# **Arboricultural Report**

Site – 1 Millfield Place, London, N6 6JP

Client - Archplan Architects,

1 Millfield Place, Highgate,

London, N6 6JP

Contact - Mr Andrew Down

1 Millfield Place, Highgate,

London, N6 6JP 0208 341 5628

Planning application number - 2010/2046

**Date of survey - 17/05/10** 

To be read in conjunction with –

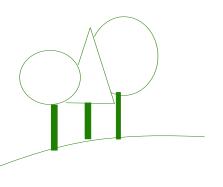
Tree Constraint Plan Drawing No. AP/MF/01

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#### 1.0 Instruction and client brief

- 1.1 Mr Andrew Down of Archplan Architects requested a survey and report on the trees, as part of the planning application 2010/2046. It is to survey the trees within the property. The report was to comment on:
  - the condition of the trees, to assess and categorise in line with BS5837:2005
  - to prepare a tree constraints plan in line with BS5837:2005
  - the arboricultural implications that the re development may have on the existing trees, in line with BS5837:2005

#### 2.0 Site

- 2.1 The site is a detached property on the western side of Millfield Place. The existing site lay out and house is shown in Archplan drawing numbers MP/01 to MP/04.
- 2.2 Millfield Place is a private road of large detached properties. In the road are a number of significant mature and semi mature trees within the grounds of the properties along the road. There are two large mature horse chestnut trees on the opposite side of Millfiled Place. They are approximately 20m from any proposed works and outside the maximum RPA (root protection area) as laid out in BS5837:2005, so have not been included in this survey.
- 2.3 The trees within the site are predominantly fruit trees around the boundary. There are mature trees close to the boundary within the neighbouring gardens, which have been included within the survey.
- 2.4 The levels within the development area are on two distinct levels; the higher lawn area to the west of the house, and the lower lawn level to the south of the house. There is a significant difference between the two levels of around approximately 1.5m
- 2.5 The soil within the area is defined as predominantly a slowly permeable, seasonally wet, acid loams and clays, as detailed by Cranfield University, source Landis.org.uk

### 3.0 Proposed Development

- 3.1 The proposals are for the construction of a basement below the existing property.
- 3.2 The rear (western) elevation of the house is to be rebuilt approximately 3.5m from the existing rear elevation of the house.
- 3.3 The southern flank elevation will be rebuilt and have a light well constructed at a lower level, to allow light into the basement.
- 3.4 The proposals are shown in Archplan drawing numbers MP/05 to MP/09.

### 4.0 Tree assessment

(For further detail see appendix 1 and photographs appendix 3)

4.1 The T1 is a plum tree, located close to the east boundary of the property. It is a semi mature tree in a good to fair physiological and structural condition. The crown has relatively dense secondary growth, typical of plum species. The tree is visible from the road and has been reduced

- back from the road in the past. The tree has been given a C rating, as it is visible from the private road. It is however a small tree and could be removed and replaced with an appropriate tree when the construction has been completed.
- 4.2 T2 is a small young tree apple that could easily be transplanted.
- 4.3 T3 is a mature Apple tree that is in a fair structural and physiological condition. It has been pruned heavily back to the two main limbs. The crown is formed from the re-growth from this pruning. There is minor dead wood through out the crown. The tree affords screening of the proposals from the adjacent property. It has been given a C2 rating in line with BS5837:2005.
- 4.4 T4 is a smaller fruiting apple tree than T3, which leans to the east, so has been considered to have a fair structural condition. The physiological condition is good. It again affords screening of the proposals from the adjacent property. It has been given a C2 rating in line with BS5837:2005.
- 4.5 T5 is the third fruiting apple along the south boundary. It is in a good to fair physiological condition. Structurally the tree leans significantly to the south. It has a main fork at 1.4m high from which there are 2 main limbs. It too has been given a C rating, as it also screens the proposals from the properties to the south.
- 4.6 T6 is a large mature eucalyptus, which is located in the garden of the neighbouring property. The ground level in the garden, where the tree is growing, is around 3m lower than the ground level in 1 Millfield place. Access to the base of the tree was not possible, so the diameter of the trunk has been estimated. It has been rated as in a good to fair condition, both structurally and physiologically. However, there are 2 lines in the bark running around the girth of the tree, at about 6m above ground level. These could be the result of wires or ropes running around the tree in the past, which have now been included into the trunk of the tree. If this is the case, then it is a potential structural defect within the trunk. The tree has been given a B2 rating, due to its size in the landscape of the area. It affords screening between the proposals and the adjacent properties.
- 4.7 T7 is a young mature ash tree on the boundary of the property. It appears to be in a fair physiological condition. Structurally it leans to the east, due to suppression from T6. The dense covering of ivy on the trunk makes full structural assessment of the trunk and main scaffold not possible. The tree, along with T6, is important in the wider landscape of the area and, as such, has been give a B2 rating in line with BS5837.
- 4.8 T8 is a mature fruiting pear in a good to fair condition. It also adds to the screening of the proposals from the adjacent properties. It has been given a C2&3 rating.
- 4.9 T9 is a young mature magnolia. It is an attractive tree within the garden but has limited visual amenity from outside the site. It is in a good condition and has been rated as a C2 category rating.
- 4.10 T10 is a large mature eucalyptus which is located in the garden of the neighbouring property. It is in a fair physiological and structural condition. There are a series of cavities running up the trunk on the east side, which appear to have some localised decay associated with them. It is visual in the wider landscape and, with T11 & T12, forms a good screen of the proposed development from the properties to the west. As such, it has been given a B2 rating.
- 4.11 T11 and T12 are Portuguese laurels, located in the neighbouring property. They are shrubs that have grown into small trees. They are evergreen and provide a good screen to the proposals. Both are in a fair structural

- and physiological condition, though they are shaded by T10. Both have been given a C rating due to their screening value.
- 4.12 T13 is a young mature walnut tree, in both a good structural and physiological condition. It has limited value in the wider landscape, due to the presence of T10, T11 and T12 to the west. It is, however, a good specimen. Taking this into consideration, it has been given a B-C rating in line with BS5837, as it would be expected to have a safe useful life expectancy of more than 40 years.
- 4.13 T14 is a large mature silver birch tree, located in the neighbouring garden. It is in a good physiological condition. The dense covering of ivy on the trunk makes full structural assessment of the trunk and main scaffold not possible. T14 is important in the wider landscape of the area and, as such, has been give a B2 rating in line with BS5837.
- 4.14 T15 is a large example of a Cornelian cherry tree. It is a multi stem specimen. As with T14, the dense covering of ivy on the trunk makes full structural assessment of the trunk and main scaffold not possible. It appears to be in a good physiological condition. It has been given a C rating as, though it is a nice small tree or large shrub, the views of it from the wider landscape are limited.

### 5.0 Arboricultural Impact Assessment

- 5.1 The Arboricultural impact is based on the following parameters
  - All trees that are to be retained will be protected by tree protection fencing in line with BS5837:2005 section 9
  - All tree pruning works are carried out in line with BS3998:1989
  - Should be read in conjunction with Tree Constraints drawing number AP/MF/01
  - All works are in line with the site specific Arboricultural Method Statement.
  - All trees are protected in line with the Protection Plan AP/MF/02

Tree no. & class.		RPA m/sq	Radi of RPA (M)	Tree implications assessment	Mitigation to consider
T1	Cherry Plum Prunus domestica var	18	2.4	The proposed building work is outside the Root Protection Area (RPA) and crown spread. However an area to the west of the RPA maybe encroached into to facilitate the development	Additional ground protection inline with BS5837:2005 will be required over approximately 3.6 m/sq of the RPA to facilitate access during the build
T2	Pear Pyrus comunis var		0.72	They proposals are well outside the root protection area and crown spread of the tree. If the tree is protected it should suffer no long term detrimental affects from the construction.	Protect the tree in line with BS5837:2005 section 9.
Т3	Apple Malus domestica var		3.2	They proposals are well outside the root protection area and crown spread of	Protect the tree in line with BS5837:2005 section 9.

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			the tree. If the tree is protected it should suffer no long term detrimental affects from the construction.	
T4	Apple Malus domestica var	1.7	They proposals are well outside the root protection area and crown spread of the tree. If the tree is protected it should suffer no long term detrimental affects from the construction.	Protect the tree in line with BS5837:2005 section 9.
T5	Apple Malus domestica var	1.5	They proposals are well outside the root protection area and crown spread of the tree. If the tree is protected it should suffer no long term detrimental affects from the construction.	Protect the tree in line with BS5837:2005 section 9.
T6	Eucalyptus spp	4.4	They proposals are well outside the root protection area and crown spread of the tree. If the tree is protected it should suffer no long term detrimental affects from the construction.	Protect the tree in line with BS5837:2005 section 9.
T7	Ash Fraxinus excelsior	3.8	They proposals are well outside the root protection area and crown spread of the tree. If the tree is protected it should suffer no long term detrimental affects from the construction.	Protect the tree in line with BS5837:2005 section 9.
Т8	Pear Pyrus comunis spp	2.3	They proposals are well outside the root protection area and crown spread of the tree. If the tree is protected it should suffer no long term detrimental affects from the construction.	Protect the tree in line with BS5837:2005 section 9.
Т9	Magnolia Magnolia soulangeana	1.9	They proposals are well outside the root protection area and crown spread of the tree. If the tree is protected it should suffer no long term detrimental affects from the construction.	Protect the tree in line with BS5837:2005 section 9.
T10	Eucalyptus spp	4.8	They proposals are well outside the root protection area and crown spread of the tree. If the tree is protected it should suffer no long term detrimental affects from the	Protect the tree in line with BS5837:2005 section 9.

			construction.	
T11	Portuguese laurel Prunus lausitanica	2.4	They proposals are well outside the root protection area and crown spread of the tree. If the tree is protected it should suffer no long term detrimental affects from the construction.	Protect the tree in line with BS5837:2005 section 9.
T12	Portuguese laurel Prunus lausitanica	2.4	They proposals are well outside the root protection area and crown spread of the tree. If the tree is protected it should suffer no long term detrimental affects from the construction.	Protect the tree in line with BS5837:2005 section 9.
T13	Walnut Juglans nigra	2.88	They proposals are well outside the root protection area and crown spread of the tree. If the tree is protected it should suffer no long term detrimental affects from the construction.	Protect the tree in line with BS5837:2005 section 9.
T14	Silver birch Betula pendula	7.08	They proposals are well outside the root protection area and crown spread of the tree. If the tree is protected it should suffer no long term detrimental affects from the construction.	Protect the tree in line with BS5837:2005 section 9.
T15	Cornelian cherry Cornus mas	5.0	The proposed building work is outside the Root Protection Area (RPA) and crown spread. However an area to the east of the RPA maybe encroached into to facilitate the development	Additional ground protection inline with BS5837:2005 will be required over approximately 3.8 m/sq of the RPA to facilitate access and scaffold during the build

# Appendix 1 – Survey data

Site – 1 Millfield Place Client – Archplan

Weather - Fair

Date – 13-05-10 By – JMM

No.	Species English & Latin	Approx Height (M)	Dia. @1.5 (CM)	Spread (M)	Height Crown Clearance (m)	Age Class	Physiological condition	Structural condition	Preliminary management recommendation	Years remaining	Category grading
T1	Cherry Plum Prunus domestica var	6	20	N 2.5 S 2.5 E 2 W 3	1.5	Mi	Good - Fair	Fair	Na	20-30	C2
T2	Pear Pyrus comunis var	3	6	N 0.5 S 0.5 E 0.5 W 0.5	1.2	Y	Good - Fair	Fair Small young tree that could be transplanted	Na	40+	C2
Т3	Apple Malus domestica var	7	26.5	N 3.5 S 2.5 E 1.5 W 2.5	1.8	Ма	Fair Minor dead wood through out the crown	Fair Has been historically heavily pruned back to the two main limbs. The crown is formed from the re-growth from this pruning	Na	20-30	C2
T4	Apple Malus domestica var	4	14	N 2.5 S 2.5 E 2 W 1	1.5	Ма	Good - Fair	Fair- poor Leans significantly to the east towards T3	Na	10-20	C2
T5	Apple Malus domestica var	6.5	12.5	N 1 S 2.5 E 2 W 2	0.9	Mi	Good - Fair	Fair Leans to the south with the main fork at 1.4m	Remove the stake	20-40	C2

T6	Eucalyptus spp	14	Esti 40	N 3 S 3 E 3 W 4	5	Ма	Fair	Fair The trunk is located in the next garden and the ground/ base level is around 3m lower than the level of the garden at 1 Millfield. At 6m up on the east side there are a pair of rings in the bark suggesting the tree may have been girthed by wire – rope that has now been included into the stem.	Na	40+	B2
Т7	Ash Fraxinus excelsior	10	29	N 6 S 3 E 3 W 2	2	Ма	Fair	Fair Leans to the east due to suppression from T6. The dense covering of ivy on the trunk makes full structural assessment of the trunk and main scaffold not possible.	Na	40+	B2
Т8	Pear Pyrus comunis spp	8	19.5	N 2 S 3 E 3 W 2	2	Ма	Good - fair	Good – fair Leans to the south	Na	20-40	C2
Т9	Magnolia Magnolia soulangeana	6	m/s 19	N 2 S 3 E 2.5 W 2.5	1.5	Mi	Good – fair	Good – fair Multi stem specimen with 2 main stems and 1 smaller limb. The small limb crosses and rubs at 1m on the south side	Remove crossing branch	20-40	C2

T10	Eucalyptus spp	12	Esti 40	N 3 S 3 E 3 W 4	5	Ма	Fair	Fair There are a series of cavities running up the trunk on the east side that appear to have some localised decay associated with them	Na	40+	B2
T11	Portuguese laurel Prunus lausitanica	6	Esti 20	N 3 S 5 E 3 W 2	3	Ma	Good – fair	Good – fair	Na	10 – 20	C2
T12	Portuguese laurel Prunus lausitanica	6	Esti 20	N 3 S 5 E 3 W 2	3	Ма	Good – fair	Good – fair	Na	10 – 20	C2
T13	Walnut Juglans nigra	10	24	N 3 S 3.5 E 5 W 4	1.8	Mi	Good	Good	Na	40+	B2
T14	Silver birch Betula pendula	14	59	N 4 S 4 E 3.5 W 4	3	Ма	Good	Good – fair The dense covering of ivy on the trunk makes full structural assessment of the trunk and main scaffold not possible.	Na	20-40	B2
T15	Cornelian cherry Cornus mas	10	M/s 50	N 4 S 3 E 3 W 4	3	Ма	Good – fair	Good – fair Multi stem specimen The dense covering of ivy on the trunk makes full structural assessment of the trunk and main scaffold not possible.	Na	20 – 40	C2

Note - where access to the tree was not available an estimate denoted as 'esti' has been used.

## Key to survey sheets -

M/S Multi stem, tree with 2 or more main stems

Age class: N = Newly planted

Y = Young first third of life
Mi = Middle Age second third of life

Ma = Mature last third of life

OM = Over mature V = Veteran tree

### Tree categories

Category	Description
Α	Trees of high quality
Green	A1 – Mainly arboricultural value
	A2 - Mainly landscape value
	A3 – Mainly cultural value, including
	conservation
В	Trees of moderate quality
Blue	B1 – Mainly arboricultural value
	B2 - Mainly landscape value
	B3 – Mainly cultural value, including
	conservation
С	Trees of low quality
Grey	C1 – Mainly arboricultural value
	C2 - Mainly landscape value
	C3 – Mainly cultural value, including
	conservation
R	Trees that are in a poor condition so that any
red	existing value will be lost in the next 10 years
	and should, for reasons of sound
	arboricultural management be removed.

## Appendix 2 - Photographs



T1 – plum on left and T2 pear on the right



T3 on left and T4 on right apple trees with T10 in the back ground right



T5 apple on the left, T6 eucalyptus in the centre and T7 ash on the right.



T8 pear on left and T9 magnolia on right with T10 in the back ground right



### **Appendix 3 – Report Caveats**

- 1. The report is based on a ground level visual tree assessment (Matteck).
- 2. No soil or pest and disease samples were taken or sent away for analysis.
- 3. It remains the responsibility of the tree owner to check TPO status prior to carrying out any works on the tree.
- 4. Physiological and structural assessments are valid for a period of 12 months.
- 5. Environmental changes to the ground around the tree will render the report invalid.
- 6. The site survey is based on drawing number by
- 7. No internal diagnostic equipment was used.
- 8. Any works to the trees should comply with BS3998:89 Tree Work
- Any works to trees should regard the Wildlife and Countryside Act 1981, The habitat Regulations, and the Countryside and Rights of Way Act

### Appendix 4 – References

BS5837:2005 Trees in relation to construction

NHBC Chapter 4.2 Building near trees

D Lonsdale 'Principles of Tree Hazard Assessment and Management' Forestry Commission 2007

Strouts and Winter 'Diagnosis of ill health in trees' Forestry Commission 2007

C Mattheck and H Breloer 'Body Language of Trees' Forestry Commission 2006