

GEOSPHERE ENVIRONMENTAL

REPORT NUMBER: 7257,EC,AR,ARB,TC,KL,27-07-23,V2

SITE: Hinckley & District Hospital, Mount Road, Hinckley,
LE10 1AE

DATE: 27/07/2023



DOCUMENT CONTROL SHEET

Report Number: 7257,EC,AR,ARB,TC,KL,27-07-23,V2
Client: NHS Property Services Ltd
Project Name: Hinckley & District Hospital, Mount Road, Hinckley, LE10 1AE
Project Number: 7257,EC,AR
Report Type: Arboricultural Survey
Status: Final
Date of Issue: 27 July 2023

Issued By:

Geosphere Environmental Ltd, Brightwell Barns, Ipswich Road, Brightwell, Suffolk, IP10 0BJ.
T: 01603 298 076 / 01473 353 519. W: www.geosphere-environmental.co.uk

Confidentiality, Copyright and Reproduction:

This document has been prepared by Geosphere Environmental Ltd in connection with a contract to supply goods and/or services and is submitted only on the basis of strict confidentiality. The contents must not be disclosed to third parties other than in accordance with the terms of the contract. Geosphere Environmental Ltd accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.

Prepared By:

Tom Cox
Senior Ecological and
Arboricultural Consultant

**Reviewed & Authorised By:**

Katie Linehan
Technical Director of Ecology

**VERSION RECORD**

Version	Date	Document Revision Details	Prepared By	Admin
1	23-05-23	Original Version	TC	CD
2	26-07-23	Updated Development Plan	TC	HP

Executive Summary

Report Description	Geosphere Environmental Limited was commissioned by NHS Property Services Ltd to undertake an Arboricultural Survey of the land at Hinckley & District Hospital, Mount Road, Hinckley, LE10 1AE. The survey area occupies an area of approximately 1.19 hectares (ha) in total, with the development boundary having an area of 0.34 ha located around National Grid Reference SP 42946 93756.
Summary of Main Findings of Whole Survey Area	The Tree Constraints Plan, Drawing ref. 7257,EC,AR/001/Rev0 in Appendix 6, shows the locations of all the trees surveyed with the canopy and root protection area plotted on the plan. A total of nineteen trees and eleven groups were surveyed. Two trees were classed as category A trees. Ten trees and one group were classified as category B trees. Seven trees and ten groups were classified as category C trees. No trees or groups were categorised as category U trees. The BGS digital mapping indicated that the site comprised a bedrock layer of Mercia Mudstone Group (mudstone), with a recorded superficial layer of Oadby Member (diamicton). These soils, potentially contain cohesive materials which could indicate a risk of shrink/swell that should be considered during foundation design. Hinckley & Bosworth Borough Council Online Planning Map (Ref. R.10) was consulted on 26 April 2023 and it confirmed that there are no Tree Preservation Orders or Conservation Areas onsite.
Preliminary Implications Assessment of Development Zone	The following trees will be impacted upon by development: • G4, G5, G6, – Category C – These trees will need to be removed to facilitate the development. • G7 – Category C – Part of this group will need to be removed to facilitate the new car parking bays. • T8, T9 – Category B, C – These trees are adjacent to the proposed building and as such will have to be protected and considered during foundation designs. • T10 – Category B – This tree is a memorial tree, in good condition, and as such should be retained. Its location adjacent to one of the existing buildings means that it will require tree protection measures to be put in place to protect the tree during demolition. It will also need consideration during construction as the proposed building is adjacent to the root protection area. • T1-T7, T11-T19, G1-G3, G8 – Category A, B, C – These trees can be entirely protected by tree protection barriers throughout the development.

Recommendations

The impacts outlined above are preliminary and should be used to inform future designs for the site.

The Tree Constraints Plan should be consulted to ensure that the constraints posed by the trees are taken into account when designing the proposed development. For example, retained trees could be incorporated as a boundary feature for the site.

A Tree Retention Plan and a Tree Protection Plan will need to be designed once the layout of the development area has been finalised. This will include locations of trees to be retained, finalised locations of protective barriers, construction exclusion zones and any other protection that trees will require prior to commencement of construction. An Arboricultural Method Statement, Arboricultural Implications Assessment and Tree Management Plan should be supplied with the Tree Protection Plan.

CONTENTS

Page No.

EXECUTIVE SUMMARY	3
1. INTRODUCTION	7
1.1 General	7
1.2 Previous Reports	8
1.3 Aims	8
2. TECHNICAL APPROACH	9
2.1 Arboricultural Survey	9
2.2 Soil Assessment	9
2.3 Site Specific Limitations	9
3. TREE SURVEY	10
3.1 Site Description	10
3.2 Tree Survey Results	10
3.3 Tree Constraints Plan	11
3.4 Soil Assessment	11
3.5 Permissions and Council Restrictions	11
4. PRELIMINARY ARBORICULTURAL IMPACT ASSESSMENT	12
4.1 Proposed Development	12
4.2 Priorities for Retention	12
4.3 Impact of Development	12
4.4 Tree Management	13
4.4.1 Tree Pruning	13
4.4.2 Tree Planting	14
5. RECOMMENDATIONS	15

APPENDICES

APPENDIX 1 – REPORT LIMITATIONS AND CONDITIONS

APPENDIX 2 – REFERENCES

APPENDIX 3 – TREE SURVEY SCHEDULE

APPENDIX 4 – SURVEY SCHEDULE DESCRIPTIONS

APPENDIX 5 – KEY TO SCIENTIFIC NAMES

APPENDIX 6 – DRAWINGS

CONTENTS

TABLES

	Page No.
Table 1 – Proposed Impact of Construction on Trees	12

FIGURES

	Page No.
Figure 1 – Indicative Site Boundaries	7

1. INTRODUCTION

1.1 General

Geosphere Environmental Limited was commissioned by NHS Property Services Ltd, to undertake an Arboricultural Survey of the site at Hinckley & District Hospital, Mount Road, Hinckley, LE10 1AE.

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 survey area occupies an area of approximately 1.19 hectares (ha) in total, with the development boundary having an area of 0.34 ha located around National Grid Reference SP 42946 93756. The relevant boundaries are shown on Figure 1 below:

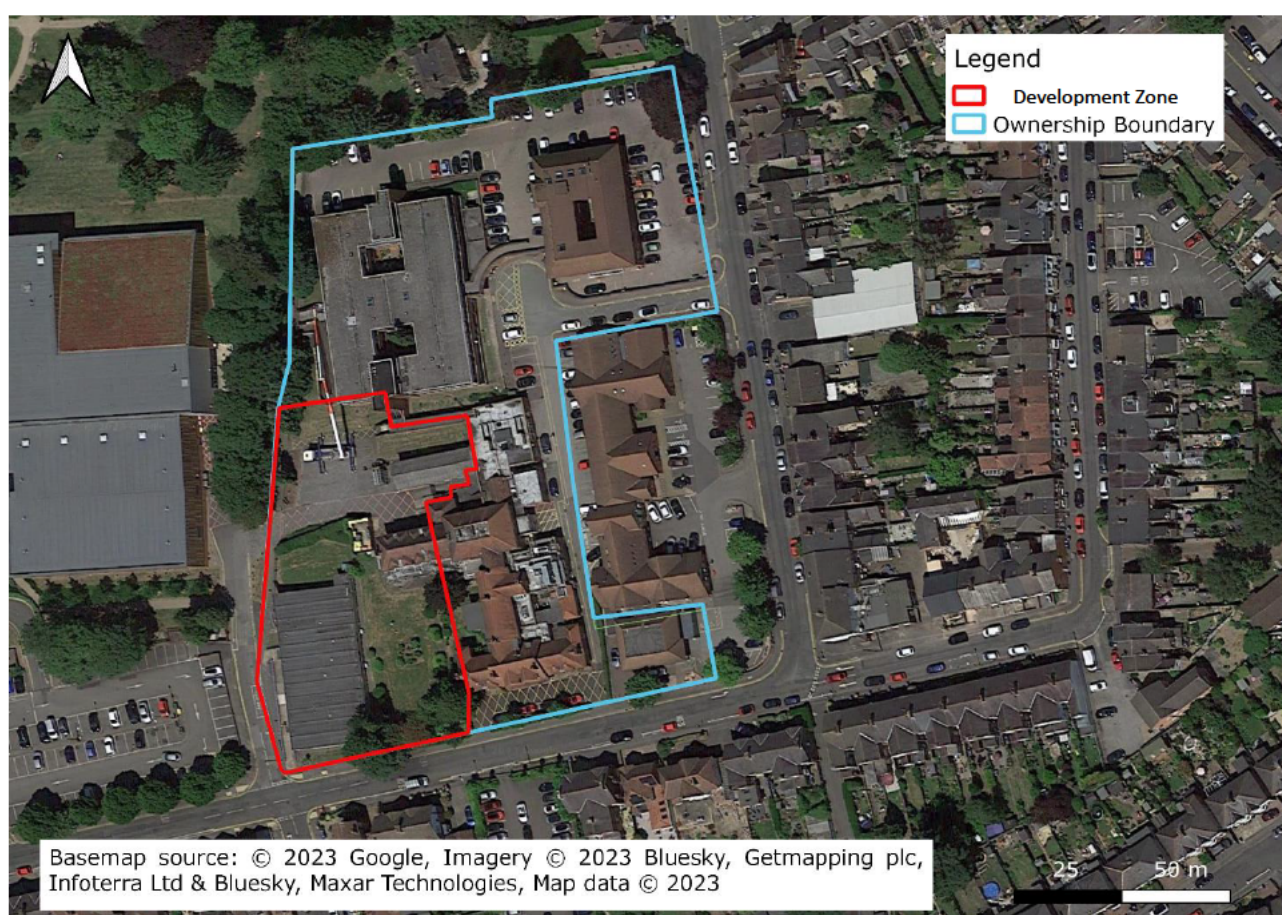


Figure 1 – Indicative Site Boundaries

1.2 Previous Reports

- 3866,EC,AR,ARB,TC,RF,KL,01-07-19,V1 (ref. **R.1**)

The previous arboricultural survey report is completely superseded by this updated report and all relevant findings are reported herein.

1.3 Aims

This report has been prepared to support a planning application and provides baseline data for an arboricultural assessment of the site and identifies the tree constraints and root protection areas of trees on or near the site which may be affected by future development.

2. TECHNICAL APPROACH

2.1 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**).

2.2 Soil Assessment

A desk-based assessment of the soil was undertaken to determine potential for volume changing soils onsite, using BGS mapping (ref. **R.6**).

2.3 Site Specific Limitations

Trees were surveyed without undertaking vegetation clearance.

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. TREE SURVEY

The survey was undertaken by Tom Cox TechArborA, an experienced surveyor from Geosphere Environmental Ltd on 20 April 2023 to record data relevant to the assessment of the trees on and adjacent to the site.

3.1 Site Description

The site encompasses Hinckley District Hospital and associated hardstanding and car parks. There are several groups of introduced shrubs throughout the site and some small areas of amenity grassland. The majority of the trees onsite were located around the boundary.

The site was bordered on the western and southern edges by residential housing. To the east is a Leisure Centre and to the north is Argents Mead Town Park.

3.2 Tree Survey Results

The results of the tree survey are shown within the Tree Survey Schedule in Appendix 3. A full description of the surveyed parameters is included in the survey schedule description in Appendix 4. A key to the scientific names used is attached within Appendix 5. The results are summarised below:

- A total of nineteen trees and eleven groups were surveyed across the survey area.
- Two trees were classed as Category A trees. This is the highest classification available under BS 5837:2012. These trees are of high quality and confer particular visual importance on the landscape. These trees are likely to be required to be protected during the development.
- Ten trees and one group were classified as Category B trees. These trees are of moderate quality and confer considerable importance on the landscape. These trees should be retained where possible during development.
- Seven trees and ten groups were classified as Category C trees. These trees are of low quality and confer lower levels of benefits to the landscape. The local authority may find it acceptable to remove these trees during development.
- No trees or groups were categorised as Category U trees. These trees are of poor condition and are unlikely to provide significant value to the landscape for more than 10 years. The local authority should find it acceptable to remove these trees during development.
- Since the previous report two category C trees have been removed; formally referenced as T6 and T20 within report (ref. **R.1**).

3.3 Tree Constraints Plan

A Tree Constraints Plan, Drawing ref. 7257,EC,AR/001/Rev0 has been prepared for the site and is attached within Appendix 6.

The Tree Constraints Plan describes the constraints that the trees may place on the development. The tree canopy and root protection area have been calculated using the stem diameter as per BS 5837:2012 (ref. **R.2**).

3.4 Soil Assessment

The BGS digital mapping (ref. **R.6**) indicated that the site comprised a bedrock layer of Mercia Mudstone Group (mudstone) with a superficial layer of Oadby Member (diamicton). These soils potentially contain cohesive materials and therefore there is a risk of shrink swell soil present onsite. A further site investigation should be undertaken to confirm the findings of the BGS digital maps.

The combination of shrinkable soils and trees, hedgerows or shrubs represents a hazard to structures that requires special consideration. Trees and hedgerows can take moisture out of the ground. In cohesive soils this can cause volume change resulting in ground movement and damage to building foundations.

In order to minimise the risk, foundations should be designed in accordance with NHBC Standards Chapter 4.2 Building near Trees, (ref. **R.8**).

3.5 Permissions and Council Restrictions

The Hinckley & Bosworth Borough Council online planning map (ref. **R.10**) was checked on the 26 April 2023 and confirmed that there were no Tree Preservation Orders onsite. The north and part of the western ownership boundaries are adjacent to a Conservation Area. However, the designated development site boundaries do not abut the Conservation Area. This is shown on the Tree Preservation Order Plan, Drawing ref. 7257,EC,AR/002/Rev0 in Appendix 6.

It is advisable to contact the local authority regarding Tree Preservation Orders and Conservation Areas before any tree works are carried out, as new Tree Preservation Orders can be made subsequent to the issuing of this report.

4. PRELIMINARY ARBORICULTURAL IMPACT ASSESSMENT

4.1 Proposed Development

A Proposed Site Plan, Drawing ref. 1782-DBC-ZZ-00-DR-A-0100 P06 has been supplied by the Client and is included within Appendix 6. The proposed developments involve demolition of existing buildings and construction of new buildings and car parks. The proposals indicate that trees will be included within the landscaping of the proposed development.

The impacts outlined below are preliminary and should be used to inform future designs for the site.

4.2 Priorities for Retention

The Category A trees onsite should be retained as part of any new development on the site. T12 and T13 are located on the margin of the site, so it should be possible for them to remain in place. T11 is located within the centre of the site and is indicated on the proposed development plans as being retained.

The Category B trees should also be retained where possible. The root protection areas of these trees will have to be considered when designing the proposed development to avoid impacting as many trees as possible.

Some of the Category C trees will need to be removed to facilitate development. If possible, these trees could be retained as part of the proposed residential gardens.

4.3 Impact of Development

Table 1 below, shows the likely impacts of development on the trees identified during the survey:

Table 1 – Proposed Impact of Construction on Trees		
Tree Number	Category	Impact on Tree
G4, G5, G6	C	These trees will need to be removed to facilitate the proposed development.
G7	C	Part of this group will need to be removed to facilitate the new car parking bays.
T8, T9	B, C	These trees are adjacent to the proposed building and as such will have to be protected and considered during foundation designs.
T10	B	This tree is a memorial tree, in good condition, and as such should be retained. Its location adjacent to one of the existing buildings means that it will require tree protection measures to be put in place to protect the tree during demolition. It will also need consideration during construction as the proposed building is adjacent to the root protection area.

Table 1 – Proposed Impact of Construction on Trees

Tree Number	Category	Impact on Tree
G4, G5, G6	C	These trees will need to be removed to facilitate the proposed development.
G7	C	Part of this group will need to be removed to facilitate the new car parking bays.
T8, T9	B, C	These trees are adjacent to the proposed building and as such will have to be protected and considered during foundation designs.
T1-T7, T11-T19, G1-G3, G8,	A, B, C	These trees can be entirely protected by tree protection barriers throughout the development.

4.4 Tree Management

Standard avoidance measures to reduce the impact of development on trees as required by BS 5837:2012, (ref. **R.2**), is simplified as follows for any development type:

- A Consultant Project Arboriculturalist should be appointed to oversee the arboricultural aspects of the development project;
- The Root Protection Areas and above ground structures for retained trees must be protected during construction work with barriers as prescribed by BS 5837:2012, (ref. **R.2**). The locations of barriers should be determined once a finalised development plan has been produced;
- Once the protection areas have been finalised and the protective barriers have been erected, then these areas are to be considered construction exclusion zones. Any work within these zones will need prior agreement with the Consultant Project Arboriculturalist;
- Changes to the shape of the canopy of retained trees must be agreed with the Consultant Project Arboriculturalist before any works are undertaken, however, all construction within the canopy extent of a tree is best avoided to avoid potential damage to future buildings and to avoid recurring pruning regimes;
- Tree planting should form part of the soft landscaping onsite to offset any trees which are removed during the development process. An appropriate after care scheme should be implemented to ensure the newly planted trees reach maturity.

4.4.1 Tree Pruning

The site contains a number of trees in various stages of maturity, containing deadwood and fungal infections, usual for trees of their age. Any hazards should be removed prior to the commencement of construction.

The canopies of the trees are likely to require pruning to accommodate new construction. Once the layout of the development area has been finalised, a tree management plan should be completed advising on remedial action required for health and safety and facilitation pruning for construction needs.

All 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.

Tree planting should form part of the soft landscaping onsite to offset any trees which are removed during the development process.

4.4.2 Tree Planting

Space within the proposed development is very tight. No trees are due to be removed within the development, only groups of shrubs. If these changes and trees are due to be removed then appropriate replacement trees will need to be planted to mitigate the loss.

5. RECOMMENDATIONS

The Tree Constraints Plan, Drawing ref. 7257,EC,AR/001/Rev0, in Appendix 6 should be consulted to ensure that the constraints posed by the trees are taken into account when designing the proposed development. For example, retained trees could be incorporated as features around the boundary of the site.

Further arboricultural planning is required once the proposed development plans have been finalised. The formal planning process with regards to trees will require the following additional information:

- A Tree Retention Plan should be designed once the layout of the development area has been finalised, and a final proposed development plan is available. This will show the locations of trees which will remain throughout the development works, and the trees which will be removed prior to the commencement of development;
- A Tree Protection Plan should be designed based upon the Tree Retention Plan. This will include finalised locations of protective barriers; construction exclusion zones and any other protection measures that trees will require prior to commencement of construction;
- An Arboricultural Impact Assessment, Arboricultural Method Statement, and Tree Management Plan should be supplied with the Tree Protection Plan. A Consultant Project Arboriculturalist should be appointed by the developer, to ensure all the arboricultural aspects of the redevelopment project are taken into account, from the planning stage onwards.

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 in the context of the whole report.

Interpretations and recommendations contained in 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 within 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 within 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 Limited (2019) Arboricultural Survey Report (Arb) report ref: 3866,EC,AR,ARB,TC,RF,KL,01-07-19,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 26TH April 2023) Geology of Britain Viewer website: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>.
- R.7.** Hinckley & Bosworth Borough Council online planning map accessed 26th April 2023: <https://www.hinckley-bosworth.gov.uk/tpomap>
- R.8.** National House-Building Council, Standards, Chapter 4.2, 2003 'Building Near Trees'.
- R.9.** BSI (2014). BS 8545:2014 Trees: from nursery to independence in the landscape – Recommendations.
- R.10.** Hinckley & Bosworth Borough Council Online Planning Map 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: 23/05/2023

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																		
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	
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	

TREE SURVEY SCHEDULE

Project Number: 7257,EC,AR

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

Date: 23/05/2023

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																		
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	
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 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 (m²)	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

TITLE
Tree Survey Schedule Descriptions

DATE
23/05/2023

PAGE NO. 1 of 1

Appendix 5 – Key to Scientific Names

SCIENTIFIC NAMES KEY

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.

TITLE

Scientific Names Key

PAGE NO. 1 of 1

Appendix 6 – Drawings

Proposed Site Plan Drawing ref. 1782-DBC-ZZ-00-DR-A-0100 P06

Tree Constraints Plan – Drawing Ref. 7257,EC,AR/001/Rev0

Tree Preservation Order Plan – Drawing Ref. 7257,EC,AR/002/Rev0

Site Address

Hinckley and District Hospital
Mount Road
Hinckley
LE10 1AG

N

North

Produced on 27 February 2023 from the Ordnance Survey National Geographic Database and incorporating surveyed revision area data as of the date
This map shows the area bounded by 40357 791020 44080 719420 440750 219810 44080 392673 442387 219420
Copyright and database rights 2023 OS 100064135. Supplied by mapbox ltd trading as Mapbox.com a licensed Ordnance Survey
partner OS 100064135
Data revision request 27 February 2024. Unique plan reference: null19146171234327

Key

Application Site Area:
4042.89 sq m
0.404 ha

Land owned/controlled by the
trust



Notes:

This drawing is to be read in conjunction with all other consultants engineers and specialist sub contractors drawings
All items are to be cross referenced throughout design, tender & construction

Any discrepancies whatsoever discovered must be reported to the Main Contractor or Contract Administrator (CA) as soon as they become apparent

The Main Contractor is responsible for checking all dimensions prior to commencement of work

All specified manufacturers are OSA (or similar approved) OEA (or equal approved) whether stated or not. Any equivalent product or manufacturer must be approved in writing by the CA before use

All structure shown on these drawings is based on structural philosophy & is to be fully designed, detailed & dimensioned by 'Others'. Refer to Structural Engineers plans for current structural design

All drawings are to be read in conjunction with project specific NBS (national building specification)

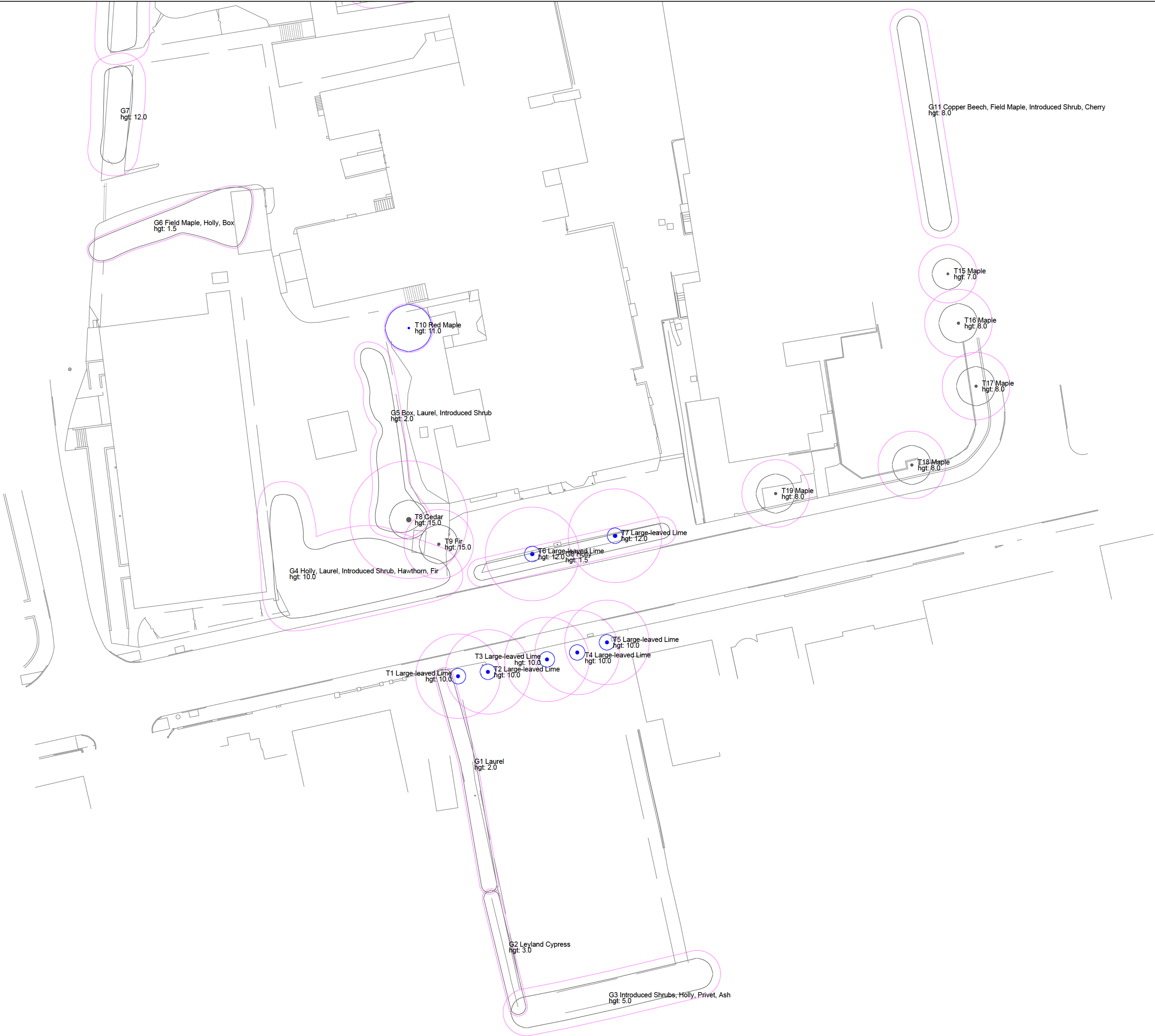
P06	12/07/2023	Building layout updated in line with latest plans	BCP
P05	16/05/2023	Updated building shape to reflect current proposal	BCP
P04	12/04/2023	Car park layout updated to factor in refuse lorry swept path analysis	BCP
Rev	Date	Revision Details	Author
Status	Purpose For Issue		
S0	Initial Issue		

designburo

The Design Buro (Coventry) Ltd
5 Euston Place,
Leamington Spa,
Warwickshire,
CV32 4LN
01788 555350
www.thedesignburo.co.uk

Client		NHS Property Services	
Job		Hinckley CDC & Endoscopy	
Title		Proposed Site Plan	
Drawn BCP	Date Feb 2023	Checked MH	Date Feb 2023
Scale:Size	1:500	@	A2
Drawing Number			Revision
1782 DBC ZZ 00 DR A 0100			P06

The copyright of this drawing is vested in the Architect/ Designer and must not be copied or reproduced without the written consent. Figured dimensions only to be taken from the drawing. All contractors and / or specialists must visit the site and be responsible for taking and checking all dimensions relative to this work



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		
The original of this drawing was		
copy should not be relied upon		
LOCATIONS ARE APPROXIMATE.		
PROJECT Hinckley & District Hospital, Mount Road, Hinckley, LE10 1AG		
TITLE Tree Constraints Plan		
DRAWING NUMBER 7257,EC,AR/001-1/Rev0		
CLIENT NHS Property Services Ltd		
SCALE 1:250 @ A1 DATE 15/05/23		



LEGEND

- Indicative Site Boundary
- Conservation Area
- Tree Preservation Orders

SOURCE

<https://www.hinckley-bosworth.gov.uk/tpomap>

PROJECT

Hinckley & District Hospital, Mount Road, Hinckley, LE10 1AE

TITLE

Tree Preservation Orders

DRAWING NUMBER

7257,EC,AR/002/Rev0

SCALE

As marked

DRAWN BY

TA

DATE

26/04/2023

CHECKED BY

TC





GEOSPHERE ENVIRONMENTAL

Ec

Ecology.

Fr

Flood Risk.

Ge

Geotechnical.

En

Environmental.

Kw

Knotweed.

GEOSPHERE ENVIRONMENTAL LTD

Brightwell Barns, Ipswich Road, Brightwell, Suffolk, IP10 0BJ

T: 01603 298076 | 01473 353519 | E: info@geosphere-environmental.co.uk | W: geosphere-environmental.co.uk