Landmark Trees

ARBORICULTURAL METHOD STATEMENT

53 Fitzroy Park

London

N6 6JA

REPORT PREPARED FOR:

Artin Homes Ltd

3 Marlborough House

Somerset Road

London

SW19 5HZ

REPORT PREPARED BY:

Adam Hollis

MSc ARB MICFor FArbor A MRICS C Env

Ref: WFA/53FZP/AMS/02a

Date: 30th January 2019

Contents

Appendices

1.0 Introduction

1.1 Purpose & Use of the Method Statement

1.1.1 This method statement has been prepared for Artin Homes, in support of planning application 2018/2104/P which seeks to vary planning conditions at 53 Fitzroy Park London N6 6JA issued as part of London Borough of Camden planning permission no.: 2015/0441/P. The document will address the protection of trees during demolition / construction.

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, Artin Homes Ltd 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 survey plan (11589B-TOPO) and the proposed drawings (Fitzroy Park-GLG and 110-STO-001, -002 and -003) in addition to the Construction Traffic Management Plan prepared by Knight Build Ltd (Rev 05a – Planning Submission) and the review and comments on the engineering aspects of the scheme provided by Alan Baxter & Associates (ABA) for the FPRA (1675/114/JGa/mw dated March 2015). We are also reliant upon our own impact assessment report WFA/53FZP/AIA/01f and plan overlays of tree constraints contained therein.

1.3 Development Proposals & Potential Impacts

1.3.1 The principal proposals are for: *Erection of a three storey single dwelling following demolition of existing dwelling (Class C3), to amend fenestration; lightwell added to north side; entrance relocated to the corner; bike storage relocated to south side boundary; metal spandrel changed to natural stone; external stair removed at rear lower ground floor level; metal balustrade changed to glass; cornices changed to plain natural stone; rear curved bay squared off at lower ground level; recessed blind window omitted and recessed wall revised on south elevation.*

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
- demolition of existing building & landscaping
- installation of loading platform
- installation of underground services
- main construction
- removal of TPB & ground protection
- hard landscaping
- soft landscaping

These works and their arboricultural implications are outlined in sequence below

1.5 Site Supervision

1.5.1 John Knight from Knight Build will nominate a site manager who will 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 issued to the London Borough of Camden in the minutes / site monitoring report for this meeting. During this meeting all the tree protection methods below will be studied and familiarization with 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

John Knight Tel: 07939 016007
Managing Director
Knight Build Ltd
john.knight@knightbuild.co.uk

1.6 Site Monitoring

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 A tree protection protocol for contingencies will be integrated into the site induction process at a pre-commencement meeting involving the developer, the arboricultural consultant, the site manager and the Council tree officer as appropriate. The protocol will be that, 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:

Tom Little Tel: 020 7974 5939
Tree and Landscape Officer
London Borough of Camden
tom.little@camden.gov.uk

1.6.4 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.

1.6.5 Supervision will not require the arboriculturalist to be present throughout all operations to ensure tasks are carried out as per the approved methodology, but certainly, during the key elements of proposed (and any other unplanned) incursions into the protection areas (subject to LPA agreement and for whatever reasons) to ensure the arboricultural objectives were met. However, where tasks are ongoing, provided the arboriculturalist is satisfied, and after an appropriate briefing, the supervision may be reduced to telephone and email contact between the site manager and Arboricultural consultant.

1.6.6 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.

1.6.7 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	Lead in Time Required by LT	Action
Visit 1: Pre-Development Site Inspection (S.2.3 of AMS) Arboricultural supervision of excavation of trench within RPA (see TPP)	• To included construction Site Manager briefing (S.1.5); • to confirm position of protective fencing and that it has been erected in accordance with AMS (S.2.2 and Tree Protection Plan in Appendix 5); • to check any pre-demolition/construction ground protection is in place; • to check any tree works have been undertaken in accordance with this AMS (S.2.1. and Appendix 1); • to check site facilities/access are in accordance with the AMS (S.3.3). • Attend excavation of trench within RPA (see TPP in Appendix 5).	Minimum 2 weeks	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: Phase 1 Demolition of hard surfaces/structures within RPA (S3.6) and	• Confirm position of any additional temporary ground protection and that temporary ground protection is in accordance with AMS; • Inspect removal of hard surfacing within RPA of T22 and ensure additional ground protection is provided.	Minimum 2 weeks	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: Phase 1 Erection of Platform	• Attend site to confirm protective measures are still in place. Ensure attendance is timed for erection of platform where supporting piers encroach the protection areas. Check works to existing retaining wall adjacent to T2.	Minimum 2 weeks	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 Supervision Visits – every month for first 6 months, then every 3 months until the completion of the construction phase	• Periodically during 12 months (or longer) of entire project and prior to construction phase. • 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.	TBC as project develops	Issue a brief report with findings to Architect 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 construction phase is complete, allow removal of temporary protective fencing and ground protection. Specify any remedial work if necessary.	Minimum 2 weeks	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)

1.6.3 In addition to the above, a site log book will be kept by the Site Manager to record all stages of the development from the installation of the fence protection, to routine checks of the fencing through to the completion of the project. This should be made available to the LA if required to show evidence of site monitoring. Site monitoring should include:

- Pre-Development Site Inspection (S.2.3)
- Construction Site Manager Briefing (S.1.5)
- Installation of site facilities (S.3.3)
- Demolition of hard surfaces / structures within RPA's (S.3.6)
- Installation of the temporary platform (S.3.6)
- Construction of new of hard surfaces / structures within RPA's (S.3.7)
- Site completion meeting (S.5)

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 removal of trees T3, T18, T19, T20 and T21. Pruning works include the crown lifting of T22 sycamore. These specific works to facilitate development and any other husbandry works are listed in Appendix 1.

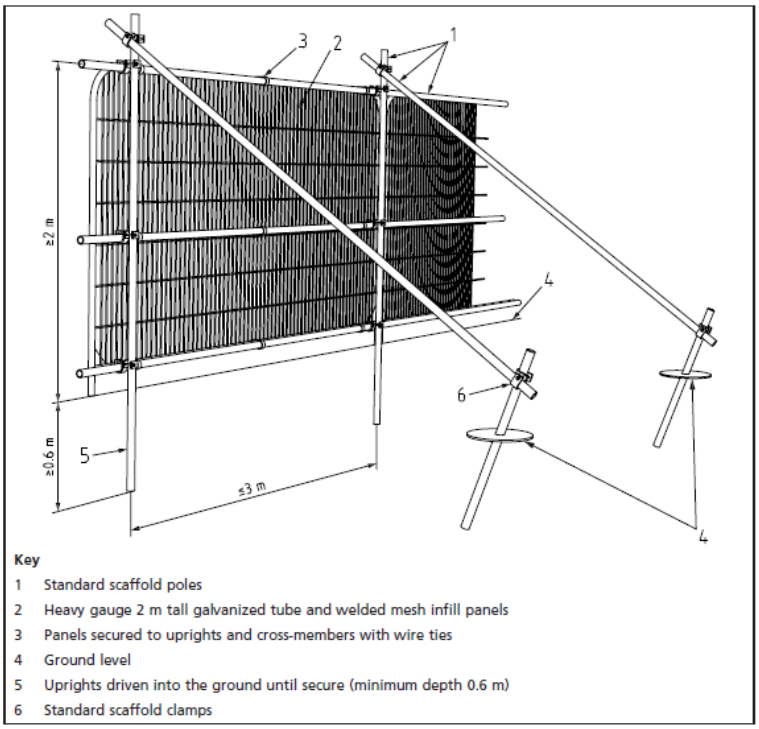
2.2 Installation of Tree Protection Barrier

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') should be erected to protect retained 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).

2.2.3 The TPB's are to be erected before any work (other than tree surgery) commences on site, are to remain *'in situ'* undamaged for the duration of all work or each phase, and only to be removed once all work is completed. If any work is deemed necessary prior to the erection of fencing a Landmark Trees representative should be informed to enable their presence to oversee the work being carried out.

2.2.4 The location of the TPB's are shown in the Tree Protection Plans at Appendix 5.



Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

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 and type of ground protection is shown in the Tree Protection Plans at Appendix 5. As per paragraph 2.2.3, this ground protection is to be installed before any work (other than tree surgery) commences on site, is to remain *'in situ'* undamaged for the duration of all work until the landscape phase and only to be removed once all construction work is completed. In the landscape phase the ground protection at the front of the site will be replaced with a no-dig drive section under arboricultural supervision.

2.3.2 As far as practical, existing hard surfaces shall be retained as initial ground protection (where fit for purpose for anticipated loading) until the landscaping phase. Where they are not present / fit for purpose, 150mm Protectaweb shall be employed. **NB the provision of ground protection on plan does not prohibit the construction of the platform piers, 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.**

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. demolition of existing building and hard landscaping, installation of the temporary platform, installation of services and construction of new building and new hard landscaping.

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.3.4 (routing of services) S3.5 (raising ground levels) S.3.6 (demolition of surfaces) and S.3.7 (construction) will be required.

3.3 Site Access, Accommodation & Storage

3.3.1 In accordance with the CTMP, a hoarding will be erected along the boundary of the property and a set of folding gates constructed across the existing driveway / site entrance. The site hoarding will be constructed from good quality ply wood of a minimum 2.4m high. The tree protection will also be installed at this stage as per the TPP (Appendix 5) and prior to any works commencing.

3.3.2 Due to the logistics of the site and the difference between the Fitzroy Park road level and the existing ground behind the hedge row it is not possible to gain access for vehicles or plant to the lower levels of the site from Fitzroy Park without providing the temporary loading platform to the right of the property extending the driveway.

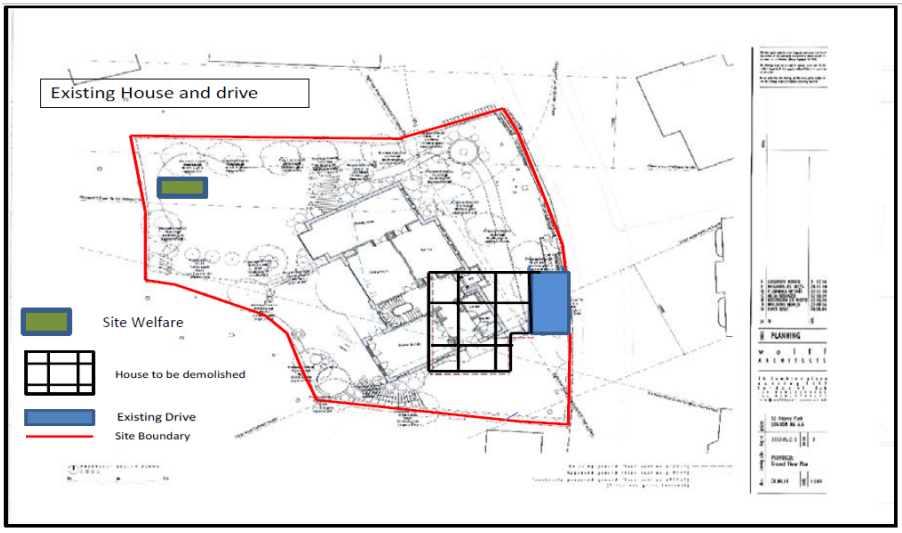
3.3.3 The platform will be established following the demolition stage of the works (see section 3.7 below). The platform has been designed to ensure that all vehicles that are attending site will be able to reverse onto the platform and then drive away when loaded/unloaded; the whole of the vehicle will be positioned on the platform and within the site boundary at all times.

3.3.4 The site welfare and site offices will be a container set up delivered to site by Hiab and established on the lower level of the site (see extract 1 below). It will be positioned away from the canopies/RPA of the retained tree resource on this boundary.

3.3.5 The site access will be as existing initially, although the phasing is likely to require the construction of the proposed access prior to the main build. The tree protection will be installed prior to all construction works (see Appendix 5).

3.3.6 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 onto protected ground within RPA's and stored throughout the interior of the site away from protected trees

3.3.7 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 cranes and any other machinery, including their loads, do not physically damage trees in use.



Extract 1: Position of site welfare (Source: CTMP by Knight Build)

3.3.8 Construction vehicle will be accompanied by walking banksmen to minimise the potential for damage to street furniture and the carriageway. In addition, a bond against repairs has been offered by the applicant and this can be secured by private agreement with the FPRA or through a S106 Agreement associated with the permission granted.

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. If not, these matters will need to be resolved separately by variation of condition. This cannot be resolved herein as a generic item.

3.5 Changes in Grade

3.5.1 A trench will be dug as permitted under the previous proposals, to minimise the damage to roots that may be located within the areas proposed for levelling works (see TPP).

3.5.2 The ground level will also require raising to create the new drive. Where the new vehicular access lies within the theoretical RPA of T2, the existing landscaping will be carefully removed under arboricultural supervision (see Table 1 above). Where the ground requires raising to create the new drive, this will be achieved using a cellular confinement system filled with aggregate.

3.6 Demolition Measures.

3.6.1 The proposed crown lifting to T22 will prevent injurious contact between demolition plant and the tree(s). The pruning will be undertaken in accordance with British Standard 3998: Recommendations for tree works (See Section 2.1 / Appendix 1).

3.6.2 Demolition of structures within what would otherwise be an RPA will proceed with due caution to avoid unnecessary damage to trees. Such measures apply in particular to T22 and both building and removal of existing hard standings to create the pedestrian access.

3.6.3 It is intended that the demolition of 53 Fitzroy Park will be carried out by hand in a manner that will reduce the building from roof down, allowing all debris and arising to fall within the frame of the building itself. Rubble chutes will then be used, which will be constructed between the existing floors of the building to the lower ground level. There will be no requirement for any large plant or equipment to be delivered to site to carry out these works. All hard-core arising's will be used and retained on site; the soft strip and other materials that cannot be used on site will be removed by the use of skips and 2 axle wait and load trucks.

3.6.4 A monarflex wrapped scaffold will encase the building during the demolition and water spray will be used as a dust suppression. In the unlikely event that levels of dust build-up on trees occur, it may be necessary to seek the advice of Landmark Trees on remedial measures, e.g. hose down the tree(s) immediately following any significant accumulation of dust.

3.6.5 Throughout all mechanical operations a banksman will be present at all times. Dust generated by the works will be suppressed using water sprays.

3.6.6 The existing hard standing within the RPA of retained trees, removal of which is necessary for the construction of the basement and building will be first broken up with manual power tools and then carefully removed with light plant by a skilled machine operator, either operating outside the RPA, or working from within the existing hard standing. Existing paving slabs should be lifted by hand. **The remaining hardstanding shall remain in situ as part of the ground protection.**

3.7 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.

3.7.1 The revised scheme does not encroach the RPA/canopy of any retained tree, therefore no mitigation measures for the construction of the replacement dwelling are required.

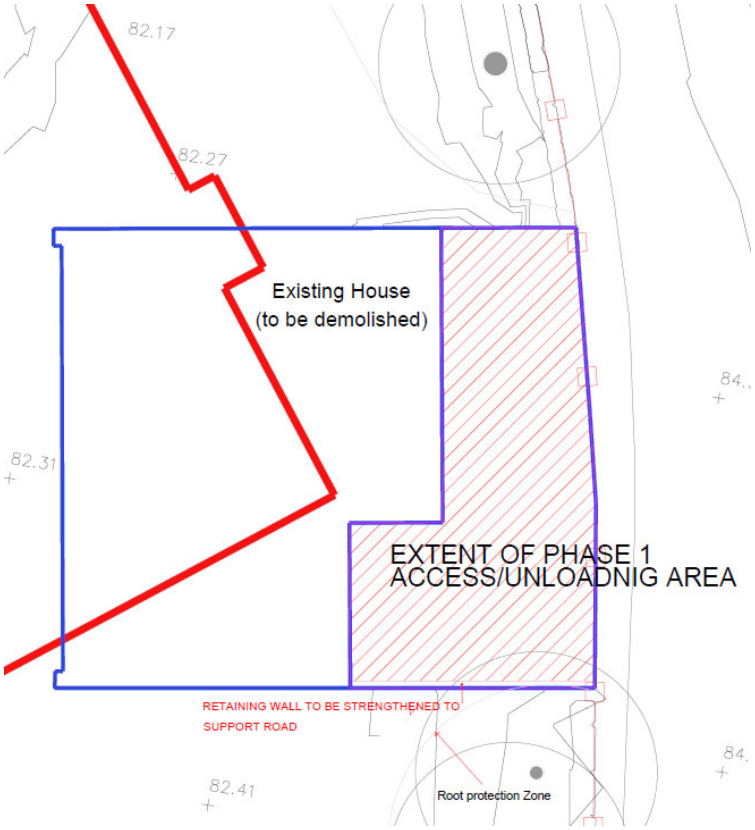
3.7.2 A temporary loading platform will be constructed to the right of the property, extending over the existing the driveway and into the site. The platform will be a steel frame structure that will be supported on concrete piles, the piling rig to be used is a KITTEN KT-50 Mini. All of the proposed piling for the platform lies outside the theoretical RPAs (see Extracts 2-4 below). Where supporting piers are located within the theoretical RPA, the ground protection will be removed and the foundations required hand excavated under arboricultural supervision. The strengthening of the retaining wall (see Extract 2 below) will be undertaken with caution, ensuring that any roots behind the existing structure are not disturbed.

3.7.3 Construction materials will be delivered on lorries with mechanical off load and stored outside the RPAs.

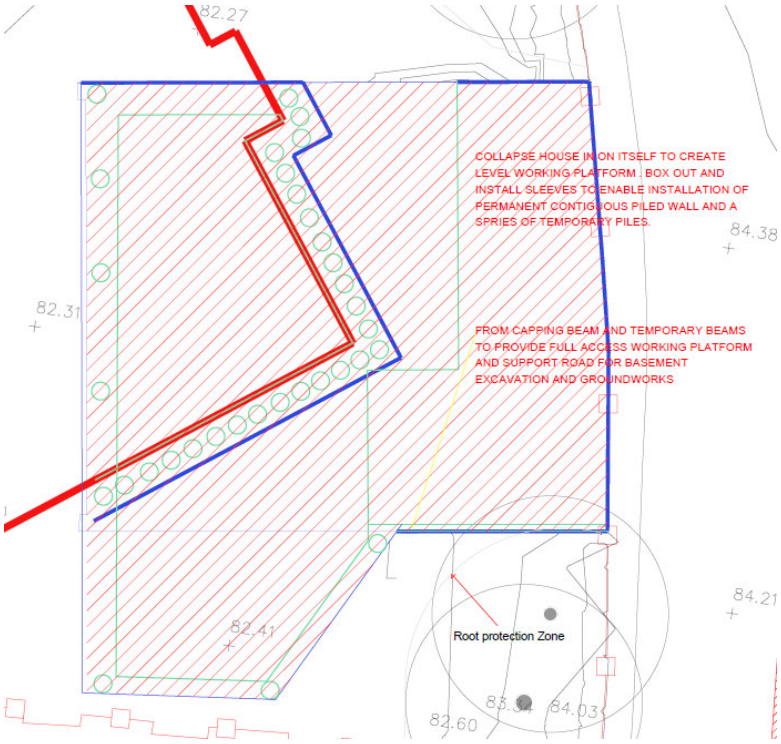
3.7.4 Waste shall be taken from site using 3 axle vehicles, loaded within the site boundary by either a conveyor moving the material directly into the lorries or use a long reach excavator that would be positioned on the loading platform to load the lorries.

3.7.5 During the construction phase and throughout dry periods on site regular hosing down will be carried out to control dust pollution. In the event of dust build up on trees occurring arboricultural advice will be sort and if necessary remedial measures such as hosing down the trees will be taken.

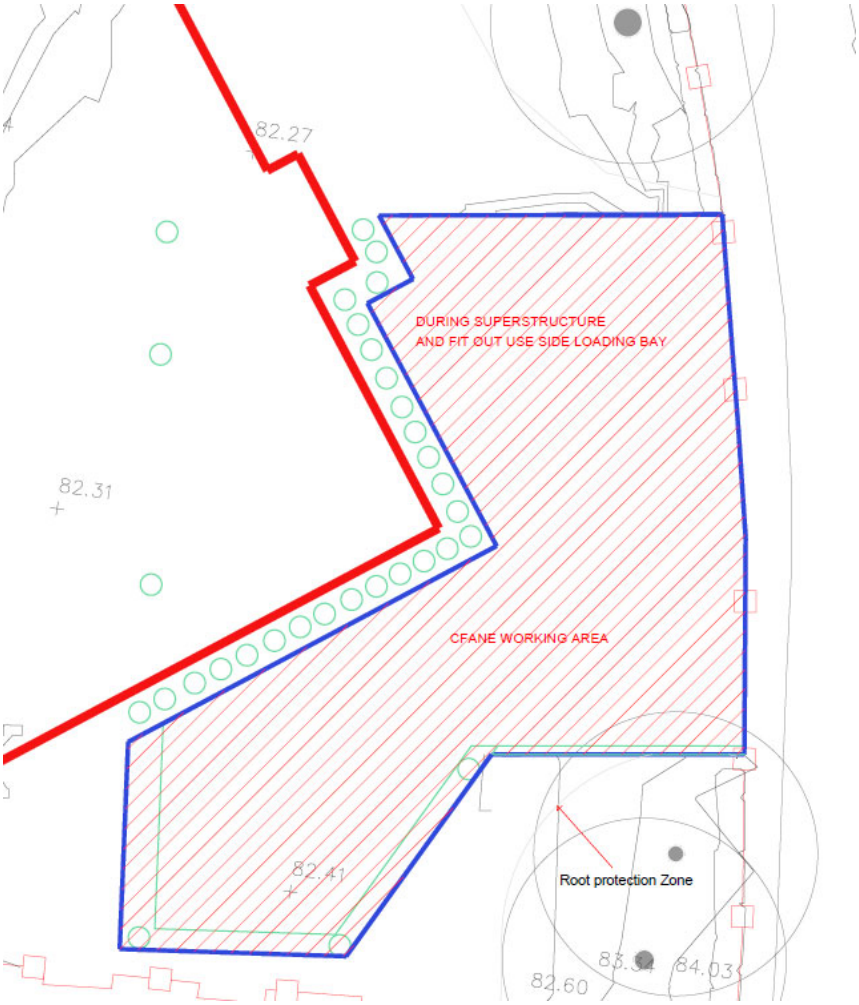
3.7.6 The foundation pits for the “legs” required to support the floating ramp within the RPA of T22 will need to be hand-dug, with any significant roots found pruned under arboricultural supervision. If possible, some flexibility in the position of the “legs” should be built into the design, allowing trial pits with significant roots to be relocated.



Plan Extract 2: Phase 1 Loading Platform (Plan Ref: 110-STO-01)



Plan Extract 3: Phase 2 Loading Platform (Plan Ref: 110-STO-01)



Plan Extract 4: Phase 3 Loading Platform (Plan Ref: 110-STO-01)

3.8 Removal of Ground Protection & Post Construction Landscaping & Treatment

3.8.1 The tree protection may be removed upon completion of the construction phase and any site machinery has been removed from the RPA.

3.8.2 The replanting scheme will include a minimum of 9 semi-mature indigenous trees and smaller indigenous trees (total of 25 new trees). This replanting will also include the two small leaved limes (*Tilia cordata*) specified in condition 3 of planning permission 2013/6828/T. A beech hedge is also proposed around the whole site to increase privacy, as previously approved (2011/1682/P). The new planting scheme proposed is detailed on plan 1317-PL-213-REV-F by Wolff Architects.

3.8.3 New trees will be containerised (i.e. grown in a container for at least one season after being lifted), ideally in an air pot, and will have well-established radial root growth including a substantial amount of fibrous rooting within the container. There shall be no circling or girdling roots present.

3.8.4 The trees will be of the size specified, true to type and free from discernible pests and diseases. If formative pruning has been carried out, the wounds shall have healthy and continuous bark occlusions. In case of any doubt, the recommendations of BS8545: 2014 Trees: from nursery to independence in the landscape – Recommendations will be adhered to.

3.8.5 Before any landscaping works are carried out, there shall be a site meeting between (as a minimum) the retained arboriculturist and the landscaping manager to discuss tree protection measures. During this meeting, the soil condition shall be assessed and remedial measures specified as appropriate.

3.8.6 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. If existing soft vegetation is to be removed, this shall be done using hand tools only.

3.8.7 Individual planting pits shall be dug by hand for trees and shrubs, there shall be no trench planting. The planting pits of trees shall be square and dug to a diameter at least 500mm greater than the diameter of the root ball. The pit shall be deep enough to accommodate the depth of the root ball to the root collar. Should the sides and bottom of the pit be smeared or compacted, they shall be loosened with a fork to facilitate root penetration.

3.8.8 Trees and shrubs shall be planted so that the root collar is level with the finished level of the surrounding soil.

3.8.9 Planting pits will be backfilled with the excavated soil following the removal of stones and any foreign objects. This backfilling will be carried out in stages of approximately 150mm depth to allow for light consolidation of the backfill throughout the depth of the planting pit. No air pockets shall be left within the pit.

3.8.10 Trees shall be secured in place by being tied to double stakes of pressure-treated, peeled timber. The ties used shall be biodegradable and will be located at a height of not more than one-third of the clear height of the stem.

3.8.11 After planting, all trees and shrubs shall be watered slowly under low pressure until the soil around the trunk and an area equivalent to a circle 1000mm in diameter around it is thoroughly moistened.

3.8.12 All newly planted trees and shrubs shall be watered at least once a fortnight between March and October. This frequency will be increased according to rainfall and temperature.

3.8.13 An area equivalent to a circle 1000mm in diameter around the stems of all newly planted trees shall be mulched with bark or well-rotted woodchip to a depth of 75mm. This mulch should not be laid in direct contact with tree stems. This mulched area shall be hand-weeded once every fortnight between March and October. Any mulch disturbed during this process will be replaced.

3.8.14 Tree stakes and ties will be removed within 18 months of planting.

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 proposed development and the methods that need to be adopted in order to prevent such damage:

Table 2: Summary of Proposed Methods

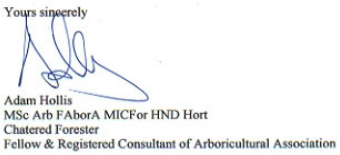
Impact	Mitigation	Reference	Trees Affected
General site access, material storage etc.	Ground protection to acceptable standards.	Paras 1.3, 2.2.1 & 3.3.3 Tree Protection Plan in Appendix 5	All retained trees
Demolition within existing canopy	Tree surgery	Section 2.1	T22
Reinforcement of retaining wall	Existing root zone to be protected/undisturbed	Section 3.7	T21
Demolition of existing build within RPA	Pull down technique within RPA	Section 3.6	T22
Changes in grade within RPA	Course granular material (subject to confirmation from engineers). Trench dug to 600mm as permitted under previous proposals	Section 3.5	T22
Temporary Platform	Hand-dug foundation pits for supporting piers	Section 3.7	T22
New landscaping	Hand-dug foundation pits for “legs” on proposed ramp No-dig construction techniques for new/replacement hard landscaping	Section 3.8	T22 and all retained trees

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

30th January 2019

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

Web: www.landmarktrees.co.uk
e-mail: info@landmarktrees.co.uk
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

Site: 53 Fitzroy Park, London N6 4JA

Surveyor(s): Adam Hollis

Date: 11 01 2016

Ref: WAL/53FP/AMS

Recommended Tree Works to Facilitate Development

Show All Trees
Hide irrelevant

Tree No.	English Name	Height	Stem Diameter	Crown Spread	Recommended Works	Comments/ Reasons
3	Lime, Common	16	540.0	8246	Fell	Lapsed pollard / high end weight Leaning (significantly) N Small cavity on western stem Unsuitable for lawn location To Facilitate Development
18	Sycamore	19	551.0	8246	Fell	Multi stem weakness Restricted rooting on embankment Unsuitable fro retention within garden interior To Facilitate Development
19	Sycamore	19	489.9	3556	Fell	Multi stem weakness Restricted rooting on embankment Unsuitable fro retention within garden interior To Facilitate Development
21	Ash, Common	14	150.0	1312	Fell	Suppressed by nearby tree Asymmetry (minor) To Facilitate Development
20	Cherry, Wild (Gean)	16	350.0	2444	Fell	Unprofessionally topped/lopped Suppressed by nearby tree Asymmetry (minor); Co-dominant limbs with included bark To Facilitate Development
22	Sycamore	19	560.0	2756	CL 3 metre ground clearance - CL to provide working clearances	Unprofessionally topped/lopped Co-dominant limbs Included bark in branch unions Low live crown ratio To Facilitate Development

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

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		

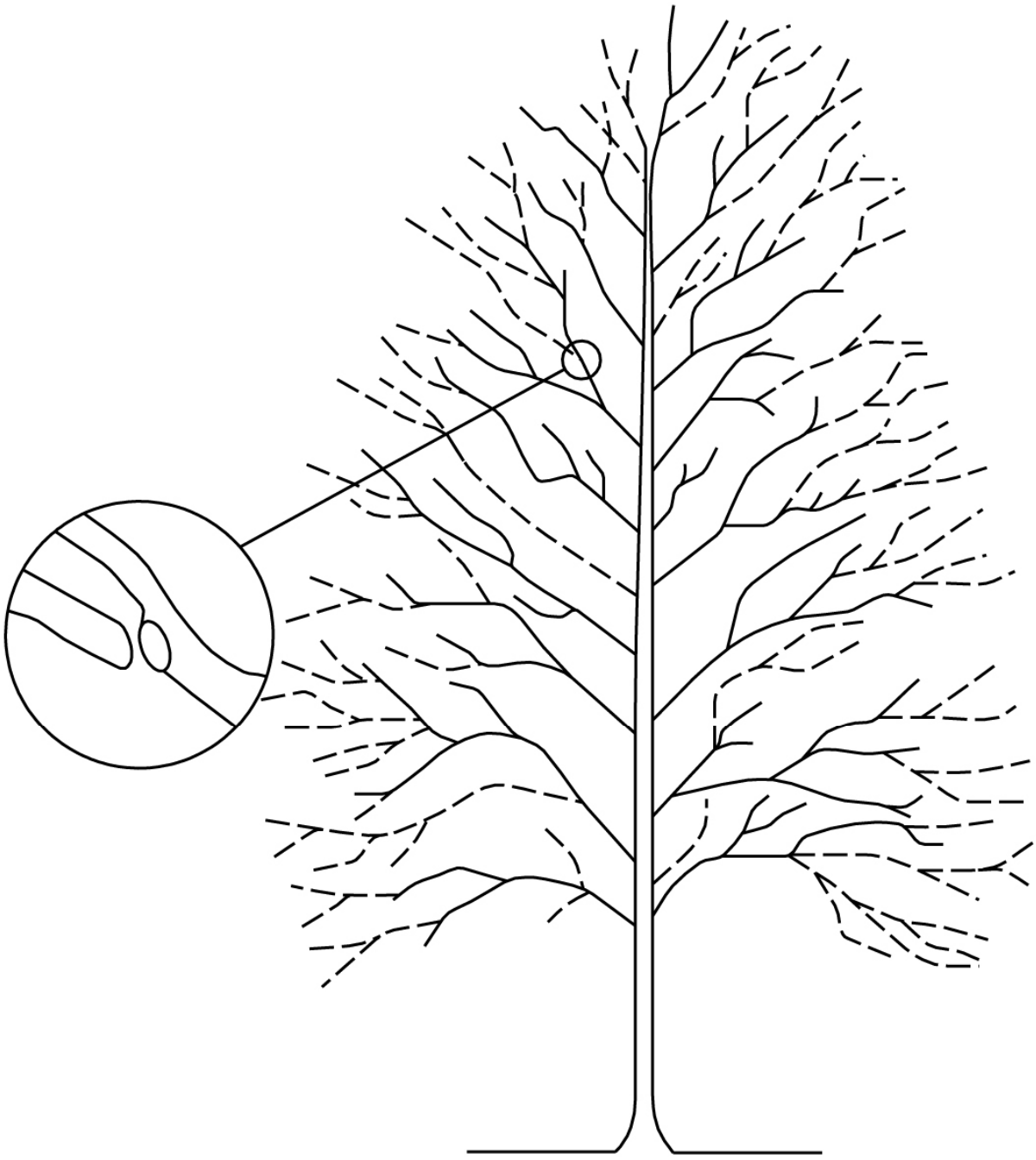
Web: www.landmarktrees.co.uk
e-mail: info@landmarktrees.co.uk
Tel: 0207 851 4544

London Office: 20 Broadwick Street, W1F 8HT, London
Registered Office: Grange Cottage, All Cannings, Devizes, Wiltshire, SN10 3NR

Arboricultural Supervision Sign off Checklist

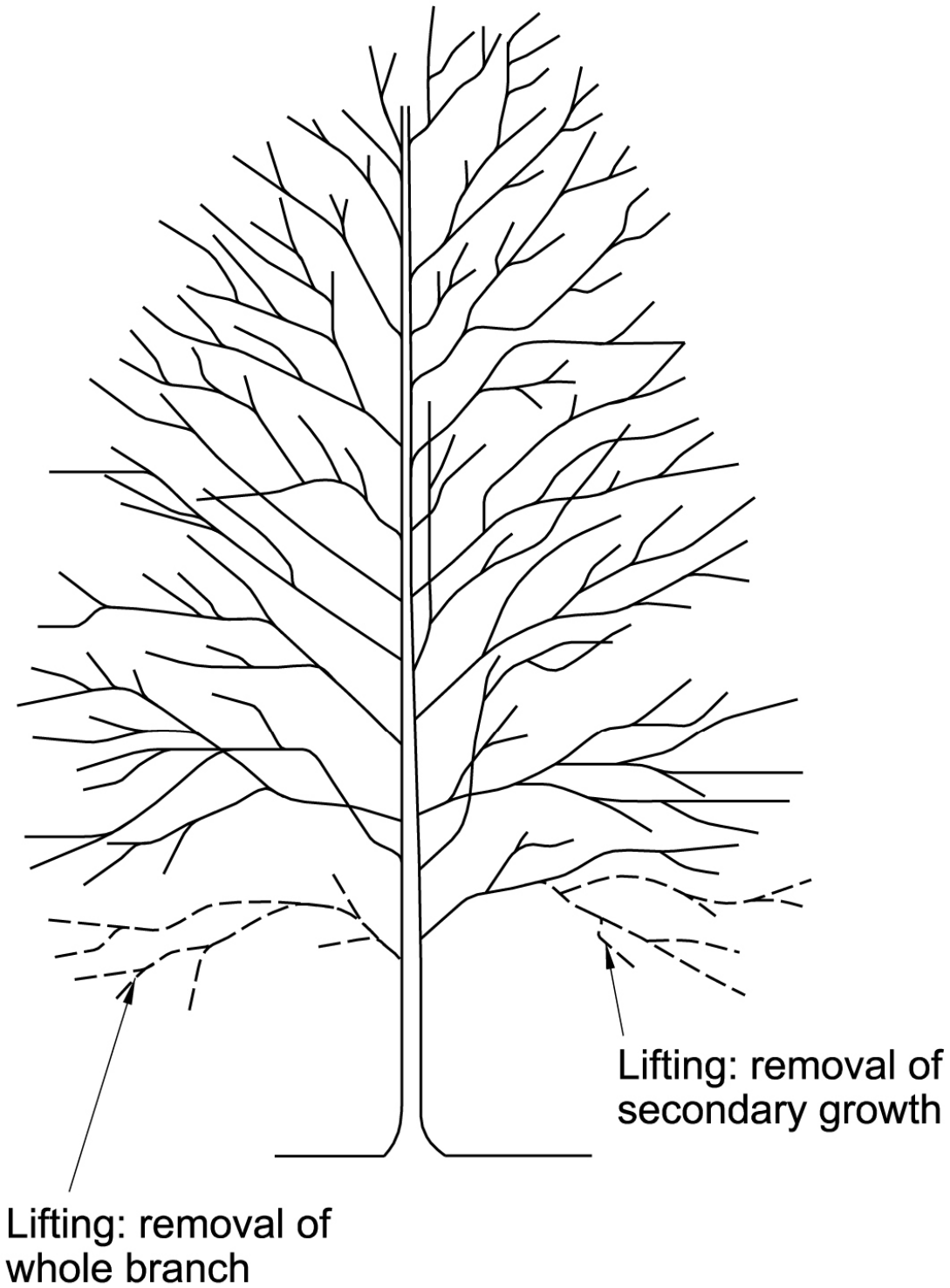
Tree No (s)	Project Phase	Task	Date Completed	Signed (Project arboriculturist)	Signed (Site Manager)
	Pre-commencement	Pre-commencement site meeting to include site manager briefing (S.1.5)			
	Pre-commencement	Confirm the location and specification of the protective measures is in accordance with AMS & 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.

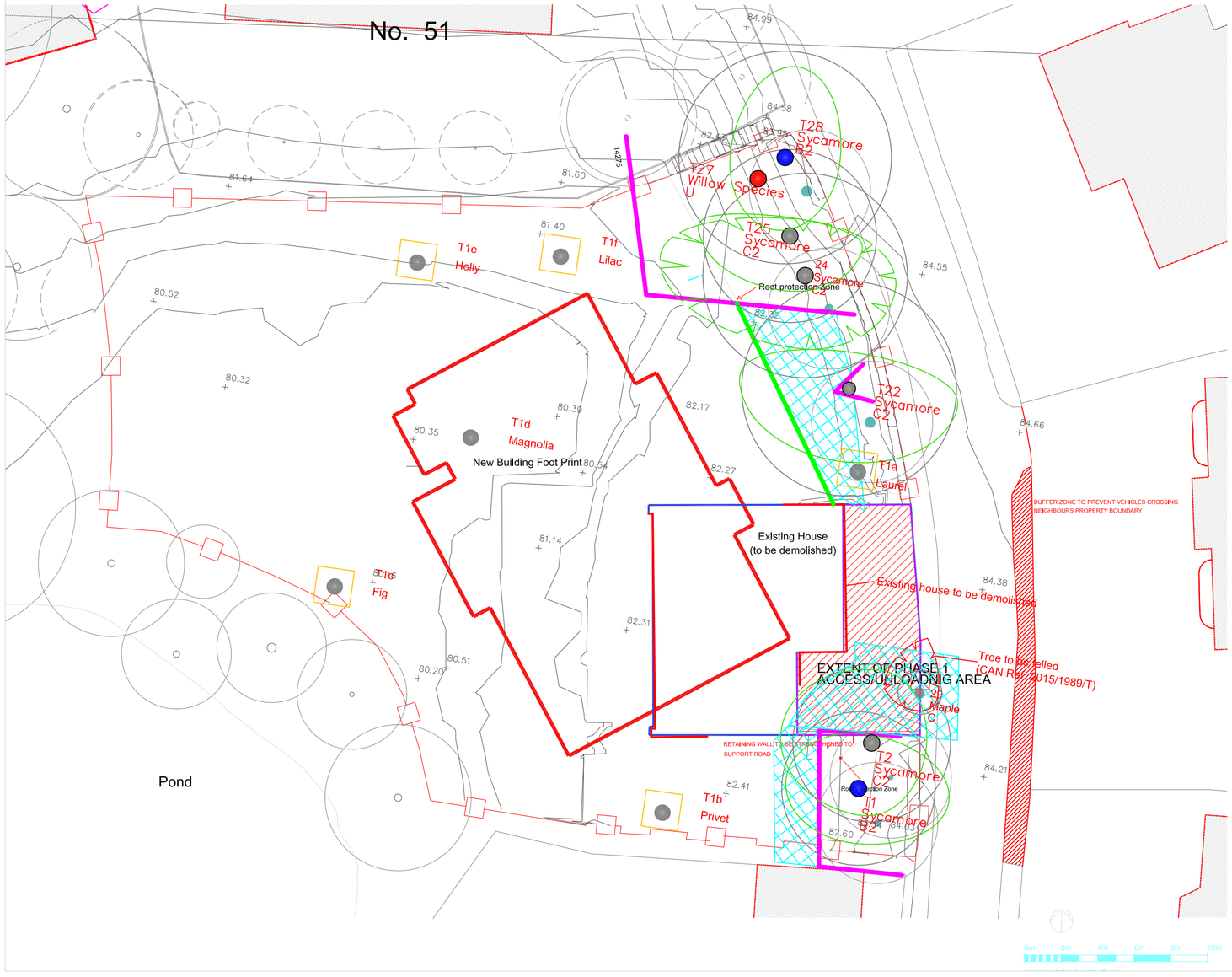
REDUCING THE CROWN



CROWN LIFTING

APPENDIX 5: TREE PROTECTION PLANS

No. 51



Phase 1 Extent of access

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).

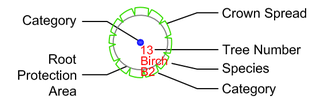
Landmark Trees

20 Broadwick Street, London, W1F 8HT
Tel: 0207 851 4544 Mobile: 07812 989928
e-mail: info@landmarktrees.co.uk Web: www.landmarktrees.co.uk

Site: 53 Fitzroy Park. London, N6 4JA	1:200@A2
Drawing Title: Tree Protection Plan	January 2019

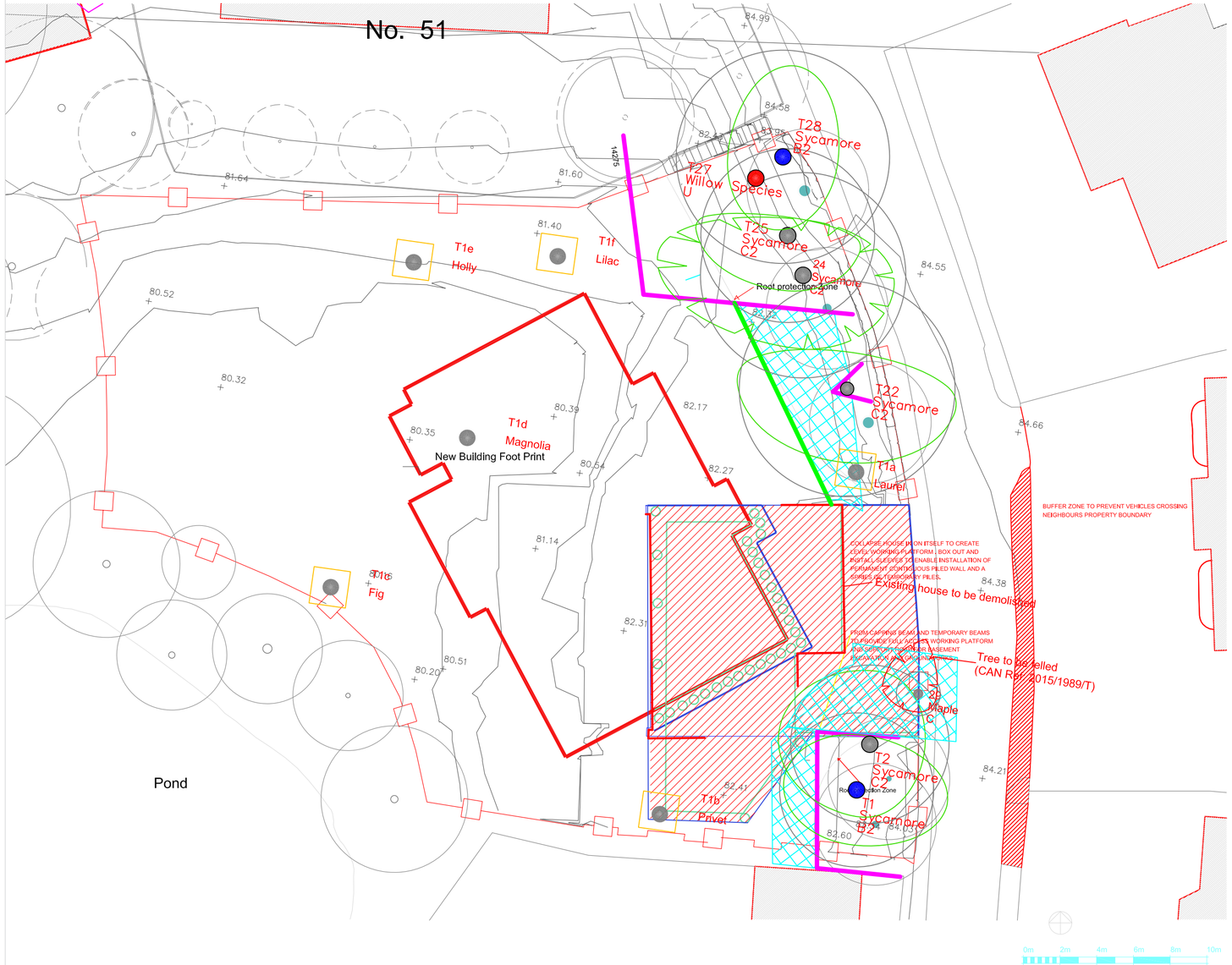
Key:

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



- Trees felled subject to CAN notice
- Precautionary area: assumed no-dig construction. All excavation subject to arboricultural supervision; limits of which to be hand-dug; hard-surfacing retained as ground protection where practicable
- 2m x 2m Temporary Netlon Fencing
- Tree Protection Fencing
- Installation of hand-dug trench to 600mm and root pruning

No. 51



Phase 2 Extent of access for demolition groundworks

N

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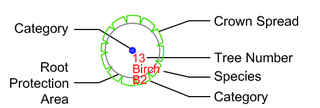

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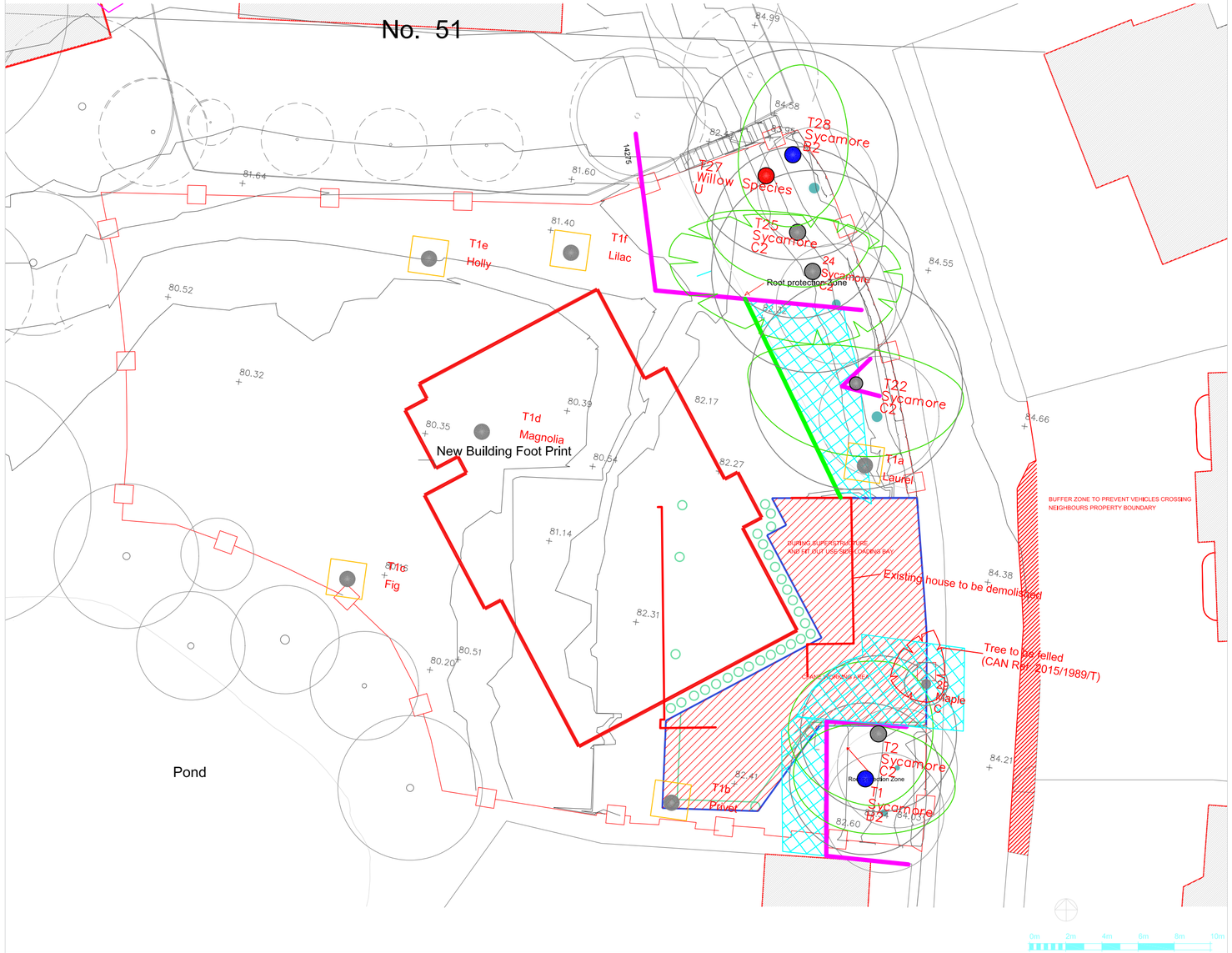

Phase 3 For superstructure

NOTE:

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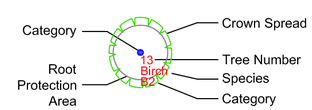

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- 2m x 2m Temporary Netlon Fencing
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