

Arboricultural Impact Assessment (AIA) For the proposed construction of a rear infill extension			
Site/Project:	2 West Mallion, Haywards Heath, West Sussex, RH16 4HP	Author:	Matthew Jones BSc (Hons), MArborA
Prepared for:	Ms T Needle	Date:	3 April 2025
Document Ref.	MDJAC-BS25135-AIA-01	Local Authority:	Mid Sussex District Council

1. INSTRUCTIONS AND SCOPE OF WORK

Instruction and context

- 1.1. This Arboricultural Impact Assessment (AIA) has been instructed by Ms T Needle, the owner of the subject property, 2 West Mallion, Haywards Heath, West Sussex, RH16 4HP.
- 1.2. The proposals comprise the construction of a rear infill extension between two pre-existing extensions to provide additional living space. An existing foul water manhole will need to be re-located as part of the proposals.
- 1.3. This report is intended to be submitted to Mid Sussex District Council as part of the supporting technical information for a planning application and it has been prepared in accordance with British Standard BS5837:2012 *'Trees in relation to design, demolition and construction – Recommendations'*.
- 1.4. **The contents of this report are based on the arboricultural and design information available at the time of writing. Detailed design elements such as foundation designs, underground service routes, hard and soft landscaping and other such information is included where known. If it is not available at present, subsequent submissions with revised arboricultural assessments can be requested through the use of appropriate planning conditions.**
- 1.5. The agreed scope of work is outlined below:
 - To undertake a site visit and tree inspection of the trees within influencing distance of the proposals, in accordance with BS5837:2012; and
 - To produce this arboricultural impact assessment; identifying the impact of the proposals and what working methodologies or protection measures should be adhered to, to ensure successful integration of the proposals into the existing landscape.

2. STATUTORY CONTROLS

2.1. I have consulted the MSDC website¹ which suggests that some of the trees are afforded protection by a Tree Preservation Order (TPO). Specifically, two oak trees (T1 and T4) and an off-site pine tree (T5) appear to be covered by TPO ref. CU/04/TPO/83.

2.2. The site is not within a designated conservation area.

3. IMPACT ASSESSMENT METHODOLOGY

3.1. In order to systematically assess the overall impact of the scheme, I have devised a series of categories which seek to provide a summary of the likely, post-planning site conditions on the presumption that planning consent is gained, and the proposed scheme as detailed within this report is built out.

3.2. My conclusions relating to the overall arboricultural impact of the scheme are summarised at **Table 1** below.

Table 1: MDJAC magnitudes of impact summary.

Impact category	Description
High	Total or extensive alteration to the existing arboricultural character of the site, or the principal arboricultural features on or adjacent to it. The post-planning situation is significantly and adversely different.
Medium	Partial alteration to the existing arboricultural character of the site, or the principal arboricultural features on or adjacent to it. The post-planning situation is partially different.
Low	Minor alteration to the existing arboricultural character of the site, or the principal arboricultural features on or adjacent to it. The post-planning changes will be distinguishable, but comparable to the existing context.
Negligible	No or very minor alteration to the existing arboricultural character of the site, or the principal arboricultural features on or adjacent to it. The post-planning situation is not readily distinguishable from the existing context with no material adverse impact.

4. SITE ASSESSMENT

Survey details

4.1. I undertook a site inspection and tree survey on Thursday 27 March 2025. Weather conditions at the time were clear, dry and bright and deciduous trees were not in leaf.

4.2. The dimensions and assessments of the trees contained within this document reflect their condition at the time of the survey. I surveyed the trees from within the boundaries of the site only. The presence of additional physiological or structural defects that may only be visible from viewpoints with

¹ (Mid Sussex District Council, 2025)

restricted access cannot be discounted. All trees were surveyed from ground level only, aided by the use of binoculars where considered necessary. Other aids included an acoustic hammer and a steel probe, both of which were used where necessary to assess and evaluate the extent of any dysfunctional wood, cavities or other structural defects where necessary. The information contained within this document does not constitute a full hazard or risk assessment, and therefore I (MDJ Arboricultural Consultancy Limited) make no guarantee of their stability or safety.

4.3. I collected the baseline data using a handheld tablet, which was then exported to Microsoft Excel to produce the tree survey schedule at **Appendix 1**. The locations of the trees have been plotted using measurements taken on site. This information was exported to produce a Tree Constraints Plan (TCP), onto which the proposed layout has been reproduced to produce the Tree Protection Plan (TPP) at **Appendix 2**.

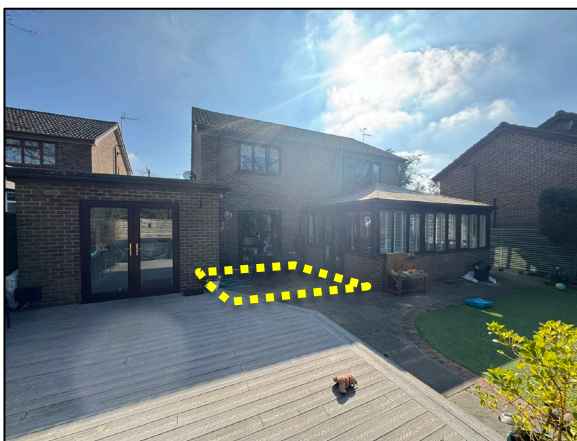
Site description

4.4. The site comprises the existing two-storey detached property, including various past extensions, and its associated front and rear gardens. Ground levels slope down from West Mallion towards the property with the front garden comprising a driveway for two cars and a small area of soft landscaping; no trees exist at the front of the property.

4.5. To the rear, the garden has been levelled to form a patio, an area of artificial grass, and a raised decking area, all of which sit approximately 500mm higher than the northern end of the garden. A retaining wall exists to separate the levels, as shown below.

4.6. The footings of the retaining wall, the foundations of the adjacent properties, and the construction of the adjacent highway (Franklynn Road) are all likely to have influenced the direction and volume of root development. As such, the appended TPP shows Root Protection Areas (RPAs) that have been modified in shape whilst maintaining the areas recommended by BS5837:2012, so as to give a more realistic impression for root distribution.

Photograph 1: below left, looking westwards across the garden. Approximate extent of extension is shown in yellow; and Photograph 2: below right, looking southwards at the existing rear elevation. Approximate extent of extension in yellow.



Photograph 3: below left, showing the existing retaining wall in cyan; and

Photograph 4: showing the existing retaining wall close to the base of T1.



5. ARBORICULTURAL IMPACT ASSESSMENT

- 5.1. None of the surveyed tree will require removal.
- 5.2. None of the surveyed trees will require facilitative pruning in order to implement the proposals.
- 5.3. None of the proposed elements are within the RPAs of the retaining trees and therefore, the implementation of standard tree protection measures such as temporary tree protection fencing (TPF) should provide an acceptable level of protection against development-related pressures. Accordingly, I set out my recommended protection measures below, and on the appended Tree Protection Plan.

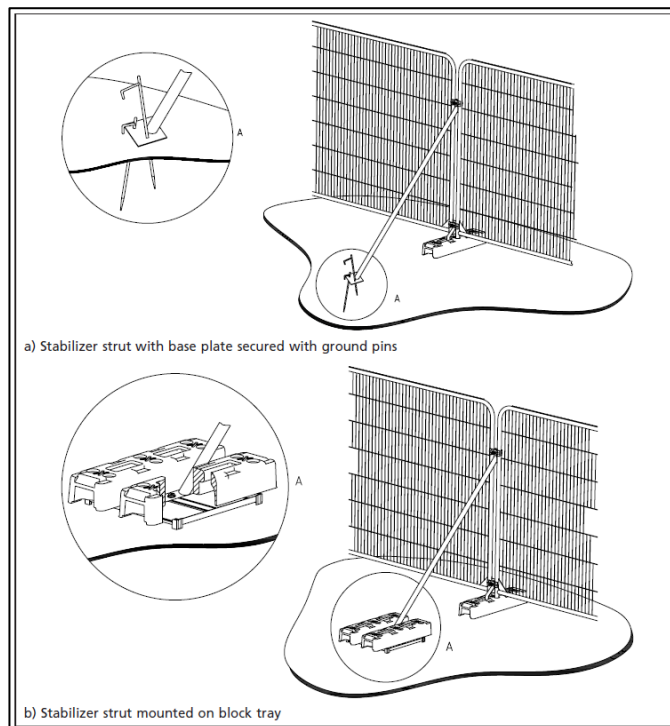
Tree Protection Fencing (TPF)

- 5.4. The rooting environments of trees identified for retention will be safeguarded by the erection of temporary tree protection fencing to the alternative specification² and set out below. These locations are denoted by bold red lines on the appended TPP.
- 5.5. The alternative specification comprises 2m tall, welded mesh panels such as 'heras' panels, set within rubber feet to avoid the need for excavation within the RPAs of retained trees. Individual panels will be joined together using a minimum of two anti-tamper couplers that can only be removed from within the construction exclusion zone. Stabilising struts secured to a base plate with road pins, or to a block tray where fencing is to be erected onto existing hard surfaces, will be incorporated between every other panel.
- 5.6. Existing vegetation will be removed by hand to enable the location of the TPF to be accurately set out by an appropriately qualified engineer.

² (The British Standards Institution, 2012)

5.7. The TPF will remain in place to serve as physical protection for retained trees for the duration of the demolition and construction activities and will only be removed immediately prior to the landscaping phase once all large plant and machinery have been removed from site.

Figure 1: alternative fencing specification for protective barrier.



5.8. Temporary signage will be secured to the fencing at appropriate intervals to inform site operatives of the purpose of the fencing. Signage will read **'TREE PROTECTION FENCING – KEEP OUT'** or similar, as shown below.

Figure 2: example protective fencing signage.



Construction Exclusion Zones (CEZs)

5.9. Construction exclusion zones will be formed by the erection of the tree protection fencing to the specification set out above. Within the CEZs, the following principles will be observed for the duration of the project:

- No plant or machinery will access the CEZ;
- No mechanical excavation will take place;
- Unplanned excavations will be limited to hand-digging and will be considered by the project arboriculturist before commencement;
- Existing soil levels will not be altered in any way, unless for the removal of existing turf layers, which will be undertaken using hand tools only;
- No machinery or materials of any kind will be stored;
- No liquids or chemicals including fuels, oils, builders' sand or concrete mix will be stored; and
- No fires will be permitted.

6. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

6.1. Based on my recent visit, and the above points, I make the following conclusions:

- None of the existing trees require removal to facilitate the proposed works, and none will require facilitative pruning;
- All works are to be located outside of the RPAs of retained trees, which have been modified to reflect the effects of potential subterranean barriers and challenging rooting environments;
- The existing retaining wall and short timber fencing acts as a ready made physical barrier between the working area and the retained trees. However, this could be bolstered by the addition of temporary tree protection fencing using by installing the alternative specification, or similar, recommended by BS5837:2012; and
- Accordingly, I consider the likelihood of adverse physiological impacts occurring within the retained trees to be low, subject to adherence to the prescribed protection measures.

Recommendations

- 1) Ensure that the protective measures set out within this report and shown on the appended tree protection plan are erected prior to the commencement of works and followed stringently throughout construction.**

Matthew Jones

Matthew Jones, BSc (Hons), MArborA
Director & Arboriculturist

3 April 2025

REFERENCES

- Mid Sussex District Council. (2025). *Tree Preservation Order (TPO) Map*. Retrieved April 2, 2025, from <https://www.midsussex.gov.uk/planning-building/trees-and-hedgerows/tree-preservation-order-tpo-map/-order-tpo-map/>
- The British Standards Institution. (2012). British Standard BS5837:2012 'Trees in relation to design, demolition and construction - Recommendations'. BSI Standards Limited.

APPENDIX 1: TREE SURVEY SCHEDULE

Brambles End
30 Blakes Farm Road
Southwater
West Sussex
RH13 9GJ

www.mdjac.co.uk | info@mdjac.co.uk

Company Registration No.
(England & Wales): 13900533

TREE SURVEY SCHEDULE

Site Address: 2 West Mallion, Haywards Heath, West Sussex, RH16 4HP

Prepared For: Ms T Needle

Reference: MDJAC-BS25135-TSS-01

Survey date: 27 March 2025

Brambles End
30 Blakes Farm Road
Southwater
West Sussex
RH13 9GJ

www.mdjac.co.uk | info@mdjac.co.uk

Company Registration No.
(England & Wales): 13900533

BS5837:2012 Tree Survey Schedule - Explanatory Notes

This document is based on a site visit and inspection undertaken by Matt Jones of MDJ Arboricultural Consultancy Ltd on 27/03/2025; deciduous trees were not in leaf.

The dimensions and assessments of the trees contained within this document reflect their condition at the time of the survey. I surveyed the trees from within the boundaries of the site only. The presence of additional physiological or structural defects that are only visible from restricted-access viewpoints cannot be discounted.

All trees were surveyed from ground level only, aided by the use of binoculars where considered necessary. The information contained within this document does not constitute a full hazard or risk assessment, and therefore MDJ Arboricultural Consultancy Ltd makes no guarantee of their stability of safety.

1. Tree no.

Individual number assigned to the tree for identification, commencing at 1.

2. TPO no.

Number assigned to the tree in the, as shown on the LPA's interactive TPO map.

3. Species

Common and botanical names are provided. Botanical names are shown in italics.

4. Height

Measured using a clinometer or laser rangefinder, given in metres.

5. Trunk diameter

Trunk diameter measured at 1.5m, unless stated otherwise, in accordance with Figure C.1 of British Standard BS 5837:2012 *"Trees in relation to design, demolition and construction - Recommendations"*.

6. Radial crown spread

Extent of branches from the centre of the trunk to the tips in the principal cardinal directions, rounded up to the closest half metre. For trees with symmetrical canopies, an average measurement is provided.

7. Crown clearance

Height above ground level of the lowest live branch, in metres.

8. Height to first branch

Height above ground level of the origin of the lowest branch, in metres.

9. Age class

Young: recently planted, or yet-to-be established specimen, usually below 10m in height, subject to species characteristics;

Semi-mature: a recently established specimen, usually with excurrent morphology, and yet-to-reach its ultimate proportions, subject to species characteristics;

Mature: fully established, complex, decurrent or broad branching structure, and has achieved or is nearing its ultimate proportions, subject to environmental conditions and species characteristics;

Over-mature: has reached maturity, but is showing symptoms of minor decline within its canopy;

Veteran: has a large trunk diameter for its species, but displays evidence of veteranisation such as fungal colonisation, decay, hollowing, and has commenced retrenchment within its canopy;

Ancient: exceeds the typical size and age of the species, with a very large trunk diameter; with extensive fungal colonisation, decay, hollowing and veteran characteristics; has undergone significant retrenchment and is within the latter stages of life.

10. Physiology

General health and biological function, taking into account a healthy specimen of its size, age, species and location.

11. Structure

Structural condition of the tree, based on root (visible portions only), basal, trunk, stem and branch morphology.

Good: No morphological defects and no fungal or bacterial colonisation;

Fair: only minor morphological defects and a very low likelihood of failure; no pathological colonisation;

Poor: irremediable and significant morphological defects, leading to an increased likelihood of failure.

12. Comments

Comments have been made where appropriate.

13. BS5837:2012 Category

Category assigned to the tree, based on its arboricultural quality, arboricultural landscape value and potential, in accordance with Table 1 of British Standard BS 5837:2012 *"Trees in relation to design, demolition and construction - Recommendations"*.

14. RPA radius

Radius of the root protection area, based on the trunk diameter of the tree, in accordance with Section 4.6 of British Standard BS 5837:2012 *"Trees in relation to design, demolition and construction - Recommendations"*.

Table 1: Cascade chart for tree quality assessment

Category and definition	Criteria			Identification on plan
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 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			Red
Trees to be considered for retention				
	1. Mainly arboricultural qualities	2. Mainly landscape qualities	3. Mainly cultural values, including conservation	
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)	Green
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	Trees with material conservation or other cultural value	Blue
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 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	Grey

Client name: Ms T Needle
 Site: 2 West Mallion, Haywards Heath, RH16 4HP
 Reference: MDJAC-BS25135-TSS-01
 Survey date: 27/03/2025

Tree Survey Schedule



No.	TPO no.	Common name	Height [m]	Trunk diameter [mm]	Radial Crown Spread [m]	Height to 1st Branch [m]	Crown Clearance [m]	Age class	Physiology	Structure	Comments	Category	RPA Radius [m]
T1	T6 CU/04/ TPO/83	English oak	14	365 520	N4.5m E5.5m S4.75m W4.5m	5	5	Mature	Fair	Fair	Twin-stemmed. Reduced previously.	B (1)	7.62
T2	N/A	Sycamore	11	340	N4m E4.75m S5.25m W2m	4	4	Early-mature	Good	Fair	Off-site tree on embankment. Heavily ivy-covered trunk restricts assessment of structure. Suppressed. Appears to be of moderate quality and landscape value.	B (2)	4.08
T3	N/A	Sycamore	15 (est.)	380 (est.)	N4m E1.5m S3.5m W4m	4	4	Early-mature	Good	Fair	Off-site tree in rear garden of No. 3. Previously reduced to c. 11m x 2.5m. Of moderate quality and landscape value.	B (1)	4.56
T4	T9 CU/04/ TPO/83	English oak	16 (est.)	550 (est.)	N6.5m E6.5m S6.5m W6.5m	5	5	Mature	Good	Good	Off-site tree in rear garden of No. 3. Recently reduced to c. 14m x 5m. Appears to be of moderate quality and landscape value.	B (1)	6.6
T5	T4 CU/04/ TPO/83	Scots pine	16 (est.)	750 (est.)	N7m E5m S7m W6m	5	5	Mature	Good	Good	Off-site tree in rear garden of No 1. Key arboricultural feature of the belt of trees in which it stands. Of high quality and landscape value.	A (12)	9
Groups of trees													
G1	N/A	Mixed species	6-9 (est.)	75-200 (est.)	N2m E2m S2m W2m	1	1	Semi-mature	Fair	Fair	Principal species include sycamore, hawthorn and common ash. Self-seeded group of trees growing on embankment. Ivy covered. Individually of limited quality or landscape merit, but collectively forming effective screening.	C (1)	2.4
G2	N/A	Lawson cypress	3 (est.)	75-125 (est.)	N1m E1m S1m W1m	1	1	Semi-mature	Fair	Fair	Small regularly trimmed trees forming a small screen.	C (1)	1.5

(est.) denotes estimated dimensions

APPENDIX 2: TREE PROTECTION PLAN

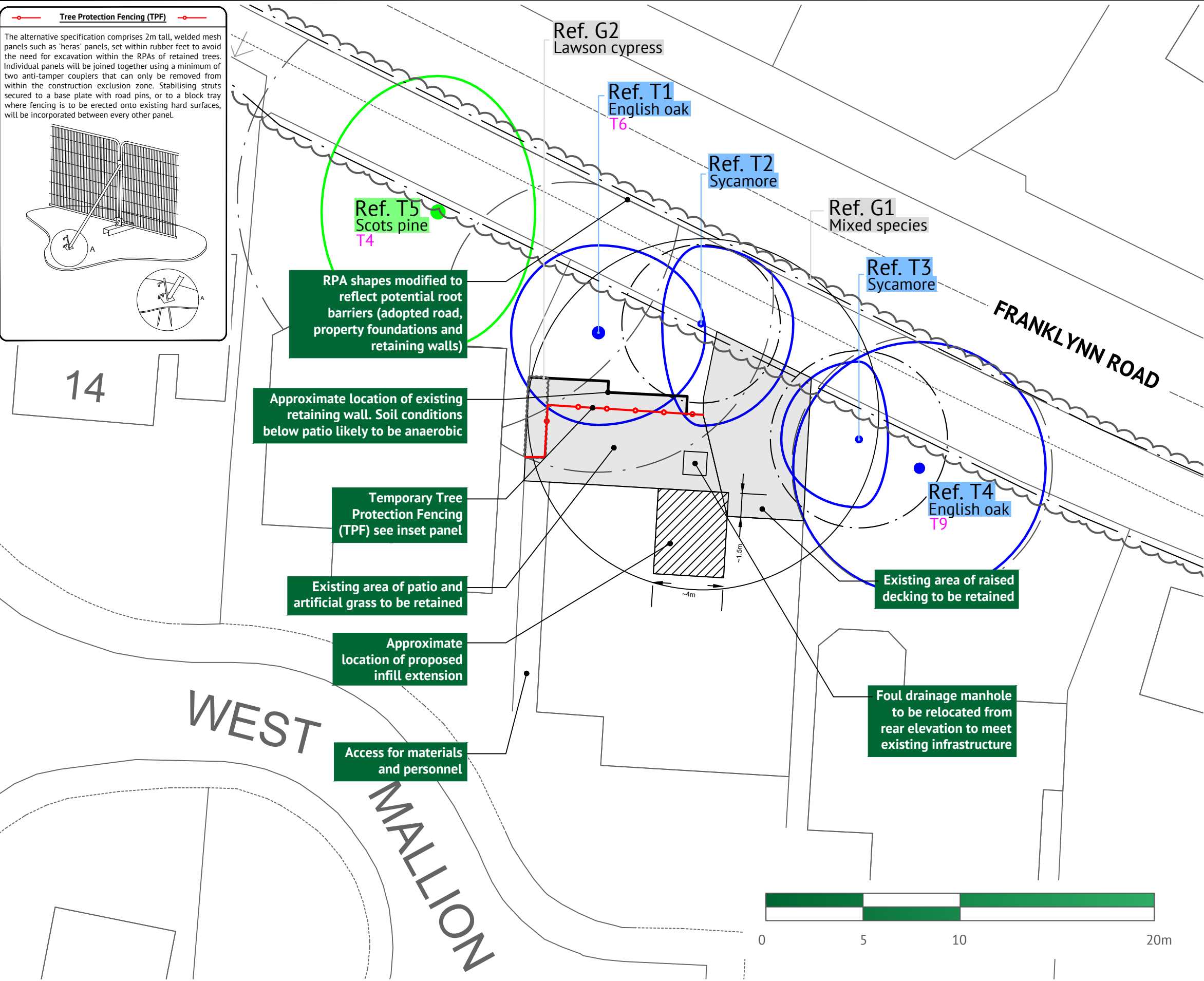
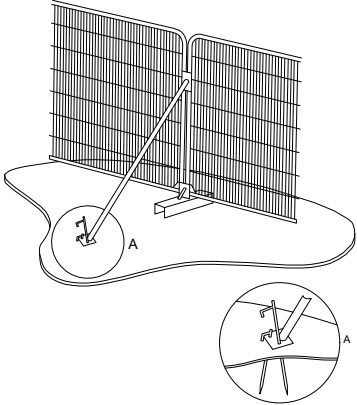
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Tree Protection Fencing (TPF)

The alternative specification comprises 2m tall, welded mesh panels such as 'heras' panels, set within rubber feet to avoid the need for excavation within the RPAs of retained trees. Individual panels will be joined together using a minimum of two anti-tamper couplers that can only be removed from within the construction exclusion zone. Stabilising struts secured to a base plate with road pins, or to a block tray where fencing is to be erected onto existing hard surfaces, will be incorporated between every other panel.



MDJ Arboricultural Consultancy Ltd
Drawing Legend

- Category 'A' tree
- Category 'B' tree
- Category 'C' tree
- Category 'U' tree
- Root Protection Areas (RPAs)
- Tree Protection Fencing (TPF)



Drawing History

Rev	Date	Comments

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Site:	2 West Mallion, Haywards Heath, RH16 4HP
Client:	Ms T Needle
Title:	Tree Protection Plan (TPP)
Date:	April 2025
Dwg No:	MDJAC-BS25135-TPP-01
Scale:	1:200 @ A3