



TREE SURVEY REPORT, IMPACT
APPRAISAL & TREE PROTECTION
DETAILS

In respect of:

1 Christchurch Road
Reading
RG2 7AB

February 2026

Ref: 0392-SV-0226

Prepared by:

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References

- British Standards 5837:2012 Trees in relation to design, demolition and construction – Recommendations
- British Standards 3998:2010 Tree Work Recommendations
- NJUG 4 Vol 10 – NJUG Guidelines for the Planning, Installation and maintenance of Utility apparatus in proximity to trees
- TDAG Trees in the Townscape: A Guide for Decision Makers

EXECUTIVE SUMMARY

Two trees have been surveyed due to their proximity to the proposed development. Both trees can be retained and adequately protected in accordance with BS5837:2012 during the works and it is considered that the proposal is compatible with their existing and future growth and management.

1.0 INTRODUCTION

- 1.1 This report was commissioned in relation to the proposed development at 1 Christchurch Road, Reading. The report details all trees over 75mm at 1.5m above ground level that are relevant to the siting of the proposed development. The position of the trees on the site is illustrated at **Appendix 1** on the site plan and information about the tree stock and its current condition is given. It will assist the planning process by discussing the impact that the proposals will have on the existing tree stock.
- 1.2 An Arboricultural Impact Assessment is included which details the constraints placed on the proposed development from the rooting area of the trees below ground and above ground by virtue of their size and position. A tree protection plan is also given which demonstrates how the trees to be retained can be adequately protected throughout the construction operations.

2.0 SITE VISIT

- 2.1 The site visit was undertaken on 21 January 2026 and tree work was carried out on 4 February 2026. The trees were surveyed visually, externally and from ground level only. No samples or internal decay detection readings were taken for further analysis. All dimensions have been measured unless stated otherwise. Weather conditions at the time of the survey were clear and dry.
- 2.2 An existing site layout plan was made available at the time of the tree survey.

3.0 SOILS

- 3.1 A full laboratory soil assessment has not been carried out. The British Geological Survey digital geological map for this part of Reading Borough describes the bedrock geology as the London Clay Formation of Clay, Silt and Sand. As clay occurs across the site, it is likely that the soil will change volume as a result of moisture abstraction by trees or shrubs. It is understood that the building has a basement and there are currently no signs of cracks that may relate to clay induced subsidence.

4.0 TREE SURVEY DATA – 1 Christchurch Road, Reading

In accordance with BS 5837:2012, the characteristics of trees over 75mm stem diameter measured at 1.5m above ground level have been recorded and they have been categorised in accordance with Table 1 of BS5837: 2012. The following tree data tables should be read in conjunction with the annotated site plan shown at **Appendix 1** and the key on page 5.

Tree	Height	Trunk Dia.	Radial Crown Spread	Crown Clearance	Life Stage	Physiology	Structure	Landscape Value	Est. Years	Comments	Category	RPA Radius	RPA m2
T1 Common lime (<i>Tilia x europaea</i>)	6m	620mm	N0.5m E0.5m S0.5m W0.5m	0m	EM	Good	Fair	High	20+	Sound base and stem. Historically pollarded at 3.5m with knuckle formation and smaller sprouts from this point.	B (1)	7.4m	173.9m ²
T2 Box elder (<i>Acer negundo</i>)	8m	440mm	N2m E2m S2m W2m	2m	OM	Poor	Poor	High	In decline	Ageing tree nearing the end of its safe useful life expectancy. Historically pollarded at 3m with regrowth to current dimensions. The crown is biased to the southwest, over the road and pavement due to historic pruning to remove branches away from the house. Large cavity at 3m, the stem appears hollow, with the column of decay down to ground level. Moderate deadwood throughout.	U	5.3m	87.6m ²

The comments made with regard to the health of the trees within this report were correct at the time of inspection. Trees are dynamic structures and changes can occur in response to biological, mechanical or environmental changes at any time.

Key to terms.

- Identification numbers have been used and correspond to the site plan shown at **Appendix 1**.
- Vegetation type has been categorized as one of the following: Tree (T), Hedge (H), Shrub (S), Group (TG), Stump (ST)
- Species are listed by common and botanical name where appropriate.
- Where possible, measurements have been made in accordance with the conventions detailed below. Where this was not possible, due to site conditions or the vegetation being in third party ownership, dimensions have been estimated. * Indicates estimated measurement.
- Height has been estimated to the nearest half metre.
- Stem diameter (of single stem trees and multi stemmed trees) has been measured at approx. 1.5m and recorded in millimetres. Where this was not possible the actual height where the diameter was measured is recorded. GL = Ground Level.
- Crown spread has been recorded in metres.
- Age class has been recorded as follows:

Y	Young recently planted or establishing tree that could be transplanted without specialist equipment, i.e. up to 12-14cms-stem girth.
S/M	Semi mature. An established tree but one that has not reached its potential ultimate height and has significant growth potential.
E/M	Early mature. A tree reaching its ultimate potential height, whose growth rate is slowing down but will increase in stem diameter and crown spread, and has a safe life expectancy.
M	Mature. A mature specimen with limited potential for any significant increase in size but with a reasonable safe life expectancy.
O/M	Over mature. A senescent or moribund specimen with a limited safe life expectancy. Possibly also containing significant structural defects with attendant safety and/or duty of care implications.
- Physiological Condition has been recorded as Good, Fair or Poor.
- Recommendations for tree management have been based on current Arboricultural Best Practice as set out by the Arboricultural profession and all relevant publications.

5.0 TREE QUALITY ASSESSMENT

Two trees on site have been surveyed for planning purposes and categorized according to BS5837: 2012 as a guide to their condition. They are coloured on the plan attached at **Appendix 1** to indicate their category and the colours are explained in the key of the plan. The full tree quality assessment chart, which gives a more detailed explanation of the definition of the subcategories, has been attached at **Appendix 2**.

5.1 Category B Tree

T1 Lime



This tree is moderate quality with an estimated remaining life expectancy of at least 20 years. It has been previously managed and no longer exhibits its natural form.

5.2 Category U tree

T2 Box Elder



This tree is in such a poor condition that it is not realistic to expect it to be retained as a living tree in the context of the current land use for longer than 10 years.

6.0 ROOT PROTECTION AREAS

- 6.1 The starting position for the RPA shape is a circle, assuming even distribution around the tree. However, roots grow where they are able and their pattern of root spread will be affected by site features like structures, historical ground work, soil, topography and drainage. Often in urban settings it should not be assumed to be a circle but instead, the shape of the RPA modified to reflect the likely root distribution.
- 6.2 In the case of both T1 and T2, their root distribution has been determined by the urban environment around them and as such, a polygon has been used to illustrate the most likely distribution of their roots. Further work to ascertain the extent of root spread has been carried out and the results outlined below.

7.0 ROOT INVESTIGATION WORK

- 7.1 **Objective:** To ascertain the extent of root spread from T1 early mature Lime tree across the area which is preferred for the excavation of new steps to the proposed basement apartment. No roots to be severed/damaged.
- 7.2 **Method:** On a damp and overcast day, a line of paving slabs along the face of the building were lifted by hand using a crowbar and their sub-base removed by hand by chiselling out the dry cement mortar and removing hardcore to reveal roots (no machinery used). One trench nine metres in length (and 40cm width) was opened. *See plate 1.* No roots were cut or damaged during the work and the one root found was covered back over with polythene and fresh soil soon after its discovery to prevent it from desiccation (*plate 5*).



Plate 1 – a line of paving slabs lifted and sub-base removed alongside the building. T1 can be seen in the background.

- 7.3 **Findings:** Within the trench, one 30mm diameter root was found growing under the small wall close to the stem of the Lime tree (the wall had no foundations) and this has extended outward along the edge of the building for a distance of 9m from the tree at a depth of 36mm (*see plate 2*). At 8.5m, the root bifurcates and then wraps around the corner of the building at a diameter of 15mm into the area where the proposed steps would be (*see plate 3*).



Plate 2 – 30mm diameter root



Plate 3 – Root bifurcates at the corner of the building and wraps around the corner of the building into the area proposed for the new steps

It seems that historically, the paved area was created by raising the ground levels with a rubble sub-base over a level 20-30mm deeper (which is still intact as a layer of quarry tiles – which the roots are growing on – see red stone area on the *plate 4*). It is thought that this was the original level and roots will be prevalent under this [unknown] depth.



Plate 4 – historic original level (red quarry tiles) showing roots over this level that have grown in the sub-base of the paving slabs.

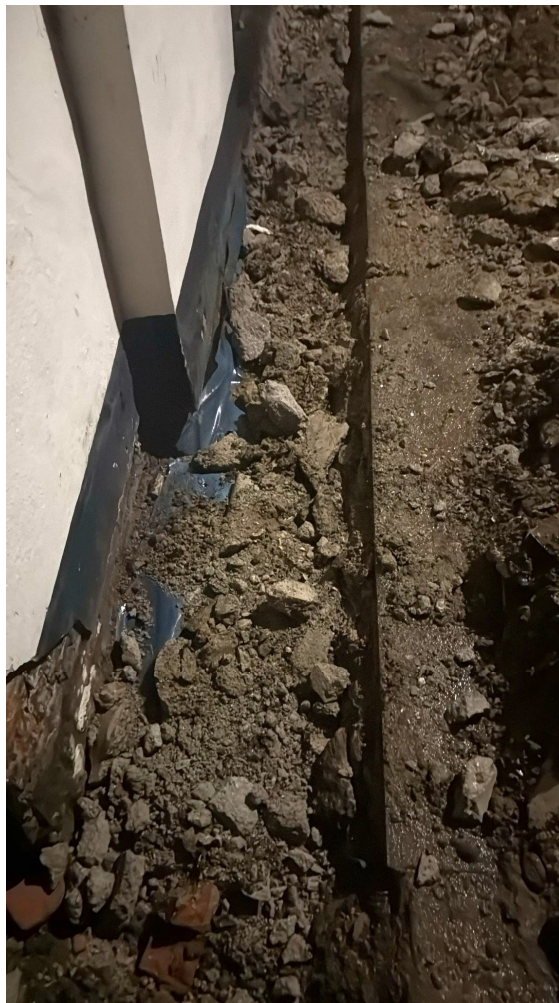


Plate 5 – Trench back filled and root covered back over

8.0 LEGAL CONSTRAINTS

- 8.1 The site is within a Conservation Area and T1 Lime is protected by Tree Preservation Order 10/15r. Both trees are therefore afforded statutory protection under the Town and Country Planning legislation and any tree work to trees over 75mm at 1.5m height must be approved by the Local Planning Authority. It is a criminal offence to fell or wilfully damage a tree within a Conservation Area or protected by a Tree Preservation Order without the consent of the LPA. No trees, within the site shall be felled, uprooted wilfully damaged or destroyed, cut back in any way or removed without the written consent of the local planning authority.

9.0 ARBORICULTURAL IMPLICATIONS ASSESSMENT

9.1 Description of Proposed Development

It is proposed to renovate the building and refurbish it to create 3 apartments, extend the depth of the basement by an additional 43cm (to raise the internal head height from 1.8m to 2.23) and create a set of new external steps down to the basement for its own access to the private side garden.

9.2 Drawings Used

An existing site layout plan was used to show the location of the trees on the Tree Quality Assessment Plan (**Appendix 1**) and the location of the root investigation trench (**Appendix 4**). The proposed site layout plan was used to show the root protection areas (**Appendix 3**), and the Tree Protection Plan (**Appendix 5**).

9.3 Trees in Relation to Proposed Development

Both T1 Lime and T2 Box Elder can be retained and safely protected during the works and it is considered that the proposal is compatible with their existing and future growth.

9.4 Tree Surgery Work

Both trees have recently been pruned with consent under tree works notice PL/25/0623 and PL/25/0622 and no further work is required in order to facilitate the scheme.

9.5 Changes in ground surface and ground level within RPA's

- 9.5.1 It is thought that the overall area of likely root spread of T1 and T2 combined is 113m² with just 3.55m² proposed to be excavated for the creation of new steps leading to the basement apartment. This amounts to just 3% of the very outer margin of the RPA of T1 Lime tree. No roots over 25mm will be disturbed as we know from recent root investigation work that the largest root (a 30mm diameter root) gradually becomes less woody and more fibrous at this point.
- 9.5.2 Large structural roots are typically close to the stem – within 1-2m from the trunk which then taper to form smaller fibrous roots that extract moisture and nutrients from the soil. These 'non woody' roots generally have a limited role in anchorage as

their main function is one of absorption. They have a short lifespan – rarely more than one growing season.

- 9.5.3 Roots are opportunistic and will only grow where conditions allow them to thrive. We have seen that the larger root tapers and forms smaller shorter lived fibrous roots in the area proposed for the new steps and it is likely that the tree has a more extensive root system under the remaining area of paving slabs (which haven't been lifted for the purpose of this root investigation exercise). As we know therefore, roots grow where they can best exploit and so it is my opinion, that the small area of incursion for the new steps will be tolerated by the tree and this work will not be detrimental to the longer term health of it given that there is a larger area of lawn for the tree to be thriving in (which will be retained) and in addition, it is proposed that as part of the future landscaping of the site, this paved area will be lifted and returned to soft lawn to form a garden area for the apartments – ultimately further increasing and improving its rooting environment.

9.6 **Tree Protection Detail**

- 9.6.1 It will be important to prevent the compaction of lawn area around these two trees during the works as this can be harmful to tree roots by reducing gaseous exchange and the availability of water and nutrients.
- 9.6.2 As such, a construction exclusion zone (CEZ) will be designated on site by using protective barriers to ensure the safe retention of the trees to be retained. These barriers will be in accordance with BS 5837: 2012 and will guard against impact damage to the trunks and branches and will protect the below ground rooting environment so that the soil structure remains viable for root growth and not compacted by construction operations. The location and type of tree protection to be used is shown on the Tree Protection Plan attached at **Appendix 5**.
- 9.6.3 Space for construction work, mixing and material storage will be designated on site away from the construction exclusion zone as defined by the protective barriers.

9.7 **Infrastructure Detail**

9.7.1 **Access**

The existing tarmac area to the rear of the site is to be used for access during the works.

9.7.2 **Services**

The existing services (shown on the plan attached at **Appendix 6**) which T1 and T2 have adapted to, will be utilised for the scheme.

9.8 **Landscaping**

- 9.8.1 The proposal offers the opportunity for an enforceable landscape improvements scheme which would be of benefit to the visual amenity of the surrounding area. New planting and landscaping will be carried out to develop gardens integrated and sympathetic to the proposed architectural style and which will be in context and harmony with the wider landscape style.

9.8.2 Removal of hard surfacing, installation of new soft landscaping

As discussed in para 9.5, the ultimate plan is to remove the paving slabs and return this area to soft ground for users of the apartments as a garden. Methodology for this work would be as follows:

1. Lift all existing slabs to reveal the cementitious sub-base.
2. Remove the 36mm depth cementitious bedding by hand, retaining **all** roots encountered. Explore what the substrate is further below the 36mm depth and if it is a layer of quarry tiles with more roots under, then investigate the integrity of this and make a decision as to whether to leave it in situ or remove that too.
3. Back fill the area where sub-base, rubble and stones have been cleared away, with a sandy clay loam topsoil – which offers a balance of drainage, water retention and nutrient availability, with good aeration properties. Let it settle into all the holes left by the removed rubble and concrete, covering all roots. All encountered roots will be retained, bent down and pinned securely with degradable wooden pins to ensure that they are re-routed within the fresh topsoil layer.
4. Lay a fresh layer of turf as the final surface and water well to establish.

9.9 Justification for building within the RPA

The proposed design is making the best use of space on the site for residential use and associated infrastructure. Whilst the proposals breach 3% of the root protection area of T1 Lime, for reasons described, it is not considered that this breach will be detrimental to the long-term health or safety of this tree. Historically, it has been poorly managed (becoming a lapsed pollard) and by restoring the ground around this tree to soft landscaping, this proposal may well enable this tree to thrive longer than if the site were left in its current condition. It is not considered that the proposed flats will create an increased pressure to fell T1 as the tree will not shade the building and it is a good green screen at the boundary and adds character and structure to the site.

10.0 CONCLUSIONS

- 10.1 The size and location of T1 and T2 means that they will not be a constraint to the proposed re-development of the property. The visual amenity value of them both will be retained following completion of the proposed development and it is considered that the proposals are compatible with the existing and potential future influence of these trees.
- 10.2 It is considered unlikely that the new residents will have negative feelings towards the trees – particularly as they will be purchasing or moving into this dwelling knowing that the trees are there and presumably will have chosen to live here because the trees add structure and character to the site. Recent research has shown that tree shade reduces UV-B exposure by about 50 percent and trees provide the most coverage from UV rays during the middle of the day. Large trees located on and near new developments can act as a secondary insulating layer, regulating temperatures around buildings. This helps to keep them cool in the summer and warmer in the winter – which is something homeowners are now beginning to understand with most people now choosing to live in and/or around trees wherever

possible. (ref: TDAG Trees in the Townscape: A Guide for Decision Makers). To re-iterate therefore, this development has been designed so that satisfactory living standards for future occupants will be maintained and it is not considered that the development would create a situation which would significantly threaten the future of the higher quality 'B' grade tree being retained.

- 10.3 Assuming full compliance with the recommendations within this report, the net arboricultural impact of the proposal is considered acceptable, and it will not be detrimental to the long-term health and safety of the trees being retained or the visual amenities of Reading Borough Council's urban townscape.

Details within this AIA are considered correct at the time of writing, but modifications may need to be made as more information becomes available.

Glossary

Arboriculturist	Person who has, through relevant education, training and experience, gained expertise in the field of trees in relation to construction
Construction Exclusion Zone	Area based on the root protection area from which access is prohibited for the duration of the project.
Root Protection Area (m2)	Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability and where the protection of the roots and soil structure is treated as a priority.
Services	Any above ground or below ground structure or apparatus required for utility provision. E.g. drainage, gas supplies, ground source heat pumps, CCTV and satellite communications.
Stem	Principal above ground structural components of a tree that supports its branches.
Tree Protection Plan	Scale drawing informed by descriptive text where necessary, based upon the finalized proposal showing trees for retention and illustrating the tree and landscape protection measures.

IMPORTANT NOTES

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The statements made in this report do not take account of extremes in weather, accidental damage including fire, chemical and physical injury, or vandalism. Venners Arboriculture cannot therefore accept any liability in connection to these factors, or for work not carried out to current industry best practice. The validity of this report ceases at the prescribed time limit or after one year from the site inspection, or if the site conditions change due to unspecified works that affect the subject tree(s), whichever is the sooner.

CREDENTIALS OF THE AUTHOR

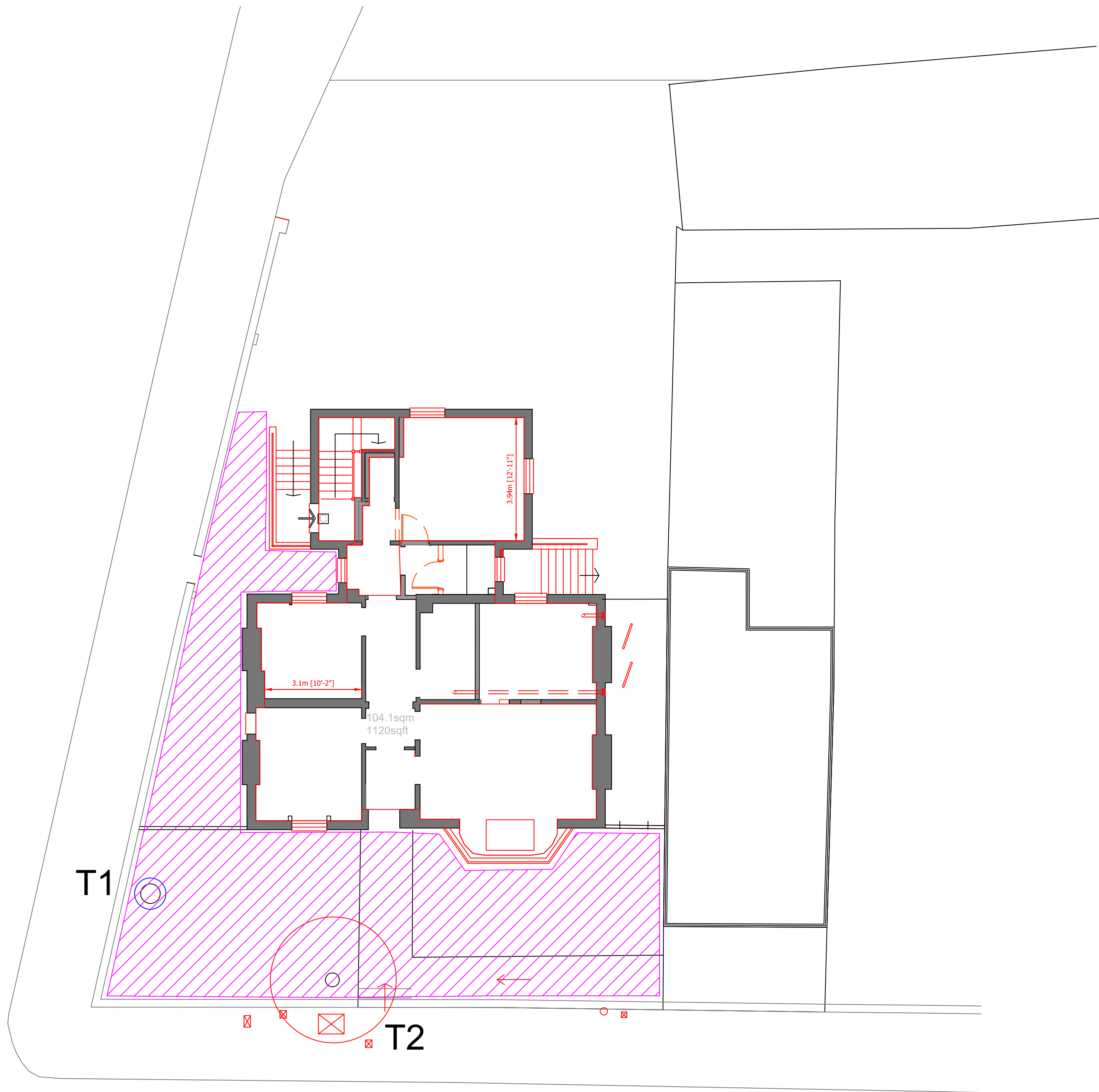
Sarah Venners has worked in the arboricultural profession for twenty-nine years. Her experience has been gained from both the public and private sector. She was the Tree Officer for Tunbridge Wells Borough Council and for South Oxfordshire District Council and was a consultant for Marishal Thompson & Co of Alnwick Northumberland until March 2006. In addition to her experience, she holds the following qualifications:

Master's degree in forestry from The Oxford Forestry Institute, Oxford University. (MSc For. Oxon).

BSc (Hons) Degree in Agriculture and The Environment, Wye College, London University. (BSc Hons Agric).

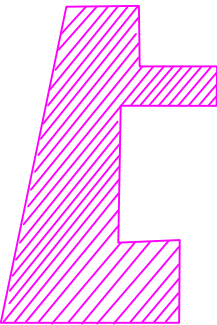
She is also a Professional Member of the Institute of Chartered Foresters (MICFor) and the Arboricultural Association (M.Arbor.A.).





Key

-  Canopy spread of the trees of moderate quality and value in accordance with BS5837:2012 with an estimated remaining life expectancy of at least 20 years.
-  Canopy spread of trees in irreversible decline with a likely safe useful life expectancy of less than 10 years.



Likely spread of roots calculated in accordance with BS5837:2012 (m2) 'Root Protection Area'. The shape of the root spread is offset to reflect the inability of the roots from T1 or T2 being able to exploit the soils below foundation level due to the existing depth of the basement of the property, and to the west, the boundary wall and change of levels between the ground the lime tree is growing on and the pavement beyond.



Scale: 1:100
1 Christchurch Road, Reading RG2 7AB

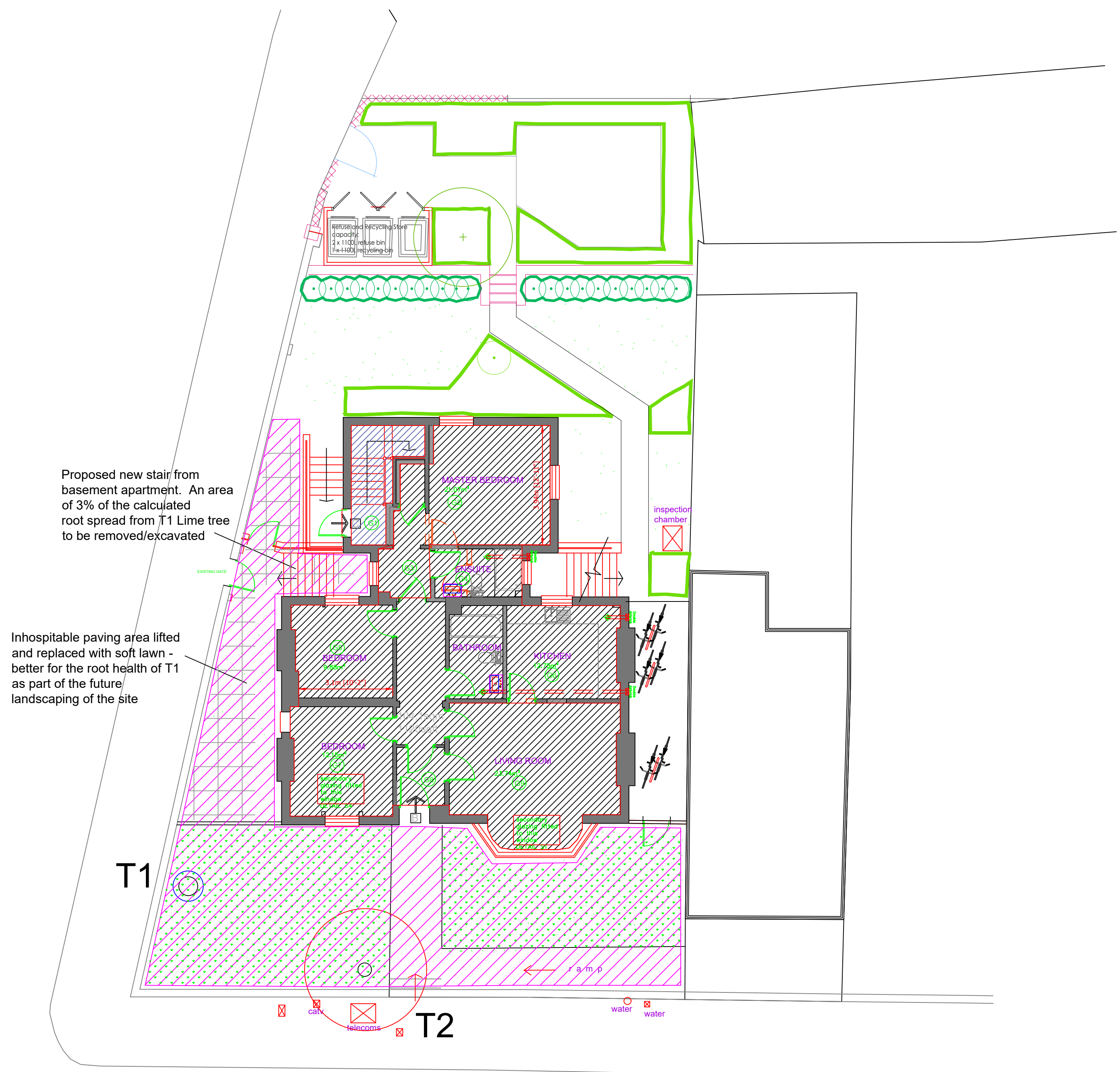
Appendix 1

Tree constraints on the existing layout

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Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)	Identification on plan
Trees unsuitable for retention (see Note)		
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 <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>	See Table 2
1 Mainly arboricultural qualities		
2 Mainly landscape qualities		
3 Mainly cultural values, including conservation		
Trees to be considered for retention		
Category A Trees of high quality with an estimated remaining life expectancy of at least 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
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	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), such that they are unlikely to be suitable for retention for beyond 40 years; 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
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees with material conservation or other cultural value
	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



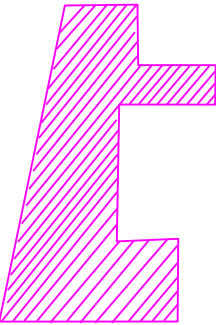
Key



Canopy spread of the trees of moderate quality and value in accordance with BS5837:2012 with an estimated remaining life expectancy of at least 20 years.



Canopy spread of trees in irreversible decline with a likely safe useful life expectancy of less than 10 years.



Likely spread of roots calculated in accordance with BS5837:2012 (m2) 'Root Protection Area'. The shape of the root spread is offset to reflect the inability of the roots from T1 or T2 being able to exploit the soils below foundation level due to the existing depth of the basement of the property, and to the west, the boundary wall and change of levels between the ground the lime tree is growing on and the pavement beyond.

An area of 113m2



Scale: 1:100

1 Christchurch Road, Reading

Appendix 3

Tree constraints on the proposed layout

February 2026 Dwg nbr 0392-SV-03

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Key

Canopy spread of the trees of moderate quality and value in accordance with BS5837:2012 with an estimated remaining life expectancy of at least 20 years.

Canopy spread of trees in irreversible decline with a likely safe useful life expectancy of less than 10 years.

Narrow hand dug trench to investigate root spread of the T1 Lime. Paving slabs lifted and the sub-base removed by hand to expose root spread.

See Tree Survey Report for more information



Scale: 1:100

1 Christchurch Road, Reading RG2 7AB

Appendix 4

Location of root investigation trench

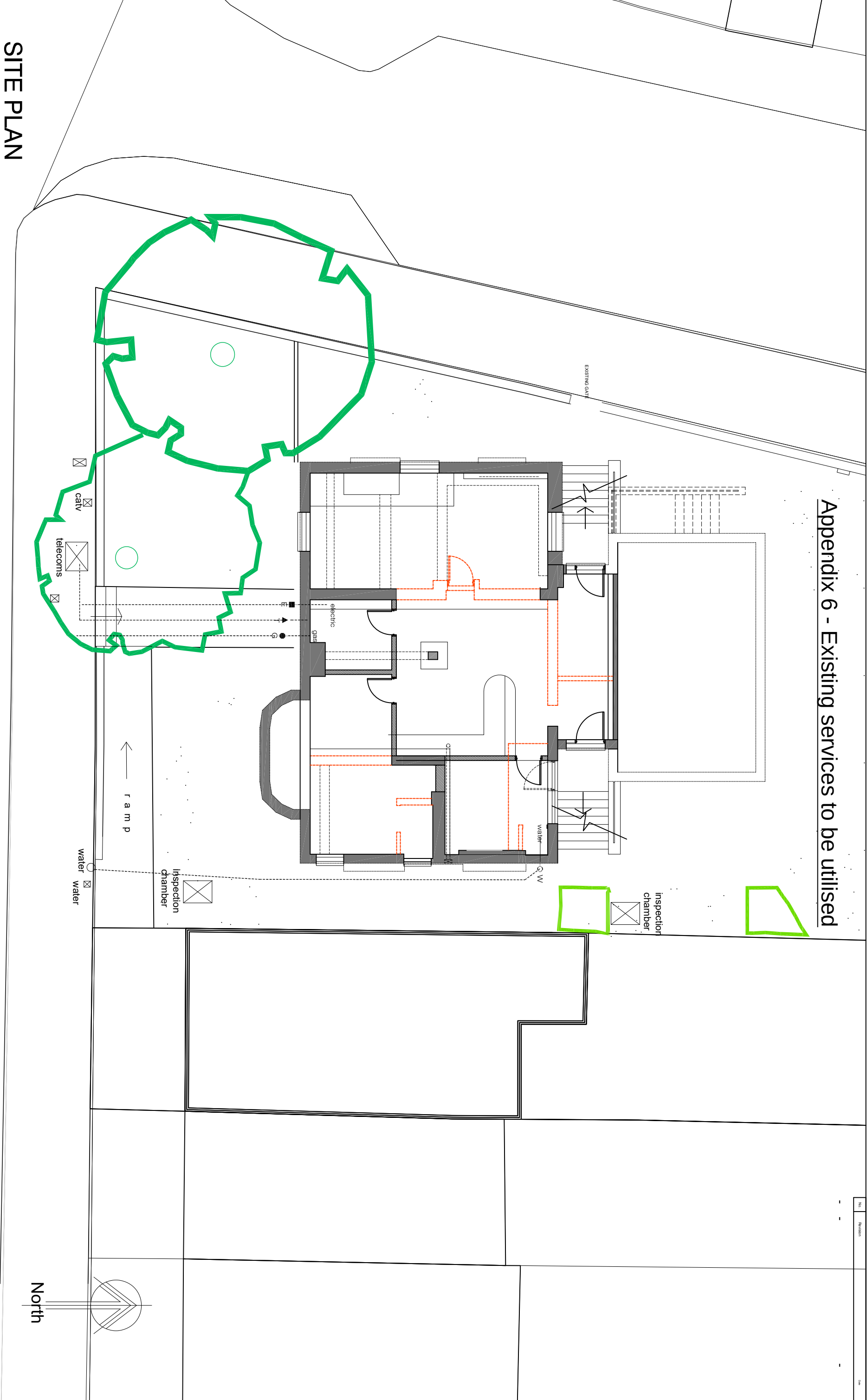
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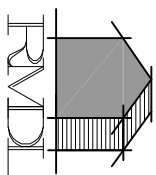
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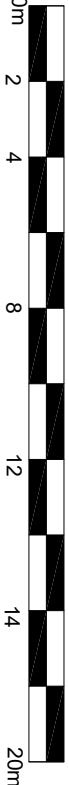
Appendix 6 - Existing services to be utilised



SITE PLAN



RAMMURTI DESIGN LTD
ARCHITECTURAL & PLANNING SERVICES
268 TILGHURST Lane, READING RG30 2NE
TEL/FAX: 01189510628 MOB: 07799883574



Proposed change of use of existing Doctors Surgery to 3no
residential apartments
at 1, Christchurch Road, Reading
for Jarvis Property Partnership

EXISTING INCOMING SERVICES
Scale: 1/200
Date: Jan 2026
CC01:S1 Rev -