Arboriculture Report

Consisting of:

Tree Survey
Tree Schedule
Arboricultural Impact Assessment
Arboricultural Method Statement (Heads of Terms)
Trees Site Plan As Existing
Trees Site Plan As Proposed

In accordance with British Standard 5837 (2012) Trees in Relation to Design, Demolition and Construction.

Client: Huddersfield Giants Ltd., John Smiths Stadium, Leeds Road, Huddersfield

Site: Laund Hill Sports Complex, Laund Road, Salendine Nook, Huddersfield, HD3 3XF

Consultant: Dr Christopher Payne MSc MArborA

Date: 05 May 2025

Revision history

Revision 0	05 May 2025	Original

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Summary of findings and recommendations

What is the purpose of this report?

The purpose of this report is to consider the health and amenity of trees in relation to the proposed construction of a new gym building on the footprint of an existing concrete MUGA at Huddersfield Giants rugby team's training facility at Launds Hill, Huddersfield.

It describes the impact to existing trees and their amenity that would result from the proposed development.

It also considers whether temporary tree protection measures would be needed for retained trees, and if so, provides a specification and recommended positioning.

The report is based on the guidelines provided by BS 5837 (2012) *Trees in relation to design, demolition and construction*.

This report does not include Biodiversity Net Gain considerations nor is it a formal tree condition assessment or risk assessment.

What is the existing tree population within, and adjacent to, the site and are the trees subject to statutory protection?

Individual and groups of trees are present within the 'red line' application site boundary or sufficiently close to potentially be affected by the proposed development.

These trees form 2 groups dominated by mature sycamores. There is also a single mature beech. Some individual trees at the edge of one of the tree groups have been addressed individually.

These are considered to fall into BS 5837 category B (medium quality/amenity) and category C (low quality/amenity).

No high quality/amenity trees (BS 5837 category A) were identified.

No ancient woodland, ancient or veteran trees were identified.

Most of the trees surveyed are subject to statutory protection by Tree Preservation Order according to Kirklees Council's interactive map available on their website.

Which trees are proposed for removal, what is their quality and amenity, and why do they need to be removed?

No trees are growing from the footprint of the proposed new building so no trees would need to be removed to facilitate the proposals.

However, I recommend that 3 trees (T3, T5 and T6) close to the East of the proposed building's footprint should be removed because the extent of pruning necessary to their canopies to ensure adequate clearance from the building would likely make their retention unsustainable. The trees recommended for removal include 1 mature sycamore considered to be BS 5837 category B (medium quality/amenity), and 1 semi-mature lime and 1 young sycamore both considered to be BS 5837 category C (low quality/amenity).

These trees are not prominent in views from the public realm being located well within the property some distance from the public realm and they do not appear to be subject to TPO according to the interactive map on Kirklees Council's website.

Which trees are proposed for canopy pruning to facilitate the proposed development?

Part of the lower canopies of 3 trees forming part of a group (G2) to the West of the proposed new building would need to be pruned back as indicated on the Trees Site As Proposed Plan within this report to create approx. 2m clearance from the building. It is considered that this pruning, if undertaken sensitively and to the guidelines provided by BS 3998 (2010) *Tree Works*, would not be harmful to the trees or the amenity they provide.

These 3 trees are subject to TPO so consent for pruning would be required in advance from Kirklees Council. However, full planning consent allows for tree works that are immediately required to facilitate the proposals. A condition to a grant of planning permission should include details of the pruning allowed.

Would any third-party off-site trees be at risk of harm as a result of the proposed development?

None. All trees identified for pruning or removal are within the same ownership as the development site.

What would be the level of impact of the proposed development in terms of the arboreal character of the site, the character and appearance of the local landscape and impact to retained trees?

It is considered that the recommended removal of 3 trees and pruning of 3 trees would have minor impact to visual amenity in short range views from within the property. There would be and no impact to longer range views from the public realm. Impact to public visual amenity is therefore considered to be insignificant.

Proposed compensatory tree planting has been carefully considered. It is proposed to plant 3 hazels within the group to the East of the proposed new building. These are expected to tolerate the shaded conditions within the group and improve the understorey assemblage.

If all recommendations provided by this report are fully and correctly executed then it is considered that the proposed development should not be harmful to retained trees and there would be no significant change to the arboreal character of the site.

How should retained trees be protected during development works?

Tree rooting systems from the trees close to the site are expected to extend beneath the existing concrete MUGA. I understand that this concrete surface is to be retained with a small number of relatively small holes being necessary for steel posts used in the new building's construction. It is considered that retention of the existing concrete surface would protect tree roots beneath. The holes would be relatively small in size and so their potential impact to tree rooting systems would be very limited and considered not harmful to tree's health or stability.

A proposed new footpath around parts of the new building's perimeter should be constructed using no-dig methods using porous materials to avoid harm to tree roots in the soil beneath.

In order to minimise potential harm to trees resulting from soil compaction resulting from vehicles passing over soil containing tree roots, I recommend that vehicular access to the site during construction be made only from the South side via the existing track.

Temporary tree protection fencing should be erected and maintained *in situ* during development works to prevent harm to retained trees. Recommended positioning and specification is provided within this report. It should be erected before any other site works commence and should remain in place and intact until all other development works have been completed.

Other trees at the property would not be at risk of damage during site works due to their locations being far enough away from the area of works.

Would retained trees be likely to cause problems within the completed development, eg insufficient space for continued growth, excessive shading or unacceptable risk from branch or whole tree failure?

The proposed building will likely be exposed to some shading by retained trees though this is not anticipated to be problematic because it is not a domestic or residential building.

Occasional pruning would effectively manage any potential risk of damage caused by contact of branches with the building.

Regular inspections by knowledgeable operators would identify any significant tree related hazards that may pose a risk of damage to the new building with mitigation works being completed as required.

I draw the landowner's attention to the mature sycamore tree (identified as T4, within G7) to the East of the site which shows a potentially significant area of missing bark and decayed wood at its lower stem. It is recommended that this tree be inspected further to assess risk regardless of the proposed development.

1. Introduction

1.1 Terms of instruction

Christopher Payne (Consultant) was instructed by Dan Hockey (Client's agent) to undertake a tree survey at land for the proposed development and produce an Arboricultural Impact Assessment report. This document is the result, which consists of the following:

- **Tree Schedule** to present data from the tree survey.
- **Site as Existing Plan** to show the trees on, and close to, the site as existing including tree retention categories, root protection areas and canopy spreads.
- **Site as Proposed Plan** to identify the trees to be removed and canopy pruning to facilitate the proposed development.
- **Tree Protection Plan** to show the position of the proposed temporary tree protection fencing for the retained sycamore tree in the site.
- **Tree Planting Plan** to show the location for proposed compensatory tree planting.
- **Arboricultural Impact Assessment** to assess the impact the proposed development would have on the amenity of the site's tree population.
- **Arboricultural Method Statement (Heads of Terms)** to outline recommended tree protection specifications, construction methodologies and arboricultural supervision designed to minimise impact on retained trees.

This arboricultural report has been prepared following the guidelines of British Standard 5837 (2012) - *Trees in Relation to Design, Demolition and Construction.*

This report is intended only to accompany a planning application to the relevant Local Planning Authority for the proposed development. It is not a tree risk assessment.

It should be recognised by the Client that additional arboricultural input may be required to discharge conditions which may be attached to a grant of planning permission.

1.2 Background

Every Local Planning Authority has its own policies within its Local Plan relating to trees on development sites. While wording varies, Local Plans generally aim to balance the need for development with the protection and enhancement of tree resources, promote sustainable land use practices, and ensure that trees contribute to the overall health, appearance, resilience, and 'livability' of communities.

Trees are a material planning consideration meaning that Local Planning Authorities are legally required to take them into account when making decisions on planning applications.

Typically, where trees are located on or close to a proposed development site the Local Planning Authority's Trees Officer will be consulted by the Development Management Department.

The Trees Officer will consider whether the loss of trees that would result from the proposals would cause significant harm to the character and appearance of the locality and the surrounding landscape; whether retained trees can be protected from harm during development activities; whether proposed specifications for demolition, construction and services installations near trees is appropriate; whether retained trees will be sustainable within the completed development and whether the specification for proposed newly planted trees would mitigate for any trees lost.

To assist them in this task, the applicant will usually be required to submit to the Local Planning Authority a 'tree report', such as this one.

The Trees Officer's response will be considered, along with other internal and external consultation responses including that from ecologists, the highways authority, the floods authority, archaeologists, advice from the Council's Design and Conservation Officer and against the Local Plan policies to guide the Planning Officers decision on whether to grant planning consent or to refuse it.

Conditions requiring further information or details to be submitted to the LPA for approval can be attached to a grant of planning consent, eg. Details of proposed temporary tree protection measures, specifications for development works that encroach into root protection areas, etc.

The Planning Officers task is to ensure that development proposals are sustainable, compatible with the local context, and contribute positively to the quality of life for residents and the environment.

In certain circumstances the planning application may be decided by the planning committee of the Local Planning Authority rather than by Officers, though they will still make a recommendation to the committee.

1.3 The author

The author of this report is Dr Christopher Payne BSc MSc MArborA.

I am a self-employed arboriculture consultant. I have approx. 30 years of experience in arboriculture: as owner of a tree works contracting business, university Lecturer and Research Fellow in forestry and wood science, arboricultural consultant and Local Authority Trees Officer.

I hold a PhD in forestry, wood science and mycology, BSc Environmental Science, MSc Geology and the LANTRA Professional Tree Inspection qualification. I am a Professional Member of the Arboricultural Association and Life Member of the International Society of Arboriculture.

1.4 Proposed development

I understand that the proposed development is for construction of a new gym building on the footprint of an existing concrete MUGA.

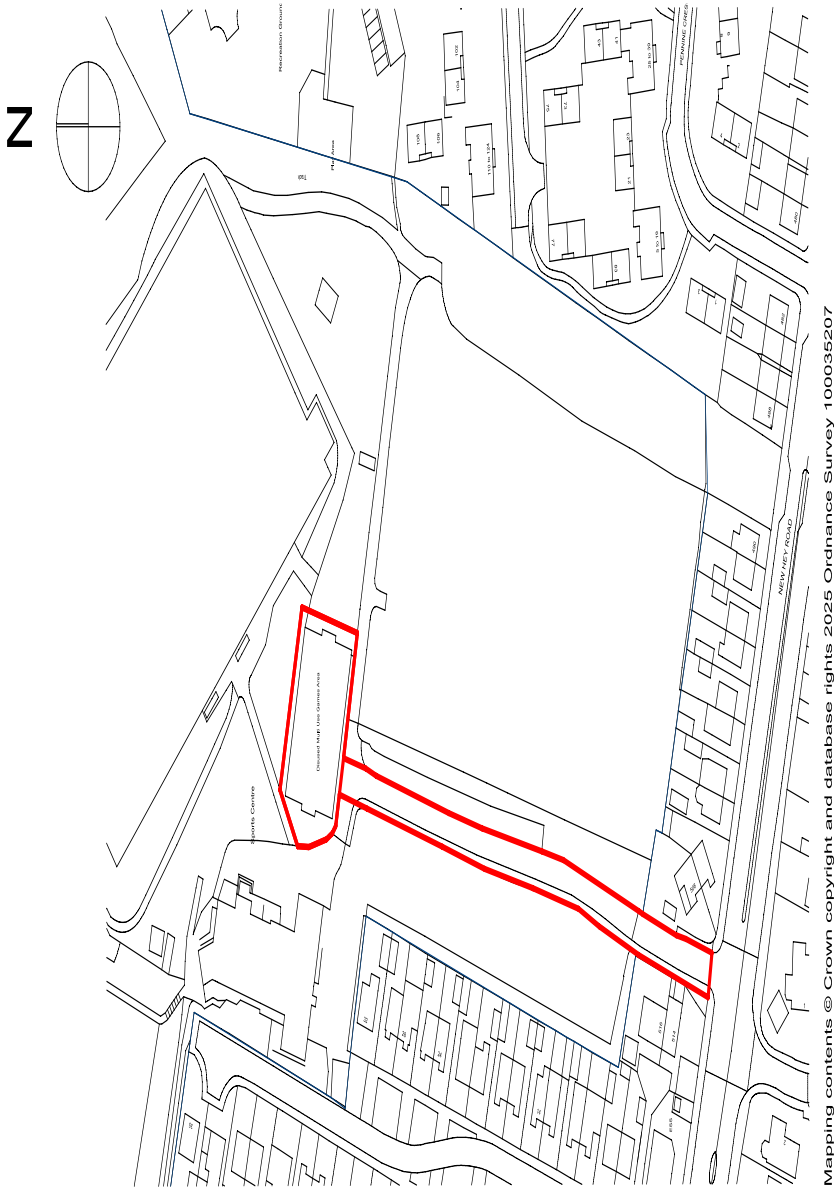
1.5 Information provided

I was provided with the following information:

- Site as Existing Plan
- Site as Proposed Plan

1.6 Site location and character of surrounding landscape

The site is located within the grounds of the large sports facility at Launds Hill. It currently includes sports pitches, car parking areas and a facilities building. The site includes significant groups of trees around the perimeter and within the site, some of which are subject to Tree Preservation Order. The facility is located within the built-up area of Huddersfield as indicated on the location plan below.


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2. Regulatory framework

2.1 Tree Preservation Orders and conservation areas

Trees may be subject to statutory protection through Tree Preservation Order and conservation area under the Town and Country Planning Act (1990) (as amended) and Town and Country (Tree Preservation) (England) Regulations (2012).

The diagram below shows the individual trees (tree shapes) and groups of trees (green shaded areas) in the vicinity of the site that are subject to TPO.



There is an overriding exception to the need for Tree Preservation Order or conservation area consent for the removal or pruning of trees ***immediately required*** to implement approved plans of a development that has received ***full*** planning permission. Outline planning permission does not provide such an exception.

2.2 Felling licence

Removal of trees is restricted under the Forestry Act (1967) such that a felling licence may be required to implement tree removals, including those recommended within this report.

However, there is an overriding exception to the need for a felling licence for the removal of trees ***immediately required*** to implement approved plans of a development that has received ***full*** planning permission. Outline planning permission does not provide such an exception.

2.3 Land based designations / ancient woodland

DEFRA's MAGIC website indicates no Ancient Woodland close enough to the site to be potentially affected by the proposals. Ancient Woodland is defined as land that has had continuous woodland cover since at least 1600 AD. It is considered '*irreplaceable habitat'* and is a serious constraint to development.

2.4 Veteran and ancient trees

The Ancient Tree Inventory holds no records of notable, veteran or ancient trees on, or immediately adjacent to, the site. None of the trees surveyed showed sufficient relevant characteristics to be considered ancient or veteran trees.

2.5 Wildlife legislation

Statutory protection of flora and fauna in England and Wales is provided by the Wildlife and Countryside Act (1981), the Countryside and Rights of Way Act (2000) and the Conservation of Species and Habitat Regulations (2017) (as amended).

A wildlife assessment should be carried out and findings used to inform how and when any tree works are to be carried out. The responsibility for this lies with the tree work contractor.

The law requires that tree work operations be planned to avoid disturbance to nesting, breeding or roosting birds. The nests of wild birds are protected whilst in use. All bats and their roosts are protected by law.

3. Existing tree population

3.1 Site visit and tree survey

I undertook a site visit on 03 May 2025 and completed my tree survey on that date.

Access throughout the site was unlimited. The weather was dry and bright, with good visibility. I consider that these weather conditions did not impede my assessment of the trees.

The approximate location of each tree or group of trees was plotted onto site plans provided to me by the applicant's agent. Tree positions indicated on the plans within this report should be regarded as approximate. No Topographical survey was available.

Further information on tree survey / assessment is provided in Appendix 1 - Survey Methodology, and limitations associated with my inspection and the contents of this report are detailed in Appendix 2 - Report Limitations'.

3.2 Summary of existing tree population

A summary of the survey findings is shown in the tables below.

The complete data set and comments resulting from the tree survey are presented in full in the enclosed Tree Schedule and Tree Constraints data (see Appendix 3, 4 and 5) and correspond to trees plotted on Appendix 6 - Tree Site as Existing Plan and Tree Site as Proposed Plan. Photos to show the site and trees are included in Appendix 7.

BS 5837 (2012) Category	Trees	Groups	Hedgerows
Category A - high quality trees which should be prioritised for retention and which should be considered to be constraints to development	0	0	0
Category B - moderate quality trees which should be retained if practicable and should be considered to be constraints to development but less so than Category A trees	2	2	0
Category C - low quality or young trees which should not be considered to be a constraint on development.	2	0	0
Category U - trees which are recommended for removal regardless of the proposals to manage risk. These trees should not be considered to be a constraint on development.	0	0	0

The table below identifies whether any of the trees were of particular note because of other characteristics. These would require special consideration and present addition constraint to development.

Characteristic	Trees	Groups
Veteran or ancient trees	0	0
Ancient woodland	0	0
Important hedgerows (as defined by Hedgerow Regulations 1997)	0	

3.3 Description of the existing tree population

This report considers relevant trees within potential influencing distance of the site. This includes trees within the 'red line' application boundary and additional trees on adjacent land whose stem bases are within 15m of the red line boundary. The off-site trees may or may not be under the control of the applicant.

The surveyed tree population briefly comprises of 2 groups G2 and G7 and 4 individual trees. G2 consists of mature sycamores. G7 is also dominated by mature sycamores. T1 is a mature beech. T3 is a young sycamore. T5 is a mature sycamore and T6 is a semi-mature lime.

A single sycamore T4 which is located within G7 is not directly affecting the proposed development but is mentioned because it appears to have what may be a significant area of missing bark and wood decay at the base of its stem that warrants further investigation to assess the level of risk this tree presents regardless of whether or not the proposed development goes ahead.

4. Arboricultural Impact Assessment

4.1 Overview

An Arboricultural Impact Assessment presents the impact the proposed development would have on the tree population and arboreal amenity of the site. This will be determined by interpreting:

- the impact of proposed removal or pruning of existing trees to the character and appearance of the site and the surrounding landscape (absolute and relative numbers and their quality),
- potential damage to retained trees,
- proposed tree protection measures, and
- proposed tree planting.

4.2 Tree removals or canopy pruning required

The table below indicates the trees that have been identified for recommended removal or canopy pruning and the reasons for each.

Reason	Tree removal	Canopy pruning
To facilitate the proposed development to provide adequate clearance between tree canopies and new building	T3, T5, T6	G2
To prevent damage to rooting systems	none	N/A
To prevent unacceptable shading of buildings	none	none
To manage tree related risk or in the interest of good arboricultural management regardless of the proposals	Further investigation recommended for T4	

4.4 Temporary tree protection required during development works

An area of ground around the base of a tree will contain sufficient of its total rooting system to be the minimum considered necessary to maintain the tree's condition, stability and vitality. This area is defined in BS 5897 1012 and is known as the Root Protection Area (RPA).

It is recommended that the RPA around retained trees should be protected through complete exclusion of all construction, surfacing, excavations, soil compaction, soil contamination, ground level changes and site activity during development works. This area should be a construction exclusion zone, in order to protect the trees from harm, unless development in this zone can be specified in such a way that harm can be avoided.

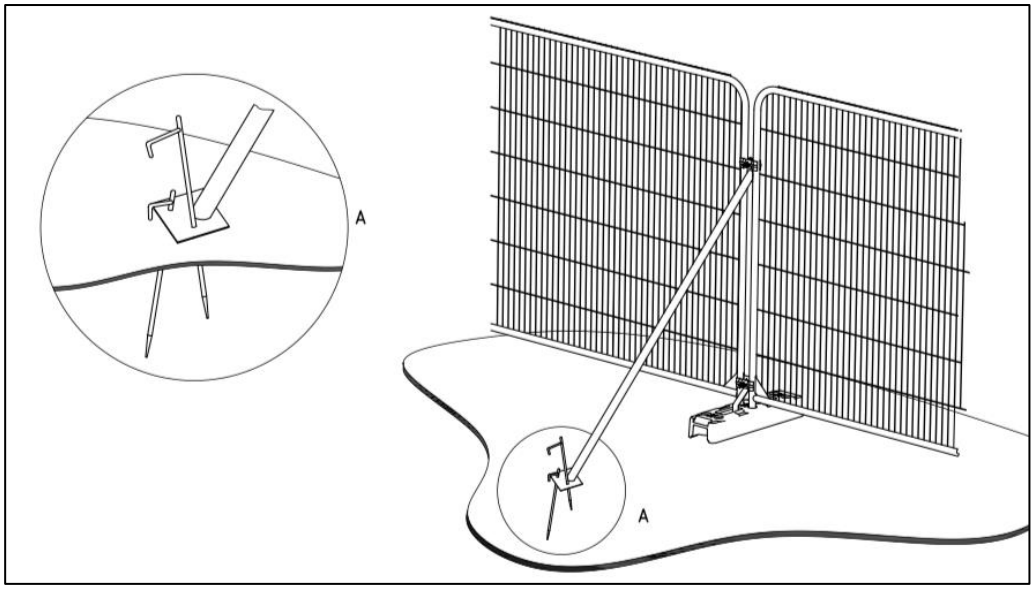
For this proposed development the footprint of the building is the same as the existing concrete MUGA. The existing concrete surface will be retained as part of the proposed development and will protect any tree roots that happen to extend beneath it so additional protection measures for these is not required. I understand that several relatively small holes will be made through the concrete surface for installation of steel posts needed for the

construction of the new building. Because of their relatively small size and number these are considered not likely to result in significant harm to tree rooting systems.

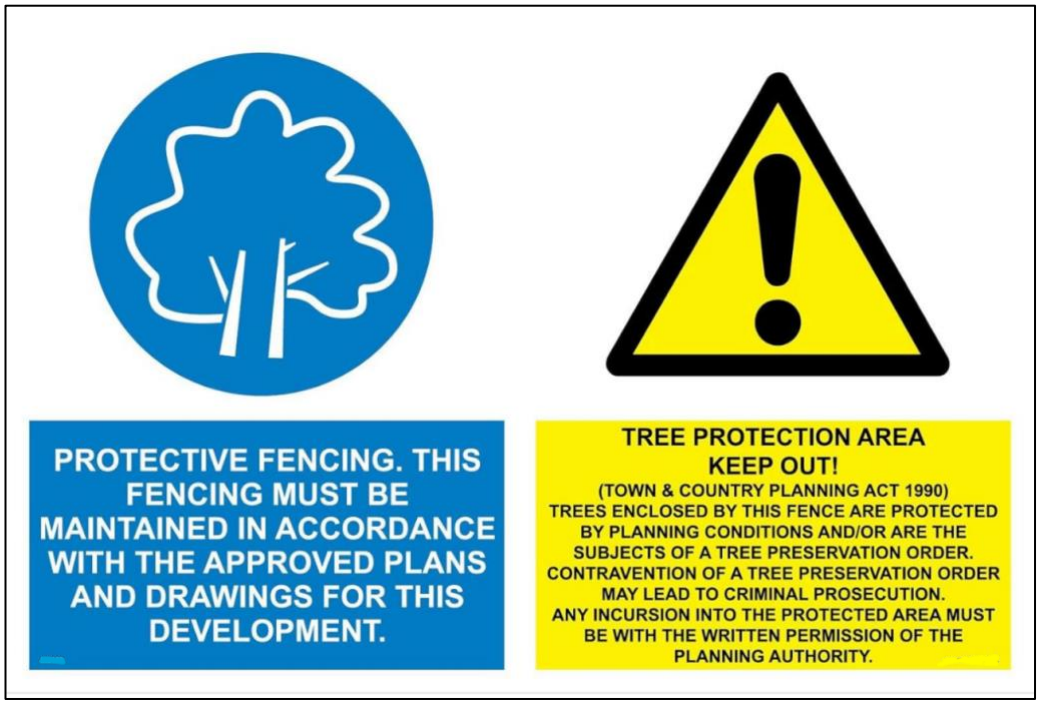
Where RPA's are located in the vicinity of the MUGA they should be enclosed by installation of temporary tree protection fencing.

The Tree Site As Proposed Plan shows the recommended positioning for the temporary tree protection fencing. BS 5837 provides recommended specifications for this fencing using 2m tall 'Heras' weldmesh panels on rubber feet with stabiliser struts pinned to the ground in the inside of the protected area – see extract below.

The fencing should be installed before any other works begin on site and remain *in situ* undisturbed until all other works have been completed. No development work of any kind or site activity should occur within the protected area.



It is important that weatherproof signage explaining the purpose of the fence is attached to it so that all contractors and their staff are aware of its purpose and that it is important it remains in its correct position for the duration of the works. Example of appropriate signs provided below.



4.5 Specification of appropriate materials and methods to minimise harm to trees

BS 5837 recommends that no development should be undertaken within Root Protection Areas of retained trees, this includes ground level changes, excavations, trenching, underground services installations and new permanent surfacing. All site activity should also be excluded from Root Protection Areas, including storage of materials or waste and vehicle/plant/equipment movements. If this is not possible then this report should be reviewed and updated, before any activity in the Root Protection Area, to include appropriate materials and methods to minimise any potential harm to retained trees.

I understand that a narrow pedestrian path is proposed to run around the perimeter of part of the new building and that this will be specified to consist of no-dig installation of crushed stone only. This is considered to not be harmful to tree roots below because no excavation would be required and the surfacing material would be permeable.

4.6 Impact of proposed tree removals and canopy pruning to the character and appearance of site and landscape

Removal of 3 trees (T3, T5 and T6) and pruning of G2 to facilitate the proposed development is considered to have only minor impact to visual amenity in short range views from within the sports facility.

The trees concerned are not visible from the public realm outside the facility. The trees identified for removal appear not to be subject to TPO and are located at the end of the group immediately adjacent the position of the proposed building.

The trees for pruning are subject to TPO, however the pruning would affect only some lateral branches of the lower parts one side of the canopy extending too close to the proposed building. The reason for pruning is to ensure 2m clearance between branches and building. The pruning is considered to not be harmful to the trees or their amenity and would facilitate their long-term retention adjacent the proposed new building.

If all recommendations provided by this report are fully and correctly executed then it is considered that the proposed development would not be harmful to retained trees and change to the arboreal character and amenity of the site would not be significant.

4.7 New tree planting

Proposed compensatory tree planting has been carefully considered. It is proposed to plant 3 hazels within G2.

The recommended tree planting will replace removed trees at a rate of 1:1 thus maintaining tree numbers and with an increased diversity of native tree species appropriate to the local environment and which should benefit the groups tree structure, biodiversity and arboricultural interest.

5. Arboricultural Method Statement (Heads of Terms)

5.1 Overview

This Arboricultural Method Statement (Heads of Terms) outlines generic principles required for protection of retained trees on development sites during development works.

It is anticipated that any arboricultural issues raised beyond the scope of this report can be dealt with through planning conditions. This may include the development of a detailed site-specific Arboricultural Method Statement where necessary.

5.2 Tree work operations

Wherever practicable, it is recommended that all identified tree pruning or tree removals as specified in the Tree Schedule should be completed prior to any construction works taking place.

If any further tree removals or facilitation pruning become necessary beyond that detailed in this report, then this should be agreed in advance with the Local Planning Authority Planning Department as soon as they become required.

All tree work should be carried out in accordance with BS 3998 (2010) *Tree Work – Recommendations* and wildlife protection law.

5.3 Temporary tree protection fencing

The purpose of temporary tree protection fencing is to:

1. Minimise impact of development works on rooting systems of retained trees through protection of Root Protection Areas which equate to Construction Exclusion Zones. Soil compaction, soil contamination, ground level changes and trenching in these areas can harm or kill trees or reduce their stability.
2. Prevent damage to tree branches and stems through site activity and contact with vehicles, plant, cranes, trucks, fires etc. Damage to the aerial parts of trees can reduce their visual amenity and lead to disease and decay that can ultimately make them dangerous or result in their decline or death.

5.4 Underground services or drainage installations, demolition, construction, ground level changes, new permanent surfacing and foundations

Should any of these activities be necessary in areas around retained trees likely to contain tree rooting systems, i.e. within Root Protection Areas as defined by BS 5837, then it is recommended that an arboriculturist should be consulted to contribute to the specification of appropriate materials and methodologies. This will usually lead to preparation of a detailed site-specific Arboricultural Method Statement.

5.5 Plant / operational supervision

Banksmen should be present during all movements of plant throughout the site to reduce likelihood of impact with retained trees. This should include transit, demolition and lifting operations.

5.6 Foundations for buildings and surfacing

These should be specified by an appropriately qualified and experienced architect / engineer to take account of the presence of retained trees and removed trees including their future root growth and potential subsidence / heave issues.

6. Disclaimer

This report has been prepared according to agreed Terms and Conditions for use solely for planning application purposes by Christopher Payne's client. It remains the copyright of Christopher Payne and any transfer to, or use by, any third party must be with the author's prior written consent.

Appendix 1 Methodology

Visual tree assessment

The tree inspection was carried out in accordance with the established Visual Tree Assessment (VTA) method which provides a systematic framework for formal tree inspection:

VTA Stage 1 - Visual inspection for defect symptoms and vitality

VTA Stage 2 - Confirmation of presence or absence of defect(s)

VTA Stage 3 - Measurement and assessment of defect(s) and residual strength

This survey was undertaken from ground level and in accordance with Stage 1 VTA, involving the use of only visual methods to identify tree health issues and structural defects by observation.

Should a more detailed inspection be recommended then this will be stated in the Tree Schedule. This may involve the use of decay detection tools or aerial inspection (Stage 2 VTA) and interpretation of findings to form a prognosis (Stage 3 VTA).

Data collection

The location of each tree or group of trees has been plotted onto the site plans provided. Locations of trees were estimated using measurements made on site and reference to aerial photographs.

Data was collected in accordance with BS 5837 (2012), including all required tree dimensions and information. Dimensions were measured using a Laser Rangefinder or tape measure. Stem diameter was measured with a diameter tape, unless otherwise stated.

A key for the Tree Survey Schedule is presented in the appendices.

Appendix 2. Report limitations

Limitations: Generic

The information, opinions and recommendations contained within this report are based on my site observations and information provided, interpreted in the context of my arboricultural knowledge and experience.

The trees have been assessed within their current context and surrounding land use. Subsequent change of land use or change in the surrounding built environment or local tree population may affect target values and modify wind flow patterns and soil conditions.

Due to the unpredictable and complex state of nature and the environment, and a natural failure rate of intact trees, no tree should ever be considered absolutely safe.

The client shall indemnify the consultant against any claims, damages, or losses arising from the services provided by the consultant.

The consultant operates as a sole trader and their liability is limited to the extent permitted by law. The consultant's personal assets are not at risk in the event of claims arising from the services provided.

The consultant's services have been provided according to the agreed Terms and Conditions document.

Limitations: Project Specific

This report is intended to provide tree related information for the purposes of accompanying this planning application only.

Any assessment of tree condition or risk associated with trees within this report is to be regarded as strictly preliminary in nature. If a more thorough assessment is required then further inspections would be required. This report is not a risk assessment survey or inspection.

This report has been complied using data collected from ground level observations in accordance with the methodology described.

No below ground assessment or excavation has been attempted, no ivy growing on trees or undergrowth growing around trees was removed to facilitate inspection of trees nor has any effort been made to assess subsidence or heave risk potential or direct damage caused by roots. It is recommended that a soil assessment is undertaken to inform decisions relating to any operations, including foundation design, in proximity to retained or removed trees.

The location of trees shown on plans within this report is indicative other than in instances where they are included on a supplied topographic plan.

On the day of my site visit, access throughout the curtilage of the property was unlimited. However, due to difficulties associated with the site, including topography, nature of ground features, proximity of adjacent trees, excessive undergrowth and adjacent buildings I was not able to view all parts of the tree canopies from all angles. The inspection was further restricted where trees were ivy-clad or located wholly or partially on neighbouring land or where fences, basal growth or other vegetation obscured lower stems and root flare.

The contents of this report are valid for a period of 6 months from the date of report or until severe weather conditions occur including snow, unusually windy, hot, cold, dry or wet weather; or until any significant alteration to the site or surrounding area which may affect the existing tree population; whichever is sooner.

Appendix 3 Tree Survey Schedule

Tree / group number	Common name	Height (m) approx. / max height for groups	Canopy clearance (m) approx. over site	Life stage	Observations and recommendation for management to facilitate proposed development	Estimated remaining contribution (years)	BS 5837:2012 retention category	Condition physiological : structural
T1	beech	17	Canopy does not extend over site	M	Located in car parking area adjacent site – does not impact proposed development. No works required to facilitate proposed development. TPO applies.	20+	B	F:F
G2	sycamore	15	3	M	Part of the lower canopy towards the proposed development would need to be pruned to create recommended 2m clearance from building. TPO applies	20+	B	F:F
T3	sycamore	5	1	Y	Young multi-stemmed tree very close to proposed location for new building so recommended for removal to facilitate proposed development. Appears not to be TPO.	20+	C	F:F
T4	sycamore	17	Canopy does not extend over site	M	Does not directly affect development but noted due to observed missing bark and wood decay in lower stem that justifies further investigation regardless of proposed development. Appears to be TPO.	20+	C	F:F

Tree / group number	Common name	Height (m) approx. / max height for groups	Canopy clearance (m) approx. over site	Life stage	Observations and recommendation for management to facilitate proposed development	Estimated remaining contribution (years)	BS 5837:2012 retention category	Condition physiological : structural
T5	sycamore	17	2	M	Mature tree located at edge of group resulting in much of its canopy being located over or very close the site of the proposed building. Pruning to give sufficient clearance from new building would likely result in tree not being sustainable so recommended for removal to facilitate proposed development. Appears not to be TPO.	20+	B	F:F
T6	lime	15	2	SM	Semi-mature tree located at edge of group with poor form resulting from suppression by adjacent larger trees. Much of canopy over site of proposed new building so pruning to create sufficient clearance would likely make tree unsustainable so recommended for removal. Appears not to be TPO.	20+	C	F:F
G7	Mostly sycamore	17	Canopy does not extend over site	M	Group of mostly mature sycamore, only part of group shown on plans. Appears to be TPO.	20+	B	F:F

Appendix 4 Tree Constraints

Tree / group / hedgerow number	No. of stems	Stem diameter (cm) at approx. 1.5m above ground level *= estimated	Canopy encroachment over site (approx., m)	Root Protection Area (m) extending out from stem of individual trees or from stems located at edges of group. Calculated according to BS 5837 2012
T1	1	79	none	9.48
G2	4 in vicinity of proposed development	Average 65	2	7.8
T3	3	14	2	1.68
T4	1	78	none	9.36
T5	1	62	3	7.44
T6	1	40	3	4.8
G7	Several in vicinity of proposed development	55	none	6.6

Appendix 5 Legend for Tree Schedule

Tree / Group / hedgerow number: As recorded on the tree schedule and plans

Species: Common name

Height: Measured in metres above ground level

Stem diameter: Measured in millimetres at 1.5m (or in accordance with BS 5837 (2012) Annex C). May be estimated if access unavailable.

Crown spread: Radius from the main stem, measured in metres at the four cardinal points

Crown height: Height of lowest branch / lowest part of crown

Physiological and structural condition:

Good: Containing no apparent significant defects or pathogens
Fair: Containing defects or pathogens that have potential to have significant impact on the function of the tree, or component of the tree
Poor: Containing defects or pathogens that significantly compromise structural integrity or cause dysfunction to the tree, or component of the tree

Moribund / Dead: Tree with no significant live growth

Age class:

Newly planted: A tree which is not yet fully established in the landscape

Young: Established tree less than 1/3 life expectancy

Semi-mature: A tree around 1/3 life expectancy

Early mature: Middle aged tree around 1/3 to 2/3 life expectancy

Mature: Mature tree over 2/3 life expectancy

Veteran: A tree exhibiting features of biological, cultural or aesthetic value that are characteristic of, but no exclusive to, individuals surviving beyond the typical life expectancy

Cascade chart for tree quality assessment. Extract from Table 1 and 2 of BS 5837:2012

Category and definition	**Criteria (including subcategories where appropriate)**		
TREES UNSUITABLE FOR RETENTION			
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 Shown in red on plans	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 *NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve*		
TREES TO BE CONSIDERED FOR RETENTION			
	1. Mainly arboricultural qualities	**2. Mainly landscape qualities**	**3. Mainly cultural values including conservation**
CATEGORY A Trees of high quality with an estimated remaining life expectancy of at least 40 years Shown in green in plans	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	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)

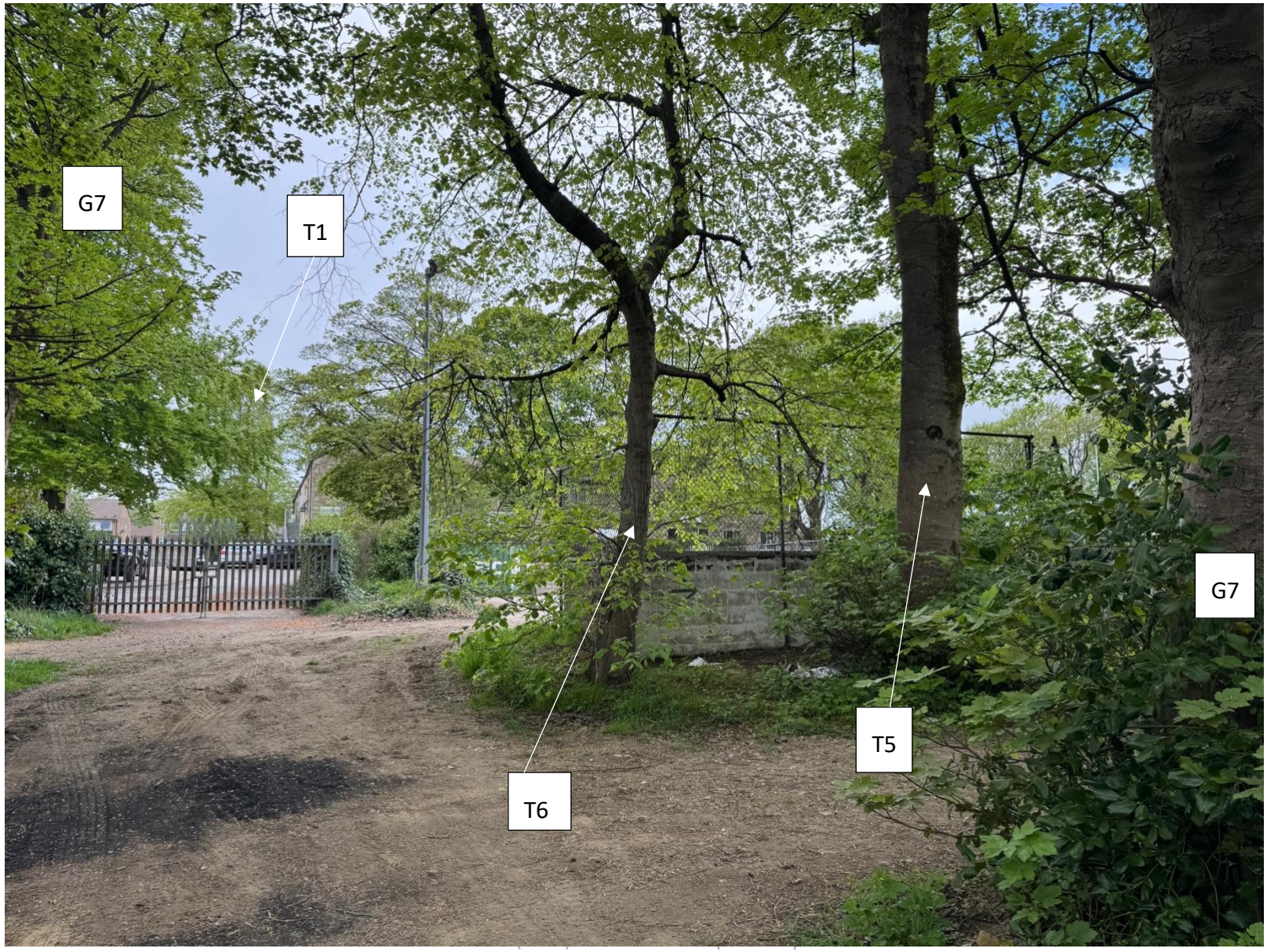
	features (e.g. the dominant and/or principal trees within an avenue)		
CATEGORY B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years Shown in blue on plans	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence 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
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 Shown in grey on plans	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

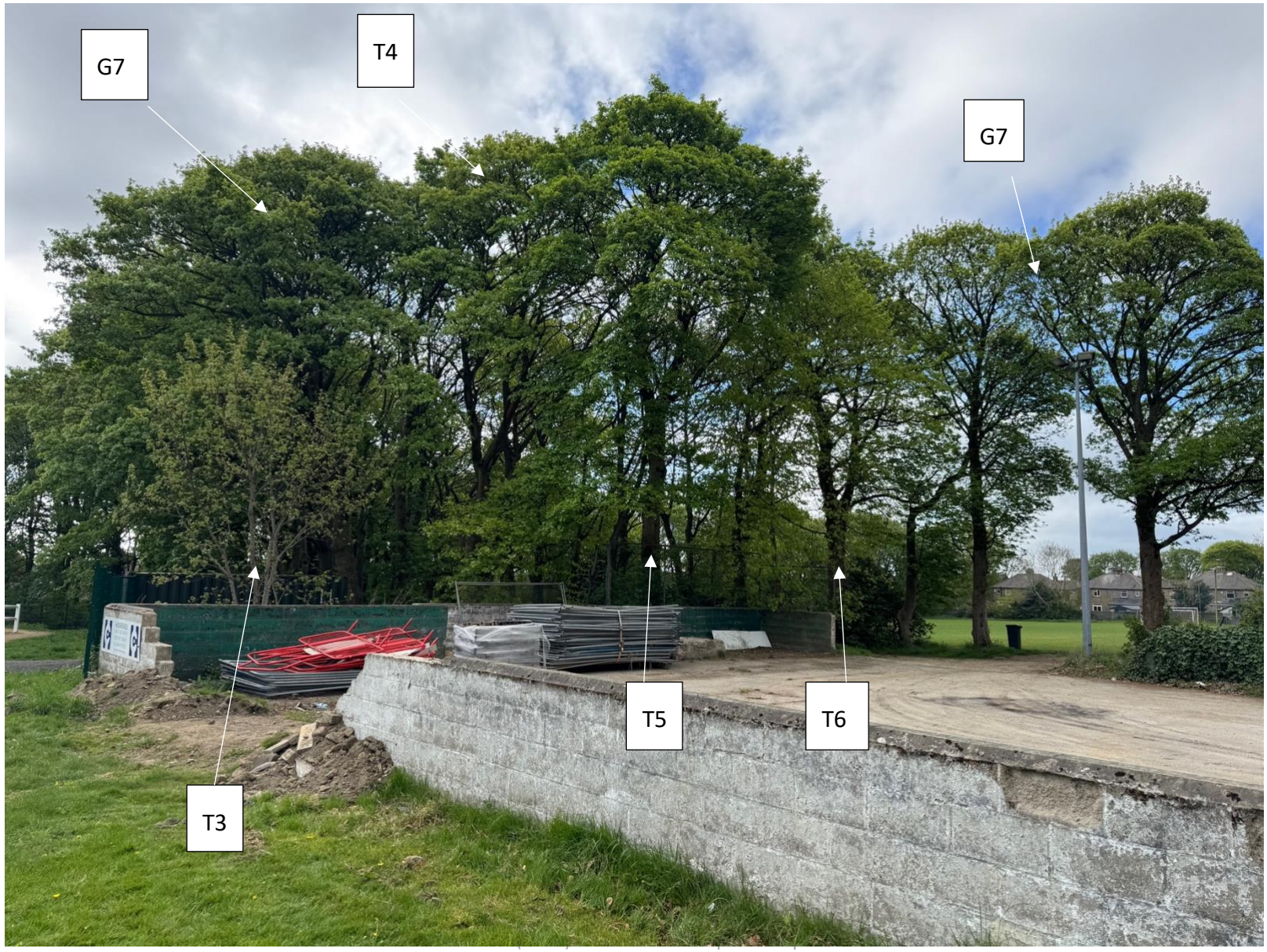
Appendix 6 Tree Plans - Site as Existing / Site as Proposed / Temporary Tree Protection Fencing Recommendations

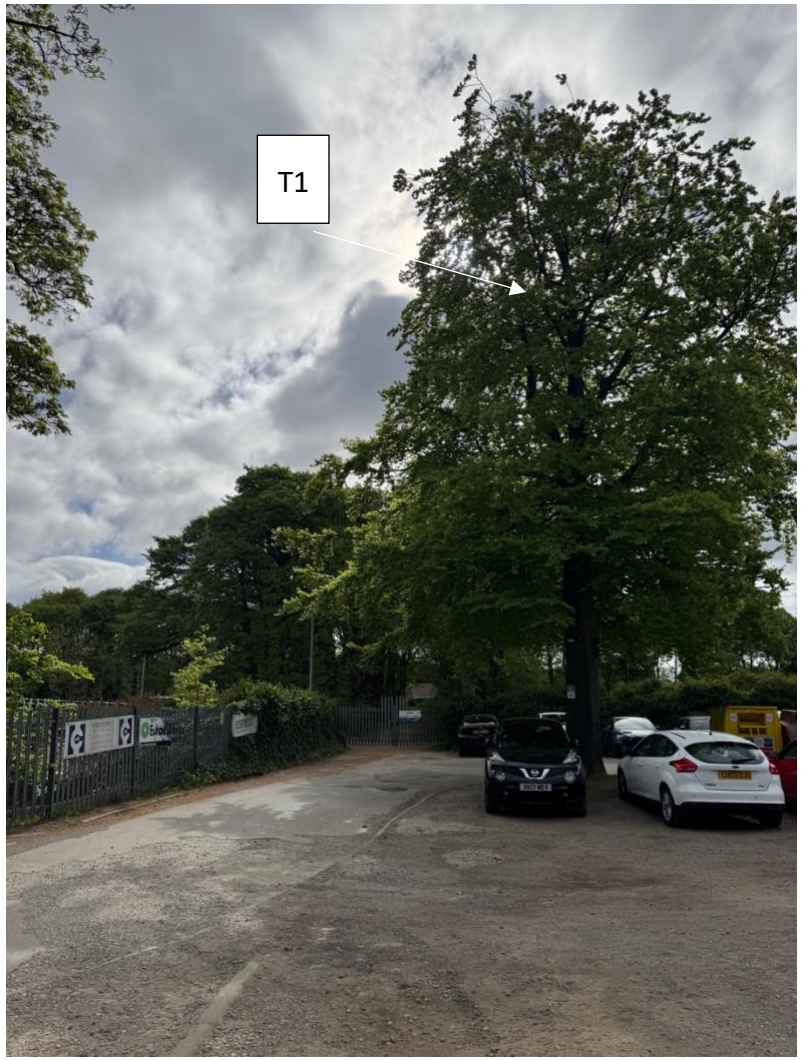
Plans provided as separate attachment

Appendix 7 Photos

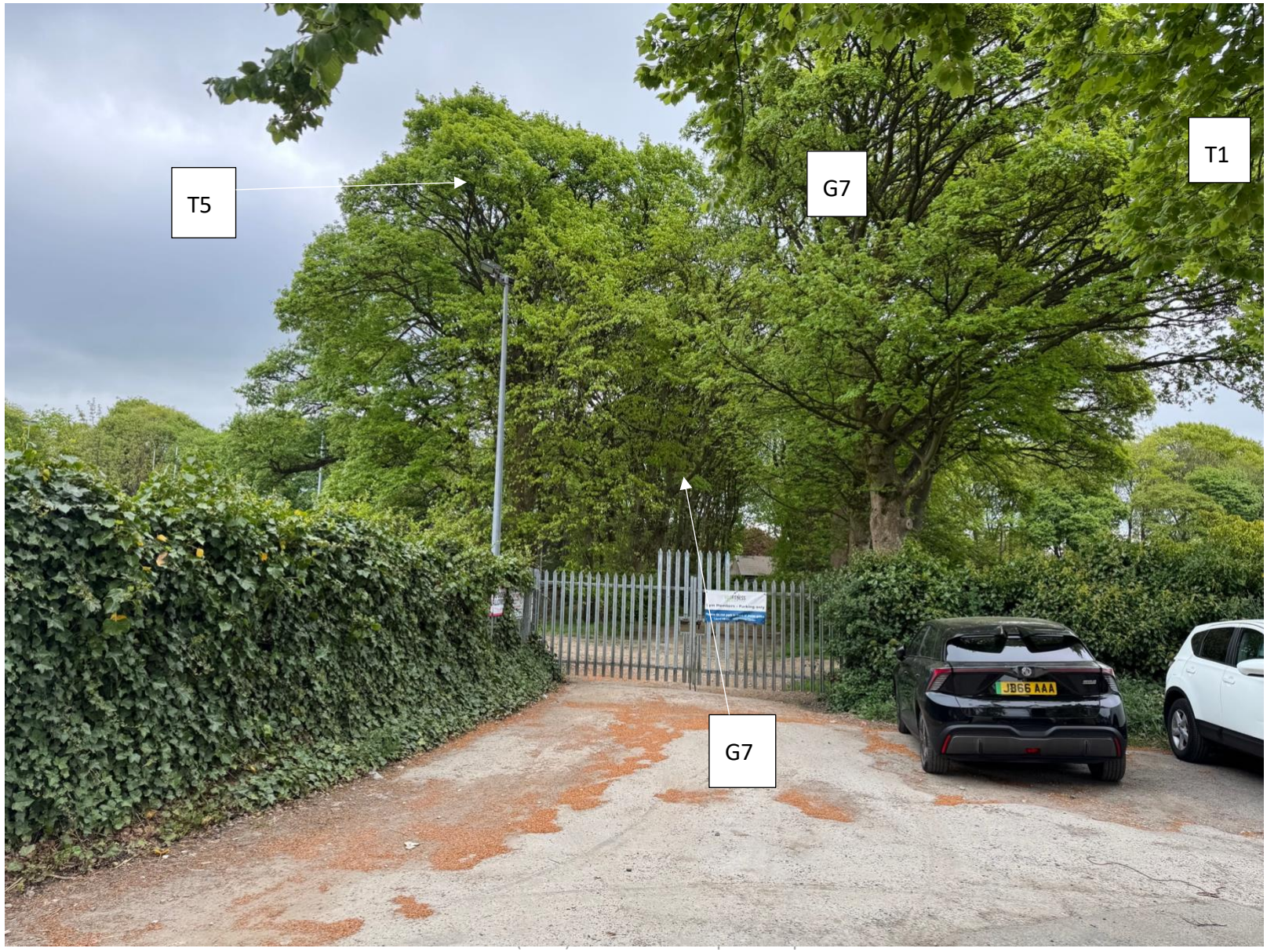

T1
G2


G7
T1
T6
T5
G7


G7
T4
G7
T5
T6
T3


T1


T4


T5
G7
T1
G7
JB66 AAA