



ARBORICULTURAL IMPLICATIONS ASSESSMENT

PROPOSED DEVELOPMENT

AT

2 WANTAGE VIEW
HUYTON
KNOWSLEY

Author: C. Salisbury
Date: 13 October 2021
Ref: TRE/2WV



Mulberry

Adamson House, Towers Business Park, Wilmslow Road, Didsbury, M20 2YY

T 0161 955 3628
F 0161 955 4201
E info@mulberrytmc.co.uk

www.mulberrytmc.co.uk

1.0 Introduction

- 1.1 Mulberry Tree Management were instructed by Mr D Fletcher, to carry out an arboricultural survey of trees at his site in Wantage View, Huyton.
- 1.2 This report details the arboricultural implications of developing the site, including:
 - a survey of the trees on and near the development which may impact the proposal from ground level, noting their location, species and all relevant parameters, i.e. stem diameter, height, crown spread, condition etc;
 - providing advice on the removal, retention and management of trees;
 - assessment of the potential effects of the proposal on retained trees and vice versa;
 - assessment of the requirement for tree protection for the duration of the works;
 - mitigation for any loss;
 - preparation of a tree schedule;
 - and report on the above matters.
- 1.3 The survey was carried out on 5 October 2020 by means of inspection from ground level by an experienced and qualified arboriculturalist. The inspection can be restricted in cases where trees were Ivy clad or surrounded by vegetation.
- 1.4 Under *BS5837: 2012 Trees in Relation to Construction - Recommendations*, the assessment of trees is made objectively. The tree categorisation method identifies the quality and value of the existing tree stock, allowing informed decisions to be made concerning development design layout.
- 1.5 The following documents have been made available by the client:
 - Drawing- 2 Wantage view rev 4.dwg
- 1.6 The supplied drawing included some tree positions plotted. Any dimensions regarding tree positions and protective fencing must be checked on site.
- 1.7 Weather conditions during the survey were wet and windy.
- 1.8 The survey was carried out noting the conditions of the trees at the time of inspection. As trees are part of the natural environment, conditions can naturally change; therefore the contents of this report are valid for one year only. After this period, re-inspection may be necessary.

2.0 Survey Methodology

- 2.1 The trees were surveyed (prefixed T, or G for group) and recorded in the tree schedule in appendix one. Where groups are recorded, average height and diameter at breast height (DBH) of the trees in the group are reported. Where access to the base of any trees was limited, stem size was estimated.
- 2.2 All the trees were assessed using: a grading A to C (retention) and U (removal); condition and age class as defined in appendix two.
- 2.3 Where appropriate, canopy spread for each tree was recorded at four cardinal points in order to reproduce an accurate representation of the crown shape of the tree on the tree plan in appendix three.
- 2.4 The survey included all trees within the proposal area and trees near to the proposal.

3.0 Development Proposals

- 3.1 Due to the proposed development and its associated infrastructure there are a number of locations where the proposals are in close proximity to the trees surveyed. The Site Layout Plan within appendix three identifies the trees in relation to the proposed development.
- 3.2 In order to fully assess the impact of the proposals an Impact Table has been created detailing each tree, which shows the proximity of the associated works to the tree.
- 3.3 This can then be assessed in accordance with BS 5837:2012 to determine whether the development will have a detrimental impact on the health of each tree. Once this has been determined remedial measures can be detailed to reduce the impact the proposals will have on the treescape.

3.4 Impact Table:-

Tree No.	Root Protection Area identified in Table 2 of BS 5837:2012	Distance to Proposed Hard Standing (m)	Distance to Proposed Development (m)	Can the Tree/s be Successfully Retained
T1	137m ²	N/A	4.10	Yes as outlined in section 5.1 below
T2	Fell Due to Proximity to Existing Building			
T3	Fell Due to Development			
W1	5m ²	N/A	1.60	Yes as outlined in section 5.1 below

4.0 Impact Assessment

4.1 To assess the implications of the Impact Table each tree can be categorised in the following way: -

	Trees to be retained		Trees to be removed	
	With No Impact	With detailed construction	Due to Condition	Due to Development
Tree No.	T1 & W1	N/A	T2	T3

5.0 Mitigation Proposals

5.1 Property Construction

5.1.1 The impact table below shows the proposed development having a minor encroachment into the root protection area of W1. It is felt that due to the species, condition and limited extent of encroachment the proposal will not have a detrimental impact on the safe useful life expectancy of these trees.

5.1.2 Section 7.5.3 of BS 5837:2012 advises that where a slab or minor structure is to be formed within the RPA it should not exceed 20% of any existing unsurfaced ground. The table below details the amount of encroachment within the RPA.

Tree No	Total Area m2 of RPA	Total m2 of Structure within the RPA	Percentage of Structure within the RPA
T1	137	12.50	9.20%
W1 (One tree)	31	5.50	17.70%

- 5.1.3 As you can see from the table above the proposed structure does not exceed 20% of the RPA's. It is therefore felt that the proposed development will not have a detrimental impact upon the existing trees.

6.0 Conclusions and Arboricultural Recommendations

- 6.1 The tree categorisation method identifies the quality and value of the existing tree stock but it is not meant to be interpreted rigidly and is presented in order to form a balanced judgement on tree retention and removal.
- 6.2 A precautionary method of working near trees is detailed in the accompanying Arboricultural Method Statement.
- 6.3 Following site development, regular (annual or biannual) inspections of all retained trees should be undertaken by a qualified Arboricultural Consultant.
- 6.4 It is considered that in following the advice in this document, any negative factors affecting trees on the site will be minimised.

Appendix One

Tree Survey Schedule

TREE SURVEY SCHEDULE

Arboricultural Data Sheet:					Date of Survey: 05/10/20				Surveyor: C. Salisbury				
Tree No.	Species	DBH (mm)	Height (m)	Age	Crown Spread (m)				Crown clearance	Condition rating	Comments and preliminary management recommendations	Estimated remaining contribution	Tree quality category rating
					N	E	S	W					
T1	Willow	550	13.60	FM	5.5	7.5	6.0	6.0	0.50	B	A co-dominant specimen situated adjacent to a highway causing root damage to the footpath.	20 – 40	B2
T2	Conifer	510	15.40	FM	4.0	4.0	2.0	4.0	2.50	B	A poor-quality individual specimen situated in very close proximity to the garage. – Fell	20 – 40	U
T3	Spruce	250	8.80	EM	1.5	2.5	2.0	1.0	2.00	B	A co-dominant specimen situated in the side garden.	20 – 40	C2
W1	Oak, Alder, Hawthorn & Birch	110 avg.	10.60	SM/E M	-	-	-	-	2.00	B/C	A linear mixed species group situated on adjacent land.	80+	A2

Appendix Two

Tree Survey Key

Trees for removal				
Category and definition		Criteria		
Category U Those in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management		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 R category trees (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infected with pathogens of significance to the health and/or safety of other trees nearby (e.g. Dutch elm disease), or very low quality trees suppressing adjacent trees of better quality Note – Habitat reinstatement may be appropriate (e.g. R category tree used as a bat roost: installation of bat box in nearby tree).		
Trees to be considered for retention				
Category and definition		Criteria - Subcategories		
		1 Arboriculture values	2 Landscape values	3 Conservation values
Category A Those of high quality and value: in such a condition as to be able to make a substantial contribution (a minimum 40 years is suggested)		Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboriculture features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance (e.g. avenues or other arboricultural features assessed as groups)	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood pasture)
Category B Those of moderate quality and value: those in such a condition as to make a significant contribution (a minimum of 20 years is suggested)		Trees that might be included in the high category, but are downgraded because of impaired condition (e.g. presence of remediable defects including unsympathetic past management and minor storm damage)	Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi-formal arboriculture features (e.g. trees of moderate quality within avenue that includes better, A category specimens), or trees situated mainly internally to the site, therefore individually having little impact on the wider locality	Trees with clearly identifiable conservation or other cultural benefits
Category C Those of low quality and value: currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150 mm		Trees not qualifying in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit	Trees with very limited conservation or other cultural benefits
		Note - Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150 mm should be considered for relocation		

Age Class

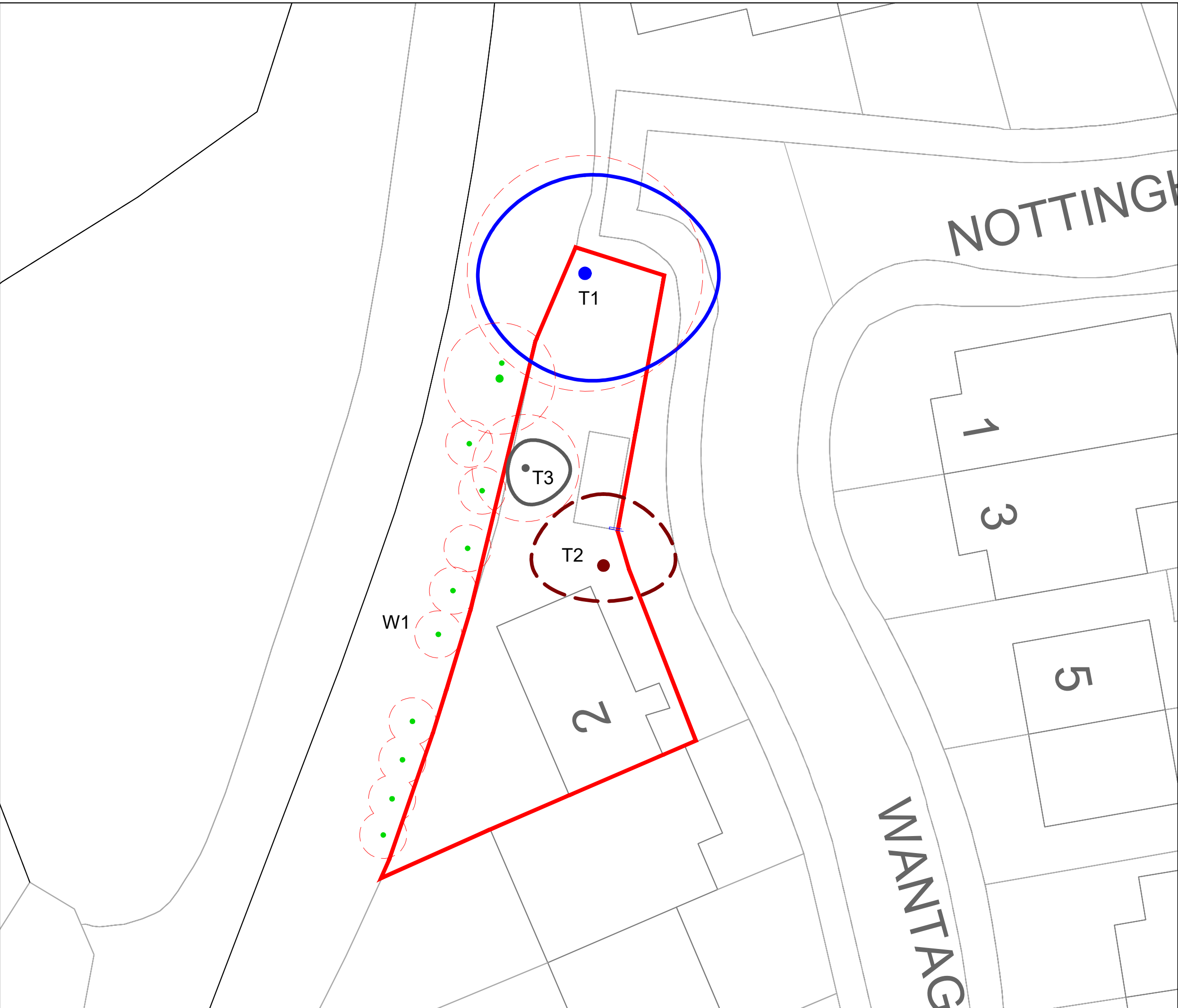
Y	Young	Trees that have not yet established
SM	Semi-Mature	Established trees up to 1/3 of expected height and crown
EM	Early mature	Between 1/3 and 2/3 expected height and crown
M	Mature	Between 2/3 and full expected height and crown
FM	Fully Mature	Full expected height and crown
OM	Over-Mature	Crown beginning to break up and decrease in size
S	Senescent	Crown in advanced stage of break-up

Condition

A	Good
B	Fair
C	Poor
D	Dead

Appendix Three

Plans



-  Category A Trees
-  Category B Trees
-  Category C Trees
-  Category U Trees
-  Root protection area

Mulberry TMC
Adamson House
Towers Business Park
Wilmslow Road
Didsbury
M20 2YY

Tel: 0161 955 3628
Email: info@mulberrytmc.co.uk



Site Address:
2 Wantage View
Huyton

Drawing Title:
BS5837 Plan

Drawing No:
2WVH/BS/01

Date:	Scale:	Drawn by:
10/10/2020	1:200@A3	CS

Note: Dimensions are not to be scaled from this drawing.
All written measurements are to be checked on site by the contractor. Copyright Mulberry TMC.
Note: All rights described in Chapter IV of the Copyright Design & Patents Act 1988 have generally been asserted.



ARBORICULTURAL METHOD STATEMENT

PROPOSED DEVELOPMENT

AT

2 WANTAGE VIEW
HUYTON
KNOWSLEY

Author: C. Salisbury
Date: 13 October 2021
Ref: TRE/2WV



Mulberry

Adamson House, Towers Business Park, Wilmslow Road, Didsbury, M20 2YY

T 0161 955 3628
F 0161 955 4201
E info@mulberrytmc.co.uk

www.mulberrytmc.co.uk

1.0 Discussion

- 1.1 The majority of the root system, of a tree, is in the surface 600mm of the soil, extending radially for distances frequently in excess of the trees height. Beyond the main structural roots (close to the base of the trunk), the root system rapidly sub-divides into smaller diameter roots: off this main system, a mass of fine roots develops.
- 1.2 The shape of the main structural roots develops in response to the need for the tree to have physical stability. Beyond these major roots, root growth and development is influenced by the availability of water and nutrients. Unless conditions are uniform around the tree, which would be unusual, the extent of the root system will be very irregular and difficult to predict. It will not generally show the symmetry seen in the branch system.
- 1.3 The parts of the root system, which are active in water and nutrient uptake, are very fine, typically less than 0.5mm diameter. They are short lived, developing in response to the needs of the tree, with the majority dying each winter. It is *essential* that conditions in the soil remain conducive to the healthy growth of these fine roots so that the water and nutrients necessary for healthy tree growth can be absorbed.
- 1.4 All parts of the root system, but especially the fine roots, are vulnerable to damage. Once they are damaged, water and nutrient uptake will be restricted until new roots have regenerated. Vigorous young trees will be capable of rapid regeneration but over mature trees will respond slowly, *if at all*.
- 1.5 In order to live and grow, roots need oxygen from the soil. Respiration by the roots and other soil organisms depletes this oxygen and increases carbon dioxide levels in the soil; a correct balance of these gases is normally maintained by diffusion between the soil and the atmosphere. Anything, which disturbs this balance, will affect the condition of the root system.
- 1.6 The factors that most commonly affect this diffusion adversely, and therefore damage roots, are the following: -
 - a) Compaction of the ground, which reduces the space between soil particles. This is particularly important on clay soils. A single passage by heavy equipment on clay soils or storage of heavy materials can cause significant damage.
 - b) Changing soil levels, even for a few weeks.
 - c) Covering the root area with impervious surfaces.
 - d) A rise in the level of the water table. Roots can tolerate submersion for short periods. But a permanent rise will deplete the soil of oxygen.
- 1.7 Serious damage is often caused during preliminary site works by stripping the topsoil. For this reason, such works should be avoided until protective fencing has been erected.

- 1.8 Excavations in the rooting area can sever roots. As the majority of roots are in the surface 600mm, even shallow excavations can cause damage.
- 1.9 Excavations for foundations, landscaping or service trenches are usually sufficiently deep to sever most of the roots, and it should therefore be assumed that all parts of the root system beyond the excavation would no longer serve the tree.
- 1.10 Excavation or soil stripping which severs or damages the roots may impair the stability of the tree and make it dangerous.

2.0 Method Statement

Before any form of development commences on the site the following works should be undertaken: -

2.1 Tree Works

Tree No.	Proposed Works
T1	Crown lift secondary branches only to allow construction of the development
T2 & T3	Fell
W1	Reduce overhanging vegetation to property boundary

2.2 Protective Fencing

Due to the existing hard standing and location of the retained trees it is felt that protective fencing is not required on this occasion.

2.3 Additional Precautions

- 2.3.1 Oil, bitumen, cement or other material likely to cause damage to the tree will not be stacked or discharged within 10m of the tree's stem or within the protective area. Also materials in general will not be stacked or discharged within the exclusion zone.
- 2.3.2 Concrete mixing and washing will not be carried out within 10m of any retained trees.
- 2.3.3 Fires will not be lit beneath the foliage or in a position where the flames could extend to within 5m of the foliage, branches or trunk. If the fire is large then this may necessitate a distance of at least 20m.
- 2.3.4 Trees that are to be retained will not be used as anchorage for equipment.
- 2.3.5 Notice boards, telephone cables, or other services will not be attached to any part of the retained tree.

2.3.6 Care should be taken when using cranes or other equipment near the canopy of the retained trees. Also any trees to be felled in proximity to the retained trees should be done so with particular care.

2.4 Summary of Methodology for the Protection of the Trees

