

Arboricultural Impact Assessment (AIA)

September 2022

Smithy Bridge Road
Littleborough
Rochdale
OL15 8RF

U R B A N
G R E E N

QUALITY MANAGEMENT

Project No.:	UG11711			
Project:	Smithy Bridge Road, Rochdale			
Location:	Smithy Bridge Road, Littleborough, Rochdale, OL15 8RF			
Title:	Arboricultural Impact Assessment			
Document Type:	BS 5837			
Date:	11/04/2022			
Prepared By:	Robert Hickey			
Checked By:	Andy Bagshaw			
Approved By:	Andy Bagshaw			
Revision Status:				
Rev:	Date:	Issue/Purpose/ Comment:	Prepared:	Checked:
o1	o6/06/22	Updated Proposal	RH	GK
o2	o2/09/22	Updated Proposal	RH	GK

CONTENTS

1. Executive Summary	1
2. Introduction	2
2.1. Instructions and references	2
2.2. Scope.....	3
2.3. Documents provided.....	3
2.4. Limitations	3
3. Legislation.....	4
3.1. Tree protection status	4
3.2. Wildlife	4
4. Arboricultural Impact Assessment (AIA)	5
4.1. Summary of the development.....	5
4.2. Tree constraints	5
4.3. Root Protection Areas (RPAs) explained.....	5
4.4. Surveyed Trees.....	5
4.5. Impacts of development	6
4.6. Tree surgery works	7
4.7. Protective fencing.....	7
4.8. Ground protection for pedestrians or light vehicles	7
4.9. Boundary treatments.....	8
4.10. Temporary site cabins	8
4.11. Utilities	8
4.12. Recommendations	9

Appendix 1 – Tree Data Schedule

Appendix 2 – Tree Schedule Definition of Terms

Appendix 3 – Tree Retention Categories

Appendix 4 – Site Plans

1. Executive Summary

- 1.1.1. Urban Green has been instructed by Taylor Wimpey Manchester to carry out an Arboricultural Survey to British Standard 5837:2012 guidelines at Smithy Bridge Road, Littleborough, OL15 8RF and produce our findings in a report.
- 1.1.2. Trees on and within influencing distance to the site have been assessed and the effect of the development proposal on trees evaluated in accordance with current best practice.
- 1.1.3. It is proposed to develop the site into 199 plots of residential housing alongside landscape improvements such as parking and soft landscaping. Full details of the proposed site layout can be seen on the plans included in Appendix 4.
- 1.1.4. The proposed development necessitates the removal of six trees, four hedges and sections of a further one hedge and two groups. However, it is noted that all of these removals are of low value. It is recommended that this tree loss is mitigated for by replacement tree planting and the production of a robust soft landscaping scheme.
- 1.1.5. Tree protection fencing, and ground protection will need to be installed at the alignment shown on the Tree Protection Plan in Appendix 4 before any construction activity takes place.
- 1.1.6. New permanent hard surfacing within the predicted RPAs of retained trees will need to be constructed using above ground methods, such as cellular confinement, as detailed in BS5837: 2012 section 7.4.
- 1.1.7. It will also be necessary to carry out supervised excavation with possible root pruning within the RPA of H12 and G16 as indicated on the Tree Protection Plan.
- 1.1.8. Visually important boundary trees will be retained and can be protected during the development in accordance with current best practice.
- 1.1.9. Whilst the removal of T1 is not required to facilitate the development it is recommended that the removal of T1 is negotiated with the owner(s), as this tree is in a very poor condition with large deadwood noted. This trees retention is potentially hazardous to construction workers and future residents.
- 1.1.10. T19 and a section of H12 will require pruning to facilitate the development.
- 1.1.11. Before any tree works are carried out trees should first be assessed for their suitability for protected species by a suitably qualified and experienced ecologist.
- 1.1.12. 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.

2. Introduction

2.1. Instructions and references

- 2.1.1. Urban Green have been instructed by Taylor Wimpey Warrington to carry out a Arboricultural Impact Assessment (AIA) in accordance with BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations at the site location 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 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 size and 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 Figure 1. The OS Grid Reference is approximately SD 92052 15446.



Figure 1 – Site Location Plan

2.2. Scope

- 2.2.1. The AIA takes into account 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.
- 2.2.2. The AIA will also assess any potentially damaging activities proposed in the vicinity of retained trees and the effect that the retained trees may have on the development such as potential nuisance caused by excessive leaf/fruit litter, lighting levels and potential damage to structures.

2.3. Documents provided

- 2.3.1. A scaled plan has been provided with tree positions already plotted. 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 Tree Protection Plan in Appendix 4. 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 in order to assess the potential impacts.

2.4. Limitations

- 2.4.1. The report is based upon a visual inspection. 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. However, this report is not a substitute for a full tree risk assessment or management plan which are specifically designed to minimise risk and liability associated with responsibility for trees.

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. It has been confirmed by Rochdale Borough Council on 19/04/22 that there are no TPO's on site nor is the site 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 5m³ 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. Wildlife

- 3.2.1. Prior to the commencement of any tree works, the trees should be assessed for the presence of protected species, some of which are subject to the *Wildlife and Countryside Act 1981* (as amended) and the *Conservation of Habitats and Species Regulations 2017*.
- 3.2.2. Where there is evidence that bats, birds or other protected species are present, the advice of a suitably qualified ecologist should be sought.
- 3.2.3. If tree works are carried out during the bird nesting season (March to September inclusive), trees would need to be inspected by a qualified ecologist within the 24-hour period prior to the commencement works.

4. Arboricultural Impact Assessment (AIA)

4.1. Summary of the development

- 4.1.1. It is proposed to develop the site into 199 plots of residential housing alongside landscape improvements such as parking 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. We have transposed the tree survey plan over plans detailing current proposals in order 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 RPA is an area of ground around the base of a retained tree, which is calculated in relation to the stem diameter, where disturbance should be kept to a minimum and avoided if at all possible.
- 4.3.2. The majority of 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.

4.4. Surveyed Trees

- 4.4.1. The survey assessed seventeen individual trees, eleven groups and six hedges, the quality and value of which are summarised below.
- 4.4.2. One tree and four groups were assessed as BS5837: 2012 `High-Quality` retention category A, four groups were assessed as `Moderate Quality` retention category B, twelve trees, four groups and six hedges were assessed as `Low Quality` retention category C and four trees were assessed as `Unsuitable` category U. Refer to appendix 1 - Tree data Schedule.
- 4.4.3. All of the surveyed trees are either within or on the boundaries of the application site except T1, G2, T6, T7, T8, one tree within G9, G10, G25, G28, and G33

4.5. Impacts of development

- 4.5.1. `Low Quality` C category trees T4, T5, T20, T22, T23, T24 and hedges H13, H14, H15, H21 will require removal to facilitate the development, one tree within `Low Quality` group G3, the majority of the trees within G9 and a 5m section of H12 also require removal.
- 4.5.2. The loss of these trees and hedges will not materially harm public views from outside the site, there will be some localised loss of visual amenity in the short-term which will be mitigated by the provision of new trees and landscaping.
- 4.5.3. On-site tree T19 and hedge H12 will require pruning (crown lifting/crown reducing) to provide clearance for in the new development. The works are of a minor nature and will not harm the health or visual amenity provided by the trees. The pruning works are detailed in the Tree works schedule and on the Tree removal plan at appendix 4.
- 4.5.4. It is also our recommendation that due to the poor structural condition of T1, this tree should be removed for arboricultural reasons to avoid any risk of failure. As this tree is on third-party land its condition should be highlighted to the owner(s) as those responsible for their removal.
- 4.5.5. The trees proposed for retention can be protected during construction in accordance with current best practice as detailed in BS5837; 2012.
- 4.5.6. Where the set-back of the tree protection barrier would expose unmade ground to construction damage, new temporary ground protection should be installed as part of the implementation of physical tree protection measures. Temporary ground protection should be installed adjacent to several trees within the site boundary as detailed at section 4.8 of this report and on the Tree protection Plan at appendix 4 prior to work starting on site.
- 4.5.7. New permanent hard surfacing is required within the predicted RPA of G16. The approximate coverage is within recommended guidelines as detailed in BS5837: 2012 section 7.4 and should not have any long-term impacts to the tree's health. An engineered hard surface such as Cellular confinement will avoid damage to roots.
- 4.5.8. Best practice guidance for avoiding physical damage to root's during construction is set out at section 7.2 of BS5837 and will be implemented in the areas identified on the tree protection plan where excavation is required within the RPA of H12 and G16.
- 4.5.9. Any new fencing that is proposed to be constructed within the RPA of retained trees, should be constructed in accordance with the methodology detailed at section 4.9 of this report.

4.6. Tree surgery works

- 4.6.1. Tree works that are recommended within the Tree Works Schedule (Appendix 4) are works required to facilitate development and also include details or remedial works. Tree works stated in the Tree Data Schedule (Appendix 1) 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.

4.7. 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 construction activities on site 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 with appropriate fencing.
- 4.7.3. The required specification for protective fencing is illustrated in the Tree Protection Plan (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 Plan (Insert 2).

4.8. Ground protection for pedestrians or light vehicles

- 4.8.1. The primary method of ground protection is the installation of a compressible layer (e.g. woodchip) over a geotextile fabric with side butting scaffold boards.
- 4.8.2. Ground protection measures whilst working the RPA must be capable of supporting the expected loads and avoid compaction of the soil.
- 4.8.3. The boarding will be left in place until the construction works are finished.
- 4.8.4. Scaffolding may first be erected with the uprights on spreader boards and the ground protection installed around the uprights.

4.9. Boundary treatments

- 4.9.1. Where fencing is to be installed within RPAs of retained trees, post holes will be excavated by hand and kept as narrow as possible. Trial holes will be dug using a manually operated soil augur in order to position post holes to avoid major roots.
- 4.9.2. Exploratory post holes will be dug before committing to positions. If any roots in excess of 25mm are encountered they are to remain intact and the post hole will be relocated to avoid them. The fencing system must permit such flexibility (i.e. where fixed panel widths are used, all post holes must be excavated before committing to the final location)
- 4.9.3. All post holes will be excavated by hand and kept as narrow as possible (maximum diameter 300mm).

4.10. Temporary site cabins

- 4.10.1. 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 LPA prior to delivery and will remain in the agreed locations unless approved by the LPA.
- 4.10.2. 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.

4.11. Utilities

- 4.11.1. 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.
- 4.11.2. Where utilities need to be brought onto the site, these should be routed away from the RPAs of retained trees. Where this is not possible, methodologies on the installation of underground services without damaging the tree roots should be considered.

4.12. Recommendations

- 4.12.1. 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.
- 4.12.2. 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 on-site operations.
- 4.12.3. 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.
- 4.12.4. The Arboricultural Consultant shall be responsible for inspecting all protective fencing prior to the commencement of all onsite activity.

Appendix 1 – Tree Data Schedule

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

Reference T = Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	DBH (mm)	Crown Spread (m)			Notes	Recommendations		Physiological Condition	Life Expectancy (yrs)	RPA Radius
					W	N	E		Priority	Inspect Freq (yrs)	Structural Condition	Retention Category	(m)
T1	Early-Mature Sycamore Acer pseudoplatanus	4.5	2	400	1	1	1	1: Tree has been previously topped 2: Little live growth remaining, almost completely dead 3: Stem bifurcates at 1.5m 4: Southern most stem is completely dead 5: Off site tree prevents a detailed inspection	remove		Very Poor	<10	4.80
									Low	n/a	Poor	U	
G2	Mature Sycamore Acer pseudoplatanus	av 7.5	av 3	av 600	2.5	2.5	2.5	1: 3 trees in group 2: Off site group prevents a detailed inspection 3: Have been previously topped at 4m, now with 3m of regrowth 4: Western most tree has unidentified fungi on stem 5: Currently poses no significant risk	no action required		Fair	20-40	7.20
									n/a	3	Fair	C1	
G3	Young Mixed Species	av 5	av 1.8	av 75	2	2	2	1: Goat willow and sycamore mixed group with dense bramble understory 2: No major visible defects 3: Currently poses no significant risk due to size of tree	no action required		Good	40+	0.90
									n/a	3	Good	C1	
T4	Young Sycamore Acer pseudoplatanus	6	0.5	230	1.7	2.2	1.9	1: Multiple stemmed at base 2: No major visible defects 3: Currently poses no significant risk 4: Crossing stems noted	no action required		Good	40+	2.76
									n/a	3	Good	C1	
T5	Young Ash Fraxinus excelsior	6	1.8	100	2	2	2	1: Growing in between two fences 2: Dense bramble at base prevents a detailed inspection 3: Symptoms indicative of ash die back noted 4: Deadwood noted 5: Multiple stemmed at 1.5m	no action required		Poor	<10	1.20
									n/a	3	Poor	U1	
T6	Semi-Mature Goat Willow Salix caprea	4.5	1	250	3	3	3	1: Off site tree prevents a detailed inspection 2: Appears to have been previously topped at 1.5m, now with significant regeneration 3: No major visible defects	no action required		Fair	20-40	3.00
									n/a	3	Fair	C1	

Reference T = Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	DBH (mm)	Crown Spread (m) W N E S	Notes	Recommendations		Physiological Condition	Life Expectancy (yrs)	RPA Radius
							Priority	Inspect Freq (yrs)	Structural Condition	Retention Category	(m)
T7	Semi-Mature Leyland Cypress x Cupressocyparis leylandii	6	1.5	360	2 2 2	1: Has been previously topped 2: Off site tree prevents a detailed inspection 3: Multiple stemmed at base	no action required		Fair	20-40	4.32
							n/a	3	Fair	C1	
T8	Semi-Mature Goat Willow Salix caprea	6	1.3	270	3.5 3.5 3.5	1: Off site tree prevents a detailed inspection 2: Has been previously topped, now with significant regrowth 3: No major visible defects	no action required		Good	20-40	3.24
							n/a	3	Fair	C1	
G9	Semi-Mature Mixed Species	av 4.5	av 1	av 200	av 3 3 each	1: Elder, cherry laurel, goat willow and cypress mixed group 2: Limited access prevents a detailed inspection 3: No major visible defects	no action required		Good	40+	2.40
							n/a	3	Good	C1	
G10	Early-Mature Sycamore Acer pseudoplatanus	av 12	av 4.5	av 400	av 4 4 each	1: Off site group prevents a detailed inspection 2: Group has been previously pollarded, now with some regrowth 3: No major visible defects 4: Pruning wounds on stem noted, occluding well	no action required		Fair	40+	4.80
							n/a	3	Good	B1.2	
H11	Semi-Mature Leyland Cypress x Cupressocyparis leylandii	av 6	0.5	200	1.5 1.5 1.5	1: Off site hedge prevents a detailed inspection 2: No major visible defects 3: Provides good screening	no action required		Good	40+	2.40
							n/a	3	Good	C1.2	
H12	Semi-Mature Mixed Species	av 3	0.1	100	1.5 1.5 1.5	1: Hawthorn, elder, gause, mixed hedge 2: Well maintained in places 3: Dense bramble in places	no action required		Fair	40+	1.20
							n/a	3	Good	C2	

Reference T = Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	DBH (mm)	Crown Spread (m) W N E S	Notes	Recommendations		Physiological Condition	Life Expectancy (yrs)	RPA Radius
							Priority	Inspect Freq (yrs)	Structural Condition	Retention Category	(m)
H13	Semi-Mature Hawthorn Crataegus monogyna	av 3.5	0.1	120	1.5 1.5 1.5	1: Boundary hedge 2: No major visible defects 3: Dense bramble in places 4: Dense canopy in places	no action required		Fair	40+	1.44
							n/a	3	Good	C2	
H14	Semi-Mature Hawthorn Crataegus monogyna	av 2	0.3	100	1 1 1	1: Hedge appears to be in decline 2: Deadwood noted 3: Boundary hedge 4: Poses no significant risk	no action required		Poor	<10	1.20
							n/a	3	Poor	U1	
H15	Semi-Mature Hawthorn Crataegus monogyna	av 3.5	0.1	130	1.5 1.5 1.5	1: Boundary hedge 2: No major visible defects 3: Dense bramble in places 4: Dense canopy in places	no action required		Fair	40+	1.56
							n/a	3	Good	C2	
G16	Semi-Mature Mixed Species	av 6.5	av 2	av 300	av 2 2 each	1: Off site group prevents a detailed inspection 2: Silver birch, cherry laurel, fir, cypress, cedar and larch mix 3: No major visible defects	no action required		Good	40+	3.60
							n/a	3	Good	B1.2	
T17	Young Magnolia Magnolia sp	6	1	150	2.5 2.5 2.5	1: Off site tree prevents a detailed inspection 2: No major visible defects	no action required		Good	40+	1.80
							n/a	3	Good	C1	
T18	Young Norway Maple Acer platanoides	6.5	2	90	2 2 2	1: Off site tree prevents a detailed inspection 2: No major visible defects	no action required		Good	40+	1.08
							n/a	3	Good	C1	

Reference T = Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	DBH (mm)	Crown Spread (m) W N E S	Notes	Recommendations		Physiological Condition	Life Expectancy (yrs)	RPA Radius
							Priority	Inspect Freq (yrs)	Structural Condition	Retention Category	(m)
T19	Semi-Mature Sycamore Acer pseudoplatanus	7.5	2	260	4 3 4 4	1: Off site tree prevents a detailed inspection 2: No major visible defects 3: Canopy touching sign	Prune to clear sign		Fair	40+	3.12
							n/a	3	Good	C1	
T20	Semi-Mature Ash Fraxinus excelsior	8	2	290	4 3.5 4 3	1: Fence nailed into stem 2: Stem bifurcates at 1.6m 3: Minor deadwood noted 4: Minor symptoms indicative of ash die back noted	monitor		Fair	10-20	3.48
							Moderate	1	Fair	C1	
H21	Semi-Mature Mixed Species	av 3	0.1	100	1.5 1.5 1.5 1.5	1: Holly, privet, elder and ash mixed hedge 2: Boundary hedge 3: No major visible defects	no action required		Good	40+	1.20
							n/a	3	Good	C2	
T22	Semi-Mature Wild Cherry Prunus avium	7.5	2	150	3 3 3 2	1: Growing on embankment 2: No major visible defects 3: Dense vegetation around base prevents a detailed inspection	no action required		Good	40+	1.80
							n/a	3	Good	C1	
T23	Semi-Mature Wild Cherry Prunus avium	8	2	180	3 2 3 3	1: Dense vegetation prevents a detailed inspection 2: No major visible defects 3: Growing on embankment	no action required		Good	40+	2.16
							n/a	3	Good	C1	
T24	Semi-Mature Wild Cherry Prunus avium	7.5	2	300	3.5 3 3.5 3	1: Stem occluding barb wire fence 2: Co-dominant stem at 1.3m	no action required		Good	40+	3.60
							n/a	3	Fair	C1	

Reference T = Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	DBH (mm)	Crown Spread (m) N W E S	Notes	Recommendations		Physiological Condition	Life Expectancy (yrs)	RPA Radius
							Priority	Inspect Freq (yrs)	Structural Condition	Retention Category	(m)
G25	Mature Sycamore Acer pseudoplatanus	av 15	av 4.5	av 800	av 8.5 8.5 8.5 each	1: Off site group prevents a detailed inspection 2: No major visible defects 3: Minor deadwood noted 4: Excellent specimens 5: Stubs present due to past pruning	no action required		Good	40+	9.60
							n/a	3	Good	A1.2	
T26	Dead Dead Tree	12	3.7	450	4.5 4.5 4.5	1: Dead specimen 2: Currently poses no significant risk, due to location 3: Tear wounds noted	monitor		Dead	Dead	5.40
							Moderate	1	Dead	U1	
G27	Semi-Mature Hawthorn Crataegus monogyna	av 4	av 0.2	av 170	av 2.5 2.5 2.5 each	1: 2 trees in group 2: No major visible defects 3: Dense canopy prevents accurate DBH (refer to Appendix 2)	no action required		Fair	40+	2.04
							n/a	3	Good	C1	
G28	Semi-Mature Mixed Species	av 8	av 0.3	av 300	av 4 4 4 each	1: Cherry and cypress mixed group 2: Off site group prevents a detailed inspection 3: No major visible defects	no action required		Good	40+	3.60
							n/a	3	Good	B1	
G29	Early-Mature Sycamore Acer pseudoplatanus	av 12	av 2	av 550	av 5 5 5 each	1: No major visible defects 2: Occasional pruning wounds noted 3: Minor deadwood noted 4: Occasional bark wounds noted, generally occluding well	no action required		Good	40+	6.60
							n/a	3	Good	A1.2	
T30	Mature Sycamore Acer pseudoplatanus	15	4	920	7 8.5 9	1: Deadwood noted 2: Decay pockets forming in old branch tears 3: In overall good condition	no action required		Good	40+	11.04
							n/a	3	Fair	A1.2	

Reference T = Tree G = Group H = Hedge W = Woodland	Age & Species	Height (m)	Crown Ht (m)	DBH (mm)	Crown Spread (m) W N E S	Notes	Recommendations		Physiological Condition	Life Expectancy (yrs)	RPA Radius
							Priority	Inspect Freq (yrs)	Structural Condition	Retention Category	(m)
T31	Semi-Mature Ash Fraxinus excelsior	11	0.5	250	2.5 3.5 3 3	1: Acceptable condition at present 2: Currently poses no significant risk 3: Symptoms indicative of ash die back noted	monitor		Fair	10-20	3.00
							Moderate	1	Fair	C1	
G32	Semi-Mature Sycamore Acer pseudoplatanus	av 11	av 1.5	av 200	av 4 4 4 each	1: Acceptable condition at present 2: No major visible defects 3: Currently poses no significant risk	no action required		Good	40+	2.40
							n/a	3	Good	B1.2	
G33	Early-Mature Mixed Species	av 13	av 1	av 300	av 5 5 5 each	1: Goat willow, silver birch, sycamore, ash and oak mixed group 2: Off site group prevents a detailed inspection 3: Group growing other side of River Roch	no action required		Good	40+	3.60
							n/a	3	Good	A1.2	
T34	Semi-Mature Whitebeam Sorbus aria	4.5	1	150	3 3 3 3	1: Heavily leaning towards river 2: Possible land slide beneath tree 3: No major visible defects	no action required		Good	20-40	1.80
							n/a	3	Fair	C1	

Appendix 2 - Tree 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
Crown	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 to 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.
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 Category

The following table provides an explanation of retention categories used.

Trees to be removed		Colour on Plan
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		
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
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
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

NOTE: 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:

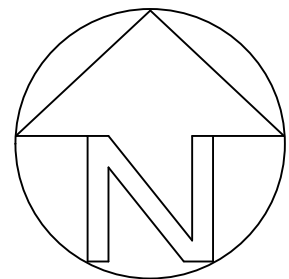
- Tree Constraints Plan
- Tree Removal Plan
- Tree Works Schedule
- Tree Protection Plan
- Tree Protection Inserts

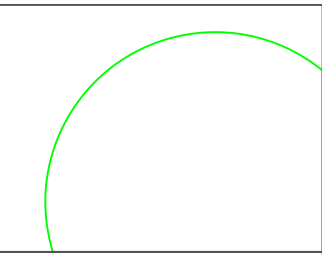
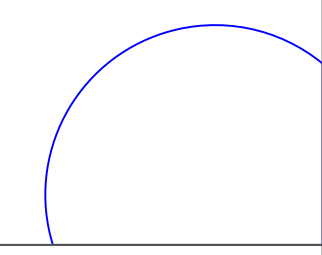
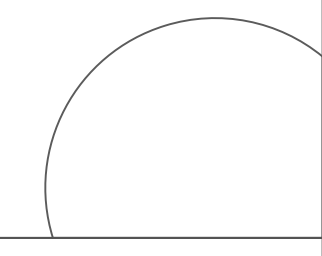
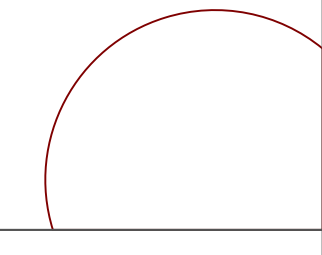
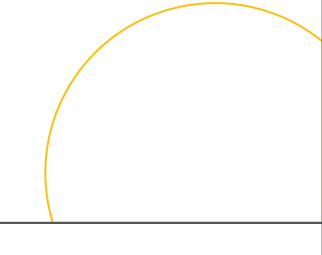
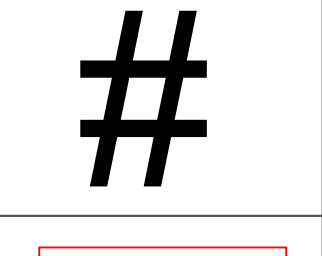
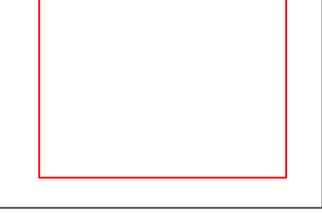
Although included plans are usually to scale, they are only intended to indicate positions of surveyed trees and dimensions should not be taken from these drawings.



Do not scale this drawing (printed or electronic version).
Contractors must check all dimensions from site.
This drawing is copyright and is for use on this site only. This drawing should be read in conjunction with all relevant consultants drawings and specialist subcontractors / supply chain drawings and specifications.
All works to be carried out in accordance with the latest British Standards / Codes of Practice unless specifically directed otherwise in the specification.
Responsibility for the reproduction of this drawing in paper form, or issued in electronic format, lies with the recipient to check that all information has been replicated in full and is correct when compared to the original paper or electronic image.
Graphical representations of equipment on this drawing have been co-ordinated, but are approximations only. Please refer to the specifications and / or details for actual sizes and / or specific contractor construction information.

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

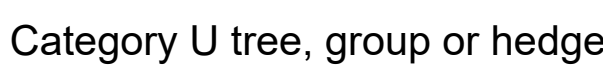
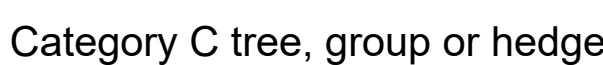
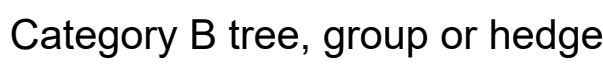
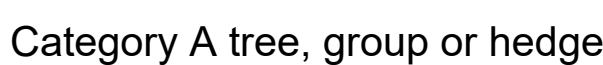
REV.	DATE	DESCRIPTION	DRAWN	CHK'D



A: Ground Floor, The Tower,
Deva City Office Park, Trinity Way,
Manchester M3 7BF
T: +44 (0) 161 312 3131
weareurbangreen.co.uk

Client: TAYLOR WIMPEY - WARRINGTON		
Project: SMITHY BRIDGE ROAD, ROCHDALE		
Title: TREE CONSTRAINTS PLAN		
Issue: PLANNING		
Drawn: RH	Checked: AB	Approved: AB
Project: UG11711	Scale @ A0: 1:1000	Date: 28/03/22
Dwg No: UG_11711_ARB_TCP_01	Revision: 00	

Graphical representations of equipment on this drawing have been co-ordinated, but are approximations only. Please refer to the specifications and / or details for actual sizes and / or specific contractor construction information.



03	02/09/22	Updated Proposal	RH	GK
02	03/08/22	Updated Proposal	RH	GK
01	01/06/22	Updated Proposal	RH	EA
REV.	DATE	DESCRIPTION	DRAWN	CHKD

weareurbangreen.co.uk

**TAYLOR WIMPEY -
WARRINGTON**

**SMITHY BRIDGE ROAD,
ROCHDALE**

TREE REMOVAL PLAN

PLANNING

Drawn: RH	Checked: AB	Approved: AB
---------------------	-----------------------	------------------------

Project: UG11711	Scale @ A0: 1:1000	Date: 28/03/22
----------------------------	------------------------------	--------------------------

Dwg No:	UG 11711 ARB TRP 01	Revision:	03
---------	---------------------	-----------	----

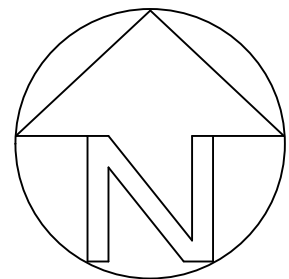
Tree Works Schedule				
Tree Number	Category	Species	Works Required	Reason
G3 x1	C	Mixed Species	Fell to ground level and grind out stumps	To facilitate developmenet
T4	C	Sycamore		
T5	U	Ash		
G9	C	Mixed Species	Remove all trees on site	
H12	C	Mixed Species	Remove a small section adjacent to plot 180 to facilitate driveway construction. Prune 2x sections on south east side to facilitate plots 180, 183 and 184	
			Prune back from proposed parking areas	
H13	C	Hawthorn	Fell to ground level and grind out stumps	
H14	U	Hawthorn		
H15	C	Hawthorn		
T19	C	Sycamore	Crown reduce by 2m on south eastern side	
T20	C	Ash	Fell to ground level and grind out stumps	
H21	C	Mixed Species		
T22	C	Wild Cherry		
T23	C	Wild Cherry		
T24	C	Wild Cherry		

01	02/09/22	Updated Proposal	RH	GK
REV.	DATE	DESCRIPTION	DRAWN	CHK'D
U R B A N G R E E N A: Ground Floor, The Tower, Deva City Office Park, Trinity Way, Manchester M3 7BF T: +44 (0) 161 312 3131 weareurbangreen.co.uk				
Client: TAYLOR WIMPEY - WARRINGTON				
Project: SMITHY BRIDGE ROAD, ROCHDALE				
Title: TREE WORKS SCHEDULE				
Issue: PLANNING				
Drawn: RH		Checked: AB		Approved: AB
Project: UG11711		Scale @ A0: N/A		Date: 28/03/22
Dwg No: UG_11711_ARB_TWS_01			Revision: 01	



Do not scale this drawing (printed or electronic version).
Contractors must check all dimensions from site.
This drawing is copyright and is for use on this site only. This drawing should be read in conjunction with all relevant consultants drawings and specialist subcontractors / supply chain drawings and specifications.
All works to be carried out in accordance with the latest British Standards / Codes of Practice unless specifically directed otherwise in the specification.
Responsibility for the reproduction of this drawing in paper form, or issued in electronic format, lies with the recipient to check that all information has been replicated in full and is correct when compared to the original paper or electronic image.
Graphical representations of equipment on this drawing have been co-ordinated, but are approximations only. Please refer to the specifications and / or details for actual sizes and / or specific contractor construction information.

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)
- Protective fencing (Barrier Mesh)
- Boundary Treatment
- Arboricultural Supervised Excavations
- Cellular Confinement System
- Ground protection (See Insert 3)

02	02/08/22	Updated Proposal	RH	GK
01	01/06/22	Updated Proposal	RH	EA
REV.	DATE	DESCRIPTION	DRAWN	CHK'D



A: Ground Floor, The Tower,
Deva City Office Park, Trinity Way,
Manchester M3 7BF

T: +44 (0) 161 312 3131

weareurbangreen.co.uk

Client: **TAYLOR WIMPEY - WARRINGTON**

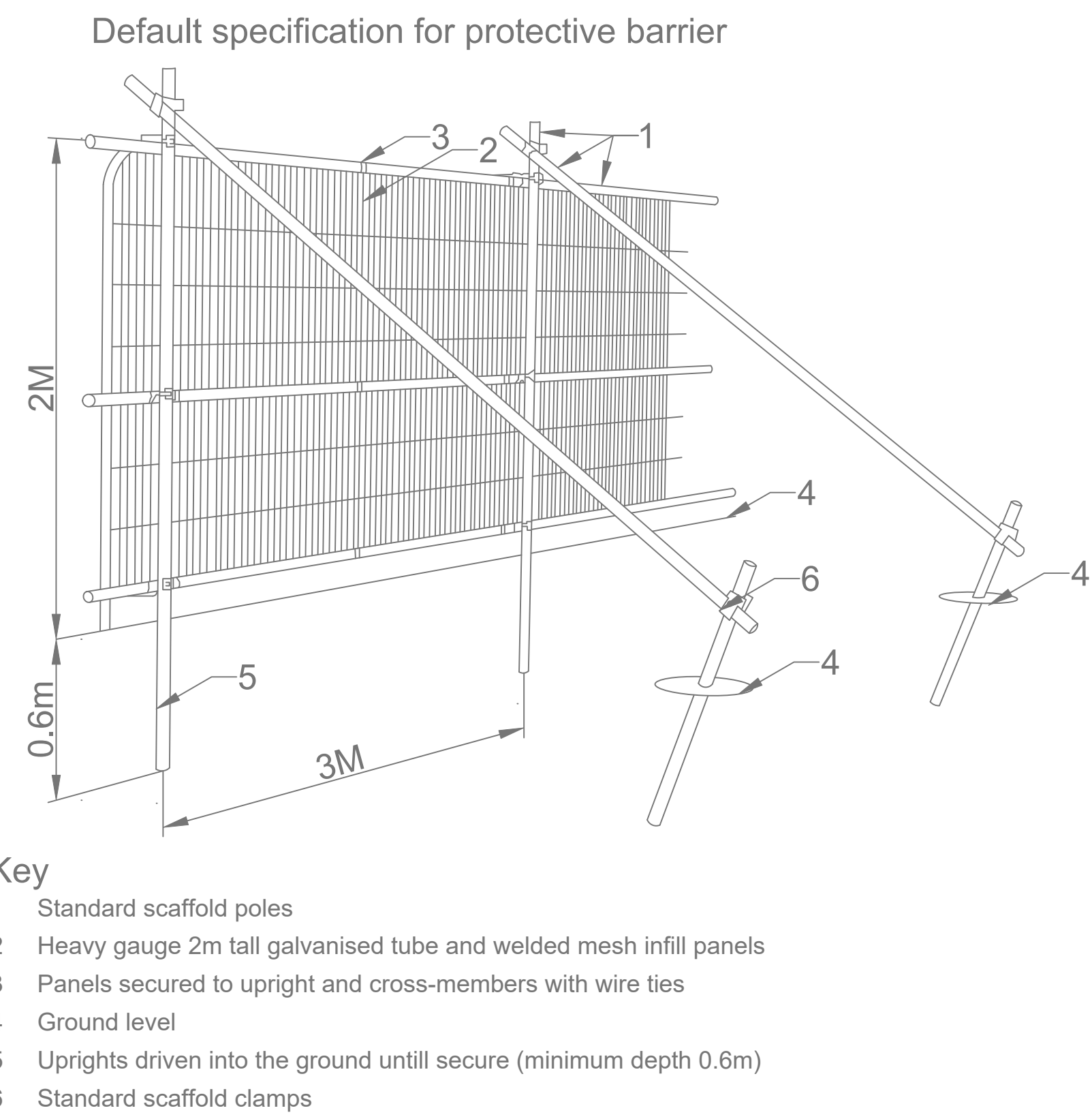
Project: **SMITHY BRIDGE ROAD, ROCHDALE**

Title: **TREE PROTECTION PLAN**

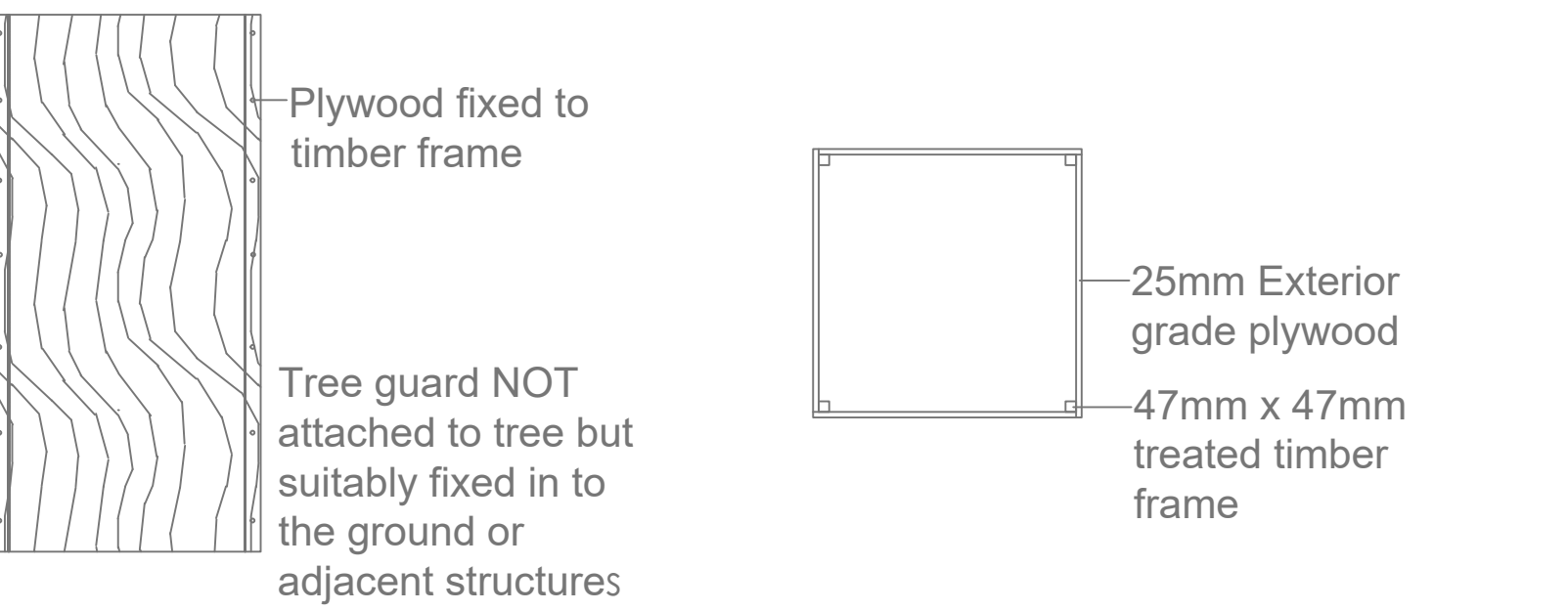
Issue: **PLANNING**

Drawn: RH	Checked: AB	Approved: AB
Project: UG11711	Scale @ A0: 1:1000	Date: 28/03/22
Dwg No: UG_11711_ARB_TPP_01	Revision: 02	

Insert 1: Tree protective fencing specification



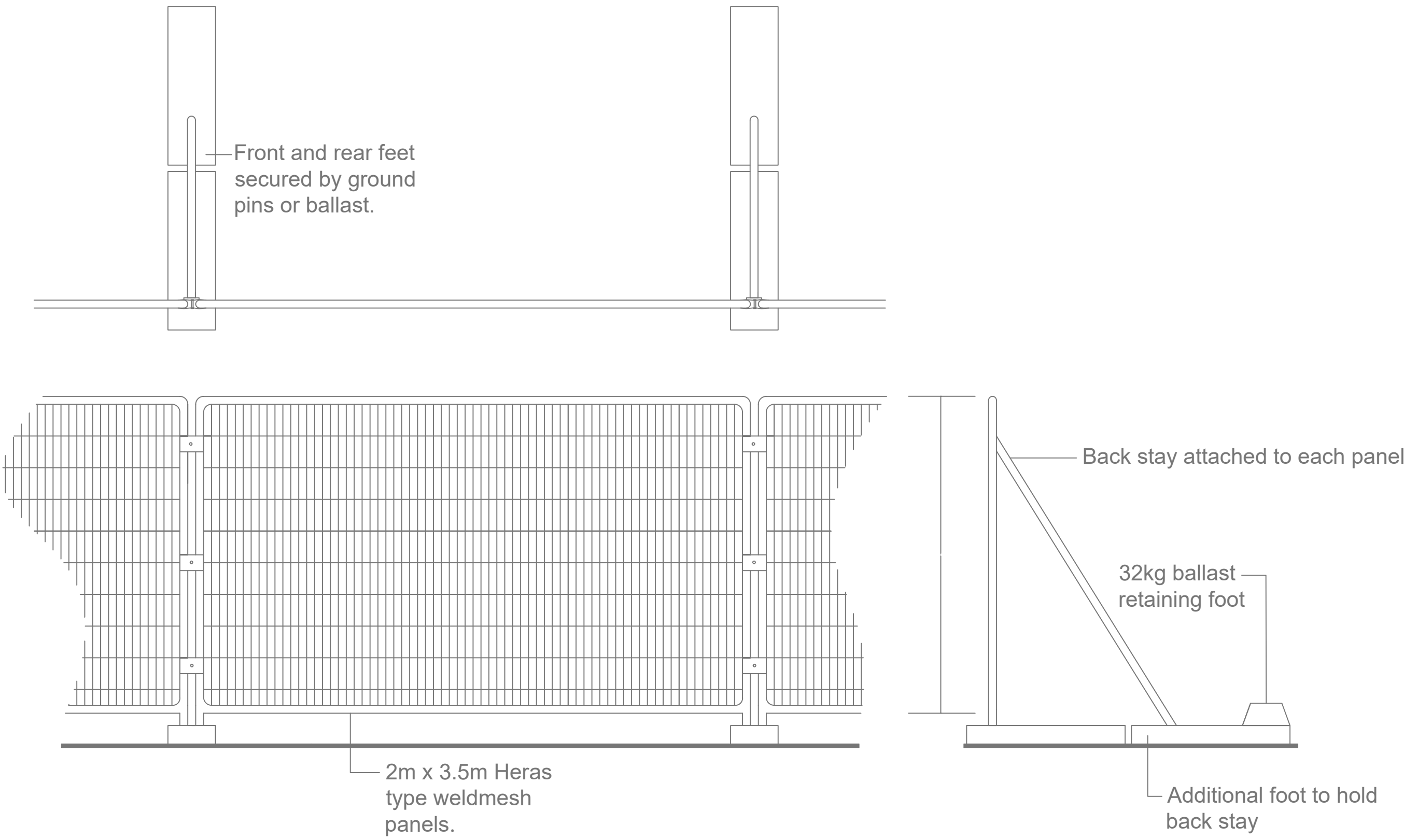
Temporary tree guard specification



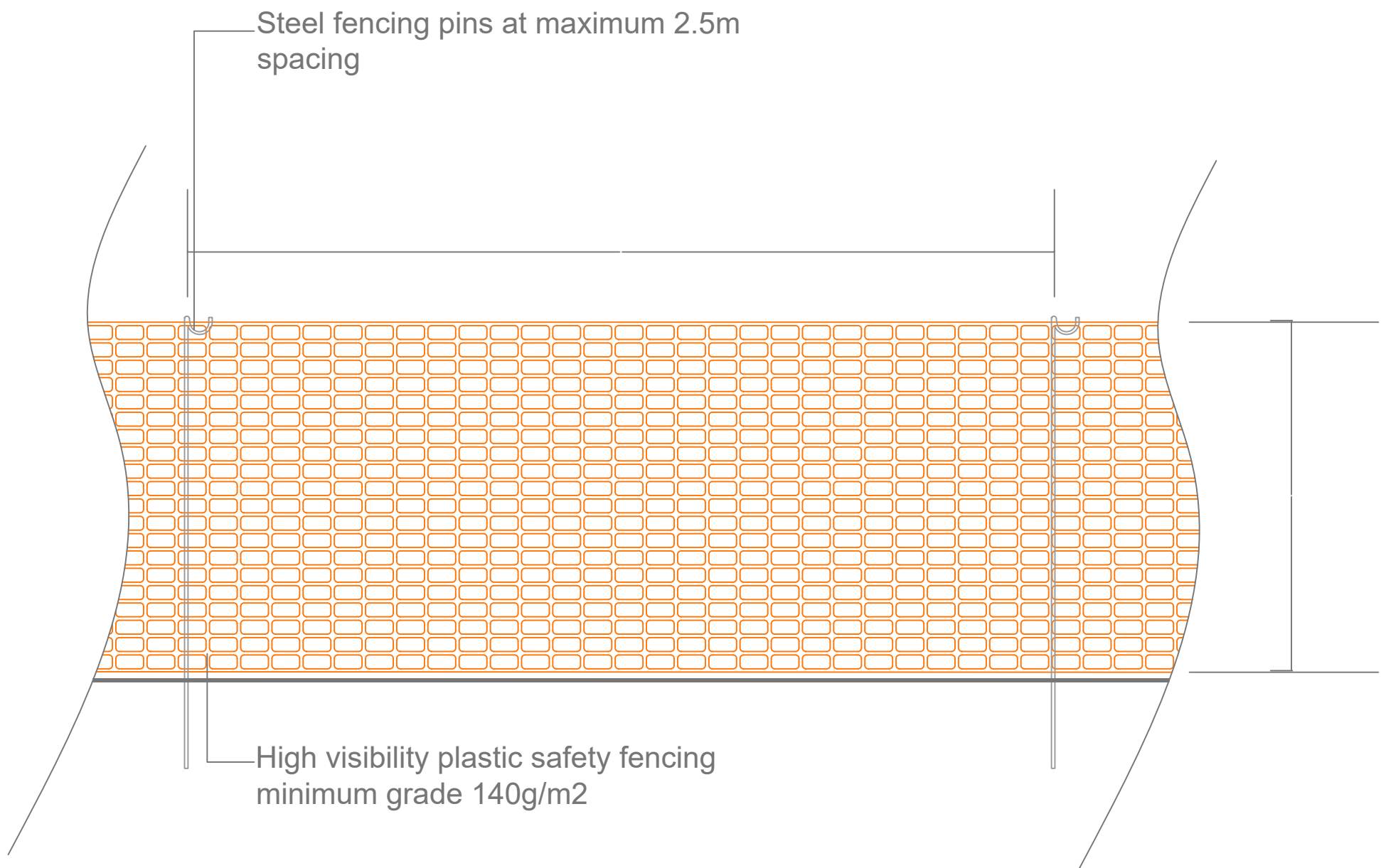
Insert 2: Tree protection notice



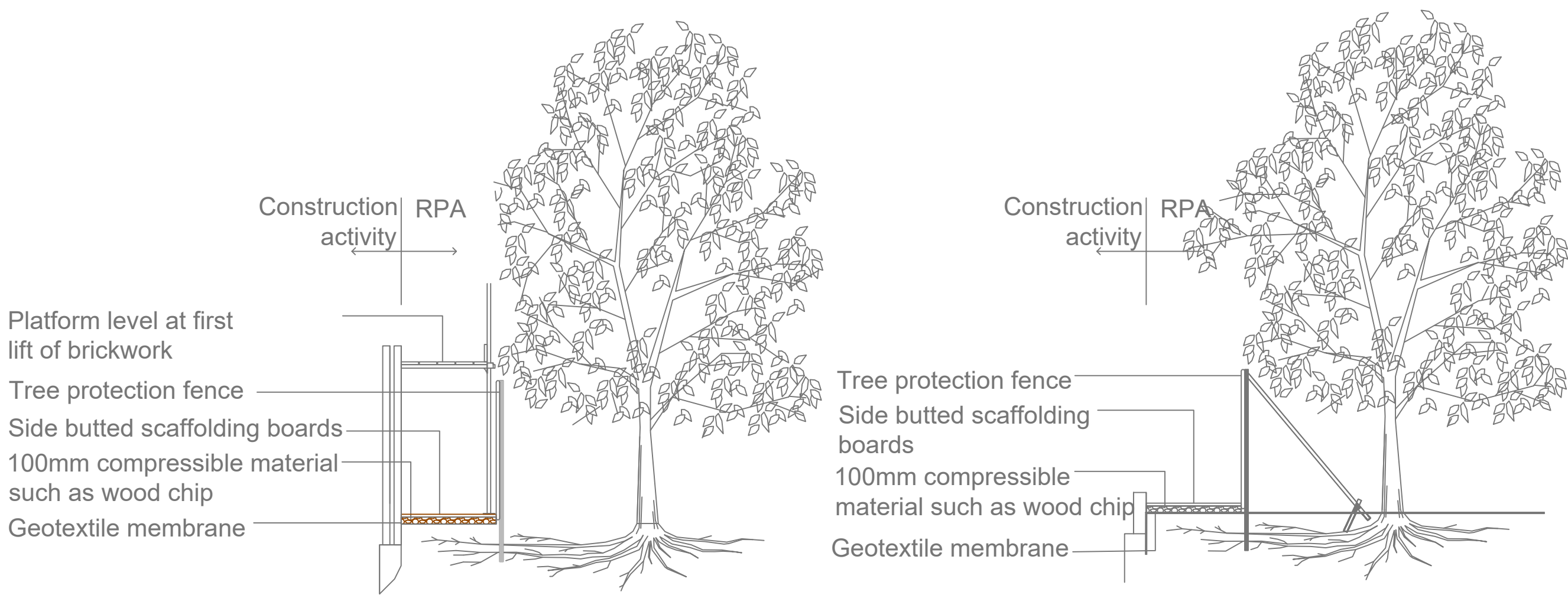
Back-stay support



Barrier mesh specification



Insert 3: Ground protection specification



Do not scale this drawing (printed or electronic version).
Contractors must check all dimensions from site.
This drawing is copyright and is for use on this site only. This drawing should be read in conjunction with all relevant consultants drawings and specialist subcontractors / supply chain drawings and specifications.
All works to be carried out in accordance with the latest British Standards / Codes of Practice unless specifically directed otherwise in the specification.
Responsibility for the reproduction of this drawing in paper form, or issued in electronic format, lies with the recipient to check that all information has been replicated in full and is correct when compared to the original paper or electronic image.
Graphical representations of equipment on this drawing have been co-ordinated, but are approximations only. Please refer to the specifications and / or details for actual sizes and / or specific contractor construction information.

Notes:-

REV.	DATE	DESCRIPTION	DRAWN	CHK'D



A: Ground Floor, The Tower,
Deva City Office Park, Trinity Way,
Manchester M3 7BF

T: +44 (0) 161 312 3131

weareurbangreen.co.uk

Client:
TAYLOR WIMPEY - WARRINGTON

Project:
SMITHY BRIDGE ROAD, ROCHDALE

Title:
TREE PROTECTION INDEX

Issue: PLANNING		
Drawn: RH	Checked: AB	Approved: AB
Project: UG11711	Scale @ A0: N/A	Date: 28/03/22
Dwg No: UG_11711_ARB_TPI_01	Revision: 00	