ARBORICULTURAL IMPACT ASSESSMENT (AIA)

SEPTEMBER 2024

AFG Wythenshawe, Millbrook
57 Wastdale Road
Wythenshawe
Manchester
M23 2RX

URBAN GREEN

QUALITY MANAGEMENT

Project No.:	UG2548
Project:	AFG Wythenshawe, Millbrook
Location:	AFG Wythenshawe Millbrook, 57 Wastdale Road, Wythenshawe, Manchester M23 2RX
Title:	Arboricultural Impact Assessment
Document Type:	BS 5837: 2012
Date:	10/06/2024
Prepared By:	H. Lord
Checked By:	A. Hodgins
Approved By:	A. Hodgins

Revision Status:

Rev:	Date:	Issue/Purpose/ Comment:	Prepared:	Checked:
01	26/09/2024	Updated redline/proposal	AH	HL

CONTENTS

1. Executive Summary 1
2. Introduction 2
   - 2.1. Instructions and References 2
   - 2.2. Scope 4
   - 2.3. Documents Provided 4
   - 2.4. Limitations 4
   - 2.5. The Site 5
   - 2.6. Soil Profile 5
3. Legislation 5
   - 3.1. Tree Protection Status 5
   - 3.2. Ecological Considerations 6
4. Arboricultural Impact Assessment (AIA) 7
   - 4.1. Summary of the Development 7
   - 4.2. Tree Constraints 7
   - 4.3. Root Protection Areas (RPAs) Explained 7
   - 4.4. Surveyed Trees 8
   - 4.5. Impacts of Development 8
   - 4.6. Tree Surgery Works 9
   - 4.7. Protective Fencing 9
   - 4.8. Temporary Site Cabins 9
   - 4.9. Utilities 9
   - 4.10. Recommendations 10

Appendix 1 – Tree Data Schedule

Appendix 2 – Tree Data Schedule Definition of Terms

Appendix 3 – Tree Retention Categories

Appendix 4 – Site Plans

1. Executive Summary

1.1.1. Urban Green has been instructed by Alternative Futures Group Ltd. to carry out an Arboricultural Survey to British Standard 5837: 2012 guidelines at AFG Wythenshawe, Millbrook, 57 Wastdale Road, Wythenshawe, Manchester, M23 2RX and produce our findings in a report.

1.1.2. It is proposed to apply for full planning permission for the extension to Independent Hospital (Use Class C2) and associated works at Millbrook Independent Hospital, Wastdale Road, Wythenshawe, M23 2RX. Full details of the proposed site layout can be seen on the plans included in Appendix 4.

1.1.3. Access to the Greater Manchester Combined Authority's GMODIN interactive planning map on 26/09/2024 indicated that there are no Tree Preservation Orders (TPOs) currently in effect at the site or in the vicinity, nor does the site lie within a Conservation Area.

1.1.4. The proposed development necessitates the removal of one individual tree (T2) assessed as BS 5837: 2012 'Moderate Quality' Retention Category 'B' within the site boundary. It is recommended that this tree loss is mitigated against through onsite replacement tree planting and the production of a robust soft landscaping scheme.

1.1.5. Urban Green have also been appointed to complete a Preliminary Ecological Appraisal (PEA) of the site (UG_2548_ECO_PEA_01). This report should be read and adhered to in conjunction with the PEA report.

1.1.6. Tree protective fencing will need to be installed at the alignment shown on the Tree Protection Plan in Appendix 4 before any construction activity takes place.

1.1.7. Arboricultural supervised excavation with possible root pruning will be required within the onsite portion of the Root Protection Area (RPA) of retained tree group G3, as indicated on the Tree Protection Plan.

1.1.8. The areas indicated on the Tree Protection Plan as the 'Construction Exclusion Zone (CEZ)' must remain free of all construction activity for the duration of the proposed development.

1.1.9. Information regarding the layout of new utilities and drainage and final site levels should be submitted to the Arboricultural Consultant so that the impact of these on the retained trees can be assessed.

1.1.10. An Arboricultural Method Statement (AMS) will be required, detailing works within the RPAs of trees to be retained.

2. Introduction

2.1. Instructions and References

2.1.1. Urban Green have been instructed by Alternative Futures Group Ltd. to carry out an Arboricultural Impact Assessment (AIA) in accordance with BS 5837: 2012 '*Trees in relation to design, demolition and construction – Recommendations'* at AFG Wythenshawe, Millbrook, 57 Wastdale Road, Wythenshawe, Manchester, M23 2RX and produce our findings in a report to be submitted with a detailed planning application.

2.1.2. All trees, regardless of their statutory status, are a material consideration in a planning application. BS 5837: 2012 recognises the potential conflict between trees and development. The standard sets out to assist those concerned with trees in relation to construction and aid with decision making. This is achieved by providing impartial and balanced information on trees and their potential impacts.

2.1.3. Due to the nature of the site, it was decided that the survey methodology would include broadly grouping trees that share very similar characteristics. This method is in line with point 4.4.2.3 of BS 5837: 2012 that states '*Trees forming groups…should be identified and considered as groups where the arboriculturist determines that this is appropriate… It may be appropriate to assess the quality and value of trees as a whole, rather than individuals*.'

2.1.4. The site is located in the Site Context Plan below. The Ordnance Survey (OS) Grid Reference is SJ 81007 87770.



Do not scale this drawing (printed or electronic version).
This drawing is copyright and is for use on this site only. This drawing should be read in conjunction with all relevant consultants drawings and specialist subcontractors / supply chain drawings and specifications.
Responsibility for the reproduction of this drawing in paper form, or issued in electronic format, lies with the recipient to check that all information has been replicated in full and is correct when compared to the original paper or electronic image.

Legend:
Red Line Boundary

0.4
Kilometers

N

Client: Alternative Futures Group	Issue: 01	
Project: Wythenshawe AFG	Scale @ A4: 1:5,000	
Title: Site Context	Approved by: HM	Checked by: HL
Drawing Ref: UG_2548_SITE_CONTEXT	Author: CL	Date: 11/06/2024

URBAN GREEN

A: Ground Floor, The Tower, Deva City Office Park, Trinity Way, Manchester M3 7BF

T: +44 (0) 161 312 3131

weareurbangreen.co.uk

2.2. Scope

2.2.1. The AIA considers any potential impacts on existing trees including the effect of any tree loss required to implement the design and recommendation for the establishment of new trees.

2.3. Documents Provided

2.3.1. A scaled topographical plan has been provided with tree positions already plotted (N D Oliver & Co. Ltd Drawing – 12660_003). Any extra trees found on site that were not included on the original plan have been plotted according to measurements taken on site and using aerial photography.

2.3.2. Tree locations which have been estimated are illustrated on the plans included in Appendix 4, by their identifying number with a "#" suffix. The exact locations of these trees must be verified, and any discrepancies discussed with the Arboricultural Consultant before starting works on site.

2.3.3. A plan outlining the development proposals has been overlaid with the Tree Constraints Plan to assess the potential impacts.

2.4. Limitations

2.4.1. This report is based upon a visual inspection carried out from ground level only. The consultant shall not be responsible for events that happen after the date of the report due to factors that were not apparent at the time, and the acceptance of this report constitutes an agreement with the guidelines and the terms listed in this report.

2.4.2. The consultant accepts no liability in respect of the trees unless the recommendations of this report are carried out under their supervision.

2.4.3. Assessing the potential influence of trees upon load bearing soils, beneath existing and proposed structures resulting from water abstraction by trees or rehydration of shrinkable soils was not included in the contract brief and is therefore not considered in the report. The consultant cannot be held responsible for damage arising from such action.

2.4.4. Trees are living organisms whose health, condition and structure can change over time. The contents of this report are valid for a period of one year from the date of the report.

2.4.5. Potentially hazardous trees are highlighted, and appropriate recommendations are made to reduce the associated risks to an acceptable level.

2.5. The Site

2.5.1. The development site is located to the east of the Millbrook Independent Hospital in the Wythenshawe area in south Manchester. It is situated within a residential area with the Wythenshawe hospital complex to the northwest, and a broad strip of agricultural land to the west and southwest. Access to the site is via Wastdale Road.

2.6. Soil Profile

2.6.1. Reference to the Cranfield Soil and Agrifood Institute's Soilscapes Viewer suggests the underlying soil profile in the site vicinity is characterised as slowly permeable, seasonally wet, slightly acid, base-rich loamy and clayey soils.

3. Legislation

3.1. Tree Protection Status

3.1.1. A Tree Preservation Order (TPO) is an order made by a Local Authority to protect specific trees, groups of trees or woodlands in the interests of amenity. A TPO prohibits the cutting down, topping, lopping, uprooting and wilful damage or destruction of trees without the Local Authority's written consent.

3.1.2. Access to Greater Manchester Combined Authority's GMODIN interactive planning map on 26/09/2024 indicated that there are no TPOs in effect on the site. The site is not within a Conservation Area.

3.1.3. It is recommended that the Local Authority is consulted before any tree works are undertaken, as new TPOs may have been created since the time of enquiry, and heavy fines exist for unauthorised works to protected trees.

3.1.4. All works to trees covered by a TPO require permission from the Local Authority, including any pruning. However, this does not include trees that are dead or have become dangerous. The removal of dead branches is also excluded from a TPO. Although the above exceptions exist, it is advisable to give the Local Authority five days' notice in writing of any intended removal. Permission is not needed where tree work is required to implement an approved planning application.

3.1.5. It is an offence to remove more than five cubic metres of timber in any one calendar quarter without having first obtained a felling licence from the Forestry Commission. It must be noted, however, that this excludes sites where planning permission has already been granted.

3.2. Ecological Considerations

3.2.1. Prior to the commencement of any tree works, the trees should be assessed for the presence of protected species, many of which are subject to the *Wildlife and Countryside Act 1981* (as amended) and the *Conservation of Habitats and Species Regulations 2017* (as amended).

3.2.2. Where there is evidence that roosting bats, nesting birds, or other protected species are present, the advice of a suitably qualified ecologist should be sought regarding how best to proceed.

3.2.3. If tree works are carried out during the bird nesting season (March to September inclusive), trees should be inspected by a qualified ecologist to confirm likely absence, no more than forty-eight hours prior to the commencement of works.

3.2.4. Urban Green has also been appointed to complete a Preliminary Ecological Appraisal (PEA) of the site (UG_2548_ECO_PEA_01), which should be read and adhered to should any tree work be required. The objectives of the PEA are to identify habitats on site and determine the suitability for any 'protected and/or notable' species, including proximate designated sites, in the context of the development proposals. This report should be read and adhered to in conjunction with the PEA report.

4. Arboricultural Impact Assessment (AIA)

4.1. Summary of the Development

4.1.1. It is proposed to apply for full planning permission for the extension to Independent Hospital (Use Class C2) and associated works at Millbrook Independent Hospital, Wastdale Road, Wythenshawe, M23 2RX. Full details of the proposed site layout can be seen on the plans included in Appendix 4.

4.2. Tree Constraints

4.2.1. BS 5837: 2012 recognises that conflicting requirements of the planning system for development means that trees are only one factor which need to be taken into consideration. Although there may be certain specimens that can pose significant constraints to development due to their importance, it is essential that inappropriate tree retention is avoided.

4.2.2. Trees can be adversely affected on development sites if their protection is not factored into the wider project management of onsite operations. The tree survey plan has been transposed over plans detailing current proposals to assess the impact on surveyed trees.

4.2.3. It is essential that roots are protected from construction works including physical damage from excavation and changes in soil structure from compaction and changes in ground levels.

4.3. Root Protection Areas (RPAs) Explained

4.3.1. The Root Protection Area (RPA) is an area of ground around the base of a tree indicated on the plans included in Appendix 4 as an ochre yellow circle centred around the stem which is calculated in relation to the stem diameter.

4.3.2. Most tree roots grow within the upper 600mm of the soil profile where most nutrients are available as the result of the decomposition of organic matter close to the surface. Rooting conditions become less favourable at depth as the soil density increases, creating anaerobic conditions.

4.3.3. BS 5837: 2012 states that the default position for proposed structures should always be outside the RPA. It is recognised that this may not always be possible, yet tree retention would be desirable. In this instance, technical solutions might be available that prevent damage to the retained tree(s).

4.4. Surveyed Trees

4.4.1. The survey assessed seven individual trees, one tree group and two hedgerows, the quality and value of which are summarised below. Full details of the surveyed trees, tree groups, and hedgerows can be viewed in the Tree Data Schedule in Appendix 1.

4.4.2. Three individual trees and one tree group were assessed as BS 5837: 2012 'Moderate Quality' Retention Category 'B'; and four individual trees and two hedgerows were assessed as BS 5837: 2012 'Low Quality' Retention Category 'C'.

4.4.3. Tree T10 and tree group G3 are offsite. The remaining trees, tree groups, and hedgerows are within the site ownership boundaries. However, only a portion of H7 and T8 lie within the provided redline boundaries for the proposed development.

4.4.4. The tree cover is comprised mainly of moderate-to-low quality ornamental planting and boundary hedging, with occasional self-set individuals.

4.5. Impacts of Development

4.5.1. The proposed development would necessitate the removal of one individual tree (T2) assessed as BS 5837: 2012 'Moderate Quality' Retention Category 'B', as detailed in the Tree Removal Plan and Tree Works Schedule in Appendix 4. The tree is internal to the site; therefore, its removal will not have a high impact on the overall visual amenity of the area.

4.5.2. Retained offsite tree group G3 will require access facilitation pruning works (crown lifting) within the site boundary. These works are relatively minor in nature and, provided they are carried out in accordance with BS 3998: 2010 '*Tree work – Recommendations*' should not affect the health, appearance or long-term retention value of the trees.

4.5.3. The remaining trees, tree group and hedgerows are to be retained and can be protected throughout the proposed development in accordance with the standards and practices detailed in BS 5837: 2012 and in this report.

4.5.4. Temporary tree protective fencing will need to be installed at the alignment indicated on the Tree Protection Plan in Appendix 4 prior to the commencement of the proposed development. A specification for protective fencing can be viewed in the Tree Protection Index in Appendix 4 and in section 4.7. of this report.

4.5.5. Arboricultural supervised excavation with possible root pruning will be required within the onsite portion of retained tree group G3, as indicated on the Tree Protection Plan. These works will need to be carried out by hand, under Arboricultural supervision, in accordance with an Arboricultural Method Statement.

4.5.6. The presence of existing buildings, paved surfaces, fences and boundary railings to be retained will serve as sufficient protection for retained trees and hedgerows T1, T6, H7 and H9 throughout the proposed development. These areas are indicated on the Tree Protection Plan as a 'Construction Exclusion Zone (CEZ)', which must remain free of any construction activity throughout the proposed development.

4.6. Tree Surgery Works

4.6.1. Tree works required to facilitate the proposed development will be carried out prior to the commencement of any onsite operations. This should allow sufficient space for the proposed development to be carried out.

4.6.2. Any unforeseen tree works that become apparent during the construction process will require written consent from the Local Authority Tree Officer.

4.6.3. All specified tree work is to be carried out in accordance with the standards and practices detailed in BS 3998: 2010.

4.7. Protective Fencing

4.7.1. Temporary protective fencing will need to be installed at the alignment indicated on the Tree Protection Plan in Appendix 4, prior to the commencement of any proposed development on site including the delivery of materials and site facilities.

4.7.2. Any fencing that is damaged so that it is no longer able to protect retained trees must be replaced/repaired immediately at the alignment indicated on the Tree Protection Plan.

4.7.3. The required specification for protective fencing is illustrated in the Tree Protection Index (Insert 1).

4.7.4. The 'in-ground' system involves driving vertical scaffold poles approximately 0.6m into the ground onto which are affixed horizontal scaffold poles and bracing struts. 2m high anti-climb weldmesh panels are then wired to the scaffold framework. The vertical scaffold poles should be at a maximum of 3m apart.

4.7.5. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to the tree roots when locating uprights.

4.7.6. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" shall be fixed to every 10m of protective fencing, as illustrated on the Tree Protection Index (Insert 2).

4.8. Temporary Site Cabins

4.8.1. All storage facilities and deliveries will make use of existing hard surfaces to avoid unnecessary compaction within RPAs. The locations will be agreed in writing with the Local Planning Authority (LPA) prior to delivery and will remain in the agreed locations unless approved by the LPA.

4.8.2. If storage facilities require siting within RPAs, every effort will be made to ensure that any damage to aerial parts of retained trees is avoided and that appropriate footings are used to avoid root damage or compaction of the soil.

4.9. Utilities

4.9.1. At the time of writing Urban Green have not been made aware of any new utilities or service runs that will be associated with the development. Information regarding the layout of new utilities and drainage and final site levels should be submitted to the Arboricultural Consultant so that the impact of these on the retained trees can be assessed.

4.10. Recommendations

4.10.1. An Arboricultural Method Statement (AMS) will be required to provide solutions and working methods so that the impacts identified do not have a detrimental effect on retained trees.

4.10.2. All operations that could affect trees on and adjacent to the site must be considered as part of the project management of the proposed development. It is therefore recommended that an Arboricultural Consultant is appointed as part of the design and management team to advise on pre-development issues and supervise onsite operations.

4.10.3. The Arboricultural Consultant may also have an advisory role in the preparation of site including tree surgery works and the protection of trees during demolition processes.

Appendix 1 – Tree Data Schedule

The following pages contain information gathered at the site during the tree survey. The reader should refer to Appendices 2 and 3 to correctly interpret the tree survey data.

Reference T = Tree G = Group H = Hedge W = Woodland	Age & Species (Common Name) (*Botanical Name*)	Height (m)	Crown Ht (m)	Lowest Branch Height (m)	Lowest Branch Direction	DBH (mm)	Crown Spread (m) N W E S	Notes	Recommendations Priority	Recommendations Inspect Freq (yrs)	Physiological Condition / Structural Condition	Life Expectancy (yrs) / Retention Category	RPA Radius (m)
T1	Early-Mature **Japanese Maple** *Acer palmatum*	4	2	1	W	130	N 2, W 2, E 2, S 2	1: Planted ornamental growing in soil bed in courtyard. 2: Multiple stems arising from 2m above ground level with upright form. 3: Occasional stubs and wounds present due to crown lifting with good occlusion. 4: Small diameter deadwood noted. Canopy growing towards adjacent building to north and west with adequate clearance currently. 5: Small diameter branches to west at 1m girdled by ribbon; attractive feature of courtyard.	No action required. n/a	 3	Good Fair	20-40 C2	1.56
T2	Early-Mature **Lime** *Tilia* sp.	11	2.5	3	W	500	N 3.5, W 6, E 4, S 3.5	1: Open-grown planted ornamental growing in grass with paving to south. 2: Bifurcated stem at 4m above ground level with well-formed union. 3: Multiple pruning wounds to lower stem and limbs due to crown lifting with good occlusion. 4: No major visible defects.	Remove for development - see Tree Removal Plan. n/a	 n/a	Good Good	40+ B1.2	6.00
G3	Early-Mature **Mixed** Species	av 12	av 2.5	2	M	av 500	N 6.5, W 7, E 7, S 6.5	1: Offsite group prevents detailed inspection. 2: One robinia and three sycamore adjacent to boundary hawthorn hedge growing in adjacent residential rear garden behind wooden fence. 3: Canopies to north overhanging site by approximately 6m with adequate overhead clearance currently. 4: Measurements estimated. 5: No major visible defects; provides screening.	Prune for development - see Tree Removal Plan. n/a	 3	Good Good	40+ B1.2	6.00
T4	Semi-Mature **Red Oak** *Quercus rubra*	8	2.5	2	E	290	N 4.5, W 4, E 4, S 4	1: Planted ornamental growing adjacent to boundary fence, underplanted with dogwood and laurel. 2: Stem bifurcated at 2m above ground level with minor included bark and upright form. 3: Occasional pruning wounds to lower stem due to crown lifting and branch shedding, almost completely occluded. 4: Small-diameter deadwood noted within inner canopy, poses no significant risk.	No action required. n/a	 3	Good Fair	40+ B1.2	3.48

Reference T = Tree G = Group H = Hedge W = Woodland	Age & Species (Common Name) (*Botanical Name*)	Height (m)	Crown Ht (m)	Lowest Branch Height (m)	Lowest Branch Direction	DBH (mm)	Crown Spread (m) N W E S	Notes	Recommendations: Priority	Recommendations: Inspect Freq (yrs)	Physiological Condition / Structural Condition	Life Expectancy (yrs) / Retention Category	RPA Radius (m)
T5	Semi-Mature **Sycamore** *Acer pseudoplatanus*	8	2	1.5	N	250	N 4, W 4, E 5, S 4	1: Self-set tree growing tight against wooden boundary fence; underplanted with dogwood and laurel preventing a detailed inspection. 2: Multiple stems arising from ground level. 3: Small-diameter stubs to lower stems due to branch shedding and crown lifting. 4: Canopy merging with T4. 5: No major visible defects.	No action required. / n/a	3	Good / Fair	40+ / C1	3.00
T6	Young **Silver Birch** *Betula pendula*	5	2	1	M	90	N 2.5, W 3, E 3, S 2.5	1: Open-grown tree within H7 preventing detailed inspection. 2: Multiple stems arising from ground level with upright form. 3: No evidence of previous management. 4: Acceptable condition at present.	No action required. / n/a	3	Good / Fair	40+ / C1	1.08
H7	Semi-Mature **Mixed** Species	av 2	2	0	M	50	N 1.5, W 2, E 2, S 1.5	1: Species-rich boundary screening hedgerow. 2: Predominantly cotoneaster with occasional sycamore, cherry, ash, laurel, bay, dogwood, field maple. 3: Maintained at current height and form.	No action required. / n/a	3	Good / Good	40+ / C1.2	0.60
T8	Semi-Mature **White Willow** *Salix alba*	4	2	2	M	190	N 3, W 3, E 3, S 3	1: Planted ornamental growing in soil verge with Japanese laurel around base, limiting inspection. 2: Bifurcated stem at 2m above ground level with wide union, and globular, pendulous form due to pruning works. 3: Small-diameter deadwood throughout inner canopy due to shading and pruning. 4: Pronounced kink to southernmost stem at 2.5m; multiple crossing branches throughout canopy due to growth habit. Occasional pruning to lower stem due to crown lifting with some occlusion. 5: Attractive specimen.	No action required. / n/a	3	Good / Poor	20-40 / C2	2.28
H9	Early-Mature **Mixed** Species	av 3	3	0	M	80	N 0.5, W 1, E 1, S 0.5	1: Mixed species boundary screening hedgerow growing tight against and through boundary metal railings. 2: Predominantly hawthorn with privet, sycamore, Norway maple, cherry laurel and ash. 3: Pruned back to boundary.	No action required. / n/a	3	Good / Good	40+ / C2	0.96

Reference T = Tree G = Group H = Hedge W = Woodland	Age & Species (Common Name) (*Botanical Name*)	Height (m)	Crown Ht (m)	Lowest Branch Height (m)	Lowest Branch Direction	DBH (mm)	Crown Spread (m) N W E S	Notes	Recommendations		Physiological Condition	Life Expectancy (yrs)	RPA Radius
									Priority	Inspect Freq (yrs)	Structural Condition	Retention Category	(m)
T10	Semi-Mature **Norway Maple 'Crimson King'** *Acer platanoides* 'Crimson King'	5	3	3	M	350	N 3.5, W 4, E 4, S 3.5	1: Offsite tree prevents detailed inspection. 2: Planted ornamental growing in grass verge. 3: Large bark wound to north of main stem with good wound-wood formation. 4: Acceptable condition at present.	No action required. n/a	3	Good Good	40+ B1.2	4.20

Appendix 2 - Tree Data Schedule Definition of Terms

Tree Referencing:	**Individual Trees**	T (+number)
	Grouped Trees	G (+number)
	Hedgerows	H (+number)
	Woodlands	W(+number)
Age Category/Life Stage:	**Young**	Usually <15 years
	Semi-Mature	Significant growth expected, approximately one third of life expectancy complete
	Early-Mature	Full height achieved with further significant growth possible, up to two thirds of life expectancy complete
	Mature	Full height has been achieved with possible spreading of the canopy, usually past two thirds of overall life expectancy
	Veteran	Usually a tree of significant age with characteristics that give additional cultural, landscape and conservation benefits,
	Over-Mature	A tree declining due to age as indicated by deterioration in the health and condition of its crown and trunk.
Species:	**Botanical Name**	conforming to the International Code of Nomenclature for algae, fungi, and plants (ICN). For universal plant recognition.
	Common Name	commonly used names usually on a local and national scale.
Tree Height:	The vertical distance between the base of the tree (where soil and buttress meet) and the tip of the highest branch on the tree.	
Crown Height :	Measured from ground level to the height at which the main crown begins.	
Stem Diameter (DBH):	Stem diameter is measured at 1.5 m above ground level	
Lowest Branch Height & Orientation:	Height above ground level and direction of growth of the lowest lateral branch extending from the main tree stem ('M' denotes stems arising from multiple orientations).	
Crown Spread:	Measurements taken from all four cardinal points in metres.	
Notes:	Notes are made to inform of any possible defects, peculiarities or points of interest that may relate to the trees position, physiology, safety and possible effects on developments.	
Recommendations:	Recommendations are made in accordance with good Arboricultural practice. Recommendations are made regardless to the end usage of the site.	
Priority Scale:	Priority is given dependant on the perceived threat and the likelihood of failure given to a possible hazard. The priority of work is given regardless of the end usage of the site.	
	Urgent	To be carried out as soon as possible.
	Very High	To be carried out within 1 month.
	High	To be carried out within 3 months.
	Moderate	To be carried out within 1 year.
	Low	To be carried out within 3 years.
Physiological Condition:	**Good**	Usually healthy with no symptoms of poor health or disease.
	Fair	Exhibiting signs of poor health or minor disease infections that are not considered to be hazardous.
	Poor	Disease present in considerable quantities or with very poor physiological vigour.
	Very Poor	Tree is in a moribund state in extremely poor condition, usually with little chance of recovery.
Structural Condition:	**Good**	A tree with no significant structural defects.
	Fair	Minor defects may have been observed but are not considered to be immediately hazardous.
	Poor	Significant defects found. Tree requires monitoring or remedial works.
	Very Poor	Major defects that require immediate remedial work or the removal of the tree.
Life Expectancy:	The estimated number of years before the tree may require removal should no unexpected mechanical or environmental impacts occur to the tree.	
Retention Category:	Please refer to Tree retention categorisation table on the next page.	

Appendix 3 – Tree Retention Categories

The following table provides an explanation of the BS 5837: 2012 Tree Retention Categories and Subcategories used during the survey and in the report.		
Trees to be Removed:		**Colour on Plan**
BS 5837: 2012 Category U Includes trees of very low quality that offer little or no amenity value.	Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.	**RED**
Trees to be Considered for Retention:		
BS 5837: 2012 Retention Category A Trees of a high quality, with an estimated life of expectancy of at least 40 years	Trees that are excellent examples of their species, usually mature, especially if rare or unusual including veteran trees. Category A trees are likely to enhance a development and should be retained wherever possible.	**GREEN**
BS 5837: 2012 Retention Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	Trees that are good examples of their species. B category trees are usually mature or younger trees with the potential to reach A category in the future. Although the retention of these trees is desirable, some losses may be acceptable.	**BLUE**
BS 5837: 2012 Retention 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.	**GREY**
BS 5837: 2012 Tree Retention Subcategories:		
BS 5837: 2012 Retention Subcategory 1	Trees possessing mainly Arboricultural qualities.	**n/a**
BS 5837: 2012 Retention Subcategory 2	Trees possessing mainly landscape qualities.	**n/a**
BS 5837: 2012 Retention Subcategory 3	Trees possessing mainly cultural values, including conservation.	**n/a**

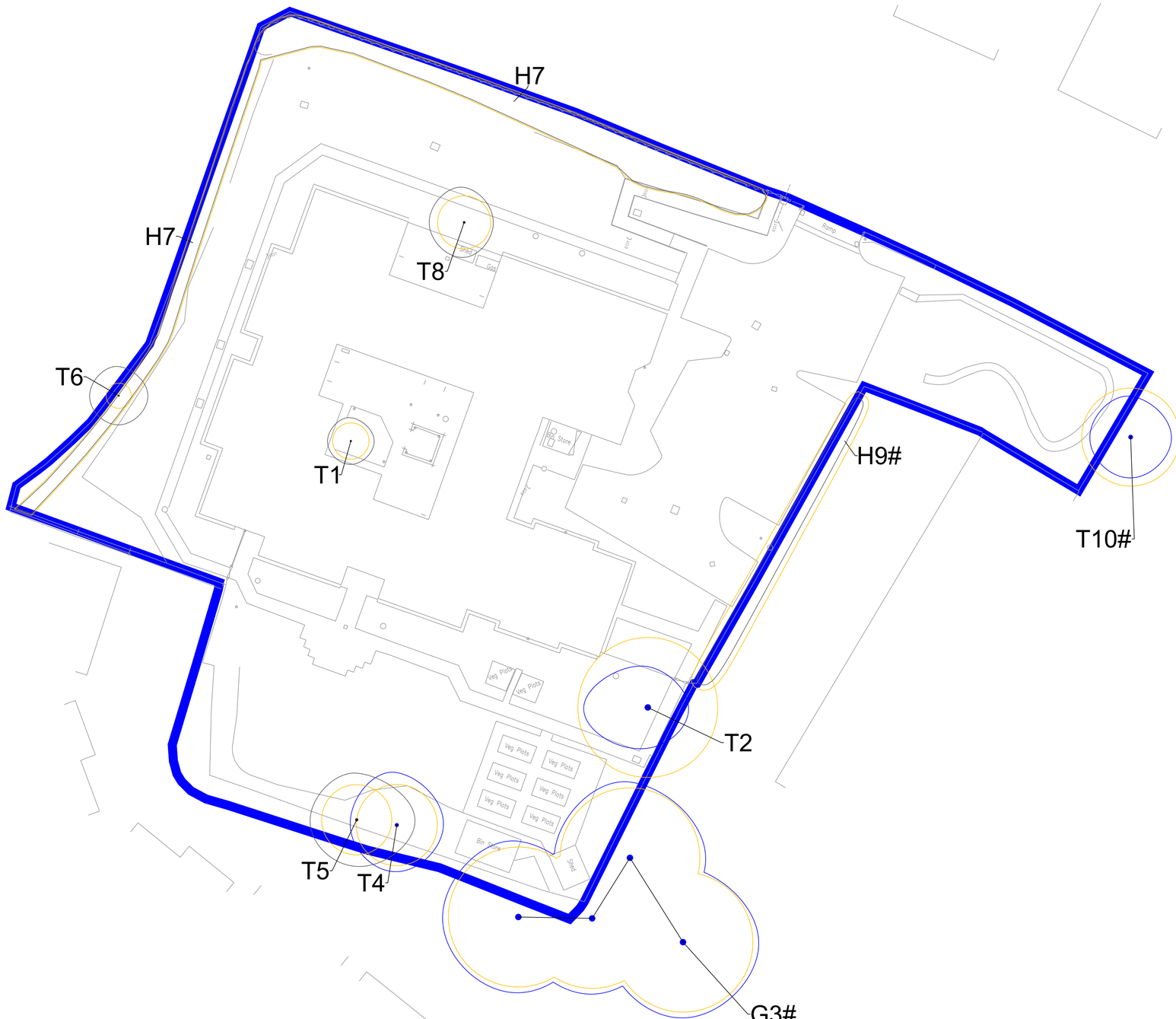
NOTE 1: Trees may be assessed as belonging to more than one BS 5837: 2012 Tree Retention Subcategory depending on their perceived value and/or contribution, i.e., A1.2; B2.3 *etc.*
NOTE 2: Trees that are viewed as borderline and do not fit neatly into either of the categories are given a plus or minus rating (+/-) in the tree data schedule. Therefore, C+ would denote a tree being borderline C/B although C is deemed to be the most appropriate category. Similarly, B- would denote a tree being borderline B/C with B seen as the most appropriate category.

Appendix 4 - Site Plans

The site plans referred to in the report follow this page which include the following:

- Tree Constraints Plan
- Tree Removal Plan
- Tree Works Schedule
- Tree Protection Plan
- Tree Protection Index

Although included plans are usually to scale, they are only intended to indicate positions of surveyed trees and dimensions should not be taken from these drawings.



Do not scale this drawing (printed or electronic version).

Contractors must check all dimensions from site.

This drawing is copyright and is for use on this site only. This drawing should be read in conjunction with all relevant consultants drawings and specialist subcontractors / supply chain drawings and specifications.

All works to be carried out in accordance with the latest British Standards / Codes of Practice unless specifically directed otherwise in the specification.

Responsibility for the reproduction of this drawing in paper form, or issued in electronic format, lies with the recipient to check that all information has been replicated in full and is correct when compared to the original paper or electronic image.

Graphical representations of equipment on this drawing have been co-ordinated, but are approximations only. Please refer to the specifications and / or details for actual sizes and / or specific contractor construction information.

Notes:-

BS 5837: 2012 Retention Category A Tree, Group or Hedge

BS 5837: 2012 Retention Category B Tree, Group or Hedge

BS 5837: 2012 Retention Category C Tree, Group or Hedge

BS 5837: 2012 Category U Tree, Group or Hedge

Root Protection Area (RPA)

\# Position Estimated on Site

Site Ownership Boundary

REV.	DATE	DESCRIPTION	DRAWN	CHK'D

U R B A N
G R E E N

A: Ground Floor, The Tower,
Deva City Office Park, Trinity Way,
Manchester M3 7BF

T: +44 (0) 161 312 3131

weareurbangreen.co.uk

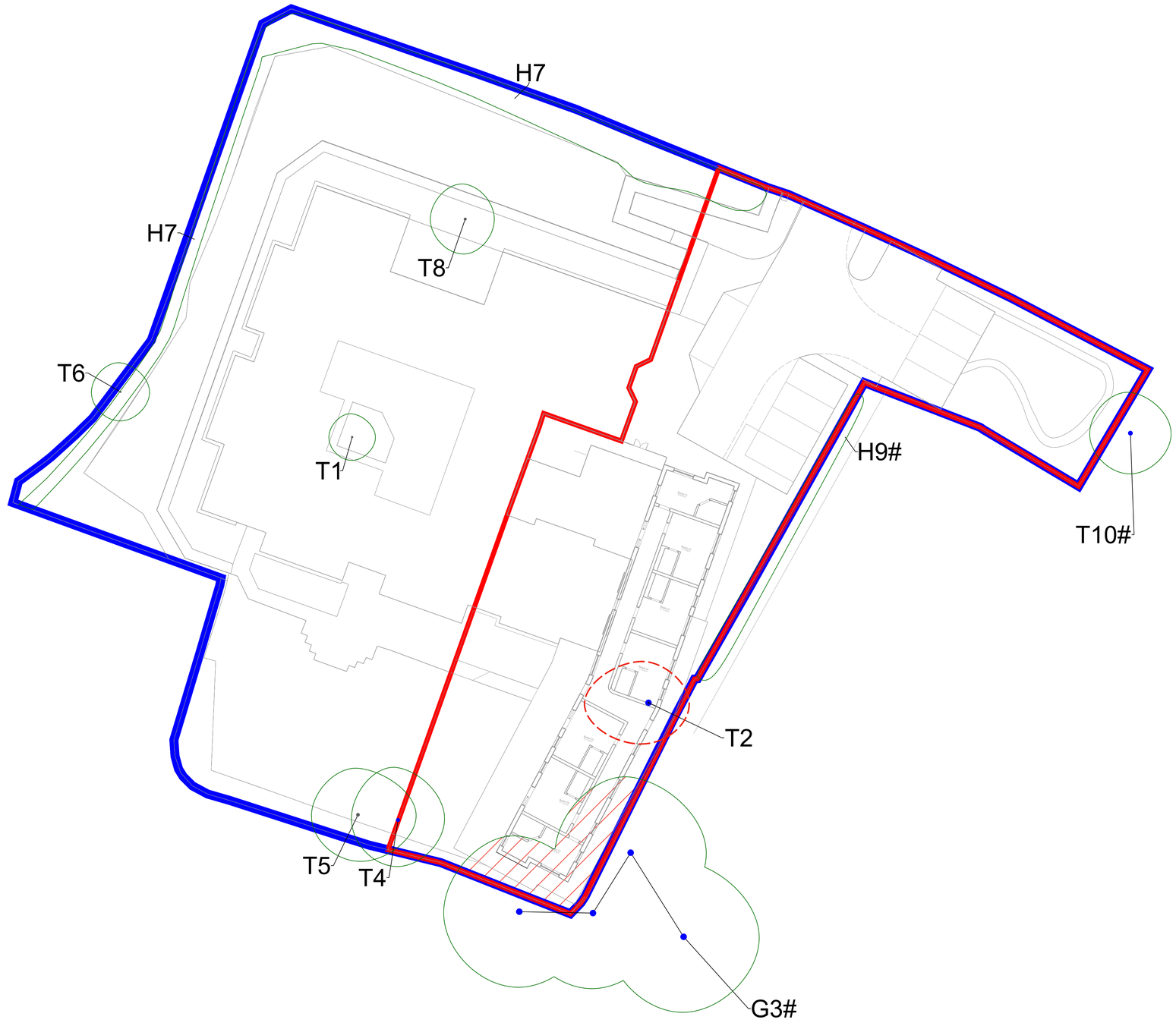
Client:
ALTERNATIVE FUTURES GROUP LIMITED

Project:
AFG WYTHENSHAWE, MILLBROOK

Title:
TREE CONSTRAINTS PLAN

Issue:
PLANNING

Drawn:	Checked:	Approved:
HL	AH	AH
Project:	**Scale @ A1:**	**Date:**
UG2548	1:200	10/06/24
Dwg No:		**Revision:**
UG_2548_ARB_TCP_01		00



Do not scale this drawing (printed or electronic version).

Contractors must check all dimensions from site.

This drawing is copyright and is for use on this site only. This drawing should be read in conjunction with all relevant consultants drawings and specialist subcontractors / supply chain drawings and specifications.

All works to be carried out in accordance with the latest British Standards / Codes of Practice unless specifically directed otherwise in the specification.

Responsibility for the reproduction of this drawing in paper form, or issued in electronic format, lies with the recipient to check that all information has been replicated in full and is correct when compared to the original paper or electronic image.

Graphical representations of equipment on this drawing have been co-ordinated, but are approximations only. Please refer to the specifications and / or details for actual sizes and / or specific contractor construction information.

Notes:-

BS 5837: 2012 Retention Category A Tree, Group or Hedge

BS 5837: 2012 Retention Category B Tree, Group or Hedge

BS 5837: 2012 Retention Category C Tree, Group or Hedge

BS 5837: 2012 Category U Tree, Group or Hedge

Retained Tree

Removed Tree

Extents of Pruning

Position Estimated on Site

Redline Site Boundary

Site Ownership Boundary

REV.	DATE	DESCRIPTION	DRAWN	CHK'D
01	26/09/24	UPDATED REDLINE/PROPOSAL	AH	HL

URBAN GREEN

A: Ground Floor, The Tower, Deva City Office Park, Trinity Way, Manchester M3 7BF

T: +44 (0) 161 312 3131

weareurbangreen.co.uk

Client:
ALTERNATIVE FUTURES GROUP LIMITED

Project:
AFG WYTHENSHAWE, MILLBROOK

Title:
TREE REMOVAL PLAN

Issue:
PLANNING

Drawn:	Checked:	Approved:
HL	AH	AH
Project: UG2548	**Scale @ A1:** 1:200	**Date:** 10/06/24
Dwg No: UG_2548_ARB_TRP_01		**Revision:** 01

Tree Works Schedule

Tree Number	BS 5837: 2012 Retention Category	Species	Works Required	Reason
T2	B	Lime	Fell to ground level	To facilitate the proposed development
G3		Mixed species	Crown lift to 5m above ground level within site boundary, as indicated on the Tree Removal Plan	

REV.	DATE	DESCRIPTION	DRAWN	CHK'D
01	26/09/24	UPDATED REDLINE/PROPOSAL	AH	HL

U R B A N
G R E E N

A: Ground Floor, The Tower,
Deva City Office Park, Trinity Way,
Manchester M3 7BF

T: +44 (0) 161 312 3131

weareurbangreen.co.uk

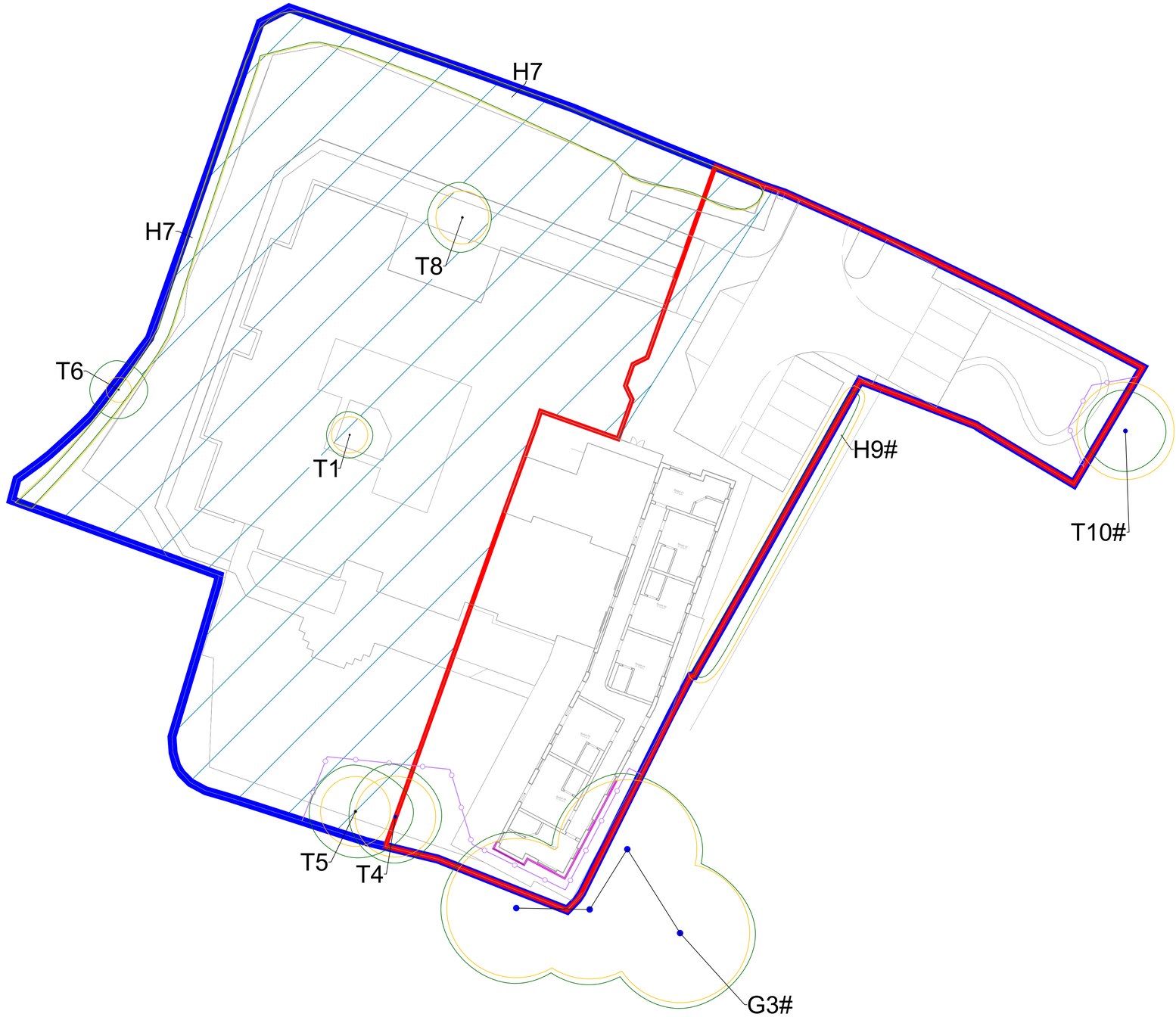
Client:
ALTERNATIVE FUTURES GROUP LIMITED

Project:
AFG WYTHENSHAWE, MILLBROOK

Title:
TREE WORKS SCHEDULE

Issue: **PLANNING**

Drawn:	Checked:	Approved:
HL	AH	AH
Project: UG2548	**Scale @ A1:** N/A	**Date:** 10/06/24
Dwg No: UG_2548_ARB_TWS_01		**Revision:** 01



Do not scale this drawing (printed or electronic version).

Contractors must check all dimensions from site.

This drawing is copyright and is for use on this site only. This drawing should be read in conjunction with all relevant consultants drawings and specialist subcontractors / supply chain drawings and specifications.

All works to be carried out in accordance with the latest British Standards / Codes of Practice unless specifically directed otherwise in the specification.

Responsibility for the reproduction of this drawing in paper form, or issued in electronic format, lies with the recipient to check that all information has been replicated in full and is correct when compared to the original paper or electronic image.

Graphical representations of equipment on this drawing have been co-ordinated, but are approximations only. Please refer to the specifications and / or details for actual sizes and / or specific contractor construction information.

Notes:-

- BS 5837: 2012 Retention Category A Tree, Group or Hedge
- BS 5837: 2012 Retention Category B Tree, Group or Hedge
- BS 5837: 2012 Retention Category C Tree, Group or Hedge
- BS 5837: 2012 Category U Tree, Group or Hedge
- Retained Tree
- Root Protection Area (RPA)
- # Position Estimated on Site
- Redline Site Boundary
- Site Ownership Boundary
- Protective Fencing (See Insert 1 & Insert 2)
- Arboricultural Supervised Excavation
- Construction Exclusion Zone (CEZ)

REV.	DATE	DESCRIPTION	DRAWN	CHK'D
01	26/09/24	UPDATED REDLINE/PROPOSAL	AH	HL

U R B A N
G R E E N

A: Ground Floor, The Tower,
Deva City Office Park, Trinity Way,
Manchester M3 7BF

T: +44 (0) 161 312 3131

weareurbangreen.co.uk

Client:
ALTERNATIVE FUTURES GROUP LIMITED

Project:
AFG WYTHENSHAWE, MILLBROOK

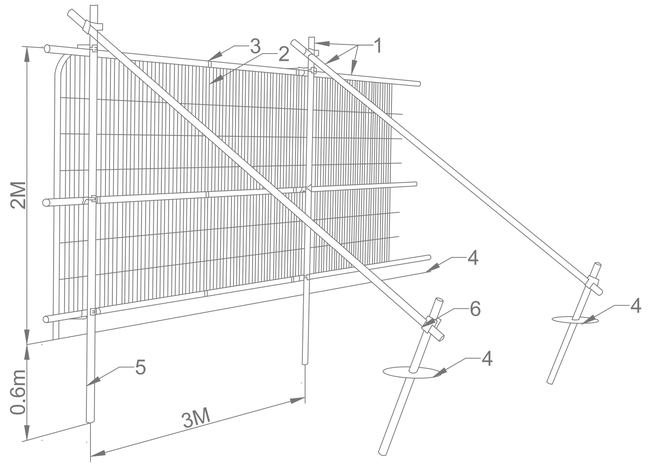
Title:
TREE PROTECTION PLAN

Issue:
PLANNING

Drawn:	Checked:	Approved:
HL	AH	AH
Project:	**Scale @ A1:**	**Date:**
UG2548	1:200	10/06/24
Dwg No:		**Revision:**
UG_2548_ARB_TPP_01		01

Insert 1: Tree protective fencing specification

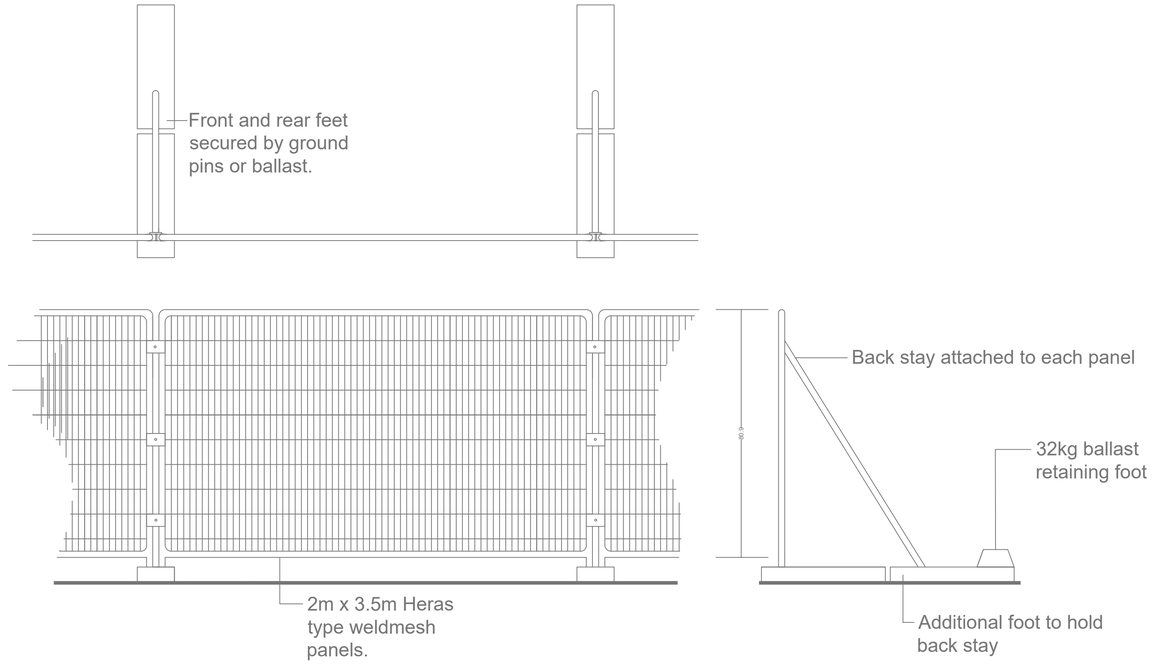
Default specification for protective barrier



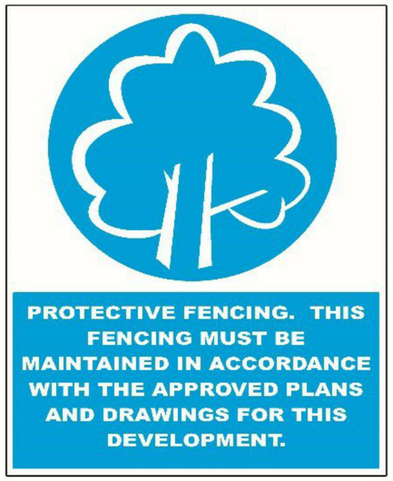
Key

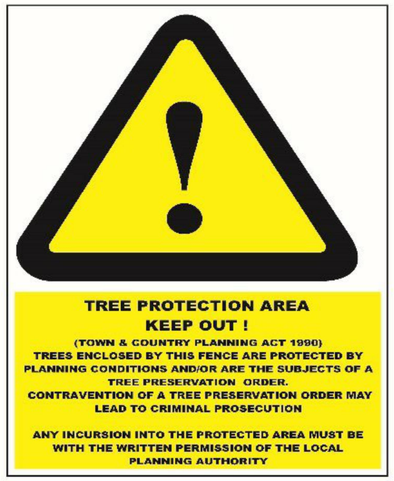
1 Standard scaffold poles
2 Heavy gauge 2m tall galvanised tube and welded mesh infill panels
3 Panels secured to upright and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground untill secure (minimum depth 0.6m)
6 Standard scaffold clamps

Back-stay support



Insert 2: Tree protection notice





Do not scale this drawing (printed or electronic version).

Contractors must check all dimensions from site.

This drawing is copyright and is for use on this site only. This drawing should be read in conjunction with all relevant consultants drawings and specialist subcontractors / supply chain drawings and specifications.

All works to be carried out in accordance with the latest British Standards / Codes of Practice unless specifically directed otherwise in the specification.

Responsibility for the reproduction of this drawing in paper form, or issued in electronic format, lies with the recipient to check that all information has been replicated in full and is correct when compared to the original paper or electronic image.

Graphical representations of equipment on this drawing have been co-ordinated, but are approximations only. Please refer to the specifications and / or details for actual sizes and / or specific contractor construction information.

Notes:-

REV.	DATE	DESCRIPTION	DRAWN	CHK'D

URBAN GREEN

A: Ground Floor, The Tower, Deva City Office Park, Trinity Way, Manchester M3 7BF

T: +44 (0) 161 312 3131

weareurbangreen.co.uk

Client: ALTERNATIVE FUTURES GROUP LIMITED

Project: AFG WYTHENSHAWE, MILLBROOK

Title: TREE PROTECTION INDEX

Issue: PLANNING

Drawn:	Checked:	Approved:
HL	AH	AH

Project:	Scale @ A1:	Date:
UG2548	N/A	10/06/24

Dwg No:	Revision:
UG_2548_ARB_TPI_01	00