



GEOSPHERE ENVIRONMENTAL

REPORT TYPE: Arboricultural Impact Assessment
REPORT NUMBER: 9185,AR,AIA,TC,SJ,KL,25-04-25,V3
SITE: Hinckley & District Hospital, Hinckley, LE10 1AG
DATE: 25/04/2025



DOCUMENT CONTROL SHEET

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 Project Name: Hinckley & District Hospital, Hinckley, LE10 1AG
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It is advised that this report and the implications herein be re-assessed should development proposals alter. In addition, it may be necessary to update baseline conditions if alterations of the report are required after 12 months of the date of issue.

VERSION RECORD

Version:	Date:	Details:	Author(s):	Reviewed By:	Authorised By:
1	24/03/25	Original version	Tom Cox Senior Arboricultural and Ecological Consultant	Sarah Jarrett Arboricultural and Ecological Consultant	Katie Linehan Technical Director of Ecology
2	02/04/25	Minor change to figure	Ariana Segura Ecologist	Sarah Jarrett Arboricultural and Ecological Consultant	Katie Linehan Technical Director of Ecology
3	25/04/25	New Development Plan	Tom Cox Senior Arboricultural and Ecological Consultant	Katie Linehan Technical Director of Ecology	Katie Linehan Technical Director of Ecology

Executive Summary

Report Description	Geosphere Environmental Limited was commissioned by Darwin Group Limited to undertake an Arboricultural Survey and Impact Assessment of the land at Hinckley & District Hospital, Hinckley, LE10 1AG. The site is located at National Grid Reference (NGR) SP 4295 9372. The report relates to the assumed redevelopment of the site. A development plan has been provided as Drawing ref. 180769-DG-02-XX-DR-A-1402 P6 and is included within Appendix 6. The site covers an area of approximately 0.4 hectares (ha). This and the immediate surrounding area were surveyed.
Arboricultural Impact Assessment	Potential impacts of proposed development: • T9, G4, G5, G7 – Category C - These trees have been removed as part of a separate application. • T8 – Category C – This tree will need to be removed to facilitate the development. • T6, T7 – Category B – These trees will have foundations installed within the edge of the root protection area. Any excavations should be made by hand using the excavation within the root protection area methodology within the Arboricultural Method Statement. Specialist foundations should be used such as mini pile or cantilever to minimise impacts to the trees. • T10, G8 – Category B, C – Remaining trees within the development boundary, these trees can be fully protected with tree protection fencing and therefore should not be negatively impacted.
Conclusions	Providing the recommendations within section 4 and the Arboricultural Method Statement included within Appendix 7 are adhered to then impacts to trees should be kept to a minimum.
This Executive Summary only provides a summary of the site data and its assessment. It is recommended that the reader reviews the report in its entirety and any material referenced therein.	

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1. INTRODUCTION

1.1 General

Geosphere Environmental Limited was commissioned by Darwin Group Limited to undertake an Arboricultural Impact Assessment of the site at Hinckley & District Hospital, Hinckley, LE10 1AG.

Any limitations and conditions pertaining to the report are stated within Appendix 1, with a full list of technical references provided within Appendix 2.

The site covers an approximate area of 0.46 hectares (ha) and is located at National Grid Reference (NGR) SP4295 9372.

The site boundary is shown on Figure 1 below:



Figure 1 – Site Boundary (red outline)

1.2 Aims

The Arboricultural Impact Assessment has been undertaken based upon information provided by an arboricultural survey undertaken by Geosphere Environmental Ltd and reported in May 2024, (ref. **R.1**).

The Tree Survey Schedule from the initial survey has been included in Appendix 3, with a description of the schedule in Appendix 4, and a key to the scientific names in Appendix 5.

A Tree Retention and Removal Plan has been designed based upon the tree survey to highlight trees which are planned to be removed during development. A tree protection plan has been included to detail the protection measures which are to be put in place to protect the trees retained throughout the development. An Arboricultural Impact Assessment, Tree Management Plan, and Arboricultural Method Statement has been included within this report.

2. TECHNICAL APPROACH

2.1 Personnel

This report was produced by Tom Cox HND MarborA Qualifying CIEEM Senior Arboricultural and Ecological Consultant, who is experienced in Arboricultural consultancy including surveys and impact assessments. This report was reviewed by Sarah Jarrett BSc (Hons) MSc TechArborA (Ecological and Arboricultural Consultant) and approved by Katie Linehan BSc (Hons) MSc PIEMA MCIEEM (Technical Director), who are experienced in both ecological and arboricultural consultancy including the production of reports and impact assessments.

2.2 Arboricultural Survey

The arboricultural survey has been undertaken in general accordance with BS 5837:2012 (ref. **R.2**). The recommendations for tree remediation works are in accordance with current legislation and guidance, including BS 3998: 2010, 'Tree work – Recommendations' (ref. **R.3**).

The data collected during this survey is based entirely upon arboricultural grounds and reflects the condition of the trees on the day the survey was undertaken. The locations of the trees were detailed on a topographical survey provided by the Client. All locations of trees are assumed to be correct. Any trees not noted on the topographical plan have been added where appropriate during the tree survey.

Scientific names and common names of plant species identified are as they appear in Stace (ref. **R.4**). For species not listed in Stace, scientific and common names were taken from Johnson and More (ref. **R.5**).

2.3 Site Specific Limitations

Trees were surveyed without undertaking vegetation clearance. Some trees may have been inadvertently missed off the tree constraints plan because it was not possible to access all areas of the site, specifically the northern corner of site and the narrow strip of land leading to Hinton way on the western edge of site.

Some trees were covered with ivy which limited the visibility of the stem size and structure. This may have increased the margin of error when recording measurements and assessing the quality of the trees. In cases where the trees were obscured or inaccessible, the parameters which could not be accurately measured were estimated as per BS 5837: 2012 (ref. **R.2**).

3. ARBORICULTURAL IMPACT ASSESSMENT

3.1 Council Restrictions

Hinkley and Bosworth Borough Council Online Planning map (ref. **R.8**) was consulted on 12 April 2024 and confirmed that there are no Tree Preservation Orders onsite, however the north and part of the western ownership boundaries are adjacent to a Conservation Area. This is shown on the Tree Preservation Order Plan, Drawing ref. 9185,AR/002/Rev0.

3.2 Proposed Development

A Proposed Development Plan, Drawing ref. 180769-DG-02-XX-DR-A-1402 P6, has been supplied by the Client and is included within Appendix 6. The proposed development comprises the demolition of the existing building and the construction of a new building layout with additional car parking to the north. Additional tree planting is included within the plan.

3.3 Proposed Impact on Trees

The potential impacts of the proposed development on the existing trees are listed within Table 1 below. Tree Constraints Plan, Drawing ref. 7257,EC,AR/001/Rev0, shows the locations of the trees present onsite at the time of the survey. The Tree Removal and Protection plan, Drawing ref. 9185,AR/001/Rev0, shows which trees will be removed and which trees will be retained as well as the protection measures required for the retained trees. All plans are included within Appendix 6.

Table 1 – Proposed Impact of Construction on Trees		
Tree Number	Category	Impact on Tree
T9, G4, G5, G7	C	These trees have been removed as part of a separate application.
T8	C	This tree will need to be removed to facilitate the development.
T6, T7	B	These trees will have foundations installed within the edge of the root protection area. Any excavations should be made by hand using the excavation within root protection methodology within the Arboricultural Method Statement. Specialist foundations should be used such as mini pile or cantilever to minimise the impacts to the trees.
T10, G8	B, C	Remaining trees within the development boundary, these trees can be fully protected with tree protection fencing and therefore should not be negatively impacted.

3.3.1 Tree Removals

T8 will need to be removed to facilitate the construction of the new building.

4. TREE MANAGEMENT PLAN

4.1 Tree Construction Method Statement

The Arboricultural Method Statement has been included in Appendix 7.

4.2 Tree Protection Barriers

Tree Removal and Protection Plan, Drawing ref. 9185,AR/001/Rev0 in Appendix 6, shows the location of protective barriers which will need to be put in place, prior to demolition / construction works. The type of barriers that will be required is detailed within the Arboricultural Method Statement in Appendix 7. Existing barriers such as garden fences may need to be reinforced during construction works.

4.3 Arboricultural Supervision

A pre-commencement meeting should be held between the Local Authority Tree officer, the Consultant Arboriculturist and the Site manager to ensure that roles and responsibilities are understood and that appropriate tree protection measures are put in place. Arboricultural monitoring should be implemented throughout the development to ensure Tree Protection measures are sufficient throughout development as per the Arboricultural Method Statement in Appendix 7.

4.4 Works Within Root Protection Areas

T6 and T7 will require demolition within the root protection areas, this must be completed by carefully pulling the building away from the stems of the trees and keeping the main body of any machinery outside of the root protection area as per the Arboricultural Method Statement.

Arboricultural supervision will be required for any demolition, excavation and construction within these areas to ensure roots are not damaged during works, as per the Arboricultural Method Statement in Appendix 7.

4.5 Services and Drainage

It is not anticipated that excavation for drainage will be required within the root protection areas of any trees to be retained onsite.

4.6 Tree Pruning

Remedial tree works should be undertaken following the completion of construction works. This will include removing any branches which have become hazardous as a result of accidental damage during construction works. If any unforeseen tree work becomes necessary during the construction phase, written consent must be sought from the Arboricultural Consultant and the LPA before any further pruning works can commence.

All specified tree work is to be carried out in general accordance with BS 3998:2010 Tree work – Recommendations (ref. **R.3**) by a professional and specialist arboricultural contractor, who carries the appropriate experience and insurance cover.

4.7 Tree Planting

Tree planting has been included within the proposed development plan.

An appropriate after care scheme should be implemented to ensure the newly planted trees reach maturity.

5. CONCLUSIONS

Hinkley and Bosworth Borough Council Online Planning map (ref. **R.8**) was consulted on 12 April 2024 and confirmed that there are no Tree Preservation Orders onsite, however the north and part of the western ownership boundaries are adjacent to a Conservation Area. This is shown on the Tree Preservation Order Plan, Drawing ref. 9185,AR/002/Rev0.

T8 will need to be removed to facilitate the development.

T6 and T7 will require foundations installed within the root protection area. Any excavations must be dug by hand and specialist engineering solutions sought for the foundations such as cantilever or minipile.

APPENDICES

Appendix 1 – Report Limitations and Conditions

General Limitations and Exceptions

This report was prepared solely for our Client for the stated purposes only and is not intended to be relied on by any other party or for any other use. No extended duty of care to any third party is implied or offered. Third parties should not rely on the facts, matters or opinions set out in this report without the express written permission of Geosphere Environmental Ltd.

Geosphere Environmental Ltd does not purport to provide specialist legal advice.

The Executive Summary, Conclusions and Recommendations sections of the report provide an overview and guidance only and should not be specifically relied upon until considered within the context of the whole report.

Interpretations and recommendations contained within the report represent our professional opinions, which were arrived at in accordance with currently accepted industry practices at the time of reporting and based upon current legislation in force at that time.

Arboricultural Limitations and Exceptions

This report is prepared and written in the context stated in the introduction to this report and should not be used in a differing context. Furthermore, new information, improved practices and legislation may necessitate an alteration to the report in whole or in part after its submission. Therefore, with any change in circumstances or after the expiry of one year from the date of the report, the report should be referred to us for re-assessment and, if necessary, re-appraisal.

The trees were not climbed but surveyed from ground level. The survey recorded any defects which were observed, but a full tree health and safety inspection for the site is beyond the scope of this survey.

Any physical changes that happen to the site after the tree survey was undertaken have the potential to invalidate or change the findings of this report. Therefore, the consultant shall not be responsible for any event that may happen after the survey was undertaken due to factors that were not apparent at the time.

Any hazards that were visible on the day of the survey have been noted in the tree management recommendations section of the tree survey schedule. However, this report should not be considered a substitute for a tree risk assessment or management plan, which would be required to minimise the risk and liability associated with the trees found onsite

Appendix 2 – References

- R.1.** Geosphere Environmental Ltd 2024 Arboricultural Survey Report, Report reference number: 8421,AR,ARB,TC,TA,KL,01-05-24,V1
- R.2.** BSI (2012). BS 5837:2012 Trees in relation to design, demolition and constructions- Recommendations.
- R.3.** BSI (2010). BS 3998:2010 Trees work- Recommendations.
- R.4.** Stace, C. A. (2010). New Flora of the British Isles (third edition), Cambridge University Press.
- R.5.** Johnson and More (2006). Tree Guide, Harper Collins Publishers Ltd.
- R.6.** British Geological Survey (accessed 18 March 2025) Geology of Britain Viewer website: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>.
- R.7.** National House-Building Council, Standards, Chapter 4.2, 2021 'Building Near Trees'.
- R.8.** Hinckley and Bosworth Council Online TPO Map accessed 19 March 2025 website <https://www.hinckley-bosworth.gov.uk/tpomap>

Appendix 3 – Tree Survey Schedule

TREE SURVEY SCHEDULE

Project Number: 7257,EC,AR

Project Name: Hinckley & District Hospital, Mount Road, Hinckley, LE10 1AE

Date: 24/03/2025

1	2	3	4	5	6				7	8	9	10	11	12	13	14	15	16	Tree Work Recommendations / Comments
Tree No.	Species	Height (m)	Stem Diameter (mm)	No. of Stems	Branch Spread (m)				First Branch Height (m)	Canopy Height (m)	Life Stage	Physiological Conditions	Structural Conditions	Remaining Contribution (years)	Category Grading	RPA (m2)	RPA Radius (m)		
					N	E	S	W											
# Denotes estimated values due to lack of access																			
T1	Large leaved Lime	10	450	1	1	1	1	1	6	5	M	G	G	40+	B	91.61	5.40	Pollarded	
T2	Large leaved Lime	10	450	1	1	1	1	1	6	5	M	G	G	40+	B	91.61	5.40	Pollarded	
T3	Large leaved Lime	10	450	1	1	1	1	1	6	5	M	G	G	40+	B	91.61	5.40	Pollarded	
T4	Large leaved Lime	10	450	1	1	1	1	1	6	5	M	G	G	40+	B	91.61	5.40	Pollarded	
T5	Large leaved Lime	10	450	1	1	1	1	1	6	5	M	G	G	40+	B	91.61	5.40	Pollarded	
T6	Large leaved Lime	12	500	1	1	1	1	1	4	6	M	G	G	40+	B	113.10	6.00	Pollarded	
T7	Large leaved Lime	12	500	1	1	1	1	1	4	6	M	G	G	40+	B	113.10	6.00	Pollarded	
T8	Cedar	15	627.55	4	2.5	2.5	2.5	2.5	8	10	SM	F	F	20+	C	178.16	7.53		
T9	Fir sp	15	370	1	2.5	2.5	2.5	2.5	8	10	SM	G	G	20+	C	61.93	4.44		
T10	Red Maple	11	260	1	3	3	3	3	4	4	SM	G	G	20+	B	30.58	3.12	Memorial Tree	
T11	Sycamore	15	500	1	5	5	5	5	10	10	M	G	G	40+	A	113.10	6.00		
T12	Sycamore	15	500	1	5	5	5	5	10	10	M	G	G	40+	A	113.10	6.00		
T13	Copper Beech	12	560	1	4	4	4	4	6	6	M	G	G	40+	B	141.87	6.72		
T14	Copper Beech	12	560	1	4	4	4	4	6	6	M	G	G	40+	B	141.87	6.72		

TREE SURVEY SCHEDULE



Project Number: 7257,EC,AR

Project Name: Hinckley & District Hospital, Mount Road, Hinckley, LE10 1AE

Date: 24/03/2025

1	2	3	4	5	6				7	8	9	10	11	12	13	14	15	16
Tree No.	Species	Height (m)	Stem Diameter (mm)	No. of Stems	Branch Spread (m)				First Branch Height (m)	Canopy Height (m)	Life Stage	Physiological Conditions	Structural Conditions	Remaining Contribution (years)	Category Grading	RPA (m2)	RPA Radius (m)	Tree Work Recommendations / Comments
					N	E	S	W										
# Denotes estimated values due to lack of access																		
T15	Maple	7	310	1	2	2	2	2	2	2	SM	G	G	20+	C	43.47	3.72	
T16	Maple	8	360	1	2.5	2.5	2.5	2.5	1.5	1.5	SM	G	G	20+	C	58.63	4.32	
T17	Maple	8	360	1	2.5	2.5	2.5	2.5	1.5	1.5	SM	G	G	20+	C	58.63	4.32	
T18	Maple	8	360	1	2.5	2.5	2.5	2.5	1.5	1.5	SM	G	G	20+	C	58.63	4.32	
T19	Maple	8	360	1	2.5	2.5	2.5	2.5	1.5	1.5	SM	G	G	20+	C	58.63	4.32	
G1	Laurel	2	100	1	1	1	1	1	0	0	SM	G	G	20+	C	4.52	1.20	
G2	Leyland Cypress	3	100	1	1	1	1	1	0	0	SM	G	G	20+	C	4.52	1.20	
G3	Introduced Shrubs, Holly, Privet, Ash	5	250	1	2	2	2	2	0	0	SM	G	G	20+	C	28.27	3.00	
G4	Holly, Laurel, Introduced Shrub,	10	300	1	2	2	2	2	0	0	SM	G	G	20+	C	40.72	3.60	
G5	Box, Laurel, Introduced Shrub	2	150	1	1	1	1	1	0	0	SM	G	G	20+	C	10.18	1.80	
G6	Field Maple, Holly, Box	1.5	100	1	1	1	1	1	0	0	SM	G	G	20+	C	4.52	1.20	
G7	Fir, Leyland Cypress	12	300	1	2	2	2	2	0	0	SM	G	G	20+	C	40.72	3.60	
G8	Holly	1.5	150	1	1	1	1	1	0	0	SM	G	G	20+	C	10.18	1.80	
G9	Box, Leyland Cypress, Holly	1.5	150	1	1	1	1	1	0	0	SM	G	G	20+	C	10.18	1.80	

TREE SURVEY SCHEDULE

Project Number: 7257,EC,AR

Project Name: Hinckley & District Hospital, Mount Road, Hinckley, LE10 1AE Date: 24/03/2025

1	2	3	4	5	6				7	8	9	10	11	12	13	14	15	16
Tree No.	Species	Height (m)	Stem Diameter (mm)	No. of Stems	Branch Spread (m)				First Branch Height (m)	Canopy Height (m)	Life Stage	Physiological Conditions	Structural Conditions	Remaining Contribution (years)	Category Grading	RPA (m2)	RPA Radius (m)	Tree Work Recommendations / Comments
					N	E	S	W										
# Denotes estimated values due to lack of access																		
G10	Oak, Hornbeam, Leyland Cypress,	16	400	1	3	3	3	3	5	5	SM	G	G	40+	B	72.38	4.80	
G11	Copper Beech, Field Maple, Introduced	8	200	1	1.5	1.5	1.5	1.5	0	0	SM	G	G	20+	C	18.10	2.40	

Appendix 4 – Survey Schedule Descriptions

Tree Survey Schedule Description		
Column Number	Heading	Description
1	Tree No.	Sequential reference number (as recorded on the tree constraints plan)
2	Species	Species listed by common name
3	Height (m)	Total height of the tree
4	Stem Diameter (mm)	Stem diameter measured at 1.5 m above ground level in accordance to BS 5837:2012
5	No of stems	Total number of stems of a tree
6	Branch spread (m)	Branch spread, taken at the four cardinal points, to derive an accurate representation of the crown (plotted on the tree constraints plan)
7	First branch hgt (m)	Existing height above ground level of first branch measured at the union with the stem
8	Canopy hgt (m)	Existing height of the average clearance of the canopy above ground level
9	Life stage	The age of the tree determined by life stage category: Y- young, SM- semi-mature, EM- early mature, M- mature, OM- over mature, V- veteran
10	Physiological condition	The physiological condition of a tree based on a tree health assessment: G- good, F- fair, P- poor, D- dead
11	Structural condition	The structural condition of a tree based on structural integrity and signs of structural defects which may cause failure: G- good, F- fair, P- poor, D- dead
12	Remaining contribution (yrs)	Estimated remaining contribution in years that the trees will have on the landscape in their current context. A tree will not necessarily remain safe for the entirety of the remaining years. The remaining contribution has been categorised as follows: <10, 10+, 20+ and 40+
13	Category grading	The trees have been graded as per BS 5837: 2012 recommendations. The grading is formed by a letter and a number. The letter denotes the quality grading of the tree, the number represents one of three sub categories. Sub categories 1, 2 and 3 reflect arboricultural, landscape and cultural qualities respectively. The primary letter grading is as follows: U- Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years A- Trees of high quality with an estimated remaining life expectancy of at least 40 years B- Trees of moderate quality with an estimated remaining life expectancy of at least 20 years 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
14	RPA radius (m)	The root protection area radius calculated following BS 5837: 2012
15	RPA (m ²)	The root protection area calculated following BS 5837: 2012
16	Tree work recommendations/ comments	Work which is recommended for a tree to improve its longevity and safety in its present context. The recommendations are recorded primarily to assist with the categorisation of the trees. Please see Section 6, Tree Management for further limitations

Appendix 5 – Key to Scientific Names

Common Name	Scientific Name
Fir sp.	<i>Abies sp.</i>
Field Maple	<i>Acer campestre</i>
Sycamore	<i>Acer pseudoplatanus</i>
Red Maple	<i>Acer rubrum</i>
Maple	<i>Acer sp.</i>
Box	<i>Buxus sempervirens</i>
Hornbeam	<i>Carpinus betulus</i>
Cedar	<i>Cedrus sp.</i>
Hawthorn	<i>Crataegus monogyna</i>
Copper Beech	<i>Fagus sylvatica Purpurea</i>
Ash	<i>Fraxinus excelsior</i>
Holly	<i>Ilex aquifolium</i>
Garden Privet	<i>Ligustrum ovalifolium</i>
Cherry Laurel	<i>Prunus laurocerasus</i>
Cherry	<i>Prunus sp.</i>
Pedunculate Oak	<i>Quercus robur</i>
Common Lime	<i>Tilia x europaea</i>
Leyland Cypress	<i>Cupressus x leylandii</i>

REFERENCE

Common and scientific names based on Stace (2010) New flora of the British Isles (3rd Edition), Cambridge University Press. For species not present in Stace, scientific and common names were taken from Johnson and More (2006). Tree Guide, Harper Collins Publishers Ltd.

Appendix 6 – Drawings

Tree Constraints Plan – Drawing ref. 7257,EC,AR/001-1/Rev0, 7257,EC,AR/001-2/Rev0

Tree Removal and Protection Plan – Drawing ref. 9185,AR/001-1/Rev0, 9185,AR/001-2/Rev0

Tree Preservation Order Plan – Drawing ref. 9185,AR/002/Rev0

Proposed Development Plan – Drawing ref. 180769-DG-02-XX-DR-A-1402 P6

REV	DATE	DESCRIPTION

LEGEND

- Category U
- Category A
Trees of high quality
- Category B
Trees of moderate quality
- Category C
Trees of low quality
- RPA using formula in accordance with BS5837:2012
- # denotes estimated values due to lack of access

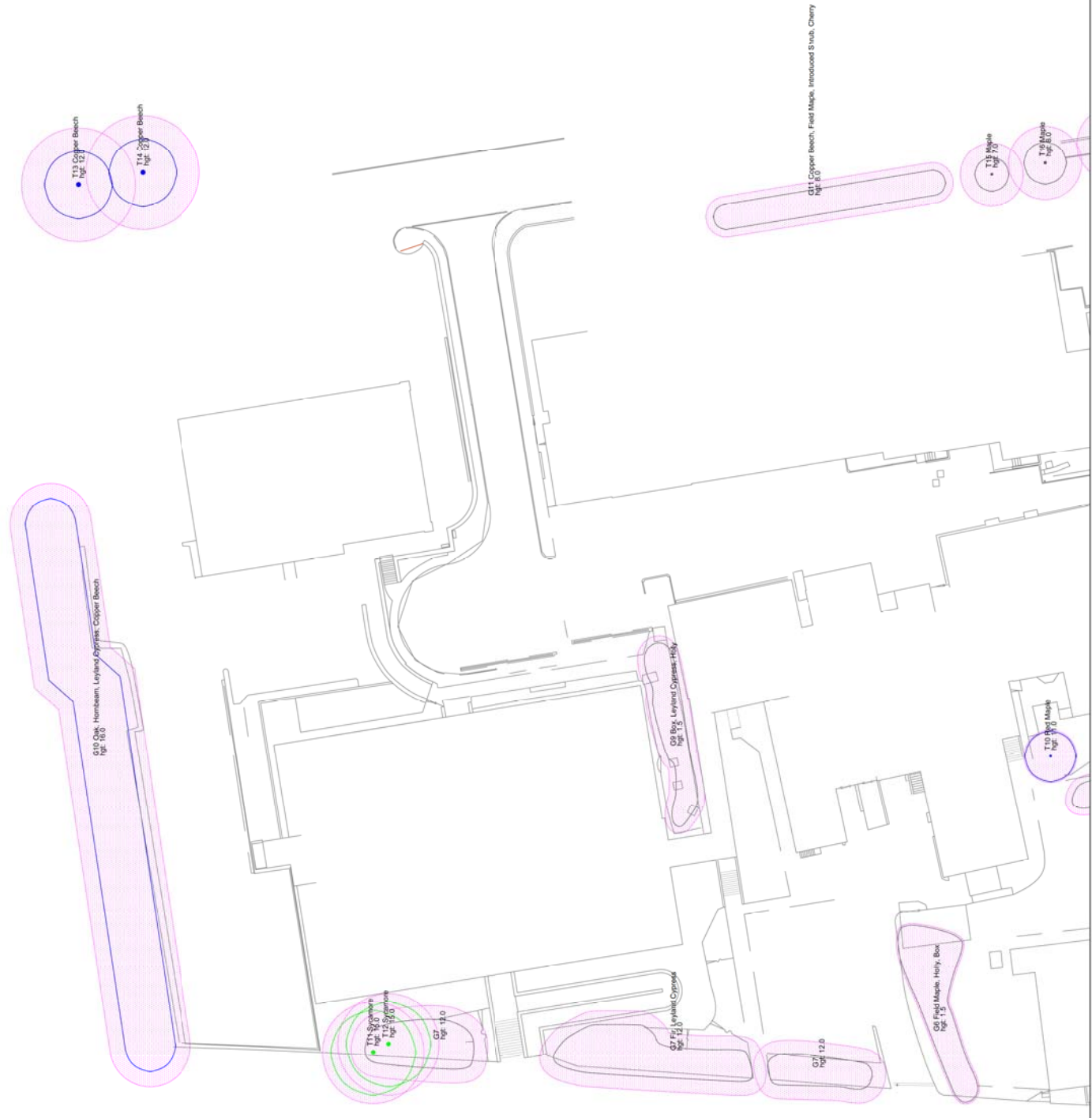
Trees categorised in accordance with BS5837:2012 "Trees in relation to design, demolition and construction"

The original of this drawing was

copy should not be relied upon



PROJECT	Hickley & District Hospital, Mount Road, Hickley, LD13 3AG
TITLE	Tree Constraints Plan
DRAWING NUMBER	7257-ECAR/001-2/Rev0
CLIENT	HIS Property Services Ltd
SCALE	1:250 @ A1
DATE	15/05/23



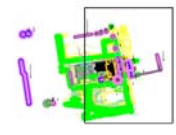
REV	DATE	DESCRIPTION

LEGEND

- Category U
- Category A
Trees of high quality
- Category B
Trees of moderate quality
- Category C
Trees of low quality
- RPA using formulae in accordance with BS5837:2012
- Trees to be removed
- Location of Protective Fencing
- Road Protection Area not protected by protective barriers (special care needed)
- # denotes estimated values due to lack of access

Trees categorised in accordance with BS5837:2012 'Trees in relation to design, demolition and construction'.

The original of this drawing was copy should not be relied upon



PROJECT
Hickley & District Hospital,
Mount Road, Hickley, LE10 3AG

TITLE
Tree Removals / Protection Plan

DRAWING NUMBER
915SAR001-1/Rev0

CLIENT
Daxim Group Limited

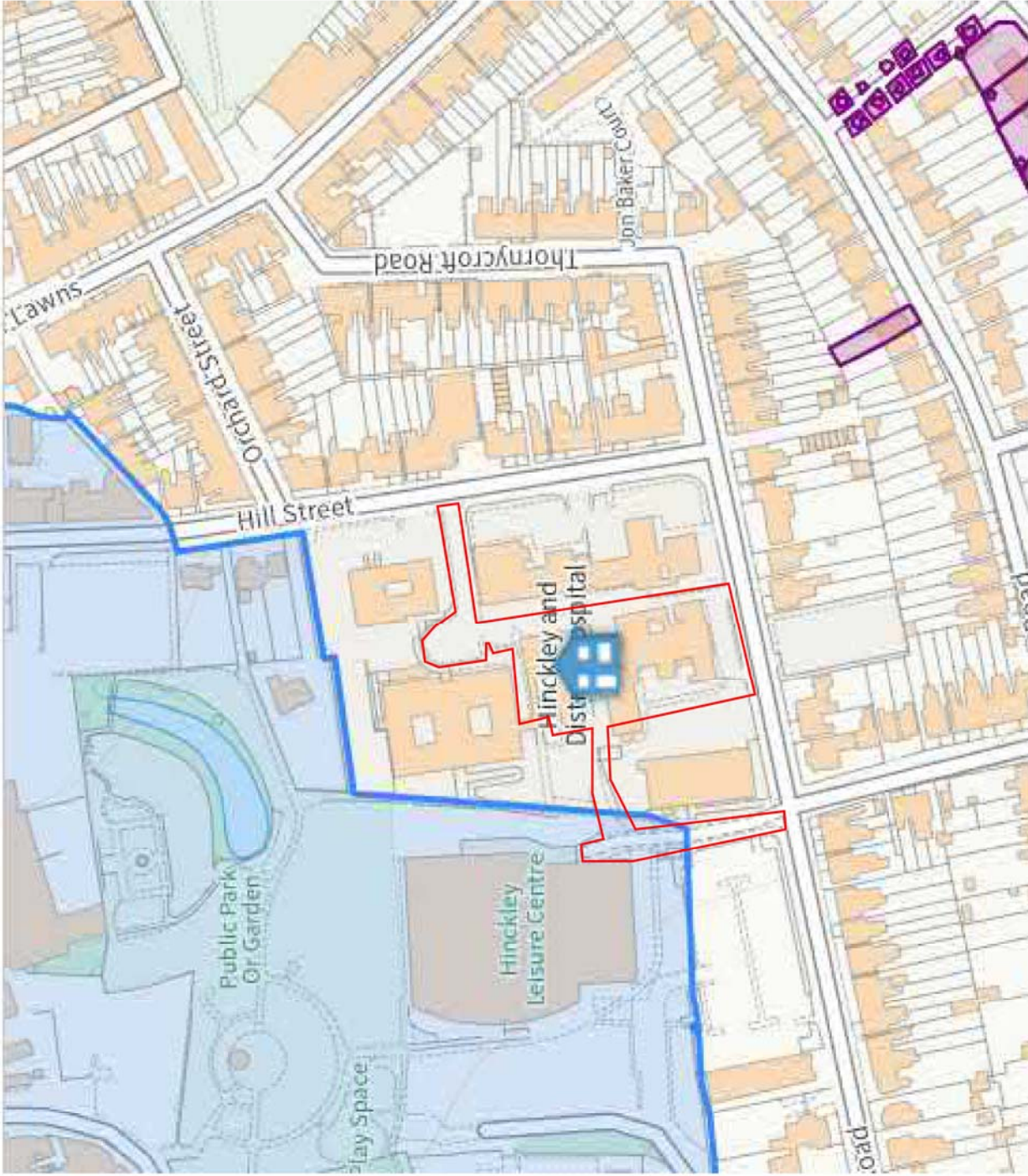
SCALE 1:250 @ A1 **DATE** 24/03/25

GEO
LANDSCAPE ARCHITECTS



LEGEND

- Site boundary
- Conservation Area



PROJECT

Hinckley & District Hospital, Hinckley, LE10
1AG

TITLE

Tree Preservation Order Plan

DRAWING NUMBER

9185,AR/002/Rev0

SCALE

As marked

DRAWN BY

TC

CHECKED BY

SJ

DATE

12/03/2025

Appendix 7 – Arboricultural Method Statement

ARBORICULTURAL METHOD STATEMENT FOR A PROPOSED DEVELOPMENT AT HINCKLEY & DISTRICT HOSPITAL, HINCKLEY, LE10 1AG

1. INTRODUCTION

1.1 Aim

The aim of this Arboricultural Method Statement is to outline working practices to ensure that planning conditions are fulfilled during the construction works at the site located at Hinckley & District Hospital, Hinckley, LE10 1AG.

1.2 Root Protection Area

The Root Protection Area refers to an area of ground around a tree which needs to be protected to comply with planning conditions. It is calculated as the area a tree will need to be sufficiently rooted to the ground in order to survive and remain safe. If any damage is caused to the roots within this area, a tree will suffer health consequences and may become a hazard.

The Root Protection Area is plotted on the Tree Constraints Plan, Drawing ref. 7257,EC,AR/001/Rev0. The Tree Removal and Protection Plan, Drawing ref. 9185,AR/001/Rev0 details the type of protection that is suitable, for example protective barriers to limit access to an area, or ground protection to protect the roots under the ground.

1.3 Construction Exclusion Zones

Barriers will be erected to protect tree canopies and Root Protection Areas. These barriers will remain in place until construction works are complete. Once the barriers are erected, they delineate the boundary between the construction zone and the construction exclusion zone. No construction activities will be undertaken within the construction exclusion zones, unless written authorisation is granted by the local planning authority.

The Project Arboriculturist can authorise the movement of the construction exclusion zone at stages of development, where specified on the Tree Removal and Protection Plan, Drawing ref. 9185,AR/001/Rev0, for example to allow specified work to commence within the Root Protection Areas, under specific circumstances as outlined below in section 3.2 – Works within the Root Protection Area.

1.4 Schedule Of Arboricultural Supervision

Table 1 below details the development phases and the required arboricultural supervisory input:

Table 1 - Development Phases and Arboricultural Input	
Phase of Development	Arboricultural Input
Phase 1 - Preconstruction	• Planning. • Tree pruning. • Install tree protection fencing. • Install ground protection. • Inspect site to ensure tree protection is installed correctly.
Phase 2 - Construction Process	• Monthly monitoring to ensure protective barriers are in place, and appropriately maintained. • Supervision of any works within Root Protection Areas. • Recording evidence for submission to the local authority.
Phase 3 - Post Construction	• Post development inspection. • Removal of protective fencing. • Remedial tree pruning or other works. • Signing off and closing report.

2. PHASE 1- PRECONSTRUCTION

2.1 Appoint a Project Arboriculturist

A Project Arboriculturist will be appointed to oversee all the arboricultural aspects of the development project outlined in this method statement. It is recommended that the arboriculturist takes an active role in the development from the beginning of the project to advise in the planning stage, and supervise site works throughout development. The arboriculturist will be appropriately qualified and experienced.

2.2 Tree Pruning

If any unforeseen tree work becomes necessary during the construction phase, written consent must be sought from the Arboricultural Consultant and the LPA before any further pruning works can commence.

Any trees which are removed in the development process will have a replacement tree replanted to mitigate against its loss. Consideration should be taken to ensure that a suitable tree species is selected for the space available. Species and varieties local to the area of development should be considered first when selecting suitable species.

All tree works undertaken will comply with BS 3998:2010 Trees work- Recommendations.

2.3 Potential Damage to Stems and Limbs

The trees will be pruned prior to the beginning of construction to allow adequate clearance for construction work to commence. Beyond this, care must be taken to ensure that all activities onsite are planned so that no plant or materials come into contact with the remaining trees.

In the event of damage to trees, the Project Arboriculturist must be contacted, in order that they may assess any hazards that may have arisen from the damage.

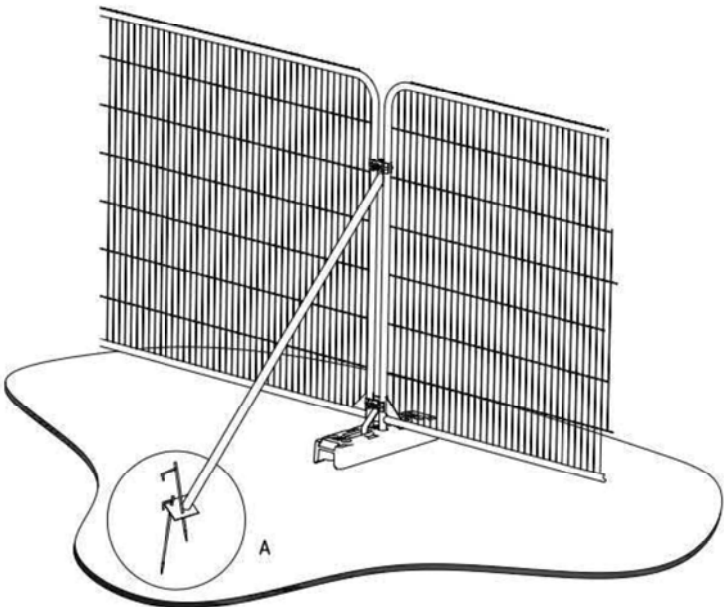
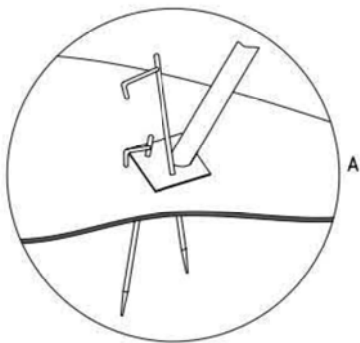
2.4 Protective Barriers

Temporary protective barriers will be erected as detailed within the Tree Removal and Protection Plan, Drawing ref. 9185,AR/001/Rev0. The designs for barriers are specified within BS 5837: 2012. The barriers must be fit for the purpose of excluding construction activity and be appropriate to the degree and proximity of the work to the protected tree.

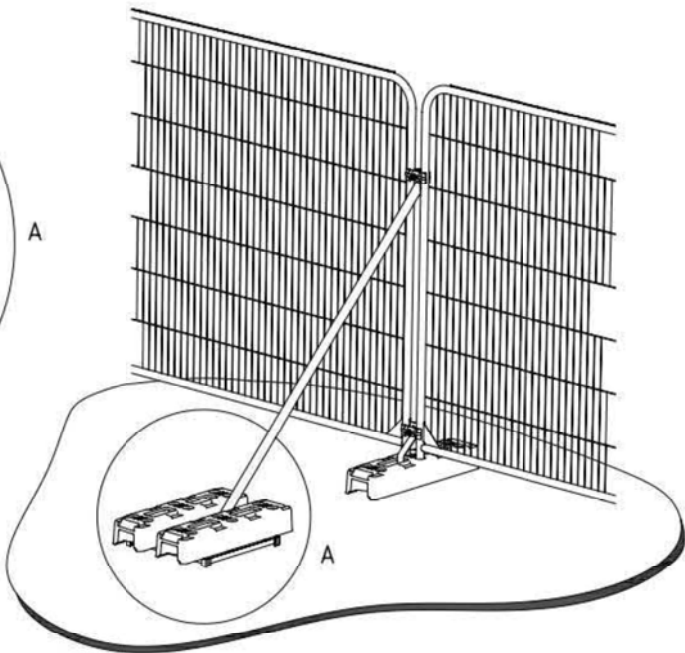
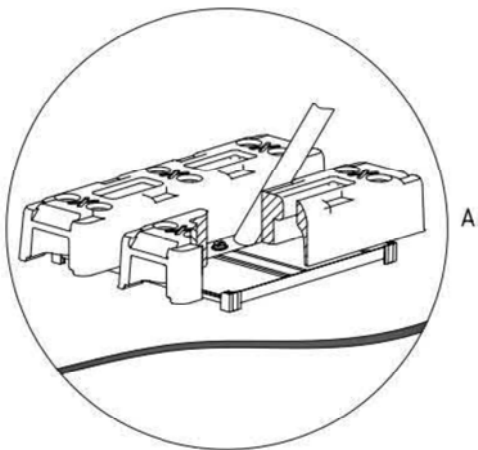
Where construction activities are limited, and there is a low risk of incursions into the protected area it is acceptable to use 2m high weldmesh panels, with rubber or concrete supports and back stay supports as shown in Figure 1 overleaf.

In cases where construction activities provide a higher risk than in low risk situations, more sturdy barriers will be required. BS 5837: 2012 stipulates that in such situations a scaffolding frame should be driven at least 0.6m into the ground with mesh panels attached, as shown in Figure 2 overleaf.

Once the exclusion zone has been protected by barriers and / or ground protection, construction can commence. All weather notices will be fixed to the barriers with the words: "Construction exclusion zone – Keep out" or similar.



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

Figure 1 – Low risk fencing solution from BS 5837: 2012

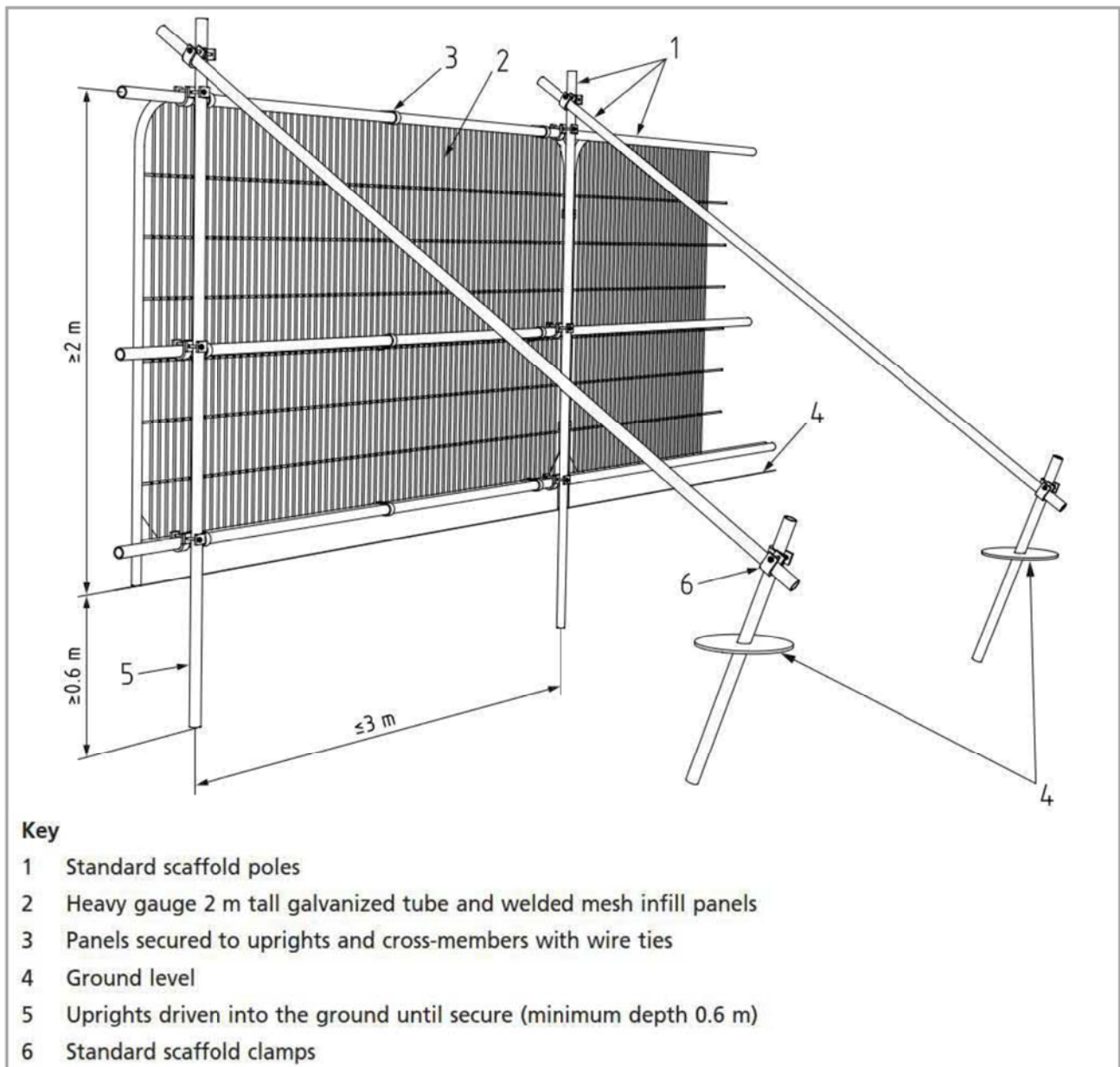


Figure 2 – Standard fencing solution from BS 5837:2012

2.5 Ground Protection

Where access through the Root Protection Area or construction working space is required within a Root Protection Area, the protective barrier will be set back and adequate protection for the roots will be provided. These areas are detailed in the Tree Removal and Protection Plan, Drawing ref. 9185,AR/001/Rev0 and described in more detail below.

The ground protection must be suitable for the type of traffic, which is expected to enter the Root Protection Area, without causing any compaction of the underlying soil.

Areas of hard surfacing should be retained during construction works to function as temporary ground protection as far as practicable. New surfaces which are laid as part of the development such as driveways and roads can be laid to form ground protection within the Root Protection Areas, as long as they are constructed following the guidance in section 3.2.6 below.

Where retention of old surfaces or creation of new surfaces is not required, any areas of unmade ground which are exposed must be protected by additional precautions.

For pedestrians it is acceptable to lay woodchip over a geotextile membrane with scaffolding boards placed on top, or a plastic / rubber Grass Protection Mat System (such as EnduraMat®) shown in Figure 3 below:



Figure 3 - Enduramat protection system

Vehicles, and plant will be excluded from the root protection areas for the duration of the works.

For light traffic of less than 2 t, it is acceptable to create a temporary ground barrier by laying a non-compressible material over a geotextile membrane, with interlocking ground protection boards placed on top.

For traffic of over 2 t it is required to use a system designed to engineering specifications capable of handling the expected loads, without causing any compaction to the soil beneath. [Such as Cellweb, insert cellweb description]

A cellular confinement system (such as Cellweb®) will be installed in the areas where an alternative engineering solution is not required, using the following methodology:

- Rocks and other debris will be removed from the area.

- Excavations will be kept to a minimum. When excavation cannot be avoided, works will be supervised by the Project Arboriculturist. Excavations must be made following the methods detailed above.
- Major hollows will be filled with sharp sand.
- A permeable membrane will be laid on the ground. A cellular confinement system (such as Cellweb®) will be laid on the membrane and pegged into position.
- Aggregate will be spread into the cellular confinement system (Cellweb®). The aggregate will be spread ahead of any machinery, so machinery is supported by sub-base rather than the cellular confinement system (Cellweb®) or the ground.



Figure 4 - Example of temporary Cellweb® construction solution

2.6 Pre-development Inspection

The pre-development pruning works, protective fencing and ground protection will be signed off by the Project Arboriculturist before proceeding to the construction phase.

3. PHASE 2- CONSTRUCTION PROCESS

3.1 Monitoring

The site will be monitored on a monthly basis by the Project Arboriculturist to gather evidence that the construction works follow the recommendations of the Arboricultural Method Statement. Accurate records must be kept so a closing report can be submitted after development has been completed.

3.2 Works within Root Protection Areas

All works within the Root Protection Areas will only be undertaken in areas marked on the Tree Removal and Protection Plan, Drawing ref. 9185,AR/001/Rev0, and will require onsite arboricultural supervision. Adequate Ground Protection must be in place during any works.

3.2.1 Excavation in the Root Protection Area

Where excavations are required within the root protection areas, the excavation will be made manually with hand tools. It is anticipated that excavations will be required for installation of foundations.

If any major roots are discovered, the roots will have to remain in place and the excavation will have to continue around the roots. Any roots encountered with a diameter of less than 25mm, may be pruned with a clean cut by a sharp tool. The Project Arboriculturist will be consulted before severing any roots or clumps larger than the specified 25mm. Figure 5 below, shows examples of retained roots for a service trench.

Any roots exposed during the excavations will be protected from desiccation by a suitable cover. Prior to back-filling, the protective cover will be removed, and a suitable topsoil will be used to surround any exposed roots.

Back-fill of removed soil will be conducted manually. The soil will be replaced carefully, so as not to damage the roots and to ensure the soil is not compacted. The soil will be backfilled, so the original ground level is maintained.



Figure 5 – Retained roots in service trench

3.2.2 New Structures in the Root Protection Area

Any structure which is to be built in the Root Protection Area of a retained tree requires special precautions. Light structures can be built directly onto the soil. Shallow excavations (see section 3.2.1 above) can be undertaken to level the soil for construction. Lintels and beams will be used to bridge roots and tree structures which provide obstacles.

The building footprint for light structures must not exceed 20% of the area of any unsurfaced ground and must be formed on the existing ground level. If a building must exceed 20% of the area, then irrigation and ventilation systems must be employed beneath the structure.

For larger structures, traditional strip foundations are not permitted within the Root Protection Area. If a tree is of high enough value to be retained and the footprint of the proposed structure cannot be relocated, then special engineering solutions will be employed to limit the impact of the new structure on the tree, such as bridging structures, floating floor slabs and mini piles. Such foundations will have to be designed by an engineer and authorised by the Project Arboriculturist.

Any excavations for foundations will have to follow section 3.2.2 (Excavation in the Root Protection Area). Foundations will have to be hand dug to a depth of at least 60cm and relocated if any major roots are discovered. Due to this limitation, foundations will be designed so minimal penetration into the soil is required.

The floor slab can sit on top of the soil as long as excavation is minimised following section 3.2.1 (Excavation in the Root Protection Area) and no more than 20% of the Root Protection Area becomes impermeable. If more than 20% of the ground within the Root Protection Area will become impermeable, floating structures with irrigation and ventilation systems can be used to mitigate the loss of permeability.

3.2.3 Ground Level

The ground level within the Root Protection Area of trees will be maintained at the pre-development levels, throughout the works. Any changes of ground level near Root Protection Areas, will consider the impacts of irrigation and drainage on protected tree roots.

3.2.4 Surface Design

Any surfaces which are to be laid within a Root Protection Area require special design specifications and construction techniques. Surfaces will not be excavated into the soil other than removal of the surface vegetation.

Impermeable surfacing will not cover more than 20% of the Root Protection Area. Where more than 20% of the Root Protection Area needs to have a surface covering, permeable paving which allows water and oxygen exchange with the soil beneath will be used.

The edging of the surfacing and foundations will require special design. Any surfacing will be designed to distribute load to avoid soil compaction beneath. It would be prudent to lay surface on a flexible base to facilitate movement of the soils due to activity of the roots.

Space will be left between the tree stem and the surface in anticipation for growth and space for root flare.

3.3 Works Outside the Construction Exclusion Zones

Other works onsite which may damage trees will have to be controlled so the damage to trees is limited. For example, excessive dust generated through demolition and construction works will be removed from trees by spraying water over the trees.

4. PHASE 3- POST CONSTRUCTION

4.1 Post Construction Inspection

When the construction process is complete, the site will be inspected by the Project Arboriculturist or Local Authority Tree Officer. The inspection will be used to gather evidence on the condition of trees post construction and to advise any remedial action that may need to be taken. The evidence gathered during the inspection will be used for a closing report which provides evidence that the work was conducted following the recommendations of this Arboricultural Method Statement.

4.2 Removal of Tree Protection

Following the Post construction inspection, the Project Arboriculturist can authorise the removal of the protective fencing and ground protection. Any proposed landscaping operations by heavy machinery will be conducted before the protective fencing is removed.

4.3 Remedial Tree Works

During the Post Construction Inspection, the condition of the trees will be assessed. Any damage caused during construction will be noted, and remedial action will be recommended. Any tree works undertaken will comply with BS 3998:2010 Trees work - Recommendations.

4.4 Planting of Trees Lost During Development

Trees will be planted onsite to mitigate any trees lost during development. The details of the planting scheme will be included in the landscape plans. The post construction inspection will include checking the condition of newly planted trees.

4.5 Closing Report

Once the construction works have been completed, a closing report will be submitted detailing evidence that works have been conducted correctly.



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