RITISH STANDARD 5837 TREE SURVEYS ARBORICULTURAL IMPLICATION STUDIES TPO/PLANNIG ADVICE/ PROJECT MANAGEMENT
REE INVENTORIES AND RISK ASSESSMENTS WOODLAND MANAGEMENT PLANS TREE PLANTING SCHEMES TPO RE-SURVEY




TREE SURVEY

AT

CALDER HOUSE
CROMPTONS LANE
LIVERPOOL

Author: C. Salisbury
Date: 12 October 2012
Ref: TRE/CHCL

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1.0 Introduction

1.1 The purpose of this report is to carry out a site visit, identify and survey the principal trees on the site.

1.2 The survey on which the findings of this report are based was undertaken on Friday the 12 October 2012.

1.3 This report should be read in conjunction with the attached location plan in Appendix One.

1.4 The reference to the left and right hand assumes a viewing position from the public highway, and facing the property.

1.5 The limitations of this report are restricted to the persons, time, information made available and purpose for which this report has been prepared.

2.0 Findings

2.1 The principal trees have been surveyed and plotted individually to assess their health and dimensions. To give assistance in reading the findings the following glossary gas been produced.

Arboricultural Glossary Of Terms

The following terms are concurrent with best Arboricultural practice and within the guidelines set by the International Society of Arboriculture (ISA), the Arboricultural Association (AA) and the British Standards Institute (BSI).

Age Range:	Age is site specific and categorised:
Young (Y)	Out-planted trees that have not yet established.
Semi-Mature (SM)	Established trees up to 1/3 of expected height and crown.
Early Mature (EM)	Between 1/3 and 2/3 of expected height and crown.
Mature (M)	Between 2/3 and full expected height and crown.
Fully Mature (FM)	Full expected height and crown.
Over Mature (OM)	Crown beginning to break-up and decrease in size.
Senescent (S)	Crown in advanced stage of break-up.

Height: Height is estimated and recorded in metres.

DBH: Diameter at Breast Height is measured at 1.5m and recorded in metres. Where a tree becomes multi-stemmed below 1.5m the highest possible diameter is measured and indicated. Alternatively, above 1.5m the diameter of each stem or an average diameter is measured and indicated.

Condition - Assessment of current physiological condition and structural morphology incorporating vigour and vitality and categorised:

A - Tree needing little, if any attention
B - Tree with minor, but rectifiable defects, or in the early stages of physiological stress
C - Tree with significant structural and physiological flaws and/or extremely stressed
D - Tree that is dead, biologically/physically moribund or dangerous

Desirability To Retain – As Outlined in Table 1 of BS 5837:2005 (Trees in Relation to Construction - Recommendations)

Definition Of Physiological & Morphological Terms

Adaptive Growth - The process whereby wood formation is influenced both in quantity and in quality by the action of gravitational force and mechanical stresses on the cambial zone.

Bifurcation – Forked or divided union.

Brown Rot - Form of decay where cellulose is degraded, while lignin is only modified.

Cankers (target or tumerous) - A localised area of dead bark and cambium on a stem or branch, caused by fungal or bacterial organisms, characterised by woundwood development on the periphery. This may be annual or perennial.

Cavity - An open wound, characterised by the presence of extensive decay and resulting in a hollow.

Chlorotic Leaf - Lacking in chlorophyll, typically yellow in colour.

Compartmentalisation - The physiological process that creates the chemical and mechanical boundaries that act to limit the spread of disease and decay organisms.

Crack - Longitudinal spilt in stem or branch, involving bark and/or underlying wood. These may be vertically and horizontally orientated.

Decay - Process of degradation of woody tissues by fungi and bacteria through decomposition of cellulose and lignin.

Deadwood - Deadwood is often present within the crown or on the stems of trees. In some instances is may be an indication of ill health, however, it may also indicate natural growth processes. If a target is present beneath the tree, deadwood may fall and cause injury or damage and should be removed, otherwise deadwood can remain intact for conservation purposes (insects, fungi, birds etc.).

End Weight - The concentration of foliage at the distal ends of stems and deficient in secondary branches.

Girdling Root - Root which circles and constricts the stem or roots causing death of phloem and/or cambial tissue.

Hazard Beam - An upwardly curved branch in which strong internal stresses may occur without the compensatory formation of extra wood (longitudinal splitting may occur in some cases).

Included Bark Union - Pattern of development at branch junctions where bark is turned inward rather than pushed out. Potential weakness due to a lack of a woody union.

Ivy Growth - Ivy growth may ascend into the tree's crown, increasing wind resistance, concealing potential defects and reducing the tree's photosynthetic capacity. Ivy growth is often acceptable in woodland areas as a conservation benefit.

Live Crown Ratio - The relative proportion of photosynthetic mass (leaf area) to overall tree height.

Reaction Wood - Specialised secondary xylem, which develops in response to a lean or similar mechanical stress, attempting to restore the stem to the vertical.

Root Plate Lift - The physical movement of the rooting plate causing soils to shift and crack. May occur during adverse weather conditions. Trees may become unstable.

Structural Defect - Internal or external points of weakness, which reduce the stability of the tree.

Suppressed - Trees which are dominated by surrounding vegetation and whose crown development is restricted from above.

Topping - A highly disfiguring practise, likely to cause severe xylem dysfunction and decay in major structural parts of the wood.

White Rot - Form of decay where both cellulose and lignin are degraded.

Wound - Any injury, which induces a compartmentalisation response.

Woundwood - Wood with atypical anatomical features, formed in the vicinity of a wound and a term to describe the occluding tissues around a wound as opposed to the ambiguous term "callus."

Woodland Structure - The vertical and horizontal arrangement of trees within a group or woodland i.e. Dominant - trees with a crown above the upper layer of the canopy, Co dominant - trees that define the general upper edge of the canopy, Intermediate - trees that have been largely overgrown by others, Suppressed - trees that have been overgrown and occupy an under storey position and grow slowly, often severely asymmetrical.

Note: The definitions described above, may not necessarily be included within the Arboricultural Survey Data.

Arboricultural Data Sheet: Calder House, Cromptons Lane													
					Date of Survey: 12/10/12						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	Cedar	590 at base	14.40	EM	3.9	3.6	3.9	3.9	2.8	C	A multi-stemmed tree with poor form due to its included unions at its base situated adjacent to a highway.	20 – 40	C2
T2	Lombardy Poplar	740	21.40	EM	0.2	3.4	2.3	3.1	3.5	D	An ivy clad specimen with extensive basal decay situated adjacent to a highway. – **Fell and replant**	0 – 10	U
T3	Lombardy Poplar	530	21.20	EM	0.3	1.2	0.6	1.3	4.0	C	A multi-stemmed ivy clad tree with poor form due to its included unions at its base situated adjacent to a highway. – **Severe and remove ivy**	20 – 40	C2
T4	Sycamore	360	14.80	SM	1.4	2.5	3.3	3.5	3.0	B	A multi-stemmed ivy clad tree with poor form due to its included unions at its base situated adjacent to a highway. – **Severe and remove ivy**	40 – 60	C2
T5	Sycamore	230	6.30	SM	1.3	0.3	1.4	2.1	3.0	C	A suppressed multi-stemmed ivy clad tree with poor form due to its included unions at its base situated adjacent to a highway. – **Fell**	0 – 10	U

Live Crown Ratio - The relative proportion of photosynthetic mass (leaf area) to overall tree height.

Reaction Wood - Specialised secondary xylem, which develops in response to a lean or similar mechanical stress, attempting to restore the stem to the vertical.

Root Plate Lift - The physical movement of the rooting plate causing soils to shift and crack. May occur during adverse weather conditions. Trees may become unstable.

Structural Defect - Internal or external points of weakness, which reduce the stability of the tree.

Suppressed - Trees which are dominated by surrounding vegetation and whose crown development is restricted from above.

Topping - A highly disfiguring practise, likely to cause severe xylem dysfunction and decay in major structural parts of the wood.

White Rot - Form of decay where both cellulose and lignin are degraded.

Wound - Any injury, which induces a compartmentalisation response.

Woundwood - Wood with atypical anatomical features, formed in the vicinity of a wound and a term to describe the occluding tissues around a wound as opposed to the ambiguous term "callus."

Woodland Structure - The vertical and horizontal arrangement of trees within a group or woodland i.e. Dominant - trees with a crown above the upper layer of the canopy, Co dominant - trees that define the general upper edge of the canopy, Intermediate - trees that have been largely overgrown by others, Suppressed - trees that have been overgrown and occupy an under storey position and grow slowly, often severely asymmetrical.

Note: The definitions described above, may not necessarily be included within the Arboricultural Survey Data.

Arboricultural Data Sheet: Calder House, Cromptons Lane											Date of Survey: 12/10/12	Surveyor: C. Salisbury	
Tree No.	Species	Dbh (mm)	Height (m)	Age	Crown Spread (m)				Crown clearance (m)	Condition rating	Comments and preliminary management recommendations	Estimated remaining contribution	Tree quality category rating
					N	E	S	W					
T6	Birch	170	7.40	SM	0.8	0.7	1.3	1.1	2.5	B	A co-dominant specimen with reasonable form situated adjacent to a highway.	40 – 60	B2
T7	Birch	380	8.60	EM	3.4	3.9	4.1	2.2	3.0	B	A co-dominant specimen with reasonable form situated adjacent to a highway.	40 – 60	B2
T8	Willow	420	8.60	EM	1.7	2.9	1.8	1.2	1.8	C	A multi-stemmed ivy clad tree with poor form due to its included unions situated adjacent to a highway. This tree has minor deadwood within its crown and is showing early signs of stress. – **Severe and remove ivy**	20 – 40	C2
T9	Sycamore	510 at base	16.40	M	3.9	4.1	4.2	3.7	4.0	B	A multi-stemmed ivy clad tree with poor form due to its included unions situated adjacent to a highway. – **Severe and remove ivy**	20 – 40	C2
T10	False Acacia	360	10.40	EM	3.6	0.2	2.3	5.6	4.0	C	A co-dominant specimen with poor form situated adjacent to a highway.	60 – 80	C2

Arboricultural Data Sheet: Calder House, Cromptons Lane												Date of Survey: 12/10/12	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					
T11	Indian Bean Tree	540	10.40	EM	5.2	4.7	2.8	3.9	3.0	C	A co-dominant specimen with poor form and extensive stem decay situated adjacent to a highway. – **Consider removal**	10 – 20	C2
T12	Sycamore	230	10.20	SM	1.2	1.1	1.2	1.1	3.0	B	A co-dominant specimen with reasonable form situated adjacent to a highway.	20 – 40	C2
G1	3 x Conifer	170 avg.	8.40 avg.	SM	-	-	-	-	2.0	B	A group with reasonable form situated adjacent to a highway.	40 – 60	B2
G2	3 x Conifer	110 avg.	7.60 avg.	SM	-	-	-	-	2.0	B	A group with reasonable form situated adjacent to a highway.	40 – 60	B2
G3	3 x Conifer	150 avg.	7.40 avg.	SM	-	-	-	-	2.0	B	A group with reasonable form situated adjacent to a highway.	40 – 60	B2
G4	7 x Lombardy Poplar & 1 x Sycamore	270 avg.	19.40 avg.	EM	-	-	-	-	3.5	C	An ivy clad mixed species group situated adjacent to a highway. – **Severe and remove ivy**	20 – 40	C2
G5	2 x Hawthorn, 1 x Birch & 1 x False Acacia	110 avg.	7.30 avg.	SM	-	-	-	-	2.5	C	A group of suppressed specimens offering little amenity value to the area.	20 – 40	C2

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		

APPENDIX ONE

CROMPTONS LANE

Boundary wall

line of basement wall below

001 002 003 004

level + 1.1m

ramp to underground car park

1:15 accessible ramp

Existing Shed

pedestrian entrance

proposed drop off zone

vehicular entrance

trees replanted on corner to replace tree at car park entrance

proposed traffic light system

proposal to replace tree to accommodate parking

3472 3722 11495 1580 4743 2928 2400 3250 14738 2968 5750 3250 3000 1175 6479 542 7309 2200 4400 1300 10500 14433 18881 7701 4201 1952 7920

T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 G1 G2 G3 G4 G5

79 83

N

proposed tree to be removed

canopy of tree

root protection radius

proposed new planting of trees

ARBORICULTURAL IMPACT STUDY PLAN

JUNCTION OF CROMPTONS LANE, CALDERSTONES ROAD & MENLOVE AVENUE

SCALE: 1:200 @ A3 | DATE: SEPT 2012

DRAWING: CL/AIS/01

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RITISH STANDARD 5837 TREE SURVEYS ARBORICULTURAL IMPLICATION STUDIES TPO/PLANNIG ADVICE/ PROJECT MANAGEMENT
REE INVENTORIES AND RISK ASSESSMENTS WOODLAND MANAGEMENT PLANS TREE PLANTING SCHEMES TPO RE-SURVEY

ARBORICULTURAL IMPLICATIONS ASSESSMENT

PROPOSED DEVELOPMENT

AT

CALDER HOUSE
CROMPTONS LANE
KNOWSLEY

Author: C. Salisbury
Date: 16 October 2012
Ref: TRE/CHCL

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1.0 Introduction

1.1 The purpose of this report is to: -

a) Asses the impact, if any, the proposed development will have on the trees identified in the survey of the 12 October 2012 by Mulberry Tree Management.
b) Advise on arboricultural measures, which would be likely to mitigate any damage resulting from the proposed development

1.2 All background information from which this report is based has been taken from the initial survey, as stated in point 1.1 (a), by Mulberry Tree Management.

1.3 The limitations of this report are restricted to the persons, time, information made available and purpose for which this report has been prepared.

2.0 Findings

2.1 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 One identifies the trees in relation to the proposed development.

2.2 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.

2.3 This can then be assed in accordance with BS 5837:2005 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.

2.4 Impact Table: -

Tree No	Root Protection Area identified in Table 2 of BS 5837:2005	Distance to Proposed Driveway (m)	Distance to Proposed Dwelling (m)	Can the Tree be Successfully Retained
T1	109 m^2 = Circle with a radius of 5.90 metres	6.20	6.20	Yes
T2	Fell Due to Condition			
T3	127 m^2 = Circle with a radius of 6.36 metres	5.00	6.00	No
T4	59 m^2 = Circle with a radius of 4.32 metres	11.20	8.40	Yes
T5	Fell Due to Condition			
T6	13 m^2 = Circle with a radius of 2.04 metres	N/A	4.00	Yes
T7	65 m^2 = Circle with a radius of 4.56 metres	N/A	6.00	Yes
T8	80 m^2 = Circle with a radius of 5.04 metres	N/A	4.00	No
T9	82 m^2 = Circle with a radius of 5.10 metres	N/A	6.40	Yes

Tree No	Root Protection Area identified in Table 2 of BS 5837:2005	Distance to Proposed Driveway (m)	Distance to Proposed Dwelling (m)	Can the Tree be Successfully Retained
T10	59 m^2 = Circle with a radius of 4.32 metres	5.20	6.80	Yes
T11	132 m^2 = Circle with a radius of 6.48 metres	10.00	8.20	Yes
T12	24 m^2 = Circle with a radius of 2.76 metres	12.20	7.60	Yes
G1	Fell Due to Development			
G2	5 m^2 = Circle with a radius of 1.32 metres	1.60	5.20	Yes
G3	10 m^2 = Circle with a radius of 1.80 metres	13.60	4.00	Yes
G4	33 m^2 = Circle with a radius of 3.24 metres	N/A	5.00	Yes
G5	5 m^2 = Circle with a radius of 1.32 metres	Varies	7.20	Fell trees within 2.00m of proposed driveway

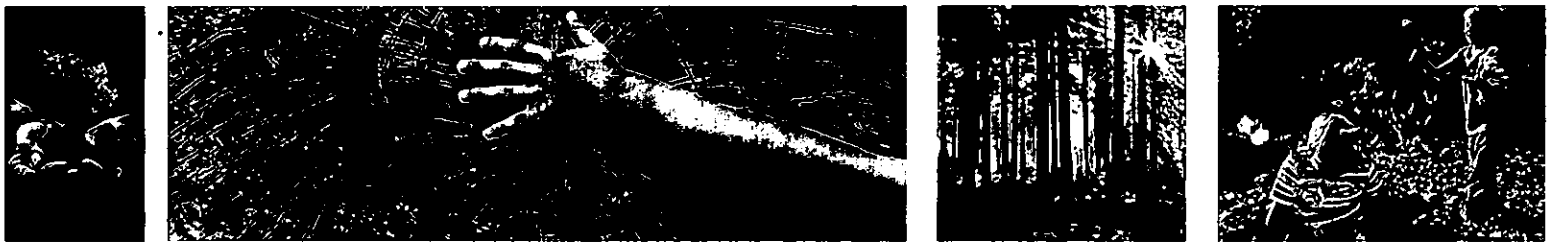
3.0 Impact Assessment

3.1 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, T3, T4, T6, T7, T8, T9, T11, T12, G2, G3, G4 & part of G5	N/A	T2 & T5	G1 and part of G5

APPENDIX

ONE



ARBORICULTURAL METHOD STATEMENT

PROPOSED DEVELOPMENT

AT

CALDER HOUSE
CROMPTONS ROAD
LIVERPOOL

Author: C. Salisbury
Date: 16 October 2012
Ref: TRE/CHCR

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1.0 Discussion

1.1 The majority of the root system, of a tree, is in the surface 600mm of the soil, extending radically 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 severe 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 severe 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 severe or damage 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	No Work Required
T2	Fell
T3	Severe and Remove Ivy
T4	Severe and Remove Ivy
T5	Fell
T6	No Work Required
T7	No Work Required
T8	Severe and Remove Ivy
T9	Severe and Remove Ivy
T10	No Work Required
T11	No Work Required
G1	Fell
G2	No Work Required
G3	No Work Required
G4	Severe and Remove Ivy
G5	Fell part of Group

2.2 Protective Fencing

All fencing used on the site should fully comply with BS 5837:2005 (Trees in Relation to Construction – Recommendations).

2.2.1 The fencing should be strong and suitable for local conditions. It should also take into account the degree of construction activity on the site.

2.2.2 The fencing should be at least 2.3m in height and should be erected with both a vertical and horizontal scaffolding framework capable of withstanding impact, with vertical tubes spaced at a maximum of 3 m. This should support either weldmesh panels which should be securely fixed with wire or scaffold clamps.

2.2.3 Notices should also be erected on the fencing stating 'Protected Area - No operations within fenced area'.

2.2.4 The positioning of the protective fencing is also very important and should be erected in the proposed location identified in Appendix One. Once the fence has been erected it should never be crossed and particular care should be taken to store any materials or soil within the protected area.

2.3 Additional Precautions Outside Fences Areas

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 trees 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.

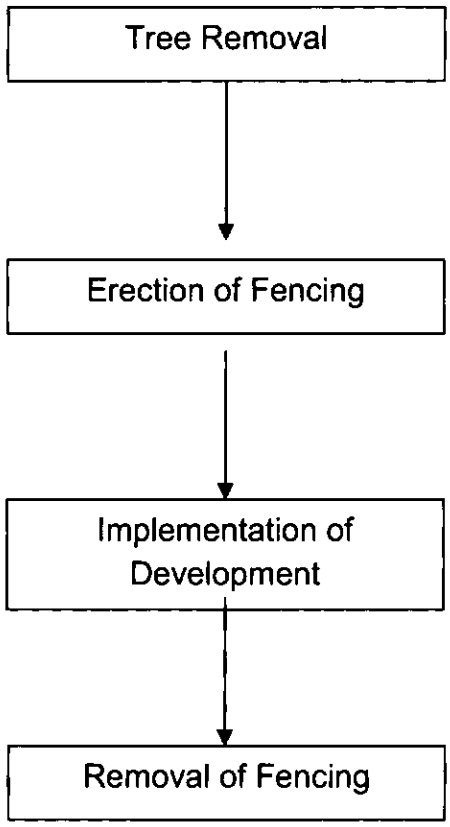
2.3.3 Fires will not be lit beneath the foliage or in a position where the flames could extend to within 5m of the foliage, branches or trunk. If the fire is large then this may necessitate a distance of at least 20m.

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



APPENDIX

ONE

CROMPTON'S LANE

Boundary wall

83

79

Existing Shed

ramp to underground car park

1:15 accessible ramp

proposed drop off zone

trees replanted on corner to replace tree at car park entrance

proposed traffic light system

vehicular entrance

level + 1.1m

line of basement wall below

001 002 003 004

Balcony Dining Kitchen Living Room Master Bedroom 01 ensuite Hallway Utility Store Bathroom Bedroom 02 Bedroom 03/Study En - suite Entrance Hall Mechanical Plant Room Electrical Plant Room Bedroom 01 Bedroom 03 Ramp

G1 G2 G3 G4 G5 T1 T3 T4 T6 T7 T8 T9 T10 T11 T12

3472 3722 11495 1580 4743 2928 2400 3250 14738 2968 5750 3250 3000 1175 542 7309 2200 4400 1300 10500 14433 18881 4201 1952 7920 7701

proposed tree to be removed

canopy of tree

root protection radius

proposed new planting of trees

protective fencing

METHOD STATEMENT PLAN

JUNCTION OF CROMPTONS LANE, CALDERSTONES ROAD & MENLOVE AVENUE

SCALE: 1:200 @ A3 | DATE: SEPT 2012

DRAWING: CL/MSP/01

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T5
G4
T6
T7
T8
T9
G5
T4
T3
T2
T10
T11
T12
G3
NP
T1
G2
G1

CALDER HOUSE, LIVERPOOL	
TREE LOCATION PLAN	
SCALE: 1/200@A3	**DATE: OCT. 2012**
DRAWING: M109/CHL/TREE/01/A	

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