



DUCKWORTHS
ARBORICULTURE LTD.

ARBORICULTURAL REPORT

BS:5837 (2012) ARBORICULTURAL SURVEY & IMPACT ASSESSMENT

50 OAKLEY ROAD
CAVERSHAM
READING
BERKSHIRE
RG4 7RN

CLIENT: SONNY KHETI

JULY 2024

Ref: 06476 / 2024

REPORT BY: SARAH DUCKWORTH

DipArb(RFS), TechCert(ArborA), M. Arbor.A, BA (Hons)
LANTRA Professional Tree Inspector

E: sarahcduckworth@hotmail.com

T: 01672 519 811 M: 07810 440546



Prepared by: Sarah Duckworth
Position: Arboricultural Consultant
Qualifications: DipArb(RFS),TechCert(ArborA),M. Arbor.A, BA (Hons),
LANTRA Professional Tree Inspector

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EXECUTIVE SUMMARY

I have been instructed by Mr. Sonny Kheti, owner of 50 Oakley Road, Caversham to survey a Walnut tree at the front of 50 Oakley Road and to provide advice on the condition of the tree and the potential arboricultural impact of the proposed construction of a drop kerb within the rooting area of the tree.

Mr. Kheti intended to retain the tree as part of the building works. However, my professional assessment is that the tree is structurally poor and unsuitable for long-term retention.

My recommendation is that the tree be removed and that replacement trees be planted elsewhere on site in order to mitigate the tree's removal.

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1. INTRODUCTION

1.1 AUTHORSHIP

This Arboricultural report has been prepared by Sarah Duckworth, Arboricultural Consultant.

I have been instructed to survey a walnut and to provide advice an Arboricultural Impact Assessment relating to the proposed installation of a drop kerb to connect with an existing driveway at the front of 50 Oakley Road, Caversham.

1.2 SCOPE

The assessment of the proposed development has been made in accordance with British Standard 5837:2012 (Trees in relation to design, demolition and construction-recommendations). This is industry best practice guidance which outlines what arboricultural information should be considered at different stages of the design, planning and construction process.

The BS:5837 document enables those concerned with assessing the impact of the development on trees to form balanced judgments on the impact of development on trees.

This report is for planning purposes only and does not constitute a detailed health and safety survey.

This report is not a structural report, nor does it consider the structural integrity of the property and its use as such is invalid.

The report is for the sole use of the client and its reproduction or use by anyone else is forbidden unless written consent is given by the author.

DISCLAIMER: This is an independently produced Arboricultural Report. I have no connection with any of the parties involved in this site or application that could influence or bias the opinions expressed in this report.

1.3 CAVEATS

The report is valid for a period of two years from the date of issue being 29th July 2024 and will expire on 29th July 2026.

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2. SITE OVERVIEW

2.1 Site Description

50 Oakley Road is a detached 3-bedroom residential property situated within the centre of Caversham. The property has a side garage and front and rear gardens.

There is an existing tarmac driveway to the garage but there is currently no drop kerb to the drive. The site is fronted with low concrete blocks and a low-level wall consisting of cast concrete panels.

The dwelling is currently in a very neglected state and in need of maintenance and repair in order to become inhabitable.

2.2 Site History

The previous owner purchased the property in 2009 and for much of her residency did not carry out any garden maintenance. Historic Streetview images back as far as 2009 show a property which was overgrown with shrubbery, brambles and Sycamore saplings. The driveway entrance and one of the two pedestrian access points were blocked up and the only access to the dwelling was via a narrow pedestrian gate.



Image 1 – November 2022 Google Streetview image showing the overgrown frontage of the property



Image 2 – Historic 2016 Google Streetview image showing the overgrown property

The current owners purchased the property in 2024 by which point the centre of the plot had been largely cleared of vegetation ahead of going on the market. What remained at the front of the property were the short, topped stumps of self-seeded multi-stem Sycamore around the western boundary, close to the brick retaining wall and a Walnut and bramble adjacent to the public highway. To the rear of the garden there was a declining conifer hedge along the eastern boundary and young Sycamores around the north and west boundaries.



Image 3 – Image of the property from the sales particulars



Image 4 – Image of the property from the sales particulars

The current owners have continued to clear the site of the overgrown vegetation as part of their ongoing restoration of the property.

2.3 STATUTORY TREE CONSTRAINTS

TREE PRESERVATION ORDER

I have confirmed on the Reading Borough Council Tree Preservation Order (TPO) Directory that trees at 50 Oakley Road are not protected by any Tree Preservation Orders.

CONSERVATION AREA

50 Oakley Road is not within a Conservation Area.

ANCIENT WOODLAND

Land at 50 Oakley Road is not within Ancient Woodland or within an Ancient Woodland Buffer Zone.

2.4 PLANNING HISTORY

On 11th April 2024, the current owners submitted a planning application for a two-storey rear extension, single storey side extension and front porch, with changes to fenestration, following demolition of existing garage and conservatory.

In response to this application, Reading Borough Council's Natural Environment Officer made the following comments:

Following various correspondence since submission, it has been established that all trees in the rear garden have been removed, the front garden has been cleared (except for one tree on the frontage) and some ground works (at least) have already commenced.

As you know, we have requested basic tree information, in line with our validation requirements, and an AIA due to the ground works necessary on the frontage around the retained tree. In addition, we requested landscape principles to help mitigate the significant tree and vegetation clearance already implemented.

With reference to the following:

- *Parking Plan (0.3) {Rev 03/07/24}*
- *Tree Plan (0.3) {Rev 03/07/2024}*
- *Layout Plan {03/07/24}*
- *Boundary Treatment drawing*

Trees

The Layout Plan plots the existing tree on the frontage, as required (trunk location, canopy spread and RPA). However, the canopy spread shown doesn't appear to be entirely accurate based on the recent photo of the tree. As the diameter of the tree (at 1.5m above ground level) is not provided, we don't know if the RPA is correct and we've got no evidence on professional input to check this. It is important that this is accurate to know what special precautions are necessary in relation to the ground works around it.

I note the existing vehicular access and concrete hard standing shown, albeit this is not strictly an existing access given the lack of drop kerb – previous and current use as such would require illegally crossing the public highway. I would suggest it be more accurately labelled as 'existing hard standing' and 'new vehicular access' with the drop crossing clearly shown and labelled.

In relation to this, I assume, proposed drop crossing, this is immediately adjacent to the tree and hence excavation for this will be in its RPA and likely to cause harm to the roots. This needs to be properly assessed.

I note that a new wall is proposed and this should also properly be dealt with in relation to the tree.

Landscaping

The Tree Plan indicates the existing Bird cherry on the frontage (not accurately plotted) and 3 new trees (one in the front and two in the back) – stated as ‘saplings’. In addition, the Layout plan states: ‘Front garden laid to lawn with planted borders to side and front ‘Stepping stone’ path access to front door’. Landscaping can be secured via condition and given the new soft & hard landscaping, along with the proposed boundary treatment and extent of overall works, as previously indicated, it would suggest dealing with via condition (details attached below).*

For clarity and for your future reference the new trees should be a minimum select standard size – 10-12cm girth and 3m in height (at time of planting), rather than ‘saplings’.

In terms of the boundary treatment, the Boundary Treatment plan states: ‘existing wall to be re-built on existing foundation to match adjacent neighbour at No. 52; maximum height 1.20m. I note that the neighbour at No. 52 has railings on top of their wall, not shown on the Boundary Treatment Plan so I assume reference to No. 52 is for wall appearance only and the materials could be dealt with via condition (details attached below). It is unclear if the 1.20m is the main wall or the pillars – the latter would seem higher.

Conclusion

Subject to any clarification you might wish to seek now, it seems that landscaping and boundary treatment details could be dealt with via condition.

In relation to tree issues, as stated from the start, an AIA is required. This is a normal requirement and given the works within the RPA is a necessity. I would not expect this to be a lengthy document as there is only one tree to survey but it should cover all ground works within the RPA which would include, at least, any changes to existing surfacing (e.g. upgrading of hard, conversion of hard to soft including planting within RPAs), boundary wall installation, drop crossing installation and any necessary pruning to the tree.

The current owners have continued to clear the site of the overgrown vegetation as part of their ongoing restoration of the property. Trees on site are not protected and works have been undertaken as part of the general garden maintenance to bring the property back to a state of inhabitability.

* The tree has been incorrectly identified. The Bird Cherry referred to relates to T001 – Walnut of this report

3. ARBORICULTURAL IMPACT ASSESSMENT

3.1 NOTES ON T001 (WALNUT)

T001 (Walnut) is the only tree present on site. This is a small tree growing at the front of the property adjacent to the public highway. There has been recent trenching for services within the adjacent public highway, the nearest trench being 1.7m from the tree's base.

There is an existing tarmac driveway directly at the base of the tree and footings for a concrete paneled fence at the base of the tree. Sunken concrete blocks also run along the the front boundary.

The tree is generally in poor form with multiple pruning cuts on lower trunk. Two older branch cuts have decay and cavities present (see photos 4 & 5). There is a large split in the bark and bleeding canker / exudates from a split on trunk 1.5m above ground level (see photo 4). Multiple smaller pruning cuts where smaller branches have been removed.

In the upper canopy there is a wound from a previous branch failure at 3m. There is an additional area of damage /missing bark and associated bark necrosis on large stem at 4m over access drive.

As a result of past management, the tree now has an asymmetrical crown. Pigeon foraging has caused some defoliation towards the branch tips. Prolific ants on trunk indicate aphids in the canopy.



Image 4 – Lower trunk and base



Image 5 – T001 (Walnut) asymmetrical canopy over public highway



Images 6 & 7 – Old pruning cuts on lower trunk and split in bark

T001 (Walnut) grows at the front of the property and has some public amenity value when viewed from Oakley Road. However, the tree has been subject to significant pruning works in the past leaving an impaired form with an asymmetrical crown.

The historic poor management has caused permanent harm to the tree's shape and physiological health. The tree now has an asymmetrical canopy and a greatly impaired structural form such that it would not qualify as a higher category 'A' or 'B' tree. I therefore have designated T001 (Walnut) to be low quality a category 'C' tree and one which would not pose a constraint to development.

3.2 DROP KERB

The owner of 50 Oakley Road wishes to continue to use an existing tarmac driveway which is in situ and requires no modification. However, a drop kerb is required between the driveway and public highway. The Council has raised a concern that the drop kerb may sever tree roots and therefore impact on the health of the tree.

It is evident on site that although the proposed drop kerb will be 2.2m from the base and within the generic Root Protection Area of the tree, few roots are anticipated in this area. Between the tree and the kerb there are foundations for a concrete boundary fence panels as well as sunken concrete blocks which will have deflected the growth of tree roots.

In addition, there are two areas of repair in the pavement indicating recent service trenches which have been excavated between 2020 and 2022. These are believed to be for fiber optics and freshwater (one trench connects to a stopcock / water cover) . Fiber optics are installed 30-60cm below ground level in urban areas and freshwater pipes are usually 75cm below ground level to reduce the risk of freezing.



Images 8 – Existing development / trenching within the rooting area of T001 (Walnut)



Images 9-11 – Dated images showing additional service trenches within the rooting area of T001 (Walnut)

Roots grow predominantly near the soil surface – over 90% of all roots and virtually all the large structural supporting roots are in the upper 60cm of soil. Therefore, trenching for services will have severed the roots growing towards the point of the proposed drop kerb. Although there may have been some regrowth in the two years since the trenching was carried out this will be minimal growth unlikely to reach the kerb.

I therefore consider that if the tree is to be retained, it would be possible to install a standard drop kerb at the front of the existing driveway for 50 Oakley Road without any impact or detriment to the tree therefore no special engineering measures would be required.

3.3 CONCLUSIONS

T001 (Walnut) is a low-quality tree which has an asymmetrical canopy and a greatly impaired structural form. My recommendation is that the tree be removed and replaced with two trees planted along the front boundary of the property.

The proposed new drop kerb would be located approximately 2.2m from the base of the Walnut and therefore within its root protection area. However, two recent service trenches have been excavated along the pavement next to the tree which would have severed any tree roots in this area. Therefore, although it would be possible to install the drop kerb without any detriment to tree roots and retain the tree in situ, my recommendation is that it is in the interests of the longer-term tree cover on site to fell the tree and carry out new planting on completion of the building works.

T001 is a category 'C' tree which would not usually pose a constraint to development. I therefore recommend that the tree be removed as part of the proposed building renovation works and that provision should be made for planting a number of specimen trees in a suitable location on site.

APPENDIX A – SURVEY APPRAISAL

The tree was surveyed on Monday 22nd July 2024.

The weather conditions were dry and sunny. Visibility was satisfactory.

Trees are dynamic living organisms subject to change, whose health and condition can be subject to significant change influenced by internal and external factors. The assessment of trees in this report are based on the condition assessed at the time of inspection and are valid for 24 months.

If the condition of the trees evidently changes or the trees are subject to extreme weather conditions before this date; further inspection may be required. No tree is ever absolutely safe due to the unpredictable laws and forces of nature.

The tree survey identified 1 individual tree growing adjacent to the site which was relevant to the proposed building works. The tree was assessed for its quality and benefits within the context of the proposed development and categorised in accordance with the recommendations in the BS:5837:2012.

APPENDIX B – SURVEY KEY

Ref:	T001 = Tree 1	G001 = Group 1
	A001 = Area 1	W001 = Woodland 1
Species:	Common name (Botanical name)	
Height:	Measured with a clinometer (m) where possible or estimated when part of a group	
Stem:	Stem diameter taken at 1.5m with girth tape or rule and recorded in millimeters	
Branch spread:	Paced measurements at compass points or with a laser measure.	
Crown clearance:	Existing height above ground level of canopy and / or first significant branch direction of growth in metres e.g., 2.4 (N) where relevant.	
Epics:	Lower canopy created by epicormic growth.	
Age Class:	Newly planted - 3 years following planting.	
	Young - Tree well established but with juvenile crown form	
	Young Mature - Tree in first third of usual life expectancy for species	
	Mature - Tree in second third of usual life expectancy for species	
	Over Mature - Tree in final third of usual life expectancy for species / exhibiting signs of crown retrenchment & senescence.	
	Veteran - Older than usual for species or with historical/ cultural / ecological value	
General Observations:	Made with reference to physiological condition (health, vigour) and structural condition, noting evidence of decay, structural weakness and physical defect and preliminary management recommendations.	
Estimated Remaining Contribution:	Estimated in years - less than 10, 10-20, 20-40, 40+	
BS: 5837:2012 category rating:	In accordance with the guidelines of the British Standard.	
	 Category 'A' tree (Green)  Category 'C' tree (Grey)	
	 Category 'B' tree (Blue)  Category 'U' tree – Fell (Red)	
RPA Area	BS:5837 (2012) Root Protection Area calculation in square metres	
RPA Radius	BS:5837 (2012) Root Protection Area calculation circle radius in metres. [†]	

[†] The root protection area radius is for information only and may not be appropriate in every case. BS:5837 advises that *'the RPA for each tree should initially be plotted as a circle centered on the base of the stem. Where pre-existing site conditions or other factors indicate that rooting may have occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distributions.'*

APPENDIX C - BS:5837 (2012) CHART FOR TREE QUALITY ASSESSMENT

Category & Definition		Criteria (including sub-categories where appropriate)		
• Trees unsuitable for retention				
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 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. NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve.			
	<u>Mainly Arboricultural Qualities</u>	<u>Mainly Landscape Qualities</u>	<u>Mainly cultural values including conservation</u>	
• Trees considered suitable 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.	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 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 remedial 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 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 contribution to the wider locality.	Trees with material conservation or other cultural value.	
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 150mm.	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.	

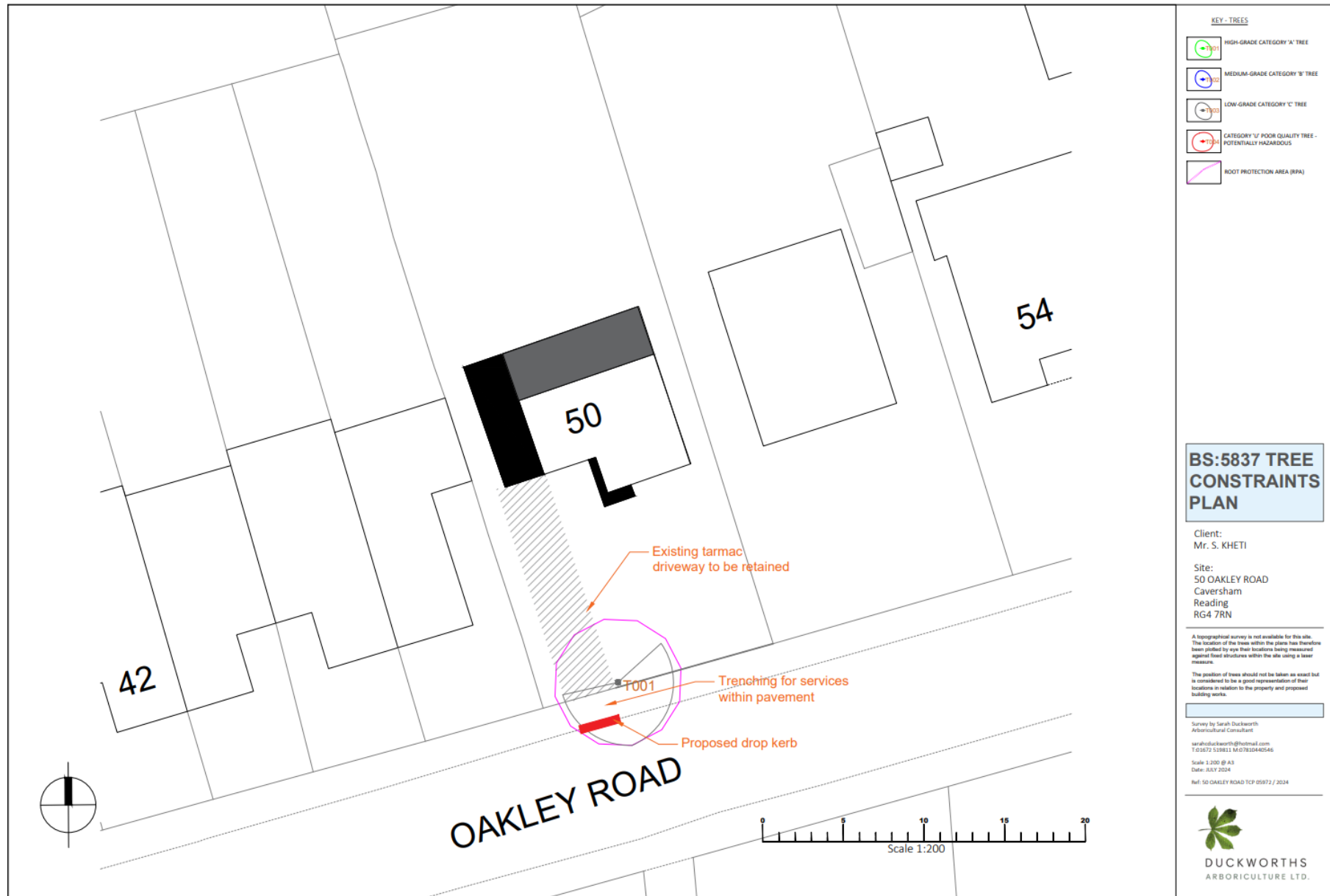
APPENDIX D - TREE SURVEY DATA

Ref.	Species	Measurements	Canopy Spread	BS:5837 Category	RPA	Condition
T001	Common walnut (<i>Juglans regia</i>)	Height (m): 7.5 Stem Diam(mm): 330 Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: 10+ Years	North: 3.5m East: 4m South: 3.5m	C1	Radius: 4.0m. Area: 50 sq m.	Small tree at front of property. 4.7m from the western boundary. Existing driveway at base. Storage of materials at base. Multiple pruning cuts on lower trunk with decay and cavities bleeding canker from split on trunk 1.5m above ground level. Multiple smaller pruning cuts where branches removed. Wound from branch failure at 3m. Area of damage /missing bark on large stem at 4m over access drive. Asymmetrical crown. Pigeon defoliation. Drive 3m wide. Trenching for services 1.7m from tree. Prolific ants on trunk – aphids presumably in crown.

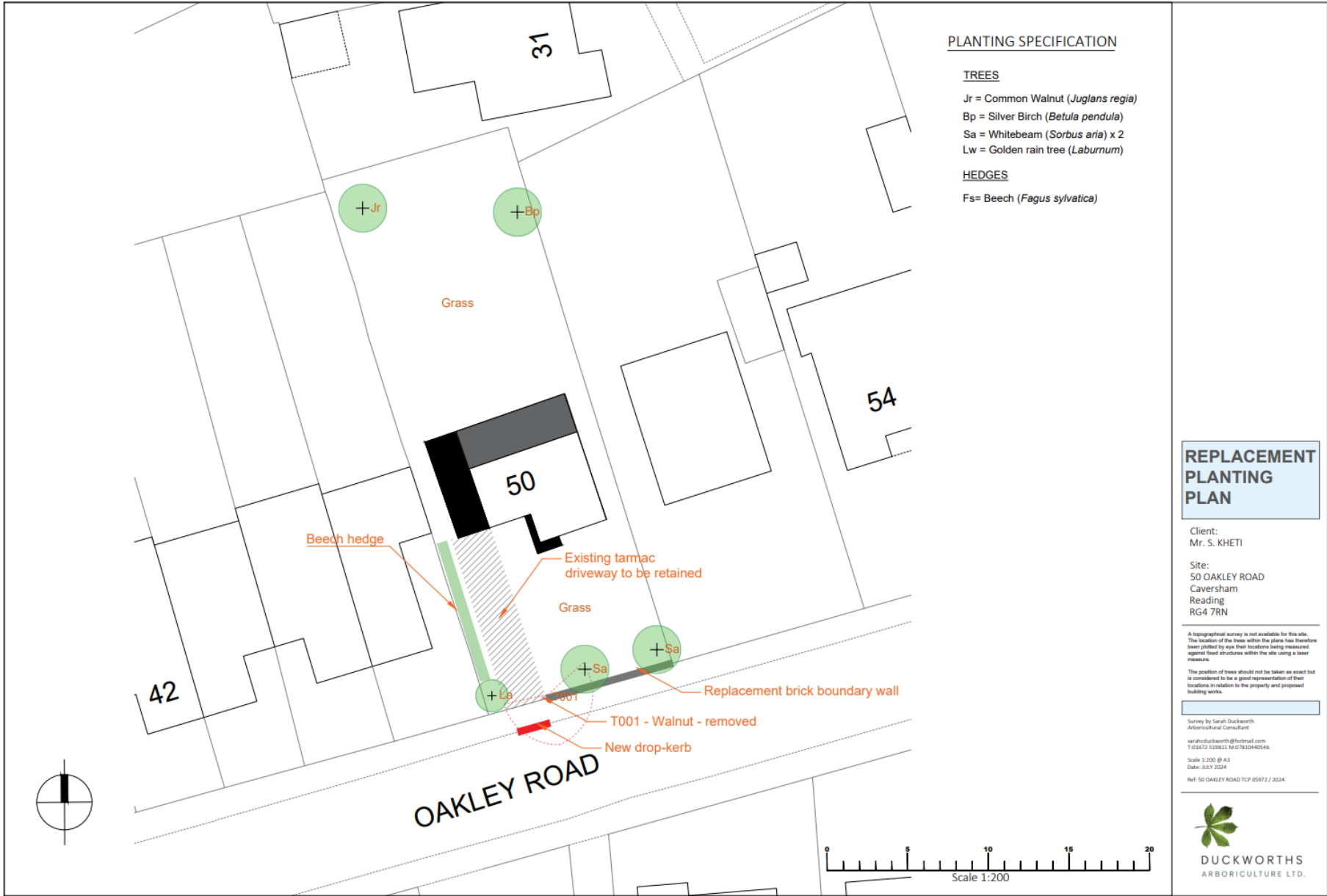


Photos 12 & 13 – T001, Norway Maple viewed from within the site (12) and the public highway (13).

APPENDIX E – TREE CONSTRAINTS PLAN



APPENDIX F - REPLACEMENT PLANTING PLAN



APPENDIX G – TREE PLANTING STANDARDS

The following trees are proposed from Chew Valley Trees, a reputable supplier of quality container-grown tree stock and can be reserved for delivery in November 2024 pending approval of the scheme by the Local Authority.

TREES

- 1x Walnut (*Juglans regia*)
- 1x Silver Birch (*Betula pendula*)
- 1x Laburnum (*Laburnum x wossii*)
- 2x Whitebeam (*Sorbus aria*).

HEDGING

- 23 x Beech (*Fagus sylvatica*)

The five new trees will enhance the setting of 50 Oakley Road and provide the next generation of mature trees on site. A have chosen a mix of native and non-native planting suited in scale and species to the property which will thrive in this location and show resilience to changing growing conditions from climate change.

Trees from Chew Valley are well formed trees between 2-3.5m high (depending on species) in 15lt pots. As smaller trees, the new planting will establish quickly and require less post-planting maintenance. It will give the new trees the best possible chance to establish and thrive.

Beech hedging will be 1.25-1.5m tall whips planted bare root, 50mm from the boundary retaining wall at 0.5m spacings.

The tree planting scheme has been approved by the client.

TREE PLANTING GOOD PRACTICE

The following guidelines will be followed to ensure successful tree establishment:

- Trees will be container grown and planted in November / December when soils are moist and free from frost.
- Planting trees too deep is a major cause for premature decline. Tree planting pits will be dug to the same depth as the container to prevent settlement and sinking post planting.
- The width of the planting pits will be a minimum of one and a half times as large as the root-ball/container and up to a maximum of two times as wide, if the soil is very compacted. This means that a root-ball of 40cm wide will be planted in a hole at least 60cm wide. The

soil backfilled into the planting pits will consist of 1/3 organic matter (well rooted manure or other compost) with 2/3 existing soil.

- The young trees will be staked with a low, diagonal stake set as low down the tree as possible to allow for canopy and stem movement whilst supporting the structural function of the root system.
- Tree stakes will be driven into the ground to a sufficient depth to provide full support before the tree is planted. Supporting straps around the stem will allow for the radial expansion of the stem. A rubber bung will prevent the tree from coming into direct contact with the tree stake.
- The health and development of the young trees should be assessed annually and on an adhoc basis as required during the year to inform maintenance operations and any required actions. Assessment to include - foliage appearance, leaf size, leaf canopy density, extension growth and girth development.

TREE PLANTING PIT DESIGN

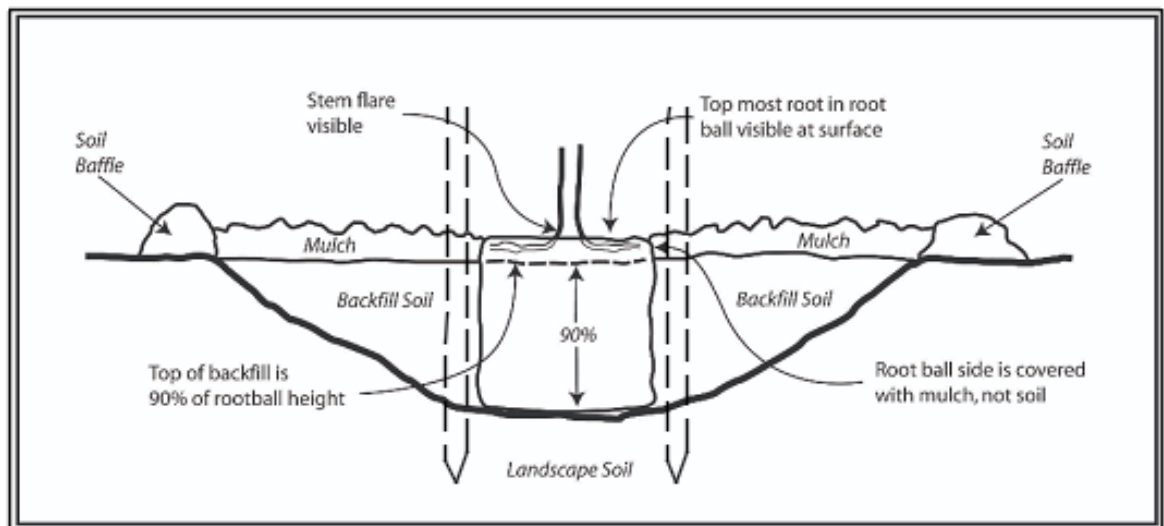


Figure 1. Tree Planting Pit specification

- Tree stakes and ties should be inspected at least annually for stability and firmness, ensuring that ties are performing effectively and not causing damage to the tree through chaffing or rubbing of the tree against the stake. Ties must be fitted correctly so that they provide the necessary support to the tree but not be so tight that they constrict and inhibit the natural growth of the tree.
- Within the first three years, if the trees are found to be leaning, they will be re-straightened. At the end of the second and third season assess tree establishment and remove the stake and tie provided the tree has established well enough to longer require supporting or protecting.
- Crossing or damaged wood can be removed along with any dead or diseased branches.
- Areas around the base of trees are to be kept free from weeds maintaining a 0.5 metre diameter mulch ring surround to trees free from grass, weeds and rubbish at all times.

- Strimmers can cause irreparable damage to the stems of young trees and plants and should not be used near tree trunks.
- Should any trees within a period of five years following planting; die, be removed, fail to thrive or become seriously damaged or diseased; they will be replaced with another in of a similar size and species.

APPENDIX F – SURVEYOR QUALIFICATIONS

This Arboricultural Survey was carried out by Sarah Duckworth, Independent Arboricultural Consultant, trading as Duckworth's Arboriculture Limited.

I have over 19 years' experience working in the field of Arboriculture and for the past 16 years I have worked as a Local Authority Tree Officer both directly and independently providing contracted support. Since 2010 I have worked as a private consultant carrying out a range of Arboricultural Reports and Assessments for private clients.

I hold the Royal Forestry Society's Professional Diploma (Level 6) for which I received the Lockhart Garrett Award.

I also hold the Arboricultural Association's Technicians Certificate (with Distinction) and am a LANTRA qualified Professional Tree Inspector.

I am a Professional Member of the Arboricultural Association.