Landmark Trees

ARBORICULTURAL METHOD STATEMENT

50 Avenue Road

London

NW8 6HS

REPORT PREPARED FOR:

Aprirose Real Estate Investment

20 Balderton Street

London

W1K 6TL

REPORT PREPARED BY:

Adam Hollis

MSc ARB MICFor FArbor A MRICS C Env

Ref: KSR/50AR/AMS/01b

Date: 10th February 2017

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Contents

1.0	INTRODUCTION	3
2.0	PRE-DEVELOPMENT SITE PREPARATION	8
3.0	DEVELOPMENT PHASE	10
4.0	SUMMARY OF PROPOSED METHODS	15
5.0	COMPLETION	15

Appendices

APPENDIX 1	Tree Works	17
APPENDIX 2	General Guidelines	20
APPENDIX 3	Sample Site Supervision Sheet and Arboricultural Supervision Sign off Checklist	21
APPENDIX 4	Indicative Pruning Guidelines	24
APPENDIX 5	Tree Protection Plan	27

1.0 Introduction

1.1 Purpose & Use of the Method Statement

1.1.1 This outline method statement has been prepared for Aprirose Real Estate Investment, for assistance with the discharge of planning conditions at 50 Avenue Road, London NW8 6HS: London *Borough* of Camden planning permission no.: 2014/4573/P. The document will principally address the following condition:

6 Prior to the commencement of any works on site, details demonstrating how trees to be retained shall be protected during construction work shall be submitted to and approved by the Council in writing. Such details shall follow guidelines and standards set out in BS5837:2012 "Trees in Relation to Construction" and should include details of appropriate working processes in the vicinity of trees, and details of an auditable system of site monitoring. All trees on the site, or parts of trees growing from adjoining sites, unless shown on the permitted drawings as being removed, shall be retained and protected from damage in accordance with the approved protection details.

This document also relates to the discharge of following condition (insofar as it references plans produced therein).

5 Details of the design of building foundations and the layout, with dimensions and levels, of service trenches and other excavations on site in so far as these items may affect trees on or adjoining the site, shall be submitted to and approved in writing by the local planning authority before any works on site are commenced. The relevant part of the works shall not be carried out otherwise than in accordance with the details thus approved.

1.1.2 This document lays down the methodology for any proposed works that may have an effect upon the trees on and adjacent to the site. It is essential within the scope of any contracts related to the development proposals that this method statement is observed and adhered to. It is recommended that this document form part of the work schedule and specification issued to the building contractors and can be used to form part of the contract.

1.1.3 Copies of this document will be available for inspection on site. The developer will inform the local planning authority within twenty-four hours if the arboricultural consultant is replaced.

1.2 Terms of Reference

1.2.1 We (LT) are instructed by the client, Aprirose Real Estate Investment to prepare a method statement for proposed development based on the above planning application with reference to BS 5837:2012 Trees in Relation to Design, Demolition and Construction.

1.2.2 For this purpose, the client has supplied us with a site lay-out plan (1730_Site) and the current proposals plan (AND-080_BASEMENT/LOWER GROUND PLAN & AND-100_GROUND/ FIRST FLOOR PLAN. Engineers, Fairhurst, have supplied copies of piling and foundations plans 117121_001 and 117121_100. We are also reliant upon our own impact assessment report KSR/50AR/AIA/01 and plan overlays of tree constraints contained therein.

1.3 Development Proposals

1.3.1 The principal proposals are for the partial demolition of existing single dwelling house, erection of two storey rear and single storey side extensions, creation of double basement with front lightwells and car stacker, erection of single storey outbuilding, installation of lift overrun and solar panels at roof level together with alterations to windows.

1.4 Sequence of Works

1.4.1 The sequence of works will be as follows:

- initial tree works – felling, stump grinding and pruning for working clearances
- installation of Tree Protection Barrier (TPB) & ground protection
- partial demolition of existing building & landscaping
- installation of underground services
- main construction
- removal of TPB
- soft landscaping

These works and their arboricultural implications are outlined in sequence below

1.5 Site Supervision

1.5.1 A site manager will be nominated to be responsible for all arboricultural matters on site. A pre-commencement site briefing/meeting between the site manager and arboricultural consultant will be held (see Table 1 below); the site manager's details will be noted in the minutes to / report for this meeting (and issued to the London Borough of Camden). During this meeting, all the tree protection methods below will be studied and familiarization undertaken with the requirements of this AMS. The site manager will also:

- be present on site for the majority of the time;
- have the authority to stop any work that is causing, or has the potential to cause harm to any tree;
- be responsible for ensuring that all site operatives are aware of their responsibilities toward trees on site and the consequences of the failure to observe these responsibilities;
- make immediate contact with the Arboricultural consultant in the event of any tree related problems occurring, whether actual or potential, in accordance with a tree protection protocol (see section 1.6 below).

1.5.2 At this stage, the nominated Key Personnel are as follows:

Adam Hollis — Tel: 0207 851 4544
Arboricultural Consultant
Landmark Trees
info@landmarktrees.co.uk

Richard Hughes — Tel: 0203 096 0200
Project Manager
Aprirose Real Estate Investment
20 Balderton Street
London
W1K 6TL

1.6 Supervision Schedule & Contingency Protocol

1.6.1 Landmark Trees are to be retained as Arboricultural Consultants responsible for site monitoring for the duration of the development. As noted above Adam Hollis MSc (Arb) is the key contact, with monitoring occasionally undertaken by James Bell Tech Cert. (subject to any new staff intake). Site supervision will be undertaken by a qualified and experienced arboriculturalist at pre-determined and agreed time intervals as indicated in Table 1 below. In addition to specific task supervision, general monitoring of protection measures will be undertaken at least once per month, coordinated where practical with visits detailed in Table 1.

1.6.2 Routine visits will generally be unannounced. However, the arboriculturalist will also visit subject to advance notification (2 weeks) and agreement to supervise any agreed works within the RPA, in accordance with table 1 below.

1.6.3 In the event of any unplanned incursion / accident / spillage within the RPA, the site agent should notify (by telephone) the retained arboricultural consultant immediately. The consultant will provide advice and attend site as soon as possible. This may require the stoppage of all or part of the works in the vicinity of the tree. The consultant will notify the LPA Tree Officer of the nature

and extent of damage, the mitigation strategy and likely prognosis. The contact details of the LPA Tree Officer are:

James Remmington Tel: 0207 974 4444
Planning Arb Officer
LB Camden
james.remmington@camden.gov.uk

1.6.5 The site monitoring sheet in Appendix 3 will be used to provide photographic evidence, indicate the remedial action required and timescales for remediation completion. The consultant and officer will further liaise as necessary (perhaps meeting on site) until the officer is satisfied that protection measures are again satisfactory. The action in response to incidents will be commensurate with and appropriate to the nature of any such incident. Any breach of the stipulated timescale for remediation will trigger a further monitoring report.

1.6.6 Supervision will require the arboriculturalist to be present throughout all such designated operations (works within the RPA) to ensure tasks are carried out as per the approved methodology, and to ensure the arboricultural objectives were met.

1.6.7 The Local Authority will be accorded free access to the site subject to H&S requirements; as noted at 1.6.3, any problems will be reported directly to Arboricultural consultant, who will then visit the site and make recommendations to the developer on how best to rectify the situation and ensure implementation. As noted in Table 1 below, a final sign-off visit will be carried out at the end of the development and a formal letter sent to both the client and the London Borough of Camden indicating an end to the monitoring period. It is the client's duty to notify LT that the project has been completed, in order to facilitate such an inspection.

1.6.8 Landmark Trees will be instructed to provide the above monitoring. In the absence of routine payment (as per our business terms), routine monitoring will cease (temporarily or permanently) and the London Borough of Camden will be informed of the cessation of monitoring. The client will also reserve the right to dismiss Landmark Trees and replace with another arborist, but must inform the London Borough of Camden.

Table 1: Site Monitoring Visits

Supervision Visit No:	Details	Action
Visit 1: Pre-Development Site Inspection (S.2.3 of AMS)	• To included construction Site Agent briefing (S.1.5). • To confirm position of protective measures and that they have been erected in accordance with AMS (S.2.2 & 3 and Tree Protection Plan in Appendix 5); • To check any tree works have been undertaken in accordance with this AMS (S.2.1. and Appendix 1). • Determine if further tree work is required and seek required permission if necessary. • To check site facilities/access are in accordance with the AMS (S.3.3).	Issue a brief report with findings to Architect and Main Contractor within 5 days of site supervision visit (Site Monitoring Sheet in Appendix 3).
Visit 2: Arboricultural supervision of partial demolition of house	• Supervision of partial demolition of house. • 2 weeks prior notice required.	Issue a brief report with findings to Architect and Main Contractor within 5 days of site supervision visit (Site Monitoring Sheet in Appendix 3).
Visit 3: Installation of any new services within RPA (S3.4) subject to consent for works	• Attend any excavation within RPA's where arboricultural supervision is prescribed by the AMS to ensure work is undertaken in accordance with NJUG provisions or other specification. • Date to be confirmed following formal project planning. • 2 weeks prior notice required.	Issue a brief report with findings to Architect and Main Contractor within 5 days of site supervision visit (Site Monitoring Sheet in Appendix 3).
Visit 4: Arboricultural supervision of construction within RPA	• Confirm position of any additional temporary ground protection and that temporary ground protection is in accordance with AMS. • Attend any excavation within RPAs where arboricultural supervision is prescribed by the AMS and any other unplanned incursions into the protection areas (subject to Local Authority agreement as noted above). • 2 weeks prior notice required.	Issue a brief report with findings to Architect and Main Contractor within 5 days of site supervision visit (Site Monitoring Sheet in Appendix 3).
Ongoing Monitoring Visits	• Periodically during 12 months (or longer) of entire project. • Visits will be based on intensity of site operations, but at a minimum of monthly visits. • Attend site to confirm protective measures are still in place / can be removed at appointed times. Ensure attendance is timed for any other key elements of proposed (and any other unplanned) incursions into the protection areas. • Pre-start landscape meeting with main contractor to confirm ongoing tree protection measures.	Issue a brief report with findings to and Main Contractor within 5 days of site supervision visit. (Site Monitoring Sheet in Appendix 3).
Final Site Visit - Completion of construction phase supervision visit (S.5)	After it has been confirmed that the landscape phase is complete. Specify any remedial work if necessary.	Issue a brief report with findings to Architect and Main Contractor within 5 days of site supervision visit. (Site Monitoring Sheet in Appendix 3). Provide signed arboricultural checklist (see Appendix 3)

2.0 Pre- Development Site Preparation

2.1 Arboricultural Works

2.1.1 All works must be carried out by a competent arborist in accordance with BS 3998: 2010 and any other prevailing good professional practice including BS 8545:2014 Trees: from nursery to independence in the landscape. Recommendations.

2.1.2 Specific works recommended to facilitate development are the felling of T8 and T12. Pruning works include the cutting back of T5 and T9 – T12. These works are listed in Appendix 1.

2.2 Installation of Tree Protection Barrier

2.2.1 The Root Protection Area (RPA) indicates 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. The default position is for the RPA's to be fully fenced off to form the boundary of the Construction Exclusion Zone (CEZ), an area based on the RPA, from which access is prohibited for the duration of the project, including the storage of any works materials and equipment.

2.2.2 A Tree Protection Barrier [TPB] comprising steel mesh panels of 2.4m in height ('Heras') will be erected to protect trees. These panels will be mounted on a scaffolding frame as shown in Figure 1 below (this is also Figure 2 of BS5837: Trees in Relation to Design, Demolition and Construction in paragraph 6.2.2.2). The TPB should carry waterproof warning notices denying access within the RPA.

2.2.3 This TPB is to be erected before any work (other than tree surgery) commences on site, is to remain *'in situ'* undamaged for the duration of all work or each phase, and only to be removed once all work is completed. It should be maintained to ensure that they remain rigid and complete. Where minor work is deemed necessary prior to the erection of fencing a Landmark Trees representative should be forewarned to enable their presence to oversee the work being carried out.

2.2.4 The location of the TPB is shown in the Tree Protection Plan at Appendix 5.

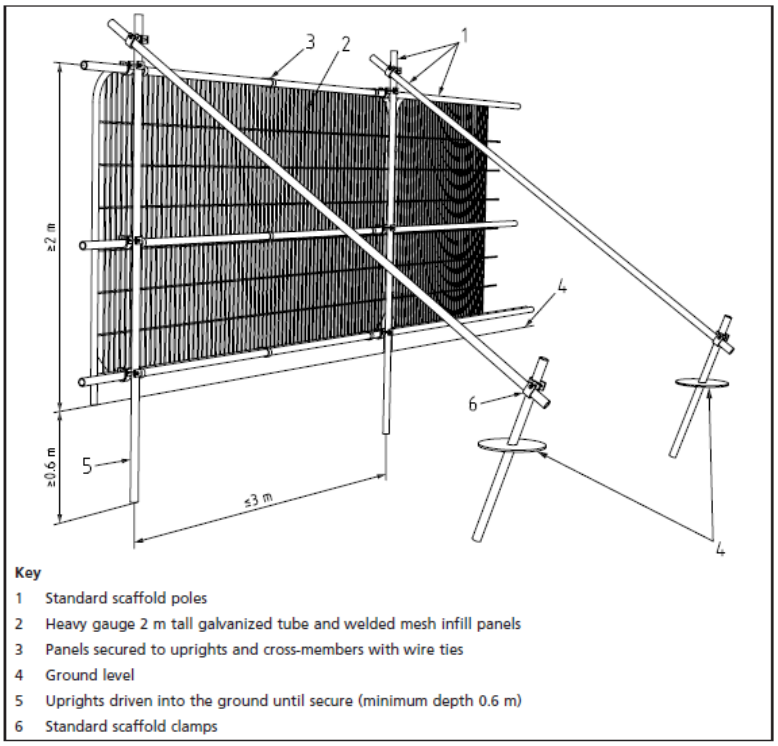


Fig. 1 Tree Protection Barrier Specification
(Source: Figure 2 from BS5837 - Default specification for protective barrier)

2.3 Ground Protection

2.3.1 Extant areas of RPA that cannot be fenced off and therefore lie outside the CEZ must be protected with fit-for-purpose ground protection. The location of the ground protection is shown in the Tree Protection Plan at Appendix 5. It will be installed before any work (other than tree surgery) commences on site, is to remain 'in situ' undamaged for the duration of all work or each phase, and only to be removed once all work is completed (other than the removal and replacement of the remaining hard surfacing).

2.3.2 It is proposed to employ Ground Guards MultiTrack Mats as the ground protection. These will be secured together using the integral fasteners.

2.3.3 During resurfacing operations at the end of the development, exposed sub-base will not be left open to vehicular access, but boarded over for temporary pedestrian access only. The replacement paving within RPA will be installed promptly (within 24 hrs of lifting the old pavement).

3.0 Development Phase

3.1.1 The following general precautions will apply:

- No fires shall be made on any part of the site, or within 20m of any tree to be retained.
- No spilling or pouring of fuels, oils, solvents, tar shall be made on any part of the site.
- No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within 10 metres of the trunk of a tree that is to be retained.
- No spillage or discharge of wet mortar or concrete shall be made on any part of the site.
- No storage of materials shall be made within the protective fences.
- No breaching or moving of the protective hoarding without the approval of an arboriculturist.

3.1.2 The procedures for dealing with variations and incidents are detailed in S1.6.

3.2 Working within Root Protection Areas (RPA)

3.2.1 Although the default position is to exclude all construction activity from the RPA, this degree of protection is not entirely possible on the site: it is necessary to perform some works (in part) within the RPA i.e. excavation of basement level and removal and replacement of hard surfaces.

3.2.2 All involved parties will need to be made aware of the deficiencies. In these instances, careful and supervised working, as described in sections, S. 3.6 (construction) and S. 3.7 (landscaping) will be required.

3.3 Site Access, Accommodation & Storage

3.3.1 Site access and accommodation will be as per the layout within our Tree Protection Plan (App. 5), making use of area to the front of the property, well away from retained trees.

3.3.2 Pedestrian access will run parallel, but separate to vehicular access.

3.3.3 Delivery lorries will be excluded from RPA's by tree protection fencing and ground protection. Adequate allowance must be made for vehicle heights and ground clearance, where tree canopies overhang access routes. Any further pruning for working clearances must be discussed first with the arboriculturalist; once agreed in principle these works should be approved by the appropriate tree officer and approved in writing by the LPA. Materials can be unloaded and stored throughout the interior of the site away from protected trees.

3.3.4 Many site activities are potentially damaging to trees e.g. material storage, parking, soil compaction and the use of plant machinery. In this latter example particular care is required to ensure that the operational arcs of excavation and lifting machinery, including their loads, do not physically damage trees in use.

3.4 Routing & Installation of Services

3.4.1 We have not at this time been supplied by the applicant with full service details, although understand existing services will be used if possible. These matters will need to be resolved separately by variation of condition. This cannot be resolved herein as a generic item.

3.5 Demolition Measures

3.5.1 Access facilitation pruning will be undertaken to prevent injurious contact between demolition plant and the tree(s). Any such pruning will be undertaken in accordance with British Standard 3998: Recommendations for tree works (See Section 2.1 / Appendix 1).

3.5.2 All plant and vehicles engaged in demolition works (removals only) will either operate outside the RPA, or work from within the existing built structure and hard standing, near trees. Where trees stand adjacent to structures scheduled for demolition, it will be necessary to undertake demolition inwards within the footprint of the existing building (often referred to as "top down, pull back"). Such measures apply to T10, T11 and T13.

3.5.3 Where hard standing within the tree's RPA's is to be removed, it will be first broken up / loosened with manual power tools as necessary and then carefully removed by hand, leaving the sub-base intact for replacement paving. The contractor will work in a "pull-back" fashion from within the existing hard surfacing. Sub-base exposed beneath the structure will not be scraped away, but preserved in situ and protected immediately (not tracked over) with replacement ground protection (boards) as per para 2.3.3 before the continuance of operations.

3.6 Construction Measures

Detailed method statements and risk assessments will be obtained from all specialist subcontractors involved in the new build and these will be scrutinised by the site agent to ensure the AMS requirements have been considered therein.

3.6.1 The path of foundations through RPAs will be manually excavated to 750mm depth under arboricultural supervision; any roots encountered within the trenches / pits will be cleanly pruned back to an appropriate junction with a sharp pruning saw or secateurs back to a junction. Roots larger than 25mm diameter may only be cut in consultation with an arboriculturalist.

3.6.2 In order to minimise the potential for conflict with tree canopies, the piling employed will have a maximum working height of 5.5m.

3.7 Removal of Ground Protection & Post Construction Landscaping & Treatment

3.6.1 The tree protection barrier may be removed upon completion of the construction phase and when all drainage and service runs have been installed and all plant has been removed from the site.

3.6.2 The replacement hard surfacing (within the RPA of T17 and T18) to the front of the house will be finished with a porous surface installed on top of the existing sub-base with minor augmentation as necessary.

3.6.3 The new patio / terrace (within the RPA of T5) requires the arboricultural supervision of a no-dig construction, using a cellular confinement system with no fines aggregate for the sub-base as outlined in 3.6.4 below.

3.6.4 Method Statement - Specifications for no dig paving by T5:

i. The Construction will be undertaken when the ground is sufficiently dry to prevent compaction occurring. Any surface vegetation should be removed by hand or with suitable herbicide.

ii. Fill any hollows in the exposed ground with sharp sand or 4/20mm or 40/20mm clean angular stone.

iii. Place Treetex Geotextile over the area to be protected ensuring laps are a minimum of 300mm. The geotextile should not be trafficked across at any time.

iv. The CellWeb system is available in a number of depths for varying traffic loadings but for this site, one of the following will be employed:

- 75mm deep CellWeb for Pedestrians, Cycleways and vehicles up to 1.5 tons;
- 100mm deep CellWeb for Cars, 4 Wheel Drives, Vans etc up to 6 tons;

v. Lay out the collapsed Cellweb TRP on-top of the Treetex. Place one of the supplied J pins into the centre cell at the end of the panel and secure into the ground. Pull out the Cellweb TRP to its full 8.1m length and secure its length with another J pin. Now measure its width to 2.56m and secure in each of the corners with the J pins. Use 10 pins per panel to create a panel measuring 8.1m x 2.56m. This will produce a cell size of 259mm x 224mm which is the required cell diameter. Each cell must be fully extended and under tension. Staple adjacent panels together at each cell, all cells must be fully opened to the required diameter.

vi. Infill the Cellweb TRP cells with the clean angular stone (Type 4/20mm or Type 20/40mm), working towards the tree and using the infilled panels as a platform. Use a minimum 25mm overfill of clean angular stone when used in conjunction with a hard surface. No compaction is required of the infill. Do not use a whacker plate or other means of compaction.

vii. Where edging is required for footpath and light structures, a peg and treated timber board edging is acceptable, other options include wooden sleepers, kerb edging constructed on-top of the Cellweb® TRP system, plastic and metal edging etc.

viii. The CellWeb TRP system is to be surfaced with the materials listed below. Porous systems will be of greater benefit for the trees, however it is understood that this is not always possible.

Block / Flag Paving:

- Place Permatex 200 separation fabric over the filled InfraWeb.
- Lay sand / gravel bedding material as per manufacturer's recommendations.
- Place porous / standard blocks as per manufacturer's instructions.

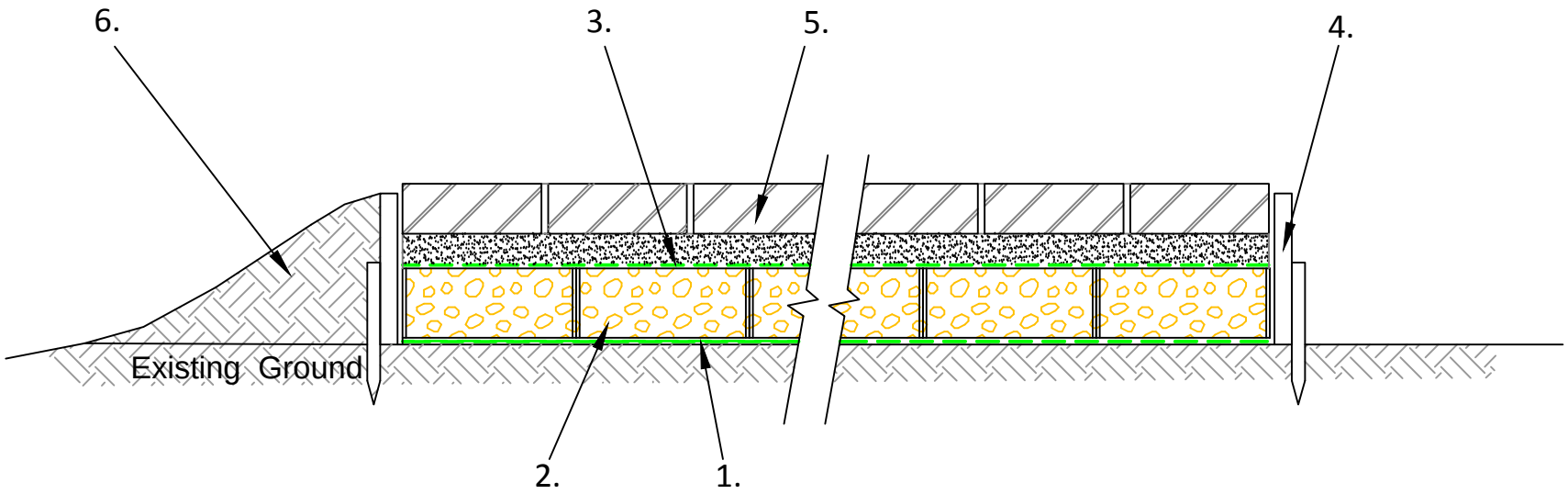
3.6.5 For technical data on the Geotextile membrane and the CellWeb cellular confinement system always refer to the manufactures guidelines for design and implementation. Further technical advice can be gained from the manufacturer:

Geosynthetics Limited
Fleming Road
Hinckley
LE10 3DU
Tel. 01455 617139
http://www.geosyn.co.uk/

3.6.6 All landscaping and associated ground works within RPA will be carried out manually and carefully with due regard for soil and root protection, avoiding changes of ground levels or deep digging. Mechanised cultivation must not be used within any RPA's.

KEY

1. Permatex 300 geotextile
2. 100mm deep InfraWeb tree root protection System infilled with 4/20 Clean angular Stone to BS EN 13242 / EN 12620
3. Permatex 200 separation geotextile
4. Treated Timber Edging (Or other Edging Detail Acceptable)
5. Block Paving with sand bed to Engineers Specification
6. Soil graded to edging (if required)



InfraGreen solutions
Warrington Business Park
Longfield Road
WA2 8TX
T: 01925 630976
E: info@infragreen-solutions.com

TITLE

InfraWeb Section - Tree Root Protection c/w Block Paving Surface

DRAWN BY	SCALE	DATE	CHECKED BY
PP	1:10	01/14	RP
DRAWING NO		REVISION	APPROVED
IG-SD-IW-BP-100		A	

4.0 Summary of Proposed Methods

4.1 Table of Impacts and Mitigation

4.1.1 The table below summarises the main areas where trees could become damaged by the development and the methods that need to be adopted in order to prevent such damage:

Table 2: Summary of Proposed Methods

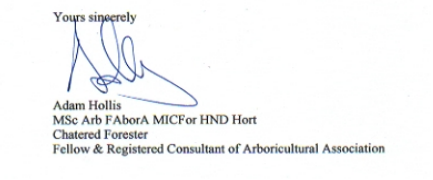
Impact	Mitigation	Reference	Trees Affected
General site access, material storage etc.	Ground protection to acceptable standards.	Paras 2.2.1 & 3.3.3 Tree Protection Plan in Appendix 4	All retained trees
Damage to trees caused by demolition of adjacent structure	Pull-down demolition method	Section 3.5	T10, T11 & T13
Damage to trees caused by piling within canopy line	Remedial tree surgery and use of mini piling rig	Section 2.1 & 3.6	T5, T9 – T11 & T14
Damage to roots caused by basement foundation excavation within RPA.	Manual excavation of top 750mm with pre-emptive root pruning	Section 3.6	T1 – T5 & T17
Removal and replacement of hard surfacing within RPA	Manual removal and no-dig construction	Section 3.5 & 7	T17 & T18
Installation of new patio within RPA	No-dig construction method.	Section 3.6	T5

5.0 Completion

5.1 Completion Meeting

5.1.1 Following completion of the works listed above, a Landmark Trees consultant will conduct a walkover survey of the trees to review any defects or signs of ill-health, and inform the local authority in a final report as per Table 1. It is the client's duty to notify LT that the project has been completed, in order to facilitate such an inspection. A separate LT post-development tree inspection (with specific reference to trees identified in the Appendix 1 schedules) is recommended to facilitate a constructive meeting.

Signed



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Adam Hollis MSc ARB MICFor FArbor A

10th February 2017

For and on behalf of ***Landmark Trees***

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Tel: 0207 851 4544

London Office: Holden House, 4th Floor, 57 Rathbone Place London W1T 1JU
Registered Office: 15 Abbey Road, Oxford OX2 0AD
Landmark Trees is the trading name of Landmark trees Ltd. Registered in Wales. Reg No. 3882076

APPENDIX 1: ARBORICULTURAL WORKS

Notes for Guidance:

1, 2, 3 - Urgent (ASAP), Standard (within 6 months), Non-urgent (2-3 years)
RP - Pre-emptive root pruning of foundation encroachments under arboricultural supervision.
CB - Cut Back to boundary/clear from structure.
CL# - Crown Lift to given height in meters.
CT#% - Crown Thinning by identified %.
CCL - Crown Clean (remove deadwood/crossing and hazardous branches and stubs).*
CR#% - Crown Reduce by given maximum % (of outermost branch & twig length)
DWD - Remove deadwood.
Fell - Fell to ground level.
FInv - Further Investigation (generally with decay detection equipment).
Pol - Pollard or re-pollard.
Mon - Check / monitor progress of defect(s) at next consultant inspection which should be <18 months in frequented areas and <3 years in areas of more occasional use. Where clients retain their own ground staff, we recommend an annual in- house inspection and where practical, in the aftermath of extreme weather events.
Svr Ivy / Clr Bs - Sever ivy / clear base and re-inspect base / stem for concealed defects.

*Not generally specified following BS3998:2010

Landmark Trees Ltd
Tel: 0207 851 4544

Recommended Tree Works To Facilitate Development

Hide irrelevant
Show All Trees

Site: 50 Avenue Road, London NW8 6HS

Surveyor(s): Adam Hollis

Date: 02/05/13

Ref: KSR/50AVR/AIA

Tree No.	English Name	Height	Stem Diameter	Crown Spread	Recommended Works	Comments/ Reasons
2	Beech, Copper	>40	580.0	4	Svr Ivy FInv i.e. re-inspect stem post-ivy clearance	Ivy clad Leaning (significantly) over boundary Rampant creeper over S crown Advisable for good arboricultural practice
3	Beech, Copper	16	580.0	6555	DWD	Deadwood (minor) throughout crown Advisable for good arboricultural practice
4	Tree of Heaven	15	430.0	7344	DWD	Deadwood (minor) throughout crown A sparser than normal canopy Dieback in lower crown Advisable for good arboricultural practice
5	Pear, Domestic	10	520.0	4	CR25% Pre-emptive root pruning of top 700mm of piling trench	Deadwood (minor) throughout crown Leaf/shoot disorders Moderate decay in stem Recommended to permit development
8	Cypress, Leyland	11	360.0	4	Fell	Co-dominant stems Included bark in main stem unions Recommended to permit development
9	Pine, Austrian	10	400.0	3443	CB 2m	RS Recommended to permit development
10	Plum, Purple	9	259.8	3	CB 2m	RS Recommended to permit development
11	Cypress, Leyland	16	509.9	5544	CB Cut back from new elevation	RS Recommended to permit development

Notes:
CB - Cut Back to boundary/clear from structure.
CL# - Crown Lift to given height in meters.
CT#% - Crown Thinning by identified %.
CCL - Crown Clean (remove deadwood/crossing and hazardous branches and stubs).
CR#% - Crown Reduce by given maximum % (of outermost branch & twig length)
DWD - Remove deadwood.
Fell - Fell to ground level.
FInv - Further Investigation (generally with decay detection equipment).
Pol - Pollard or re-pollard.
Mon - Monitor ongoing condition (annually by staff / owners & every 2-3 yrs by consultant).
Svr Ivy / Clr Bs - Sever ivy / clear base and re-inspect base / stem for concealed defects.

Landmark Trees Ltd
Tel: 0207 851 4544

Recommended Tree Works To Facilitate Development

Hide irrelevant
Show All Trees

Site: 50 Avenue Road, London NW8 6HS

Surveyor(s): Adam Hollis

Date: 02/05/13

Ref: KSR/50AVR/AIA

Tree No.	English Name	Height	Stem Diameter	Crown Spread	Recommended Works		Comments/ Reasons
12	Magnolia (M. grandiflora)	5	134.5	2	Fell		Recommended to permit development
14	Holly, variegated	10	200.0	3	CB	2m	Ivy smothered RS Recommended to permit development

Notes:
CB - Cut Back to boundary/clear from structure.
CL# - Crown Lift to given height in meters.
CT#% - Crown Thinning by identified %.
CCL - Crown Clean (remove deadwood/crossing and hazardous branches and stubs).
CR#% - Crown Reduce by given maximum % (of outermost branch & twig length)
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Pol - Pollard or re-pollard.
Mon - Monitor ongoing condition (annually by staff / owners & every 2-3 yrs by consultant).
Svr Ivy / Clr Bs - Sever ivy / clear base and re-inspect base / stem for concealed defects.

APPENDIX 2: GENERAL GUIDELINES

2.1 All work must be to BS 3998:2010 - '*Recommendations for tree work'*.

2.2 Staff carrying out the work must be qualified, experienced and ideally be Arboricultural Association approved contractors, and will be covered by adequate public liability insurance.

2.3 Any defects seen by a contractor or the client that were not apparent to the consultant must be brought to the consultant's attention immediately.

2.4 No liability can be accepted by the consultant in respect of the trees unless the recommendations of this method statement are carried out under the supervision of a Landmark Trees consultant.

2.5 It is advisable to have trees inspected by a consultant regularly. On this site it is recommended that these inspections are made every year.

APPENDIX 3: SAMPLE SITE MONITORING SHEET AND ARBORICULTURAL SUPERVISION SIGN OFF CHECKLIST

Landmark Trees

Site Monitoring Report Sheet

Client:		**Planning Ref:**	
Local Authority:		**Date:**	
Site Address:			
Proposal:			

Visit Checklist	**Y/N**		**Y/N**
Tree protection barrier (TPB) in place		TPB as per approved	
Ground protection (GP) in place		GP as per approved	
TPB / GP breached		Trees damaged	
Site Agent briefed by LT			
LT briefed by Site Agent			
LPA informed			
Remedial action required			

Comments

Recommendations

Outcome		
1		
2		
3		
4		

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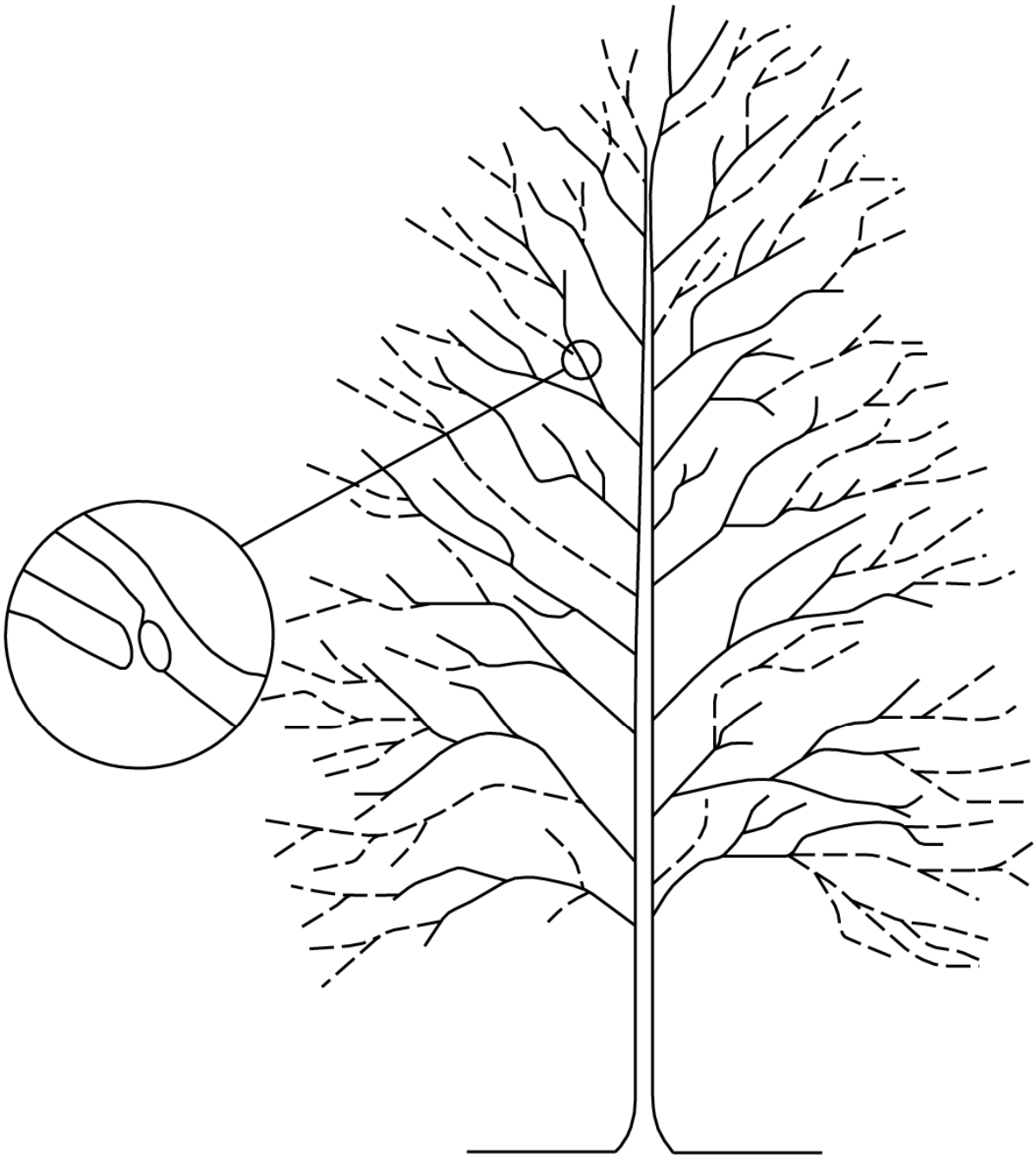
Arboricultural Supervision Sign off Checklist

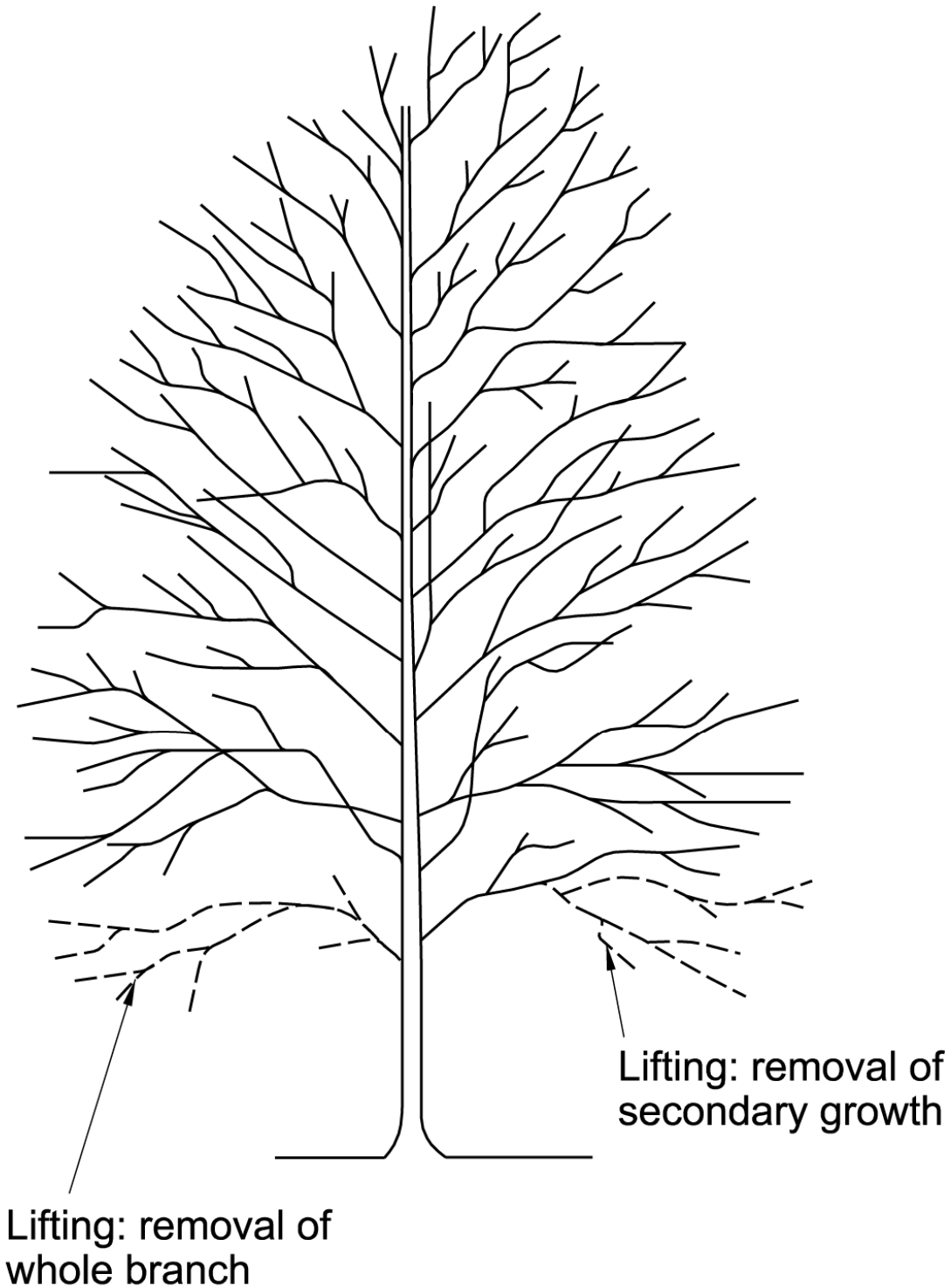
Tree No (s)	Project Phase	Task	Date Completed	Signed (Project arboriculturist)	Signed (Site Manager)
	Pre-commencement	Pre-commencement site meeting to include site manager briefing (S.1.5)			
	Pre-commencement	Confirm the location and specification of the protective measures is in accordance with AMS & Tree Protection Plan (TPP)			
	Pre-commencement	Confirm any tree works have been undertaken in accordance with this AMS (S.2.1/ App 1) and determine if further tree work is required			
	Pre-commencement	Seek required permission for further tree works if necessary.			
	Installation of any new services	Attend any excavation within RPA's where arboricultural supervision is prescribed by the AMS (S3.4) to ensure work is undertaken in accordance with NJUG provisions or other specification.			
	Demolition	Demolition of hard surfaces/ structures within RPA (S3.6) Confirm position of any additional temporary ground protection and that temporary ground protection is in accordance with AMS.			
	Completion of Demolition	Sign off of the demolition phase			
	Construction	Supervised manual excavation of foundations			
	Construction	Installation of 'No Dig' hard surfacing			
	Construction	Additional excavations (if required)			
	Completion of Construction	Completion of construction			
	Post Construction	Removal of machinery and materials from site			
	Post Construction	Dismantle & removal of protective measures			
	Landscaping	Completion of Landscaping			
	Project Completion	Sign off from project arboriculturist			

APPENDIX 4: INDICATIVE PRUNING GUIDELINES



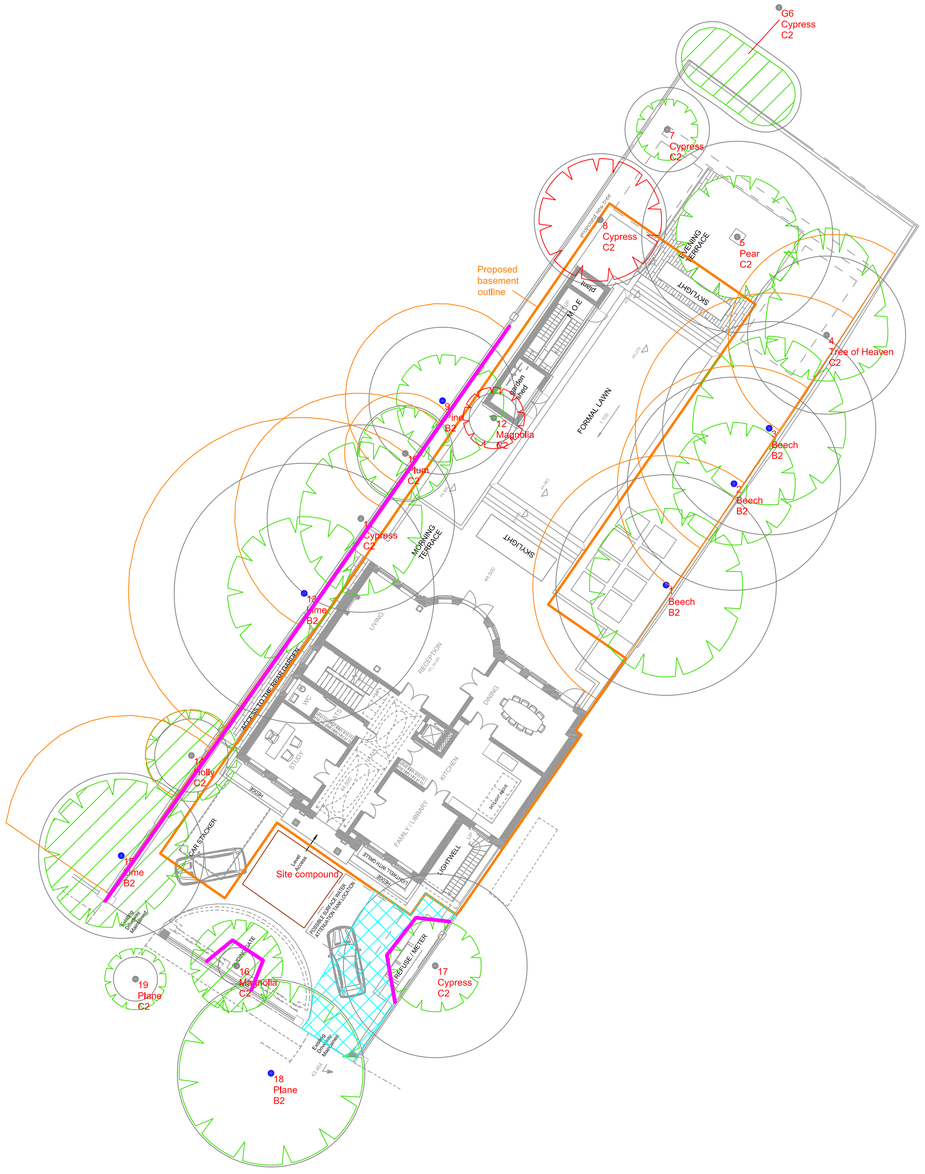
NOTE: Branches pruned back to suitable outward pointing bud or small branch.

REDUCING THE CROWN



CROWN LIFTING

APPENDIX 5: TREE PROTECTION PLAN



NOTE:

This survey is of a preliminary nature. The trees were inspected from the ground only on the basis of the Visual Tree Assessment method. No samples were taken for analysis. No decay detection equipment was employed. The survey does not cover the arrangements that may be required in connection with the laying or removal of underground services.

Branch spread in metres is taken at the four cardinal points to derive an accurate representation of the crown.

Root Protection Areas (RPA) are derived from stem diameter measured at 1.5 m above adjacent ground level (taken on sloping ground on the upslope side of the tree base).

Landmark Trees

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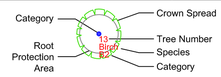
Site: 50 Avenue Road	1:200 @ A1
Drawing Title: Tree Protection Plan	January 2017

Key:

- Category A High Quality
- Category B Moderate Quality
- Category C Low Quality
- Category U Trees Unsuitable for Retention

Ground Protection: NB the provision of ground protection on plan does not prohibit the consented laying of services and related works in those areas. It means that those operations should proceed under caution and protect adjacent ground to that immediately requisitioned for the work in hand.



Tree Position Approximate (not shown on original survey)

Tree To be Felled

Tree Protection Fencing