

Arboricultural Impact Assessment

St Gabriel's, Oxford Place, Manchester, M14 5RP

Prepared for:

McLAREN PROPERTY

Our Ref: 22/AIA/MAN/33

June 2022

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1.0 INSTRUCTION

- 1.1 We have been instructed by McLaren Property to carry out an Arboricultural Impact Assessment (AIA) in order to assess the development proposal in relation to trees in accordance with the principles of British Standard 5837 'Trees in Relation to Design, Demolition & Construction - Recommendations' 2012.
- 1.2 We are instructed to prepare a report in order to provide information to assist all parties involved in the planning process to make balanced judgements regarding arboricultural features in relation to the proposed development at St Gabriels, Oxford Place, Manchester. As such, all trees within influencing distance to the development proposal both on and adjoining the site have been surveyed and are listed within a Tree Survey Schedule (**Appendix 1**) and plotted on all accompanying plans.
- 1.3 The stage 1 tree survey was carried out in February 2022 by Russell Pearce, Consultant to Tree Solutions Ltd. Our appraisal of the mechanical integrity of trees on the site is enough to inform the current project. The assessment of trees is carried out from ground level without invasive investigation and the disclosure of hidden defects cannot therefore be expected. Whilst the survey is not specifically commissioned to report on matters of tree safety, we report obvious defects that are significant in relation to the existing and proposed land use. We do not carry out detailed safety inspections unless specifically instructed to do so in writing and have not carried out such inspections of trees on the proposal site.
- 1.4 Thirty-two individual trees (T1–T32) and three groups (G1–G3) were surveyed and mapped on a Preliminary Tree Constraints Plan and Impact Assessment Plan Ref: 22/AIA/MAN/33 Drawing Nos. 1&2 at **Appendix 2/3**. All arboricultural information recorded during the survey is presented within a schedule at **Appendix 1**.
- 1.5 The Arboricultural Impact Assessment is based on the site layout plan Ref: 10349-SHP-Z0-A-G100-SK-PL-001 provided by the project architects Simpson Haugh.

2.0 STATUTORY CONTROLS

- 2.1 A search on Manchester City Council (MCC) interactive map revealed that no tree on or adjoining the site are subject to a Tree Preservation Order, the land does however fall within Victoria Park Conservation Area. As such, statutory planning consent is required prior to undertaking any works to trees not granted consent under this planning application.

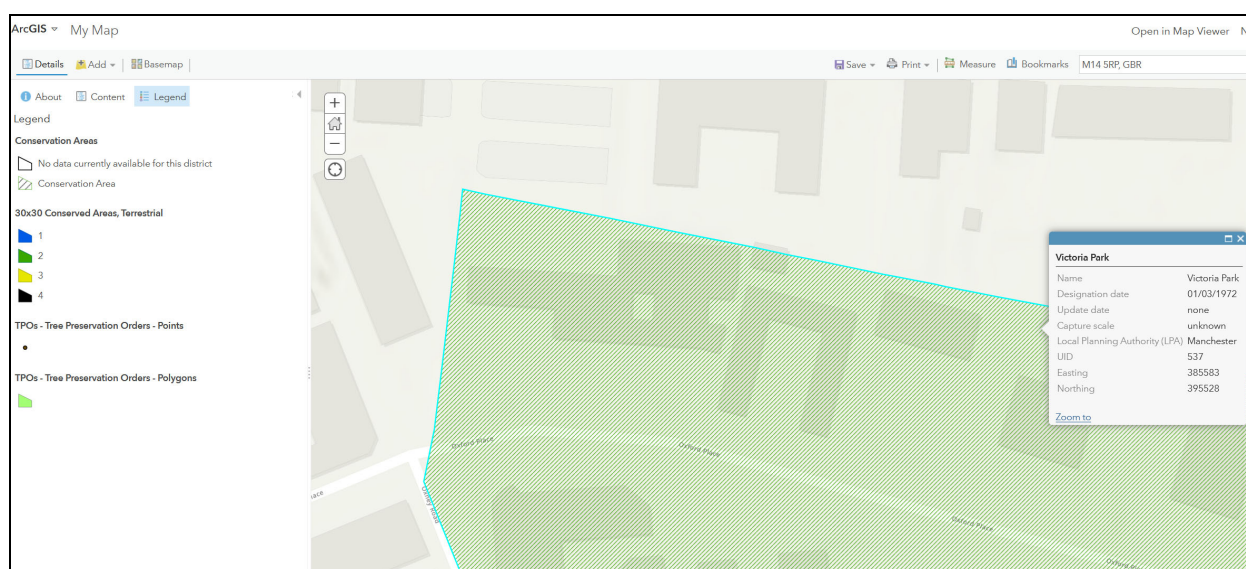


Plate 1 – Extract from MCC interactive maps showing no TPO but whole site within Victoria Park Conservation Area

2.2 Protected Species

- 2.2.1 Mature trees often contain cavities, crevices and hollows that offer potential habitat for species such as bats and barn owls. Both are afforded protection under the Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Bats are also protected under The Conservation of Habitats and Species Regulations 2010 (as amended). Refer to Rachel Hacking Ecology report for further details.

2.3 Wildlife Habitats

- 2.3.1 Trees and hedgerows of most species provide valuable nesting sites for a wide range of birds, and it is likely that nesting birds will be present on the site during the period March to September.

3.0 THE SITE

- 3.1 The site contains the former St Gabriel's Hall, Chapel, Woodthorpe Hall and St David's Hall all of which are no longer in use. The grounds contain a number of trees with the most prominent located along the southern boundary adjacent to Oxford Place. Those internal to the site are small and badly managed and offer no visual amenity to the Conservation Area.

4.0 DEVELOPMENT PROPOSAL

- 4.1 Student accommodation comprising of refurbishment of existing buildings and erection of two new blocks.

5.0 GENERAL CONSTRAINTS DATA - CONSTRUCTION EXCLUSION ZONES (CEZ's)

5.1 GENERAL

- 5.1.1 The three phases of an AIA were outlined in Section 1. In addition, during the development process for retention trees, there may be three and even four constraints to consider: Construction Exclusion Zone (CEZ's):

- CEZ 1: Root Protection Area (see 5.2)
- CEZ 2: Tree Crown Protection (see 5.3)
- CEZ 3: Tree Dominance (see 5.4)
- CEZ 4: New Tree Planting Zone (see 5.5)

CEZ's are explained below:

5.2 CEZ 1: ROOT PROTECTION AREA (RPA)

- 5.2.1 The RPA, calculated in m², should be protected before and during any demolition/construction works. This ensures the effective retention of trees by safeguarding a reliable quantum of functioning tree roots. The RPA is based on a radial measure from the centre of the tree stem, which is calculated by multiplying the stem diameter by a factor of twelve or by the (mean stem diameter²) x number of stems for multi-stemmed trees. With the AIA 1, the RPA is only shown indicatively on the preliminary TCP, as its shape may be subject to amendment as the design progresses.
- 5.2.2 During the AIA 2, the derived radial measure is converted by the arboriculturalist into the actual area to be protected, having due regard to prevailing site conditions and how these may have affected the tree(s), particularly in relation to factors affecting their likely rooting disposition. The RPA for each tree should initially be plotted as a circle centred on the base of the stem. Where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution.
- 5.2.3 The means of protecting the RPA will include the installation of tree protective fencing prior to the start of any demolition or construction work on site. The prohibition of various activities within the RPA must be adhered to (e.g. mechanical excavation, soil stripping, fire lighting, material storage, lowering levels and creating excessive sealed surfacing) and may include the use of temporary ground protection and/or special engineering solutions where construction is proposed near to retention trees or within the RPA.

5.3 CEZ 2: TREE CROWN PROTECTION ZONE

- 5.3.1 This is the area above ground occupied by the crown (branches) of the tree, along with allowances for working space (safe working area) and if appropriate, for future growth. The extent of CEZ 2 is determined by considering the existing and future crown spread of the tree(s), bearing in mind the possibility of this being modified by an acceptable quantum of pruning.

5.4 CEZ 3: TREE DOMINANCE ZONE

- 5.4.1 This is the area above ground dominated by the tree in relation to issues of shading, seasonal debris and safety apprehension. This area is calculated by considering the height and spread of the tree relative to the proposed buildings, cross referenced with intended end use. As such, what is assessed is the likely psychological effect of the tree on the end user.

5.5 CEZ 4: NEW PLANTING ZONE

- 5.5.1 Refer to Re-Form landscape architecture landscape proposals.

6.0 SURVEY METHODOLOGY

- 6.1 The method used in the preparation of this report is based on the principles of BS 5837: 2012.
1. Tree heights were surveyed to the nearest 1m.
 2. Trunk diameters were measured by use of forestry girth tape
 3. The category assessment (Table 1) on which the trees is based include current and long-term arboricultural, landscape, cultural and conservation values (BS5837: 2012). This table can be found at **Appendix 1**
 4. For clarity, the grading system is summarised from **Table 2** of the BS as follows:

U grade – trees for removal, effective for less than 10 years

A grade – trees of high quality and value, effective for more than 40 years

B grade – trees of moderate quality and value, effective for more than 20 years

C grade – trees of low quality and value, effective for 10 years

Note: We have indicated colour coding on the drawing and therefore a monochrome copy should not be relied on.

6.2 SOIL ASSESSMENT

- 6.2.1 A soil assessment should be undertaken by a competent person to inform decisions relating to:
- the root protection area (RPA)
 - tree protection
 - new planting design; and
 - foundation design to take account of retained, removed and new trees (potential soil subsidence/heave)

Tree Solutions do not undertake soil assessments and the client is advised to seek specialist advice in this respect.

7.0 JUXTAPOSITION OF TREES AND STRUCTURES

7.1 Below ground constraints

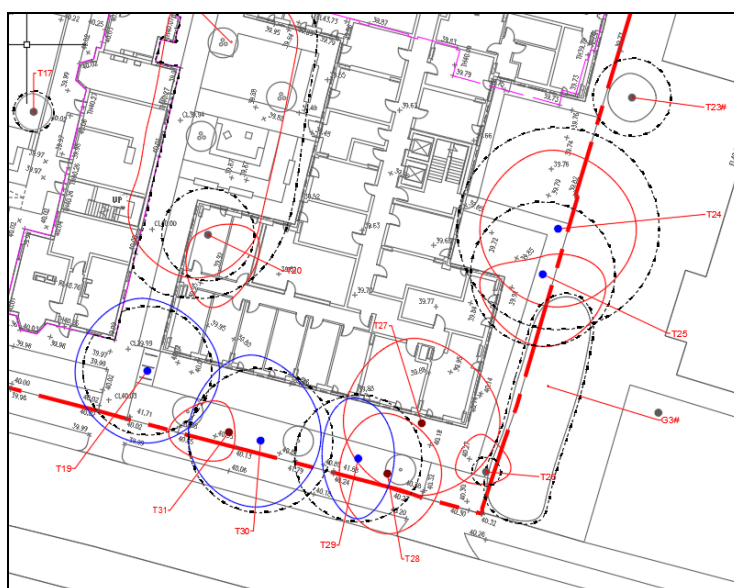
- 7.1.1 The below ground constraints are generally summarised as the root protection area (RPA). The shape of the RPA and its exact location will depend upon arboricultural considerations including likely tolerance of the tree to root disturbance; morphology and disposition of the roots when known influenced by past or existing site conditions; soil type and structure; and topography and drainage.
- 7.1.2 The purpose of the RPA is to prevent physical damage to tree roots and to prevent damage to the soil structure. Tree roots are damaged by soil compaction, changes in soil levels or soil contamination which could reduce tree health and/or stability.
- 7.1.3 Root patterns are affected by topography and characteristics of the soil or substrate. Where trees are located within proximity to existing hard standing or underground physical barriers, they are unlikely to have an even distribution of lateral roots due to restrictions in root growth created by compacted sub-grades beneath. The RPA of trees along the frontage have been modified and are shown running 2m within the road to their south and extending further within the site where a more favourable rooting environment exists. Trees adjacent to the existing buildings have also been modified around the buildings as root growth is unlikely in these areas. All other RPA's have been plotted unmodified as there were no significant underground barriers present to prevent good radial root spread.

7.2 Underground Services

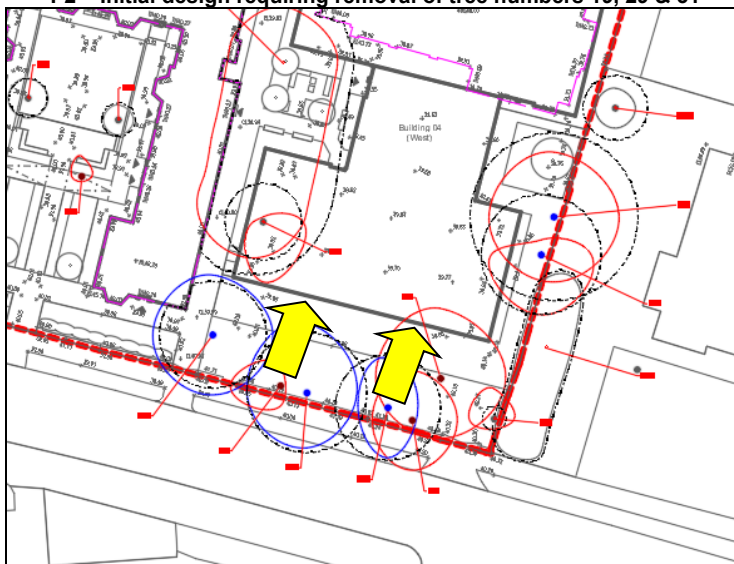
- 7.2.1 We have considered the broad implications of the provision of underground services but the locations of existing and proposed were not identified on the plans supplied by the Project Architect and in this regard, our advice is of a general nature.
- 7.2.2 Drainage and service runs may need to be constructed within the rooting areas of retained trees. If this is a requirement of the development it will be necessary to retain significant roots and methods of excavation, such as thrust boring or hand digging, may need to be adopted to ensure that these impacts are acceptable.
- 7.2.3 As with foundation design, low impact construction methods for services installation are now well established. For more information regarding underground services, reference should be made to the National Joint Utilities Group (NJUG) Publication No. 10. Volume 4 'Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees' 2007

8.0 DEVELOPMENT IMPACT TO TREES

- 8.1 Tree Solutions carried out a stage one preliminary tree survey and provided the project architect with a report in which all existing trees and their respective Root Protection Areas (RPA) were identified and plotted on a tree constraints and draft impact assessment plan. The architect has incorporated the design and layout advice contained within the stage 1 survey and input from Tree Solutions by amending the design to incorporate all trees along the frontage with no adverse construction impact. We are therefore satisfied that the layout is in accordance with The National Planning Policy Framework (2021), Manchester City Council Planning Policies and recommendations contained with BS5837: 2012.



P2 – Initial design requiring removal of tree numbers 19, 29 & 31



P3 – Amended design with new build unit 4 moved further north allowing retention of tree numbers 19, 29 & 31

- 8.2 In order to accommodate the proposed development it will be necessary to remove a total of 12 trees as listed in the table below and within the survey schedule at *Appendix 1*. Of these trees 8 have been categorised a 'C' grade, i.e. unremarkable trees of limited merit or those only offering transient landscape benefit due to their location internal to the site or impaired condition. Such trees should not form a material consideration of planning. A total of 4 trees have been categorised as 'B' grade i.e. those of moderate quality and value as they offer some landscape benefit to the site and wider locale. The trees are located on the east and western boundaries are not as visually prominent as those along the site frontage. Removal of these trees will be mitigated by the proposed new planting identified within the landscape plan that will provide good succession planting ensuring quality tree cover on the site in the future. There are also 5 trees identified as 'U' category i.e. those in such impaired condition that they cannot be realistically retained as living trees in the context of the current land use for longer than 10 years. These trees require remedial work to satisfy the landowners legal obligations under the Occupiers Liability Act 1984 irrespective of this planning proposal.

TREE/GROUP CATEGORY	NUMBER OF INDIVIDUAL TREES	NUMBER OF INDIVIDUAL TREES TO BE REMOVED FOR DEVELOPMENT	NUMBER OF INDIVIDUAL TREES TO BE REMOVED FOR H&S	NUMBER OF TREES RETAINED
A	0	N/A	N/A	N/A
B	12	4	0	8
C	15	8	0	7
U	5	N/A	5	0
Total	32	12	5	15

- 8.3 The best quality and most visually significant trees are located along the site frontage. These trees provide a valuable mature tree lined landscape to the development and their long-term retention has been a pivotal consideration throughout the design phase. Every effort has been made to retain them in order to ensure the amenity value they afford the locale is maintained well into the future. The trees will coexist well with the proposed development and provide an attractive setting as well as an important screen to the road beyond. They will be considered a significant asset by future occupants, and we can see no issues with over dominance or shading that could lead to pressure to fell or prune. Moreover, the trees would be the responsibility of the management company who would ensure they are maintained appropriately in the interests of the site and surrounding land use so the amenity value they afford the Conservation Area is maintained.



P4 – Trees along Oxford Place to be retained within context of new development

9.0 PROPOSED REVISIONS TO THE SCHEME

- 9.1 We advise that all proposed revisions having implications for trees should be referred to us for review.

10.0 CONCLUSIONS

10.1 BS 5837: 2012 contains clear and current recommendations for a best practice approach to the assessment, retention and protection of trees on development sites. The proposed development has followed this guidance by:

- Seeking arboricultural advice and undertaking a phase 1 preliminary tree survey in order to inform the layout and design of the proposed development
- Respecting the constraints posed to development of the site by high or moderate quality trees
- Acting upon arboricultural advice throughout the design process in order to obtain the best development proposal whilst considering the current and future tree requirements
- Listening to stakeholders and amending plans to ensure the long-term retention of the most visually significant trees along the road frontage
- No trees of any significant value are to be removed
- All tree protection measures will be detailed within an Arboricultural Method Statement & Tree Protection Plan to be submitted if made a condition of consent

11.0 LIMITING CONDITIONS

Unless stated otherwise:

Information contained in this report covers only those trees that were examined and reflects the condition of those trees at the time of the inspection.

The inspection is limited to visual examination of the subject trees from ground level only and without dissection, excavation, probing or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject trees may not arise in the future.

This report has been prepared for the sole use and benefit of the client. Any liability of Tree Solutions shall not be extended to any third party.

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Appendix One

Tree Survey Schedule

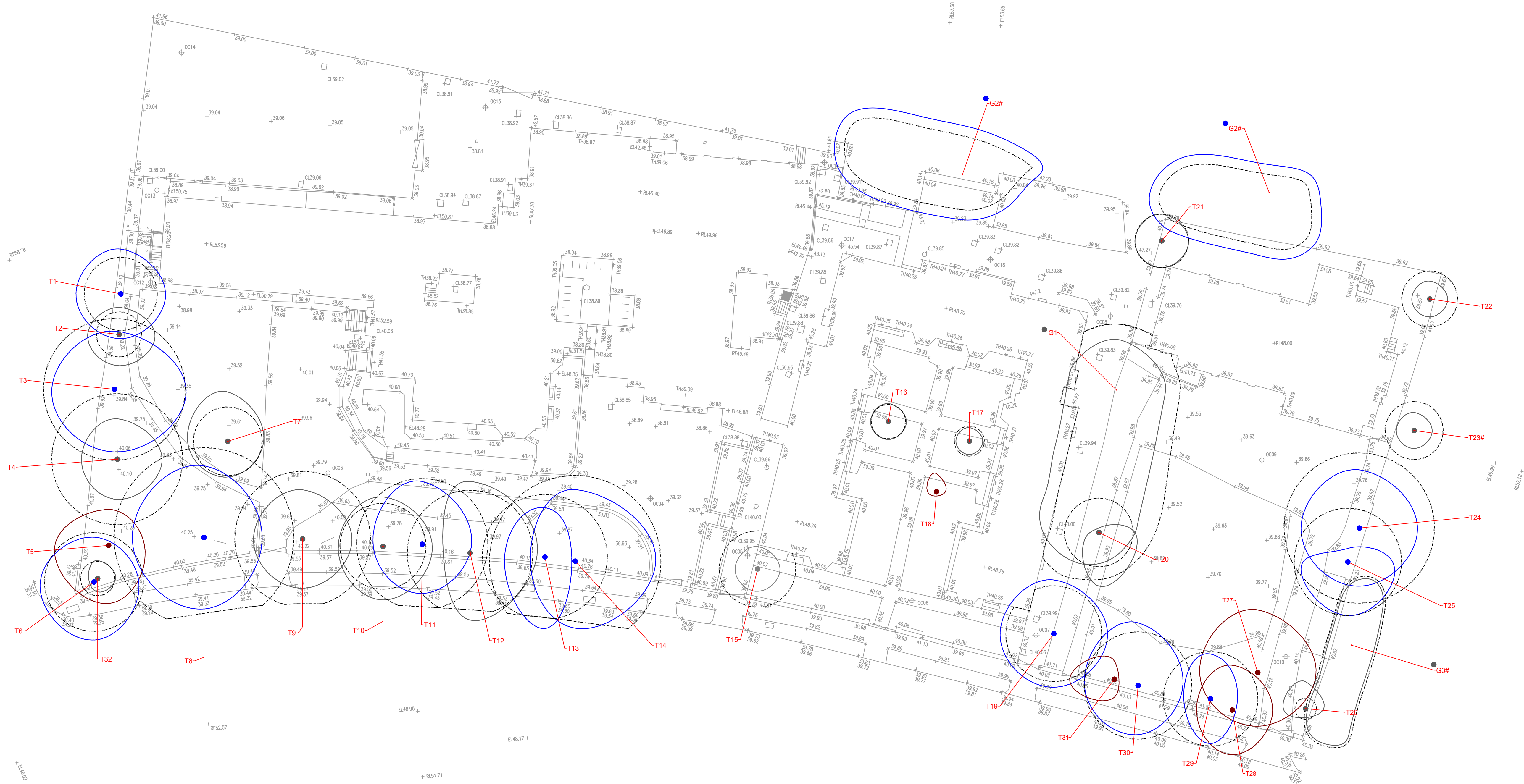
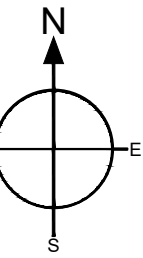
TREE SURVEY SCHEDULE (BS5837: 2012)												Tree Solutions													
ST GABRIEL'S, OXFORD PLACE, MANCHESTER											Arboricultural Consultants														
Site											Surveyor					RUSSELL REARCE					Page 2 of 2				
Client	McLAREN PROPERTY										Assessment Dates					Feb-22									
Brief	ARBORICULTURAL IMPACT ASSESSMENT										Viewing Conditions					CLEAR									
											Job Reference					22/AIA/MAN/33									
Tree Number	Name	Age	Height (m)	Crown clear	North	East	South	West	Diameter (mm)	Vitality	Comments	E.R.C	Management	Category	RPA (m)	RPA (m²)									
T17	Fastigate Beech	Y	8.5	0.5	1.5	1.5	1.5	1.5	140	Good	Good form and vitality. No defects noted.	10+	No action required.	C1	1.6	8.9									
T18	Crab apple	Y	3.5	0.5	2	1	0	1	80	Poor	Good form and vitality. Partially uprooted, only stake and tie retaining tree in position.	<10	Remove for H&S	U	N/A	N/A									
T19	Sycamore	EM	16	3	6	6	6	6	440	Good	Good form and vitality. No defects noted. No access to stem. DBH estimated Ivy covering stem and primary branch framework.	20+	Sever ivy at base to allow for reinspction	B1	5.3	87									
T20	Hybrid Poplar	SM	16	3	0	4	6	1	320	Moderate	Good vitality. Poor form. Suppressed asymmetric crown due to proximity of adjacent trees. Heavily weighted to the south. Significant dogleg in stem at 4m.	10+	Remove for development	C1	3.8	46									
T21	Sycamore	Y	12	2	3	3	3	3	250	Moderate	Dense ivy covering stem and branch framework. Self sewn directly adjacent to telegraph pole. Ivy suppressing crown. Reduced crown density	10+	Remove for development	C1	3	28									
T22	Elder	EM	6	2	2	2	2	2	260	Moderate	Self sewn tree abutting boundary wall. Low aesthetic value. Moderate vitality.	10+	No action required.	C1	3	30									
T23	Hawthorn	SM	6	2	2	2	2	2	270	Good	3rd party tree. Good form and vitality. No access - all dimensions estimated.	10+	No action required.	C1	3.2	33									
T24	Lime	M	22	3	6.5	6.5	6.5	6.5	700	Moderate	Lapsed pollard at 8m with slender extension growth. Tip dieback throughout crown. Minor deadwood throughout crown. Dense ivy covering base of stem. Brambles and vegetation limited access to stem- DBH estimated.	20+	Remove for development	B1	8.4	221									
T25	Sycamore	EM	16	5	1.5	5	6	5	500	Moderate	Lapsed pollard at 4m with slender extension growth. Some bark dysfunction in close proximity to primary union. Large deadwood in centre of crown. Asymmetric crown suppressed by adjacent tree.	20+	Remove for development	B1	6	113									
T26	Snake Bark Maple	Y	6	0	3	2	1	2.5	100	Moderate	Suppressed by adjacent tree. Asymmetric crown. Low aesthetic value.	10+	Remove for development	C1	1.2	4.5									
T27	Ash	EM	22	7	7	6.5	6	6.5	540	Moderate	Contorted peripheral growth consistent with ash dieback. Codominant bifurcation at 3.5m is acute included union with long slender stems distal. Deadwood throughout crown. Limited useful safe life	10+	Remove for H&S	U	N/A	N/A									
T28	Sycamore	M	12	2.5	5	4.5	5	4	350	Poor	Gnarled old suppressed tree with poor vitality. Low aesthetic value. Limited useful safe life.	<10	Remove for H&S	U	N/A	N/A									
T29	Lime	EM	15.5	3	5	3	5	3	360 150 210	Good	Good form and vitality. No defects noted. Minor deadwood throughout. Multistemmed from base. x1 stem covered by ivy	20+	Crown clean	B1	5.3	88									
T30	Lime	EM	14	2	7	5	5.5	6	500	Moderate	Good form and vitality. Very dense epicormic growth prevented access to stem. Previously reduced. Large deadwood within crown.	20+	Remove all dead wood Remove epicormic growth to allow inspection of stem	B1	6	113									
T31	Hawthorn	EM	6.5	0	2	0.5	2	5	315	Moribund	Moderate vitality and form. Large open basal cavity with significant decay. Previously topped at 3m. Suppressed by adjacent tree. Advanced state of decline.	<10	Remove for H&S	U	N/A	N/A									
T32	Lawson cypress	Y	8	0	2	2	1.5	1	160	Good	Good form and vitality. Slightly suppressed by adjacent tree.	10+	No action required	C1	1.9	11.6									
G1	Sycamore x 5	EM	16	4	5.5	5.5	5.5	5.5	550	Good	Poor form. Previously topped at 2m. Very slender regrowth with hazard beam form just above topped points. Exposure could lead to failure. Deadwood within crowns. Reduced aesthetic value.	0	Remove for development	C2	6.6	136									
G2	Mixed	SM	10	1	5	5	5	5	300	Good	3rd party trees overhanging site. Sycamore, alder, pine, ash. DBH estimated. No access.	20+	No action required.	B2	3.6	40									
G3	Lawson cypress	SM	12	0	2.5	2.5	2.5	2.5	230	Good	3rd party linear group of approximately 15. No access. DBH avg estimated. Good form and vitality. No defects noted.	10+	No action required.	C2	2.7	24									

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
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 category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>			See Table 2
	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 those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant 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)	See Table 2
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	See Table 2
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 value	See Table 2

Appendix Two

Preliminary Tree Constraints Plan



Legend

Root Protection Area
Modified to Account for
Site Features



- Category A (High Quality)
- Category B (Moderate Quality)
- Category C (Low Quality)
- Category U (Dead/Dying/In Decline)

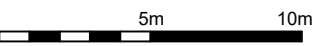
NOTE: Tree/group numbers marked with an # have approximate locations.

Client: McLaren Property	
Project: St Gabriels, 1 Oxford Place, Rusholme, Manchester, M14 5RP	
Title: Preliminary Tree Constraints Plan	
Scale: 1:250 @ A1	Date: February 2022
Drawn By: NB	Revision: -
Job Ref: 22/AIA/MAN/33	Drawing No: 01

Do not scale from this drawing all dimensions to be checked on site.

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Appendix Three

Impact Assessment Plan

