

AIA

ARBORICULTURAL IMPACT ASSESSMENT

(INC. TREE SURVEY TO BS 5837:2012)



PROJECT - Land off Church Lane, Shinfield

CLIENT - OCU Group C/O Dalcour MacLaren

DOC. REF - P4225-AIA01 V1

PLANNING REF - N/A

CREATION DATE - 27/01/2025

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PURPOSE OF DOCUMENT

This document assesses the anticipated impact that the proposed scheme will have on the surrounding tree population, and outlines possible technical design considerations and mitigation measures that should be implemented in order to minimise the overall arboricultural impact.

ARBORICULTURAL DOCUMENT REGISTER

Planning Documents		Version Issued	
Document	Ref.	Current Version	Document Date
Arb. Impact Assessment	P4225-AIA01	V1	27/01/2025
Arb. Site Plan (Existing)	P4225-ASP01	V1	27/01/2025
Arb. Site Plan (Proposed)	P4225-ASP02	V1	27/01/2025

1. SUMMARY

1.1 PROPOSED DEVELOPMENT

1.1.1 The client wishes to retain the existing compound for the next 8 years.

1.2 TREE SURVEY

1.2.1 The following woody vegetation was considered to be of note in relation to any development of the site: 14 individual trees, 3 groups of trees.

1.3 MITIGATION AND PROTECTION MEASURES

1.3.1 The required arboricultural mitigation measures can be found in *Section 3* of this report.

1.4 CONCLUSION

1.4.1 The table below summarises the trees which will be lost, pruned, or protected by special measures during the development project.

	Tree Category				
	A	B	C	U	Total
Trees to be removed	-	-	-	-	-
Groups to be removed	-	-	-	-	-
Other Vegetation to be removed	-	-	-	-	-
Trees to be pruned	-	-	-	-	-
Instances of trees being affected by the retention of surfacing	-	4	2	-	6

1.4.2 Considering the anticipated arboricultural impact from the retention of the site, and the implementation of the proposed mitigation measures outlined in this document, the proposed development's arboricultural impact is considered to be **acceptable**.

2 GENERAL INFORMATION

2.1 BRIEF

- 2.1.1 Ligna Consultancy Ltd were instructed by the client, OCU Group C/O Dalcour MacLaren, to undertake a tree survey in accordance with BS 5837:2012 and to prepare an arboricultural impact assessment for the proposed scheme at Land off Church Lane, Shinfield.

2.2 PROPOSED DEVELOPMENT

- 2.2.1 The client wishes to retain the existing compound for the next 8 years.

2.3 SITE

- 2.3.1 The site discussed within this report is located at:

Land off Church Lane, Shinfield, Reading RG2 8PY

2.4 SCOPE OF REPORT

- 2.4.1 This report consists of the following:

- Appraisal of arboricultural impact
- Outline of tree protection & mitigation measures

- 2.4.2 Appendices included with this report are:

No.	Appended Document
1	Tree Survey
2	Site Photos
3	Arboricultural Site Plan (Existing) (P4225-ASP01 V1)
4	Arboricultural Site Plan (Proposed) (P4225-ASP02 V1)

2.5 DOCUMENTS PROVIDED

- 2.5.1 The following documents were submitted to Ligna Consultancy Ltd for consideration:

No.	Supplied Document
1	Existing Site Plan / Topographical Survey

2.6 PROJECT CONTACT

Role	Name	Telephone	Email
Arboricultural Consultant	Jake Duthie	01284 598008	jake@lignaconsultancy.co.uk

2.7 AUTHOR

- 2.7.1 Jake Duthie is a tree inspector with 9 years of experience in the arboricultural industry. He has extensive practical experience in tree surgery, including for high profile sites such as the Tower of London and Hampton Court Palace. He has worked as a tree inspector for Merton Borough Council, inspecting and ordering works on a large tree stock in high target areas. He has a level 4 advanced diploma in arboriculture and LANTRA Professional Tree Inspection training.
- 2.7.2 This report has been checked and edited by Benjamin Hallinan MArborA.
- 2.7.3 Benjamin Hallinan is a professional member of the Arboricultural Association. He has worked in arboriculture for over a decade, including management and supervisory roles undertaking both domestic and commercial arboricultural work. He possesses a FdSc in arboriculture, LANTRA Professional Tree Inspection training, and has also received advanced training in tree related subsidence and BS 5837. Benjamin is familiar with the use of the QTRA system.

2.8 LIMITATIONS

- 2.8.1 Detailed inspections and recommendations relating to tree condition and health are not included within this report.
- 2.8.2 Any engineering solutions presented within this document are recommendations for their suitability from an arboricultural viewpoint. The architect and structural engineers should make the final decision on the suitability of the methods advised.
- 2.8.3 Information provided by third parties, considered in the creation of this report, is assumed to be correct.

2.9 PROTECTED TREES

- 2.9.1 Details of trees (if any) that are protected by Tree Preservation Orders (TPOs) or are situated within Conservation Area are available upon request.
- 2.9.2 It is the standard approach of Ligna Consultancy not to obtain this information from the LPA prior to an application, as the LPA will provide details of nearby protected trees as part of the consultation.
- 2.9.3 It should also be noted that granted planning permission that includes tree work specifications overrides Tree Preservation Orders and Conservation Area protections (approved works only).

2.10 NESTING BIRDS / BATS

- 2.10.1 Officially, the 'Bird Nesting Season' is between February and August (Natural England). During this time, it is recommended that vegetation works (tree or hedge cutting) or site clearance is avoided if there is a reasonable potential for the disruption of nesting birds.
- 2.10.2 All parties involved in the management and/or development of a site must actively avoid causing disturbance and disruption to nesting birds. Failure to

do this may result in an infringement of the *Wildlife and Countryside Act 1981* and the *European Habitats Directive 1992 / Nesting Birds Directive*.

2.10.3 When tree or vegetation clearance work has to be undertaken during the nesting season, a pre works survey needs to be carried out by a suitably competent person.

2.10.4 All bats and their roosts are protected by domestic and international legislation. They are protected by the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations (2017 – as amended). This means you may be committing a criminal offence if you: Deliberately take, injure or kill a wild bat; Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats; Damage or destroy a place used by bats for breeding or resting (roosts) (even if bats are not occupying the roost at the time); Intentionally or recklessly obstruct access to a bat roost.

2.10.5 Prior to carrying out any tree works it is recommended that a survey of the tree/trees is carried out to confirm whether there are any nesting birds or bat roosts. This should be carried out by a suitably trained person.

2.11 SUMMARY OF TERMS

Term	Definition
Species	The type of tree.
Stem	The main woody upright portion of a tree that is supported by the roots and supports the crown.
Branch Spread	The length of a tree's branches from stem to tip measured from the north, east, south and western sides of the crown.
BS 5837	The commonly used name for the official guidance document relating to trees and development (<i>BS 5837:2012 - Trees in relation to design, demolition and construction – Recommendations</i>)
Canopy / Crown	The branches, leaves, and reproductive structures extending from the trunk or main stems of a tree/trees.
DBH	Diameter of a tree's stem, measured as per BS 5837:2012
RPA	The 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.
Facilitation Tree Works	Tree pruning/felling required in order to facilitate the implementation of the proposed development.
Tolerance	The relative tolerance the species can show to construction related activities such as root-loss, soil compaction and other development pressures.
Category (Cat.)	Categorisation of the tree's value based on the methodology shown in Appendix 1, A1.4. This rating takes into account the size, quality, condition, estimated remaining life expectancy and legal status of each tree.

2.12 COPYRIGHT

2.12.1 This report was prepared for use by the Clients and their contractors for planning purposes. The report and its appendices may not be copied,

modified, or distributed beyond the necessary parties without the written consent of Ligna Consultancy Ltd.

3 ARBORICULTURAL IMPACT ASSESSMENT

ASSESSMENT & APPRAISAL OF IMPACTS

The following section lists and discusses any aspects of the proposed design and its implementation that has the potential to harm nearby trees, and outlines possible mitigation measures:

If approved, the mitigation measures outlined below should be detailed within a Tree Protection Scheme (Arboricultural Method Statement and Tree Protection Plan) prior to the commencement of any development associated works:

3.1 TREES TO BE REMOVED

Affected Trees n/a

Impact Appraisal & Mitigation	No trees are to be removed as part of the proposed scheme.
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Significance (with mitigation)	Negligible
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3.2 GROUPS TO BE REMOVED

Affected Trees n/a

Impact Appraisal & Mitigation	No groups are to be removed as part of the proposed scheme.
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Significance (with mitigation)	Negligible
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3.3 RETENTION OF EXISTING SURFACING WITHIN RPAS

Affected Trees Cat. B: T11 (Quercus robur), T12 (Quercus robur), T13 (Quercus robur), T14 (Quercus robur)

Cat. C: T4 (Fraxinus excelsior), T10 (Acer campestre)

Impact Appraisal & Mitigation	During the initial installation of the site compound, surfacing was placed within the RPAs of T4, T10, T11, T12, T13, and T14. This is believed to have occurred between 2018 and 2020, resulting in significant root loss and soil compaction within the RPAs of some trees. These impacts are likely the primary cause of their declining vitality.
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As the compound is proposed to remain for another 8 years, measures should be implemented to mitigate the damage and prevent further harm to the affected trees.

For T4, T12, T13, and G1, the extent of compaction within RPAs is within acceptable limits, covering 11% of T4's RPA, 6% of T12's RPA, 10% of T13's RPA, and <1% of G1's RPA. No mitigation is required for these trees.

However, compaction within the RPAs of T10, T11, and T14 exceeds tolerable limits, affecting 28%, 46%, and 32% of their RPAs, respectively. This has significantly contributed to their declining vitality. Remedial actions to improve soil structure and quality are necessary if the compound is to remain for the proposed duration.

Mitigation

Soil amelioration via 'vertical mulching' is to be undertaken within the RPAs of T10, T11, and T14. The following specification should be implemented:

- Existing surfacing is to be removed from within the affected RPAs under arboricultural supervision.
- A 0.5m² grid will be marked out within the extended rooting area of the tree. At each grid point, an auger or airspade will be used to excavate a 75mm x 400mm deep hole (taking care not to damage roots >20mm diameter).
- The holes will then be filled with a mix of the following (or similar): John Innes No 3 Soil (50%); Organic compost (40%); Slow release fertiliser (5%); Biochar (5%).
- In addition to the above, and to improve, distribute the nutrients added to the holes, and to decompact the existing soil within the tree's rooting area, mixed earth worm colonies will also be introduced to the soil.

The above specification has been proven to significantly enhance root growth, soil respiration and fertility and prolonged decompaction (based on Dr Glynn Percival's research, outlined in 'Bartlett Tree Experts Research Laboratory Technical Report - Vertical Mulching' and their study at Stockley Park).

Following the vertical mulching, no-dig surfacing (such as Cellweb TRP) should be installed within the RPAs of T10, T11 and T14.

This type of specialist system allows for the retention of underlying tree roots while protecting against possible soil compaction damage and allowing the continuation of water and gas exchange between soil and air.

Owing to the nature of no-dig surfacing the FSL of the system is likely to be higher than surfacing based upon a traditional subbase. This will need to be considered in detail by the design team, and it is

recommended that the system manufacturer is consulted to ascertain recommended system thickness at an early stage to ensure that the proposed FFLs are viable (typical thickness specification based on use: $\geq 150\text{mm}$ for vans/HGVs).

- Specialist no-dig surfacing (such as Cellweb TRP) is to be installed as per the locations shown on the Arb. Site Plan (Proposed).

- The thickness and fill material must be as per the manufacturer's recommendations.

- The surface finish must comprise of permeable materials to allow continued gas and moisture exchange.

Significance <i>(with mitigation)</i>	Acceptable
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3.4 IMPLEMENTATION OF PROPOSED SCHEME

Affected Trees	All retained trees
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Impact Appraisal & Mitigation	During the process of temporarily moving equipment from the RPAs of affected trees, and the installation of no-dig surfacing within these RPAs, all retained trees are susceptible to damage from general construction related activities.
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Significance <i>(with mitigation)</i>	Acceptable
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TREE RELATED SHADING AND NUISANCES

3.5 LONG-TERM IMPACT OF RETAINED TREES ON PROPOSED SCHEME

3.5.1 Shading

3.5.1.1 n/a

3.5.2 Canopy Growth

3.5.2.1 The layout of the scheme has been designed with consideration of the location and growth potential of nearby trees. Owing to such, no noteworthy contention between tree canopies and property are anticipated.

3.5.3 Nuisances

3.5.3.1 Owing to the tree species present within and around the site, and the layout of the proposed scheme, additional unreasonable tree-related nuisances, such as leaf and fruit-fall, are not thought to exist beyond what might generally be considered as acceptable limits.

OPPORTUNITIES FOR NEW TREE PLANTING

3.6 PROVISION OF NEW TREE PLANTINGS

3.6.1 No mitigation tree planting is required as part of the proposed scheme.

CONCLUSION

3.7 SUMMARY OF THE DEVELOPMENT'S OVERALL IMPACT

3.7.1 The table below summarises the trees which will be lost, pruned, or protected by special measures during the development project.

	Tree Category				
	A	B	C	U	Total
Trees to be removed	-	-	-	-	-
Groups to be removed	-	-	-	-	-
Other Vegetation to be removed	-	-	-	-	-
Trees to be pruned	-	-	-	-	-
Instances of trees being affected by the retention of surfacing	-	4	2	-	6

3.7.2 Considering the anticipated arboricultural impact from the retention of the existing compound, and the implementation of the proposed mitigation measures outlined in this document, the proposed development's arboricultural impact is considered to be **acceptable**.

4 APPENDICES

4.1 APPENDICES

4.1.1 The following appendices are included within this document:

No.	Appended Document
1	Tree Survey
2	Site Photos
3	Arboricultural Site Plan (Existing) (P4225-ASP01 V1)
4	Arboricultural Site Plan (Proposed) (P4225-ASP02 V1)

APPENDIX 1 TREE SURVEY

APPENDIX 1 – TREE SURVEY

A1.1 SITE VISIT

- i) A site visit was undertaken by Jake Duthie of Ligna Consultancy, on the 15/01/2025

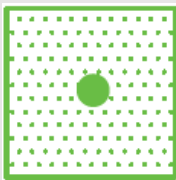
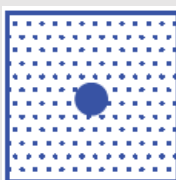
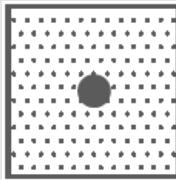
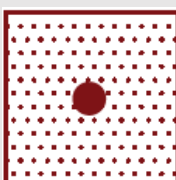
A1.2 METHOD OF DATA COLLECTION

- i) Data was collected using the recommendations laid out in British Standard 5837:2012 as a guide. All observations were from ground level without detailed or invasive investigations.
- ii) Measurements have been calculated using a laser measurer and diameter tape/calipers. Where this was not possible or reasonably practical, measurements have estimated by eye.
- iii) The trees were surveyed and assessed impartially and irrespective of the proposed development. Management recommendations should be implemented regardless of any proposed development for reasons of sound arboricultural management or safety.
- iv) The method used for categorising the trees can be seen in section A1.3. This is an improved variation of the method suggested in BS 5837:2012.
- v) BS 5837:2012 recommends that better quality (category A and B trees) are retained where possible. Planning permission overrides a Tree Preservation Order and Conservation Area. Furthermore, trees are a material consideration in the UK planning system irrespective of their legal status. Trees in land adjacent to the site are considered where they may be impacted by development; for example, when roots or branches encroach onto the site.
- vi) Trees may be recorded as group or woodland where:
 - The canopies touch.
 - The trees have more group value than individual merit.
 - They are part of a formal landscape feature like an avenue.
 - It is impractical to record them individually.
- vii) Trees within groups or woodlands etc. are recorded individually where it is necessary to distinguish them from others.

A1.3 SURVEY KEY & GLOSSARY OF TERMS

Term	Definition
Ref.	Tree reference number
Tag	Physical tag attached to some trees with unique identification number (not the same as Ref.)
Species	The trees' scientific and common name
Height	The measured/estimated height of the tree (measured in metres)
Branch Spread	The length of a tree's branches from stem to tip measured from the north, east, south and western sides of the crown.
Crown Clearance	Crown clearance is the measurement of height between the trees branches in the outer third of its crown and the floor. Crown clearance has only been recorded where it is considered to be of relevance to the proposed scheme. The height of the first significant branch is also generally recorded and is discussed where relevant.
DBH	Diameter of a trees' stem, measured as per BS 5837:2012
RPA	The 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.
Life Stage	A quantification of a trees' state of physical maturity: • Young • Semi-mature • Early-Mature • Mature • Late-mature • Veteran • Dead
Structural	Summary statement relating to the structural condition of a tree: • Good (no apparent problems / normal optimal condition for a tree of its species.) • Fair (minor problems, no instabilities) • Poor (major problems, potential instabilities) • Unstable (extreme problems, likely to result in failure)
Vitality	Summary statement relating to the overall observed vitality of a tree: • Good (no apparent problems / normal optimal vitality for a tree of its species) • Fair (minor / temporary reduction in tree vitality) • Poor (major reduction in tree vitality, often with some branch dieback) • Dead / Dying (extreme / total reduction in tree vitality)
General Management Recommendations	Remedial tree works recommended regardless of whether the site is developed or not.
Facilitation Tree Works	Tree pruning/felling required in order to facilitate the implementation of the proposed development.
Development Related Tree Works	Tree works that are required as part of the proposed scheme.
Tolerance	The relative tolerance the species can show to construction related activities such as root-loss, soil compaction and other development pressures.
Cat.	Categorisation of the tree's value based on the methodology shown in A1.4. This rating takes into account the size, quality, condition, estimated remaining life expectancy and legal status of each tree.

A1.4 TREE CATEGORISATION METHODOLOGY

Category and definition	Criteria / Subcategories			Label on plan
	1 – Mainly arboricultural qualities	2 – Mainly landscape qualities	3 – Mainly cultural values/conservation	
Trees worthy of being a material constraint:				
Category A Trees of high quality, capable of providing a significant contribution to local amenity (usually large in size) and that generally possess an estimated remaining life expectancy of 40+ years.	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	
Category B Trees of moderate quality and with an estimated remaining life expectancy of 20+ years, that are capable of providing a notable contribution to local amenity but are lacking the condition of category A trees (usually medium to large in size).	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage); or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	
Trees worthy of material consideration:				
Category C Trees of a low quality, small size, or incapability to be protected within the legal framework. These trees generally possess an estimated remaining life expectancy of 10+ years.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	
Trees unsuitable for retention owing to condition:				
Category 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.	- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low-quality trees suppressing adjacent trees of better quality			

A1.5 SUMMARY OF DATA

- i) The following woody vegetation was considered to be of note in relation to any development of the site: 14 individual trees, 3 groups of trees.
- ii) The following tables show the category distribution and life stage of the trees distributed within the site:

	Tree Category				
	A	B	C	U	Total
Individual Trees	-	8	6	-	14
Groups	-	-	3	-	3
Woodland Groups	-	-	-	-	-
Hedges	-	-	-	-	-
Shrubs	-	-	-	-	-

Table 1 - Table showing category distribution within site.

	Life Stage						
	Young	Semi-Mature	Early-Mature	Mature	Late-Mature	Veteran	Dead
Individual Trees	-	3	-	8	3	-	-
Groups	-	-	-	3	-	-	-
Woodland Groups	-	-	-	-	-	-	-
Hedges	-	-	-	-	-	-	-
Shrubs	-	-	-	-	-	-	-

Table 2 - Table showing life stage distribution within the site.

Ref.	Tag	Species	Height (m)	Crown (N/E/S/W)	Crown Clearance (m)	DBH (mm)	Life Stage	Structural	Vitality	Additional Notes	General Management Recommendations	Priority	Development Related Tree Works	Tolerance	RPA Radius (m)	RPA Area (m ²)	Cat.
T1		Salix caprea (Goat willow)	6	5.5 / 5.5 / 3.5 / 2	3	197	Mature	Fair	Good	Main stem leaning eastwards almost horizontally. Minor deadwood in crown (<50mm diameter). Crown obscuring traffic lights.	Prune for 1m clearance from traffic lights.	Optional		Moderate - Good	2.4	17.6	C1
T2		Salix caprea (Goat willow)	6	4.5 / 3 / 3 / 4	0.5	316	Mature	Fair	Good	Multi stemmed from 0.5m, satisfactory unions. Basal suckers growing over pavement and beginning to encroach on road.	Prune lowest 3m of crown to edge of grass verge.	Optional		Moderate - Good	3.8	45.1	C1
T3		Acer campestre (Field maple)	5	1.5 / 2.5 / 1.5 / 2	1.2	187	Semi-Mature	Good	Good	Previously pruned back from road. No concern at present.				Good	2.2	15.8	C1
T4		Fraxinus excelsior (Ash)	6.5	2.5 / 4 / 3.5 / 1.5	3.5	197	Semi-Mature	Good	Good	Triple stemmed from 1.3m, satisfactory unions. No ash dieback symptoms visible at present.				Moderate	2.4	17.6	C1
T5		Prunus spp. (Plum)	4.5	3.5 / 3.5 / 4.5 / 4	2	252	Mature	Good	Good	Multi stemmed from base, satisfactory unions. 2 stems tightly adpressed, providing natural bracing.				Moderate - Good	3.0	28.7	B1
T6		Sambucus nigra (Elder)	4.5	2 / 2.5 / 1.5 / 1	1.5	150	Late-Mature	Fair	Poor	Tree health in early stage of decline. Minor deadwood in crown (<50mm diameter).				Good	1.8	10.2	C1
T7		Quercus robur (English oak)	9.5	5.5 / 5.5 / 5.5 / 5.5	2	350	Mature	Good	Good	Previously lifted over road, repeat prune not currently needed. Minor deadwood in crown (<50mm diameter).				Moderate - Good	4.2	55.4	B1
T8		Quercus robur (English oak)	6.5	4 / 4 / 4 / 4	1	250	Mature	Good	Good	Stem and crown measurements estimated due to lack of access to stem.				Moderate - Good	3.0	28.3	B1
T9		Quercus robur (English oak)	11	6 / 6 / 6 / 6	2	500	Mature	Good	Good	Stem and crown measurements estimated due to lack of access to stem. Minor deadwood in crown (<50mm diameter).				Moderate - Good	6.0	113.1	B1
T10		Acer campestre (Field maple)	7	4.5 / 2.5 / 2 / 4	2	200	Mature	Fair	Fair	Stem and crown measurements estimated due to lack of access to stem. Central leader wounded and decaying, with laterals taking over as leaders. Moderate size deadwood in crown (<150mm diameter). over adjacent site.				Good	2.4	18.1	C1
T11		Quercus robur (English oak)	13	6.5 / 4.5 / 5 / 6.5	3	850	Late-Mature	Good	Fair	Tree health in early stage of decline. Upper crown is stag headed. Decline either caused or exacerbated by installation of compound between 2018 and 2020 and heavy compaction within RPA. Moderate size deadwood in crown (<150mm diameter). over containers within site, harm considered unlikely in event of falling deadwood.	Existing surfacing should be removed, and vertical mulching should be carried out within the tree's RPA (see section 3 of Arb Impact Assessment).	12 Months		Moderate - Good	10.2	326.9	B1
T12		Quercus robur (English oak)	8	4.5 / 5.5 / 3 / 5.5	3	280	Mature	Good	Good	Stem and crown measurements estimated due to lack of access to stem. Minor deadwood in crown (<50mm diameter).				Moderate - Good	3.4	35.5	B1
T13		Quercus robur (English oak)	9	2.5 / 2.5 / 3.5 / 3.5	2.5	220	Semi-Mature	Good	Good	Stem and crown measurements estimated due to lack of access to stem. Minor deadwood in crown (<50mm diameter).				Moderate - Good	2.6	21.9	B1

Ref.	Tag	Species	Height (m)	Crown (N/E/S/W)	Crown Clearance (m)	DBH (mm)	Life Stage	Structural	Vitality	Additional Notes	General Management Recommendations	Priority	Development Related Tree Works	Tolerance	RPA Radius (m)	RPA Area (m²)	Cat.
T14		Quercus robur (English oak)	14	9.5 / 11 / 9.5 / 11	4	1300	Late-Mature	Fair	Fair	Stem and crown measurements estimated due to lack of access to stem. Tree health in early stage of decline. Decline either caused or exacerbated by installation of compound between 2018 and 2020 and heavy compaction within RPA. Upper crown becoming stag headed. Moderate size deadwood in crown (<150mm diameter) over both surveyed site and site to west. Harm considered unlikely in event of falling deadwood, but deadwooding may still be prudent in interest of avoiding damage to equipment.	Remove significant deadwood (>30mm diameter and 1m in length). Existing surfacing should be removed, and vertical mulching should be carried out within the tree's RPA (see section 3 of Arb Impact Assessment).	12 Months		Moderate - Good	15.6	764.5	B1
G1		Mixed group	3.5	1.5 / 1 / 1 / 1		60	Mature	Good	Good	Hedgerow running along southern boundary of site from south-east corner to entrance. Predominantly Hawthorn. No concern at present.				-	0.7	1.6	C2
G2		Mixed group	3.5	1.5 / 1.5 / 1 / 1.5	0.5		Mature	Good	Fair	Mixed species hedgerow running along southern boundary of site between central and south-west entrances. Some dieback within hedge but overall no concern at present.				-			C2
G3		Mixed group	4.5	1 / 1 / 1 / 1	0.5	80	Mature	Good	Good	Mixed species hedgerow running along southern boundary from south-west entrance to south-west corner. Prunus and Hawthorn present.				-	1.0	2.9	C2

APPENDIX 2 SITE PHOTOGRAPHS

APPENDIX 2 – SITE PHOTOGRAPHS

Note - Below is a selection of site photographs intended for general site context. Should you require supplementary site/tree photographs please contact info@lignaconsultancy.co.uk:



Figure 1 – The south-western corner of the site, pictured from the south. From left to right, G1, T2 and T1 are visible.



Figure 2 – The southern boundary of the site, pictured from the south-east. T4 is visible just to the right of the site entrance, with G1 extending along the verge to the right of the entrance.

APPENDIX 2 – SITE PHOTOGRAPHS



Figure 3 – The southern boundary of the site, from the entrance to the south-western corner. T5 is visible by the entrance, with G2 running along the verge and T6 visible to the left of the telephone pole.



Figure 4 – T7 and G3. While these trees have been included in the survey, they do not border the OCU Group owned compound.

APPENDIX 2 – SITE PHOTOGRAPHS



Figure 5 – The southern boundary, pictured from the north-east. T4 can be seen right of centre.



Figure 6 – The south-eastern corner of the compound, pictured from the north-west. The trees visible to the right are not close enough to the compound to be affected by its retention.

APPENDIX 2 – SITE PHOTOGRAPHS



Figure 7 – The eastern boundary of the compound, pictured from the west. No trees or groups are close enough to the compound to be affected by its retention.



Figure 8 – The eastern boundary of the compound, pictured from the south-west. T8 can be seen centre frame. No trees in this picture are close enough to the compound to be affected by its retention.

APPENDIX 2 – SITE PHOTOGRAPHS



Figure 9 – The north-eastern corner of the site, pictured from the south-west. No trees pictured are close enough to the compound to be affected by its retention.



Figure 10 – The northern boundary of the site, pictured from the south-east. T9 can be seen left of centre. T11 can be seen left of frame. No trees to the north of the compound are close enough to be affected by its retention.

APPENDIX 2 – SITE PHOTOGRAPHS



Figure 11 – The north-western corner of the site, pictured from the south-east. T12 can just be seen in the far left of frame, with T11, T10 and T9 visible (from left to right).



Figure 12 – The western boundary of the site, pictured from the north-east. T14 is visible centre frame, with T13 and T12 to its right, and T11 just visible on the far right.



Figure 13 – T9, pictured from the south-east.



Figure 14 – T10, pictured from the east. Its crown is obscured somewhat by the larger oak tree behind it, but its stems can be seen left of centre.



Figure 15 – T11, pictured from the north-east. Its declining vitality can be seen clearly, which is likely caused or exacerbated by the compaction of ground within its RPA.



Figure 16 – The western boundary of the site, pictured from the north. From front to back, T11, T12, T13 and T14 can be seen.



Figure 17 – T12, pictured from the east. The ground within the site has been compacted within its RPA.



Figure 18 – T13, pictured from the east. The ground within the site has been compacted within its RPA.

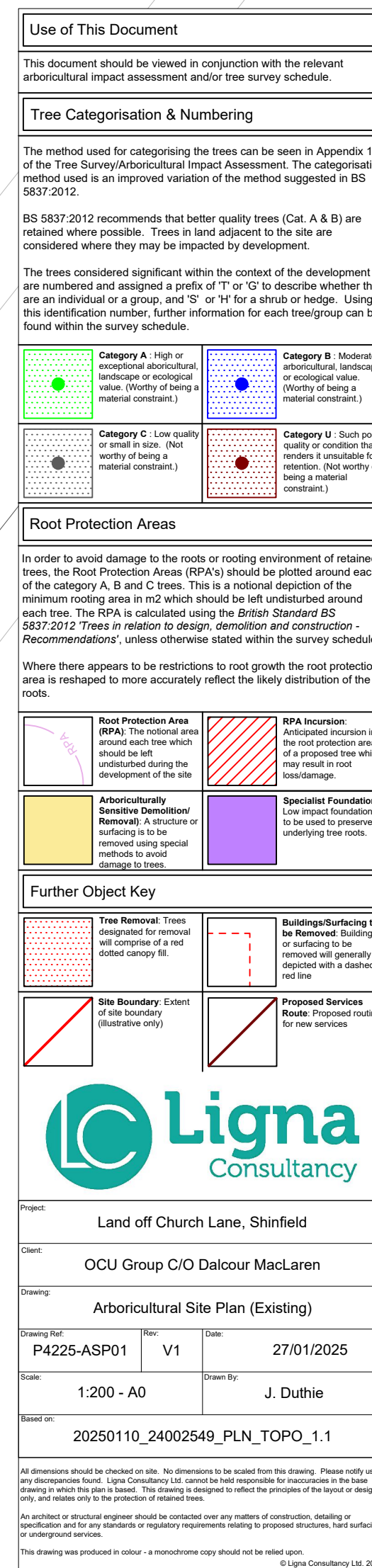
APPENDIX 2 – SITE PHOTOGRAPHS



Figure 19 – T14, pictured from the east. The ground within the site has been compacted within its RPA. Decline is visible in its canopy, although not to the same extent as in T11's. The compaction and storage of heavy equipment within its RPA is likely causing or exacerbating the tree's decline.

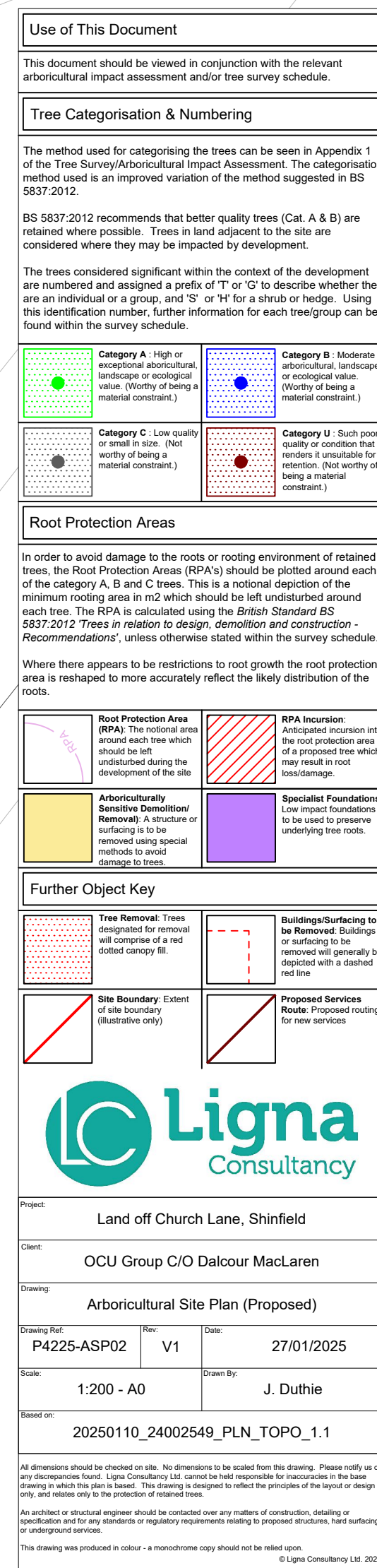
APPENDIX 3

ARB. SITE PLAN (EXISTING)



APPENDIX 4

ARB. SITE PLAN (PROPOSED)





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