

Arboricultural Impact Assessment, Arboricultural Method Statement & Tree Protection Plan

Corby, Birkby Road, Huddersfield, HD2 2DR

June 2023

Statement prepared by

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Summary

Candid Architecture instructed Treeplan to undertake a BS5837 Pre-Development tree survey to inform proposed development at Corby, Birkby Road, Huddersfield, HD2 2DR.

Updates to an existing detached dwelling and grounds are proposed. The local planning authority has asked for more information on the impact of a proposed garage to the east of the site in respect of a line of protected trees on the eastern boundary.

A site visit and tree survey was undertaken on 16 June 2023. Details for six trees were recorded.

These trees, their canopy extent, root protection areas and retention category are shown on a Tree Constraints Plan in Appendix 3.

The proposed site and the recorded trees are shown on a Tree Impact Plan, also in Appendix 3.

The impact of the proposed development is discussed in section 4 below.

- No trees need to be pruned or removed to enable the construction of the garage
- An existing tarmac driveway already surfaces the approach to the location of the proposed garage. This driveway is proposed for retention in its current form
- The proposed garage will be constructed outside the root protection areas of the protected trees, there is a need to extend the current tarmac by 1.5m, surfacing the periphery of one tree, T6. This area was formally hosting roots from a tree, now removed so the impact of T6 is anticipated to be low
- A tree removed under a separate tree work application (2022/92801) is proposed for replacement planting 16m to the south east from the location of the removed tree as this will allow the replacement to grow a fully formed, symmetrical canopy rather than an asymmetrical one up against the end of the current row of trees

Methodology on reducing the impact of the proposed development on trees is included in section 5 below and on a Tree Protection & Planting Plan at the rear of Appendix 3.

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1. INTRODUCTION

1.1 Instruction

Candid Architecture instructed Treeplan to undertake a BS5837 Pre-Development tree survey to inform proposed development at Corby, Birkby Road, Huddersfield, HD2 2DR.

Updates to an existing detached dwelling and grounds are proposed. The local planning authority has asked for more information on the impact of a proposed garage to the east of the site in respect of a line of protected trees on the eastern boundary.

The tree survey and this report follow guidelines contained in *British Standard 5837:2012 Trees in relation to design, demolition and construction* (hereafter BS 5837).

1.2 Qualifications & Experience of Author

The author of this report is Ross Cannon. Conclusions and recommendations of this report are based on my site observations and experience. I have experience and qualifications in Forestry and Arboriculture which are summarised in Appendix 1.

1.3 Documents Supplied

- Topographical site plan of current & proposed site plan ref RG324_PL01E

1.4 Surveying Methodology & Report Limitations

A summary of the survey methodology and report limitations are included in Appendix 2.

2. TREE SURVEY

2.1 Tree Survey

A survey was undertaken on 16 June 2023 in accordance with section 4.4.2.5 of BS 5837. The following information was recorded and can be found summarised in Appendix 3 below:

- A sequential tree (or group of trees) number
- Species
- Height
- Stem diameter(dbh) at 1.5m above ground level
- Canopy/branch spread at the four cardinal compass points
- Canopy height above ground
- Height of first significant branch and direction of growth
- Age class
- Health
- Condition (tree) comments
- Management
- BS Retention category

2.2 Tree Categorisation

Section 4.5.2 of BS 5837 states *'The purpose of the tree categorisation method, which should be applied by an arboriculturist, is to identify the quality and value (in a non-fiscal sense) of the existing tree stock, allowing informed decisions to be made concerning which trees should be removed or retained in the event of development occurring'*.

There are four retention category's, U, A, B and C.

- **Category U** – Trees in such **poor** condition that they cannot realistically be retained in the context of the current land use for greater than 10 years.
- **Category A** – Trees of **high** quality with an estimated life expectancy of at least 40 years.
- **Category B** – Trees of **moderate** quality with an estimated life expectancy of at least 20 years.
- **Category C** – Trees of **low** quality with an estimated life expectancy of at least 10 years, or young trees with a stem diameter of less than 150mm.

Category U trees are those that should be removed in the short term and should not be considered further in the planning process unless there is ecological/ habitat value. All other category trees are material considerations in the planning process.

2.3 Tree Constraints

2.3.1 Above Ground Constraints – Tree Trunk and Canopy

The trees current canopy/ crown spread is marked on plans to aid site design. Consideration needs to be made to the following pre-development:

- Mature height and spread
- Species characteristics such as evergreen or deciduous, honeydew (sap) drip, fruit fall
- Shade potential
- Potential incompatibilities between layout and trees proposed for retention
- Working/access space needed for construction phase
- Protection of tree canopies from machinery impact or scaffold clearance
- Infrastructure requirements- easements, lighting, solar collectors, CCTV

2.3.2 Below Ground Constraints – Root Protection Area

BS 5837 states a *'root protection area (RPA) is a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority'*.

For single stems the RPA is calculated as an area equivalent to a circle with a radius 12 times the stem diameter.

The default position is that proposed structures should be located outside the RPA's of retained trees unless a sound arboricultural judgement can be made to support an incursion taking in to account pre-development ground conditions.

The RPA's have been altered in shape, but not area as no roots are considered to be spreading to the east, beyond a retaining wall and lower site levels.

The site has historic tarmac surfacing at the entrance and driveway.

If utility operations within the RPA are proposed consideration should be given to NJUG4 (National Joint Utilities Group Volume 4 (Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees)).

3. TREE & SITE APPRAISAL

See Tree Constraints Plan in Appendix 3

3.1 Tree Details

See a Tree Schedule in Appendix 3

- Six trees were surveyed
- Trees were mature in age, most had seen historic pruning events

3.2 Site Appraisal

- A desktop search at <https://www.kirklees.gov.uk/beta/trees-listing-and-conservation/tree-preservation-orders.aspx> indicates the recorded trees are the subject of a tree preservation order

4. ARBORICULTURAL IMPACT ASSESSMENT

Local planning authority has requested –

2023/91002 There is a line of trees down the side of the property which are protected by TPO 46/90. Although there has been no specific tree information supplied, looking at the block layout it appears that the proposed garage encroaches into the root protection area of these trees. Although permission was granted for removal of one of these trees as part of tree work application 2022/92801, it was a condition as part of that permission that a replacement tree was to be planted, as such adequate room for the successful establishment of this tree must be made available.

In order to progress this proposal, we would need to see an arboricultural impact assessment to help understand the impact this proposal could have on existing trees and an arboricultural method statement to show how this work can be done without causing harm to trees or their roots. If the access needed to facilitate this work is to be the driveway running alongside these trees how will this done without damage being caused”.

See Tree Impact Plan in Appendix 3

4.1 Below Ground Impacts – RPA's

- No trees need to be pruned or removed to enable the construction of the garage
- An existing tarmac driveway already surfaces the approach to the location of the proposed garage. This driveway is proposed for retention in its current form. Contractor build access to the rear garden and garage build can utilise the current driveway area, already hard surfaced and historic without any additional detriment to the recorded trees
- The proposed garage will be constructed outside the root protection areas of the protected trees, there is a need to extend the current tarmac by 1.5m, surfacing the periphery of one tree, T6. This area was formally hosting roots from a tree, now removed so the impact of T6 is anticipated to be low

4.2 Above Ground Impacts – Canopies

- No trees need to be pruned or removed to enable the construction of the garage
- Some cyclical pruning of the recorded trees will be required to clear the existing dwelling and (in future decades) the proposed garage. The pruning will be required whether development goes ahead or not. This can be controlled by the local planning authority through the tree work application process to ensure the health and longevity of the trees and the amenity of the area
- The recorded trees have the potential to grow in size in the future, but not significantly so
- No shade cast has been shown as there are no living rooms to the east of the dwelling and the proposed garage is to the south of the trees
- Tree leaf, seed and twig fall can accumulate on paths, gutters etc so these may need to be cleared at more regular intervals than elsewhere

4.3 Replacement Tree

A tree removed under a separate tree work application (2022/92801) is proposed for replacement planting 16m to the south east from the location of the removed tree as this will allow the replacement to grow a fully formed, symmetrical canopy rather than an asymmetrical one up against the end of the current row of trees, See location on the Tree Protection & Planting Plan at the rear of Appendix 3.

4.4 Impact on Amenity

There will be no detrimental impact on the amenity of the area.

4.5 Recommendations

Follow the methodology provided in section 5 below and labelled on the Tree Protection & Planting Plan at the rear of Appendix 3.

5. ARBORICULTURAL METHOD STATEMENT

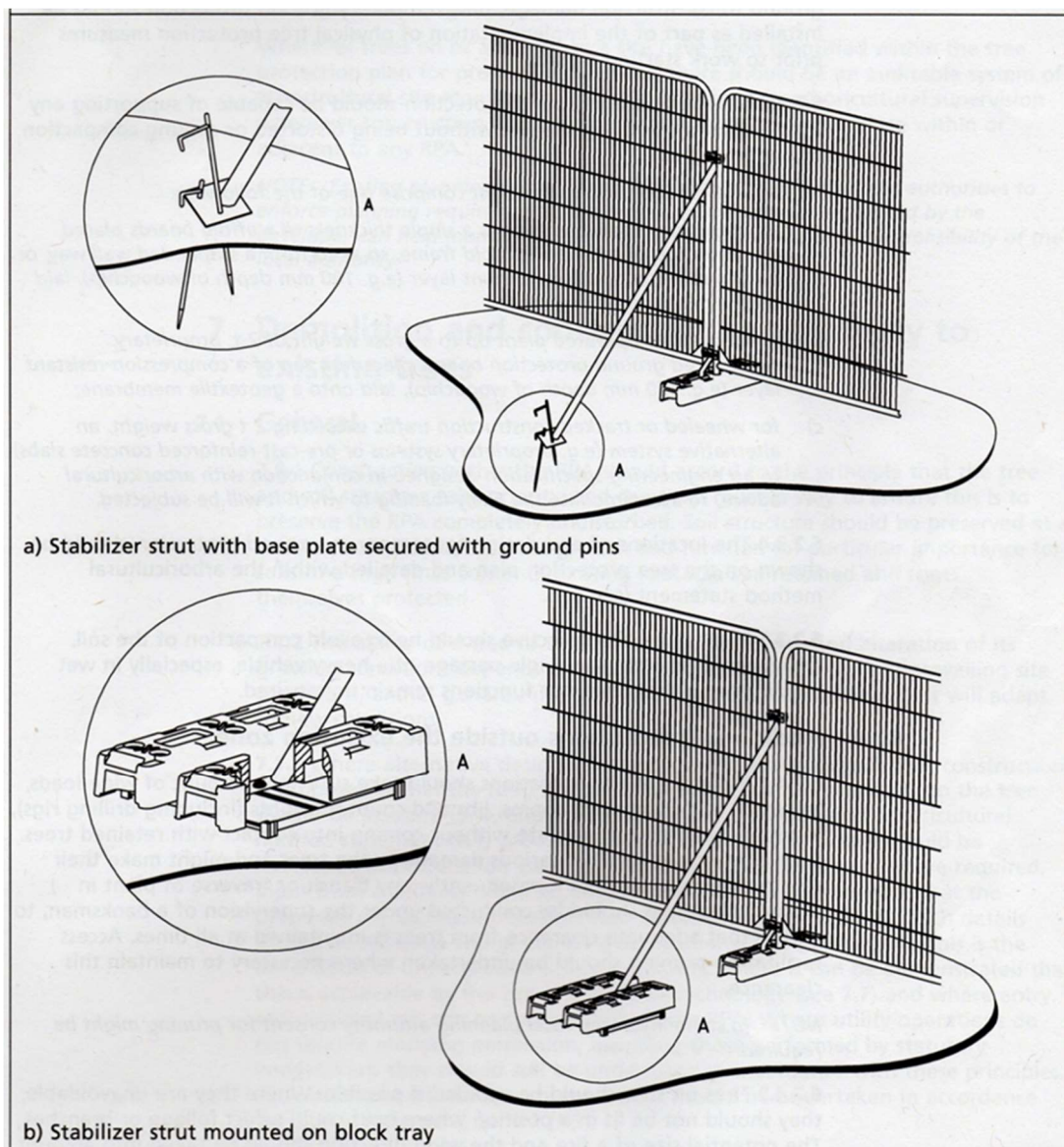
See Tree Protection & Planting Plan at the rear of Appendix 3.

5.1 Temporary Tree Protective Fencing

Protective fencing should be erected as shown on the Tree Protection Plan. The area inside this fence line becomes the 'Construction Exclusion Zone' (CEZ).

Fencing will prevent construction activity that could cause damage occurring close to retained trees. No plant, equipment or vehicles should operate within the protective fencing.

Paragraph 6.2.2 and Fig. 3 of BS5837 details the appropriate fencing specification. The appropriate fencing is shown below. The support poles should be inside the fence line/ CEZ, the side closest to the retained/protected tree.



Laminated and securely fixed signs with the words 'CONSTRUCTION EXCLUSION ZONE – NO ACCESS' to be attached to the outside/site side of the Tree Protective Fence line every 6m. Replace when weathered or lost.

5.2 Drive Extension & Garage Construction

1. Remove soils in footprint of drive to required levels
2. Any tree roots encountered (these may be dead roots from recently removed tree) cut using a sharp tool, leaving as small a wound as possible on the tree side of the excavation

5.3 Responsibilities & Order of Works

Responsibilities

All enquiries relating to trees should be addressed to the Project Arborist, no matter how trivial. Consultation is time well spent.

Responsibility	Title	Name	Organisation	Contact
Client Architectural & Planning	Architect	R Lowe	Candid Architecture	ric@candidarchitecture.co.uk
Local Planning Authority (LPA)			Kirklees	William.Simcock@kirklees.gov.uk
Site trees	Project Arborist	R Cannon	Treeplan (if instructed)	07599358056
Protective fencing & Construction	Builder/Client to supervise	Client		

Order of Works

This list should be followed to ensure the health and longevity of the retained trees. Where operations need to be carried out that are not listed here then consideration should be made to the retained trees. Contact the Project Arborist if in any doubt.

Keep this document, in its entirety in the site cabin so it can be reviewed, and an auditable series of operations is maintained. Send copy (photo by email/text) of completion signature and date to Project Arborist and Local Planning Authority at each stage.

Deviation or non-compliance which is detrimental to the health or longevity of a retained tree can lead to prosecution under the Town & Country Planning Act to both instructing parties and the contractors themselves.

Abbreviations – AMS = Arboricultural Method Statement, TPP = Tree Protection Plan, LPA = Local Planning Authority, Pro Arb = Project Arboriculturist

Stage	Operation detail	Responsible person	Completion signature & date – email Pro Arb
1	Remove any rubble or dumped material Erect Temporary Tree Protective Fencing as per section 5.1 above and Tree Protection Plan, invite LPA to inspect 7 days before commencement	Builder to liaise with Architect & Pro Arb	
2	Undertake build	Builder	
3	When build complete, all plant, machinery and materials are off site remove Temporary Tree Protective Fencing	Builder to liaise with Architect & Pro Arb	

APPENDIX 1

The Qualifications and Experience of Ross Cannon

1. Qualifications

In 2001 I was awarded a National Diploma in Urban Forestry.

In 2006 I was awarded the Arboricultural Associations Technicians Certificate.

In 2011 I became a Technical Member of the Arboricultural Association.

2. Experience

I have been working and studying within the field of arboriculture since 1999, first as a tree surgeon and latterly in an advisory capacity. Between 2001 and November 2007 I was a tree surgeon for a large local authority. Between November 2007, and December 2008 I worked as a Tree Surveyor and then Arboricultural Officer for Leeds City Council. This involved various large-scale tree condition and management surveys and carrying out detailed tree inspections. Between December 2008 and December 2011 I was a Trees & Woodlands Officer for the Yorkshire Dales National Park Authority administering tree preservation orders, trees in conservation areas and providing advice to the development control section on matters relating to trees in relation to proposed development. From December 2011 to present I have been undertaking independent tree consultancy services.

3. Continuing professional development

I attend courses, conferences, seminars and workshops run by land management, forestry and arboricultural organisations, colleges and universities.

APPENDIX 2

SURVEY METHODOLOGY, TREE RISK ASSESSMENT & REPORT LIMITATIONS

Trees were inspected using the 'Visual Tree Inspection' methodology (Mattheck). No decay detection equipment was used.

Methodology of survey is in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction – Recommendation and is not a tree hazard, tree risk or subsidence/subsidence potential survey.

Horizontal and vertical measurements were taken using laser rangefinder, which I consider are accurate enough for the purpose of this report.

Maps and plans are for illustrative purposes only to inform site design and planning requirements.

Trees are living and dynamic structures subject to extreme weather, vandalism, physical, chemical and biological changes that can quickly have an impact on a tree's condition and its growing environment. As such, even with robust tree inspections unforeseen changes, hidden defects and resulting structural failures can occur. All trees have a tolerance to the expected weather at a site they have grown in, but even then, healthy defect free trees can still fail in extremes of weather.

Tree condition comments only relate to the day the tree was inspected, this report is valid for one year from the date given on the front page or in the header or footer under normal weather conditions and site conditions.

The validity of this report ceases

- after a significant weather event, such as but not limited to severe winds, extremes in temperature, floods and drought not normal for the area.
- an outbreak of a virulent pest or disease which the author cannot foresee.
- pruning or works recommended are not undertaken to British Standard 3998:2010 or to the specification recommended in the report.
- if groundwork operations/ level changes or use are/ have been undertaken, that I was not aware of, within the vicinity of the trees that could alter their rooting environments, such as but not limited to underground utility work that doesn't meet the recommendations in NJUG 10 or British Standard 5837:2012 or their successors.
- significant change in on or off site conditions, such as, but not limited to adjacent tree/building removal, ground/surface water alteration.

No attempt has been made to assess soil subsidence/ heave risk potential, nor should any be construed.

This survey and report is for the recipient(s) named in the Introduction only; any third-party relying on the contents of this report does so entirely at their own risk.

I recommend that the trees are inspected at least every year or after any significant weather event by a suitably qualified and insured arboricultural consultant.

APPENDIX 3

TREE SCHEDULE & PLANS

Tree Data – Glossary

N, S, E, W = Compass direction

1. Tree Number/ tags - Individual tree = T+ Number, Group of trees = G+ Number
2. Species - Common and or scientific names where appropriate
3. Height - Over all tree height, measured in M
4. Diameter at breast height - Measurement of stem @1.5m in mm
5. Canopy spread - Extent of tree branches taken at each compass point in m.
6. Low canopy height - Height of lowest branch above the ground.
7. Height of first significant branch and its direction of growth
8. Age Class / Life Stage - Y =Young, SM= Semi mature, EM=Early Mature, M= Mature, OM=Over Mature, V= Veteran.
9. Health - Good = Normal growth, Fair = Reduced twig extension, but other than that few signs of ill health, Poor = Small internodes, thinning canopy, Dead.
10. Condition comments - Significance of physiological and structural condition
11. Management
12. U or A to C Category grading - See BS 5837(2012) Table 1 For details of each Category

All measurements should be considered estimated

Ref.	Common Name	Height (m)	Stem Diam (mm)	North	East	South	West	Crown Clearance (m)	First Branch (m)	Age Class	Health	Comment	Management	Retention Category
T1	Norway Maple	14	560	6.5	7	3	7	3.5	3N	M	F/G	Ivy prevents full inspection, previous pruning, canopy sparser than normal	None	B
T2	Lime	13	420	3.5	4	3	6	1	3E	M	G	Base obscured, previous pruning	None	B
T3	Norway Maple	10	530	6.5	6.5	4.5	6.5	3	3N	M	G	Base obscured, previous pruning	None	B
T4	Norway Maple	13	560	5.5	8	4.5	8	2.5	3E	M	F/G	Base obscured, previous pruning, canopy sparse to east, dead branches	Remove dead branches	C
T5	Norway Maple	12	290	1	4	3	3	2.5	2.5W	M	G	Base obscured, bleeding bark lesion to north at 0.8m, suppressed but upright stem, previous pruning	None	C
T6	Norway Maple	13	340	3.5	3	2	8	1	3W	M	G	Base obscured, previous pruning, formally suppressed to south	None	B

Tree Plans

Tree Constraints Plan – Current site and trees

Tree Impact Assessment Plan – Proposed site and trees

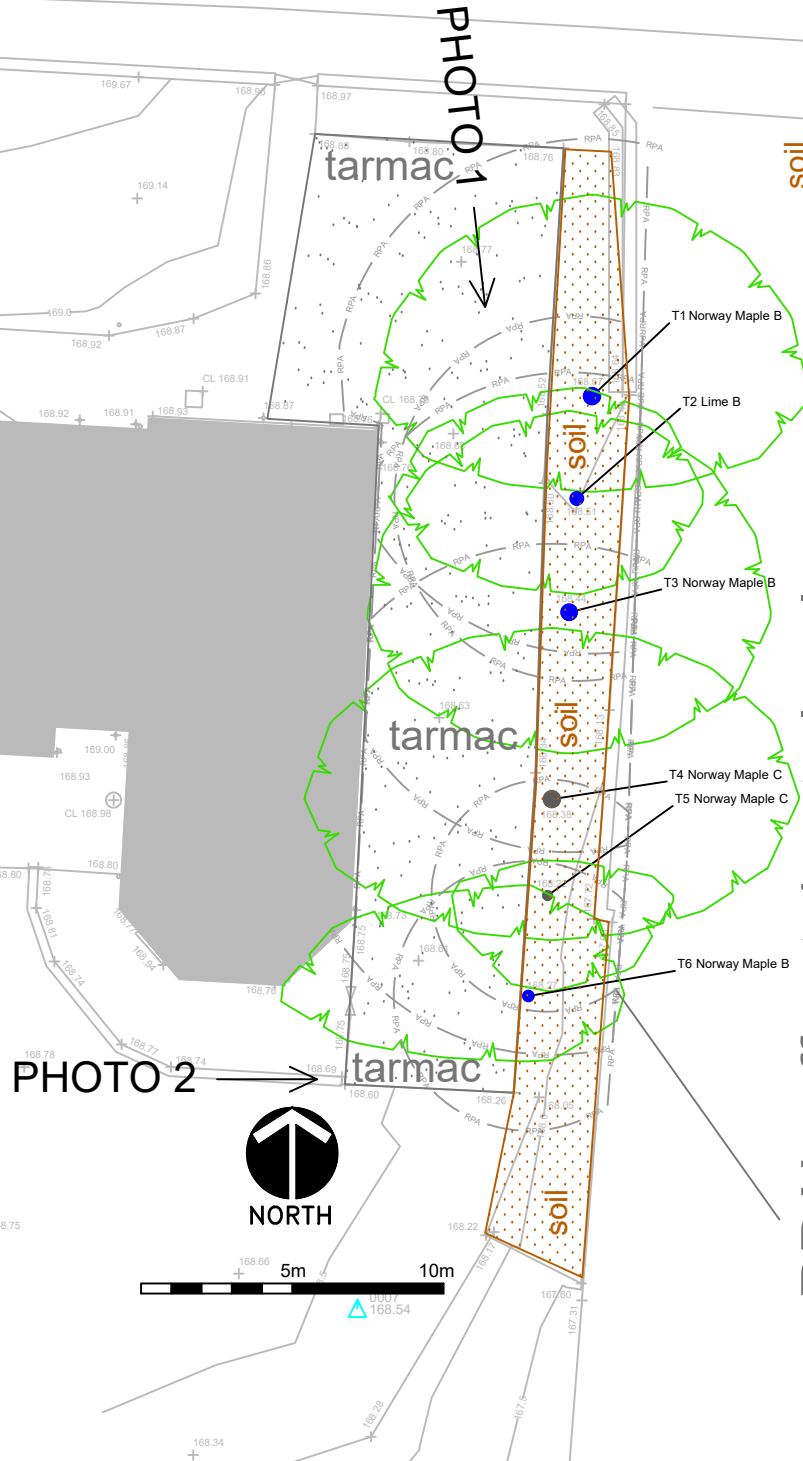
Tree Protection & Planting Plan – Trees and protection measures labelled, including replant location



PHOTO 1

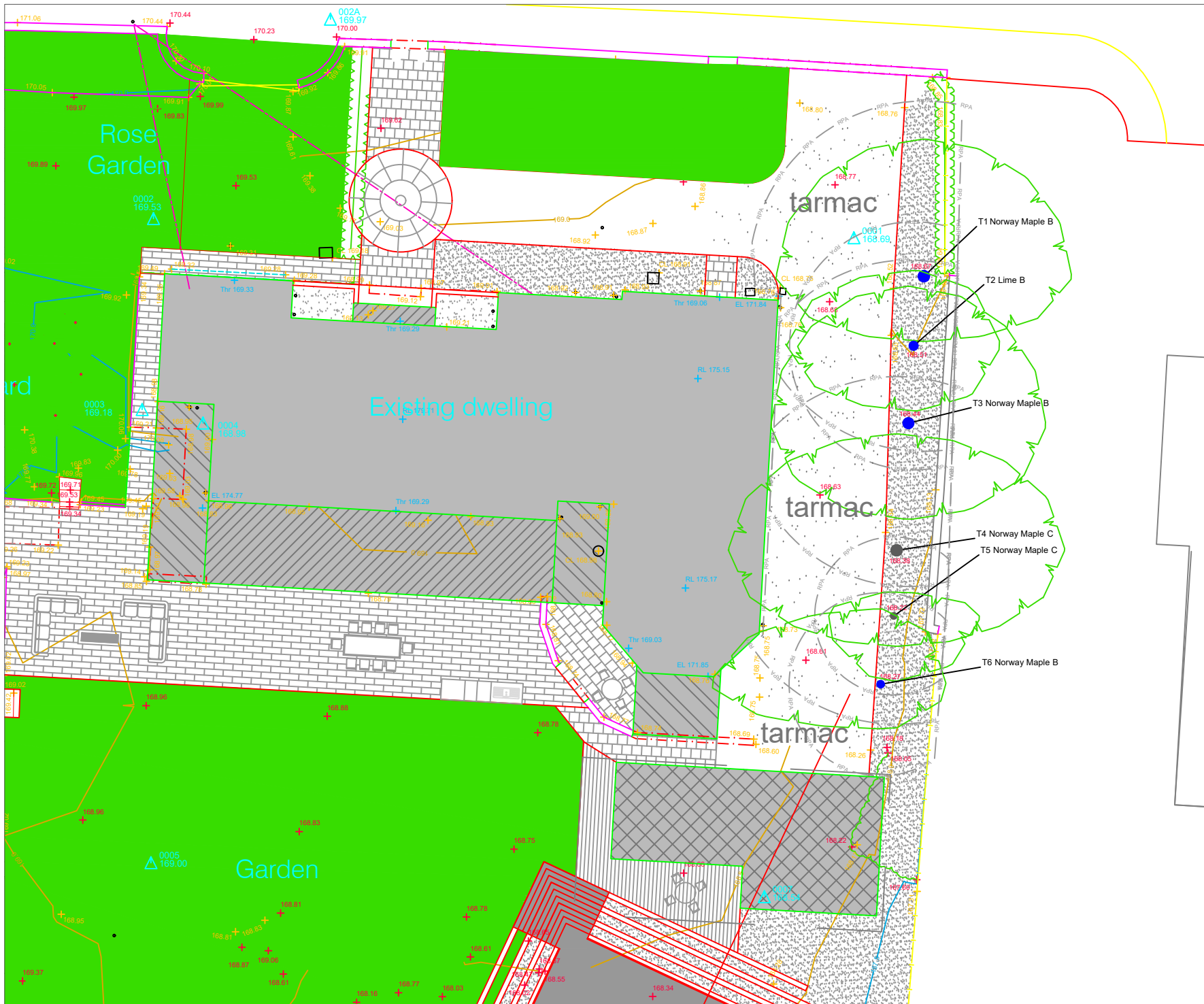


PHOTO 2



RPA's off-set due to level change/retaining wall, accurate in area

Key	
Item Reference Number Common Name BS 5837 Retention Category	
Stem Location & Diameter	
Root Protection Area (RPA)	
Canopy Spread	
BS 5837 Retention Category Colour	
●	Category A - Tree of High Quality
●	Category B - Tree of Moderate Quality
●	Category C - Tree of Low Quality
●	Category U - Tree Unsuitable for Retention
For planning purposes only, check all measurements on site Read in colour & with associated report. Copyright.	
PLAN 1 OF 3	
Scale	1:250@ A3
Plan Title	Tree Constraints Plan
Site	Corby, Birkby Rd, HD2 2DR
Date	20 June 2023
tree@treeplan.co.uk	



Key

Item Reference Number
Common Name
BS 5837 Retention Category

Stem Location & Diameter
Root Protection Area (RPA)
Canopy Spread

BS 5837 Retention Category Colour

- Category A - Tree of High Quality
- Category B - Tree of Moderate Quality
- Category C - Tree of Low Quality
- Category U - Tree Unsuitable for Retention

LEGEND

- Existing Building
- Proposed single storey extension
- Proposed two storey extension
- Proposed garage and home office

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PLAN 2 OF 3

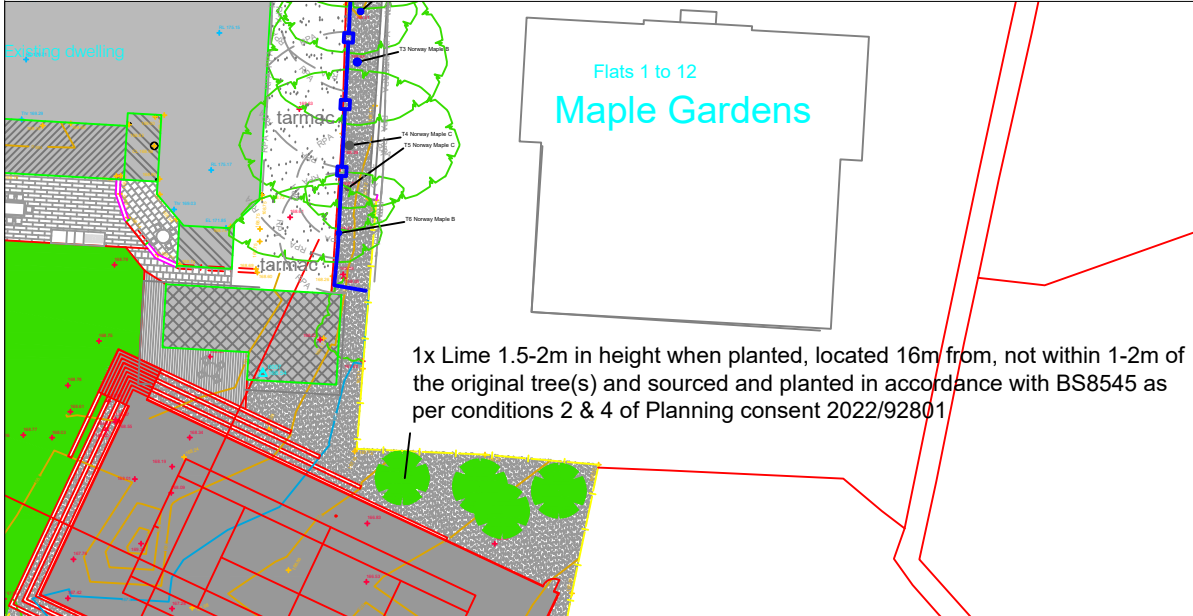
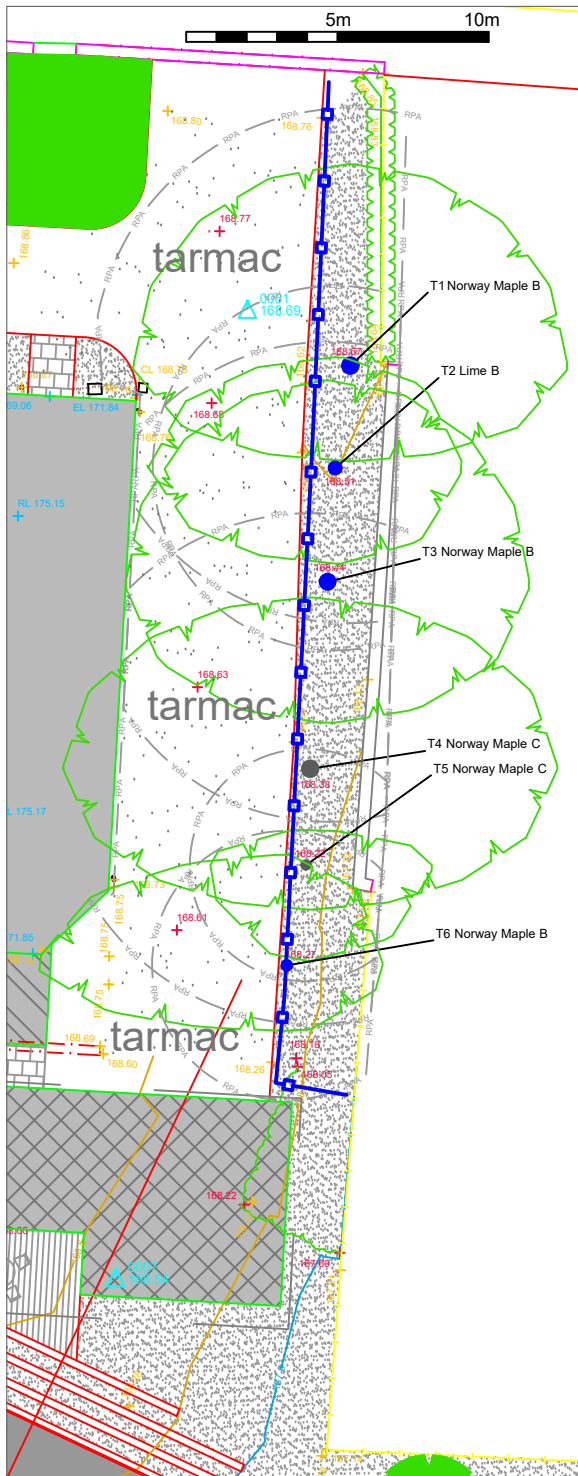
Scale 1:250@ A3

Plan Title Tree Impact Plan

Site Corby, Birkby Rd, HD2 2DR

Date 23 June 2023

tree@treeplan.co.uk



Key	
Item Reference Number Common Name BS 5837 Retention Category	
Stem Location & Diameter	
Root Protection Area (RPA)	
Canopy Spread	
BS 5837 Retention Category Colour	
	Category A - Tree of High Quality
	Category B - Tree of Moderate Quality
	Category C - Tree of Low Quality
	Category U - Tree Unsuitable for Retention
	Temporary Tree Protective Fence to Fig. 2 of BS5837
For planning purposes only, check all measurements on site Read in colour & with associated report. Copyright.	
PLAN 3 OF 3	
Scale	1:250@ A3
Plan Title	Tree Protection/Planting Plan, Arboricultural Method Statement
Site	Corby, Birkby Rd, HD2 2DR
Date	23 June 2023
tree@treeplan.co.uk	