

**TREE SURVEY AND
ARBORICULTURAL IMPACT ASSESSMENT
to BS 5837:2012
at
Land off Elizabeth Street
Cheetham Hill
Manchester
Greater Manchester
M8 8BB**

Client:
Kier Trade City LLP

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Contents

1. Introduction	3
1.1 Purpose of the Report	3
1.2 Scope of the Report	3
1.3 Tree Survey Details and Methodology	3
2. Status of the Trees	4
3. Tree Survey Details	5
3.1 Tree Retention Categories	5
4. Arboricultural Impacts.....	6
4.1 The Proposals	6
4.2 Trees to be Removed	6
4.3 Potential Impacts to Retained Trees	7
5. Tree Protection / Mitigation Measures	8
6. Requirement for an Arboricultural Method Statement.....	9
7. Conclusions	10
Appendix 1: Tree Descriptions and Recommendations.....	12
Appendix 2: Explanation of Tree Descriptions.....	13
Appendix 3: General Guidelines	16
Appendix 4: Glossary of Terms & Abbreviations	17
Appendix 5: Author Qualifications.....	19
Appendix 6: Tree Constraints Plan	21
Appendix 7: Arboricultural Implications Plan.....	22

1. Introduction

1.1 Purpose of the Report

- 1.1.1 JCA Limited has been instructed by **Kier Trade City LLP** to carry out a Tree Survey and Arboricultural Impact Assessment for the proposed development at the **Land off Elizabeth Street, Cheetham Hill, Manchester**.
- 1.1.2 The development proposals involve the construction of nine industrial units with associated parking, access roads, landscaping and associated facilities. For the construction to proceed, ground stabilisation methods are required to be undertaken under all proposed units and hard surfacing on the site.
- 1.1.3 The purpose of this report is to assess the impact of the development proposals on the existing tree stock and outline mitigation actions where appropriate, to minimise potential damage to retained trees.

1.2 Scope of the Report

- 1.2.1 The arboricultural survey and report conforms to the most recent specifications outlined in BS5837: 2012 *Trees in relation to design, demolition and construction – Recommendations* and is based on an objective assessment of the existing vegetation.
- 1.2.2 Tree data collected during the survey has been overlaid onto the proposed designs to create the *Arboricultural Implications Plan*, which can be found at **Appendix 7**. This provides the basis for which this Arboricultural Impact Assessment has been prepared.

1.3 Tree Survey Details and Methodology

- 1.3.1 The survey took place during November 2021 and was conducted by:
Robert Armitage BSc (Hons) Arboriculture, MA ArborA.
- 1.3.2 All trees were inspected from ground level. Those trees within the site boundary with a stem diameter above 75mm have been included. However, numerous groups comprising specimens under 75mm have also been included. Where applicable, trees outside the site boundary, but close enough to be affected by the proposed development, are also included.
- 1.3.3 Tree data was collected in accordance with Sections 4.4 and 4.5 of BS5837: 2012. Full details of all trees surveyed are recorded in the tables at **Appendix 1** which can be cross referenced with the Tree Constraints Plan at **Appendix 6**. A full explanation of the tables can be found at **Appendix 2**.

- 1.3.4 Measurements were obtained using clinometers, specialist tapes or electronic distometers. Where this was not possible, measurements were estimated to the best ability of the surveyor, which is highlighted at **Appendix 1** with a '#' symbol.
- 1.3.5 JCA endeavour to provide accurate information and will always take measurements unless inhibited by restricted access or other mitigating circumstances.

2. Status of the Trees

- 2.1 A check was made with **Manchester City Council** in September 2021 to determine whether any of the trees surveyed as part of this report are subject to any statutory controls.
- 2.2 We are informed that no trees within our survey are subject to any Tree Preservation Orders (TPO) and the site is not located within a Conservation Area.
- 2.3 However, prior to any works being undertaken to trees, those instructing and proposing to carry the work should satisfy themselves that all appropriate consents are in place to prevent potential breach of legislation.
- 2.4 Any removals that are permitted by the Planning Department as part of the planning process for development will be exempt from any statutory protections once permission has been consented.

3. Tree Survey Details

3.1 Tree Retention Categories

3.1.1 Below is a summary of the surveyed vegetation with retention categories identified in accordance with BS5837: 2012. For a full explanation of the retention categories, please refer to **Appendix 2 (Section A2.3)**.

Retention Category	Trees	Groups	Totals
B	2	3	5
C	2	6	8
Totals	4	9	13

3.1.2 As a general rule, those trees listed as retention category 'A' or 'B' are the most valuable items and as such the removal of these is likely to be met with resistance by the Local Planning Authority (LPA).

3.1.3 Those items listed as retention category 'C' are of lesser value and the removal of these is generally less likely to be met with resistance by the LPA.

4. Arboricultural Impacts

4.1 The Proposals

4.1.1 We have been supplied with Drawing Ref: **21039-FRA-XX-XX-DR-A-10- 0003 - Proposed Site Plan.dwg**, which details the proposed layout.

4.1.2 The tree data has been overlaid onto the proposed designs to create the Arboricultural Implications Plan, which can be found at **Appendix 7**. This provides the basis for which this Arboricultural Impact Assessment has been prepared.

4.2 Trees to be Removed

Tree Ref.	Species	Height (m)	Diameter (cm)	Retention Category	Reason
G1	Buddleja, Goat Willow, Wild Cherry, Birch and Elm.	<8	20#	C	To facilitate the proposals.
G3	Goat Willow and Ash	<12	28 avg.#	C	To facilitate the proposals.
G4	Goat Willow, Birch and Sycamore	<8	20 x8#	C	To facilitate the proposals, remove the section in red, within the site boundary.
G5	Birch, Goat Willow and Buddleja	<6	10#	C	To facilitate the proposals, remove the section in red, within the site boundary.
G6	Lombardy Poplar	<25	55 avg.#	B	- Southern section of trees have had excavations within the rooting zone and are likely to be unstable. - The whole group requires removal to facilitate the proposals.
G7	Cypress	17	61 & 55	B	To facilitate the proposals.
G11	Goat Willow, Birch	<8	20#	C	To facilitate the proposals.
T12	Cypress	15	#45	C	To facilitate the proposals.
G13	Willow, Birch and Broom	4.5	<5#	C	To facilitate the proposals.

- 4.2.1 The majority of the trees to be removed are Category ‘C’. These trees are of low quality and provide little amenity value to the area.
- 4.2.2 However, there are also category ‘B’ trees which require removal (**G6** and **G7**). The client advises that these trees will have to be removed to achieve the proposals. The current iteration of the layout is the only economically viable option for the client to proceed with the development of this site. Further to this, the processes required to stabilise the ground would likely have deleterious effects on the trees.
- 4.2.3 We understand from pre-application discussions with the Council’s tree officer, Noel Nugent; there are some concerns in relation to the proposed loss of **G6**, given the ecological and arboricultural benefits that the Lombardy Poplars provide. As a result, we have undertaken a Biodiversity Metric 3.0 Assessment, in order to calculate the biodiversity value of **G6**, as well as the proposed replacement planting hedgerows.
- 4.2.4 **G6** was identified as having 0.24 baseline hedgerow units. The assessment was undertaken on the whole of **G6**. Approximately a third of the group are recommended for removal due to historic excavations within the RPA. Therefore, these trees require removal anyway and the baseline units should be adjusted. As such, **G6** has been reduced by a third, giving a total of **0.16 baseline hedgerow units**.
- 4.2.5 As part of the Metric, the proposed landscaping scheme, which is to be submitted as part of the application, has been used to assess the quantity of hedgerow units that are being proposed for planting. The proposed hedgerows were assessed as **3.99 hedgerow units**, this is a significant increase.

4.3 Potential Impacts to Retained Trees

- 4.3.1 Based on the provided layout, the proposals have the potential to cause direct impacts to the trees which are to be retained.
- 4.3.2 Such areas are highlighted in **blue** on the Arboricultural Implications Plan at **Appendix 7** and are detailed in the following table.

<u>Tree Ref.</u>	<u>Species</u>	<u>Height (m)</u>	<u>Stem Diameter (cm)</u>	<u>Retention Category Grade</u>	<u>Potential Impact</u>
G2	Lombardy Poplar	20	#54 Avg.	B	Root pruning required.
G4	Goat Willow, Birch and Sycamore	<8	20 x8#	C	Potential Root Pruning required.

5. Tree Protection Measures

Tree Ref.	Potential Impact	Action Required
G2	• Damage to roots through compaction by vehicles, plant machinery, storage of materials or pedestrians; and/or through ripping from mechanical damage during excavations. • Stems and canopies may suffer damage through direct contact with plant machinery or other equipment or materials.	• Protective fencing.
G4	• Damage to roots through compaction by vehicles, plant machinery, storage of materials or pedestrians; and/or through ripping from mechanical damage during excavations. • Stems and canopies may suffer damage through direct contact with plant machinery or other equipment or materials.	• Protective fencing.
G5	• Stems and canopies may suffer damage through direct contact with plant machinery or other equipment or materials.	• Protective fencing.
T8	• Damage to roots through compaction by vehicles, plant machinery, storage of materials or pedestrians; and/or through ripping from mechanical damage during excavations. • Stems and canopies may suffer damage through direct contact with plant machinery or other equipment or materials.	• Protective fencing.
T9	• Damage to roots through compaction by vehicles, plant machinery, storage of materials or pedestrians; and/or through ripping from mechanical damage during excavations. • Stems and canopies may suffer damage through direct contact with plant machinery or other equipment or materials.	• Protective fencing.
T10	• Damage to roots through compaction by vehicles, plant machinery, storage of materials or pedestrians; and/or through ripping from mechanical damage during excavations. • Stems and canopies may suffer damage through direct contact with plant machinery or other equipment or materials.	• Protective fencing.

Tree Ref.	Potential Impact	Action Required
T12	• Damage to roots through compaction by vehicles, plant machinery, storage of materials or pedestrians; and/or through ripping from mechanical damage during excavations. • Stems and canopies may suffer damage through direct contact with plant machinery or other equipment or materials.	• Protective fencing.

6. Requirement for an Arboricultural Method Statement

- 6.1 An Arboricultural Method Statement provides comprehensive details of how trees proposed for retention will be protected throughout the entire course of the development.
- 6.2 The method statement will advise on temporary protective barriers, temporary ground protection, site supervision, location of services, details of specialist construction techniques, or any other methodologies should these be applicable. An accompanying Tree Protection Plan will show the Construction Exclusion Zones and the required positions of protective barriers.
- 6.3 In this instance, the production of an Arboricultural Method Statement is considered necessary as, in the absence of suitable controls, the development proposals for the site would have the potential to significantly impact the trees proposed for retention.

7. Conclusions

- 7.1 The trees surveyed were generally found to be in a fair condition. **None** of the trees are protected by a Tree Preservation Order or by virtue of them being in a Conservation Area.
- 7.2 Part of **G6** has been recommended for removal for arboricultural reasons. These are discussed in **Section 4.2** and detailed at **Appendix 1**.
- 7.3 The arboricultural implications of the development have been considered and discussed in **Section 4.3**. Some trees require removal in order to facilitate the proposed development. These are discussed in **Section 4.2** and detailed on the plan at **Appendix 7**.
- 7.4 Whilst the development of the site as proposed will require the removal of a number of trees, such impacts are to be mitigated through replacement planting (see **section 4.2**. This will improve the aesthetic and ecological value of the site and surrounding area.
- 7.5 The protection of retained trees can be achieved by the creation of a Construction Exclusion Zone based on the Root Protection Area of a tree. The Root Protection Area of each tree or group is marked on the Tree Constraints Plan at **Appendix 6**.
- 7.6 The proposed development should be accompanied by an Arboricultural Method Statement (AMS) detailing the specific protection measures necessary for each tree. This should specify the required fencing standard and positions (the creation of the Construction Exclusion Zone), acceptable construction techniques and necessary tree works.
- 7.7 Upon instruction JCA are able to provide a comprehensive Arboricultural Method Statement in order to ensure the continued health of trees throughout the proposed development. We are also able to provide tree planting schemes and organise tree works.
- 7.8 The data gained during the original survey provides an indication of the health of the trees. However, it does not enable a comprehensive assessment of their condition over time. Trees are living organisms which are affected by many factors including weather conditions, diseases/disorders, light levels and human activities. Due to this, the report is only valid for a period of 1 year from the date of issuing. Should an update or revision of this report be required outside of this time period, JCA may require a further site visit to ensure that the condition of the trees has not significantly changed. It is advised that the trees are inspected regularly, in the interests of risk management.

Appendices

Tree Ref.	Age Common Name Botanical Name	Height (m)	Crown Height (m)	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
G 1	Young to Early-mature Buddleja, Goat Willow, Birch, Wild Cherry and Elm	<8	0	20#	See plan	Predominantly Goat Willow scrub and Birch regeneration. Occasional taller tree as picked out on plan, but all relatively low value trees. Japanese Knotweed within the group, some dense areas.	Remove as much vegetation as required to enable the legal and safe removal of the Japanese Knotweed. <i>Remove to facilitate the proposals (red on plan).</i> High	FAIR	FAIR	LOW	20+	C 2
G 2	Early-mature Lombardy Poplar <i>Populus nigra 'Italica'</i>	20	2.5	#54 avg.	See plan	Closely planted linear group of trees along boundary. Stems appear to be outside the assumed site boundary fence. Prominent landscape features.	No action required. <i>Root pruning required to facilitate the proposals.</i> n/a	FAIR	FAIR	HIGH	40+	1 B 2
G 3	Semi-mature Goat Willow and Ash	<12	3	#28 avg.	See plan	Relatively low value scrub. Contains slightly older trees than rest of site.	No action required. <i>Remove to facilitate the proposals.</i> n/a	FAIR	FAIR	LOW	20+	C 2

Tree Ref.	Age Common Name Botanical Name	Height (m)	Crown Height (m)	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
G 4	Early-mature Goat Willow, Birch and Sycamore	<8	0	20 x8#	See plan	Multiple-stemmed Goat Willow, the larger of which appear to be located offsite. Onsite is mainly young Birch sapling regeneration.	No action required. <i>Part-removal (red on plan); potential root pruning of x4 specimens (blue on plan); to facilitate the proposals.</i> n/a	FAIR	FAIR	LOW	20+	C 2
G 5	Young to Semi-mature Birch, Goat Willow and Buddleja	<6	0	10#	See plan	Low value, predominantly Birch regeneration. Japanese knotweed prevalent within the group.	Remove as much vegetation as required to enable the legal and safe removal of the Japanese Knotweed. <i>Part-removal (red on plan) to facilitate the proposals.</i> High	FAIR	FAIR	LOW	40+	C 2

Tree Ref.	Age Common Name Botanical Name	Height (m)	Crown Height (m)	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
G 6	Early-mature to Mature Lombardy Poplar <i>Populus nigra 'Italica'</i>	<25	3	#55 avg.	See plan	Prominent landscape feature. Closely planted trees. Unable to measure accurately for dense vegetation around bases. Japanese Knotweed is prevalent to the south of the group, adjacent to G5.	Fell the southern portion (red on plan, x19 stems) which has been undermined. <i>Remove to facilitate the proposals.</i> High	FAIR	FAIR	HIGH	20+	1 B 2
G 7	Mature Cypress <i>Cupressus sp.</i>	17	2	61+ 55	3 3 3	Two trees forming a homogenous canopy. Not particularly prominent within landscape.	No action required. <i>Remove to facilitate the proposals.</i> n/a	FAIR	FAIR	MOD	20+	1 B 2
T 8	Mature Eucalyptus <i>Eucalyptus gunnii</i>	16	0S	83+ 51	10 12 10 12	Canopy appears full and in good vitality. Relatively balanced canopy. One relatively large secondary branch to south partially snapped away from parent stem, but still attached with live growth. Prominent landscape feature. Acceptable condition at present.	No action required. n/a	GOOD	FAIR	HIGH	40+	B 1
T 9	Early-mature Eucalyptus <i>Eucalyptus gunnii</i>	8	2	#35	2 2 2 3	Large area of missing bark with localised decay at the base. Suppressed by adjacent larger trees. Acceptable condition at present.	No action required. n/a	POOR	POOR	LOW	10+	C 1
T 10	Mature Eucalyptus <i>Eucalyptus gunnii</i>	13	2	67	5 5 4 5	Slightly suppressed by adjacent larger tree. No evidence of any significant structural defects or signs of any ill-health. Surrounded by low value scrub.	No action required. n/a	FAIR	FAIR	MOD	40+	1 B 2

Tree Ref.	Age Common Name <i>Botanical Name</i>	Height (m)	Crown Height (m)	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
G 11	Young Goat Willow, Birch	<8	1	20#	See plan	Low value scrub.	No action required. <i>Remove to facilitate the proposals.</i> n/a	FAIR	FAIR	LOW	20+	C 2
T 12	Early-mature Cypress <i>Cupressus sp.</i>	15	4	#45	3 3 3 3	Significant fire damage to base and lower foliage. Saprotrophic fungal growth on lower stem.	Monitor condition to see how it recovers from fire damage. <i>Remove to facilitate the proposals.</i> Low	POOR	POOR	LOW	<10	C 2
G 13	Young Willow <i>Salix sp.</i>	4.5	0+	<5#	See plan	Large area of scrub, not detailed on the Topographical Plan, location indicative. Birch & Broom also present.	No action required. <i>Remove to facilitate the proposals.</i> n/a	GOOD	GOOD	LOW	40+	1 C 2

Appendix 2: Explanation of Tree Descriptions

A2.1 Measurements/ Reference Information

- A2.1.1 *REF NUMBER*. All items surveyed are allocated a reference number preceded with a letter, identifying the type of vegetation surveyed: T = an individual tree, G = a group of trees or an area of vegetation, W = woodland, H = a hedgerow.
- A2.1.2 *SPECIES: COMMON AND BOTANICAL NAME*. The common and botanical names of the species present are noted. If the species is not clear or identifiable, then a general common name and genus will be noted.
- A2.1.3 *AGE CLASS* of the tree is described as young, semi-mature, early-mature, mature, over-mature, veteran or dead.
- A2.1.4 *HEIGHT* of the tree is measured in metres from the stem base to the top of the crown.
- A2.1.5 *CROWN HEIGHT* is an indication of the height above ground level at which the crown begins.
- A2.1.6 *STEM DIAMETER* is measured at 1.5 metres above (higher) ground level. Where the tree is multi-stemmed at this point; diameter measurements are taken for each stem. If more than five stems are present, an average stem diameter is taken. If for whatever reason it is not practical to measure multiple-stemmed trees in this way, the diameter is measured close to ground level, just above the root buttress.
- A2.1.7 *CROWN SPREAD* is measured from the centre of the stem base to the tips of the branches to all four cardinal points.
- A2.1.8 *HEIGHT AND DIRECTION OF LOWEST BRANCH*. The height and direction of the lowest significant branch is noted because of potential issues relating to clearances and the need for tree pruning.
- A2.1.9 *NHBC WATER DEMAND*. The water demand of each tree, as listed in NHBC Standards 2010 Chapter 4.2 'Building near trees'. This is included to aid structural engineers, architects and other members of the design team as it determines foundation depth and other considerations with regard to trees.

A2.2 Evaluations

A2.2.1 *PHYSIOLOGICAL CONDITION* is classed as good, fair, poor, or dead. This is an indication of the health and vitality of the tree and takes into account vigour, presence of disease and dieback.

A2.2.2 *STRUCTURAL CONDITION* is classed as good, fair or poor. This is an indication of the structural integrity of the tree and takes into account significant wounds, decay and quality of branch junctions.

A2.2.3 *LIFE EXPECTANCY* is classed as; 0, less than 10 years, 10+ years, 20+ years, or 40 + years. This is an indication of the minimum number of years before removal of the tree is likely to be required.

A2.2.4 *AMENITY VALUE*. A general indication is given in respect to the amenity/landscape value of the tree/group within the surrounding area.

A2.2.5 *PRIORITIES*. A priority rating is given concerning the time periods in which the recommended works should be undertaken. LOW priority works should be undertaken within 12 months of the survey, MOD (moderate) priority works should be undertaken within 6 months and HIGH priority works should be completed as soon as practically possible. If no works are recommended, N/A (not applicable) will be used.

A2.3 Retention Categories

A2.3.1 ***A (marked green on the Tree Constraints Plan) = Trees of high quality.***

These trees are of high quality and value with a good life expectancy (usually with an estimated remaining life expectancy of 40 years).

A2.3.2 ***B (marked in blue on the Tree Constraints Plan) = Trees of moderate quality.***

These trees are of moderate quality and value with a reasonable life expectancy (usually with an estimated life expectancy of at least 20 years).

A2.3.3 ***C (marked in grey on the Tree Constraints Plan) = Trees of low quality.***

These trees are of low quality and value but which are in adequate condition to remain or are young trees with a stem diameter below 15cm (usually with an estimated life expectancy of at least 10 years).

A2.3.4 Trees categorised as retention category 'A', 'B' or 'C' are then justified by being further divided into 3 subcategories:

1 = Mainly arboricultural qualities.

2 = Mainly landscape qualities.

3 = Mainly cultural values, including conservation value.

A2.3.5 U (marked in red on the Tree Constraints Plan) = Trees usually unsuitable for retention due to poor condition.

These trees are in such a condition that they cannot be realistically retained as living trees in the context of the current land use for longer than 10 years. This may be due to any of the following:

- 1) Failure is likely due to serious, irredeemable, structural defects.
- 2) Removal of other category U trees will render them exposed and unstable.
- 3) They are in serious, overall decline or are dead.
- 4) They are of low quality and suppressing adjacent trees of better quality.
- 5) Diseases are present which may affect the health of adjacent trees.

These trees should be removed or treated in such a way as to make them safe where they have high ecological value, such as in a woodland setting.

Appendix 3: General Guidelines

- A3.1 All tree work should be undertaken to BS 3998: 2010 '*Recommendations for tree work*' or other recognised industry practice.
- A3.2 Staff carrying out the work must be qualified, experienced and ideally be Arboricultural Association approved contractors. They should be covered by adequate public liability insurance.
- A3.3 This report is based upon a visual inspection. The consultant shall not be responsible for events which happen after this time due to factors which were not apparent at the time, and the acceptance of this report constitutes an agreement with the guidelines and the terms listed therein.
- A3.4 Any defects seen by a contractor or the employer that were not apparent to the consultant must be brought to the consultant's attention immediately.
- A3.5 No liability can be accepted by JCA in respect of the trees unless the recommendations of this report are carried out under the supervision of JCA and within JCA's timescale.
- A3.6 It is advisable to have trees inspected by an arboricultural consultant on a regular basis.

Appendix 4: Glossary of Terms & Abbreviations

Arboriculture	The cultivation of trees in order to produce individual specimens of the greatest ornament, for shelter or any primary purpose other than the production of timber or fruit.
Canker	Disease damaged area of a tree, usually caused by fungus or bacteria affecting the bark.
Co-dominant stem	A stem which has grown in direct competition to the main stem and which has formed a substantial size influencing the appearance of the tree.
Crown lift	The removal of the lowest branches, usually to a given height. It allows more residual light and greater clearance underneath for vehicles etc.
Crown reduction	The reduction of a tree's height and spread while preserving its natural shape.
Crown thin	The removal of some of the density of a tree's crown, usually 5-15% allowing more light through its canopy and reducing wind resistance.
Deadwood	Either dead branches, or a procedure involving the removal of dead, dying and diseased branches.
Dieback	Where branches are beginning to show signs of death usually at the tips in the crown.
Epicormic shoots	Small branches that grow in clusters around the base of the stem of a tree or within the crown. This is usually as a result of bad pruning or some other stress factor, although can be a natural growth pattern for some species of tree (eg Lime species).
Formative pruning	The pruning of a tree to remove weaknesses and irregularities which may lead to future problems. The formative pruning operation is aimed at reducing the potential for future weaknesses or problems within the tree's crown and to encourage an optimal canopy shape.
Included bark	Where the bark on two adjoining branches or stems is growing tight together, forming a joint with limited physical strength.
Pollarding	A method of tree management in which the main trunk and principle branches of the tree are cut to the same height, and the resulting branches are then cropped on a regular basis.
Remedial pruning	The removal of old stubs, deadwood, epicormic growth, rubbing or crossing branches and other unwanted items from the tree's crown. Sometimes referred to as crown cleaning.

RPA	Root Protection Area – Theoretical rooting area of a tree as defined in BS5837:2012 <i>Trees in relation to construction</i> .
Topping	Topping is a form of pruning that removes terminal growth leaving a ‘stub’ cut end. Topping can cause serious health problems to a tree.

Appendix 5: Author Qualifications

Principal Consultant and Managing Director

Jonathan Cocking *F.R.E.S., Tech. Cert. (Arbor.A), PDipArb (RFS) FArborA CBiol MSB. MICFor.* Jonathan is a Registered Consultant and Fellow of the Arboricultural Association and sits on its Professional Committee. He has 31 years' experience in the Arboricultural profession and served for eight years as Senior Arboriculturist with a large local authority before establishing JCA in 1997. Jonathan has since developed JCA's portfolio of services and its extensive client base. He is a Chartered Biologist, a Chartered Arboriculturalist and an Expert Witness with much experience of litigation work.

Technical Director

Toby Thwaites *BSc (Hons), HND (Arboriculture), MArborA.* Toby joined JCA in 1998 after graduating in Ecology at the University of Huddersfield and has since graduated in Arboriculture at the University of Central Lancashire. A former JCA team leader and Consulting Arboriculturist, Toby is now Technical Director and oversees all office and on-site activities at JCA and is on hand to offer technical support and advice.

Operations Director

Charles Cocking *FdSc (Arboriculture), MArborA.* Charles joined JCA in January 2014 having previously worked for the company on a part time basis during 2013. Charles obtained his Foundation Degree in Arboriculture at Askham Bryan College, York, and is a Professional Member of the Arboricultural Association. Charles now oversees all internal operations for the company.

Consulting Staff: Arboriculture

Andrew Bussey. Andrew started working in consultancy at JCA in 2006 having spent 12 years working as an arborist for various private companies before joining a Local Authority forestry team. He has various NPTC qualifications, is QTRA qualified and is a LANTRA Accredited Professional Tree Inspector.

Emily Wilde *FdSc (Arboriculture).* Emily joined JCA having previously worked for various private tree surgery and consultancy companies over the past 8 years. She initially obtained a ND in Forestry & Arboriculture, followed by a FdSc in Arboriculture at Askham Bryan College, York. Emily has various NPTC certificates and is QTRA qualified.

Mick Eltringham *ND (Forestry).* Mick joined JCA after spending 12 years working in the industry for various private companies in the north and south of England. He has also spent the last five years working as a consultant for two canopy research projects in the Amazon Rainforest, working with Oxford University and the University of Arizona. He has various NPTC Qualifications.

Dan Kemp *FdSc (Arboriculture).* Dan joined JCA with nearly 30 years' experience in arboriculture. He worked as a London Tree Officer for 12 years and in several arboricultural and horticultural management posts, specialising particularly in tree risk assessments and tree related subsidence.

Ryan Bateman *BSc (Hons), FdSc (Arboriculture), TechArborA.* Ryan joined JCA in 2020 after working as a Lecturer on the Foundation Degree in Arboriculture at Askham Bryan College in York. Ryan has both practical skills, NPTC qualifications and theoretical knowledge and owned his own contracting business prior to, and whilst working as a lecturer.

Robert Armitage *BSc (Hons) Arboriculture, MArborA.* Rob joined JCA in 2021 with over six years' experience within arboricultural consultancy, predominantly within the context of the UK planning system. Rob has recently attained professional membership of the Arboricultural Association.

Luke Wickham *FdSc (Arboriculture and Urban Forestry).* Luke joined JCA in 2021 after obtaining his Foundation Degree in Arboriculture and Urban Forestry at Askham Bryan College. Having previously worked within the industry for the past 4 years, running his own small business and sub-contracting for local firms, Luke brings a sound knowledge and understanding of the practical and academic sides of the industry.

Consulting Staff: Ecology

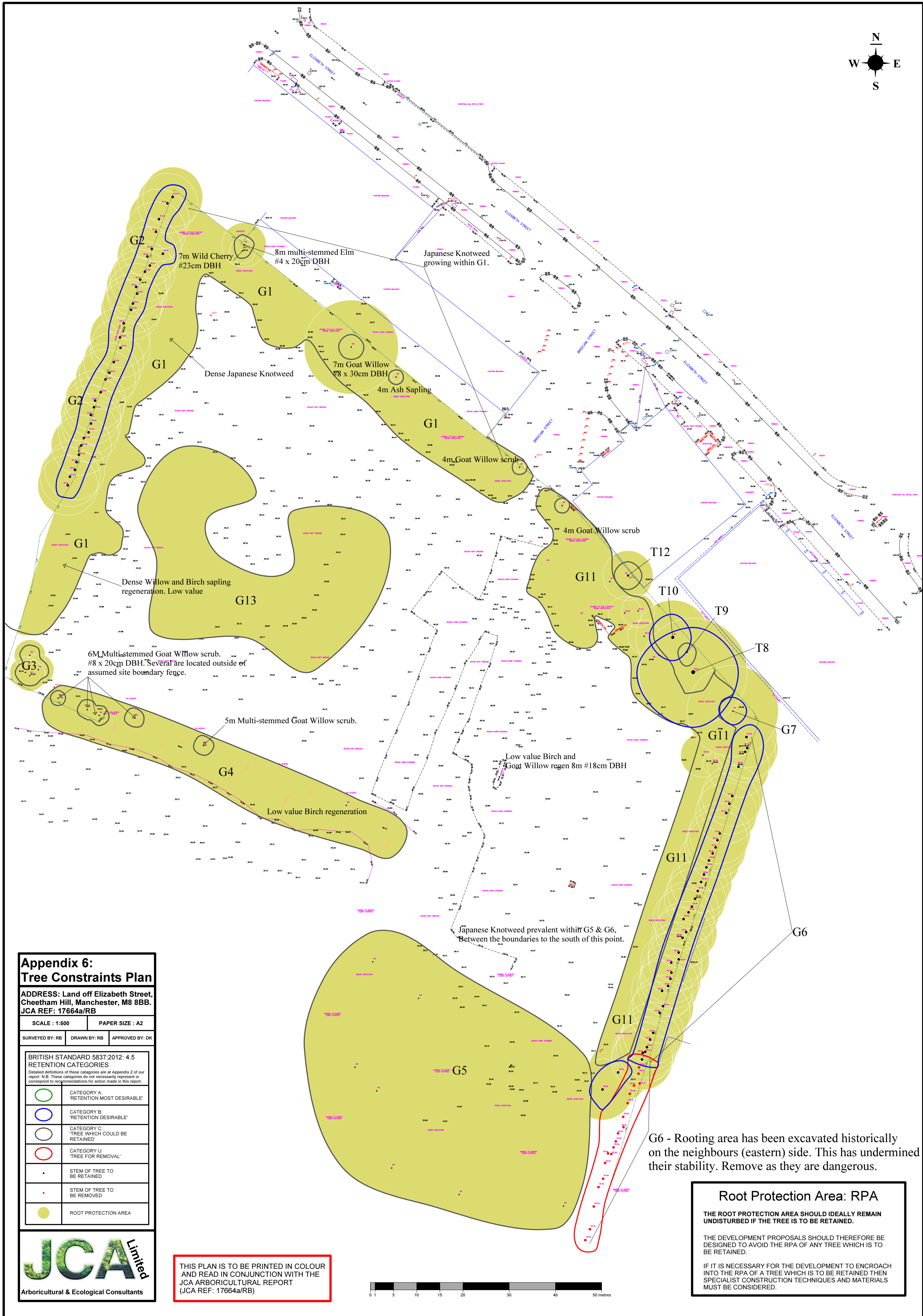
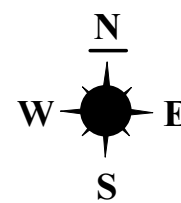
Adam West, Principal Ecologist *BSc (Hons) Animal and Wildlife Management*. Adam joined JCA to lead the expanding ecology department. Having returned to education as a mature student, Adam studied Countryside Management for two years before undertaking a Bachelor's degree, for which he was awarded First Class Honours. Adam has many years' experience in ecological consultancy, working on projects ranging from individual planning applications to national infrastructure projects. Adam holds a Natural England Level 1 great crested newt survey class licence, a Natural England Level 2 bat survey class licence (and the Scottish and Welsh equivalents) and a CSCS card.

Poppy McDermott, Seasonal Ecologist *BSc (Hons) Ecology and Conservation*. Poppy joined JCA after completing her degree for three years at Nottingham Trent University in Ecology and Conservation. She has gained practical experience in protected species surveying and report writing whilst at university and is hoping to further develop these skills and consultancy experience whilst at JCA.

Administrative Staff

Catherine Cocking Accounts Manager.
Kelly Saunders Accounts Assistant.

Lorraine Spink Administrative Assistant.
Lisa Beedham Marketing Manager.



Appendix 6: Tree Constraints Plan

ADDRESS: Land off Elizabeth Street,
Cheetham Hill, Manchester, M8 8BB.
JCA REF: 17664a/RB

SCALE : 1:500

PAPER SIZE : A2

SURVEYED BY: RB

DRAWN BY: RB

APPROVED BY: DK

BRITISH STANDARD 5837:2012: 4.5
RETENTION CATEGORIES

Detailed definitions of these categories are at Appendix 2 of our
report. N.B. These categories do not necessarily represent or
correspond to recommendations for action made in this report.

CATEGORY A:
'RETENTION MOST DESIRABLE'

CATEGORY B:
'RETENTION DESIRABLE'

CATEGORY C:
'TREE WHICH COULD BE
RETAINED'

CATEGORY U:
'TREE FOR REMOVAL'

STEM OF TREE TO
BE RETAINED

STEM OF TREE TO
BE REMOVED

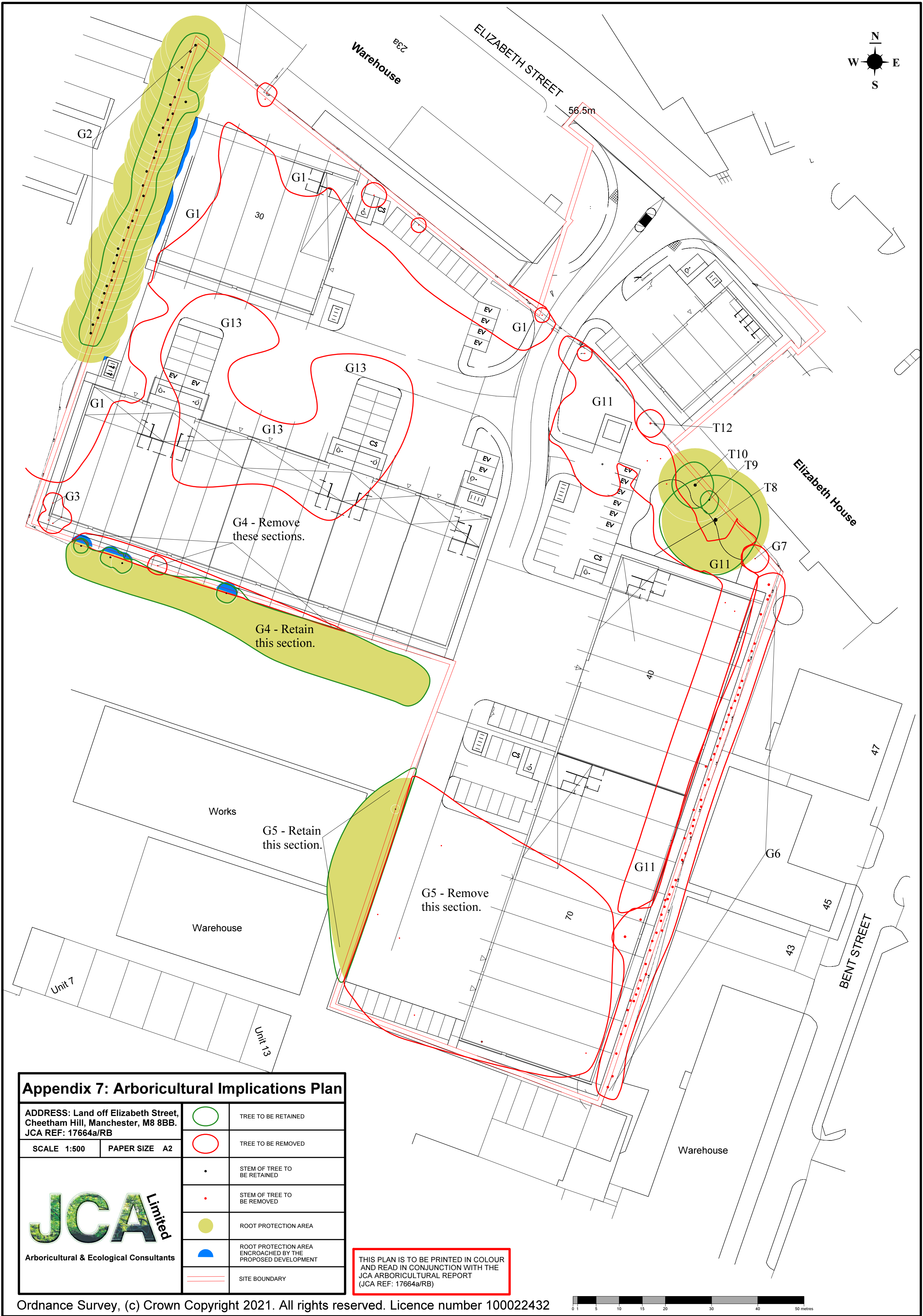
ROOT PROTECTION AREA

Root Protection Area: RPA

THE ROOT PROTECTION AREA SHOULD IDEALLY REMAIN
UNDISTURBED IF THE TREE IS TO BE RETAINED.

THE DEVELOPMENT PROPOSALS SHOULD THEREFORE BE
DESIGNED TO AVOID THE RPA OF ANY TREE WHICH IS TO
BE RETAINED.

IF IT IS NECESSARY FOR THE DEVELOPMENT TO ENCOACH
INTO THE RPA OF A TREE WHICH IS TO BE RETAINED THEN
SPECIALIST CONSTRUCTION TECHNIQUES AND MATERIALS
MUST BE CONSIDERED.



Appendix 7: Arboricultural Implications Plan

ADDRESS: Land off Elizabeth Street,
Cheetham Hill, Manchester, M8 8BB.
JCA REF: 17664a/RB

SCALE 1:500 PAPER SIZE A2



JCA Limited
Arboricultural & Ecological Consultants

	TREE TO BE RETAINED
	TREE TO BE REMOVED
	STEM OF TREE TO BE RETAINED
	STEM OF TREE TO BE REMOVED
	ROOT PROTECTION AREA
	ROOT PROTECTION AREA ENCROACHED BY THE PROPOSED DEVELOPMENT
	SITE BOUNDARY

THIS PLAN IS TO BE PRINTED IN COLOUR
AND READ IN CONJUNCTION WITH THE
JCA ARBORICULTURAL REPORT
(JCA REF: 17664a/RB)



I hope that this report provides all the necessary information, but should any further advice be needed please do not hesitate to contact the author.

Signed



.....

Ryan Bateman BSc (Hons), FdSc (Arboriculture), TechArborA.

24th February 2022

For and on behalf of **JCA Ltd**

Registered Office

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Report printed on recycled paper

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Professional Tree and Ecology Advice nationwide

ARBORICULTURAL SERVICES

Guidance for Architects and Developers

- British Standard 5837 Tree Surveys
- Arboricultural Implication Assessments (AIA)
- Arboricultural Method Statements (AMS)

Tree Advice for the Legal Profession

- Subsidence Litigation
- Personal Injury and Accident Investigation
- Expert Witness, Planning Inquiries and Appeals

Advice for Engineers, Loss Adjusters and Insurers

- Tree Surveys for Subsidence
- Heave Assessment
- Tree Root Identification

Veteran Tree Management

- Ancient Woodland Management
- Veteran Tree Management

Advice for Local Authorities and Social Housing

- Tree Safety Surveys
- Specialist Decay Detection
- Landscape and Orchard Design

Tree Health and Pest and Disease Management

- Pest and Disease Surveys
- Tree Health Checks
- Disease Mitigation and Control

ECOLOGICAL SERVICES

Ecological Pre-Planning Services

- Phase 1 Habitat Surveys
- Great Crested Newt eDNA Sampling
- Protected Species: Bat, Wintering and Nesting Bird, Badger, Amphibian, Otter, Water Vole, White-Clawed Crayfish, Dormice and Reptile Surveys.
- Preparation for Environmental Impact Assessment (EIA)
- Invasive Species Surveys
- Code for Sustainable Homes

Ecological Post-Planning Services

- Biodiversity Enhancement Plans
- Protected Species Mitigation
- Ecological Management (Bat and Bird box installation and inspection)

HEAD QUARTERS:

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Mobile: 07778 391986
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