



Arboricultural Impact Assessment and Method Statement
**Manchester Life, Back of
Ancoats Phase 1 – Eliza Yard**

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Section 1: Introduction

- 1.1. This report has been prepared by Tyler Grange Group Ltd (TG) on behalf of Manchester Life Development Company 2 Limited (the Applicant). It sets out the findings of a BS5837 Tree Quality Survey and Arboricultural Impact Assessment at Eliza Yard, Ancoats, Manchester. (Ordnance Survey Grid Reference: SJ 85225 98804) hereinafter referred to as the 'site'.
- 1.2. This report has been produced to accompany a full planning application for 'Eliza Yard' to deliver 118 residential units, ground floor commercial floorspace, and ancillary amenity space within an 8-storey building, cycle parking provision, hard and soft landscaping, access and servicing and other associated works.
- 1.3. A full BS5837 tree quality survey of the site was undertaken in October 2020.
- 1.4. The report sets out the baseline findings of the tree survey and provides an assessment of the development layout, confirming the removal of a single low value specimen and the planting of additional internal trees to offer a net-gain in tree numbers in accordance with local objectives.

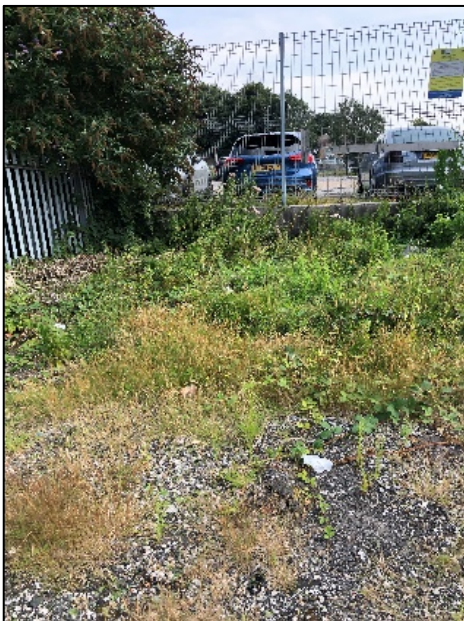
Section 2: Baseline Information

Site Description

- 2.1. The site measures 0.24 ha. It is bounded by Poland Street to the west, Jersey Street to the south, the City Court Trading Estate to the north, and a surface car park to the east. The Site can be accessed by pedestrians and vehicles via Jersey Street. The site is currently used as a surface car park accessed from Jersey Street. The site is enclosed by various means including security fencing and a wall along Poland Street. The existing surfacing consists of areas of hardstanding with limited areas of self-seeded vegetation. Modern industrial units lie to the north and west of the Site with the residential neighbourhood of Miles Platting further beyond to the east. The Rochdale Canal is located 0.1km south of the site.



Photograph 1 – Hardstanding within the site.



Photograph 2 – Ephemeral/short perennial vegetation to north eastern corner of the site

- 2.2. The site is enclosed by a brick wall measuring approximately 7 metres in height on its western boundary with lower sections of wall along the northern and southern portions of the site boundary. A wire fence was present approximately halfway between the eastern and western boundary. Aside from the internal areas of hard surfacing / car parking, other features include a rubble pile consisting mainly of brick and mortar with some colonisation of scrub from the adjacent ephemeral/short perennial vegetation is present to the site's eastern boundary.
- 2.3. In terms of tree cover, this is sparse with only a single grey willow (T1) *Salix caprea* tree growing on-site, located on the north western corner of the site. A stand of Willow and Rhododendron vegetation is located offsite beyond the north eastern corner of the site (G1). Vegetation is unmanaged and largely of low value, being bound by hard surfacing and left to naturalise.
- 2.4. A summary of the local planning policy context relating to arboricultural matters is provided at **Appendix 1** to the rear of this report.
- 2.5. In summary, local planning policy objectives seek to retain existing trees which are important to the character and appearance of the local area in conjunction with new development proposals and seeks to enhance local biodiversity and Green Infrastructure provision through increasing tree cover and the linking of retained habitats, particularly those of nature conservation and / or habitat value.

Tree Survey Summary

- 2.6. The survey was completed in accordance with BS5837 and the methodology as detailed at **Appendix 2** to the rear of this report. In accordance with the above recommendations, the tree survey included all trees within / in influence of the site and the site boundaries that were over 75mm diameter at breast height (dbh).
- 2.7. Measured topographical survey data was used to inform the locations and surrounding context of the sites individual and groups of trees. Any trees not included within the topographical survey have been approximated using measurements taken during the tree survey and further informed by aerial photography.
- 2.8. A total of 1no. individual tree (T1) and 1no. tree group (G1) were identified during the tree survey of the site. The survey findings are illustrated on the **Tree Constraints Plan ('TCP' 13399/P06b)** located at the rear of this report. The **TCP** shows the distribution of the trees surveyed together with details of their constraints to new development in accordance with BS5837, including:
- Tree Quality Gradings;¹
 - Root Protection Areas (RPA's);²
 - Tree canopy spreads;³
 - Tree Shading.⁴

¹ The value of arboricultural features surveyed in accordance with the methodology set-out in Appendix 3.

² A layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority. See further explanation at Appendix 3.

³ Dimensions of the trees crown spread and clearance from ground level. See further explanation at Appendix 3.

⁴ Shade cast by existing trees which may affect the availability of sunlight and daylight within a new development. See further explanation at Appendix 3.

- 2.9. Findings for each of the tree groups surveyed are detailed in the **Tree Survey Schedule** (see **Appendix 4**). This provides a tabulated record of the trees surveyed, including reference numbers, species composition, tree dimensions, life stage, physiological and structural condition, and the arboricultural value of each survey entry.

Tree Grading Summary

- 2.10. The trees surveyed have been categorised using the 'cascade chart for tree quality assessment' (see **Appendix 3**) recommended by the BS5837. Grading subcategories (1, 2 and 3) are intended to reflect the arboricultural, landscape and cultural values, respectively. The grading system allows informed decisions to be made concerning the design and impact of potential development in relation to the arboricultural value of the trees surveyed.
- 2.11. T1 and G1 are of Low Value (Category C).
- 2.12. No 'Category B' (Moderate Value / Quality) or 'Category A' (High Value / Quality) specimens are present on or within influence of the site.
- 2.13. As Category C trees, the surveyed stock represents largely unremarkable examples in terms of species, quality, context and condition. Category C trees are denoted by a Grey tree canopy outline as illustrated on the **TCP**. These provide limited or transient benefits in the existing site context which may be readily replaced.

Tree Preservation Orders

- 2.14. Manchester City Council have confirmed via email that whilst the site is located within the Ancoats Conservation Area 1989 Conservation Area, no trees within the site are covered by a Tree Preservation Order (TPO). A copy of this correspondence is included at **Appendix 5** to the rear of this report.
- 2.15. No ancient or Veteran trees or woodlands are present on nor in the vicinity of the site.

Section 3: Arboricultural Impact Assessment

- 3.1. This Arboricultural Impact Assessment has been undertaken to set out the required tree losses and impacts in response to the proposed layout drawing prepared by Buttress Ltd.
- 3.2. The assessment is informed by a composite of the tree survey findings and the proposed layout drawings with the tree losses described below.

Tree Retention and Removal

- 3.3. In accordance with BS5837, the tree losses required to implement the proposed layout are illustrated on the **Tree Retention and Removal Plan (Ref. 13399/P07c) (TRRP)** located to the rear of this report and this is also listed in the table below.

Tree Number / Grading Category	Description of Tree Loss
T1 (Category C)	Removal of a single roadside willow tree, growing at the north eastern corner of the site. This is as a result of a direct conflict with the proposed development footprint and new areas of hardstanding. The tree is of Low Value (Category C) and in a general state of naturalised degradation. The tree will be replaced with new on-site planting.

Table 3.1. *Extent of Tree Losses Required to Implement Scheme Proposals*

Works within Root Protection Area of G1

- 3.4. The existing hardstanding across the site-side RPA of the retained G1 vegetation to the north eastern corner of the site will be removed and replaced with new lawn. This will offer an improved rooting environment to that of the current scenario in terms of permeability and aeration which will be of benefit to the adjoining G1 tree stock.
- 3.5. Despite the low quality and condition of the adjoining tree stock, with G1 being located within the Ancoats Conservation Area 1989 Conservation Area, and being positioned off-site, the removal of the existing hard surfacing within the RPA on-site will adopt a sensitive construction methodology requiring the use of hand tools to break up any areas of existing hardstanding (limited only to the RPA within the site) to sensitively work around any significant tree roots that may be extending into the construction area from off-site.
- 3.6. Such work is not considered to pose a significant risk to the G1 vegetation given the presence of existing hard surfacing (where the retained vegetation to the edges of the proposed scheme will have adapted to an existing developed context) and enhancement measures within the site to provide a new grassland area across the eastern edge of the proposed scheme.
- 3.7. A sensitive construction methodology will be required, outlining how contractors will deal with any significant roots found during initial air-spading / hand tool exploratory excavation works, including the possibility of pruning minor roots deemed acceptable by an appointed arboricultural consultant who will be required to monitor such works under a specific clerk of works. This is set out within **Section 4** of this report.

New Planting

- 3.8. The proposed layout shows an arrangement of 14 new trees within the central courtyard area and 4 street trees with an open area of green space provided to the east to offer a net-gain in tree numbers and canopy coverage for the site post-construction.
- 3.9. The low quality and value of the tree being removed needs to be balanced against the opportunities being presented for new soft landscaping on-site, including the provision of tree planting within the development. No high or moderate value trees, veteran specimens, important hedgerows or ancient woodland will be impacted by the proposed development.

Construction Mitigation

- 3.10. The off-site stand of G1 tree cover is to be protected from unnecessary damage during the construction phase of the development. An Arboricultural Method Statement (**AMS**) is therefore included at Section 4 of this report to provide a practical strategy for the protection of the retained trees.

Section 4: Arboricultural Method Statement

- 4.1 This Arboricultural Method Statement has been prepared to demonstrate how above and below ground structure are to be protected during the construction phase of the proposed development in accordance with BS 5837:2012. The development is required to be carried out in accordance with the details included within this report.
- 4.2 Compliance with this AMS will be a requirement of all relevant contractors associated with the development, including initial ground works and landscaping. Copies of this report will be available for inspection on site and all personnel shall be made aware of the key implications of the AMS, namely, to ensure that during the construction phase of the development:
- The site manager and all other personnel are provided with this document;
 - All requirements of this Tree Protection Scheme are adhered to;
 - The Site Manager and site personnel are updated of any approved changes or variations to this document (approval for alterations must be obtained in writing from the LPA);
 - Site personnel must work in accordance with this document at all times, or in accordance with any approved variation; and
 - The tree protection measures are left in place until the construction phase of development is completed, except with the written consent of the LPA.

Tree Retention and Removal

- 4.3 Tree removals are limited to the removal of T1, as illustrated on the **TRRP** and detailed at Table 3.1 in this report.
- 4.4 Works to remove this tree must be carried out in accordance with the 'advance works' provisions set out above and in line with BS 3998:2010.

Tree Protection Plan

- 4.5 The retained trees which are outside the site but could sit within a possible construction area must be protected from unnecessary damage during the construction phase of the development. Robust tree protection on development sites is of paramount importance if existing vegetation is to be retained successfully. The inevitable stress caused by development near existing trees can, if provision for adequate protection is not made, be a strain that can severely damage the trees or even result in their failure.
- 4.6 Tree protection measures are illustrated on the **Tree Protection Plan (Ref. 13399/P08c) (TPP)** included to the rear of this report. The procedures and working methods are outlined further below.

General Site Precautions and Requirements

- 4.7 The following points must be observed during both advanced works and the construction process:
- *Cutting down, uprooting, damaging or otherwise destroying any tree that is proposed for retention is prohibited;*

- *No access will be permitted inside tree protection / non-intervention areas (unless authorisation is obtained in writing from the LPA or overseen by project arborist). Appropriate signage will also be implemented along the tree protection fencing to highlight to contractors the need for careful working methods and importance of establishing construction exclusion zones;*
- *No materials, equipment or debris will be stored within the RPA at any time and no fires will be lit on site;*
- *If during construction, there are any excessive levels of dust build-up on retained trees then trees must be hosed down immediately with a clean water supply;*
- *Holes for fence posts for the permanent boundary fencing if within the RPAs (in relation to the site-side RPA of G1) must be dug by hand, avoiding tree roots. Due to the highly alkaline leachate produced during the curing of wet concrete, concrete should not be poured within the RPA unless an impermeable liner has been installed. Holes must therefore be sheathed to reduce the risk of contamination where concrete is to be implemented;*
- *All construction or tree management works must be undertaken sensitively and with regard to the RPAs and canopies of adjacent retained trees. Any roots encountered which are smaller than 25mm in diameter can be pruned back, preferably to a side branch using a proprietary cutting tool. Roots larger than 25mm diameter should only be severed following on-site agreement with an arboricultural consultant, as they may be essential to the tree's health and stability;*
- *Prior to undertaking tree works, all risks associated with the work should be identified by carrying out a site-specific risk assessment. All works must be undertaken in accordance with BS3998:2010 (refer to BS 3998:2010 – Section 7) which provides recommendations for site management, best practice guidance for tree works and safety planning*
- *Notice boards, telephone wires or other services must not be attached to any part of retained trees;*
- *Materials which will contaminate the soil (e.g. concrete, cement, chemical toilets, diesel oil, vehicle washings etc.) must not be permitted within, or close to RPAs of retained trees unless required in order to implement the permanent plot boundary fencing. To avoid any associated damage or injury occurring to the trees as a direct result of contact with contaminants, works including cement mixing, re-fuelling and tool or machine washing will not be permitted within 20m uphill of any retained tree;*
- *The location of the site compound, welfare facilities and open storage areas must be located outside of the RPAs of retained tree cover; and*
- *Planning of on-site operations must take sufficient account of wide or tall loads in order that they can operate without coming into contact with retained trees. If deliveries or construction plant is required in close proximity to the southern site boundary any transit or traverse of*

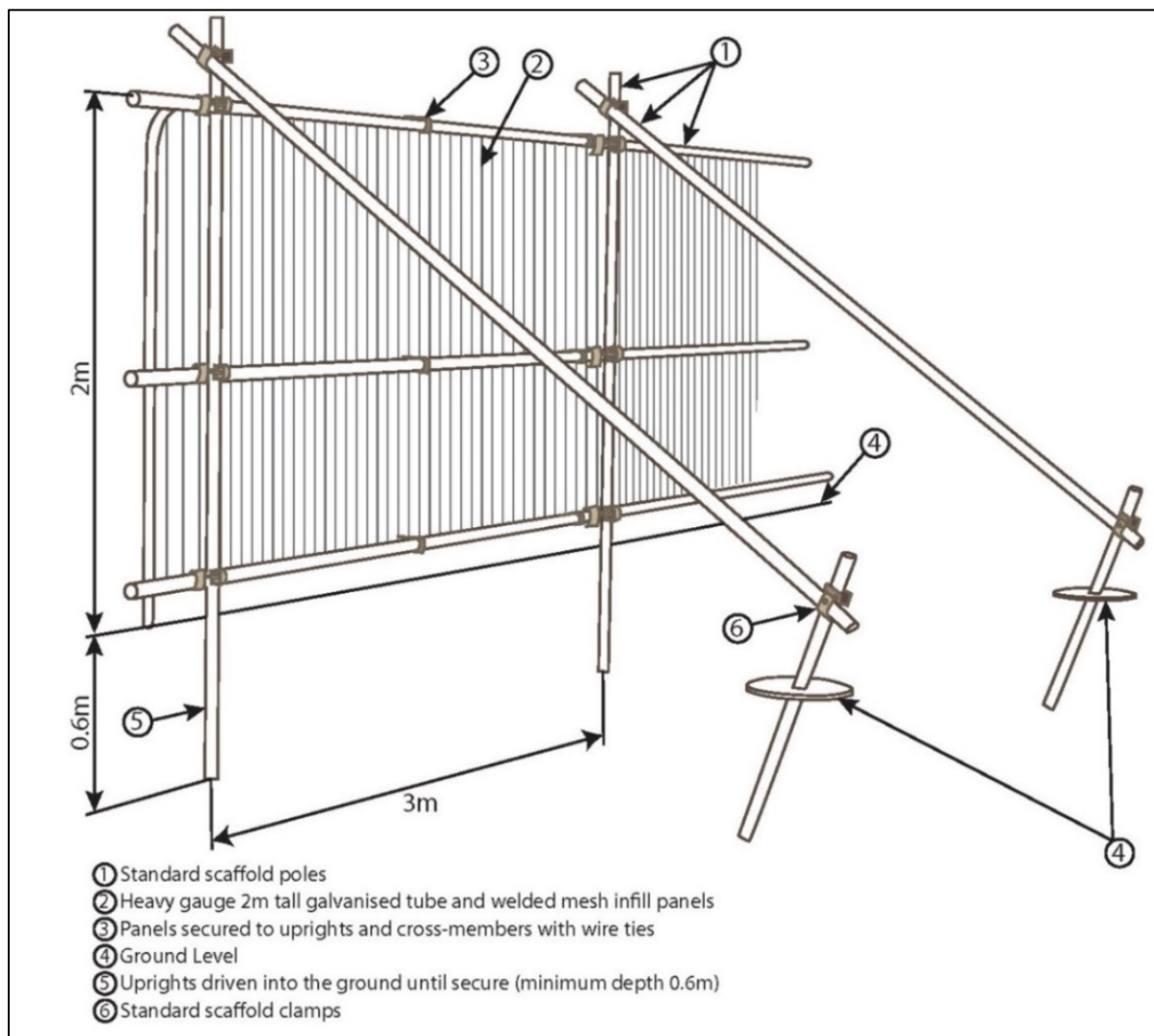
plant prior to the erection of tree protection fencing must be conducted under the supervision of a banksman to ensure that adequate clearance from trees is maintained at all times. The banksman must have the ability to observe and communicate directly to operatives of machinery in close proximity to trees to reduce conflicts. The presence of trees should be considered in any Risk Assessment undertaken by the operators of site machinery.

Tree Protection Fencing

- 4.8 Once the consented tree removal has been undertaken, protective fencing will be erected in accordance with BS5837, as illustrated with the Magenta line on the **TPP** contained to the rear of this report. The protective fencing must remain in position for the duration of the site-wide construction activities.

Specification

- 4.9 The fencing consists of a scaffold framework, well braced to resist impacts, with vertical tubes spaced at a maximum of 3m to add further stability. Onto this, weldmesh panels will be securely fixed with wire or scaffold clamps (See image below).



Maintenance

- 4.10 Special attention is essential in maintaining the protective barrier during the demolition and construction phases, ensuring that it remains rigid and complete as well as fit for the purpose intended. In order to avoid disturbances to the protective barrier once it is installed, it should be inspected frequently, including during site visits by the project Arborist. Repairs shall be made immediately where required. The protective fencing will remain in position for the duration of the site-wide construction activities.

Signage

- 4.11 All-weather notices will be attached to the barriers with words such as 'Construction Exclusion Zone – No Access' (see signage examples below).



Manual Excavation in Relation to G1

- 4.12 As denoted by a magenta-coloured line hatch on the **TPP** Existing hardstanding will be removed from the site-side RPA of G1. Within the magenta hatched area the following measures will be implemented:
- Tree protection fencing will be moved by hand to allow access into the area of proposed lawn planting within the RPA.
 - Excavation within the RPA will be carried out using hand-held tools or by compressed air displacement under direct arboricultural supervision;

- Single roots smaller than 25mm will be cleanly pruned back using a suitable sharp hand tool;
- Roots found over 25mm and where occurring as clumps will not be immediately pruned back, the appointed supervising Arboriculturist will record the size and nature of the root, determine its significance to tree health, and specify proceedings accordingly;
- Exposed roots will be covered with topsoil or damp hessian sacking to avoid root desiccation;
- Exposed roots to be retained as part of the construction will be supported by sharp sand; and
- Due to the highly alkaline leachate produced during the curing of wet concrete, concrete should not be poured within the RPA unless an impermeable liner has been installed. The bedding for the new car parking bays must therefore be sheathed to reduce the risk of contamination where concrete is to be implemented.

Amendments

- 4.13 Issues can arise on development Sites which require amendments to the previously agreed tree protection details. Any amendments to the AMS will be discussed with the Arboricultural Consultant and agreed in writing with the LPA prior to being implemented.
- 4.14 Copies of paperwork relating to any amendments shall be attached to the site AMS to provide a definitive record of what has been approved.

Procedures for Incidents

- 4.15 If any breach of the approved tree protection measures occurs (*including any accidental / unauthorised damage to the limbs, roots or trunk of trees, the discharge / spillage of toxins and waste within the RPAs, or unauthorised breaching / failure to implement a tree protection barrier or construction exclusion zone or prescribed arboriculturally sensitive working methodology*):
- The site manager must be informed immediately;
 - The Local Planning Authority Tree officer (or other Planning Officer) and project Arborist;
 - Swift action must be taken to halt the breach and prevent any further breach; and
 - All preventative action and details of agreed remedial works must be recorded by the project Arborist and reported to the LPA

Appendix 1: Planning Policy Context

Appendix 1: Planning Policy Context

- A1.1 Under the Town and Country Planning Act 1990 (as amended) the requirement to consider trees as part of development is a material planning consideration and will be taken into account in the determination of planning applications. Applicable arboricultural planning policy that relates to the site is set out below at a National and Local level.

National Planning Policy

- A1.2 The National Planning Policy Framework (NPPF) is a material consideration in planning decisions and outlines the Government's planning policies for England, setting out how these are expected to be applied. The consideration for existing trees and woodlands in the context of planning and new development is set out within Section 15 'Conservation and Enhancing the Natural Environment'.
- A1.3 Paragraph 170 provides a series of prerequisites to inform how planning policies and decisions should contribute to and enhance the natural and local environment. This includes "*protecting and enhancing valued landscapes*" and "*recognising the intrinsic character and beauty of the countryside*". The value of ecosystem services is also noted, including the "*economic and other benefits of the best and most versatile agricultural land, and of trees and woodland*".
- A1.4 Paragraph 170 also recognises the consideration for "*minimising impacts on and providing net gains for biodiversity*". This includes the need to establish cohesive ecological networks that are "*more resilient to current and future pressures*".
- A1.5 Paragraph 171 addresses the need to take a "*strategic approach to maintaining and enhancing networks of habitats and green infrastructure*" adding that plans should be made for the "*enhancement of natural capital at the catchment or landscape scale across local authority boundaries*".
- A1.6 Paragraph 174 includes ways in which biodiversity should be protected and enhanced, such as plans that "*identify, map and safeguard components of local wildlife-rich habitats*", as well as "*wildlife corridors and stepping stones that connect them*".
- A1.7 Paragraph 175 highlights a series of principles that local planning authorities should apply when determining planning applications, stating that "*if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused*".
- A1.8 Paragraph 175 also adds that "*development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensatory strategy exists*".
- A1.9 At a national level, the consideration for trees is recognised in the context of their contribution green infrastructure and biodiversity networks, and also in terms of their contribution in landscape terms to the local setting and character to a place. Great weight is also applied to the importance of

conserving existing aged trees, including ancient woodland and trees and trees considered to be 'veterans'.

Local Planning Policy

Manchester City Council Core Strategy

- A1.10 Manchester's Core Strategy was adopted on 11th July 2012 and is the key Development Plan document in the Local Development Framework (LDF). It replaces significant elements of the existing Unitary Development Plan (UDP) as the document that sets out the long term strategic policies for Manchester's future development and will form the framework that planning applications will be assessed against.
- A1.11 **Policy EN9 Green Infrastructure** states that *"New development will be expected to maintain existing green infrastructure in terms of its quantity, quality and multiple function. Where the opportunity arises and in accordance with current Green Infrastructure Strategies the Council will encourage developers to enhance the quality and quantity of green infrastructure, improve the performance of its functions and create and improve linkages to and between areas of green infrastructure. Where the benefits of a proposed development are considered to outweigh the loss of an existing element of green infrastructure, the developer will be required to demonstrate how this loss will be mitigated in terms of quantity, quality, function and future management"*.
- A1.12 **Policy EN 15 Biodiversity and Geological Conservation** adds that *'The council will seek to maintain or enhance sites of biodiversity and geological value throughout the City. Particular consideration will be given to... The council's objective to protect and conserve the City's existing trees and woodlands and aim for a net increase in trees across the City'*.

Appendix 2: Methodology, Constraints, Mapping and Limitations

Appendix 2: Methodology, Constraints, Mapping and Limitations

Field Work

- A2.1 In accordance BS5837, the tree survey included all trees within / in influence of the site and the site boundaries that were over 75mm diameter at breast height (1.5m).
- A2.2 Measured topographical survey data (supplied by others) was used to inform tree locations their surrounding context. Any trees not identified on the topographical survey are prefixed with (*) and their locations have been approximated using measurements during the tree survey and further informed by aerial photography where required.
- A2.3 The trees surveyed were visually inspected from ground level only. No invasive investigations or climbing inspections were necessary to confirm visual or audible signs of defect or debility and no tissue or soil samples were undertaken. For further clarification please refer to the tree survey explanatory notes in below.

Tree Numbers

'T' prefixes have been used to identify individual trees and commence with 'T1'.

'G' prefixes have been used to identify groups of trees.

'H' prefixes have been used to identify hedgerows.

'W' prefixes have been used to identify woodlands.

Species

- A2.4 Species are listed by their common name, both in the schedule and in the report text.

Height and Stem Diameter

- A2.5 The stem diameter is measured at 1.5m above ground level and given in millimetres (mm). Tree heights are measured in metres (m) using a clinometer where access and land typography allowed. In instances where access to tree's stem and height measurements were not possible, the dimensions have been estimated by eye.

Crown Spread and Height of Crown Clearance

- A2.6 Radial crown spread is measured in metres and is listed for each of the four cardinal points where access has been possible to obtain a measurement. Where access was not possible to measure the spread of the canopy, such distances have been estimated by eye or informed by aerial photography.
- A2.7 The measured canopy shapes have been plotted on the **Tree Constraints Plan** at the four cardinal points. For groups of trees, the extent of the canopy has been measured as an average across the group and plotted using the topographical survey mapping. In some instances, Tyler Grange will use aerial photography to inform the canopy spread of larger tree groups and woodlands where topographical data is limited for such features.
- A2.8 The distance between the ground level and the first significant branch or radial tree crown, whichever is the lower, has been measured in metres.

Age Class

A2.9 The age of each tree is defined as follows:

Young - within the first third of reaching full maturity;

Semi-Mature - within the second third of reaching full maturity;

Early-Mature - within the last third of reaching full maturity;

Mature - specimen at full maturity; and

Veteran – tree that, by recognised criteria, shows features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.

Physiological and Structural Condition

A2.10 The physiological or structural condition of each tree is defined as either; good, fair, poor or dead. For each tree, where appropriate, notes on the structural integrity are provided on form, taper, forking habit, storm damage, decay, fungi, pests, etc.

A2.11 An assessment of a tree's physiological condition is defined as:

Good – fully functioning biological system showing expectant vitality for the species i.e. normal bud growth, leaf size, crown density and wound closure.

Fair – fully functioning biological system showing below average vitality i.e. reduced bud growth, smaller leaf size, lower crown density and reduced wound closure.

Poor – a biological system with limited functionality showing clear physiological decline, disease or significantly below average vitality i.e. limited bud growth, small and chlorotic leaves, low crown density and limited wound closure.

Dead – tree observed to fully dead with no living parts.

A2.12 An assessment of a tree's structural condition is defined as:

Good – no significant structural defects.

Fair – structural defects which could be alleviated through remedial tree surgery or arboricultural management practices

Poor – structural defects which cannot be alleviated through tree surgery or arboricultural management practices.

Tree Quality Gradings

A2.13 The value of trees have been assessed in accordance with the BS5837 Cascade Chart for Tree Quality Assessment (See **Appendix 3**). Grading subcategories (1, 2 and 3) reflect arboricultural, landscape and cultural values, respectively.

Root Protection Areas

- A2.14 The **Tree Constraints Plan** shows the approximate extent of Root Protection Areas (RPAs). The RPAs have been plotted and calculated in accordance with the methodology set out in Appendices C and D of BS5837, using the tree stem diameter dimensions obtained during the site visit.
- A2.15 Plotted RPAs serve as a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.
- A2.16 Where pre-existing site conditions or other factors indicate that rooting may occur 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 observed on-site. Any deviation in the RPA from the original circular plot should take account of the following factors whilst still providing adequate protection for the root system:
- a) the morphology and disposition of the roots, when influenced by past or existing site conditions (e.g. the presence of roads, structures and underground apparatus);
 - b) topography and drainage;
 - c) the soil type and structure; and
 - d) the likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.
- A2.17 The plotted RPAs have therefore informed the design of the proposed development where possible. While developing within RPAs should be avoided, special working methods can be adopted to alleviate the RPA disturbance for cases where the development is considered necessary and unavoidable.

Tree Canopies and Shading

- A2.18 The distribution of tree canopy cover on and within influence of the site is illustrated on the **TCP**. Canopies have been plotted at cardinal points for individual and groups of trees. The Tree Survey Schedule included at **Appendix 4** to the rear of this report lists the vertical clearance from site ground level to significant tree branching of individual trees. This measurement informs the impacts of accessibility and development beneath tree canopies.
- A2.19 The principal tree shadow constraints are shown on the **TCP** and have been plotted in accordance with BS5837 using the current height of surveyed trees. The indicative shade cast by existing surveyed trees signifies the area within which the amenity interests of shading, available daylight and the proximity of trees to any future site uses may be impacted upon should a tree be retained as part of development.
- A2.20 Where shading is unavoidable, the potential adverse impact of shadowing should also be reviewed on balance with the positive aspects of retaining a degree of canopy shade. BS5837:2012 (para. 5.3.4, a) NOTE 1) states that "shading can be desirable to reduce glare or excessive solar heating, or to provide comfort during hot weather. The combination of shading, wind speed/turbulence reduction and evapotranspiration effects of trees can be utilised in conjunction with the design of buildings and spaces to provide local microclimatic benefits".

Limitations

- A2.21 The comments made are based on observable factors present at the time of inspection. Although the health and stability of trees in their current context is an integral part of their suitability for retention, it must be understood that this report is not a tree risk assessment and should not be construed as such. While every attempt has been made to provide a realistic and accurate assessment of the trees' condition at the time of inspection, it may have not been appropriate, or possible, to view all parts or all sides of every tree to fulfil the assessment criteria of a risk assessment.
- A2.22 No tree can be considered entirely safe, given the possibility that exceptionally strong winds could damage or uproot even a mechanically 'perfect' specimen. It is therefore usually accepted that hazards are only recognisable from distinct defects or from other failure-prone characteristics of the tree or the site. An assessment of the potential influence of trees upon existing buildings or other structures resulting from the effects of trees upon shrinkable load-bearing soils or the effects of incremental root or branch growth, are specifically excluded from this report.

Un-assessable Risks

- A2.23 Any alteration to the application site or development proposals could change the current circumstances and may invalidate this report and any recommendations made.
- A2.24 The Wildlife and Countryside Act (WCA) 1981 (as amended) makes it an offence to disturb nesting birds or recklessly endanger a bat or its roost. Bats are also a European protected species and are additionally protected under the Conservation (Habitats & c) Regulations 1994 and 2010 (as amended). The survey findings, constraints, opportunities and design or mitigation recommendations included within that report must be read alongside this document.
- A2.25 A lack of recommended work does not imply that a tree does not pose an unacceptable level of risk and likewise, it should not be implied that a tree will present an acceptable level of risk following the completion of any recommended work.

Appendix 3: BS 5837:2012 Cascade Chart for Tree Quality Assessment

Appendix 3: BS 5837:2012 Cascade Chart for Tree Quality Assessment

TREES FOR REMOVAL				
Category and Definition	Criteria			Identification on Plan
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning). Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline. Trees infected with pathogens of significance to the health and/or safety of other trees nearby or very low-quality trees suppressing adjacent trees of better quality. (NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve)			DARK RED
TREES TO BE CONSIDERED FOR RETENTION				
Category and Definition	Criteria - Subcategories			Identification on Plan
	1. Mainly Arboricultural Values	2. Mainly Landscape Values	3. Mainly Cultural Values, including Conservation	
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)	LIGHT GREEN

TREES TO BE CONSIDERED FOR RETENTION				
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 remedial 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 benefits.	MID BLUE
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	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 temporary/transient landscape benefit.	Trees with no material conservation or other cultural value.	GREY

Appendix 4: Tree Survey Schedule

BS5837: 2012 Tree Survey Schedule

Tree Number	Common Species Name	Height (m)	Trunk Diameter (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Physiological Condition	Structural Condition	BS5837 Category	Comments/Preliminary Management Recommendations	RPA Radius	Root Protection Area (m2)
				N	S	E	W								
T1	Grey Willow	7	6x60, 5x40, 2x20	3.5	3	3	2.5	0	EM	Fair	Fair	C.1	Self-seeded multistemmed willow. Unmanaged and contained by hardstanding. Low value specimen left to naturalise.	2m	12
G1	Goat Willow, Rhododendron	8	200 av.	2.00	2.00	2.00	2.00	0.00	Y - EM	Fair - Good	Fair	C.2	Stand of off-site naturalised trees and self-seeded regenerative stock. Hardstanding across site-side RPAs with palisade fence line and tarmac to site boundary. Low value trees left unmanaged.	2.4m	—

Appendix 5: Email Confirmation with MCC regarding TPOs

Re: Poland Street TPO Search

Planning <Planning@manchester.gov.uk>

Thu 28/01/2021 10:32

To: Jack Jewell <jjewell@tylergrange.co.uk>

Dear Jack

The property/land is within Ancoats Conservation Area 1989 Conservation Area so will require planning permission for the work to the trees. You can apply at www.planningportal.co.uk. There is no fee for the application. For information, there is no Tree Preservation Order that affects the property/land.

Regards Aaron

Technical Support Team (Planning)
Planning, Building Control & Licensing
Growth & Development Directorate

Postal address: Manchester City Council, P O Box 532, Town Hall, Manchester M60 2LA

Location address: Level 6 Town Hall Extension, Manchester M2 5DB

Tel: 0161 234 4516

Please consider the environment before printing an e-mail.

From: Jack Jewell <j.jewell@tylergrange.co.uk>

Sent: 27 January 2021 20:43

To: Planning <Planning@manchester.gov.uk>

Subject: Poland Street TPO Search

Good evening,

Please can you confirm if any trees within the attached red line boundary are covered by a Tree Preservation Order?

The site lies at the junction of Poland Street and Jersey Street. An adjoining post code to assist with locating the site is M4 6JW.

Kind regards

Jack



Jack Jewell
Director

m 07921679983
e j.jewell@tylergrange.co.uk

3 Jordan Street
Manchester, M15 4PY



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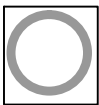
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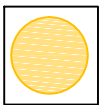
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Plan: 13399/P06b: Tree Constraints Plan



Category C - Trees of low quality and value



Approximate Extent of BS5837
Calculated Root Protection Areas
(RPAs)



BS5837 Canopy
Shading Extents



T1

G1

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Tree Constraints Plan



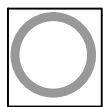
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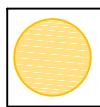
3 Jordan Street, Manchester, M15 4PY
t: 0161 236 8367
www.tylergrange.co.uk

Project	Manchester Life, Back of Ancoats Phase 1 - Eliza Yard,
Drawing No	13399/P06b
Date	February 2021

Plan: 13399/P07c: Tree Retention and Removal Plan



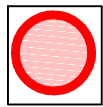
Category C - Trees of low quality and value



Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)



BS5837 Canopy Shading Extents



Proposed Tree Removal (T1)

T1 (Category C) removed to facilitate access and ground works

Replacement trees located within central courtyard, Jersey Street roadside boundary and eastern open green space

Improvements to G1 trees (off-site) with existing site-side RPAs changed from hard surfacing to new lawn area

T1

G1

Poland Street

Jersey Street



3 Jordan Street, Manchester, M15 4PY
t: 0161 236 8367
www.tylergrange.co.uk

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Tree Retention and Removal Plan



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Project

Manchester Life, Back of Ancoats Phase 1 - Eliza Yard,

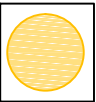
Drawing No
Date

13399/P07c
May 2021

Plan: 13399/P08c: Tree Protection Plan



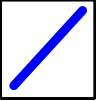
Category C - Trees of low quality and value



Approximate Extent of BS5837 Calculated Root Protection Areas (RPAs)



BS5837 Canopy Shading Extents



Tree Protection Fencing



Manual excavation / removal of existing hard surfacing

G1

Tree protection
fencing installed
around site-side of
G1 as shown

Poland Street

Jersey Street



Tyler Grange

3 Jordan Street, Manchester, M15 4PY
t: 0161 236 8367
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Tree Protection Plan

Project	Manchester Life, Back of Ancoats Phase 1 - Eliza Yard,
Drawing No	13399/P08c
Date	May 2021

Tyler Grange Group Limited
Marsden Estate, Rendcomb. Cirencester, Gloucestershire, GL7 7EX
Tel: 01285 831804 www.tylergrange.co.uk
Birmingham • Cotswolds • Exeter • London • Manchester

