arbtech

Arboricultural Impact Assessment to BS5837:2012

Manchester High School for Girls.

Grangethorpe Road,
Manchester,
M14 6HS.

08 September 2023

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Introduction

Arbtech Consulting Limited (Arbtech) received written instruction on the 29th of August 2023 from Alan Simpson of 10 Architect to attend Manchester High School for Girls, Grangethorpe Road, Manchester, M14 6HS; grid reference, SJ 85315 94518 (site) to undertake an arboricultural survey following BS5837:2012 guidance to assess trees, hedges and major shrub groups growing on and within influencing distance of the site and to produce a Schedule of trees, Tree Constraints Plan, Arboricultural Impact Assessment.

Executive Summary

This report describes the extent and effect of the proposed development at the site on individual trees and groups of trees within and adjacent to the site.

Site Location



Figure 1: OS Map (Bing Maps).



Figure 2: Aerial Image of site with approximate red line boundary of school (Google Earth).

Trees within the site were surveyed; using a methodology guided by British Standard 5837:2012 'Trees in relation to design, demolition and construction – Recommendations' ("BS5837").

General Information

Client: Manchester High School for Girls.

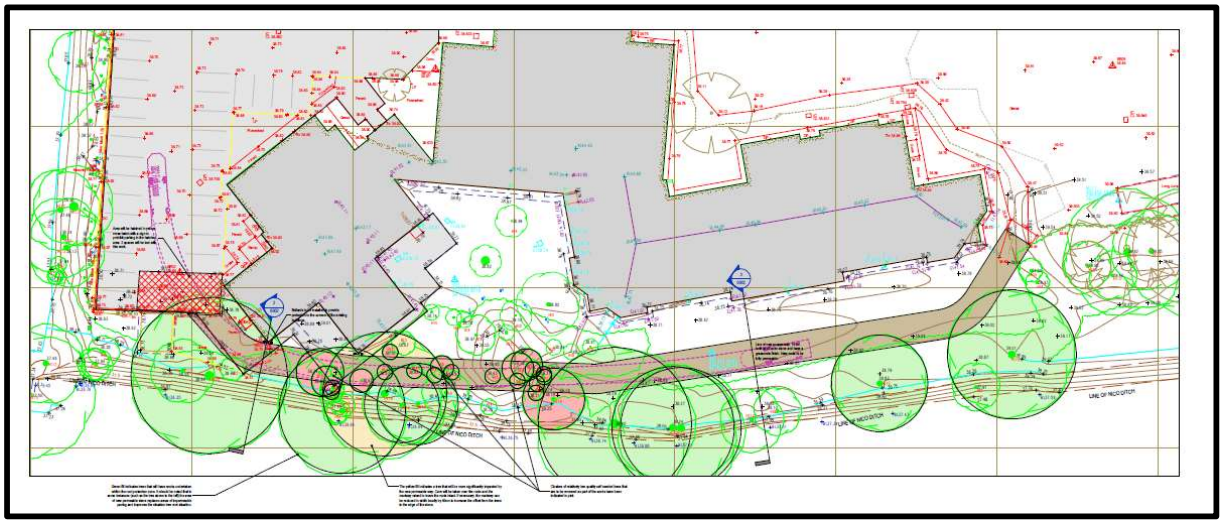
Site: Manchester High School for Girls, Grangethorpe Road, Manchester, M14 6HS.

Proposal description: Construction of access track at existing educational facility.

Table 1: Documents referred to.

Document	Reference No.
Topographical Survey	58967
Proposed layout drawing	MHCP-10A-V1-00-DR-A
Landscape master plan drawing	N/A
LPA pre-app comments	N/A
British Standard 5837:2012	“BS5837”
Arboricultural Impact Assessment	Arbtech AIA 01

Proposal



Tree Survey

Survey: An arboricultural survey to BS5837 of all trees within impacting distance of the site was undertaken by Ryan Wilson of Arbtech Consulting on 31st August 2023.

A total of 26 No. individual trees & 5 No. groups of trees were surveyed. Details for each of the trees surveyed are provided in the Schedule of Trees (see Appendix 1)

Table 2: Documents upon which this tree survey has been based

Document	Originator	Reference Number	Title
Survey base drawing	Malcolm Hughes Chartered Land Surveyors	58967	Topographical Survey

Limitations: The survey was made at ground level using visual observation only. Detailed examinations, such as climbing inspections and decay detection equipment were not employed, though may form part of the survey's management recommendations. Measurements were taken using specialist tapes, laser and GPS devices. Where this was not possible, measurements are estimated.

Scope: Pre-development tree surveys make arboricultural management recommendations based exclusively upon the individual tree or group of trees condition relative to their present context (*i.e. not in relation to the proposed development*).

Legal Status: No statutory protection check has been performed. BS5837 does not draw any distinction between trees subject to statutory protection, such as a Tree Preservation Order ("TPO"), and those trees without. This is principally because a detailed planning consent overrides any TPO protection. Consequently, we do not seek to offer any comparison between or infer any difference in the quality or importance of TPO trees and other trees.

* For more information on the surveyed trees please see Arbtech Consulting Ltd, Tree Survey Schedule (Appendix 1), Tree Survey Report and Tree Constraints Plan.

Arboricultural Impact Assessment

Table 3: Documents upon which this assessment has been based

Document	Originator	Reference Number	Title
Survey base drawing	Malcolm Hughes Chartered Land Surveyors	58967	Topographical Survey
Proposals	10 Architect	MHCP 10A-V1-00-DR-A-002	Proposed Site Plan

There are a number of issues that may need to be addressed in an arboricultural impact assessment between the trees and the proposed development, these are as follows:

- The effect and extent of the proposed development within the root protection areas (RPAs) of retained trees;
- The potential conflicts of the proposed development with canopies of retained trees; and
- The likelihood of any future remedial works to retained trees beyond which would have been scheduled as a part of usual management.

Table 4: Impacts upon the RPAs of retained trees

These impacts can be seen on the Arboricultural Impact Assessment drawing number Arbtech AIA 01.

Tree Number	Species	Structure	Incursion
T3	Lime	Access track	RPA
T4	Sycamore	Access track	RPA
T5	Sycamore	Access track	RPA
T6	Lime	Access track	RPA
T8	Lime	Access track	RPA

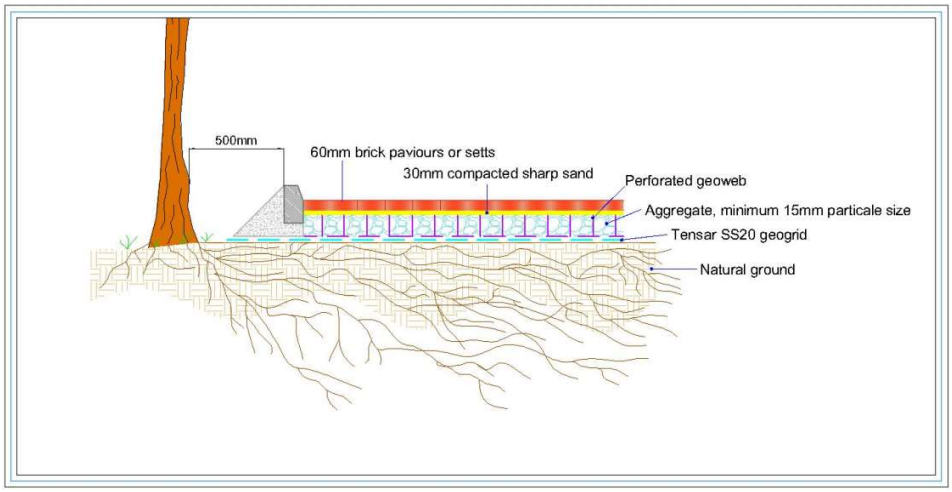
Tree Number	Species	Structure	Incursion
T9	Lime	Access track	RPA
T10	Sycamore	Access track	RPA
T16	Sycamore	Access track	RPA
T17	Sycamore	Access track	RPA
T18	Sycamore	Access track	RPA
T20	Sycamore	Access track	RPA
T21	Sycamore	Access track	RPA
T22	Ash	Access track	RPA
T25	Goat willow	Access track	RPA
G02	Various	Access track	RPA
G03	Various	Access track	RPA

Access track within RPAs

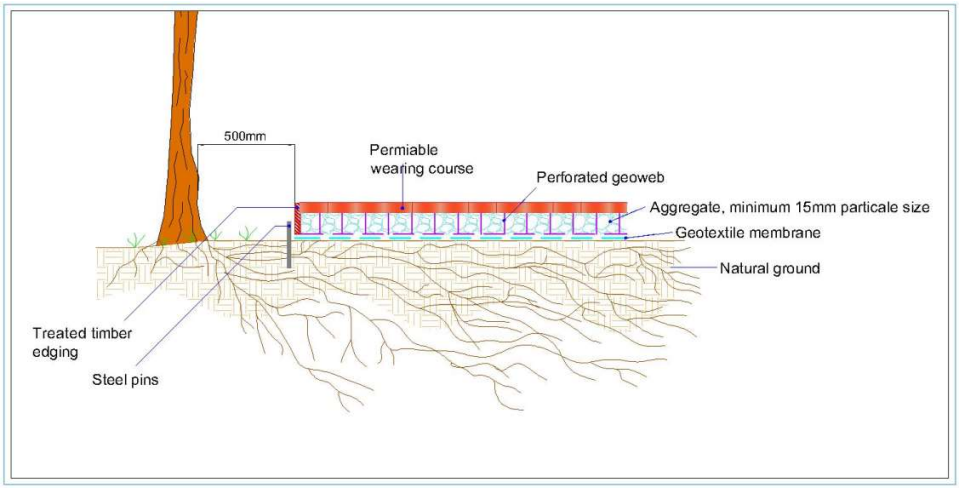
New hard surfacing to be situated within the RPAs of retained trees is to be designed with CellWeb™ in conjunction with arboricultural advice to accommodate the loading. The design will not require excavation however the removal of the turf layer or other surface vegetation will be acceptable if necessary

Prior to the installation of the hard surfacing within the RPAs vegetation may be removed using hand tools or sprayed with an approved non residual herbicide such as 'Glyphosate'.

NB: The use of a multi-dimensional confinement system will affect the finished level of the hard surfacing by raising the levels and needs to be taken into consideration when designing foundations and setting the finished floor level of adjacent buildings.



Typical cross section for multi-dimensional confinement system using kerb edging



Typical cross section for multi-dimensional confinement system using timber edging

Trees to be removed

The proposal requires the removal of one category C group of trees & the partial removal of one category C group of trees.

Table 5: Number of individual trees to be removed.

U	A	B	C
0	0	0	0

Table 6: Number of groups to be removed. () indicates partial removal.

U	A	B	C
0	0	0	1 (1)

Tree Works

For reasons of public safety, all tree works referred to herein must be carried out prior to any site personnel commencing works or any building materials being delivered.

Table 7: Summary of Tree Works

No.	Species	Works	Category
G02	Various	Prune back canopy to facilitate construction of access track	B1
G03	Various	Prune back canopy to facilitate construction of access track	B1
G04	Various	Partial removal of group	C12
G05	Laurel	Fell to ground level, remove stumps	C2

Notes

All tree work is to be undertaken in accordance with British Standard BS 3998:2010, Recommendations for tree work. All arising's are to be removed and the site is to be left as found. Care is to be taken of the ground around retained trees to make sure that it does not become compacted as a result of tree surgery operations. No equipment or vehicles such as timber Lorries, tractors, excavators or cranes shall be parked or driven beneath the crowns of any retained trees, to prevent subsequent compaction and root death.

Tree removal

A tree should be felled in one piece only when there is no significant risk of damage to people, property or protected species (see Annex A).
Where restrictions (e.g. lack of space, buildings, other features, land ownership or use, or other trees which are to be retained) cannot be overcome, trees should be dismantled in sections.
This also applies where a tall stump is being retained but where branches are to be removed/pruned.
Extensively decayed trees can be unpredictable when they are being felled, and special precautions should therefore be taken, such as the use of a winch to guide the direction of fall.

Stump removal – stump grinding

Stump grinding should be to a minimum of 300mm deep or to extend through the base of the stump leaving the major roots disconnected if the intention is to reduce the potential for the spread of Honey fungus.
The grinding residue should be treated as arising's and removed from site.
NOTE Mechanical destruction of a stump by stump grinding is less disruptive to the site than digging out.
The hole left by stump removal, should be filled with soil or other material. The filling should be appropriate for future site usage, and for any surface treatment that is to be installed.
Where future plant growth is desired, the backfill material should be firmed in 150 mm layers by treading, avoiding excessive compaction and destruction of the soil structure.

Stump removal - digging

Stump removal by digging out should include disposal/utilisation of woody material (see Clause **13**).
NOTE Whether done by hand or machine, digging out can cause severe disturbance of the site.
Where possible, when winching out a stump, a ground or other type of anchor should be used rather than a tree to be retained. If there is no alternative to using such a tree as an anchor, appropriate protective measures should be adopted.

After stump removal

The hole left by stump removal, whether by digging out or grinding, should be filled with soil or other material. The filling should be appropriate for future site usage and for any surface treatment that is to be installed.
Where future plant growth is desired, the back fill material should be firmed in 150mm layers by treading, avoiding excessive compaction and destruction of the soil structure.

Protected Species

Conservation Status of British Bats

The general consensus in Britain and Europe is that virtually all bat species are declining and vulnerable. Our understanding of population status is poor as there is very little historical data for most bat species. Certain species, such as the horseshoe bats, are better understood and have well documented contractions in range and population size.

Given this general picture of decline in UK Government within the UK Biodiversity Action Plan has designated five species of bats as priority species (greater and lesser horseshoe bats, barbastelle, Bechstein's and pipistrelle). These plans provide an action pathway whereby the maintenance and restoration of the former populations levels are investigated.

Legal Status of British Bats

Given the above position all British bats as well as their breeding sites and resting places enjoy national and international protection.

All bat species in the UK are fully protected under the Wildlife and Countryside Act 1981 (as amended) through inclusion in Schedule 5. All bats are also listed on Annex IV (and some on Annex II) of the EC Habitats Directive giving further, European protection. Taken together the act and Conservation of Habitats and Species Regulations 2012 (as amended)* make it an offence to; intentionally or deliberately kill, injure or capture (take) bats;

- Deliberately disturb bats (whether in a roost or not);
- Damage, destroy or obstruct access to bat roosts;
- Possess or transport a bat or any part of a bat, unless acquired legally;
- Sell, barter or exchange bats, or parts of bats

The legislation although not strictly affording protection to foraging grounds does protect roost sites. Bat roosts are protected at all times of the year whether or not bats are present. Any disturbance of a roost due to development must be licenced.

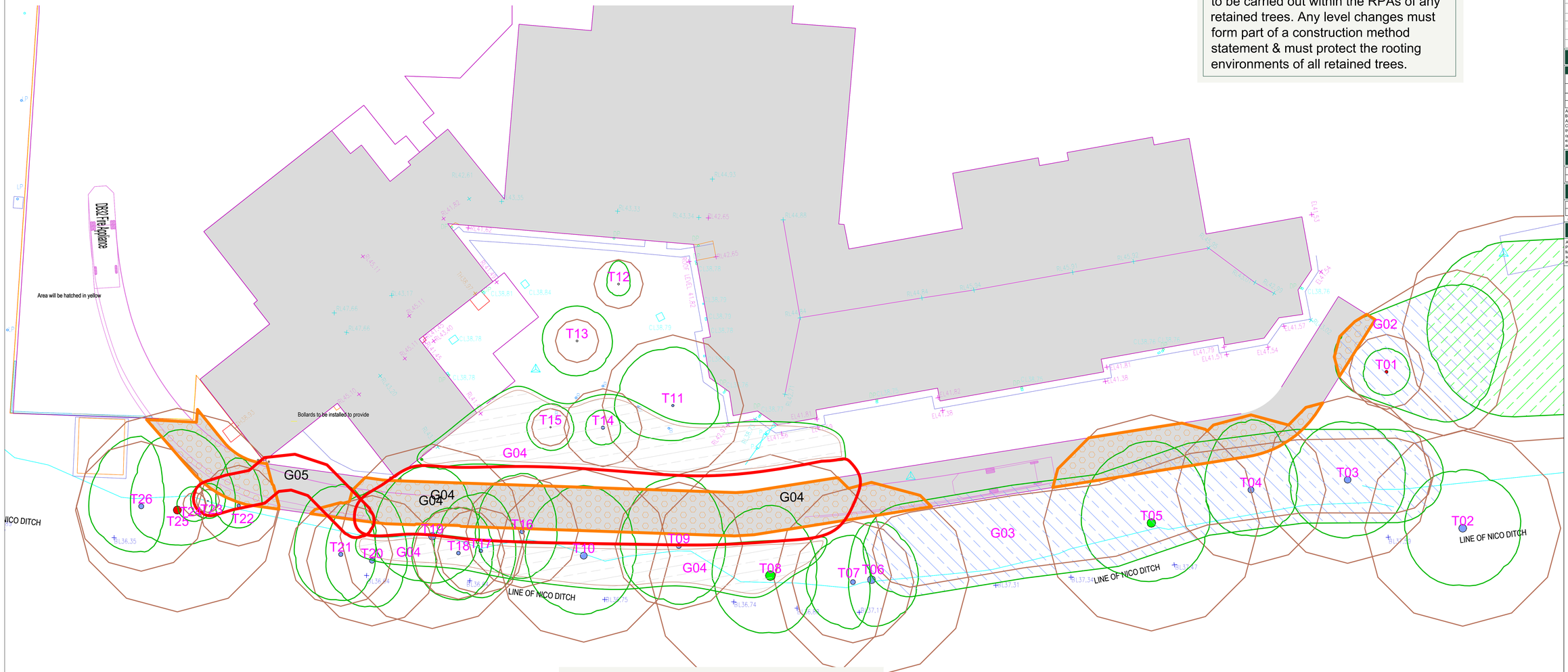
**the regulations that delivered by the UK's commitments to the Habitats Directive.*

Breeding birds

All nesting birds are protected under the Wildlife and Countryside Act (as amended) 1981, which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. Furthermore a number of birds enjoy further protection under that Act and are listed on Schedule 1 of the Act. These further protected birds are also protected from disturbance and it may be necessary to operate “no-go” buffer zones around such nests – typically out to 100m.

Planning policy guidance on the treatment of species identified as priorities under the biodiversity action programme suggests that local authorities should take measures to protect the habitats of these species from further decline through policies in local development documents and should ensure that they are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations.

Appendix 1: Arboricultural Impact Assessment Plan



Note: No unauthorised excavations are to be carried out within the RPAs of any retained trees. Any level changes must form part of a construction method statement & must protect the rooting environments of all retained trees.

Issue: Proposed access track is partially situated within the RPAs of trees T3, T4, T5, T6, T8, T9, T10, T16, T17, T18, T20, T21 T22 & T25.
Solution: A cellular confinement system (cell-web) will be used to construct the access track entirely above the existing soil level.

Indicative only

0m 1m 3m 5m 10m 15m 20m

Arboricultural Impacts

Impacts	Nos. of trees
Trees to be removed	0
Groups / Hedges to be removed (Partial removal of groups)	1 (1)
Trees with proposed incursions into RPAs	14
Groups / Hedges with proposed incursions into RPAs	2
Trees that will require pruning	0
Groups / Hedges that will require pruning	0
Trees to be transplanted	0
Groups / Hedges to be transplanted	0

No.	Species	Proposed structure	Incursion
T3	Lime	Access track	RPA
T4	Sycamore	Access track	RPA
T5	Sycamore	Access track	RPA
T6	Lime	Access track	RPA
T8	Lime	Access track	RPA
T9	Lime	Access track	RPA
T10	Sycamore	Access track	RPA
T16	Sycamore	Access track	RPA
T17	Sycamore	Access track	RPA
T18	Sycamore	Access track	RPA
T20	Sycamore	Access track	RPA
T21	Sycamore	Access track	RPA
T22	Ash	Access track	RPA
T25	Goat willow	Access track	RPA
G02	Various	Access track	RPA
G03	Various	Access track	RPA

Tree Work Schedule

No.	Species	Works	Category
G02	Various	Prune canopy back to facilitate construction of proposed access track	B
G03	Various	Prune canopy back to facilitate construction of proposed access track	B
G04	Various	Partial removal of group	C1
G05	Laurel	Partial removal of group	C1

All tree work is to be undertaken in accordance with British Standard BS 3998:2010 Tree work - Recommendations.
All arising's are to be removed and the site is to be left as found.
Care is to be taken of the ground around retained trees to make sure that it does not become compacted as a result of tree surgery operations. No equipment or vehicles such as timber lorries, tractors, excavators or cranes shall be parked or driven beneath the crowns of any retained trees, to prevent subsequent compaction and root death.

No. of individual trees to be removed

U	A	B	C
0	0	0	0

No. of groups / hedges to be removed

U	A	B	C
0 (0)	0 (0)	0 (0)	1 (1)

( ) = Partial removal of a groups

Arboricultural Method Statement

All tree work is to be undertaken in accordance with British Standard Please refer to Arbtech Consulting Ltd. Tree Schedule, Arboricultural Method Statement and Tree Protection Plan, for full details of all surveyed trees and how all aspects of the development maybe implemented without detriment to retained trees.

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Project:
Manchester High School for Girls
Grangethorpe Road
Manchester
M14 6HS

Client:
Manchester High School for Girls

Drawing:
Arboricultural Impact Assessment

Based on:
MHCP-10A-V1-00-DR-A-0002

Drawing No: Arbtech AIA 01
Rev:

Date: Sep 2023
Scale: 1:125 @ A0
Drawn: AST

Key:

Tree Nos.:	T1	Tree Canopies:		Trunks:	
RPAs:		Category 'U' trees:		Category 'A' trees:	
Category 'B' trees		Category 'C' trees:		Trees to be removed:	G05

All dimensions should be checked on site. No dimensions are to be scaled from this drawing. Please notify us of any discrepancies found. Arbtech Consulting Ltd. cannot be held responsible for inaccuracies in the base drawing in which this plan is based.
This drawing is designed to reflect the principles of the layout or design only, and relates only to the protection of retained trees.
This drawing is not to be read as a definitive part of the engineering or construction designs or method statement. Arbtech Consulting Ltd. cannot be held responsible for any inaccuracies in the information shown on this drawing and for any standards or regulatory requirements relating to proposed structures, hard surfacing or underground services.
The drawing was produced in colour - a monochrome copy should not be relied upon.

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Appendix 2: Tree Survey Schedule

BS5837:2012 Tree Survey

Client: Manchester High School for Girls
Project: Manchester High School for Girls
Survey Date: 31/08/2023
Surveyor: Ryan Wilson

Arbtech Consulting Ltd.
Unit 3, Well House Barns,
Chester Road
Chester
Chesire
CH4 0DH
Phone: 01244661170

Tree and Tag No / Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations / Survey Comment	Cat ERC
G01										Estimated Measurements	
Various *See comments for details*	18	1	780	N 7.5 E 7.5 S 7.5 W 7.5	0 0 0 0	M	A: 275.3 R: 9.36	Good	C: Good S: Good B: Good	Group consists of 5 large mature lime and 1 sycamore trees. The under story consists of hazel, elder, elm, holly and cherry laurel. Group forms a boundary woodland adjacent to the southern boundary. Measurements taken from the largest representative tree in the group.	A.1 40+ yrs
G02										Estimated Measurements	
Various *See comments for details*	7	2	420 (Eq)	N 4 E 4 S 4 W 4	0 0 0 0	M	A: 79.9 R: 5.04	Good	C: Good S: Good B: Good	Group consists of 4 holly trees with interspersed elm and ash. Measurements for taken from the largest representative of the group.	B.1 20+ yrs
G03										Estimated Measurements	
Various *See comments for details*	9	1	260	N 4 E 4 S 4 W 4	0 0 0 0	EM	A: 30.6 R: 3.12	Good	C: Good S: Good B: Good	Group consists of 2 sycamore trees, 2 ash trees and an understory of cherry laurel, birch, and immature ash and sycamore saplings. Group measurements taken from group average.	B.1 20+ yrs
G04										Estimated Measurements	
Various *See comments for details*	5	1	220	N 3 E 3 S 3 W 3	0 0 0 0	M	A: 21.9 R: 2.64	Good	C: Good S: Good B: Good	Large group consists of predominantly self set, young, ash, holly, and sycamore with interspersed yew, cherry laurel, Leyland cypress, and Pittosporum forming an understory. Group measurements taken from largest representative tree.	C.1.2 10+ yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contribution

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)		Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
G05											Estimated Measurements	
Various *See comments for details*	3	1	80	N E S W	1.5 1.5 1.5 1.5	0 0 0 0	EM	A: 2.9 R: 0.96	Good	C: Good S: Good B: Good	Group of laurel that forms part of the boundary Measurements estimated from the largest representative in the group.	C.2 10+ yrs
T01											Estimated Measurements	
Common Ash *Fraxinus excelsior*	6.5	1	260	N E S W	2 2 2 2	2 2 2 2	SM	A: 30.6 R: 3.12	Poor	C: Poor S: Good B: Good	Tree showing moderate ash dieback progression with more than 15% foliage loss in the crown. Recommendation: remove to ground level within 6 months.	U <10 yrs
T02											Estimated Measurements	
Common Horse Chestnut *Aesculus hippocastanum*	14	1	680	N E S W	5 5 5 5	4 4 4 4	M	A: 209.2 R: 8.16	Fair	C: Fair S: Not visible B: Not visible	Tree located off site. Wasps nest also blocking access to the tree. Ivy is obstructing view of the stem and base. Foliage showing signs of guignardia disease (inconsequential).	B.1 20+ yrs
T03											Estimated Measurements	
Common Lime *Tilia europaea*	16	1	580	N E S W	5 5 5 5	0 0 0 0	M	A: 152.2 R: 6.96	Fair	C: Fair S: Good B: Not visible	Access to the base obstructed by epicormic growth, typical of species. Crown showing signs of reduced vitality and early yellowing of the leaves. Large pieces of deadwood (greater than 5cm in diameter) in less than 10% of the crown.	B.1 20+ yrs
T04											Estimated Measurements	
Sycamore *Acer pseudoplatanus*	16	1	520	N E S W	6 4 4 4	5 5 5 5	M	A: 122.3 R: 6.23	Good	C: Good S: Good B: Not visible	Access to the base obstructed by vegetation. Full view of the stem is obstructed by ivy.	B.1 20+ yrs
T05											Estimated Measurements	
Sycamore *Acer pseudoplatanus*	16	1	750	N E S W	7 5 5 6	5 5 5 5	M	A: 254.5 R: 9	Good	C: Good S: Good B: Fair	Minor basal wound on buttress root (7cm-5cm). Occluding well.	A.1 40+ yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contribution

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T06										Estimated Measurements	
Common Lime *Tilia europaea*	14	5	676 (Eq)	N 5 E 4 S 4 W 2	3 3 3 3	M	A: 206.9 R: 8.11	Good	C: Good S: Good B: Fair	Tree located off site. Base has multiple bark included unions due to multiple stems.	**B.1** 20+ yrs
T07										Estimated Measurements	
Common Lime *Tilia europaea*	14	3	422 (Eq)	N 4 E 1.5 S 4 W 4	3 3 3 3	M	A: 80.7 R: 5.06	Good	C: Good S: Good B: Fair	Tree located off site. Base has multiple bark included unions due to multiple stems.	**B.1** 20+ yrs
T08											
Broad-Leafed Lime *Tilia platyphyllos*	16	1	840	N 6 E 4 S 5 W 5	4 4 4 4	M	A: 319.2 R: 10.07	Good	C: Good S: Fair B: Good	Large fissure feature at the base on the Northern side of the base extends upwards by 2m, possible historic occluded wound.	**A.1** 40+ yrs
T09											
Broad-Leafed Lime *Tilia platyphyllos*	16	2	442 (Eq)	N 6 E 4 S 5 W 5	4 4 4 4	EM	A: 88.4 R: 5.3	Good	C: Good S: Good B: Fair	Tree located on the boundary fence. Twin stems growing from ground level with an acute union, full view of the union obstructed by vegetation.	**B.1** 20+ yrs
T10											
Sycamore *Acer pseudoplatanus*	16	1	600	N 6 E 4.5 S 5 W 5	4 4 4 4	M	A: 162.9 R: 7.2	Good	C: Good S: Good B: Good	Tree located off site. Minor ivy cladding of the mid stem.	**B.1** 20+ yrs
T11											
Smooth Japanese Maple *Acer palmatum*	5	6	490 (Eq)	N 5 E 4 S 3 W 5	2 2 2 2	M	A: 108.6 R: 5.87	Good	C: Good S: Fair B: Good	Minor bark damage caused by squirrels on the upper eastern stems.	**B.1.2** 20+ yrs

Age Classifications: N Newly planted; EM Early Mature; Y Young; M Mature; SM Semi-mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contribution

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T12											
Smooth Japanese Maple *Acer palmatum*	4	2	170 (Eq)	N 2 E 1 S 1 W 1	2 2 2 2	M	A: 13.1 R: 2.04	Good	C: Fair S: Good B: Good	Upper crown contains minor deadwood (less than 5cm in diameter). Less that 15% foliage loss.	**C.1.2** 10+ yrs
T13										Estimated Measurements	
Chinese Privet *Ligustrum lucidum*	3	1	150	N 3 E 3 S 3 W 3	1 1 1 1	M	A: 10.2 R: 1.8	Good	C: Good S: Not visible B: Not visible	Base on lower stems obstructed from view by ivy. Multiple rubbing branches within the crown.	**C.2** 10+ yrs
T14											
Lawson Cypress *Chamaecyparis lawsoniana*	7	1	270	N 1.5 E 1.5 S 1.5 W 1.5	1 1 1 1	EM	A: 33 R: 3.24	Good	C: Good S: Not visible B: Not visible	Base and stem both obstructed from view by ivy.	**B.1** 20+ yrs
T15											
Common Ash *Fraxinus excelsior*	7	1	130	N 2 E 2 S 2 W 2	1 1 1 1	EM	A: 7.6 R: 1.55	Good	C: Good S: Good B: Good	No notable features.	**C.1** 10+ yrs
T16											
Sycamore *Acer pseudoplatanus*	16	1	390	N 5 E 3 S 4 W 4	4 4 4 4	M	A: 68.8 R: 4.67	Good	C: Good S: Good B: Good	No notable features.	**B.1** 20+ yrs
T17											
Sycamore *Acer pseudoplatanus*	10	1	300	N 5 E 3 S 4 W 4	4 4 4 4	M	A: 40.7 R: 3.59	Good	C: Good S: Good B: Good	Tree located off site	**B.1** 20+ yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contribution

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T18											
Sycamore *Acer pseudoplatanus*	10	1	320	N 4 E 3 S 4 W 4	4 4 4 4	M	A: 46.3 R: 3.83	Good	C: Good S: Good B: Good	Tree located off site	**B.1** 20+ yrs
T19											
Sycamore *Acer pseudoplatanus*	13	1	640	N 6 E 4 S 4 W 5	4 4 4 4	M	A: 185.3 R: 7.68	Good	C: Good S: Good B: Good	Tree located off site	**B.1** 20+ yrs
T20										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	12	2	453 (Eq)	N 6 E 3 S 4 W 4	4 4 4 4	M	A: 92.7 R: 5.43	Good	C: Good S: Good B: Not visible	Tree located off site within drainage ditch.	**B.1** 20+ yrs
T21										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	12	1	360	N 6 E 3 S 4 W 4	4 4 4 4	M	A: 58.6 R: 4.31	Good	C: Good S: Good B: Not visible	Tree located off site within drainage ditch.	**B.1** 20+ yrs
T22										Estimated Measurements	
Common Ash *Fraxinus excelsior*	11	1	280	N 4 E 2 S 2 W 2	4 4 4 4	EM	A: 35.5 R: 3.36	Good	C: Good S: Good B: Not visible	Tree located off site.	**B.1** 20+ yrs
T23										Estimated Measurements	
Bird Cherry *Prunus padus*	5	1	80	N 1.5 E 1.5 S 1.5 W 1.5	3 3 3 3	Y	A: 2.9 R: 0.96	Good	C: Good S: Good B: Good	Tree located off site.	**C.1** 10+ yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contribution

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T24										Estimated Measurements	
Bird Cherry *Prunus padus*	5	1	80	N 1.5 E 1.5 S 1.5 W 1.5	3 3 3 3	Y	A: 2.9 R: 0.96	Good	C: Good S: Good B: Good	Tree located off site.	C.1 10+ yrs
T25										Estimated Measurements	
Goat Willow *Salix caprea*	12	2	707 (Eq)	N 7 E 5 S 3 W 4	5 5 5 5	M	A: 226.2 R: 8.48	Good	C: Good S: Poor B: Poor	Off site tree. Two previous snapped out leaders at the base are decaying, no assessment of the decay was done due to no access. Large bark included union between two remaining leaders. Extending approximately 1m. Recommendation: Remove to ground level within 6 months.	U <10 yrs
T26										Estimated Measurements	
Bird Cherry *Prunus padus*	13	1	450	N 6 E 2 S 4 W 4.5	4 4 4 4	M	A: 91.6 R: 5.39	Good	C: Good S: Good B: Good	Off site tree.	B.1 20+ yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contribution

Appendix 3: Contact Details

Name	Position	Company	Contact
	Client	Manchester High School for Girls	https://www.manchesterhigh.co.uk/
	Tree Officer		
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	Main contractor		
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