

## Arboricultural Impact Assessment (AIA)

|                  |                                                       |
|------------------|-------------------------------------------------------|
| NAME OF SITE:    | Pennington Street, Levenshulme,<br>Manchester M12 4QJ |
| PROJECT No:      | 12754                                                 |
| CLIENT NAME:     | Onward Homes                                          |
| SPECIALIST:      | Amenity Tree Care Ltd                                 |
| DATE PREPARED:   | 10.09.2025                                            |
| PREPARED BY:     | Paul Springett                                        |
| REVIEWED BY:     | Simon Brain                                           |
| DATE REVIEWED:   | 10.09.2025                                            |
| VERSION CONTROL: | Version 1                                             |

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- 3 Tree Removal Plan
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## **1.0 Introduction**

### **1.1 Instruction, Scope, Methodology, Mitigation & Limitations**

- 1.2 My name is Paul Springett with 17 years' experience holding the LANTRA Professional Tree Inspection certificate. I have been instructed by the client to prepare the following Arboricultural Impact Assessment for land at Pennington Street, Levenshulme, Manchester M12 4QJ. The proposed development is for 14 mixed social housing units, associated highways access and new urban landscaping to include extensive tree planting.
- 1.3 This Arboricultural Implications Assessment (AIA) is based on the proposed developments as shown on the 1351-100B-Proposed Site Plan as drawn by DK Architects and incorporated into the Tree Protection Plans (TPP) in Appendix 1 of this report.
- 1.4 The assessment will be carried out in line with the recommendations in BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* and will evaluate the direct and indirect impacts of the proposed design and where necessary recommend mitigation.
- 1.5 The AIA considers constraints posed above and below ground and where appropriate makes recommendations to mitigate impacts associated with development sites and retained trees.
- 1.6 Where specialist design, construction techniques or in areas where supervision of the works is required a Special Measure Area (SMA) has been shown on the TPP for the study areas.
- 1.7 Below ground constraints are influenced by the root protection area and are determined in line with the recommendations set out in BS 5837:2012. These recommendations quantify the root protection area based on a measured stem diameter in accordance with Annex C, and the root protection area determined from Annex D.
- 1.8 It is important to understand that when considering the Root Protection Area (RPA) with regards to the circular plot as delineated on the TPP that a number of site factors can influence root morphology and disposition of tree roots.

- 1.9 Above ground constraints are considered above and below ground and in line with the recommendations in BS 5837:2012 to include shade, dominance, current and future crown spread as well as the ultimate height of those retained trees.
- 1.10 Impacts associated with development sites and retained trees can be associated with single or multiple site operations that can subject trees to multiple impacts (*root severance, compaction, loss of photosynthetic material*), where this is applicable it will be highlighted in the AIA.
- 1.11 The mitigation measures proposed in this report are essential to ensure that trees marked for retention are adequately protected during the period of post/preconstruction.

## **2.0 Arboricultural Impact Assessment**

### **2.1 Area for proposed development**

2.2 The proposed development has been embedded within the Tree Constraints Plan which indicates the following developments associated with this site to have an arboricultural impact:

- Installation of proposed housing associated services and landscaping requiring tree removal.

2.3 The arboricultural impacts of these items have been identified below.

2.3.2 Installation of proposed development requires the removal of the following tree references:

- T1, T2, T4, T6, T7, T8, T9, T10, T11, T12, T13, T16, T17, T18, T19

## **3.0 Tree Preservation Orders**

3.1 A review of the Manchester City Council Website information for Tree Preservation Orders has confirmed none are located within the red line boundary, or directly adjacent to it.

## **4.0 Trees to be removed and retained**

4.1 The following trees have been identified for removal due to their condition (Category U): None

4.2 A total of fifteen trees are identified to be removed for the direct impact of development as listed in section 2.3.2.

4.3 The remaining trees are due to be retained and protected as outlined on the TPP by methodology needed in an AMS.

## **5.0 Root Protection Areas (RPA)-modifications**

- 5.1 Root Protection Areas have been plotted in line with the guidance given in BS 5837: 2012 where ground constraints have had or are likely to affect the root morphology of trees e.g. where underground utilities or building foundations have obstructed root growth this shall require formal confirmation by excavation to establish presence or absence of significant rooting material. No RPA modifications have been shown for this scheme.

## **6.0 Post construction considerations**

- 6.1 No post-construction considerations are required in relation to retained trees, as all existing trees within the development footprint are scheduled for removal. Offsite trees within influence of the proposals will not be directly affected and are not considered to be an arboricultural constraint to the proposals as they are located in areas which will not directly affect properties with regards to cast shade, leaf fall, blocked views and overbearing proximity.

## **7.0 Tree pruning to facilitate development and future pruning**

- 7.1 No tree pruning is required to facilitate development or future use, as all existing trees within the development footprint are scheduled for removal.

## **8.0 New surfacing and ground level modifications**

- 8.1 No new surfacing or ground level modifications are proposed in relation to retained trees, as all existing trees within the development footprint are scheduled for removal.

## **9.0 Construction Exclusion Zones and Special Measure Areas**

- 9.1 The Construction Exclusion Zone has been shown as a black fenced polyline on the TPP in Appendix 1 and shall be constructed using heras panels and rubber feet securely staked to the ground.

## **10.0 Site supervision and monitoring**

- 10.1 Where a tree has been delineated on the TPP as requiring retention there will be a requirement to oversee construction operations in these areas in order to ensure that no damage occurs to the retained tree.
- 10.2 To ensure that there is an auditable system of site monitoring, reports will be compiled by an appointed arborist and following site visits they issued to the site manager and design team, copies of which will be available on site at all times for inspection by a Council planning/Tree officer.

## **11.0 Installation of below ground infrastructure**

- 11.1 No detailed plans have been provided specifying the location of site utilities
- 11.2 Specialist advice with regards to the position of utilities will need to be sought from engineers and must be reviewed by the consulting arboriculturist prior to commencement on site.
- 11.3 The usual construction techniques for installing site utilities within an RPA will be unacceptable due to the level of root severance that would occur. The impact of root severance will have a detrimental effect on tree health as trees require a healthy root system in order to maintain water and mineral uptake from the soil. Trees need to maintain a balance between shoot and root growth to ensure that the resources supplied by each can meet the demand of the other. Severance of tree roots caused by trenching can lead to reduced water uptake which in turn impacts on the trees ability to supply water to the canopy, resulting in desiccation. A further complication associated with root severance can be problems associated with tree stability. The tree relies on an intact root system in order to maintain stability; this stability will be compromised by root severance.
- 11.4 The use of trenchless techniques can be acceptable provided the depth of service run that is excavated is below the anticipated root depth.

## **12.0 Design change requirements**

- 12.1 Design changes have not been considered due the demanding needs for social housing in suitable locations, and the proposed replacement tree planting as part of the proposals to enhance tree cover on the site in the long term.

### **13.0 Amenity Value**

It is considered that the successful establishment of replacement trees in line with Local Planning Authority policy of a two to one replacement would provide the opportunity to enhance the long-term wider amenity value of the site contributing positively to the surrounding landscape and wider greenscape.

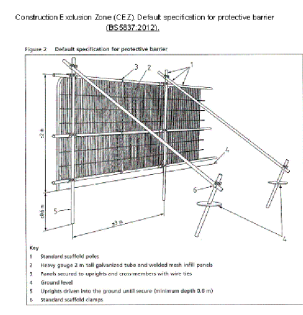
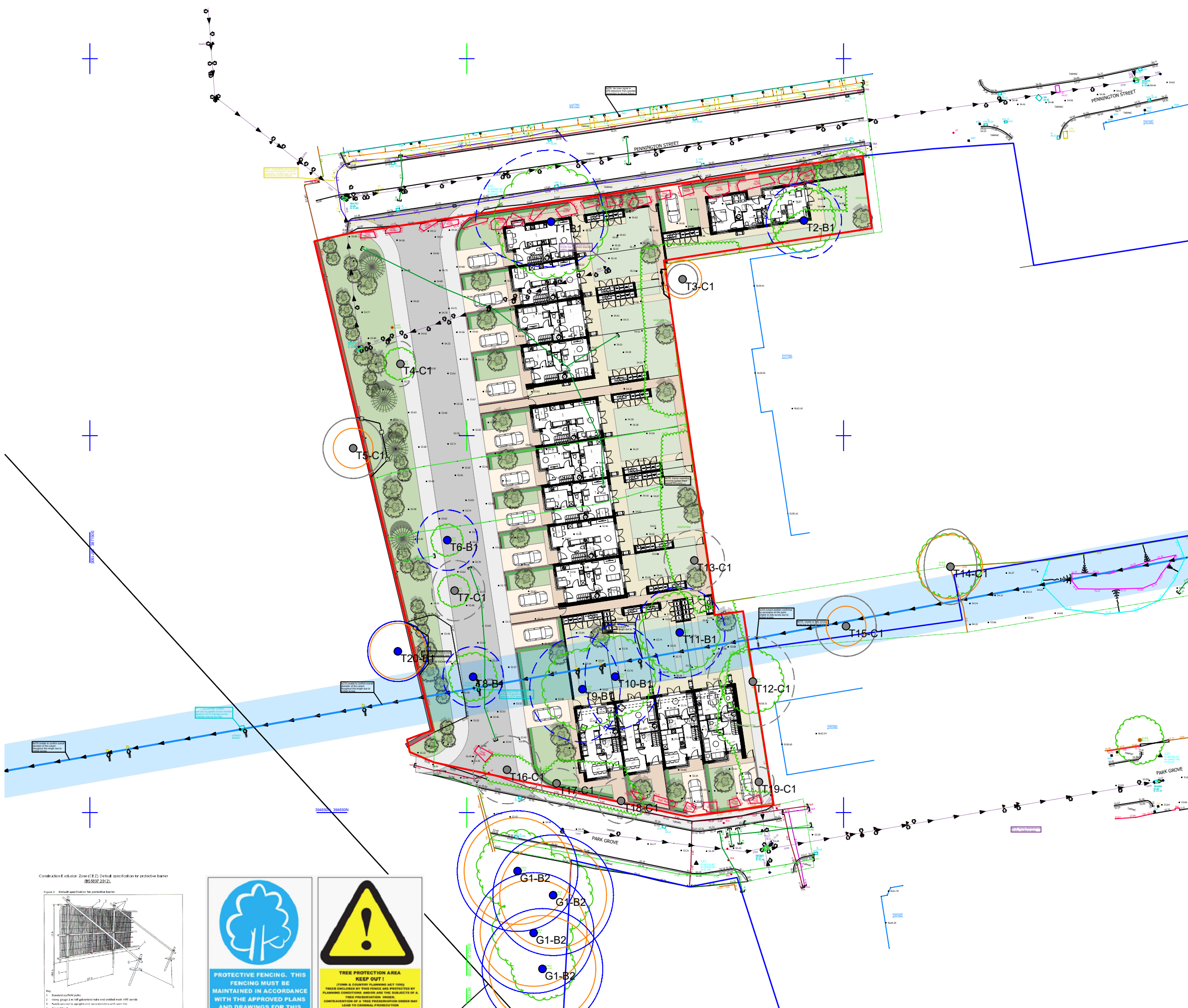
### **14.0 Concluding statement**

- 14.1 The Arboricultural Impact Assessment has been undertaken in accordance with BS 5837:2012 *Trees in relation to design demolition and construction – Recommendations*. The proposed development will necessitate the removal of fifteen trees to facilitate the proposals, resulting in a loss of on-site tree cover. While this represents a short-term reduction in arboricultural value, the successful implementation of a replacement planting scheme in line with local planning policy (two-for-one replacement, or more) will provide an opportunity to enhance the long-term amenity value and landscape character of the area.

**Appendix 1 Survey sheets (updated as a result of AIA)**

| Tree No. | latin name                                | Life Stage | Diameter(mm) | Stem Count | Height(m) /<br>Crown Height<br>(m) | North(m) | South(m) | East(m) | West(m) | Category | Estimated<br>Remaining Life<br>Expectancy (yrs) | Pick Comments                                                           | Comments                                                                                                       | Recommendations                                | RPR(m) | RPA(m) |
|----------|-------------------------------------------|------------|--------------|------------|------------------------------------|----------|----------|---------|---------|----------|-------------------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------|--------|--------|
| T1       | Prunus avium (Wild Cherry)                | M          | 690          | 1          | 13(2)                              | 9.5      | 6        | 7       | 10      | B1       | 40+                                             |                                                                         | Historical crown lifting works evident, low branches over the public highway at 2m above ground level.         | Remove for development                         | 8.28   | 215.41 |
| T2       | Tilia X europaea (Common Lime)            | M          | 470          | 1          | 15(0.5)                            | 5        | 5        | 5       | 5       | B1       | 40+                                             | Branches encroaching upon building.                                     |                                                                                                                | Remove for development                         | 5.64   | 99.95  |
| T3       | Chamaecyparis lawsoniana (Lawson Cypress) | SM         | 210          | 1          | 7(0)                               | 2        | 2        | 2       | 2       | C1       | 40+                                             | Tree not picked up on the topo, plotted by eye by the surveyor on site. | Off site tree located in a residential property, measurements estimated due to no access.                      | Off site not affected. Insatall CEZ as per TPP | 2.52   | 19.95  |
| T4       | Sorbus aucuparia (Rowan)                  | EM         | 230          | 1          | 8(2)                               | 3        | 3        | 2       | 3       | C1       | 20+                                             |                                                                         | Brown rot decay located on the northern aspect of the main stem, die back evident in the eastern upper canopy. | Remove for development                         | 2.76   | 23.93  |
| T5       | Fraxinus excelsior (Ash)                  | SM         | 220          | 1          | 8(2)                               | 4        | 4        | 4       | 4       | C1       | 20+                                             | Tree not picked up on the topo, plotted by eye by the surveyor on site. | Off site tree located on a railway embankment, measurements estimated due to no access.                        | Off site not affected. Insatall CEZ as per TPP | 2.64   | 21.9   |
| T6       | Sorbus aucuparia (Rowan)                  | EM         | 380          | 1          | 9(2.5)                             | 4        | 4        | 4       | 4       | B1       | 20+                                             |                                                                         | Minor historical vandalism located on the main stem.                                                           | Remove for development                         | 4.56   | 65.33  |
| T7       | Sorbus aucuparia (Rowan)                  | EM         | 300          | 1          | 8(2.5)                             | 4        | 4        | 4       | 3       | C1       | 10+                                             | Cavity on stem.                                                         | Longitudinal cavity located on the northern aspect of the main stem 1.2m in length.                            | Remove for development                         | 3.6    | 40.72  |
| T8       | Sorbus aucuparia (Rowan)                  | EM         | 260          | 1          | 7(2)                               | 4        | 4        | 4       | 4       | B1       | 20+                                             | Suckers around stem base.                                               |                                                                                                                | Remove for development                         | 3.12   | 30.59  |
| T9       | Tilia X europaea (Common Lime)            | EM         | 400          | 1          | 15(0)                              | 7        | 7        | 5       | 7       | B1       | 40+                                             | Part of linear group.                                                   |                                                                                                                | Remove for development                         | 4.8    | 72.39  |
| T10      | Tilia X europaea (Common Lime)            | EM         | 410          | 1          | 15(0)                              | 7        | 7        | 6       | 4       | B1       | 40+                                             | Part of linear group.                                                   |                                                                                                                | Remove for development                         | 4.92   | 76.06  |
| T11      | Tilia X europaea (Common Lime)            | EM         | 400          | 1          | 14(1)                              | 6        | 6        | 6       | 6       | B1       | 40+                                             | Part of linear group.                                                   |                                                                                                                | Remove for development                         | 4.8    | 72.39  |
| T12      | Acer pseudoplatanus (Sycamore)            | SM         | 220          | 2          | 10(2)                              | 6        | 6        | 5.5     | 6       | C1       | 40+                                             | Branches encroaching upon building.                                     | Causing fence damage.                                                                                          | Remove for development                         | 3.73   | 43.71  |
| T13      | Sorbus aucuparia (Rowan)                  | SM         | 220          | 1          | 9(1)                               | 4        | 4        | 4       | 4       | C1       | 40+                                             | Tree not picked up on the topo, plotted by eye by the surveyor on site. |                                                                                                                | Remove for development                         | 2.64   | 21.9   |
| T14      | Acer pseudoplatanus (Sycamore)            | SM         | 260,240      | 2          | 7(1)                               | 5        | 5        | 3.5     | 3.5     | C1       | 40+                                             |                                                                         | Off site tree, measurements estimated due to dense vegetation.                                                 | Off site tree not affected                     | 4.25   | 56.75  |
| T15      | Aesculus hippocastanum (Horse Chestnut)   | SM         | 220          | 1          | 7(1)                               | 4        | 4        | 4       | 4       | C1       | 40+                                             | Tree not picked up on the topo, plotted by eye by the surveyor on site. | Off site tree.                                                                                                 | Off site not affected                          | 2.64   | 21.9   |
| T16      | Sorbus aucuparia (Rowan)                  | EM         | 390          | 1          | 9(2)                               | 4.5      | 4.5      | 4.5     | 4.5     | C1       | 20+                                             | Tree not picked up on the topo, plotted by eye by the surveyor on site. |                                                                                                                | Remove for development                         | 4.68   | 68.82  |
| T17      | Prunus avium (Wild Cherry)                | Y          | 80           | 1          | 6(1)                               | 2        | 3        | 3       | 2       | C1       | 40+                                             | Tree not picked up on the topo, plotted by eye by the surveyor on site. |                                                                                                                | Remove for development                         | 0.96   | 2.9    |
| T18      | Fraxinus excelsior (Ash)                  | SM         | 180          | 1          | 7(1)                               | 3        | 3        | 3       | 3       | C1       | 20+                                             | Tree not picked up on the topo, plotted by eye by the surveyor on site. |                                                                                                                | Remove for development                         | 2.16   | 14.66  |
| G1       | Tilia X europaea (Common Lime)            | M          | 590          | 1          | 16(0)                              | 8        | 8        | 8       | 8       | B2       | 40+                                             |                                                                         | Off site ivy clad group, Dbh range 580mm-590mm.                                                                | Off site not affected                          | 7.08   | 157.5  |
| T19      | Fraxinus excelsior (Ash)                  | SM         | 110          | 1          | 6(1)                               | 2        | 2        | 2       | 2       | C1       | 20+                                             | Tree not picked up on the topo, plotted by eye by the surveyor on site. |                                                                                                                | Remove for development                         | 1.32   | 5.47   |
| T20      | Fraxinus excelsior (Ash)                  | EM         | 310          | 1          | 12(1)                              | 4        | 4        | 4       | 4       | B1       | 40+                                             | Tree not picked up on the topo, plotted by eye by the surveyor on site. | Off site tree located on a railway embankment, measurements estimated due to no access.                        | Off site not affected. Insatall CEZ as per TPP | 3.72   | 43.48  |

## **Appendix 2 Tree Protection Plan**



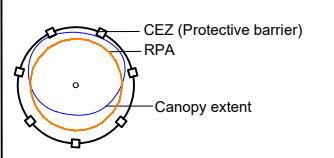
### TREE PROTECTION PLAN

#### Retention value key



#### Root Protection Areas (RPA) & Construction Exclusion Zones (CEZ)

Root Protection Areas (RPA's) have been identified and are based on BS5837:2012. RPA's and Construction Exclusion Zones (CEZ) have been shown as detailed below. The CEZ shall act as the protective barrier for retained trees.



**CEZ and re-positioning during build period**  
The CEZ's will require installation as shown on the TPP. The CEZ shall be repositioned only under ACOW.

Refer to Arboricultural Implications Assessment (AIA) For details of recommended construction in SMA's.

**NOTES**  
This drawing shall not be reproduced in black and white.  
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Client:

Onward Homes

Project:

Pennington Street, Levenshulme, Manchester M12 4QJ  
12754

Detail:

TREE PROTECTION PLAN - Overview

Drawn By:

PS

Date:

09.09.2025

Scale:

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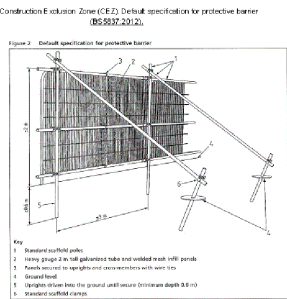
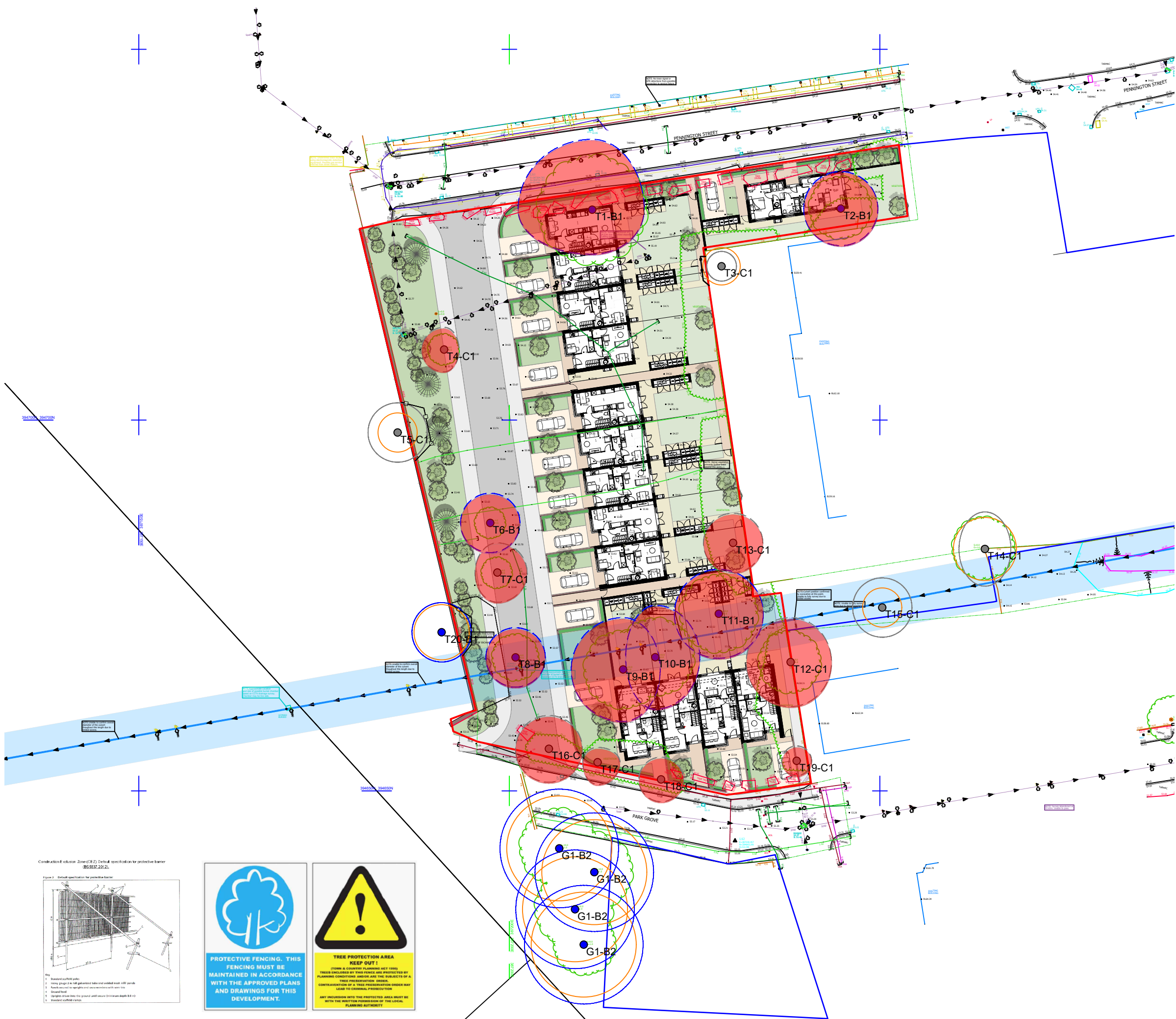
Drg No:

TR-01-Sheet 1

Revision:

V1

## **Appendix 3 Tree Removal Plan**



**PROTECTIVE FENCING. THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.**

**TREE PROTECTION AREA**  
**KEEP OUT!**  
(UNDER A CURRENT PLANNING ACT 1990)  
TREES INCLUDED BY THIS FENCING ARE PROTECTED BY PLANNING CONDITIONS. ANYONE WHO IS SUBJECTS OF A TREE PRESERVATION ORDER, CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION.  
ANY INCLUSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY

### TREE REMOVAL PLAN

**Retention value key**

(RETENTION VALUE A)

(RETENTION VALUE B)

(RETENTION VALUE C)

(RETENTION VALUE D)

**Root Protection Areas (RPA) & Construction Exclusion Zones (CEZ)**

Root Protection Areas (RPA's) have been identified and are based on BS5837:2012. RPA's and Construction Exclusion Zones (CEZ) have been shown as detailed below. The CEZ shall act as the protective barrier for retained trees.

CEZ (Protective barrier)

RPA

Canopy extent

Tree to remove

**CEZ and re-positioning during build period**  
The CEZ's will require installation as shown on the TPP. The CEZ shall be repositioned only under ACDW

Refer to Arboricultural Implications Assessment (AIA) For details of recommended construction in SMA's.

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ENVIRONMENTAL PLANNING CONSULTANTS

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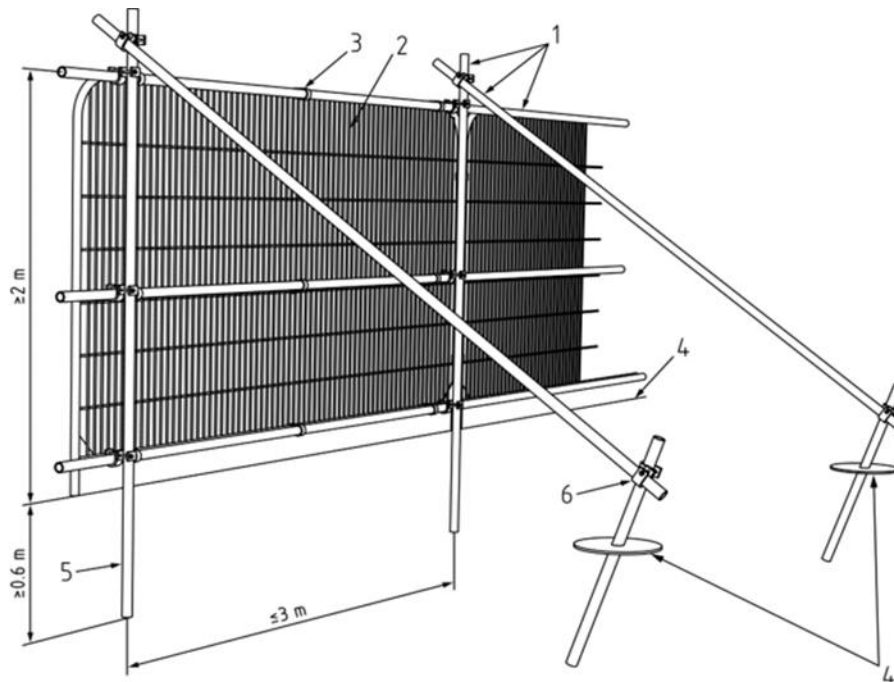
Detail:  
**TREE REMOVAL PLAN - Overview**

|           |            |            |
|-----------|------------|------------|
| Drawn By: | Date:      | Scale:     |
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|               |           |
|---------------|-----------|
| Drg No:       | Revision: |
| TR-01-Sheet 1 | V1        |

## Appendix 4 Tree Protection Fencing Specification

### Default specification for protective barrier



#### Key

- 1 Standard scaffold poles
- 2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
- 3 Panels secured to uprights and cross-members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m)
- 6 Standard scaffold clamps

