



Glendene, Wythenshawe

Arboricultural Report

January 2020

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Chapter 1 Introduction

1.01

The purpose of this report, in accordance with good practice, is to formally record in detail the existing tree resource present on site prior to development and to help inform the design of the site where existing trees present may potentially be incorporated into the design.

1.02

ACS Consulting is instructed by WCHG to report on trees and the constraints on development at Glendene, Wythenshawe. The assessment and report was undertaken by Ian Murat, Registered Consultant of the Arboricultural Association.

1.03

The assessment identifies trees and discusses their suitability to be retained on the site.

The survey identifies:

- Trees that are undesirable to be retained because of structural or other defects.
- Trees that can be retained with an acceptable level of risk and the measures that are required to ensure their long term retention.

1.04

The site was visited during January 2020 and a survey of the trees was completed recording; species type, age, height, crown spread, diameter-at-breast-height, and condition. All the trees have been summarised in the tables in Appendix 1. The Arboricultural Plan ARB/4088/Y/100 plots the merged Root Protection Area as a heavy black broken line. Individual RPA areas are noted as a circle with a solid blue line.

1.05

Under the UK planning system, local authorities have a statutory duty to consider the protection and planting of trees when granting planning permission for proposed development. The potential effect of development on trees, whether statutorily protected or not, is a material consideration that is taken into account in dealing with planning applications. The report contains standard information regarding the trees and the protection requirements of those trees considered desirable to be retained as a record. The report is compliant with Table B.1 – Pre-Application.

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Chapter 2 Background

2.01 The Site

The site comprises a brownfield site with a derelict property occupying approximately the southern half, self-site pioneer trees over building foundations in a northern section and open ground to the north west.

2.02 Statutory Protection/Planning Policies

The application is subject to the Core Strategy Development Plan Document (DPD), and saved Citywide Development Control Policies of the Manchester City Council.

The site is not located within a Conservation Area.

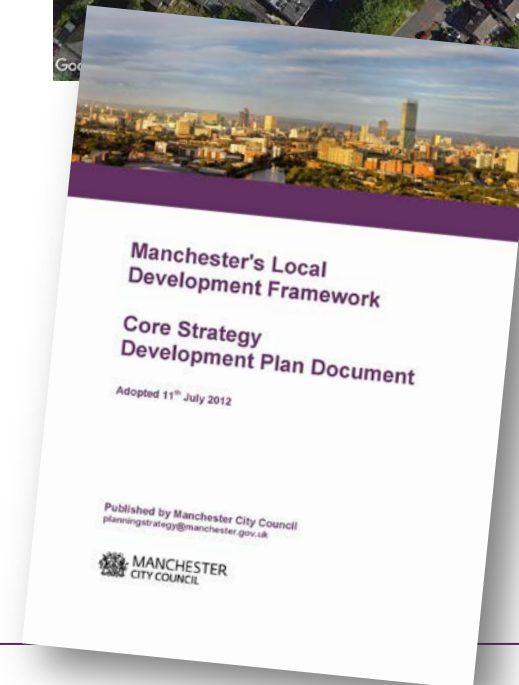
2.03 Soils

BS 5837 – 2012 requires a basic assessment of the soils on site. An examination of the British Geological Survey site notes the superficial deposits as: Till, Devensian - Diamicton. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions (U).

The Cranfield Soil and Agrifood Institute Soilscales viewer shows soils at the site to be slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils.

2.04 Topographical Survey

The survey has been based on the provided Topographical Survey. Where trees have been omitted they have been plotted with reasonable accuracy.



Chapter 3 Tree Survey

3.01

I have identified trees as individuals or in groups.

The group classification is intended to identify trees that form cohesive arboricultural features either aerodynamically, visually or culturally.

Off-site trees and groups that could influence the development potential of the site, have been noted. Their attributes have been approximated. A number of trees were not plotted on the topographical survey and have been added. Their location is approximate.

3.02

The trees were surveyed for species type, age, height, crown spread, diameter-at-breast-height, condition, and their suitability for retention from ground level. Heights were measured with a Hypsometer and diameters were taken, where possible, with a diameter tape to give an average stem measurement. Canopy spreads have been measured at the cardinal points or where they significantly extend in other directions.

Each tree has been assessed using the BS 5837 2012 category ratings (a copy can be found in Appendix A). The data collection accords with the advice set out at Subsection 4.4.2.5 of BS 5837:2012. This is the primary authority for this matter and therefore it is not only this Practice, but also the Local Authority, who will be considering the application by reference to these guidelines.

3.03

The site contains a number of significant trees. These are located along the boundary with Greenbrow Road, between the two buildings within the site, along the boundary with the nursery and to the north as an individual specimen and a small group. The trees are visually prominent specimens giving scale and maturity as landscape features.

3.04

To the north is a large group of self-set pioneer specimens growing over building foundations. They are unremarkable specimens of very limited merit and in such impaired condition that they do not qualify in higher categories.

3.05 Invasive Non-Native Species (INNS)

None.

Chapter 3 Tree Survey



Chapter 3 Tree Survey



Chapter 4 Development Aspects

4.01

Development should normally seek to retain and integrate trees identified as Category A or B. Category C and U may be retained where they pose no constraint to development.

4.02 Constraints and Opportunities

Development should normally seek to retain and integrate trees identified as Category A or B. Category C and U may be retained where they pose no constraint to development. In the current context, many trees are suitable to be retained particularly the trees along the grassed amenity area by Greenbrow Road. Where new development is proposed, it is unlikely that many of the larger specimens could be retained and the site's development potential realised. Other trees may be considered suitable to be retained but their close growing association with companion specimens may mean they are unsuitable.

4.03

Mitigation is an important consideration. A carefully designed landscape including new planting to compensate for any lost trees would have the potential to reduce the adverse effects of development and in some cases create beneficial effects, through the creation of a better quality landscape.

4.04

The RPA has been extended into the tarmac areas, pavements and beyond places of significant ground level change such as retaining walls and building foundations. Whilst such features can be a barrier to root development, there is the possibility that roots can develop underneath or alongside the feature. Tree roots directly below a paved or tarmaced surface often experience conditions that are much more favourable for growth than conditions encountered by deeper roots. For example temperatures can be higher and water condenses on the underside of the hard surface, making the adjacent soil particularly suitable for root growth.

With regards to abrupt changes in ground levels and retaining walls, roots may be restricted in their lateral development but be present in such volumes that damage can be caused and the viability of the tree(s) reduced during demolition.

4.05

Development is to be located outside the Root Protection Area (RPA). The RPA is a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority. Layouts need to take account of secondary development pressures such as shade and dominance. Layouts should also seek to allow adequate levels of light to private amenity space and light demanding rooms during the core hours.

Chapter 4 Development Aspects

4.06 Tree Protection

Where trees are able to be retained, Tree Protection measures should be implemented as stated in BS 5837:2012 and placed in the positions indicated on the Arboricultural Plan. A suitably qualified arboriculturalist should be retained to monitor and report on tree related development issues to ensure the continued protection of trees. A method statement should be prepared by the Arboricultural Consultant prior to commencement at the site in accordance with BS5837 - 2012. A full scheme of protective fencing, its location, and type should be agreed with the Arboricultural Consultant at an early stage in the development of the scheme.

Definitive plans are to be produced by the Arboricultural Consultant showing the location of the haul routes, cabins and storage areas prior to commencement on site.

Chapter 5 Conclusions

5.01

The purpose of this report, in accordance with good practice, is to formally record in detail the existing tree resource present on site prior to development and to help inform the design of the site where existing trees present may potentially be incorporated into the design.

5.02

The site comprises a brownfield site with a derelict property occupying approximately the southern half, self-site pioneer trees over building foundations in a northern section and open ground to the north west.

Development potential is dominated by the trees along the boundary with Greenbrow Road and those between the building and along the boundary with the nursery. The remainder of the site is available to be developed. Mitigation is an important consideration. A carefully designed landscape including new planting to compensate for any lost trees would have the potential to reduce the adverse effects of development and in some cases create beneficial effects, through the creation of a better quality landscape.

Layouts need to take account of secondary development pressures such as shade and dominance. Layouts should also seek to allow adequate levels of light to private amenity space and light demanding rooms during the core hours.

5.03

Development should seek to:

- Incorporate trees identified as desirable (category B) or highly-desirable (A).
- Retain trees identified as Category C or U where they pose little constraint on development.
- Trees located in adjacent property need to be taken into account in any development scheme.
- Locate development outside designated RPAs of retained trees.
- Take account of shade and dominance allowing sufficient light to private amenity space and light demanding rooms during core hours.

The incorporation of desirable specimens and good spatial locations allied with tree protection measures should satisfy the Council's suite of tree protection policies and good arboricultural practice.

Appendix A

Contents

Key

BS 5837 2012

Tree data

KEY

Age	Y – Young: Out-planted trees that have not yet established SM – Semi-mature: Established trees up to 1/3 of expected height and crown EM – Early mature: Between 1/3 and 2/3 of expected height and crown M – Mature: Between 2/3 and full expected height and crown FM – Fully mature: Full expected height and crown OM – Over mature: Crown beginning to break-up and decrease in size S – Senescent: Crown in advanced stage of break-up
Physiological Condition	Good – Very few defects a reasonable long life expectancy depending on age class Fair – Some defects giving the tree a shortened life expectancy Poor – Limited life with major problems
Structural Condition	Good – Very few defects Fair – Some defects rectifiable with minor tree surgery Poor – Significant defects rectifiable with major tree surgery or felling
#	Estimated dimensions.
(a)	Average stem diameter across a group of trees.
*	Tree subject to TPO.

Table 1 – Cascade chart for tree quality assessment

Category and definition	Criteria			Identification on Plan
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 U category trees (i.e. 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 might be desirable to preserve; see 4.5.7</i>			RED
	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 essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dormant 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)	GREEN
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.	BLUE
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 benefits	GREY

Tree Ref No.	Species	Height M	Stem Diameter MM	Branch Spread M				Height of Crown Clearance M	Clear Branch Height M	Age Class	Physiological Condition	Structural Condition	Comments/Preliminary Management Recommendations	Estimated Remaining Contribution Years	Category Grading
				N	E	S	W								
1	Maple	17	440	4.5	5	#5	5.5	3 (S)	3 (S)	EM	Good	Fair	Multi-stemmed at 2.5m. Partly included union. Restricted root development to the north. Prominent in the landscape. A tree of moderate quality and value in the landscape.	20+	B1/2
2	Ash	18	535	4.5	#6	8	7	2 (N)	5 (N)	EM	Good	Good	Well-formed tree. Of high quality and value in the landscape.	40+	A1/2
3	Ash	15	480	4	6	#8	4	3 (N)	5 (N)	EM	Good	Good	A tree of moderate quality and value in the landscape.	20+	B1/2
4	Oak	15	860	4.5	4	6	10	2	2	M	Poor	Fair	Cavity to the west with fire damage. Poor past pruning practice. Storm damage. Epicormic growth on the Stem injury with good wound wood. Poor distribution of buds and twigs throughout. Large pieces of dead wood. In steady decline with no prospect of recovery.	-	U
5	Sycamore	10	200	3	3	3	3	1	1	SM	Good	Good	Self-set tree growing through the fence. Of low quality and value in the landscape.	10+	C1/2

Tree Ref No.	Species	Height	Stem Diameter	Branch Spread M				Height of Crown Clearance	Clear Branch Height	Age Class	Physiological Condition	Structural Condition	Comments/Preliminary Management Recommendations	Estimated Remaining Contribution Years	Category Grading
		M	MM	N	E	S	W	M	M						
G1	Group	<15	<400	5	5	5	5	2	2	EM/M	Good	Good	Group of sycamore and willow. Located off-site. A group of moderate quality and value in the landscape.	20+	B1/2
6	Sycamore	16	570	#6	5.5	4	4	5	5	M	Good	Fair	Twin stemmed at 3m. Partly included union. Included scaffold branches. Past pruning throughout the canopy – crown reduced in the past. A tree of moderate quality and value in the landscape.	10+	C1/2
G2	Group	<12	200	5	6	2	2	1	1	SM/EM	Good	Fair	Group of self-set prunus and sycamore. Included stem unions. Of low quality and value in the landscape.	10+	C1/2
7	Maple	12	500	5	8	5	5	2	3	EM	Poor	Good	Extensive canopy die-back to the centre of the canopy. Appears to have lost apical dominance replaced by the canopy to the south. A tree of low quality and value in the landscape.	10+	C1/2
8	Norway Maple	14	480	3	7	6.5	5.5	1 (E)	3	EM	Good	Good	Crown asymmetry due to the influence of adjacent T7. A tree of moderate quality and value in the landscape.	20+	B1/2

Tree Ref No.	Species	Height	Stem Diameter	Branch Spread M				Height of Crown Clearance	Clear Branch Height	Age Class	Physiological Condition	Structural Condition	Comments/Preliminary Management Recommendations	Estimated Remaining Contribution Years	Category Grading
		M	MM	N	E	S	W	M	M						
9	Oak	17	830	6	7.5	7.5	7.5	2	3	M	Fair	Good	Stem injury to the south west with possible fire damage. Storm damage and branch tears. Dead wood up to 50mm in diameter. Prominent specimen. Reasonable distribution of buds and twigs. A tree of moderate quality and value in the landscape. Work Crown clean.	20+	B1/2
10	Ash and Maple	12	250, 200	3	3	3	3	2	2	SM	Good	Good	2 self-set trees as one visual unit. Of low quality and value in the landscape.	10+	C1/2
11	Ash	18	#550	#8	2	8	8	2 (W)	3	EM	Good	Good	Crown asymmetry due to the influence of adjacent tree. A tree of high quality and value in the landscape. Work Crown clean.	40+	A1/2
12	Ash	17	790	#8	10	10	0.5	0 (S)	2 (S)	M	Good	Good	Crown asymmetry to the west due to the influence of adjacent tree. A tree of high quality and value in the landscape.	40+	A1/2

Tree Ref No.	Species	Height	Stem Diameter	Branch Spread M				Height of Crown Clearance	Clear Branch Height	Age Class	Physiological Condition	Structural Condition	Comments/Preliminary Management Recommendations	Estimated Remaining Contribution Years	Category Grading
		M	MM	N	E	S	W	M	M						
13	Ash	18	530	6	3	2	7	2	3	M	Good	Good	Crown asymmetry due to the influence of adjacent trees. Ivy on the stem and into the canopy. A tree of moderate quality and value in the landscape. <u>Work</u> Crown clean.	20+	B1/2
14	Ash	18	660	2	#8	7	4	2 (S)	4	M	Good	Good	Crown asymmetry due to the influence of adjacent trees. Ivy on the stem and into the canopy. A tree of moderate quality and value in the landscape. <u>Work</u> Crown clean.	20+	B1/2
15	Ash	19	350, 410	4	#4	6.5	7.5	1 (W)	3	M	Good	Good	Twin stemmed. Included stem unions at ground level. No natural bracing. Crown asymmetry. A tree of moderate quality and value in the landscape.	20+	B1/2
16	London Plane	19	550	5	#8	6	10	1 (W)	3	M	Good	Good	A tree of high quality and value in the landscape.	40+	A1/2
17	Plane	19	600	6.5	#8	1	8.5	1 (W)	3	M	Good	Good	A tree of high quality and value in the landscape.	40+	A1/2

Tree Ref No.	Species	Height	Stem Diameter	Branch Spread M				Height of Crown Clearance	Clear Branch Height	Age Class	Physiological Condition	Structural Condition	Comments/Preliminary Management Recommendations	Estimated Remaining Contribution Years	Category Grading
		M	MM	N	E	S	W	M	M						
18	London Plane	18	585	3	#6	8	8	1 (S)	3	M	Good	Good	A tree of high quality and value in the landscape.	40+	A1/2
G1	Broad-leaved Group	<12	<200	3	3	3	3	0	0	SM	Good	Poor	Mixed group of self-set multi-stemmed goat willow over building foundations with sycamore and holly. Low quality and value in the landscape.	10+	C1/2
19	Ash	19	470	5	5	5	5	2	4	M	Good	Good	A tree of moderate quality and value in the landscape.	20+	B1/2
G2	Group	<12	<350	3	3	3	3	0	0	SM/EM	Good	Good	Group of maple and goat willow with cherry and ash. Moderate quality and value in the landscape.	20+	B1/2
20	Lime	17	#450	#4	#6	#6	#6	3	3	EM	Good	Good	Poor past pruning practice. A tree of moderate quality and value in the landscape.	20+	B1/2
21	Prunus	10	#400	5	3	#5	5	2	2	M	Poor	Fair	Large canker. Ivy. A tree of low quality and value in the landscape.	10+	C1/2
22	Ash	6	a 120	3	3	3	3	1	1	SM	Good	Fair	Self-set ash with sycamore. Low quality and value in the landscape.	10+	C1/2

Tree Ref No.	Species	Height M	Stem Diameter MM	Branch Spread M				Height of Crown Clearance M	Clear Branch Height M	Age Class	Physiological Condition	Structural Condition	Comments/Preliminary Management Recommendations	Estimated Remaining Contribution Years	Category Grading
				N	E	S	W								
ST1	Maple	12	510	6	6	6	6	5	5	M	Good	Good	A tree of moderate quality and value in the landscape.	20+	B1/2
ST2	Sycamore	18	550	6	7	7	5	5	5	M	Good	Good	Impact damage from vehicles. A tree of moderate quality and value in the landscape.	20+	B1/2
ST3	Lime	12	410	5	#7	3	6	4	4	M	Good	Good	Profusion of epicormic growth to the base. Surface rooting. Causing damage to the kerb. A tree of moderate quality and value in the landscape.	20+	B1/2
ST4	Sycamore	18	550	6	#8	7	5	5	5	M	Good	Good	A tree of high quality and value in the landscape.	40+	A1/2
ST5	Prunus	7	290	2	3	6	1	3	3	M	Good	Good	Surface rooting. Damage from grounds maintenance. Suppressed by tree within the site. A tree of low quality and value in the landscape.	10+	C1/2
ST6	Birch	12	355	2	6	2	2	1 (N)	3	M	Good	Good	Located in the verge. A tree of moderate quality and value in the landscape.	20+	B1/2

Tree Ref No.	Species	Height M	Stem Diameter MM	Branch Spread M				Height of Crown Clearance M	Clear Branch Height M	Age Class	Physiological Condition	Structural Condition	Comments/Preliminary Management Recommendations	Estimated Remaining Contribution Years	Category Grading
				N	E	S	W								
ST7	Ash	5	150	2	2	2	1	2	2	SM	Good	Good	A tree of moderate quality and value in the landscape.	20+	B1/2
ST8	Horse-chestnut	16	740	6	#8	8	6	5	5	FM	Fair/Poor	Good	Pseudomonas. Good distribution of buds and twigs. Slightly outgrowing planting space. A tree of moderate quality and value in the landscape.	20+	B1/2
ST9	Birch	10	255	1	4	4	1	2 (S)	3 (S)	M	Poor	Poor	Stem injuries. Large pieces of dead wood. A tree of low quality and value in the landscape.	10+	C1/2
ST10	Sorbus	12	530	5	7	6	3	3	3	M	Fair	Poor	Pronounced lean, historical root failure. A tree of low quality and value in the landscape.	10+	C1/2

Appendix B

Contents

Heads of Terms Method Statement

Heads of Terms of an Arboricultural Method Statement

The purpose of this document is to serve as a live record of the Heads of Terms which are suggested for the proposed development. The Heads of Terms are in draft form and are therefore themselves subject to further discussion and/or agreement. Certain matters listed herein may alternatively be addressed satisfactorily by means of Condition. This requires detailed discussions with the LPA on the principle that conditions should always be used in the first instance as per government guidance and that contained in BS 5837 – 2012 Table B.1 Delivery of tree-related information into the planning system; this method statement fulfils the recommended criteria for arboricultural information.

The Draft Heads of Terms and obligations are as follows:-

Construction Exclusion Zone Fencing

- Timing for setting out, construction and completion of fencing generally in accordance with the phasing plan.
- Specification for fencing and or ground protection to be in accordance with BS 5837:2012.

Storage of Materials/Offices/Fuels

- Identification and reservation of land for storage of materials,
- parking of vehicles, location of offices and welfare facilities, fuels.

Removal of Hard surfacing

- Existing surface to be removed by hand working from the closest point to the tree working out.
- The upper course to be cut with a disc cutter.
- The material is to be broken with hand tools.

Services

- Location of services including sewerage, gas, water, electricity.
- Timing of excavations where they pass within or close to retained trees in accordance with phasing plan.

Review/Site Inspection

- Review to be undertaken prior to the commencement of development to address: phasing and land uses.
- Arrangements for Review (monitoring).
- Review to allow for amendment / variation by agreement.

Construction Works	Arboricultural Input
Tree works	Review with contractor
Fencing installation/laying of temporary working surface	Review and supervise installation of Construction Exclusion Zone Fencing
Excavation of hard surfaces/removal of material from site	Review protection measures and working practices
Construction of hard surfaces and delivery of building materials	Review working of practices/supervision of works/Review of tree protection measure and site storage
Installation of services	Review working of practices/supervision of works/Review of tree protection measure

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