

ARBORICULTURAL IMPACT ASSESSMENT (AIA)

JULY 2024

Russell Road Extra Care

Russell Road
Whalley Range
Manchester
M16 8AJ

U R B A N
G R E E N

QUALITY MANAGEMENT

Project No.:	UG2410			
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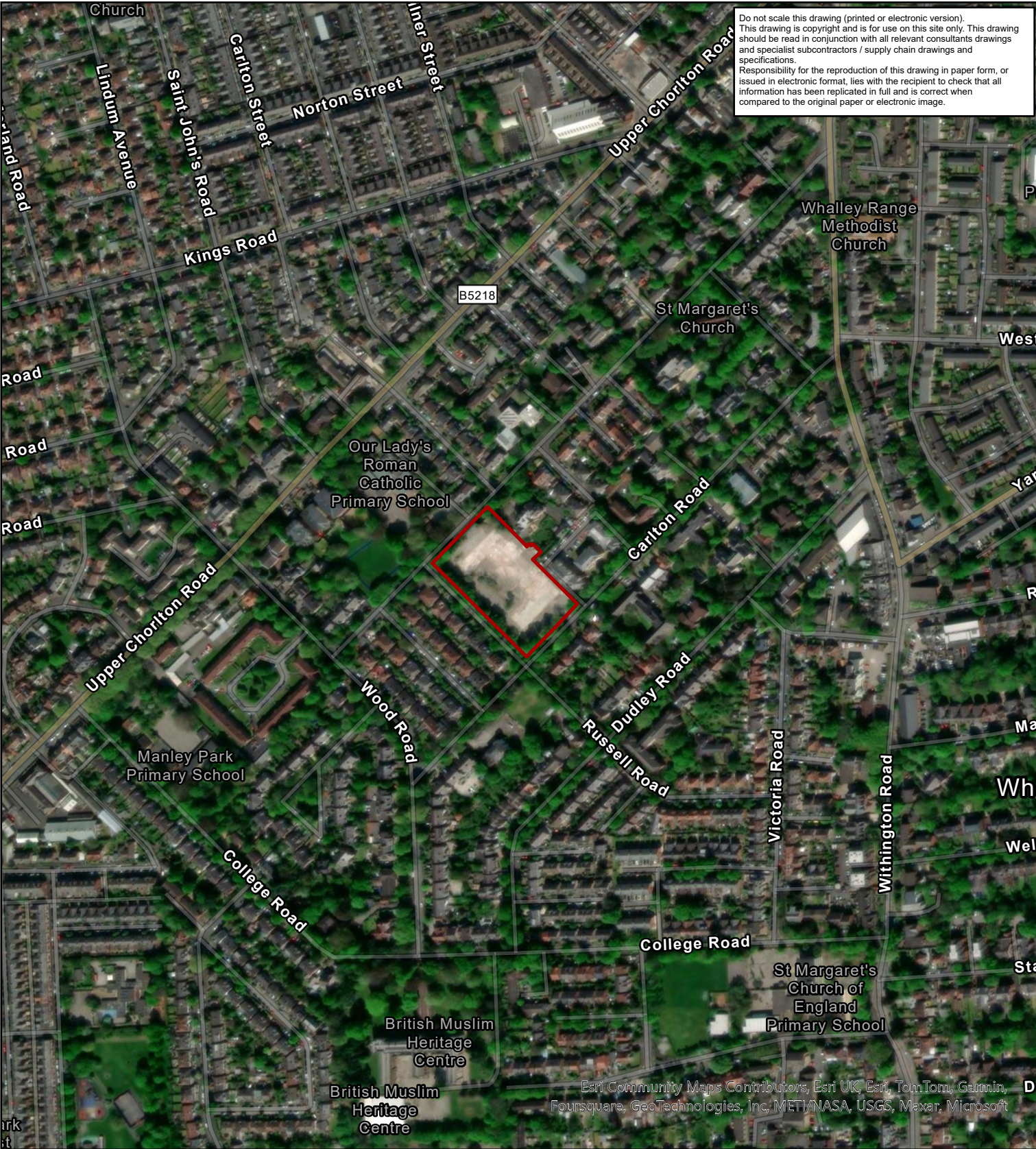
1. Executive Summary

- 1.1.1. Urban Green have been instructed by Rowlinson Construction Ltd. to carry out an Arboricultural Survey to British Standard 5837: 2012 guidelines at Russell Road, Whalley Range, Manchester, M16 8AJ and produce our findings in a report.
- 1.1.2. It is proposed to develop the site into a four-storey care home facility on the derelict site of the former Spire Hospital, alongside associated external structures, parking bays and soft landscaping. Full details of the proposed site layout can be seen on the plans included in Appendix 4.
- 1.1.3. There are no Tree Preservation Orders (TPOs) currently in effect at the site or in the vicinity, nor does the site lie within a Conservation Area.
- 1.1.4. The proposed development necessitates the removal of one individual tree, one tree group, and sections of a further three tree groups within the site boundary. However, it is noted that these are of low value. It is recommended that this tree loss is mitigated against through onsite replacement tree planting and the production of a robust soft landscaping scheme.
- 1.1.5. One further tree will require removal due to its poor condition and location, in accordance with Arboricultural best practice.
- 1.1.6. Urban Green have also been instructed to carry out a Preliminary Ecological Appraisal (PEA) of the site (UG_2410_ECO_PEA_01). This report should be read and adhered to in conjunction with the PEA report.
- 1.1.7. Tree protective fencing will need to be installed at the alignment shown on the Tree Protection Plan in Appendix 4 before any construction activity takes place.
- 1.1.8. It will also be necessary to carry out Arboricultural supervised excavation with possible root pruning within the Root Protection Areas (RPAs) of retained trees T5 and T31, as indicated on the Tree Protection Plan.
- 1.1.9. Removal and replacement of existing hard surfaces within the RPAs of several retained trees will also need to be carried out under Arboricultural supervision, as indicated on the Tree Protection Plan.
- 1.1.10. Information regarding the layout of new utilities and drainage and final site levels should be submitted to the Arboricultural Consultant so that the impact of these on the retained trees can be assessed.
- 1.1.11. An Arboricultural Method Statement (AMS) will be required, detailing working methods within the RPAs of trees to be retained.

2. Introduction

2.1. Instructions and References

- 2.1.1. Urban Green have been instructed by Rowlinson Construction Ltd. to carry out an Arboricultural Impact Assessment (AIA) in accordance with BS 5837: 2012 '*Trees in relation to design, demolition and construction – Recommendations*' at Russell Road, Whalley Range, Manchester, M16 8AJ and produce our findings in a report to be submitted with a detailed planning application.
- 2.1.2. All trees, regardless of their statutory status, are a material consideration in a planning application. BS 5837: 2012 recognises the potential conflict between trees and development. The standard sets out to assist those concerned with trees in relation to construction and aid with decision making. This is achieved by providing impartial and balanced information on trees and their potential impacts.
- 2.1.3. Due to the nature of the site, it was decided that the survey methodology would include broadly grouping trees that share very similar characteristics. This method is in line with point 4.4.2.3 of BS 5837: 2012 that states '*Trees forming groups...should be identified and considered as groups where the arboriculturist determines that this is appropriate... It may be appropriate to assess the quality and value of trees as a whole, rather than individuals.*'
- 2.1.4. The site is located in the area shown in the Site Context image below. The Ordnance Survey (OS) Grid Reference is SJ 82618 95205.



Legend: Red Line Boundary		0.4 Kilometers		N URBAN GREEN A: Ground Floor, The Tower, Deva City Office Park, Trinity Way, Manchester M3 7BF T: +44 (0) 161 312 3131 weareurbangreen.co.uk
Client: Rowlinson Construction		Issue: 01		
Project: Russell Road Extra Care		Scale @ A4 1:5,000		
Title: Site Context		Approved by: TM	Checked by: OJ	
Drawing Ref: UG_2410_SITE_CONTEXT		Author: CL	Date: 23/05/2024	

2.2. Scope

- 2.2.1. The AIA considers any potential impacts on existing trees including the effect of any tree loss required to implement the design and recommendation for the establishment of new trees.

2.3. Documents Provided

- 2.3.1. A scaled topographical plan has been provided with tree positions already plotted (Geomatic Surveys Ltd. Topographical Survey Drawing No. 02672/Topo). Any extra trees found on site that were not included on the original plan have been plotted according to measurements taken on site and/or using aerial photography.
- 2.3.2. Tree locations which have been estimated are illustrated on the plans included in Appendix 4, by their identifying number with a “#” suffix. The exact locations of these trees must be verified, and any discrepancies discussed with the Arboricultural Consultant before starting works on site.
- 2.3.3. A plan outlining the development proposals has been overlaid with the Tree Constraints Plan to assess the potential impacts.

2.4. Limitations

- 2.4.1. This report is based upon a visual inspection carried out from ground level only. The consultant shall not be responsible for events that happen after the date of the report due to factors that were not apparent at the time, and the acceptance of this report constitutes an agreement with the guidelines and the terms listed in this report.
- 2.4.2. The consultant accepts no liability in respect of the trees unless the recommendations of this report are carried out under their supervision.
- 2.4.3. Assessing the potential influence of trees upon load bearing soils, beneath existing and proposed structures resulting from water abstraction by trees or rehydration of shrinkable soils was not included in the contract brief and is therefore not considered in the report. The consultant cannot be held responsible for damage arising from such action.
- 2.4.4. Trees are living organisms whose health, condition and structure can change over time. The contents of this report are valid for a period of one year from the date of the report.
- 2.4.5. Potentially hazardous trees are highlighted, and appropriate recommendations are made to reduce the associated risks to an acceptable level.

2.5. The Site

- 2.5.1. The site is located in Whalley Range in Greater Manchester, approximately 1.2km west of the A5103 and north of the A6010, and approximately 3.3km south of central Manchester. It is located within a densely populated urban area, with residential properties to all sides. The proposed development is within the site of the former Spire hospital, which has been demolished, leaving a derelict area of hard standing surrounded by trees and shrubs. Public access roads Russell Road, Carlton Road and Whalley Road run adjacent to the site boundary. Site access is on Carlton Road.

2.6. Soil Profile

- 2.6.1. Reference to the Cranfield Soil and Agrifood Institute's Soilsclapes Viewer suggests the underlying soil profile at the site is characterised as a naturally wet, highly acidic, sandy and loamy soil, which is very low in fertility. This soil profile is typical of arable, horticultural, and some wet lowland heath environments.

3. Legislation

3.1. Tree Protection Status

- 3.1.1. A Tree Preservation Order (TPO) is an order made by a Local Authority to protect specific trees, groups of trees or woodlands in the interests of amenity. A TPO prohibits the cutting down, topping, lopping, uprooting and wilful damage or destruction of trees without the Local Authority's written consent.
- 3.1.2. Access to the Greater Manchester Combined Local Authority Mapping GM online mapping software indicated there are no TPOs currently in effect at the site, nor does the site lie within a Conservation Area.
- 3.1.3. It is recommended that the Local Authority is consulted before any tree works are undertaken, as new TPOs may have been created since the time of enquiry, and heavy fines exist for unauthorised works to protected trees.
- 3.1.4. All works to trees covered by a TPO require permission from the Local Authority, including any pruning. However, this does not include trees that are dead or have become dangerous. The removal of dead branches is also excluded from a TPO. Although the above exceptions exist, it is advisable to give the Local Authority five days' notice in writing of any intended removal. Permission is not needed where tree work is required to implement an approved planning application.
- 3.1.5. It is an offence to remove more than five cubic metres of timber in any one calendar quarter without having first obtained a felling licence from the Forestry Commission. It must be noted, however, that this excludes sites where planning permission has already been granted.

3.2. Ecological Considerations

- 3.2.1. Prior to the commencement of any tree works, the trees should be assessed for the presence of protected species, many of which are protected under the *Wildlife and Countryside Act 1981* (as amended) and/or the *Conservation of Habitats and Species Regulations 2017* (as amended).
- 3.2.2. Where there is evidence that roosting bats, nesting birds, or other protected species are present, works in these areas should pause and the advice of a suitably qualified ecologist should be sought about how best to proceed.
- 3.2.3. If tree works are carried out during the bird nesting season (March to September, inclusive), trees should be inspected by a qualified ecologist to confirm likely absence, no more than forty-eight hours prior to the commencement of works.
- 3.2.4. Urban Green have also been appointed to complete a Preliminary Ecological Appraisal (PEA) of the site (UG_2410_ECO_PEA_01), which should be read and adhered to should any tree work be required. The objectives of the PEA are to identify habitats on site and determine the suitability for any 'protected and/or notable' species, including proximate designated sites, in the context of the development proposals. This report should be read and adhered to in conjunction with the PEA report.

4. Arboricultural Impact Assessment (AIA)

4.1. Summary of the Development

- 4.1.1. It is proposed to develop the site into a four-storey care home facility on the derelict site of the former Spire Hospital, alongside associated external structures, parking bays and soft landscaping. Full details of the proposed site layout can be seen on the plans included in Appendix 4.

4.2. Tree Constraints

- 4.2.1. BS 5837: 2012 recognises that conflicting requirements of the planning system for development means that trees are only one factor which need to be taken into consideration. Although there may be certain specimens that can pose significant constraints to development due to their importance, it is essential that inappropriate tree retention is avoided.
- 4.2.2. Trees can be adversely affected on development sites if their protection is not factored into the wider project management of onsite operations. The tree survey plan has been transposed over plans detailing current proposals to assess the impact on surveyed trees.
- 4.2.3. It is essential that roots are protected from construction works including physical damage from excavation and changes in soil structure from compaction and changes in ground levels.

4.3. Root Protection Areas (RPAs) Explained

- 4.3.1. The Root Protection Area (RPA) is an area of ground around the base of a tree indicated on the plans included in Appendix 4 as an ochre yellow circle centred around the stem which is calculated in relation to the stem diameter.
- 4.3.2. Most tree roots grow within the upper 600mm of the soil profile where most nutrients are available as the result of the decomposition of organic matter close to the surface. Rooting conditions become less favourable at depth as the soil density increases, creating anaerobic conditions.
- 4.3.3. BS 5837: 2012 states that the default position for proposed structures should always be outside the RPA. It is recognised that this may not always be possible, yet tree retention would be desirable. In this instance, technical solutions might be available that prevent damage to the retained tree(s).

4.4. Surveyed Trees

- 4.4.1. The survey assessed twenty-one individual trees, and twelve tree groups, the quality and value of which are summarised below. Full details of the surveyed trees, and tree groups can be viewed in the Tree Data Schedule in Appendix 1.
- 4.4.2. Eight individual trees, and two tree groups were assessed as BS 5837: 2012 'Moderate Quality' Retention Category 'B'; twelve individual trees, and ten tree groups were assessed as BS 5837: 2012 'Low Quality' Retention Category 'C'; and one individual tree was assessed as BS 5837: 2012 'Unsuitable' Category 'U'.
- 4.4.3. Trees T31, T33 and T34 are offsite. The remaining trees and tree groups are within the site or on the boundaries.
- 4.4.4. The tree cover comprises mainly of low-to-moderate quality ornamental/ boundary screening planting, with some low-quality naturally colonised trees central to the site.
- 4.4.5. Most of the trees situated around the site boundaries are visually important in terms of their contribution to the character and appearance of the area. Trees internal/central to the site are of secondary importance in visual terms.

4.5. Impacts of Development

- 4.5.1. The proposed development would necessitate the removal of one individual tree (T4), one tree group (G29) and sections of a further three tree groups (G3, G9 & G10) assessed as BS 5837: 2012 'Low Quality' Retention Category 'C' within the site boundary, as detailed in the Tree Removal Plan and Tree Works Schedule in Appendix 4.
- 4.5.2. One additional tree (T2) assessed as BS 5837: 2012 'Unsuitable' Category 'U' will also require removal due to its poor condition, location, and lack of long-term suitability alongside the proposed development, in accordance with Arboricultural best practice.
- 4.5.3. The removal of these trees, tree group and sections of tree groups would have a low, localised, albeit long-term impact on the visual amenity of the site as viewed from Whalley Road to the west. It is recommended that the removal of these trees be mitigated against through onsite replacement tree planting and the production of a robust soft landscaping scheme.
- 4.5.4. The remaining trees and tree groups are to be retained and can be protected throughout the proposed development in accordance with the standards and practices detailed in BS 5837: 2012 and in this report.
- 4.5.5. Temporary tree protective fencing will need to be installed at the alignment indicated on the Tree Protection Plan in Appendix 4 prior to the commencement of the proposed development. A specification for tree protection fencing can be viewed in section 4.7. of this report and in the Tree Protection Index in Appendix 4.

- 4.5.6. Arboricultural supervised excavation with possible root pruning would be required within the Root Protection Areas (RPAs) of retained trees T5 and T31 to facilitate the proposed development, as indicated on the Tree Protection Plan. These excavations would need to be undertaken in accordance with an Arboricultural Method Statement (AMS).
- 4.5.7. The proposed removal and replacement of hard surfacing within the RPAs of retained trees and tree groups T5, G12-G16, T20, G25-T28, T31 & T34 should be carried out under Arboricultural supervision. These works should also be carried out in accordance with an AMS and sections 6.2.3 and 7.3.6 of BS 5837: 2012.

4.6. Tree Surgery Works

- 4.6.1. Tree works that are recommended within the Tree Works Schedule in Appendix 4 are works required to facilitate development and include details of remedial works. Tree works stated in the Tree Data Schedule are of a general maintenance nature and can be carried out at any time as per recommendations.
- 4.6.2. Tree works required to facilitate the development will be carried out prior to the commencement of any onsite operations. This should allow sufficient space for approved construction to be carried out.
- 4.6.3. Any unforeseen tree works that become apparent during the construction process will require written consent from the Local Authority Tree Officer.
- 4.6.4. All specified tree work is to be carried out in accordance with the standards and practices detailed in BS 3998: 2010 '*Tree work – Recommendations*'.

4.7. Protective Fencing

- 4.7.1. Temporary protective fencing will need to be installed at the alignment indicated on the Tree Protection Plan in Appendix 4, prior to the commencement of any proposed development onsite including the delivery of materials and site facilities.
- 4.7.2. Any fencing that is damaged so that it is no longer able to protect retained trees must be replaced/repared immediately at the alignment indicated on the Tree Protection Plan.
- 4.7.3. The required specification for protective fencing is illustrated in the Tree Protection Index (Insert 1).
- 4.7.4. The 'in-ground' system involves driving vertical scaffold poles approximately 0.6m into the ground onto which are affixed horizontal scaffold poles and bracing struts. 2m high anti-climb weldmesh panels are then wired to the scaffold framework. The vertical scaffold poles should be at a maximum of 3m apart.
- 4.7.5. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to the tree roots when locating uprights.
- 4.7.6. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" shall be fixed to every 10m of protective fencing, as illustrated on the Tree Protection Index (Insert 2).

4.8. Demolition and Removal of Surfaces in the RPA

4.8.1. During demolition, the following restrictions will apply:

- Where direct damage by falling masonry is likely, the tree should be protected by exterior grade plywood sheets constructed around the main stem.
- The main body of any mechanical excavator will operate outside the RPA.
- Masonry will be pulled away from trees where possible.
- When breaking masonry, a fine water spray will be used to minimise dust particles.
- Excessive dust particles on trees will be removed each day by spraying with water.
- Hard surfaces should be kept in place for as long as possible during construction works to prevent soil compaction in the RPA.
- During surface removal, the following restrictions will apply:
 - Only hand operated tools will be used to lift existing surfaces and sub-base. No mechanical excavators are to be used.
 - No excavation below the existing sub-base will occur.
 - All surface removal within the RPA will be supervised by the Arboricultural Consultant or the Local Authority Tree Officer.

4.9. Temporary Site Cabins

4.9.1. All storage facilities and deliveries will make use of existing hard surfaces to avoid unnecessary compaction within RPAs. The locations will be agreed in writing with the Local Planning Authority (LPA) prior to delivery and will remain in the agreed locations unless approved by the LPA.

4.9.2. If storage facilities require siting within RPAs, every effort will be made to ensure that any damage to aerial parts of retained trees is avoided and that appropriate footings are used to avoid root damage or compaction of the soil.

4.10. Utilities

4.10.1. At the time of writing Urban Green have not been made aware of any new utilities or service runs that will be associated with the development. Information regarding the layout of new utilities and drainage and final site levels should be submitted to the Arboricultural Consultant so that the impact of these on the retained trees can be assessed.

4.11. Recommendations

- 4.11.1. An Arboricultural Method Statement (AMS) will be required to provide solutions and working methods so that the impacts identified do not have a detrimental effect on retained trees.
- 4.11.2. All operations that could affect trees on and adjacent to the site must be considered as part of the project management of the proposed development. It is therefore recommended that an Arboricultural Consultant is appointed as part of the design and management team to advise on pre-development issues and supervise onsite operations.
- 4.11.3. The Arboricultural Consultant may also have an advisory role in the preparation of site including tree surgery works and the protection of trees during demolition processes.

Appendix 1 - Tree Data Schedule

The following pages contain information gathered at the site during the tree survey. The reader should refer to Appendices 2 and 3 to correctly interpret the tree survey data.

Reference T= Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	Lowest Branch Height (m)	Lowest Branch Direction	DBH (mm)	Crown Spread (m) W N E S	Notes	Recommendations		Visual Amenity 1-Low 2-Moderate 3-High 4-Very High	Physiological Condition	Life Expectancy (yrs)	RPA Radius (m)
									Priority	Inspect Freq (yrs)				
G1	Young Mixed Species	av 3	av 1	O	M	av 70	av 1 1 1 each	1: Young ornamental planting adjacent to footpath in linear bed. 2: Camelia, cherry laurel, privet. 3: Past pruning of lower lateral branches occluding well. 4: Good clearance of adjacent parking bays and external public footpath. 5: No significant defects.	No action required.		1	Good	20-40 C1	0.84
									n/a	3		Good		
T2	Mature Pear <i>Pyrus</i> sp.	6	4	3	E	320	3.5 3 o	1: Growing against external site wall, canopy overhanging wall. 2: Extensive stem decay with loss of major limb, broken off at 2.5m. 3: Ivy clad stem. 4: Declining health, but does not appear in imminent threat of failure.	Fell to ground level.		1	Poor	<10 U	n/a
									Moderate	n/a		Poor		
G3	Young Mixed Species	av 6	2	O	M	av 100	av 2 2 each	1: Elder, privet, cotoneaster, oak, rhododendron, Japanese laurel. 2: Access prevented detailed inspection. 3: Mix of ornamental and self-set young trees in raised linear bed with thick ivy growth throughout. 4: Crowded growth with multiple crossing branches; little sign of management.	Remove a section to facilitate development - See Tree Removal Plan.		1	Fair	40+ C1	1.20
									n/a	3		Fair		
T4	Mature Sycamore <i>Acer pseudoplatanus</i>	14	6	0.6	M	700	5 5 7	1: Growing in sloping planting pit adjacent to wall. 2: Ivy clad stem and canopy prevented full inspection. 3: Stubs present in canopy from snap-outs, and deadwood visible up to 7cm in diameter, not currently overhanging public areas.	Remove to facilitate development - See Tree Removal Plan.		1	Fair	20-40 C1.2	8.40
									n/a	n/a		Fair		
T5	Early-Mature Sycamore <i>Acer pseudoplatanus</i>	14	7	7	NE	700	7 6 6	1: Growing in linear raised planting bed with dense shrub understory. 2: Ivy-clad stem prevented a full inspection. 3: Minor deadwood visible in canopy; canopy overhangs wall but no significant deadwood overhanging public areas.	Remove ivy from stem and reinspect.		1	Fair	20-40 C1	8.40
									Moderate	1		Fair		

Reference T= Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	Lowest Branch Height (m)	Lowest Branch Direction	DBH (mm)	Crown Spread (m) W N E S	Notes	Recommendations		Visual Amenity 1-Low 2-Moderate 3-High 4-Very High	Physiological Condition	Life Expectancy (yrs)	RPA Radius (m)
									Priority	Inspect Freq (yrs)				
G6	Young Lawson Cypress <i>Chamaecyparis lawsoniana</i>	av 6	av 1.5	1.5	M	av 150	av 1 1 1 each	1: Row of dense screening planting in raised linear bed adjacent to entrance from Whalley Road. 2: Some ivy present on lower stems. 3: Overall in good condition.	No action required.		2	Good Good	40+ C1.2	1.80
									n/a	3				
T7	Early-Mature Lime <i>Tilia</i> sp.	15	3	2	S	700	3 5 6	1: Growing in raised linear bed adjacent to external wall. 2: Canopy overhangs wall to north. 3: Extensive ivy cladding of stem and canopy prevented detailed inspection. 4: Minor deadwood visible in canopy.	Remove ivy and reinspect.		2	Fair Fair	20-40 C1.2	8.40
									Moderate	1				
T8	Semi-Mature Turkey oak <i>Quercus cerris</i>	6	1.5	1.5	SW	150	2 2 4	1: Growing in raised linear planting bed adjacent to entry way on Whalley Road. 2: Intersects with canopies of adjacent cotoneaster and cypress. 3: Ivy-clad stem rising to lower canopy. 4: Occluded wounds on lower lateral branches with good wound wood.	No action required.		2	Good Good	40+ B1.2	1.80
									n/a	3				
G9	Semi-Mature Lawson Cypress <i>Chamaecyparis lawsoniana</i>	av 8	0	0	M	av 150	av 1 1.5 1 each	1: Row of screening planting in linear bed adjacent to Whalley Road. 2: Inspection limited due to dense growth. 3: No visible defects observed.	Remove a section to facilitate development - See Tree Removal Plan.		2	Good Good	40+ C1.2	1.80
									n/a	3				
G10	Semi-Mature Holly <i>Ilex aquifolium</i>	av 8	av 2	2	M	av 150	av 2 2 2 each	1: Three multi-stemmed specimens growing on sloping verge adjacent to Whalley Road. 2: Co-dominant stems commencing at basal level. 3: Pruning wounds on stems showing good occlusion.	Remove a section to facilitate development - See Tree Removal Plan.		2	Good Good	40+ C1.2	1.80
									n/a	3				

Reference T= Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	Lowest Branch Height (m)	Lowest Branch Direction	DBH (mm)	Crown Spread (m) W N E S	Notes	Recommendations		Visual Amenity 1-Low 2-Moderate 3-High 4-Very High	Physiological Condition	Life Expectancy (yrs)	RPA Radius (m)
									Priority	Inspect Freq (yrs)				
T11	Semi-Mature Beech <i>Fagus sylvatica</i>	15	2	2	N	500	6 7 6 8	1: Growing on sloping verge adjacent to Whalley road. 2: Bifurcates at 5m with tight junction; some included bark visible. 3: Pruning wounds on stem up to 6m showing good occlusion.	No action required.		2/3	Good	40+	6.00
									n/a	3		Good	B1.2	
G12	Semi-Mature Mixed Species	av 14	av 4	4	M	av 500	av 6 5 6 each	1: Hornbeam, lime and sycamore growing in sloping verge in westernmost corner of site with shrub and self-set beech understory. 2: Hornbeam and lime displaying epicormic growth in canopies. 3: Acer displaying retained stubs from snap-outs to north side of stem and relatively sparse canopy. 4: All three showing signs of stress-response; not currently significant but inspection rate may need to increase in subsequent years. 5: Deadwood in the canopy of lime and sycamore, but not overhanging public area.	No action required.		2	Fair	40+	6.00
									n/a	3		Fair	C1.2	
T13	Semi-Mature Whitebeam <i>Sorbus aria</i>	9	2.5	2.5	W	280	3 3 1 3	1: Growing in linear planting bed adjacent to Russell Road. 2: Bifurcates at 0.4m; stems beginning to fuse. 3: No significant defects noted.	No action required.		2	Good	40+	3.36
									n/a	3		Good	B1.2	
T14	Early-Mature Horse Chestnut <i>Aesculus hippocastanum</i>	16	6	6	W	890	6 8 7 7	1: Growing in linear planting bed adjacent to Russell Road. 2: Large structural limbs overhanging pavement to south, stem bifurcates at 4m. 3: Stem wound at 1.5m on north side measuring approximately 50cm with good wound wood, with long linear crack to east from base running up to 3m with good wound wood but internal decay. Defect requires monitoring and yearly inspection. 4: Stem is audibly hollow.	Increase reinspection frequency.		2	Fair	10-20	10.68
									Moderate	1		Poor	C1.2	
G15	Semi-Mature Mixed Species	14	5	5	SE	730	5 4 5 5	1: Two sycamore and one beech growing on sloping verge adjacent to Russell Road. 2: Ivy on stems and in canopy of beech to east of group. 3: Northern sycamore topped at approximately 11m. 4: Pruning wounds on stems showing good occlusion. 5: No major defects noted.	No action required.		2	Good	40+	8.76
									n/a	3		Good	B1.2	

Reference T= Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	Lowest Branch Height (m)	Lowest Branch Direction	DBH (mm)	Crown Spread (m) N W E S	Notes	Recommendations		Visual Amenity 1-Low 2-Moderate 3-High 4-Very High	Physiological Condition Structural Condition	Life Expectancy (yrs) Retention Category	RPA Radius (m)
									Priority	Inspect Freq (yrs)				
G16	Semi-Mature Mixed Species	av 14	av 7	3	N	av 350	av 3 5 3 each	1: Oak and maple growing in planting bed adjacent to entry way from Russell Road. 2: Pruning wounds from crown lifting occluding well. 3: No significant defects noted.	No action required.		2	Good	40+ B1.2	4.20
									n/a	3		Good		
T17	Early-Mature Horse chestnut <i>Aesculus hippocastanum</i>	14	7	7	NW	660	7 5 7	1: Growing in thick shrub layer in linear bed adjacent to Russell Road. 2: Bifurcates at 7m; junction concealed under ivy. 3: Base appears sound; stem and canopy partially obscured by ivy preventing full inspection.	Sever ivy and reinspect		2	Fair	40+ C1.2	7.92
									Low	3		Fair		
T18	Semi-Mature Turkey oak <i>Quercus cerris</i>	14	4	3	SW	270	4 5 4	1: Growing in thick shrub layer in linear bed adjacent to Russell Road. 2: Bifurcates at 5m forming spreading even crown. 3: No visible defects.	No action required.		2/3	Good	40+ B1.2	3.24
									n/a	3		Good		
G19	Young Lawson Cypress <i>Chamaecyparis lawsoniana</i>	av 7	0	0	M	av 100	av 1.5 1 each	1: Group of young trees growing in linear planting bed adjacent to Russell Road. 2: No visible defects.	No action required.		2	Good	40+ C1.2	1.20
									n/a	3		Good		
T20	Semi-Mature Horse Chestnut <i>Aesculus hippocastanum</i>	15	7	7	M	730	7 7 7	1: Growing in linear planting bed in shrub understory adjacent to Russell Road. 2: Bifurcates at 3m with tight junction; junction obscured by ivy. Two stems forming natural brace on northwest side at 8m. 3: Even balanced crown. 4: Dense ivy prevented a detailed inspection.	Remove ivy and re-inspect for defects.		2	Fair	20-40 C1.2	8.76
									Moderate	1.5		Fair		
T21	Semi-Mature Hornbeam <i>Carpinus betulus</i>	15	5	5	E	760	9 7 6	1: Growing on small raised mound in planting bed adjacent to Russell Road. 2: Tree leaning north into site; roots, stem and canopy obscured by thick ivy preventing a detailed inspection. 3: Lean may be result of root instability; further inspection after removal of basal ivy required.	Remove ivy and re-inspect for defects.		2	Fair	20-40 C1.2	9.12
									Moderate	1		Fair		

Reference T= Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	Lowest Branch Height (m)	Lowest Branch Direction	DBH (mm)	Crown Spread (m) W N E S	Notes	Recommendations		Visual Amenity 1-Low 2-Moderate 3-High 4-Very High	Physiological Condition	Life Expectancy (yrs)	RPA Radius (m)
									Priority	Inspect Freq (yrs)				
T22	Semi-Mature Turkey oak <i>Quercia cerris</i>	15	6	9	NE	540	7 4 5 5	1: Growing in linear planting pit adjacent to Russell Road. 2: Crown suppressed to east and west due to proximity to adjacent trees. 3: Dense ivy on mid stem prevented full inspection.	Remove ivy and re-inspect for defects.		2	Fair Fair	40+ C1.2	6.48
									Moderate	1				
T23	Semi-Mature Lime <i>Tilia sp.</i>	15	6	7	E	580	6 4 6 5	1: Growing in linear planting bed adjacent to Russell Road. 2: Extensive basal epicormic growth and ivy on stem and canopy preventing thorough inspection. 3: Crown suppressed to west by T21. 4: Some deadwood in canopy up to 7cm in diameter suggesting possible stress, worth monitoring in future inspections..	Remove ivy and epicormic growth and re-inspect for defects.		2	Fair Fair	40+ C1.2	6.96
									Moderate	1				
T24	Semi-Mature Norway Maple <i>Acer platanoides</i>	12	3	3	SE	320	4 5 5 5	1: Growing in planting bed immediately adjacent to gate onto Russell Road. 2: Stubs from snap-outs predominantly on northern side of stem beginning to occlude. 3: Past pruning wounds on stem fully occluded.	No action required.		2	Good Good	40+ C1.2	3.84
									n/a	3				
G25	Semi-Mature Norway Maple <i>Acer platanoides</i>	av 14	av 7	4	NW	av 350	av 6 4 7 6 each	1: Growing in planting bed in southernmost corner of site. 2: Pruning wounds on stems due to past pruning occluding well. 3: Basal wound on easternmost tree with no audible internal cavities and good wound wood. 4: Superficial wounds on stem of northernmost tree due to vandalism.	No action required.		2	Good Good	40+ C1.2	4.20
									n/a	3				
G26	Semi-Mature Mixed Species	av 16	av 8	8	NE	av 570	av 8 6 8 6 each	1: Horse chestnut and lime growing in linear planting bed adjacent to Carlton Road. 2: Central lime has stem wound approximately 0.5m in length to southern side of stem starting at 2.5m with good wound wood. 3: All have past pruning wounds due to crown lifting occluding well. 4: Dense ivy prevented a detailed inspection.	Remove ivy and re-inspect for defects.		2	Fair Fair	40+ C1.2	6.84
									Moderate	3				

Reference T= Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	Lowest Branch Height (m)	Lowest Branch Direction	DBH (mm)	Crown Spread (m) W N E S	Notes	Recommendations		Visual Amenity 1-Low 2-Moderate 3-High 4-Very High	Physiological Condition Structural Condition	Life Expectancy (yrs) Retention Category	RPA Radius (m)
									Priority	Inspect Freq (yrs)				
T27	Early-Mature Horse Chestnut <i>Aesculus hippocastanum</i>	16	8	5	M	970	7 7 8	1: Growing in linear planting bed adjacent to Carlton Road. 2: Bifurcates at 3.5m with large structural branch to south; multiple large structural branches in crown. 3: Bud proliferation on stem and canopy often associated with species and shown to be unproblematic. 4: Dense ivy prevented a detailed inspection.	Remove ivy and re-inspect for defects.		2	Fair Fair	40+ B1.2	11.64
									Moderate	1.5				
T28	Semi-Mature Norway Maple <i>Acer platanoides</i>	15	9	5	M	760	7 7 7	1: Growing in raised planting bed adjacent to gate from Carlton Road. 2: Significant pruning wounds on stem due to crown lifting. 3: Balanced even crown. 4: Ivy on lower stem prevented a full inspection.	Remove ivy and re-inspect for defects.		2	Fair Fair	40+ C1.2	9.12
									Moderate	1.5				
G29	Young Mixed Species	8	9	2	M	150	2 2 2	1: Self-set silver maple and silver birch growing opertunistically in centre of site. 2: Overall in good condition with no visible defects.	Remove to facilitate development - See Tree Removal Plan.		2	Good Good	40+ C1.2	1.80
									n/a	n/a				
T30	Semi-mature Cherry <i>Prunus</i> sp.	5	1.5	0	M	180	4 4 3	1: Growing in raised planting bed adjacent to gate from Carlton Road. 2: Co-dominant stems. 3: Overall in good condition.	No action required.		2	Good Good	40+ B1.2	2.16
									n/a	3				
T31	Mature Lime <i>Tilia</i> sp.	5	0	0	M	980	8 9 7	1: Growing in sloping planting pit external to wall at easternmost corner of site. 2: Past pruning from crown lifting occluding well, with epicormic regrowth forming into side branches. 3: Strongly defined buttressing at base. 4: Deadwood in canopy up to 10cm in diameter. 5: Telegraph wire runs through epicormic growth on stem.	No action required.		3	Good Good	40+ B1.2	11.76
									n/a	3				

Reference T= Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	Lowest Branch Height (m)	Lowest Branch Direction	DBH (mm)	Crown Spread (m) W N E S	Notes	Recommendations		Visual Amenity 1-Low 2-Moderate 3-High 4-Very High	Physiological Condition	Life Expectancy (yrs) Retention Category	RPA Radius (m)
									Priority	Inspect Freq (yrs)				
T32	Semi-mature Lime <i>Tilia</i> sp.	15	6	6	M	500	2.5 2.5 6	1: Street tree growing in pavement adjacent to site entrance on Whalley Road. 2: Past pruning on stem due to crown lifting, wounds generally well occluded. 3: Wound at 2.5 on east of stem with good wound wood development. 4. Basal epicormic shoots and epicormic growth on stem, not currently causing obstruction. 5. Good clearance of site entrance.	No action required.		3	Good	40+ B1.2	6.00
									n/a	3				
T33	Semi-mature Lime <i>Tilia</i> sp.	15	6	6	E	520	4 4 8	1: Street tree growing adjacent to site entrance on Russell road, with good clearance of entrance. 2: Past pruning due to crown lifting, well occluded. 3: Some stubs retained in canopy from branch loss; none of significant size observed.	No action required.		3	Good	40+ B1.2	6.25
									n/a	3				
T34	Mature Horse Chestnut <i>Aesculus hippocastanum</i>	15	8	0	M	770	1.5 1.5 1.5	1: External tree growing adjacent to wall at east of site. 2: Previously topped, removing entire crown. 3: Multiple pruning wounds on stem with regrowth throughout; all regrowth currently at epicormic stage. 4. Tree is in acceptable condition at this time. 5. Currently poses no risk.	No action required.		3	Fair	20-40 C1	9.24
									n/a	3				

Appendix 2 – Tree Data Schedule Definition of Terms

Tree Referencing:	Individual Trees T (+number) Grouped Trees G (+number) Hedgerows H (+number) Woodlands W(+number)
Age Category/Life Stage:	Young Usually <15 years Semi-Mature Significant growth expected, approximately one third of life expectancy complete Early-Mature Full height achieved with further significant growth possible, up to two thirds of life expectancy complete Mature Full height has been achieved with possible spreading of the canopy, usually past two thirds of overall life expectancy Veteran Usually a tree of significant age with characteristics that give additional cultural, landscape and conservation benefits, Over-Mature A tree declining due to age as indicated by deterioration in the health and condition of its crown and trunk.
Species:	Botanical Name conforming to the International Code of Nomenclature for algae, fungi, and plants (ICN). For universal plant recognition. Common Name commonly used names usually on a local and national scale.
Tree Height:	The vertical distance between the base of the tree (where soil and buttress meet) and the tip of the highest branch on the tree.
Crown Height :	Measured from ground level to the height at which the main crown begins.
Stem Diameter (DBH):	Stem diameter is measured at 1.5 m above ground level
Lowest Branch Height & Orientation:	Height above ground level and direction of growth of the lowest lateral branch extending from the main tree stem ('M' denotes stems arising from multiple orientations).
Crown Spread:	Measurements taken from all four cardinal points in metres.
Notes:	Notes are made to inform of any possible defects, peculiarities or points of interest that may relate to the trees position, physiology, safety and possible effects on developments.
Recommendations:	Recommendations are made in accordance with good Arboricultural practice. Recommendations are made regardless to the end usage of the site.
Priority Scale:	Priority is given dependant on the perceived threat and the likelihood of failure given to a possible hazard. The priority of work is given regardless of the end usage of the site. Urgent To be carried out as soon as possible. Very High To be carried out within 1 month. High To be carried out within 3 months. Moderate To be carried out within 1 year. Low To be carried out within 3 years.
Physiological Condition:	Good Usually healthy with no symptoms of poor health or disease. Fair Exhibiting signs of poor health or minor disease infections that are not considered to be hazardous. Poor Disease present in considerable quantities or with very poor physiological vigour. Very Poor Tree is in a moribund state in extremely poor condition, usually with little chance of recovery.
Structural Condition:	Good A tree with no significant structural defects. Fair Minor defects may have been observed but are not considered to be immediately hazardous. Poor Significant defects found. Tree requires monitoring or remedial works. Very Poor Major defects that require immediate remedial work or the removal of the tree.
Visual Amenity:	General significance in the landscape.
Life Expectancy:	The estimated number of years before the tree may require removal should no unexpected mechanical or environmental impacts occur to the tree.
Retention Category:	Please refer to Tree retention categorisation table on the next page.

Appendix 3 – Tree Retention Categories

The following table provides an explanation of the BS 5837: 2012 Tree Retention Categories and Subcategories used during the survey and in the report.		
Trees to be Removed:		Colour on Plan
BS 5837: 2012 Category U Includes trees of very low quality that offer little or no amenity value.	Trees 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.	RED
Trees to be Considered for Retention:		
BS 5837: 2012 Retention Category A Trees of a high quality, with an estimated life of expectancy of at least 40 years	Trees that are excellent examples of their species, usually mature, especially if rare or unusual including veteran trees. Category A trees are likely to enhance a development and should be retained wherever possible.	GREEN
BS 5837: 2012 Retention Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	Trees that are good examples of their species. B category trees are usually mature or younger trees with the potential to reach A category in the future. Although the retention of these trees is desirable, some losses may be acceptable.	BLUE
BS 5837: 2012 Retention Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	GREY
BS 5837: 2012 Tree Retention Subcategories:		
BS 5837: 2012 Retention Subcategory 1	Trees possessing mainly Arboricultural qualities.	n/a
BS 5837: 2012 Retention Subcategory 2	Trees possessing mainly landscape qualities.	n/a
BS 5837: 2012 Retention Subcategory 3	Trees possessing mainly cultural values, including conservation.	n/a
NOTE 1: Trees may be assessed as belonging to more than one BS 5837: 2012 Tree Retention Subcategory depending on their perceived value and/or contribution, i.e., A1.2; B2.3 etc. NOTE 2: Trees that are viewed as borderline and do not fit neatly into either of the categories are given a plus or minus rating (+/-) in the tree data schedule. Therefore, C+ would denote a tree being borderline C/B although C is deemed to be the most appropriate category. Similarly, B- would denote a tree being borderline B/C with B seen as the most appropriate category.		

Appendix 4 - Site Plans

The site plans referred to in the report follow this page which include the following:

- Tree Constraints Plan
- Tree Removal Plan
- Tree Works Schedule
- Tree Protection Plan
- Tree Protection Index

Although included plans are usually to scale, they are only intended to indicate positions of surveyed trees and dimensions should not be taken from these drawings.



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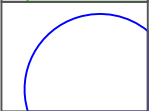
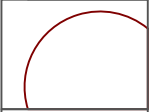
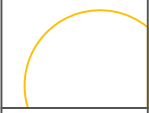
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Notes:-



-  Category A tree, group or hedge
-  Category B tree, group or hedge
-  Category C tree, group or hedge
-  Category U tree, group or hedge
-  Root Protection Area (RPA)
-  Position estimated on site
-  Redline site boundary

REV.	DATE	DESCRIPTION	DRAWN	CHK'D



A: Ground Floor, The Tower,
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Manchester M3 7BF

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weareurbangreen.co.uk

Client: **ROWLINSON
CONSTRUCTION LTD.**

Project: **RUSSELL ROAD EXTRA CARE,
WHALLEY RANGE**

Title: **TREE CONSTRAINTS PLAN**

Issue: **PLANNING**

Drawn: HL	Checked: AB	Approved: AB
Project: UG2410	Scale @ A2: 1:500	Date: 06/03/24
Dwg No: UG_2410_ARB_TCP_00	Revision: 00	



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Notes:-

Category A tree, group or hedge

Category B tree, group or hedge

Category C tree, group or hedge

Category U tree, group or hedge

Retained tree

Removed tree

Extents of pruning

#

Position estimated on site

Redline site boundary

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Client: ROWLINSON CONSTRUCTION LTD.				
Project: RUSSELL ROAD EXTRA CARE, WHALLEY RANGE				
Title: TREE REMOVAL PLAN				
Issue: PLANNING				
Drawn: AH	Checked: HL	Approved: AH		
Project: UG2410	Scale @ A2: 1:500	Date: 28/06/24		
Dwg No: UG_2410_ARB_TRP_01	Revision: 00			

Tree Works Schedule				
Tree Number	BS 5837: 2012 Retention Category	Species	Works Required	Reason
T2	U	Pear	Fell to ground level	Arboricultural best practice
G3	C	Mixed species	Remove a section, as indicated on the Tree Removal Plan	To facilitate the proposed development
T4		Sycamore	Fell to ground level	
G9		Lawson cypress	Remove a section, as indicated on the Tree Removal Plan	
G10		Holly		
G29		Mixed species	Fell to ground level	

REV.	DATE	DESCRIPTION	DRAWN	CHK'D
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Client:
**ROWLINSON
CONSTRUCTION LTD.**

Project:
**RUSSELL ROAD EXTRA CARE,
WHALLEY RANGE**

Title:
TREE WORKS SCHEDULE

Issue:
PLANNING

Drawn:	AH	Checked:	HL	Approved:	AH
Project:	UG2410	Scale @ A1:	N/A	Date:	28/06/24
Dwg No:	UG_2410_ARB_TWS_01			Revision:	00



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Notes:-

- Category A tree, group or hedge
- Category B tree, group or hedge
- Category C tree, group or hedge
- Category U tree, group or hedge
- Retained tree
- Root Protection Area (RPA)
- Position estimated on site
- Redline site boundary
- Protective fencing (See Insert 1 & Insert 2)
- Arboricultural supervised excavation
- Arboricultural supervised removal and replacement of existing hardstanding

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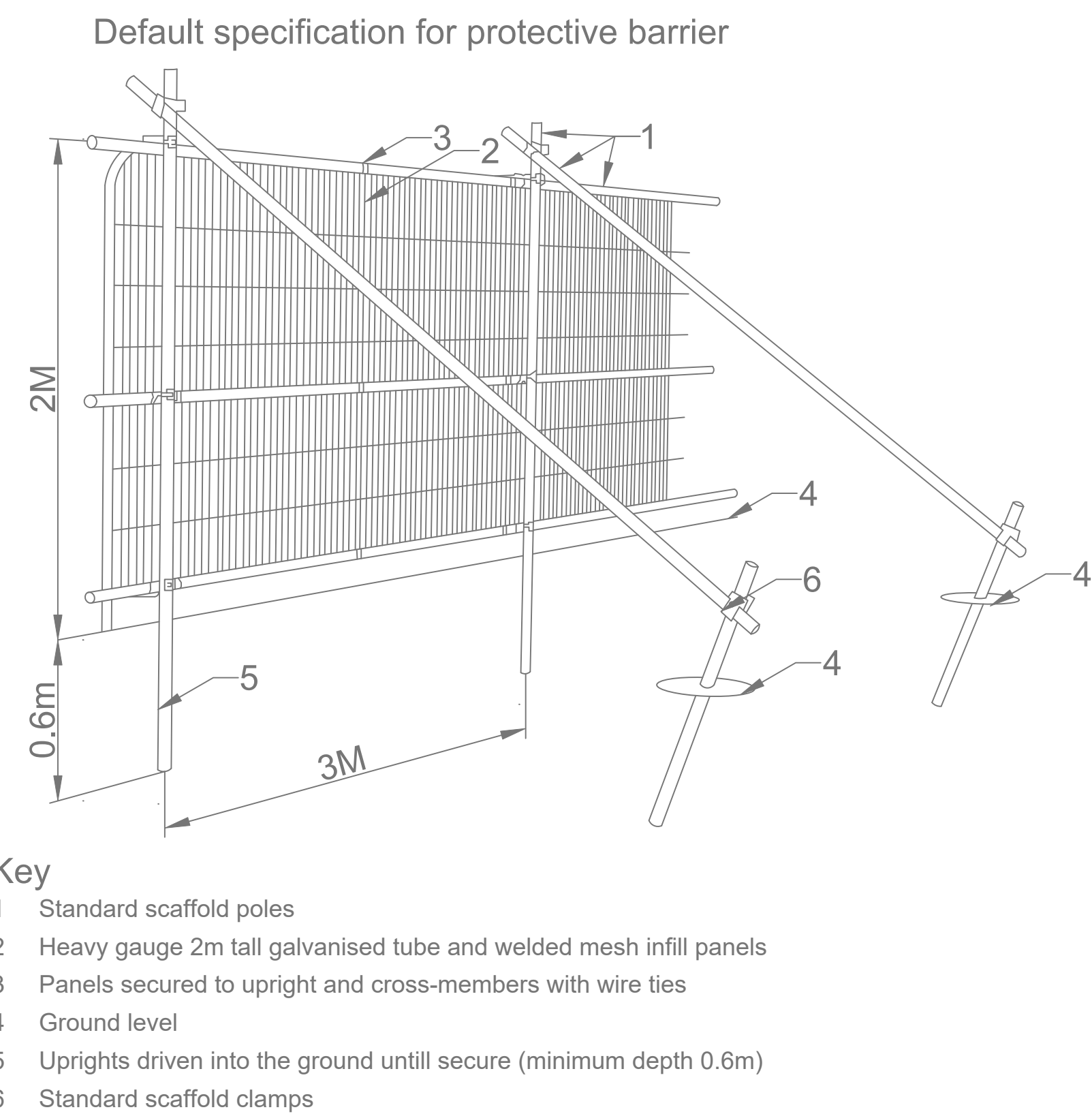
Client: **ROWLINSON
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Project: **RUSSELL ROAD EXTRA CARE,
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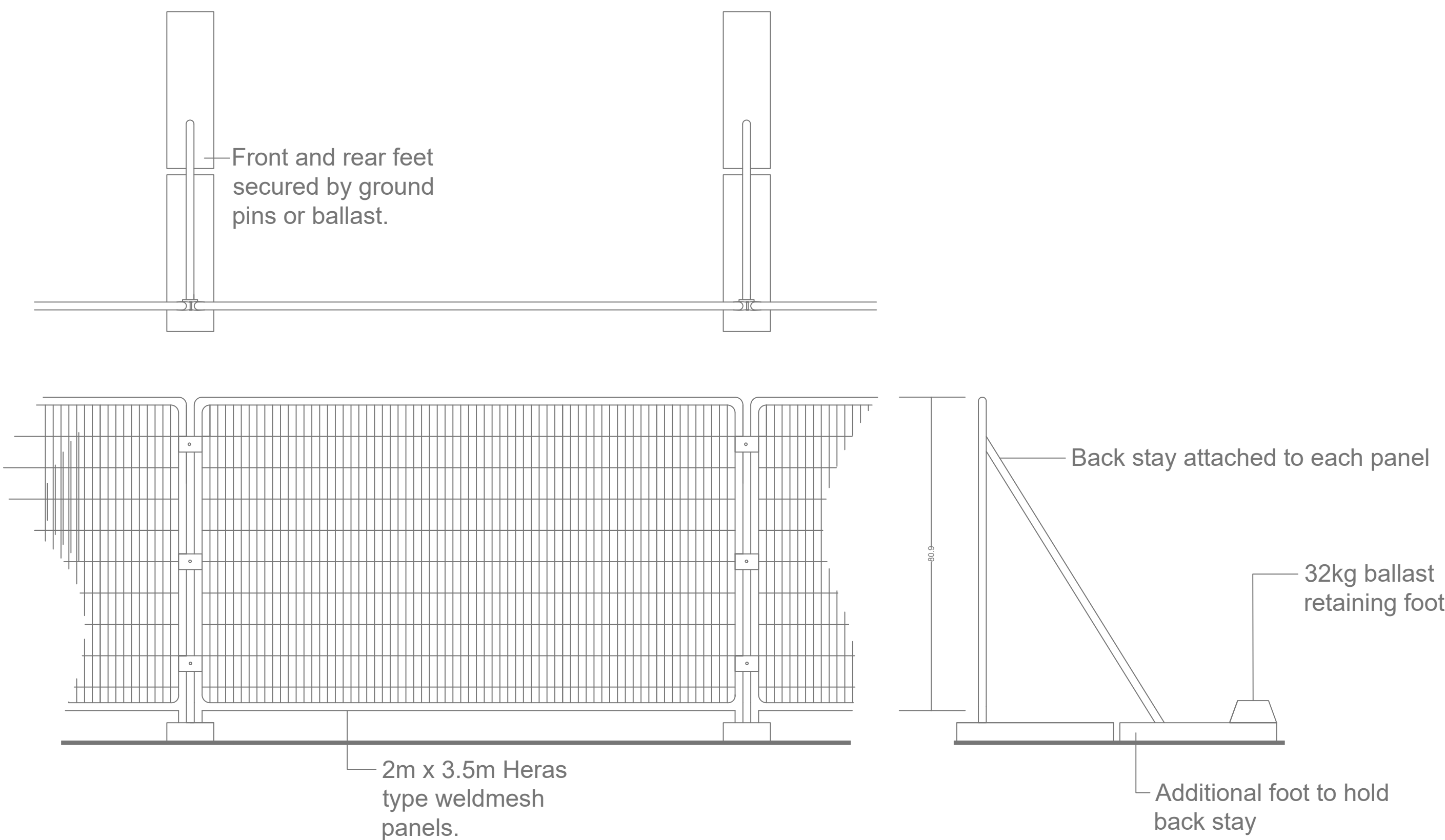
Title: **TREE PROTECTION PLAN**

PLANNING		
Drawn: AH	Checked: HL	Approved: AH
Project: UG2410	Scale @ A2: 1:500	Date: 28/06/24
Dwg No: UG_2410_ARB_TPP_01	Revision: 00	

Insert 1: Tree protective fencing specification



Back-stay support



Insert 2: Tree protection notice



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Notes:-

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Project: RUSSELL ROAD EXTRA CARE,
WHALLEY RANGE

Title: TREE PROTECTION INDEX

Issue: PLANNING		
Drawn: AH	Checked: HL	Approved: AH
Project: UG2410	Scale @ A1: N/A	Date: 28/06/24
Dwg No: UG_2410_ARB_TPI_01	Revision: 00	