TREE PROJECTS

PROFESSIONAL &
TECHNICAL ARBORICULTURE

REPORT ON TREES AT

14 Well Road
London
NW3 1LH

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SUMMARY

This report addresses proposals for the demolition of 14 Well Road together with its reconstruction to form a new residential dwelling comprising lower ground, ground and first floor levels.

One tree within the property and three off-site trees have been assessed on context of BS5837 Trees in Relation to Design, Demolition and Construction (BS 5837).

The on-site tree is a Leyland Cypress which was inspected by Tree Projects in October 2011 and prior to conception of the current project. At that time we submitted a notification of intent to remove the tree due to inappropriateness (Unsustainable within location) to which Camden Council raised no objection.

The remaining trees are off site street trees of which one suppressed London Plane is closest to the area of work. This tree is relatively young (perhaps 20 years old) and has been planted beneath the spreading crown of a much older, larger and substantial London Plane tree growing on the opposite side of the road. The crown of the tree closest to the property is wholly a-symmetrical and substantially overhangs it due to the influence of the larger tree which has 'forced' distorted growth towards available light. The' unadjusted Root Protection Area (RPA) of the closer suppressed tree is in proximity to proposed construction line however, a brick planter between is considered to have curtailed development of roots towards the main building by virtue of its intact condition.

The proposal does not require the removal of any trees although it is likely that the Leyland Cypress will be felled in accordance with the no objection response to the earlier application. With retention of the existing planter forward of the property, no harm is expected to arise that would negatively impact trees or diminish the amenities they provide.

1 INTRODUCTION

1.1 **Instruction:** I am instructed by Philip Wagner Architects on behalf of mutual clients to provide arboricultural advice and guidance in respect of proposals for the demolition and reconstruction of 14 Well Road and its replacement with a single residential dwelling.

1.2 **Qualifications and experience:** I have based this report on my site observations and the information provided and in the light of my professional knowledge. I have experience and qualifications in arboriculture, and include a summary in Appendix 1.

1.3 **Documents and information referred to:** Philip Wagner Architects have provided copies of the following documents:

- Site as existing drawings as Cad files from which we have prepared a tree schedule plan.
- Site as proposed Cad drawings in the series 639 numbered 09, 30h, 32j, 33d, 38d and 39d.

1.4 **Scope and Limitation:** This report is only concerned with the single application described within the drawings outlined at 1.3 and is for the sole use of my instructing client. Use in any other context is not permitted. Trees were inspected from ground level only and in poor light conditions (dusk). A full tree condition inspection was not undertaken other than to assign the appropriate category grade.

2 TREE CONSTRAINTS ASSESSMENT

2.1 **Identification and location of the trees:** Trees within and adjacent to the property are shown on the tree schedule plan and described within the tree schedule, both at Appendix 2. There is one tree on site, a Leyland Cypress permitted for removal under London Borough of Camden reference 2011/5136/T. Remaining trees are off site street trees presumed to owned and managed by Camden Council. The tree schedule plan is for illustrative purposes only and it should not be used for directly scaling measurements other than as can be determined by use of the scale bar. For immediate context an extract of the plan is shown at Fig 1.

2.2 **Individual tree Assessment and Assignment of Root Protection Area (RPA).** BS 5837 provides a basis for assessment of tree RPA which is a calculation based on a multiplication of tree stem diameter. It recommends trees are measured, and then assessed in several ways which include (but not exclusively) contribution to amenity/ overall condition and life expectancy. A tree grading system is advocated, the details of which are outlined within the explanatory notes at Appendix 2. I now discuss each tree individually:

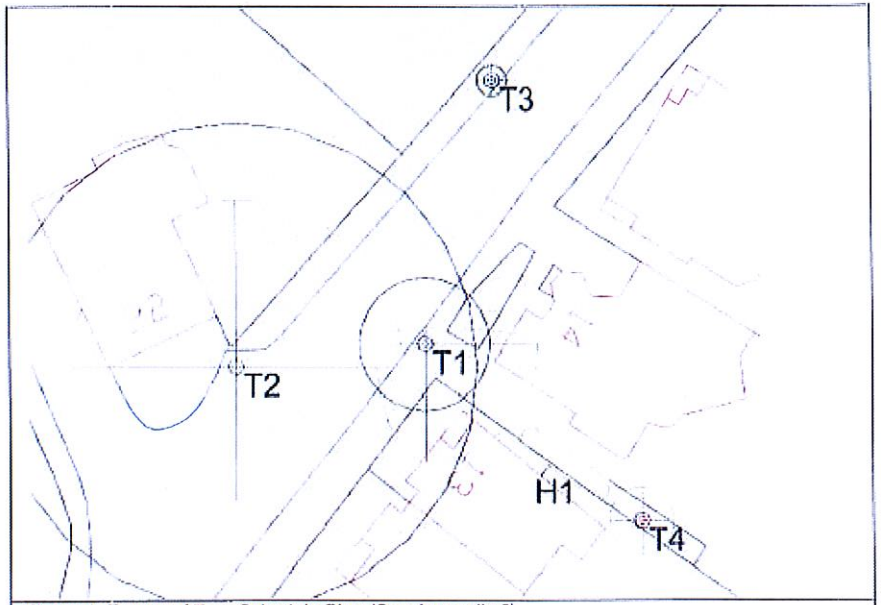


Figure 1: Extract of Tree Schedule Plan (See Appendix 2)

2.2.1 **Tree T1: London Plane, C2 grade tree with 20+ years useful life expectancy.** Located within the footpath forward of the property this is a relatively young tree the crown of which is notably a-symmetrical in form and almost predominantly overhangs the subject property. The reason for this form of growth is the suppressive influence of the much larger tree opposite; T2. Tree T1 is graded C2, an assignation of only a low quality and value (see tree schedule notes at Appendix 2). My view is that it is inappropriate for the location in which it is planted due to the prevailing circumstances, i.e. its deformed growth renders its reasonable useful life expectancy diminished.

There is a raised planter forward of the property that separates the tree from the demolitions and area of reconstruction. This structure is expected to have sufficiently directed root growth and guided it away from the property such that no adverse impact will befall roots during the course of implementing the proposal.

Whilst likely not to be a popular observation due to the sensitive nature of tree issues, it is my opinion that in strict arboricultural terms untainted by sentiment, that this tree should be removed and replaced with another better able to tolerate the shade and dominance of T2 that could grow without such pronounced deformity. Such trees, for example Pyrus calleryana Chanticleer or Cornus nutallii, tend to be smaller in stature than London Plane, a species which should be planted in a more open position with sufficient space conducive to allowing its full potential to develop.

2.2.2 **Tree T2: London Plane, A2 grade tree with 40+ years safe useful life expectancy.** Located on the opposing side of Well Road opposite numbers 12/13 this is a mature and substantial specimen of London Plane that dominates the locality and gives rise to the suppression described of tree T1. Due to its stature and presence, and being a particularly fine example of the species, (one that does not suffer the inadequacies of location that constrain T1), this tree is graded herein as A2 i.e. it is of high quality and value.

2.2.3 **Tree T3: Fastigiate Norway Maple, B2 grade with 40+ years safe useful life expectancy.** Referred to primarily for context, whilst still staked, this is a young and established tree that will continue to contribute to amenities as it develops further.

2.2.4 **Hedge H1: Yew with Cherry Laurel.** Between the subject property and number 13 Well Road, the Yew was mentioned for removal in our earlier tree work notice of intent although not referred to by the council in issuing its decision, possibly because this is a low grade specimen that is part of a poorly formed hedge. Useful replaceable screening.

3 TREE IMPACTS AND SCHEME DESIGN.

3.1 Summary of proposal:

Demolition of the existing property, formation of new footings and foundations and raise new elevations.

3.2 Summary of Foreseen Construction Impacts and Remedies

Only tree T1 is in proximity of foreseen construction risks. To assess the situation, we have overlaid to the site as existing ground floor plan the proposed lower ground floor plan See Figure 2.

RISK	PROPOSED REMEDY
	T1 London Plane
Damage to roots during construction	The existing raised planter is to be substantially retained. The structure appears intact and not to be suffering the effects of tree root interaction: this suggests footings below ground have directed roots away from the building and the new build line. Retain front walls of planter and all footings up to the line of new construction
Damage to upper	I am advised that the lower ground floor retaining wall to be formed will be

crown of trees by piling or materials handling	shuttered in situ which will have no implications as there will be no machinery. Even were there to be localised piling/ use of sheet piles, mast height of equipment can be controlled to be below 5m. Some minor pruning may be required to accommodate scaffold- this will be routine maintenance.

Table 1

3.3 Overlay of site as existing to site as proposed:

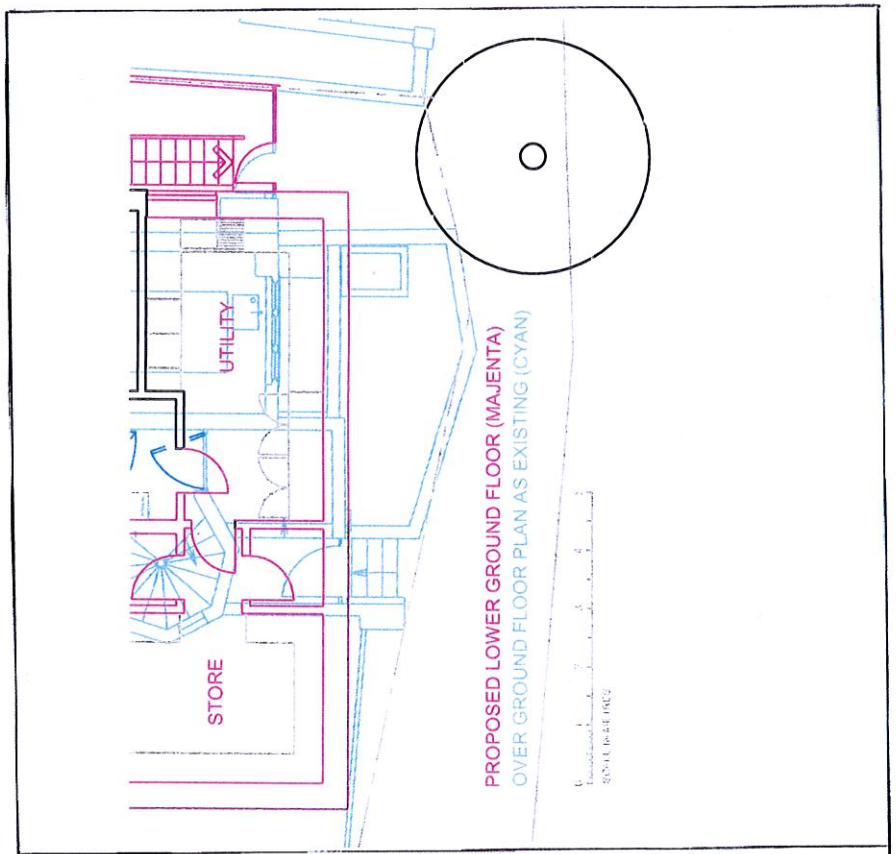


Figure 2: Site as Proposed overlain to existing

At Figure 2 we have overlain the site as proposed drawing to the site as existing in order to assess groundwork implications for suppressed tree T1.

As previously mentioned, the existing raised planter is thought to have acted as an impediment to root development of the tree and whilst the back section of this planter needs to be demolished, the front sections and concrete base can be retained to ensure no harm to roots during the course of works.

Street trees close to building sites can suffer mechanical stem damage by site vehicles manoeuvring at kerb-side. In this instance due to the lean of the stem of T1, this is unlikely to occur. Protection is still however advised as being worthwhile as damage and concrete splashes etc often remain apparent long after works have ceased.

4. INDICATIVE TREE PROTECTION METHOD STATEMENT.

4.1 London Plane Street tree forward of the property (T1) is to be protected by erection of free standing timber stud frame sheathed in 18mm Ply wood to 2.4m above ground. Timber frame can be friction clamped to stem of tree with timbers wrapped in a thick wad of hessian.

4.2 The existing planter front and side walls and base to be retained for the duration of works.

4.3 Pruning of the upper crown of the tree to accommodate scaffold etc if required, is to be undertaken following liaison with Camden Council tree section

4.4 Arboricultural advice should be retained in event of any tree related queries arising during the course of implementing the proposed scheme.

5 SUMMARY AND RECOMMENDATIONS

On the basis of the above information and discussions, I summarise and make recommendations as follows:-

5.1 No trees are required to be felled as a direct consequence of the scheme.

5.2 The removal of the Leylandii conifer, to which Camden have previously raised no objection, is likely to proceed.

5.3 Work will be in part be undertaken in proximity to a low grade London Plane Street tree T1. Activity will be external to unmodified RPA and behind a brick planter structure likely to have curtailed root development.

5.4 It is advised that the brick planter described is substantially retained to separate construction activities from tree T1 and, it is further advised, that its stem is protected to prevent inadvertent mechanical damage.

5.5 Should pruning of the street tree be required this is expected to be the equivalent of an operation constituting 'routine maintenance'.

5.6 Arboricultural input should be retained to advise the main contractor and design team in event any tree related issues arise. Tree Projects remain available and can stand to liaise with Camden Tree Officers should the need arise.

5.6 The proposal will not have any adverse impacts on trees or the amenities they provide. It is therefore our view that the proposal will not harm tree amenities or appearance and character of the area.

Nick Bentley
June 2013

ARBORICULTURAL SUBMISSION
APPENDIX 1

Brief qualifications and experience of Nick Bentley

1. **Qualifications:** HNDH Landscape Design & Horticultural Technology, Credit, Askham Bryan College, York, 1989. RFS Cert Arb 1991 Credit. Professional Tree Inspection, 2006.

2. **Practical experience:** As gardener, arborist and arboriculturist. Royal Botanic Gardens Kew (Wakehurst Place) as climbing tree surgeon. 15 years experience Local Government as an Arboricultural Officer: Leicester City Council, Wycombe District Council and latterly 8 years at the Royal Borough of Kensington and Chelsea handling all aspects of pubic sector tree management and procedures relating to the Town and Country Planning Act 1990 i.e. Development Control, public inquiries and informal hearings, tree preservation procedures and all aspects of control and enforcement thereof. Following a brief spell of 18 months as contracts manager of Arboricultural Association tree surgery contracting company I have been self employed from 2004 as a specialist tree planting contractor and, consulting arboriculturist for public and private clients and now continue to trade as Tree Projects Ltd.

3. **Continuing professional development:** Member of the Arboricultural Association and Royal Forestry Society and Associate of the London Tree Officers Association. Seminars/ Workshops: 2009: Veteran Tree Management, ISA; Trees and Climate Change, EtaLog, 2008: The Underground Movement, Barcham/ Bartlett seminar; CAVAT in practice training seminar with Chris Neilan/ Tim Moya Assoc; 2007: the Business of Arboricultural Consultancy, Arb Association; Through the Trees to Development, AAIS; 2006; Introducing BS 5837: 2005, Arb Association; Report Writing, Arb Association; Elite Bio-Mechanics, Mattheck/ Symbiosis Consulting; The Future of Tree Risk Management,

4. **Commissions undertaken:**

    - Planning consultancy to British Standard 5837 Trees in Relation to Construction; tree surveys and design advice for new builds, underground and above ground extensions, including method statements and tree protection plans.
    - Tree condition surveys and recommendations including data handling through Ezytreev and Confirm.
    - Providing advice on tree preservation matters, tree work applications and sub-contracting tree surgery operations.
    - Tree supply and planting.
    - Tree root investigations by trench formation and pile spotting by use of non percussive air spade and air vacuum excavation techniques

ARBORICULTURAL SUBMISSION
14 Well Road

APPENDIX 2

TREE SCHEDULE
TREE SCHEDULE PLAN
EXPLANATORY NOTES

No Pages: This plus 3

Tree Projects BS 5837 Survey 14 Well Road

Date: 17-5-2013

Weather: Low visibility

last filter column

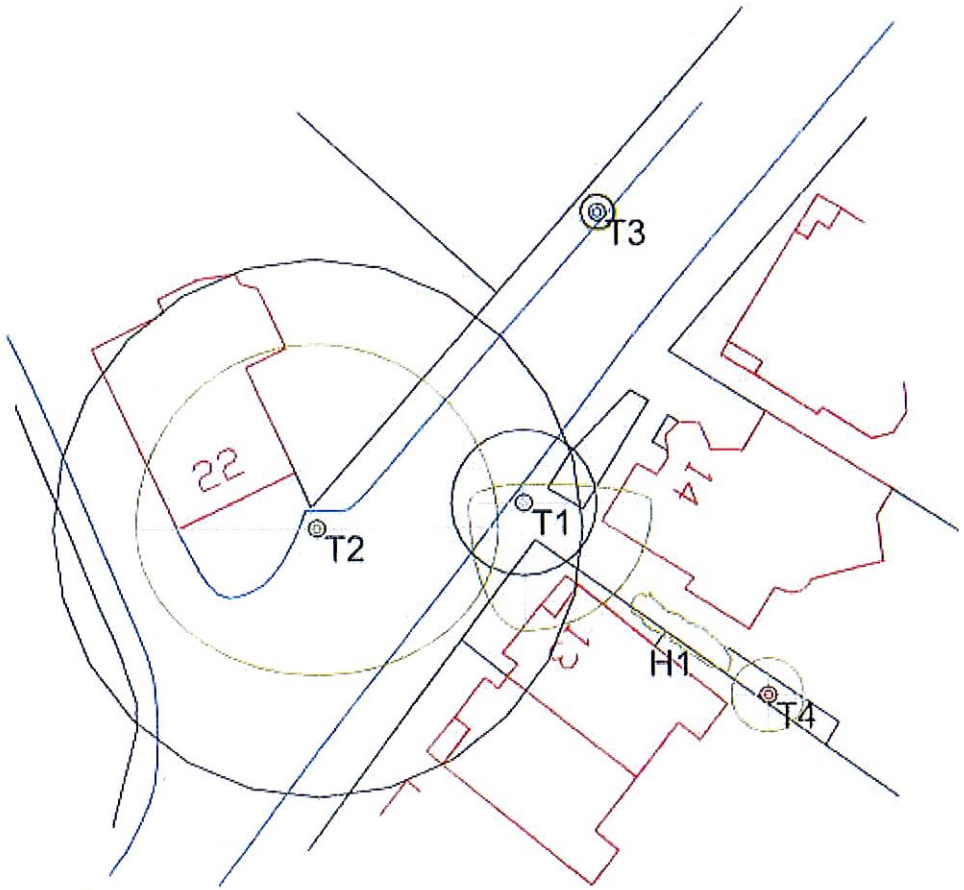
Tag	Type	Common Name	Latin Name	DBH	Stem Cnt	Height	Low Crown	Nth	East	Sth	West	Age	Life Exp	Condition	BS Cat.	Comments	Prelim. Mgt Recom.	RPA m2	RPA radius	RPA square
T1	tree	London Plane	Platanus X hispanica	330	1	15	4	1	7	7	3	Y	20+	good	C2	A-symmetrical tree substantially suppressd beneath influence of T2.	question suitability/ long term viability irrespective of proposal. Raised planter between tree and proposed location of work.	49.3	4.0	7.0
T2	tree	London Plane	Platanus X hispanica	1210	1	22	6	10	10	8	10	M	40+	good	A2	Canopy dimension estimated. fsb south 5m - centre 7m west of w boundary and opposite		662.3	14.5	25.7
T3	tree	Norway Maple	Acer platanoides	75	1	5	2	1	1	1	1	Y	40+	good	B2	on stake but established with good prospects, nice leafy tree centre 3.5m to east of e boundary on opp		2.5	0.9	1.6
T4	tree	Leyland Cypress	X Cupressocyparis leylandii	350	1	8	2	2	2	2	2	EM	<10	Fair	U	Diamensions estimated. Previously raise no objection for removal under 2011/5236/T Valid to 14th Nov 2013		55.4	4.2	7.4
H1	hedge	Yew,Cherry Laurel	Taxus baccata,Prunus laurocerasus			4	0	1	1	1	1	SM	10+	Good	C2	Informal hedge: Yew cited for removal in above S211 notification of intent.				

Explanatory Notes to tree survey schedule

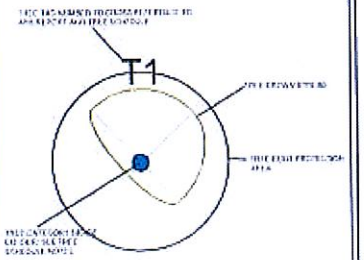
- **Tree reference (tag) number:** Individual trees are referred to by a 'T' prefix to a number, i.e. T1, T2 etc. Collections or distinct groups of trees may be assigned a G prefix to denote presence of a 'group'. Prefixes and 'SB' (shrub) ST (Stump) and 'H' (Hedge) show further arboricultural features
- **Name/ Latin:** Species identification is based on visual observations and the common English name of what the tree appeared to be is listed first, with the botanical name after. The botanical name is followed by the abbreviation spp if only the genus is known.
- **Measurements/estimates:** Stem and Height dimensions are taken by tape or laser unless indicated. (DBH in mm/ Height in m)
- **Tree Stem DBH (Diameter Breast Height) is used to calculate Root Protection Area (RPA):** Measured at 1.5m above adjacent higher ground level using a specially calibrated 'diameter tape' and recorded in millimetres. Low branching trees are measured at the waist if lower than 1.5m. If two or more stems are present breaking from ground level, each stem is measured and relative locations described where possible using cardinal points. If taken lower than 1.5m for practical purposes the reading height is given.
- **Height:** Height given approximately to the nearest 0.5m, May be derived from compensating lines of sight.
- **Stem Cnt = Stem Count:** number of stems observed (informs calculation of RPA taking account of difference between single stem [SS] and multi-stemmed trees [MS])
- **Low crown Height:** the generalised height of the crown above ground level, usually branch ends.
- **First Significant Branch & Bearing:** Height of first significant branch and direction of growth.
- **Branch Spread:** Crown spread is measured and given to the nearest metre or half metre from the face of the trunk to the tips of the live lateral branches, measured towards the cardinal points. Usually measured by pacing. For trees managed by pollard regime crown may be to pollard extent: check tree schedule.
- **Age Class:** Y=young, SM= Semi Mature, EM=Early Mature, M=Mature, OM=Over Mature, V=Veteran. Age is estimated from visual indicators and experience and it should only be taken as a provisional guide. Age estimates often need to be modified based on further information such as historical records or local knowledge.
- **Life Expectancy:** the estimated remaining contribution (to amenity)/ safe useful life expectancy in years. (< 10, 10+, 20+, 40+) a tree with less than 10 years safe useful life will ordinarily need to be felled unless retained for habitat purposes within an excluded area.
- **Physiological condition:** An assessment of the general health of a tree considering vigour, extension growth, crown density and presence of pathogens. G=Good, F=Fair, P=Poor, D=Dead
- **Category Grading:** the grade of the tree utilising the cascade chart for tree assessment within BS 5837:2012 Trees in Relation to Design, Demolition & Construction. Trees are graded on arboricultural, landscape and cultural/ conservation qualities. The assessed quality of a tree is ascribed by this letter whilst numeric sub categories define where the quality lies without conferring additional value. Simplified definitions are:

    - **Category U, Unsuitable for Retention; 'Trees in such a condition that they cannot realistically be retained in the context of the current land use [or their condition] for longer than 10 years'. (Trees would probably be removed for reasons of sound arboricultural management in any event)**
    - Category A: 'Trees of high quality with an estimated remaining life expectancy of at least 10 years.'
    - **Category B: 'Trees of moderate quality with an estimated remaining life expectancy of at least 20 years'**
    - 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'.
    - Sub categories 1, 2 or 3 assign respectively: 1; mainly arboricultural qualities, 2: mainly landscape qualities, 3; mainly cultural values including conservation. Note: for example an A1 tree has the same retention priority as an A2 tree. A Some trees may qualify under more than one criterion.

- **Comments:** observations that may supplement assessments of condition or otherwise be significant.
- **Preliminary Management Recommendation:** Advice regarding tree surgery etc. Key: NW = No work. RP= Reduce to Previous Reduction Points. CR% = Crown Reduce (by % or m). CL = Crown Lift (to specified height AGL). CT = Crown Thin (by %). **Priority** (where specified) Priority 1 = Urgent works ASAP and certainly within 1 Month. Priority 2 = Complete within 12 months. Priority 3 = Non critical works to complete within 2 to 3 years.
- **RPA m2:** The Root Protection Area in square metres required by BS 5837.
- **RPA radius:** the radius of a circle of size equivalent to the RPA m2. The radius is taken from the centre of the tree plot.
- **RPA square:** the length of sides of a square equivalent to the RPA m2. the centre of the trunk of the tree to be positioned in the centre of the square



KEY TO TREE SYMBOLS



SCALE BAR

0 1 2 3 4 5 10m

TREE SCHEDULE PLAN

14 WELL ROAD, LONDON NW3 1LH

TREE PROJECTS LIMITED,
THE MAISONETTE, 22 OLD PARK AVENUE
LONDON SW12 8TT

TSP/NR/JUNE 2013- REV A

E: treeprojects@hotmail.com M: 07788 724 720

DO NOT SCALE ONLY SCALE - USE PROVIDED MEASUREMENTS / SCALE BAR OR REFER TO ARBORICULTURIST