established, usually vigorous and increasing in height
	Semi-mature – Established with an overall height in excess of 4 metres and or a stem girth measurement (circumference) of 20 centimetres or larger;
	Middle Age - Trees in the established growth stage of their life with the potential to continue increasing in size;
	Mature - Trees that have reached their ultimate size, given their location and surroundings;
	Over-mature - Fully mature, in last quarter of life expectancy, vigour decreasing
Condition	Good, Fair, Poor. An overall assessment of a tree's physiological and structural state
Veteran	Trees that have biological, cultural or aesthetic value due to age and / or condition. Typically trees that may be living beyond their expected age range for their species
BS 5837 Tree Quality Assessment	The tree quality assessment is based on four categories (A, B, C and U) are used to denote tree quality (A= High, B = Moderate, C = Low, U= Unsuitable for retention). Subcategories (1-3) denote the specific function value of the trees and the reasoning behind the allocation of a specific category.
Root Protection Area (RPA)	The theoretical rooting area of a tree as defined in <i>BS5837: 2012</i> . RPA is allocated to ensure that a sufficient area is left undisturbed during development. It is provided as an area (m ²) and as the radius of a circle (m) typically plotted from the centre of the stem.
Estimated Remaining Contribution	The approximate life expectancy as healthy functioning tree and relates to species and the condition of the tree at the time of survey. Long > 40 years Medium 20 – 40 years Short – Medium 10- 20 years Short - Imminent removal <10years
Adventitious or Epicormic shoots	Small branches that grow in clusters around the stem or base of a tree in an uncharacteristic fashion for a normally healthy tree, usually at the site of pruning wounds or as an indicator of stress
Bifurcate	Divided into two branches or forks
Buckling	Deformation of a structure subjected to a bending load Buttress zone, irreversible.
Chalara – Ash dieback	Chalara dieback of ash, also known as Chalara or ash dieback, is a disease of ash trees caused by a fungus called <i>Hymenoscyphus fraxineus</i>
Decurrent	The tree crown is borne on several major wide spreading limbs of similar size
Defect	A feature which detracts from the uniform distribution of mechanical stress, or which makes the tree mechanically unsuited to its environment
Dieback	A condition in which a tree or shrub begins to die from the tip of its leaves or roots backwards, owing to disease or an unfavourable environment.
Disease	A malfunction or destruction of tissues usually caused by pathogens.
Dominance	The tendency for a leading shoot to grow faster than the lateral shoots; also a tree that maintains a taller crown than its neighbours.
Excurrent	A well-defined central main stem to the crown, bearing branches which are limited in their length, diameter and secondary branching.
Flush-cut	A pruning cut which removes part of the branch bark ridge and or branch-collar.
Girdling root	A root which circles and constricts the stem.

Hazard beam	An upward curving part of a tree in which strong internal stresses may occur without being reduced by adaptive growth; prone to longitudinal splitting or may form a banana shaped crack.
Included bark (ingrown bark)	Bark of adjacent parts of a tree (usually forks, acutely joined branches or basal flutes) which is in face-to-face contact.
Infection	The establishment of a parasitic micro-organism in the tissues of a tree or other organism.
Lopping	Removal of large branches from a tree that does not follow natural target pruning practices.
Natural target pruning	The siting of pruning cuts at the branch bark ridge with a cut of minimal surface area to allow quicker healing of the wound.
Occlusion	The process of continual radial growth and healing of a wound which is progressively closed by the formation of new wood and bark around it.
Plant pathogen	Infectious organism that causes a disease on a plant. Although relatives of some plant pathogens are human or animal pathogens, most plant pathogens only harm plants. Plants are rarely cured of disease once infected.
Pollarding	The removal of the tree canopy, back to the stem or primary branches. The management regime is usually repeated as part of a regular management programme.
Primary branch	A major branch, of greater order than secondary branches.
Pruning	The removal or cutting back of lesser branches or twigs.
Reactive Growth/ Reaction Wood	Production of woody tissue in response to mechanical stresses.
Root-collar	The transitional area between the stem/s and roots prior to development of a root flare or buttress.
Secondary branch	A branch, of lower order than primary branch.
Veteran tree	An aged old specimen that has features which increase its value as habitat for wildlife (dead wood, cavities etc.) irrespective of its chronological age and that is of interest biologically, culturally or aesthetically because of its age, size or condition, is usually of advanced age.
Windthrow	The fall of a tree in high wind, blowing over of a tree at its roots.
Wound wood	Wood developing in response to a wound which gradually heals and occludes the wound

REFERENCES

Barrell Tree Consultancy (2020) Manual for managing trees on development sites version 3.0

Davis, C., Fay, N & Mynors, C. (2000). Veteran Trees: a guide to risk and responsibility. English Nature, Peterborough.

Fay, N., Dowson, D.C., & Helliwell, R. (2005). Tree Surveys: A Guide to Good Practice. The Arboricultural Association

Humphries, D., & Wright, C. (2021). Fungi on Trees, a Photographic Reference. The Arboricultural Association

Lonsdale, D. Hazards from Trees. FC Practice Guide 13, Forestry Commission

Lonsdale, D. (1999). Principles of Tree Hazard Assessment and Management, Research for Amenity Trees No, 7, Stationery Office, London.

Mattheck, C. & Breloer, H. (1994). The Body Language of Trees, Research for Amenity Trees No, 4, Stationery Office, London.

Mattheck, C. (2002). Tree Mechanics: Explained with sensitive words by Pauli the Bear. Forschungszentrum Karlsruhe

Mattheck, C. (2007). Updated Field Guide for Visual Tree Assessment.

The National Joint Utilities Group (2007): NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees Volume 4, Issue 2

Schwarze, F.W.M.R., Engals, J., & Mattheck, C. (1999). Fungal Strategies of Wood Decay in Trees. Springer-Verlag Berlin

Shigo, A.L. (1991). Modern Arboriculture. Shigo & Tree Associates, Durham, NH, USA.

Slater, Duncan. (2016). Assessment of Tree Forks: Assessment of Junctions for Risk Management

Strouts, R.G. & Winter, T.G. (1994). Diagnosis of Ill Health in Trees, Research for Amenity Trees No, 2, Stationery Office, London.

Weber, K., & Mattheck, C. (2003). Manual of Wood Decay in Trees, The Arboricultural Association

AA Fungi on Trees: An Arborist's Field Guide (2011)

Recommendations for Tree Work. BS 3998. (2010) British Standards Institute, London

Common sense risk management of trees (2024) National Tree Safety Group

ISA Glossary of Arboricultural Terms (2005). ISA Champaign, IL, USA

AAIS Research Information Notes

AAIS Tree Damage Alert Notes