

Arboricultural Report

**Assessment of trees in relation to development
for planning purposes**

1-9 Sandycombe Road
North Sheen
Richmond
TW9 2EP

November 2016

141212-PD-11c

TIM M●YA ASSOCIATES



Project	141212-PD-11c – 1-9 Sandycombe Road, Richmond, TW9 2EP
Report Type	Arboricultural Report for Planning
Checked by	TM
Date Checked	Nov 2016

CONTENTS PAGE

1	SUMMARY REPORT	4
2	INTRODUCTION	5
	INSTRUCTIONS	5
	SCOPE AND LIMITATIONS	5
	BACKGROUND AND DOCUMENTS PROVIDED	5
	METHODOLOGY AND GUIDANCE	5
	SUPPORTING INFORMATION	6
3	OBSERVATIONS AND CONTEXT	7
	SITE VISIT	7
	DESCRIPTION OF THE SITE	7
	TREES WITHIN THE SITE AND SURROUNDING AREA	8
	SOIL CONDITIONS	8
	POLICY CONTEXT	8
	LONDON PLAN 2015	9
	DEVELOPMENT MANAGEMENT PLAN	10
	LEGAL CONSTRAINTS	10
4	TECHNICAL INFORMATION	11
	TREE DATA	11
	LIFE STAGE ANALYSIS	11
	BS5837 (2012) CATEGORY BREAKDOWN	12
5	ANALYSIS OF THE PROPOSAL IN RESPECT OF TREES	13
	PROPOSED DEVELOPMENT	13
	IDENTIFIED ARBORICULTURAL IMPACTS	13
6	DISCUSSION	15
	GENERAL CHANGE	15
	ARBORICULTURAL IMPACTS	15
	HOW DO THE CHANGES RELATE TO PLANNING POLICY?	15
7	CONCLUSIONS	17
	SUSTAINABILITY	17
8	RECOMMENDATIONS	18
	THE USE OF PLANNING CONDITIONS TO SAFEGUARD TREES	18
9	TMA SUPPORTING INFORMATION	19
	APPENDIX A – TMA PLANS	20
	APPENDIX B – TMA SCHEDULES	21

1 SUMMARY REPORT

1.1 This arboricultural report has been instructed by Goldcrest Land to provide information to assist all parties involved in the planning process to make balanced judgments with regard to arboricultural features in relation to the proposed development at 1-9 Sandycombe Road, North Sheen, Richmond, TW9 2EP.

1.2 This report includes:

- an assessment of the trees, their quality and value and constraints to development posed by these;
- the site context;
- observations on the trees;
- planning policies relevant to the consideration of the trees on the site;
- the impact of the proposed development upon the tree population in and around the site;
- methods of reducing impacts on trees; and
- measures to be taken to protect trees during the proposed works.

1.3 My conclusions are that the development proposal in respect of trees is acceptable and best practice guidance has been followed. No tree removals are required and all trees can be successfully protected throughout the construction of the development provided the tree protection details within this report are followed.

1.4 The overall proposal will have a positive impact upon landscape character by providing new tree planting in prominent locations adjacent to the highway in an area of Sandycombe Road where few trees currently grow.

2 INTRODUCTION

Instructions

- 2.1 My name is Charles McCorkell. I am an arboricultural consultant dealing with trees in relation to all forms of human activity including built development. I am an Associate Member of the Institute of Chartered Foresters, a Technician Member of the Arboricultural Association, and I have a BSc Honours Degree in Arboriculture from the University of Central Lancashire.
- 2.2 This arboricultural report has been commissioned by Goldcrest Land in order to provide information on arboricultural features in relation to the proposed development at 1-9 Sandycombe Road, North Sheen, Richmond, TW9 2EP.

Scope and limitations

- 2.3 The survey is not an assessment of health and safety of trees and no recommendations for works have been provided, however any trees identified as imminently dangerous will have been highlighted, if noted while on site, in the tree works schedule attached at Appendix B of this report.
- 2.4 The contents of this report are copyright of Tim Moya Associates and may not be distributed or copied without the author's permission. Tim Moya Associates Standard Limitations of Service apply to this report and all associated work relating to this site.

Background and documents provided

- 2.5 My report has been prepared with reference to the following supplied information:
- Ordinance Survey Map; and
 - Proposed Ground Floor Plan - P03 100 (Goldcrest Architects).

Methodology and guidance

- 2.6 I have referred to *British Standard 5837: Trees in relation to design, demolition and construction (2012)* which provides a methodology for the assessment of trees and other significant vegetation on development sites.

- 2.7 BS 5837 (2012) is intended to assist decision making with regard to existing and proposed trees and sets out the principles and procedures to be applied to achieve a harmonious relationship between existing and new trees and structures that can be sustained for the long term.
- 2.8 The Building Research Establishment (BRE) has also produced several documents between 1998 and 2011 in relation to trees and site layout planning, sunlight, daylight, shading and urban cooling. These documents consider trees and their relationship with buildings and garden usage, including the benefits they bring in terms of welcome shade or urban cooling, advising a balanced approach to these issues in design.

Supporting Information

- 2.9 All TMA documents relevant to this report are listed at section 9, and included within the Appendices.

3 OBSERVATIONS AND CONTEXT

Site visit

- 3.1 My colleague Tim Moya visited the site on the 15 December 2014 to carry out a survey of the trees and to advise on constraints. Trees on and around the site were inspected from ground level only.

Description of the site

- 3.2 The site is located at the southern end of Sandycombe Road which is situated within the North Sheen area of Richmond (Photo 1). The main access to the site is on the eastern side of Sandycombe Road and is easily accessible via Lower Richmond Road (A361). North Sheen train station is located less than half a mile to the south of the site and Kew Garden station is less than a mile to the north.
- 3.3 The existing building is currently an unoccupied two storey commercial building with associated car parking.

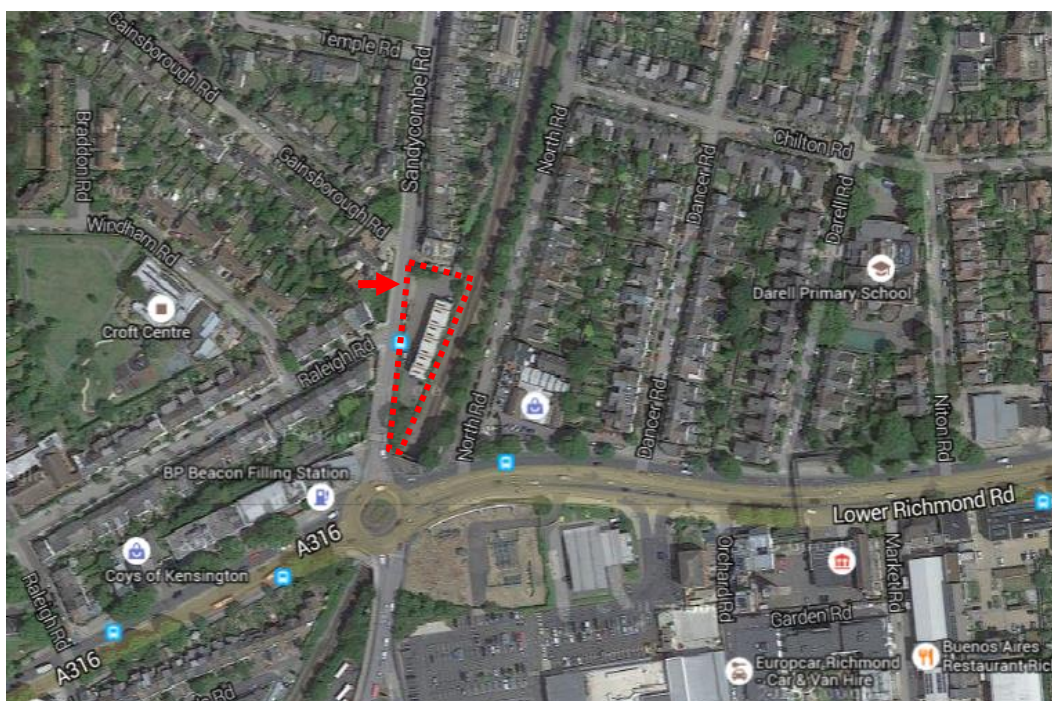


Photo 1 (Google Maps, 2015). Dashed line indicates approximate outline of the site boundary and the arrow indicates the main site access.

Trees within the site and surrounding area

- 3.4 The wider area is mostly residential in character to the north and commercial to the south with trees located within garden areas and, where planted, as street trees.
- 3.5 On site, the majority of tree cover is located in the southern most corner of the site, with some self-seeded vegetation located along the eastern boundary adjacent to the existing railway line.
- 3.6 There is more significant tree cover on the eastern side of the railway line adjacent to North Road, this row of trees offers a degree of visual and acoustic screening from passing trains to the adjacent residential properties.
- 3.7 Sandycombe Road consists mainly of residential two storey properties. Due to the lack of planting space within the front gardens and along the street verge, the overall tree cover is mostly restricted to small garden trees, hedgerows and shrubs.

Soil conditions

- 3.8 Soil conditions will have a significant effect upon tree growth and will influence:
- The species that will grow successfully.
 - Rooting depths for different species.
 - The available soil volume that can be used by roots and therefore the likely tolerance of trees and other vegetation to soil disturbance.
- 3.9 The bedrock geology of the site is indicated on the British Geological Survey (BGS) web site as being London Clay Formation while the superficial deposits have been recorded as being Kempton Park Gravel Formation - Sand and Gravel. The sand and gravel will be the significant soil in terms of tree growth.
- 3.10 Soils of this type are suitable for the growth of a large number of tree species and will particularly favour those species which prefer a free-draining rooting environment. Sandy soils can, however, become acidic and some species will not grow well in these conditions.

Policy context

- 3.11 Planning policy at national level is set out in the government's National Planning Policy Framework (NPPF).

- 3.12 The NPPF sets out overarching planning policy and at its core is a presumption in favour of sustainable development. Sustainable development is defined in the NPPF as having economic, social and environmental strands that are interdependent and in these areas planning should meet the needs of the present without compromising the ability of future generations to meet their own needs.
- 3.13 The NPPF states that planning should be *“not only about scrutiny, but instead be a creative exercise in finding ways to enhance and improve the places in which people live their lives.”* And should *“always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings;”* Also that planning should *contribute to conserving and enhancing the natural environment and reducing pollution.”*
- 3.14 The NPPF identifies thirteen aspects contributing to the delivery of sustainable development, including:
- establishing a strong sense of place;
 - responding to local character and history; and
 - providing developments that are visually attractive as a result of good architecture and appropriate landscaping
- 3.15 Paragraph 61 of the NPPF states *“planning policies and decisions should address the connections between people and places and the integration of new development into the natural, built and historic environment.”*

London Plan 2015

- 3.16 Regional planning policy consists of the London Plan 2015 and associated policy documents including the Climate Change Adaptation Strategy (*Managing Risks and Increasing Resilience – October 2011*).
- 3.17 The London Plan 2015 defines “green infrastructure” as “an overarching term for a number of discreet elements (parks, street trees, green roofs etc.) that go to make up a functional network of green spaces and green features.”
- 3.18 In relation to climate change adaptation the London Plan calls for the use of trees and other shading to *“increase green areas in the envelope of the building, including its roof and environs”*
- 3.19 The London Plan sets a target of a 5% increase in trees in parks, gardens and green spaces by 2025.

- 3.20 Policy 7.21 of the London Plan 2015 calls for trees and woodlands to be protected, maintained and enhanced. The policy requires that existing trees of value should be retained and that any loss as a result of development should be replaced following the principle of 'right place, right tree'. The policy suggests that, where appropriate, large canopied species should be planted (rather than smaller ornamental species).

Development Management Plan

- 3.21 The Richmond Development Management Plan (DMP) was adopted on the 1 November 2011 and builds on the boroughs Core Strategy by providing more detailed policies for managing developments. Policy DM DC 4 highlights the need to retain existing trees on development sites where practical and include new areas of soft landscaping.

Policy DM DC 4

Trees and Landscape

The boroughs trees and landscape will be protected and enhanced by:

- The use of Tree Preservation Orders (TPOs) where appropriate;
- Planting and encouraging others to plant trees, clumps and thickets particularly in areas of deficiency as shown on the Proposals Map and of a type and species as set out in the Borough's Tree Strategy.
- continuing to maintain trees in streets and public open spaces and of selectively clearing and replanting trees;
- requiring landscape proposals in submissions for new development, which retain existing trees and other important landscape features where practicable and include new trees and other planting. Where trees are removed, appropriate replacement planting will normally be required. There will be a presumption against schemes that result in a significant loss of trees, unless replacements are proposed and there is good reason such as the health of the trees, public amenity, street scene or restoration of an historic garden. Landscaping schemes should take account of the Borough's Tree Strategy.

Legal constraints

- 3.22 According to the London Borough of Richmond's website, the site is not located within a designated conservation area. I have no information regarding tree preservation orders, therefore no tree works should commence until the local authority have been contacted.

4 TECHNICAL INFORMATION

Tree Data

- 4.1 The location of trees and groups of trees are shown on the tree survey drawing 141212-P-10a at Appendix A, this plan illustrates the location of trees and the extent of the spread of their crowns. Dimensions, comments and information for each tree are given in the tree schedule 141212-PD-10a at Appendix B.

Life Stage Analysis

- 4.2 Unlike age in numerical terms (years), this description is used to describe the physical form of a tree in relation to its typical life expectancy and varies between species; for example, an oak may have a young form after 20 years while a cherry tree will be middle-aged after 20 years and will have developed the appearance of a mature tree with a spreading rounded crown whilst the oak remains tall and slender with strong apical dominance.
- 4.3 Of the seven separate survey entries; six have been assessed as being early mature and one as mature, please refer to see chart (Figure 1) below for complete analysis.

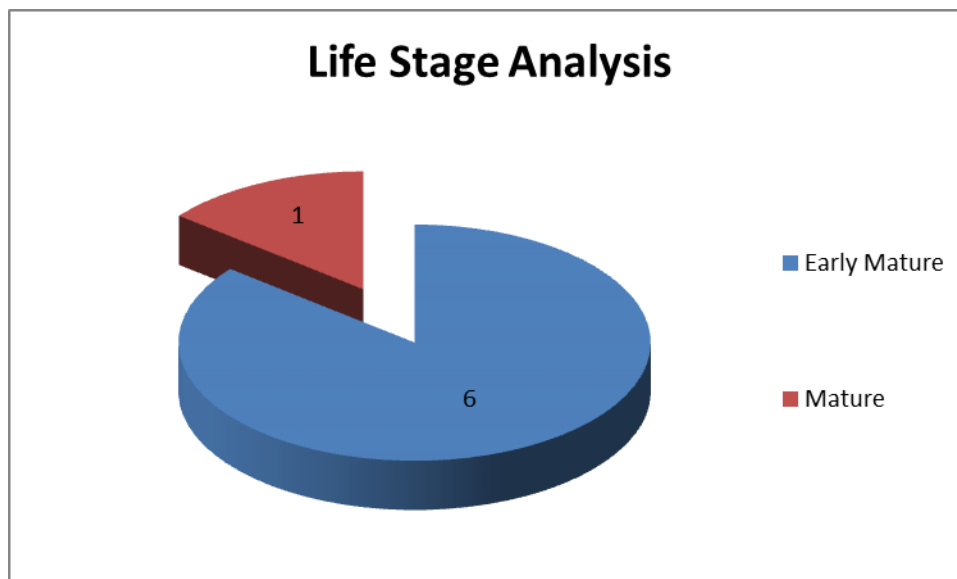


Figure 1 Analysis of Life Stage

BS5837 (2012) category breakdown

- 4.4 Of the seven survey entries recorded, all were assessed as being of low quality and value and graded as C category trees. Further details of the trees surveyed can be found in the schedule at Appendix B and the tree survey plan at Appendix A.

5 ANALYSIS OF THE PROPOSAL IN RESPECT OF TREES

Proposed development

- 5.1 The current proposal is for demolition of the existing two storey commercial building and the construction of a combined usage high quality residential properties and commercial offices with proposed new external hard and soft landscaping which includes a courtyard terrace and parking.

Identified arboricultural impacts

- 5.2 **Loss of trees and the effect on the character and appearance of the area** – the proposal does not require the removal of any existing trees onsite. A proposed soft landscaping scheme which includes tree planting will enhance the overall visual amenity of the site.
- 5.3 **Tree pruning works** – the following tree pruning works have been recommended in order to improve pedestrian clearance adjacent to public places and to improve light levels and sufficient space for the proposed planting beneath retained trees.

Tree Nos.	Tree Species	Proposed Works
T1	Field Maple	Crown lift secondary laterals to provide a 2.5m clearance from ground level. Sever and strip ivy.
T2	Field Maple	Crown lift secondary laterals to provide a 2.5m clearance above ground level. Sever and strip ivy.
T3	Field Maple	Crown lift secondary laterals to provide a 2m clearance above ground level.
T4	Field Maple	Crown lift secondary laterals to provide a 2.5m clearance above ground level.
T5	Field Maple	Crown lift secondary laterals to provide a 2m clearance above ground level.

- 5.4 **Tree protection measures** – All trees within the site will be protected using robust protective fencing which complies with the recommendation within BS5837 (2012). A tree protection plan showing these areas is available at Appendix A on drawing 141212-P-11c.
- 5.5 The proposed position of fencing can successfully protect all retained trees during the demolition and construction phases of the development. In order to provide sufficient space to complete the external hard landscaping works and to ensure trees are adequately protected for the duration of the development, the tree protection line will be repositioned as highlighted in blue on the tree protection drawing. This minor adjustment will have an insignificant impact on the retained trees, as any proposed works located within the RPA's will be carried out using special working methods as detailed within Section 5.6 below.
- 5.6 **Proposed hard landscaping works within tree RPA's** – The proposed hard landscaping works will encroach into the precautionary root protection area of T1 and T2. The excavation works required are situated at the furthest extent of the trees' RPAs and follow the kerb line of the existing hard standing. To ensure underlying roots are not impacted upon during works, it is recommended that the existing hard standing is removed manually with the use of hand tools only and that excavation does not exceed the depth of the existing sub-base layer or kerb line.
- 5.7 **Building Juxtaposition** – the juxtaposition between the retained trees and the proposed has been assessed and the extent of separation is sufficient for works to be carried out successfully without any impacts to tree canopies.
- 5.8 **Site access and compound area** – The site access and proposed compound area have not yet been designed; however, due to the available working space within the site it is not anticipated that the trees will pose any issues and that they can be successfully protected for the duration of the development.
- 5.9 **Drainage and services** – Excavations for underground services and drainage will need to avoid the root protection areas of retained trees. If avoidance of the root protection areas is not possible, then best practice guidance for the installation of these features will need to be followed. BS5837 (2012) recommends the National Joint Utilities Group Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees, Volume 4, issue 2: NJUG, 2007 as a normative reference in these instances.

6 DISCUSSION

General Change

- 6.1 In visual terms, the overall proposal will have a positive impact on the landscape character of the local area. Replacing the unoccupied commercial building with high end residential properties combined with commercial office spaces and incorporating proposed soft landscaping will significantly enhance the visual amenities of the site and local area.

Arboricultural Impacts

- 6.2 The proposed tree pruning works have been specified in order to allow sufficient crown clearance for pedestrian areas, improve light levels under tree canopies and to allow for the proposed landscaping by creating views into the proposed under planted area. The extent of pruning works is considered to be minimal and there will be no significant impact on the long term physiological condition of the trees.
- 6.3 Tree protection measures have been considered and, provided the appropriate methods of work are adhered to, as specified within this report, all trees can be successfully protected and retained throughout the project.
- 6.4 The minor adjustments required to the protective fencing are necessary to adequately protect trees at the various stages of the development. Specified working methods will ensure that once fencing has been repositioned that the rooting area of trees will not be impacted.
- 6.5 The marginal encroachments into the RPA's of T1 and T2 have been carefully assessed and are deemed to be acceptable. Excavation works will be carried out within areas of existing hard standing and will not exceed the depth of the existing sub base layer or encroach into virgin ground. With the use of manual excavation within these areas the impact on the trees health is deemed to be insignificant.

How do the changes relate to planning policy?

- 6.6 In terms of the national and local policies relevant to trees and design, the proposal promotes good design and appropriate tree retention. The Development Management Plans Policy DM DC 4 'Tree and Landscape' has been adhered to as no tree removals are required and sufficient space has been provided in order to

allow new high quality tree planting which will enhance the overall landscape and visual amenity of the site and surrounding area.

7 CONCLUSIONS

Sustainability

- 7.1 The approach to trees and landscape on the site is sustainable; best practice guidance has been followed and no trees removals are necessary to construct the current proposal. A proposed soft landscaping scheme, drawing number 141212-L-01f illustrates that the overall canopy cover within the site will be increased, which will have a positive impact on the local area.

8 RECOMMENDATIONS

The use of planning conditions to safeguard trees

- 8.1 Section 197 of the Town and Country Planning Act 1990 places a duty on the Local Planning Authority to ensure that planning permissions are granted making adequate provision for the preservation and planting of trees by the imposition of conditions. I recommend that the local planning authority approves the development subject to the full adherence of the submitted documentation.
- 8.2 The positioning of tree protective barriers should take into account the size and condition of the individual trees to be protected and the risks to their health posed by the development during and after construction. An indicative location for tree protection fencing on this site is at Appendix A in plan 141212-P-11c.
- 8.3 Appropriately worded planning conditions can ensure that trees are adequately protected during construction work.

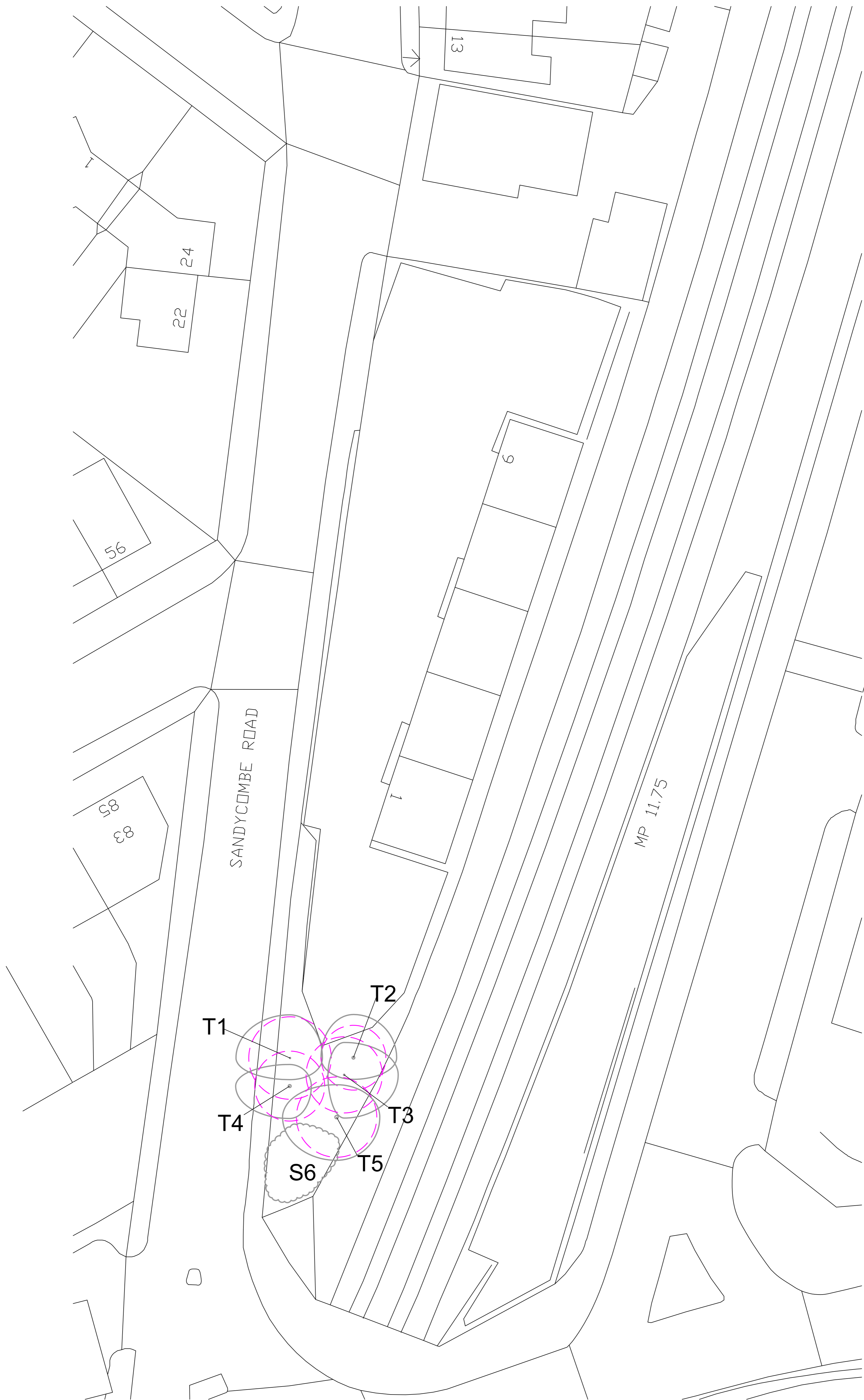
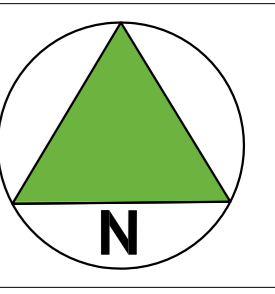
9 TMA SUPPORTING INFORMATION

Document	Reference	Revision
Tree Schedule	141212-PD-10	a
Tree Survey	141212-P-10	a
Tree Protection Plan	141212-P-11	c

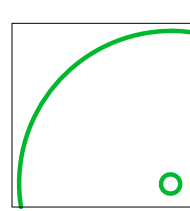
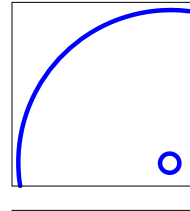
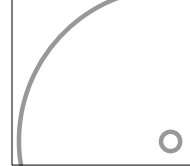
APPENDIX A – TMA PLANS

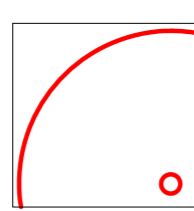
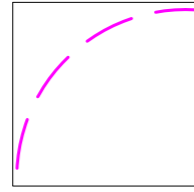
Tree Survey 141212-P-10a

Tree Protection Plan 141212-P-11c



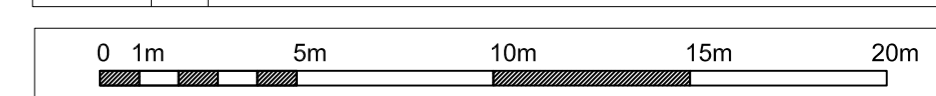
BS 5837:2012 TREE RETENTION CATEGORIES

- 
Category A
 Trees of high quality with an estimated remaining life expectancy of at least 40 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.

- 
Category U
 Those in such a condition that the tree cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.
- 
BS5837 Root Protection Areas
 Precautionary areas within which tree roots and soil structure must be protected. All works within these areas will require special methods of work.

Title Tree Survey		
Client Goldcrest Land		
Project 1-9 Sandycombe Road, North Sheen, Richmond, TW9 2EP		
Date December 2015	Drawn by AH	Checked by DA
Drawing No 141212-P-10	Rev a	Scale 1:200@A1
DO NOT SCALE Use only figured dimensions		

141215	a	Renumbered trees
REVISIONS		
Base Drawing		
04/11/15	-	Goldcrest Sandycombe Road



TIM MOYA ASSOCIATES
 ARBORICULTURE • LANDSCAPE • ECOLOGY

The Barn, Feltimores Park
 Harlow
 Essex CM17 0PF

Tel: 0845 094 3268

www.tma-consultants.co.uk



The original of this drawing was produced in colour - a monochrome copy should not be relied upon.

ARBORICULTURAL METHOD STATEMENT

BRITISH STANDARD 5837(2012)

This method statement is in accordance with British Standard 5837: Trees in relation to design, demolition and construction - Recommendations (2012) which provides a methodology for the assessment and protection of trees and other significant vegetation on development sites.

TREE SURGERY WORKS

Only tree works specified within this document may be carried out. Any uncertainty regarding trees to be pruned will be immediately confirmed with the arboricultural consultant and local authority tree officer.

All tree works will be carried out in accordance with the recommendations given in the current BS 3998 (2010).

All tree works should be carried out in accordance with the Wildlife and Countryside Act 1981 (as amended) and the Habitat Regulations 2010.

SITE SUPERVISION

All key / critical activities that will affect trees during construction will be inspected and monitored by the approved arboricultural consultant.

Supervision visits will occur as follows:

- Inspection of tree works, tree protection prior to demolition and construction works
- During works that may affect retained trees

PROTECTIVE FENCING

No materials or equipment other than those required to erect protective fencing, will be delivered to the site before the fencing is installed. The position of protective fencing for demolition is shown on this drawing.

Protective fencing will be constructed of robust barriers fit for the purpose of excluding demolition and construction traffic. Signs will be fixed to every third panel stating **'Tree Protection Area Keep Out - Any Incursion into the protected area must be with the agreement of the local authority or arboricultural consultant'**.

The main contractor will inform the local authority officer and the arboricultural consultant that tree protection is in place before demolition or site clearance works commence.

No alteration, removal or repositioning of the tree protection for demolition will take place during the demolition phase without the prior consent of the arboricultural consultant.

SERVICES AND DRAINAGE

Methods of working for installation of the drainage runs or services will follow the guidance within Table 3 of BS 5837 (2012), or National Joint Utilities Group (NJUG) *Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees*. Volume 4, issue 2, London NJUG 2007.

No works will occur within the tree protection zone without prior agreement from the arboricultural consultant. No machinery will be permitted within the TPZ at any time.

GENERAL PROTECTION METHODS

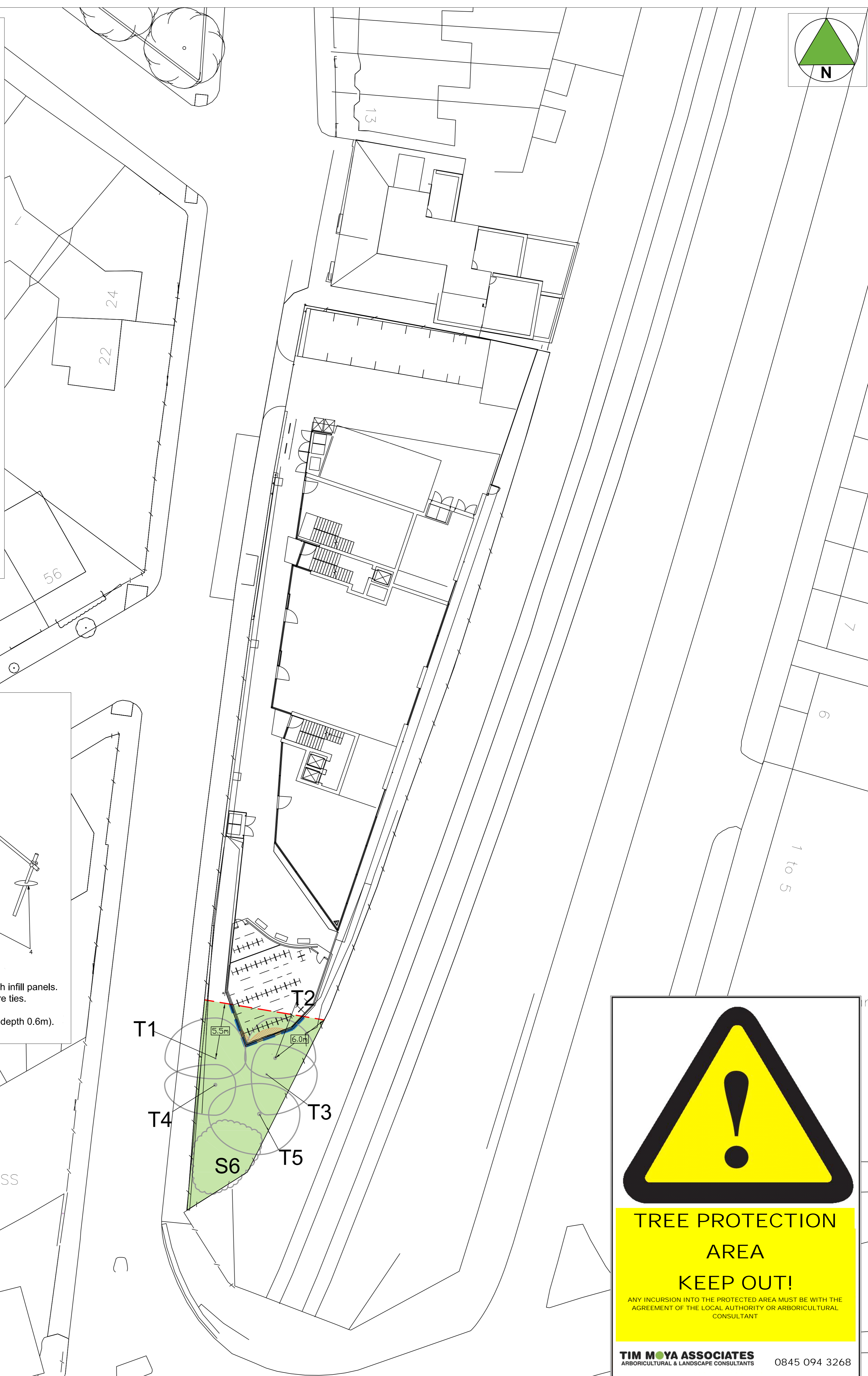
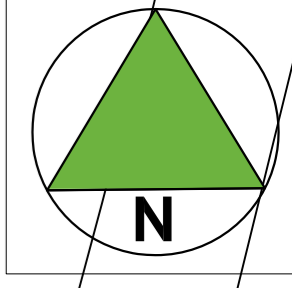
No fires will be permitted within 20m of the crown of any tree.

No changes in soil levels will take place within the tree protection zones without prior written consent of the local authority.

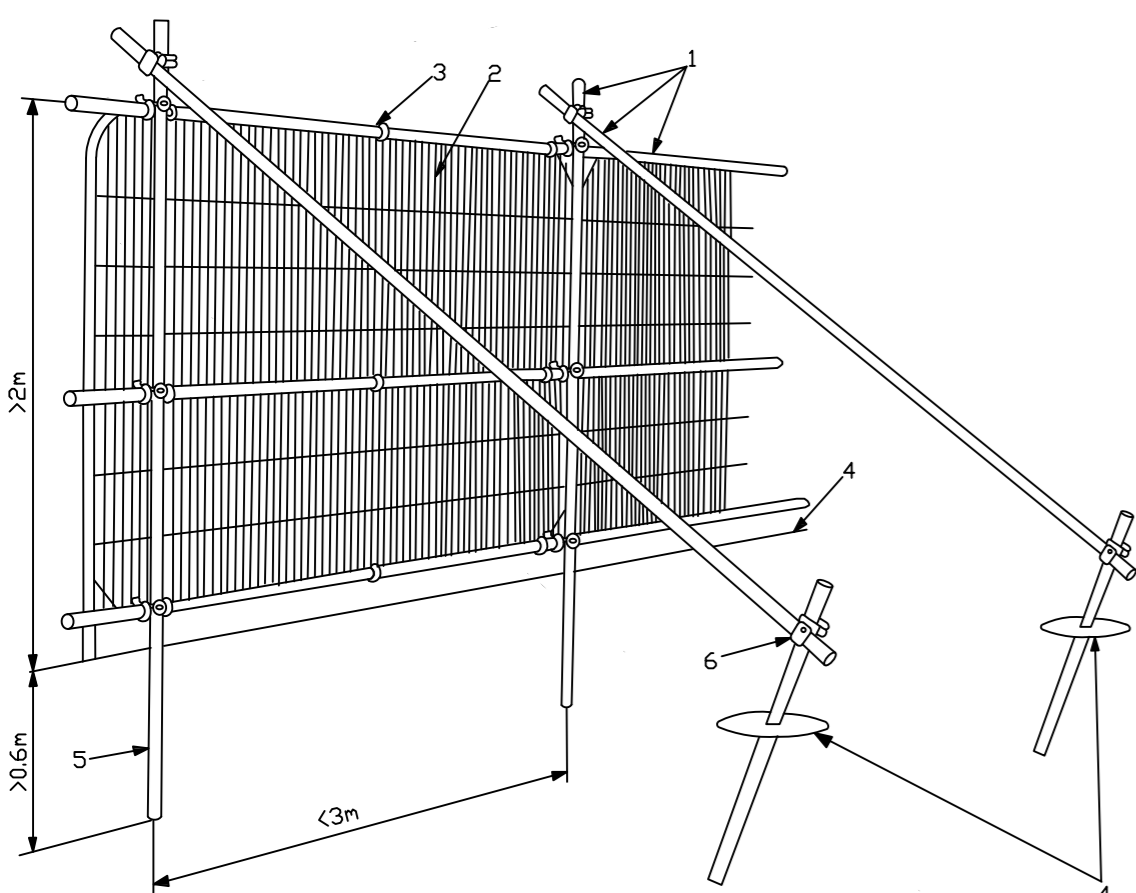
No materials, vehicles, plant or personnel will be permitted into the tree protection zones at any time without the prior consent of the arboricultural consultant.

Any liquid materials spilled on site will be immediately cleared up and removed from the site. If liquid fuel or cement products are spilled within 2m of the tree protection zone, the contractor will report the incident to the arboricultural consultant immediately.

The contractor will report any damage to trees or shrubs, whether caused by construction activities or from any other cause, to the arboricultural consultant immediately.



Protective Fencing Specification



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

**TREE PROTECTION AREA
KEEP OUT!**

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE AGREEMENT OF THE LOCAL AUTHORITY OR ARBORICULTURAL CONSULTANT

TIM MOYA ASSOCIATES
ARBORICULTURAL & LANDSCAPE CONSULTANTS 0845 094 3268

BS 5837:2012 TREE RETENTION CATEGORIES

- Category A**
Trees of high quality with an estimated remaining life expectancy of at least 40 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.

- Category U**
Those in such a condition that the tree cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.
- BS5837 Root Protection Areas**
Precautionary areas within which tree roots and soil structure must be protected. All works within these areas will require special methods of work.
- Excavation of existing hard standing not to exceed beyond sub-base layer.
- Position of protective fencing and tree protection zones during construction and demolition phase.
- Fence line to be repositioned in order to carry out external hard landscaping works.

Title Tree Protection Plan		
Client Goldcrest Land		
Project 1-9 Sandycombe Road, North Sheen, Richmond, TW9 2EP		
Date November 2016	Drawn by MD	Checked by CM
Drawing No 141212-P-11	Rev C	Scale 1:200@A1
DO NOT SCALE Use only figured dimensions		

9.11.16	c	5409-P03-100-GroundFloor-Proposed Overlay
18.10.16	b	Site plan 5409-P02 Overlay
14.12.15	a	Renumbered trees, overlaid layout FloorPlan-00Ground
REVISIONS		
Base Drawing		
09/11/2016	-	5409-P03-100-GroundFloor-Proposed

TIM MOYA ASSOCIATES
ARBORICULTURE • LANDSCAPE • ECOLOGY

The Barn, Feltmores Park
Harlow
Essex CM17 0PF

Tel: 0845 094 3268

www.tma-consultants.co.uk



The original of this drawing was produced in colour - a monochrome copy should not be relied upon.

APPENDIX B – TMA SCHEDULES

Tree Schedule 141212-PD-10a

1-9 Sandycombe Road North Sheen Richmond TW9 2EP

Tree/Group Number	No. of Trees	Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown Clearance (m)	Life stage	Condition Notes	Most Recent Survey	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
						N	NE	E	SE	S	SW	W	NW								
Tree T1	1	<i>Acer campestre</i> Field maple	8.0	10	4	4.0	3.0	2.0	5.0				0.0	Early Mature	Structural condition Fair. Physiological condition Good. Ivy or climbing plant.	15/12 /2014	45.9	3.8	20-40	C1/C2	
Tree T2	1	<i>Acer campestre</i> Field maple	8.0	25	1	4.0	4.0	2.0	3.0				0.0	Early Mature	Structural condition Fair. Physiological condition Good. Ivy or climbing plant.	15/12 /2014	28.3	3.0	20-40	C1/C2	
Tree T3	1	<i>Acer campestre</i> Field maple	8.0	12	6	3.0	5.0	4.0	1.5				0.0	Early Mature	Structural condition Fair. Physiological condition Good. Deadwood - Minor.	15/12 /2014	39.1	3.5	20-40	C1/C2	
Tree T4	1	<i>Acer campestre</i> Field maple	9.0	27	1	2.0	2.0	3.0	5.0				1.5	Early Mature	Structural condition Fair. Physiological condition Good.	15/12 /2014	33.0	3.2	20-40	C1/C2	
Tree T5	1	<i>Acer campestre</i> Field maple	10.0	31	1	3.0	4.0	4.0	5.0				1.5	Early Mature	Structural condition Fair. Physiological condition Good. Deadwood - Minor.	15/12 /2014	43.5	3.7	20-40	C1/C2	
Shrub S6	3	<i>Corylus avellana</i> Common hazel	5.0										0.0	Mature	Structural condition Fair. Physiological condition Fair. Hazels are multiple stems	15/12 /2014			10-20	C1/C2	
	1	<i>Buddleia sp.</i>																			

Stem green estimated value
 Stem AVE average stem diameter for multi-stemmed trees

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

Table 1 of BS5837 (2012) Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see note)				
<p>Category U</p> <p>Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years</p>	<ul style="list-style-type: none"> * Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) * Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline * Trees infected with pathogens of significance to health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality 			RED
<p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7</i></p>				
<p style="text-align: center;">1 Mainly arboricultural qualities 2 Mainly landscape qualities 3 Mainly cultural values, including conservation</p>				
Trees to be considered for retention				
<p>Category A</p> <p>Trees of high quality with an estimated remaining life expectancy of at least 40 years</p>	<p>Tree that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)</p>	<p>Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features</p>	<p>Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)</p>	GREEN
<p>Category B</p> <p>Trees of moderate quality with an estimated remaining life expectancy of at least 20 years</p>	<p>Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation</p>	<p>Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality</p>	<p>Trees with material conservation or other cultural value</p>	BLUE
<p>Category C</p> <p>Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm</p>	<p>Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories</p>	<p>Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits</p>	<p>Trees with no material conservation or other cultural value</p>	GREY

- Feasibility Tree Surveys
- British Standard 5837 Tree Surveys
- Tree Constraints Reports & Drawings
- Appeal Statements & Proofs
- Expert Witness
- Evidence at Hearings & Public Inquiries
- Method Statements to Satisfy Planning Conditions
- Design Solutions
- Landscape Plans
- Tender Documents & Drawings
- Supervision & Inspection of Works
- Contract & Project Management
- Health & Safety Surveys
- GPS Surveys
- Computerised Tree Population Surveys
- CAD Plans & Consultancy
- Subsidence Risk Assessments
- Mortgage & Insurance Reports
- TPO Review
- Local Government Officer Contracts
- Arboricultural & Ecological Reports for Planning
- Habitat Surveys (Extended Phase 1/ Walkover/ Botanical)
- Protected Species Surveys
- Ecological Mitigation & Licencing
- BREEAM & CFSH
- Ecological Management Plans
- Hedgerow Surveys
- Landscape Analysis



The Barn, Feltimores Park, Chalk Lane,
Harlow, Essex CM17 0PF

T: 0845 094 3268

F: 0845 094 3269

W: www.timmoyaassociates.co.uk