

Ascerta

Landscape, Arboricultural & Ecological Solutions
for the Built Environment

Arboricultural Impact Assessment

Manchester College
Northenden Campus

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A	24 th June 2021	Report / Layout updates
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Arboricultural Impact Assessment

**Manchester College
Northenden Campus**

For

Miller Homes

1st March 2021

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Appendix 1 Tree Data Tables in accordance with Table 1 of BS5837: 2012

**Appendix 2 Drawing P.846.17.10B *Tree Survey and Tree Removal Plan*
Drawing P.856.17.11C *Tree Protection Measures***

1.0 Introduction

- 1.1** Ascerta has been instructed to carry out a survey of the trees within and immediately adjacent Manchester College, Northenden Campus and to assess the potential impact of the development as proposed on trees within / adjacent the site in accordance with British Standard 5837: 2012 *Trees in relation to design, demolition and construction – Recommendations*.
- 1.2** The site was first surveyed by Ascerta on the 21st April 2017, and most recently surveyed on 2nd February 2021 by Robert Armitage, both competent and qualified arboriculturists with experience of the UK and European arboricultural and landscape industries within the context of the planning system. During the site visits, a survey was carried out of the trees growing both on and immediately adjacent the site to the standards contained within BS5837: 2012.
- 1.3** This report presents the results of the survey, provides an assessment of the impact of the development and includes recommendations for further actions, where applicable, to mitigate any potential impacts of the development on tree cover within the local landscape.
- 1.4** Our client's objective is to develop the site by the construction of 224 residential dwellings.

2.0 Planning Policy & Relevant Legislation

- 2.1** The site lies within the Manchester Council administrative area and is subject to the policies contained within its Local Plan. These have been taken into account when writing this report.
- 2.2** Checks made with the Local Planning Authority on 1st March 2021 via email with the council's planning department indicate that none of the trees within our survey are statutorily protected by a Tree Preservation Order and the site is not located within a Conservation Area. In advance of the commencement of any works to trees within or adjacent the site, those instructing and proposing to carry out such works should satisfy themselves that all appropriate consents are in place to prevent potential breach of legislation.
- 2.3** British Standard 5837: 2012 *Trees in relation to design, demolition and construction – Recommendations* provides current recommendations and guidance on the relationship between trees and design, demolition and the construction processes. It sets out the principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and structures.

- 2.4** Consideration should also be given to any impacts from the proposed development in respect of the Hedgerow Regulations 1997 and the Forestry Act 1967 (and specifically the potential need for a felling licence), as well as existing UK and European legislation relating to wildlife and nature conservation.
- 2.5** In accordance with the Hedgerow Regulations 1997, 'important' hedgerows (in the context of the Regulations) should not be removed without a Hedgerow Removal Notice issued by the relevant Local Authority, unless that removal is subject to an appropriate consent under the Town and Country Planning Act 1990. Appropriate checks should be made in advance of the commencement of works to hedgerows to establish the importance or otherwise of the hedgerow and whether there is a requirement for a Hedgerow Removal Notice distinct from any formal planning consent to be granted.
- 2.6** The revised National Planning Policy Framework, updated on 19th February 2019, sets out the government's planning policies for England and Wales and how these are expected to be applied and has been considered within this report. It provides a Framework within which locally prepared plans for housing and other development can be designed and produced.

3.0 Survey & Survey Methodology

- 3.1** We have been supplied with a digital copy of the topographical survey for the site, which satisfies the relevant part of section 4.2 of BS5837: 2012. Features of arboricultural or landscape interest that have been excluded from the original plan (for example trees on or located off site but within a distance from the boundary of the site equal to or less than 12 times the stem diameter of that tree) have been added to the plan manually.
- 3.2** Twenty-three individual trees and sixteen groups of trees were recorded during our survey, the details of which can be found within Appendix 1 to this report and cross referenced with drawing P.846.17.10A *Tree Survey and Tree Removal Plan*.
- 3.3** Our most recent update survey of the trees within and adjacent the site was carried out by a qualified and competent arboriculturist in accordance with sections 4.4 and 4.5 of BS5837: 2012 on 2nd February 2021 during cold and rainy weather conditions (original survey carried out on 21st April 2017). Those trees surveyed have been numbered sequentially and the details required by the Standard, including a categorisation in accordance with section 4.5 and Table 1 of the Standard, have been recorded within the Tree Data Tables at Appendix 1.
- 3.4** Where trees are surveyed that require immediate attention, for example to abate a nuisance, prevent a serious hazard to life or property, or are affected by a pathogen or pest that could cause widespread damage unless it is controlled, notification will be issued to the relevant person or organisation such that appropriate action can be taken.

4.0 Potential Arboricultural Impacts

4.1 Table 1 below shows the trees that will need to be removed to facilitate the development of the site.

Table 1: Trees to be Removed

<u>T. No.</u>	<u>Species</u>	<u>HT (m)</u>	<u>Stem DBH (mm)</u>	<u>Cat</u>	<u>Reason</u>
				<u>Grade</u>	
G1	Whitebeam, Apple and Cherry	5	70+ 150	C1	To accommodate the development proposals.
T4	Norway Maple	10	430	C1	
G2 (in part)	Hawthorn, Birch, Field Maple, Amelanchier, Willow and Pine	10	#200 average	B2	
G2A	Pear, Birch, Hornbeam, Cherry, Eucalyptus, Maidenhair and Antarctic Beech	5	#100 ave	C2	
T13	Beech	19	720	B1	
T14	Lime	10	340	C1	
G3	Pine, Birch, Alder, Willow, Cherry, Aspen and Rowan	8	50-250 range	C2	
G4	Field Maple, Birch, Whitebeam, Atlantic Cedar and Tulip Tree.	4-7	100-290	C2	
G5	Lime and Horse Chestnut	16	440-450 range	B2/C2	
G6	Norway Maple and Lime	15	110-510 range	B2/C2	
G7	Horse Chestnut, Norway Maple and Lime	14.5	400-580 range	B2/C2	
G8 (in part)	Goat Willow and Sycamore	9	50 - 100 range	C2	
T15	Birch	11	150	C1	
G11 (in part)	Norway Maple, Sycamore and Lime	16	400 to 550 range	B2	
G13 (in part)	Birch, Pine, Hawthorn, Willow and Field Maple	13	100-170	B2	
G15 (in part)	Sycamore, Horse Chestnut, Spruce and Goat Willow	15	#500	B2/C2	

4.2 Table 2 below shows trees that are proposed for retention within the development that have the potential to be impacted by the development proposals.

Table 2: Summary of Potential Impacts to Retained Trees

<u>T. No.</u>	<u>Species</u>	<u>HT</u> <u>(m)</u>	<u>Stem</u> <u>DBH</u> <u>(mm)</u>	<u>Cat</u>	<u>Potential Impact</u>
				<u>Grade</u>	
T6	Sycamore	16	700#	A1	The removal of existing hard standing areas immediately adjacent the stem.
T7	Oak	8	300#	C1	
T8	Sycamore	13	570#	B1/C1	
T9	Sycamore	13	580#	B1/C1	
T10	Sycamore	15	720#	A1	
T11	Sycamore	16	800#	A1	The removal of existing hard standing areas and existing buildings immediately adjacent the stem.
T12	Sycamore	15	850#	B1	
G10	Sycamore and Norway Maple	17	Range 300 to 600	B2	The construction of proposed plots.
G11	Norway Maple, Sycamore and Lime	16	400 to 550 range	B2	
G14	White Poplar and Sycamore	26	#800	A2/B2	The removal of existing hard standing areas immediately adjacent the stems and the construction of the adjacent proposed plots.
G15	Sycamore, Horse Chestnut, Spruce and Goat Willow	15	#500	B2/C2	The construction of the adjacent proposed plots.

5.0 Tree Protection Measures

5.1 Based on the proposed layout and those trees proposed for retention, Table 3 below provides suitable protection measures/ mitigation to minimise the potential impacts to retained trees as stated at 4.2.

Table 3: Potential Impacts to Retained Trees & Proposed Protection Measure / Mitigation

<u>Potential Impact / Work Stage</u>		<u>Affecting</u>	<u>Protection Measure / Mitigation</u>	<u>Description / Specification and Procedure</u>
<u>Remediation/ Demolition and Initial Tree Works</u>				
1	Removal of existing Standing of hard	T6, T7, T8, T9, T10, T11, T12 and G14	• Shallow excavations	Excavations only permitted to the depth of the existing hard standing sub-base to retain any potential roots beneath this surface. Works to be supervised by the project arboriculturist.
			• Supervised excavations	Project arboriculturist to attend site prior to the commencement of any excavations to oversee the works to ensure no significant root damage occurs.
			• Root pruning.	Any exposed roots to be pruned by the project arboriculturist as necessary using hand tools appropriate to the task.
2	Demolition of existing buildings	T11 and T12	• Careful working methodology	Buildings to be demolished whilst existing hard standing is still intact. Materials to be pulled away from tree stems. Any pruning works to be carried out in advance of any demolition works.
			• Supervised demolition	Project arboriculturist to attend site prior to the commencement of any demolition works to oversee the works to ensure no significant damage to above or below ground structures of the trees.
<u>Construction Phase</u>				
3	Proposed buildings/ plots	G10, G11, G14 and G15	• Supervised excavations	Project arboriculturist to attend site prior to the commencement of any excavations for foundations to oversee the works and ensure no significant root damage occurs.
			• Root pruning	Exposed roots <25mm to be pruned cleanly back to the soil surface as promptly as possible to avoid any prolonged exposure. Roots >25mm to be assessed on site by the project arboriculturist as to whether pruning is safe / appropriate.
			• Fencing attached to scaffolding	Tree protection fencing to be attached to elevation scaffolding where specified to prevent vehicular/ plant access within the root protection areas and prevent physical damage to the stems.

- 5.2** On the basis of the above and the contents of this report, it is considered appropriate that an Arboricultural Method Statement be prepared to demonstrate how trees proposed for retention can be suitably safeguarded. The Arboricultural Method Statement can be secured by way of an appropriately worded planning condition attached to the consent for the development and should be adopted as a control document by site personnel.
- 5.3** In addition to the erection of protective fencing, the attached drawings show areas where it would be beneficial to agree an Arboricultural Method Statement between the project arboriculturist, design & construction teams and the local planning authority tree officer. The method statement will need to address and make allowance for the following:
- All forms of access required to the site;
 - Site cabins and storage areas;
 - Proposed parking for site personnel;
 - Phasing of works;
 - Space required for excavations (including foundation excavations);
 - Any required special construction techniques (for example provision of porous surfaces);
 - The location and construction methodology for installation of services in close proximity to retained trees & hedges;
 - Any changes in ground levels and any resulting requirement for retaining structures;
 - Proposed root zone enhancement measures;
 - Working space for cranes, plant and scaffolding; and
 - Management of waste products within the site.
- 5.4** Over and above the physical tree protection measures that should form the basis for the tree protection method statement, the following details should be provided within the Arboricultural Method Statement:
- Protection of the soil structure within the proposed planted areas (where applicable);
 - Planting operations within the root protection areas of retained trees;
 - Any required / additional precautions outside of construction exclusion zones in relation to the treatment & landscaping of garden or open space areas;
 - System of arboricultural site monitoring / schedule of site visits and resulting actions.

6.0 Conclusions & Recommendations

- 6.1** The proposals to develop the site by the construction of 224 residential dwellings will directly require the removal of G1, T4, G2 (in part), G2A, T13, T14, G3, G4, G5, G6, G7, G8 (in part), T15, G11 (in part), G13 (in part) and G15 (in part).
- 6.2** In the absence of suitable controls, the development also has the potential to have an indirect impact on T6, T7, T8, T9, T10, T11, T12, G10, G11, G14 and G15 that are proposed for retention as part of the development of the site. However, suitable protection measures as listed in Table 3 and summarised below will ensure trees are sufficiently protected throughout the entire course of the development.
- 6.3** Protection of retained trees from the impacts of the development proposals can be provided by:
- The erection of protective fencing in advance of the commencement of the development in the locations shown;
 - The agreement, in advance of the commencement of the development, together with the implementation during the construction phase, of an Arboricultural Method Statement;
 - Arboricultural site supervision in key areas of the site where works are proposed within and immediately adjacent root protection areas; and
 - Root pruning procedures as specified within the Arboricultural Method Statement.
- 6.4** Compensation for the impact of the development, together with landscape and biodiversity enhancements can be achieved by way of the following:
- The planting of trees, shrubs and where applicable hedges as part of a comprehensive landscape scheme to replace any vegetation lost and to integrate the development into the wider landscape; and
 - The use of a mixture of native and ornamental species within planting schemes, where those species are suited to the site and local landscape.

7.0 References

Department for Communities and Local Government (February 2019) *National Planning Policy Framework*;

British Standard 5837: 2012 *Trees in relation to design, demolition and construction – Recommendations*;

National Joint Utilities Group publication *Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees – Volume 4*.

Appendix 1

Site:	P.846 Northenden Campus, Sale Road, M23 0DD	Surveyor:	Helen Sullivan Rob Armitage	 Landscape Trees Ecology
Client:	Miller Homes	Survey Date:	21st April, 2017 Updated: 2nd February 2021	
Brief:	Tree Survey to BS5837:2012	Survey Conditions:	Mainly dry with rain spells	

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T. No	Species	Ht (m)	Stem DBH (mm)	RPA Radius (m)	Branch Spread				Ht Crown Clearance (m)	Age Class	P Condition	Structural Condition & General Comments	Preliminary Recommendations (not to be actioned without a valid planning consent)	Est. (yrs)	Cat
					N	S	E	W							Grade
G1	Whitebeam, Apple and Cherry	5	70+ 150	1.80	2	2	2	2	1	Y	F	Young trees, some newly planted. Ornamental spp.	Remove to accommodate development proposals. Plant replacement trees elsewhere on site at the landscaping stage of the project.	30+	C2
T1	Oak	16	690	8.28	7	8	4	8	8	M	F	Lower canopy extensively pruned. Stem bulging near base. Reduced vigour. Balanced crown.	No work required at this time.	30+	B1
T2	Oak	16	650	7.80	4	10	8	9.5	7	M	F	Balanced crown. Good Vigour, Extensively pruned lower canopy.	No work required at this time.	30+	B1
T3	Red Oak	16	580	6.96	10	4	10	8	4	M	F	Balanced crown. Fair vigour. Prominent feature.	No work required at this time.	30+	B1
T4	Norway Maple	10	430	5.16	4	2	2	2	4	EM	F	Crown pruned away from T3. Good vigour. Crown bias to west from pruning.	Remove to accommodate development proposals. Plant replacement tree elsewhere on site at the landscaping stage of the project.	30+	C1
G2	Hawthorn, Birch, Field Maple, Amelanchier, Willow and Pine	10	#200 average	2.40	4	4	4	4	0	EM	G	Boundary feature, structure planting. Good condition and vigour. Prominent feature. Provides valuable screening. Regular etiolated Birch.	Remove specified section to accommodate development proposals. Prune retained canopies back as necessary. Plant replacement trees elsewhere on site at the landscaping stage of the project.	30+	B2

NOTE: The Category Grade applied to trees surveyed is consistent with the recommendations within Table 1 of BS5837: 2012, however this does not necessarily correlate with the visual importance of a tree within the wider landscape, nor does it dictate which trees should be retained at the cost of quality development. Where trees are to be lost to accommodate a development, recommendations will be made such as to provide suitable mitigation and compensation, and to integrate the development into the wider landscape.

Key to Abbreviations & Headings

T. No.: Tree number (T = Tree, G – Group, W = Woodland, H = Hedge, Cpt. = Compartment)
Stem DBH (Diameter at Breast Height): Measured at 1.5m above ground level*
Ht Crown Clearance: Canopy ground clearance
Structural Condition: Description of any observed defects
Cat. Grade: Tree quality assessment in accordance with BS5837: 2012

Species: Common name used
Root Protection Area Radius: Root Protection Area as per BS5837: 2012
Age Class: Y = Young, EM = Early Mature, M = Mature, OM = Over mature, D = Dead
Preliminary Recommendations: Made in respect of known / intended use of the site
* For groups of trees, the stem diameter of the largest tree in the group is generally used
Denotes estimated DBH where access was not possible

Ht: Approximate height of tree from ground level in metres
Branch Spread: Extent of canopy spread in metres to each of the four cardinal points
P (Physiological) Condition: G = Good, F = Fair, P = Poor, D = Dead
Est. (yrs): Estimated remaining contribution in years

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					N	S	E	W							Grade

G2A	Pear, Birch, Hornbeam, Cherry, Eucalyptus, Maidenhair and Antarctic Beech	5	#100 ave	1.20	1	1	1	1	1	Y	F	Young ornamental trees within planters around exiting car parks.	Remove to accommodate development proposals. Plant replacement trees elsewhere on site at the landscaping stage of the project.	20	C2
T5	Weeping Willow	6	500#	6.00	3	4	3	2	0	M	F	Topped at 4m. Associated re-growth. Bifurcates at 1m.	No work required at this time.	20+	C1
T6	Sycamore	16	700#	8.40	8	8	8	8	8	M	G	Balanced crown. Good vigour. Stem located in 1m Cypress hedge.	No work required at this time	30+	A1
T7	Oak	8	300#	3.60	8	1	4	4	1.5	EM	F	Off site. Squat crown suppressed to North from T8.	No work required at this time	30+	C1
T8	Sycamore	13	570#	6.84	5	5	5	5	6	M	P/F	In decline. Stem Ivy covered. Reduced vigour. Moderate deadwood. Balanced form.	No work required at this time	20+	B1/C1
T9	Sycamore	13	580#	6.96	4	3	5	3	5	M	F	Balanced crown. Reduced vigour. Moderate deadwood.	No work required at this time	20+	B1/C1
T10	Sycamore	15	720#	8.64	9	9	9	9	4	M	G	Balanced form. Good vigour. Old pruning wounds fully occluded.	No work required at this time	30+	A1
T11	Sycamore	16	800#	9.60	5	9	9	7	4.5	M	G	Balanced crown. Slight bias to the south. Good vigour. Minor epicormic growth.	No work required at this time	30+	A1
T12	Sycamore	15	850#	10.20	6	6	6	6	6	M	G	Balanced crown. Slight bias to the south. Good vigour. Minor epicormic growth Stem damage, fence wire occluded well.	No work required at this time	30+	B1
T13	Beech	19	720	8.64	6	6	6	6	2	EM/M	G	Trifurcates at 1.5m. Good vigour. Balanced crown	Remove to accommodate development proposals. Plant replacement tree elsewhere on site at the landscaping stage of the project.	30+	B1

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* For groups of trees, the stem diameter of the largest tree in the group is generally used
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					N	S	E	W							Grade
T14	Lime	10	340	4.08	3	3	3	3	1	EM	G	Balanced form. May become suppressed from T13.	Remove to accommodate development proposals. Plant replacement tree elsewhere on site at the landscaping stage of the project.	30+	C1
G3	Pine, Birch, Alder, Willow, Cherry, Aspen and Rowan	8	50-250 range	0.60 to 3.00	2	2	2	2	0	Y	G	Structure planting established well.	Remove to accommodate development proposals. Plant replacement trees elsewhere on site at the landscaping stage of the project.	30+	C2
G4	Field Maple, Birch, Whitebeam, Atlantic Cedar and Tulip Tree.	4-7	100-290	1.20 to 3.48	2	2	2	2	1	Y	G	Structure planting established well.	Remove to accommodate development proposals. Plant replacement trees elsewhere on site at the landscaping stage of the project.	30+	C2
G5	Lime and Horse Chestnut	16	440-450 range	5.28-5.40	4	5	4	4	2	EM/M	G	Four trees in group. Stem wounding – mower. Good vigour. Minor deadwood. Bird box in canopy. Some trees with defects as annotated on survey drawing.	Remove to accommodate development proposals. Plant replacement trees elsewhere on site at the landscaping stage of the project.	30+	B2/C2
G6	Norway Maple and Lime	15	110-510 range	1.32-6.12	4	4	4	4	3	EM/M/	F	Four trees, 1 in decline. Average form and condition spp. Bird box in canopy.	Remove to accommodate development proposals. Plant replacement trees elsewhere on site at the landscaping stage of the project.	30+	B2/C2
G7	Horse Chestnut, Norway Male and Lime	14.5	400-580 range	4.80-6.96	6	6	6	6	2	EM/M	F	Average vigour and form for spp. Horse Chestnut has bleeding canker. Minor deadwood and stem wounds. Bird Box on canopy.	Remove to accommodate development proposals. Plant replacement trees elsewhere on site at the landscaping stage of the project.	30+	B2/C2

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Denotes estimated DBH where access was not possible

Ht: Approximate height of tree from ground level in metres
Branch Spread: Extent of canopy spread in metres to each of the four cardinal points
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					N	S	E	W							Grade
G8	Goat Willow and Sycamore	9	50 - 100 range	0.60 – 1.20	2	2	0	2	0	Y	F	Self seeded scrub. Elongated stems/ Creates boundary feature.	Remove on site stems as necessary to accommodate development proposals. Prune retained canopies back as necessary. Plant replacement trees elsewhere on site at the landscaping stage of the project.	30+	C2
T15	Birch	11	150	1.80	1.5	1.5	1.5	1.5	0	Y/EM	G	Balanced form and good vigour. Potential to develop into nice specimen.	Remove to accommodate development proposals. Plant replacement tree elsewhere on site at the landscaping stage of the project.	30+	C1
T15A	Oak	16	#850	10.20	8	8	8	8	5	M	F/G	Good example of species located just outside the assumed site boundary fence on adjacent railway.	No work required at this time	40+	A1
T16	Birch	13	330	3.96	2	2	0	2	2	EM	F	Balanced form and good vigour. Potential to develop into nice specimen.	No work required at this time	30+	C1
G9	Lombardy Poplar	27	Topo 300 – 800 Range	3.60 to 9.60	4	4	4	4	3	M	G	Strong visual and boundary feature. Good form and vigour. Lower level Horse Chestnut. In group.	No work required at this time	30+	B2
G10	Sycamore and Norway Maple	17	Range 300 to 600	3.60 to 7.20	5	3	3	3	3	M	F	Boundary feature. Some stems Ivy covered. Average form and vigour for spp. Poorly pruned away from adjacent property.	Trees would benefit from a tree specific pruning schedule in advance of the erection of plot scaffolding to ensure suitable clearance from working areas.	30+	B2

NOTE: The Category Grade applied to trees surveyed is consistent with the recommendations within Table 1 of BS5837: 2012, however this does not necessarily correlate with the visual importance of a tree within the wider landscape, nor does it dictate which trees should be retained at the cost of quality development. Where trees are to be lost to accommodate a development, recommendations will be made such as to provide suitable mitigation and compensation, and to integrate the development into the wider landscape.

Key to Abbreviations & Headings

T. No.: Tree number (T = Tree, G – Group, W = Woodland, H = Hedge, Cpt. = Compartment)
Stem DBH (Diameter at Breast Height): Measured at 1.5m above ground level*
Ht Crown Clearance: Canopy ground clearance
Structural Condition: Description of any observed defects
Cat. Grade: Tree quality assessment in accordance with BS5837: 2012

Species: Common name used
Root Protection Area Radius: Root Protection Area as per BS5837: 2012
Age Class: Y = Young, EM = Early Mature, M = Mature, OM = Over mature, D = Dead
Preliminary Recommendations: Made in respect of known / intended use of the site
* For groups of trees, the stem diameter of the largest tree in the group is generally used
Denotes estimated DBH where access was not possible

Ht: Approximate height of tree from ground level in metres
Branch Spread: Extent of canopy spread in metres to each of the four cardinal points
P (Physiological) Condition: G = Good, F = Fair, P = Poor, D = Dead
Est. (yrs): Estimated remaining contribution in years

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Site:	P.846 Northenden Campus, Sale Road, M23 0DD	Surveyor:	Helen Sullivan Rob Armitage	 Landscape Trees Ecology
Client:	Miller Homes	Survey Date:	21st April, 2017 Updated: 2nd February 2021	
Brief:	Tree Survey to BS5837:2012	Survey Conditions:	Mainly dry with rain spells	

Page 5 of 6

T. No	Species	Ht (m)	Stem DBH (mm)	RPA Radius (m)	Branch Spread				Ht Crown Clearance (m)	Age Class	P Condition	Structural Condition & General Comments	Preliminary Recommendations (not to be actioned without a valid planning consent)	Est. (yrs)	Cat
					N	S	E	W							Grade
T17	Sycamore	15	620	7.44	5	3	4	4	3	M	P	Reduced vigour. Included union with signs of bark lifting and necrosis at 3m from bacterial canker. Located over building.	No work required at this time	10	C1
T17A	Ash	16	#680	8.16	7	7	7	7	6N	M	F	Bifurcates at 3m. Past pollard. Located in adjacent property garden.	No work required at this time	30+	B2
T17B	Sycamore	15	#500+ 500+ 500	10.39	6	6	6	6		EM	F	Relatively good example of species located on boundary. Multi-stemmed. Fence engulfed into main stem.	No work required at this time	30+	B2
G11	Norway Maple, Sycamore and Lime	16	400 to 550 range	4.80 – 6.60	5	5	5	5	2	M	F	Boundary feature. Some stems Ivy covered. Average form and vigour for spp. Poorly pruned away from adjacent property. Minor stem wounding from mower damage.	Remove one Sycamore and one Norway Maple adjacent to proposed plot as indicated on the attached plans. Plant replacement tree elsewhere on site at the landscaping stage of the project. Trees would benefit from a tree specific pruning schedule in advance of the erection of plot scaffolding to ensure suitable clearance from working areas.	30+	B2
T18	London Plane	20	#1100	13.20	12	12	12	12	6	M	F	Fair form and condition for spp. located on the boundary line. Unsure of ownership.	No work required at this time	30	B1
T19	Sycamore	18	610	7.32	6	6	6	6	1	M	F	Balanced form and vigour. Minor deadwood.	No work required at this time	30	B1
G12	Lime, Horse Chestnut and Sycamore	16	310-700 range	3.72 to 8.40	5	5	5	5	1	EM/M	G	Strong boundary feature. Horse Chestnut x 2 suppressed by other trees.	No work required at this time	30+	B2

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Page 6 of 6

T. No	Species	Ht (m)	Stem DBH (mm)	RPA Radius	Branch Spread				Ht Crown Clearance (m)	Age Class	P Condition	Structural Condition & General Comments	Preliminary Recommendations (not to be actioned without a valid planning consent)	Est. (yrs)	Cat
				(m)	N	S	E	W							Grade
G13	Birch, Pine, Hawthorn, Willow and Field Maple	13	100-170	1.20 to 2.16	2	2	2	2	0	Y	G	Boundary feature, structure planting. Good condition and vigour. Prominent feature.	Remove sections as necessary to accommodate proposed plots. Prune retained canopies back as necessary to allow sufficient working area.	30+	B2
T20	Sycamore	18	770	9.24	8	8	8	8	3	M	F/G	Three main leaders from 3m, all with upright form. Prominent landscape feature.	No work required at this time	30+	A1
G14	White Poplar and Sycamore	26	#800	9.60	8	8	8	8	6	M	F/G	Two mature White poplars located immediately adjacent site in adjoining rear garden. Prominent trees. No evident structural defects but unable to inspect stems thoroughly for restricted access.	No work required at this time	30+	A2/B2
G15	Sycamore, Horse Chestnut, Spruce and Goat Willow	15	#500	6.00	6	6	6	6	2	EM/M	F	Intermittent trees in rear gardens and some low value scrub on site.	Remove any trees on site.		B2/C2

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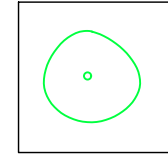
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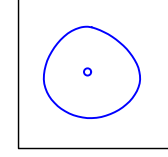
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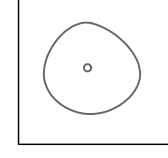
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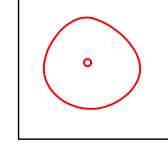
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to be retained



Existing tree - Category B
to be retained



Existing tree - Category C
to be retained



Existing tree to be removed

B	Report update	09/11/21
A	Updated to layout "2131-SL-01-B - Proposed overall site layout"	22/06/21
REV	DESCRIPTION	DATE

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CLIENT:
Miller Homes

PROJECT:
Northenden Campus, Sale Road, M23 0DD

DRAWING TITLE:
Tree Survey and Tree Removal Plan
(Sheet 2 of 2)

SCALE: 1:500 @A1	DRAWN BY: CP	DRAWING No: P.846.21.10	REV: B
DATE: 02/02/2021	CHKD BY: RA		

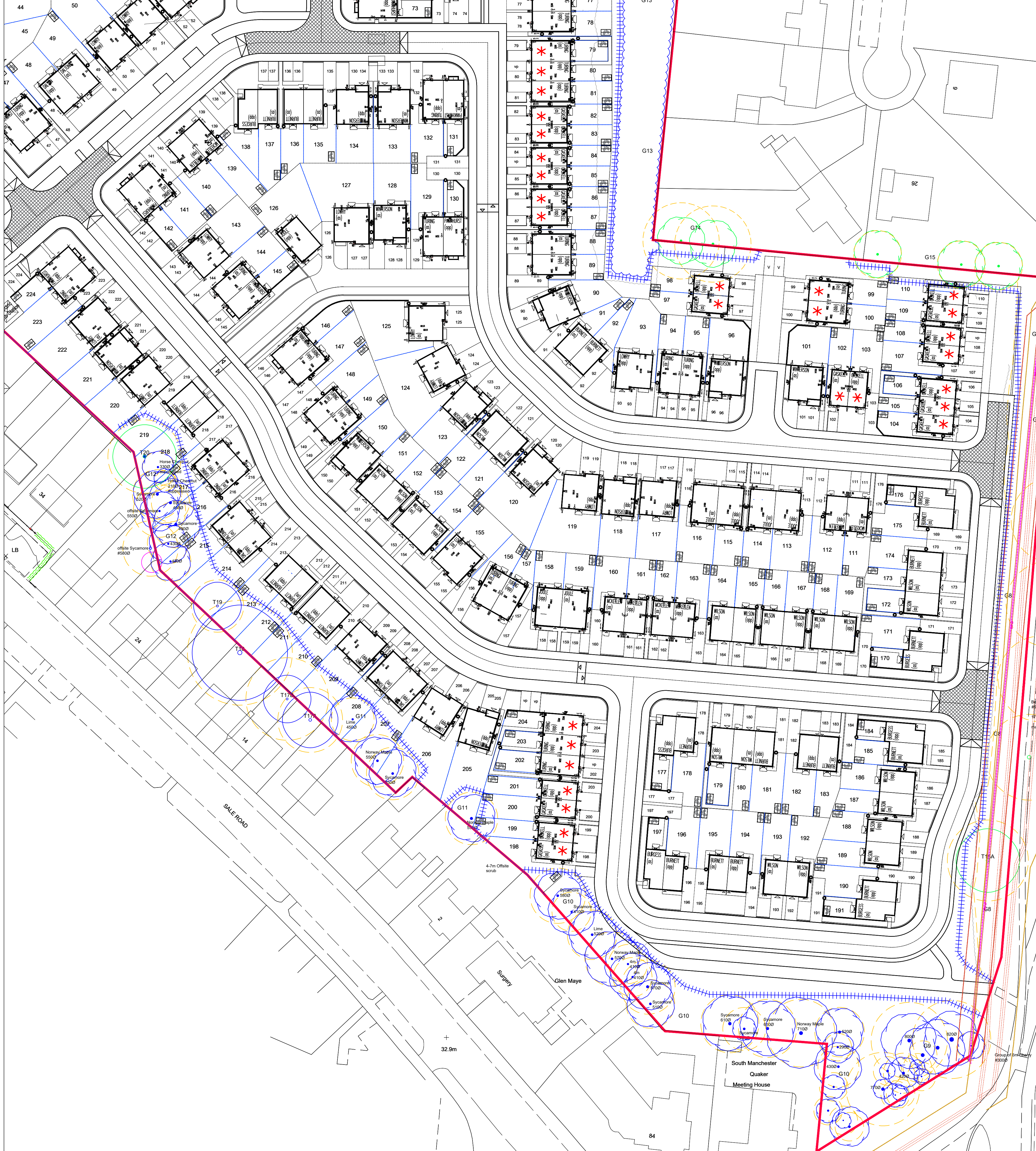


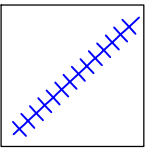
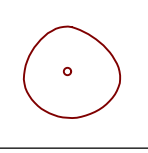
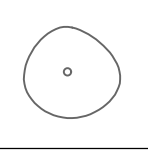
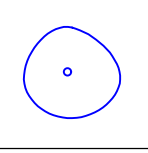
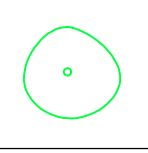
Table 3: Potential Impacts to Retained Trees & Proposed Protection Measure / Mitigation

Potential Impact / Work Stage		Affecting	Protection Measure / Mitigation	Description / Specification and Procedure
Remediation/ Demolition and Initial Tree Works				
1	Removal of existing Standing	T6, T7, T8, T9, T10, T11, T12 and G14	- Shallow excavations - Supervised excavations - Root pruning.	Excavations only permitted to the depth of the existing hard standing sub-base to retain any potential roots beneath this surface. Works to be supervised by the project arboriculturist. Project arboriculturist to attend site prior to the commencement of any excavations to oversee the works to ensure no significant root damage occurs. Any exposed roots to be pruned by the project arboriculturist as necessary using hand tools appropriate to the task.
2	Demolition of existing buildings	T11 and T12	- Careful working methodology - Supervised demolition	Buildings to be demolished whilst existing hard standing is still intact. Materials to be pulled away from tree stems. Any pruning works to be carried out in advance of any demolition works. Project arboriculturist to attend site prior to the commencement of any demolition works to oversee the works to ensure no significant damage to above or below ground structures of the trees.
Construction Phase				
3	Proposed buildings/ plots	G10, G11, G14 and G15	- Supervised excavations - Root pruning - Fencing attached to scaffolding	Project arboriculturist to attend site prior to the commencement of any excavations for foundations to oversee the works and ensure no significant root damage occurs. Exposed roots <25mm to be pruned cleanly back to the soil surface as promptly as possible to avoid any prolonged exposure. Roots >25mm to be assessed on site by the project arboriculturist as to whether pruning is safe / appropriate. Tree protection fencing to be attached to elevation scaffolding where specified to prevent vehicular/ plant access within the root protection areas and prevent physical damage to the stems.

DO NOT SCALE

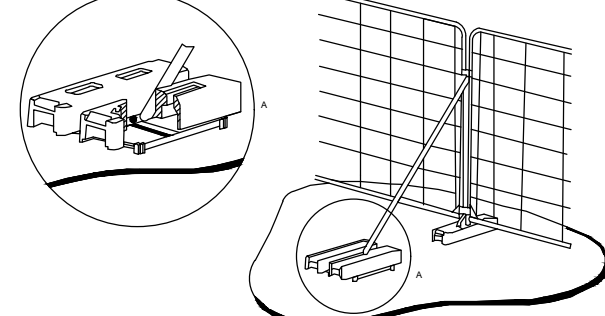
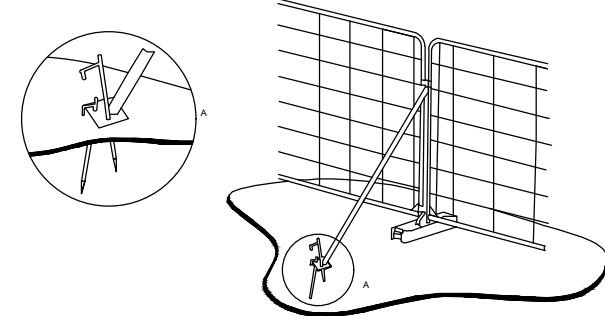
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KEY



TREE PROTECTION FENCING

Figure 3 Examples of above-ground stabilizing systems



C	Report update	09/11/2
B	Updated to layout "2131-SL-01-H - Proposed overall site layout"	20/10/2
A	Updated to layout "2131-SL-01-B - Proposed overall site layout"	22/06/2
REV	DESCRIPTION	DATE

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DRAWING TITLE:
Tree Protection Measures
(Sheet 2 of 2)

SCALE: 1:500 @A1	DRAWN BY: CP	DRAWING No:	REV
DATE: 02/02/2021	CHKD BY: RA	P.846.21.11	C