

# TREE PRESERVATION ORDER

## TOWN AND COUNTRY PLANNING ACTS 1962 AND 1968

### (CIVIC AMENITIES ACT 1967)

The Council of the London Borough of Camden

in this order called "the authority", in pursuance of the powers conferred in that behalf by section 29 of the Town and Country Planning Act 1962 [and section 16 of the Civic Amenities Act 1967], and subject to the provisions of the Forestry Act 1967, hereby makes the following order:-

1. In this Order-

"the Act" means the Town and Country Planning Act 1962;

"owner" means the owner in fee simple, either in possession or who has granted a lease or tenancy of which the unexpired portion is less than three years; lessee (including a sub-lessee) or tenant in possession, the unexpired portion of whose lease or tenancy is three years or more; and a mortgagee in possession; and "the Minister" means the Minister of Housing and Local Government.

2. Subject to the provisions of this Order and to the exemptions specified in the Second Schedule hereto, no person shall, except with the consent of the authority and in accordance with the conditions, if any, imposed on such consent, cut down, top, lop or wilfully destroy or cause or permit the cutting down, topping, lopping or wilful destruction of any tree specified in the First Schedule hereto or comprised in a group of trees or in a woodland therein specified, the position of which trees, groups of trees and woodlands is defined in the manner indicated in the said First Schedule on the map annexed hereto which map shall, for the purpose of such definition as aforesaid, prevail where any ambiguity arises between it and the specification in the said First Schedule.

3. An application for consent made to the authority under Article 2 of this Order shall be in writing stating the reasons for making the application, and shall by reference if necessary to a plan specify the trees to which the application relates, and the operations for the carrying out of which consent is required.

4.-(1) Where an application for consent is made to the authority under this Order, the authority may grant such consent either unconditionally, or subject to such conditions (including conditions requiring the replacement of any tree by one or more trees on the site or in the immediate vicinity thereof), as the authority may think fit, or may refuse consent:

Provided that where the application relates to any woodland specified in the First Schedule to this Order the authority shall grant consent so far as accords with the principles of good forestry, except where, in the opinion of the authority, it is necessary in the interests of amenity to maintain the special character of the woodland or the woodland character of the area, and shall not impose conditions on such consent requiring replacement or replanting.

(2) The authority shall keep a register of all applications for consent under this Order containing information as to the nature of the application, the decision of the authority thereon, any compensation awarded in consequence of such decision and any directions as to replanting of woodlands; and every such register shall be available for inspection by the public at all reasonable hours.

5. Where the authority refuse consent under this Order or grant such consent subject to conditions they may when refusing or granting consent certify in respect of any trees for which they are so refusing or granting consent that they are satisfied-

- (a) that the refusal or condition is in the interests of good forestry; or
- (b) in the case of trees other than trees comprised in woodlands, that the trees have an outstanding or special amenity value.

6.-(1) Where consent is granted under this Order to fell any part of a woodland other than consent for silvicultural thinning then unless-

- (a) such consent is granted for the purpose of enabling development to be carried out in accordance with a permission to develop land under Part III of the Act, or
- (b) the authority with the approval of the Minister dispense with replanting,

the authority shall give to the owner of the land on which that part of the woodland is situated a direction in writing specifying the manner in which and the time within which he shall replant such land and where such a direction is given and the part is felled the owner shall, subject to the provision of this Order and section 25 of the Countryside Act 1968, replant the said land in accordance with the direction.

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**Note:** If it is desired to fell any of the trees included in this Order whether included as trees, groups of trees or woodlands, and the trees are trees for the felling of which a licence is required under the Forestry Act 1967, application should be made not to the authority for consent under this Order but to the Conservator of Forests for a licence under that Act (section 15(5)).

- (2) Any direction given under paragraph (1) of this Article may include requirements as to—
- (a) species;
  - (b) number of trees per acre;
  - (c) the erection and maintenance of fencing necessary for protection of the replanting;
  - (d) the preparation of ground, draining, removal of brushwood, lop and top; and
  - (e) protective measures against fire.

7. On imposing any condition requiring the replacement of any tree under Article 4 of the Order, or on giving a direction under Article 6 of this Order with respect to the replanting of woodlands, the authority shall if such condition or direction relates to land in respect of which byelaws made by a river authority, a drainage board, the Conservators of the River Thames or the Lee Conservancy Catchment Board restrict or regulate the planting of trees, notify the applicant or the owner of the land, as the case may be, of the existence of such byelaws and that any such condition or direction has effect subject to the requirements of the river authority, drainage board, the Conservators of the River Thames or the Lee Conservancy Catchment Board under those byelaws and the condition or direction shall have effect accordingly.

8. The provisions set out in the Third Schedule to this Order, being provisions of Part III of the Act and of section 80 of the Town and Country Planning Act 1968 adapted and modified for the purposes of this Order, shall apply in relation thereto.

9. Subject to the provisions of this Order, any person who has suffered loss or damage in consequence of any refusal (including revocation or modification) of consent under this Order or of any grant of any such consent subject to conditions, shall, if he makes a claim on the authority within the time and in the manner prescribed by this Order, be entitled to recover from the authority compensation in respect of such loss or damage:

Provided that no compensation shall be payable in respect of loss or damage suffered by reason of such refusal or grant of consent in the case of any trees the subject of a certificate in accordance with Article 5 of this Order.

10. In assessing compensation payable under the last preceding Article account shall be taken of:

- (a) any compensation or contribution which has been paid whether to the claimant or any other person, in respect of the same trees under the terms of this or any other Tree Preservation Order Under section 29 of the Act or under the terms of any Interim Preservation Order made under section 8 of the Town and Country Planning (Interim Development) Act 1943, or any compensation which has been paid or which could have been claimed under any provision relating to the preservation of trees or protection of woodlands contained in an operative scheme under the Town and Country Planning Act 1932, and
- (b) any injurious affection to any land of the owner which would result from the felling of the trees the subject of the claim.

11.—(1) A claim for compensation under this Order shall be in writing and shall be made by serving it on the authority, such service to be effected by delivering the claim at the offices of the authority addressed to the Clerk thereof or by sending it by prepaid post so addressed.

(2) The time within which any such claim shall be made as aforesaid shall be a period of twelve months from the date of the decision of the authority, or of the Minister, as the case may be, or where an appeal has been made to the Minister against the decision of the authority, from the date of the decision of the Minister on the appeal.

12. Any question of disputed compensation shall be determined in accordance with the provisions of section 128 of the Act.

13.—(1) The provisions of section 16 of the Civic Amenities Act 1967 shall apply to this Order and the Order shall take effect on **25 OCT 1971**].

[(2) This order shall apply to any tree specified in the First Schedule hereto, which is to be planted as mentioned therein, as from the time when that tree is planted].

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**Note:** Any person contravening the provisions of this Order is guilty of an offence under subsection (1) of section 62 of the Act and liable on summary conviction to a fine not exceeding fifty pounds; and if in the case of a continuing offence the contravention is continued after conviction he is guilty of a further offence thereunder and liable on summary conviction to an additional fine not exceeding forty shillings for every day on which the contravention is so continued. Under sections 13, 14 and 15 of the Civic Amenities Act 1967 if a tree is wilfully cut down or destroyed, or if topping or lopping is carried out in such a way as to be likely to destroy the tree the fine is £250 or twice the value of the tree whichever is the greater. If a tree other than one which is part of woodland is removed or destroyed in contravention of the Order it is the duty of the owner of the land, unless on his application the local authority dispense with the requirement, to plant another tree of appropriate size and species, at the same place as soon as he reasonable can.

SECOND SCHEDULE

This Order shall not apply so as to require the consent of the authority to

FIRST SCHEDULE

TREES SPECIFIED INDIVIDUALLY

C.28

(ENCIRCLED BLACK ON MAP)

<u>NUMBER ON MAP</u>	<u>DESCRIPTION</u>	<u>SITUATION</u>
T.1	Ash	"Heath House" North End Way
T.2	Sycamore	"
T.3	Lime	"
T.4	Thorn	"
T.5	Maple	"
T.6	Holly	"
T.7	Sweet Chestnut	"
T.8	Oak	"
T.9	Lime	"
T.10	Lime	"
T.11	Ash	"
T.12	Box Elder	"

TREES SPECIFIED BY REFERENCE TO ANY AREA

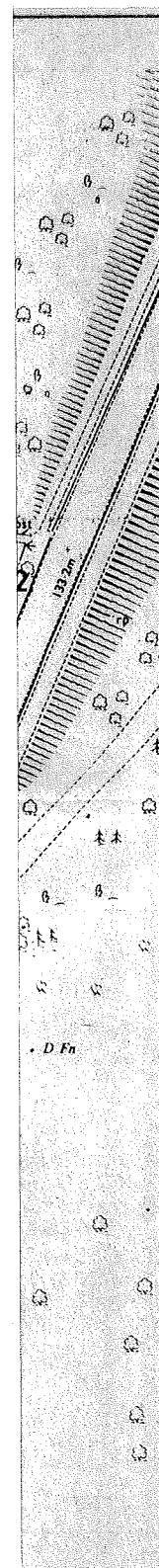
NONE

GROUPS OF TREES

NONE

WOODLANDS

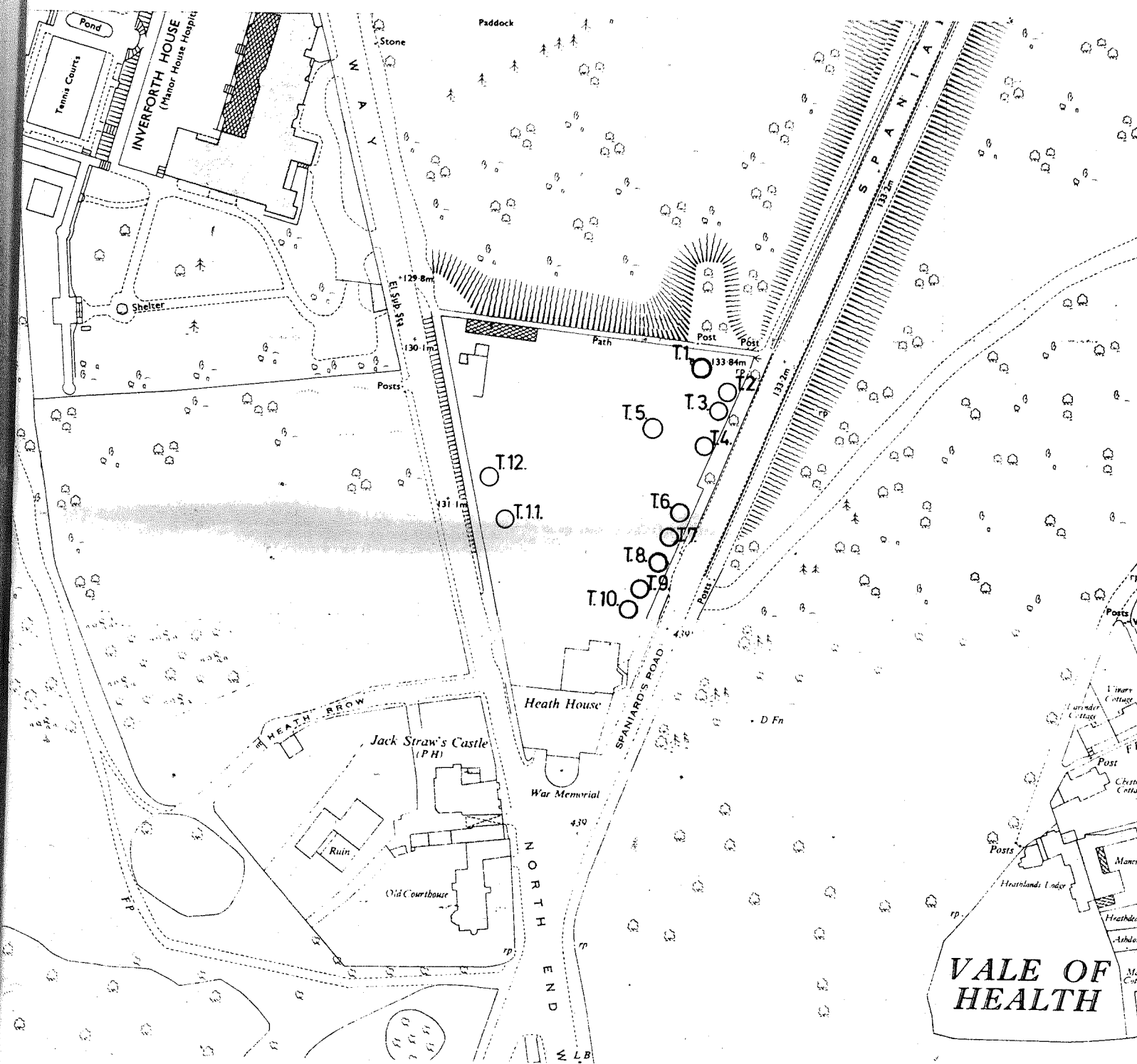
NONE



enable the local planning authority to come to a decision on whether or not to dispense with the requirement of notice of the proposed action should be given to the local planning authority which except in a case of emergency shall be of not less than five days.

T.P.O. 28.

1636



*Arblinier*  
 MAYOR

*B. Schaffenberg*  
 TOWN CLERK

**London Borough of Camden**

Department of  
 Planning and Communications



197 High Holborn WC1V 7BG  
 Telephone: 01-405-3411

Director of Planning and Communications  
 B. Schaffenberg Dr. Arch (Rome) Dip. TP MTP!

Drawing Title  
**MAP REFERED TO IN THE  
 LONDON BOROUGH OF CAMDEN  
 TREE PRESERVATION ORDER  
 N°28. 1971.**

**VALE OF  
 HEALTH**

Drawn by <b>A.J.H.</b>	Scale <b>1:1250</b>	Date <b>28-6-71</b>
Case number <b>T.P.O. 28.</b>	Drawing number <b>1636</b>	

## SECOND SCHEDULE

This Order shall not apply so as to require the consent of the authority to

- (1) the cutting down of any tree on land which is subject to a forestry dedication covenant where
  - (a) any positive covenants on the part of the owner of the land contained in the same deed as the forestry dedication covenant and at the time of the cutting down binding on the then owner of the land are fulfilled;
  - (b) the cutting down is in accordance with a plan of operations approved by the Forestry Commission under such deed.
- (2) the cutting down of any tree which is in accordance with a plan of operations approved by the Forestry Commission under the approved woodlands scheme.

\* (3) The cutting down, topping or lopping of a tree exempted from the provisions of this Order by section 29(7) of the Act namely a tree which is dying or dead or has become dangerous, or the cutting down, topping or lopping of which is in compliance with obligations imposed by or under an Act of Parliament or so far as may be necessary for the prevention or abatement of a nuisance.

(4) the cutting down, topping or lopping of a tree

(a) in pursuance of the power conferred on the Postmaster General by virtue of section 5 of the Telegraph (Construction) Act 1908;

(b) by or at the request of

(i) a statutory undertaker where the land on which the tree is situated is operational land as defined by the Act and either works on such land cannot otherwise be carried out or the cutting down, topping or lopping is for the purpose of securing safety in the operation of the undertaking;

(ii) an electricity board within the meaning of the Electricity Act 1947, where such tree obstructs the construction by the board of any main transmission line or other electric line within the meaning respectively of the Electricity (Supply) Act 1919 and the Electric Lighting Act 1882 or interferes or would interfere with the maintenance or working of any such line;

(iii) a river authority established under the Water Resources Act 1963, a drainage board constituted or treated as having been constituted under the Land Drainage Act 1930, the Conservators of the River Thames, or the Lee Conservancy Catchment Board, where the tree interferes or would interfere with the exercise of any of the functions of such river authority, drainage board, Conservators of the River Thames or Lee Conservancy Catchment Board in relation to the maintenance, improvement or construction of water courses or of drainage works; or

(iv) the Minister of Defence for the Royal Air Force, the Minister of Technology or the Board of Trade where in the opinion of such Minister or Board the tree obstructs the approach of aircraft to, or their departure from, any aerodrome or hinders the safe and efficient use of aviation or defence technical installations;

(c) where immediately required for the purpose of carrying out development authorised by the planning permission granted on an application made under Part III of the Act, or deemed to have been so granted for any of the purposes of that Part;

(d) which is a fruit tree cultivated for fruit production growing or standing on land comprised in an orchard or garden;

[Where the trees are within the area administered by the Conservators of the River Thames]

[(e) in pursuance of the powers conferred on the Conservators of the River Thames by virtue of section 105 of the Thames Conservancy Act 1932].

## THIRD SCHEDULE

Provisions of the following parts of (a) Part III of the Town and Country Planning Act 1962 and (b) section 80 of the Town and Country Planning Act 1968 as adapted and modified to apply to this Order.

### (a) Part III of the Town and Country Planning Act 1962

21.—(1) Without prejudice to the following provisions as to the revocation or modification of consents, any consent under the Order, including any direction as to replanting given by the authority on the granting of such consent, shall (except in so far as the consent otherwise provides), enure for the benefit of the land and of all persons for the time being interested therein.

22.—(1) The Minister may give directions to the authority requiring applications for consent under the Order to be referred to him instead of being dealt with by the authority.

22.—(2) A direction under this section may relate either to a particular application or to applications of a class specified in the direction.

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\*Note: Section 13(1) of the Civic Amenities Act 1967 requires, unless on the application of the owner the local authority dispense with the requirement, that any tree removed or destroyed under section 29(7) of the Town and Country Planning Act 1962, shall be replaced by another tree of appropriate size and species. In order to enable the local planning authority to come to a decision, on whether or not to dispense with the requirement, notice of the proposed action should be given to the local planning authority which except in a case of emergency shall be of not less than five days.

22.—(3) Any application in respect of which a direction under this section has effect shall be referred to the Minister accordingly.

22.—(4) Where an application for consent under the Order is referred to the Minister under this section, the provisions of Articles 4 and 5 of the Order shall apply as they apply to an application which falls to be determined by the authority.

22.—(5) Before determining an application referred to him under this section the Minister shall, if either the applicant or the authority so desire, afford to each of them an opportunity of appearing before, and being heard by, a person appointed by the Minister for the purpose.

22.—(6) The decision of the Minister on any application referred to him under this section shall be final.

23.—(1) Where an application is made to the authority for consent under the Order and that consent is refused by that authority or is granted by them subject to conditions, or where any certificate or direction is given by the authority, the applicant, if he is aggrieved by their decision on the application, or by any such certificate, or the person directed if he is aggrieved by the direction, may by notice under this section appeal to the Minister.

23.—(2) A notice under this section shall be served in writing within twenty-eight days from the receipt of notification of the decision, certificate or direction, as the case may be, or such longer period as the Minister may allow.

23.—(4) Where an appeal is brought under this section from a decision, certificate or direction of the authority, the Minister, subject to the following provisions of this section, may allow or dismiss the appeal, or may reverse or vary any part of the decision of the authority, whether the appeal relates to that part thereof or not, or may cancel any certificate or cancel or vary any direction, and may deal with the application as if it had been made to him in the first instance.

23.—(5) Before determining an appeal under this section, the Minister shall, if either the appellant or the authority so desire, afford to each of them an opportunity of appearing before, and being heard by, a person appointed by the Minister for the purpose.

23.—(7) The decision of the Minister on any appeal under this section shall be final.

24. Where an application for consent under the Order is made to the authority, then unless within two months from the date of receipt of the application, or within such extended period as may at any time be agreed upon in writing between the applicant and the authority, the authority either—

(a) give notice to the applicant of their decision on the application; or

(b) give notice to him that the application has been referred to the Minister in accordance with directions given under section 22 above;

the provisions of the last preceding section shall apply in relation to the application as if the consent to which it relates had been refused by the authority, and as if notification of their decision had been received by the applicant at the end of the said period of two months, or at the end of the said extended period, as the case may be.

27.—(1) If it appears to the authority that it is expedient to revoke or modify any consent under the Order granted on an application made under Article 3 of the Order, the authority may by Order revoke or modify the consent to such extent as they consider expedient.

27.—(2) (Subject to the provisions of section 16 of the Civic Amenities Act 1967 and section 80 of the Town and Country Planning Act 1968) an Order under this section shall not take effect unless it is confirmed by the Minister; and the Minister may confirm any such Order submitted to him either without modification or subject to such modifications as he considers expedient.

27.—(3) Where an authority submit an Order to the Minister for his confirmation under this section, the authority shall furnish the Minister with a statement of their reason for making the Order and shall serve notice together with a copy of the aforesaid statement on the owner and on the occupier of the land affected, and on any other person who in their opinion will be affected by the Order, and if within the period of twenty-eight days from the service thereof any person on whom the notice is served so requires, the Minister, before confirming the Order, shall afford to that person, and to the authority, an opportunity of appearing before, and being heard by, a person appointed by the Minister for the purpose.

27.—(4) The power conferred by this section to revoke or modify a consent may be exercised at any time before the operations for which consent has been given have been completed:

Provided that the revocation or modification of consent shall not affect so much of those operations as has been previously carried out.

27.—(5) Where a notice has been served in accordance with the provisions of subsection (3) of this section, no operations or further operations as the case may be, in pursuance of the consent granted, shall be carried out pending the decision of the Minister under subsection (2) of this section.

#### (b) Town and Country Planning Act 1968

80.—(1) The following provisions shall have effect where the local planning authority have made an Order (hereinafter called "such Order") under section 27 above revoking or modifying any consent granted on an application made under a tree preservation order but have not submitted such Order to the Minister for confirmation by him and the owner and the occupier of the land and all persons who in the authority's opinion will be affected by such Order have notified the authority in writing that they do not object to such Order.

80.-(2) The authority shall advertise the fact that such Order has been made and the advertisement shall specify (a) the period (not less than twenty-eight days from the date on which the advertisement first appears) within which persons affected by such Order may give notice to the Minister that they wish for an opportunity of appearing before, and being heard by, a person appointed by the Minister for the purpose and (b) the period (not less than 14 days from the expiration of the period referred to in paragraph (a) above) at the expiration of which, if no such notice is given to the Minister, such Order may take effect by virtue of this section and without being confirmed by the Minister.

80.-(3) The authority shall also serve notices to the same effect on the persons mentioned in subsection (1) above.

80.-(4) The authority shall send a copy of any advertisement published under subsection (2) above to the Minister, not more than three days after the publication.

80.-(5) If within the period referred to in subsection (2)(a) above no person claiming to be affected by such Order has given notice to the Minister as aforesaid and the Minister has not directed that such Order be submitted to him for confirmation, such Order shall at the expiration of the period referred to in subsection (2)(b) of this section take effect by virtue of this section and without being confirmed by the Minister as required by section 27(2) of the Town and Country Planning Act 1962.

80.-(6) This section does not apply to such Order revoking or modifying a consent granted or deemed to have been granted by the Minister under Part III or Part IV of the Town and Country Planning Act 1962 or under Part II or Part V of the Town and Country Planning Act 1968.

Given under the Common Seal of the Mayor, Aldermen and Burgesses of the London Borough of Camden

the 25 OCT 1971 day of \_\_\_\_\_ in the year  
nineteen hundred and \_\_\_\_\_

*Plans Comm (E)  
Sub-Committee  
25.8.71*

Mayor.....

Town Clerk.....

*Robert Currier*  
*B. H. L. L. L.*

The Mayor Aldermen and Burgesses of the London Borough of Camden in exercise of the powers conferred upon them in that behalf by Section 81 of the Town and Country Planning Act hereby confirm the foregoing Order.

The Common Seal of the  
Mayor Aldermen and Burgesses  
of the London Borough of  
Camden was hereunto affixed  
by Order on the  
day of 9 DEC 1971 1971

*Robert Currier*

Mayor

*B. H. L. L. L.*

Town Clerk

Dated 25 OCT 1971 19 .

Lawson Borough of Camden  
C28

**TOWN AND COUNTRY PLANNING ACTS  
1962 AND 1968**

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**TREE PRESERVATION ORDER**

relating to

Heath House, North God Way  
Area

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**TREE SURVEY TO THE BRITISH STANDARD 5837:2005 "TREES IN RELATION TO CONSTRUCTION - RECOMMENDATIONS"**  
**DATE** - **RESEARCH CONSULTANT** AT **CHECKED BY** RO  
**SITE AT** HEATH HOUSE, HAMPSTEAD, NW3  
**CLIENT** HEATH HOUSE PROPERTY PARTNERSHIP

TREE REF. #	SPECIES	TPO/CA	AGE	HEIGHT in (m)	CANOPY in (m) S - E - W			N - DBH in (mm)	RPA in (m <sup>2</sup> )	CLEARANCE in (m)	VITALITY	NOTES	BS CATEGORY	MANAGEMENT	
932	Hawthorn; <i>Crataegus monogyna</i> Rosaceae	c a	m	5	2.5	2.5	2.5	2.5	400	60.3	1	av	Multi-stem, inclusions, in close proximity to the wall	C3	
933	Sorbus spp; Rosaceae	c a	em	5	1	2.5	1.5	2.5	360	48.9	1	av	Co-dom at base, near wall	C3	
934	Shrub spp	c a	em	3	1.5	1.5	1.5	1.5	350	46.2	0.5	av	Multi stem at base	C3	
935	Sycamore; <i>Acer Pseudoplatanus</i> Aceraceae	c a	y	5	1.5	1.5	1.5	1.5	350	46.2	1.5	poor	Multi stem, self seeded, in contact with wall	R	Remove
936	Cherry; <i>Prunus avium</i> Rosaceae	c a	em	7	1.5	1.5	1.5	1.5	260	25.5	0.5	poor	In tarmac, adjacent to wall	C3	Remove
937	Yew; <i>Taxus baccata</i> Taxaceae	c a	y	3.5	1.5	1.5	1.5	1.5	530	105.9	1	av	Adjacent to garden wall	C2	
938	Goat willow; <i>Salix caprea</i> Salicaceae	c a	em	4	1.5	2	1.5	1.5	510	98.1	1	av	Raising concrete	C2	
939	Lime; <i>Tilia cordata</i> Tiliaceae	t.p.o (T.10)	m	17	3.5	4	4	3	580	126.8	2	av	Raising concrete, horse chestnut scale, epicormic, deadwood	B2	
940	Lime; <i>Tilia cordata</i> Tiliaceae	t.p.o (T.9)	m	18	3	4	3	2.5	590	131.2	1.5	av	Deadwood, light attached to stem	B2	
941	Turkey Oak; <i>Quercus cerris</i> Fagaceae	t.p.o (T.8)	m	17	3.5	3	3	2.5	680	174.3	1.5	av	Deadwood, light attached to stem	B2	
942	Birch; <i>Betula pendula</i> Betulaceae	c a	y	6	1.5	1.5	1.5	2	210	16.6	2	av	No major defects	C3	

943	Sweet chestnut; <i>Castanea sativa</i> Fagaceae	t.p.o (T.7)	m	12	4	3	3	3	740	206.5	1.5	av	Nearing contact with wall, thin canopy	B1	Monitor annually
944	Prunus spp; Rosaceae	c a	m	6	3	3	3	3	120	5.4	0	av	Multi stem, leaning, poor form	C3	Remove
945	Lime; <i>Tilia cordata</i> Tiliaceae	c a	y	4	1	1.5	1.5	1.5	300	33.9	1.5	av	Established new planting, no major defects	C3	
946	Beech; <i>Fagus sylvatica</i> Fagaceae	c a	em	12	3	3	2.5	3.5	560	118.2	1	av	Multiple attachments at 2m, pollarded at 3.5m	C3	
947	Lime; <i>Tilia cordata</i> Tiliaceae	t.p.o (T.3)	m	16	3	3	3	3.5	700	184.7	1	av	Epicormic, multiple attachments at 5m, inclusions	B3	Reduce, clean
948	Sycamore; <i>Acer Pseudoplatanus</i> Aceraceae	t.p.o (T.2)	m	14	2	2.5	2	2.5	690	179.5	1.5	av	Crown dieback, lights attached to stem, epicormic	C3	Remove
949	Birch; <i>Betula pendula</i> Betulaceae	c a	y	7	1.5	2	1.5	1	210	16.6	2	av	No major defects	C3	
950	Sweet chestnut; <i>Castanea sativa</i> Fagaceae	c a	y	5	2	2	2	2	260	25.5	1.5	av	Co-dominant at base, included	C3	
951	Oak; <i>Quercus robur</i> Fagaceae	c a	y	4	1	1	1	1	210	16.6	1	av	In contact with raised planting walls	C3	Remove
952	Prunus spp; Rosaceae	c a	em	4	2	2	2	2	300	33.9	0	av	Multi stem at base, inclusions	C3	
953	Cabbage palm; <i>Cordyline australis</i>	c a	em	3--4	1	1	1	1	220	18.2	2	av	Multi stem, no major defects	C3	
954	Cabbage palm; <i>Cordyline australis</i>	c a	em	3--4	1	1	1	1	310	36.2	2	av	Multi stem, no major defects	C3	
955	Cabbage palm; <i>Cordyline australis</i>	c a	em	3--4	1	1	1	1	420	66.5	2	av	Multi stem, no major defects	C3	
956	Cabbage palm; <i>Cordyline australis</i>	c a	em	3--4	0.5	0.5	0.5	0.5	110	4.6	2	av	No major defects	C3	

957	Cabbage palm; <i>Cordyline australis</i>	c a	em	4	0.5	0.5	0.5	0.5	200	15.1	2	av	No major defects	C3	
958	Cabbage palm; <i>Cordyline australis</i>	c a	em	2	0.5	0.5	0.5	0.5	370	51.6	2	av	No major defects	C3	
959	Magnolia; <i>Magnolia grandiflora</i> Magnoliaceae	c a	m	3	2.5	0.5	2.5	1.5	250	23.6	0.5	av	Leaning, twin fork at 1m	C3	
959a	Ash; <i>Fraxinus excelsior</i> Oleaceae	c a	y	6	2	1	2.5	1	220	18.2	2	av	Co-dominant at base, sapling	C3	Remove
960	Ash; <i>Fraxinus excelsior</i> Oleaceae	c a	y	6	1.5	1.5	1.5	1.5	220	18.2	2	av	Multi stem at base, sapling, in contact with fencing	C3	Remove
961	Hawthorn; <i>Crataegus monogyna</i> Rosaceae	c a	m	6	1.5	1.5	1.5	1.5	380	54.4	1.5	av	Co-dominant, included	C3	
962	Hornbeam; <i>Carpinus betulus</i> Corylaceae	c a	em	11	6	6	6	6	450	76.4	2	av	Stem damage, some hollows, deadwood	C2	Monitor annually
963	Hornbeam; <i>Carpinus betulus</i> Corylaceae	c a	em	10	6	6	6	6	380	54.4	1	av	Shaded out, deadwood, lean and decay on stem, some minor hollows at base	C3	Monitor annually
964	Mulberry; <i>Morus alba</i> Moraceae	c a	m	6	2	2	2.5	2	400	60.3	0	av	Multi stem at base	C3	
964a	Ash; <i>Fraxinus excelsior</i> Oleaceae	t.p.o (T.11)	em	16	7.5	7.5	7.5	7.5	540	109.9	4	av	Deadwood, good wound occlusion	C2	Deadwood
965	Leyland Cypress; <i>X Cupressocyparis leylandii</i>	c a	y	6	1	1	1	1	330	41.1	1	av	Multi attach at 1m	C3	
g1	1x Ash ( <i>Fraxinus excelsior</i> Oleaceae) sapling, 3x Cypress spp; <i>Cupressaceae</i>	c a	y	3 ave.	0.5	0.5	0.5	0.5	150	8.5	0	av	Small enough to be easily transplanted, should not warrant constraining development	C3	
t1	Sycamore/Laurel	c a	em	6 ave	2	2	2	2	300	33.9	0.5	av	Restricted access; self seeded, close to house and wall	C3	Remove

t2	Lime; <i>Tilia cordata</i> Tiliaceae	c a	m	14	3.5	2	3	3	480	86.9	2.5	av	Epicormic, hollows, chestnut scale	B1	
t3	Lime; <i>Tilia cordata</i> Tiliaceae	c a	m	14	3.5	3.5	3	3	650	159.3	2.5	av	Epicormic, hollows, chesnut scale	B1	
t4	Lime; <i>Tilia cordata</i> Tiliaceae	c a	em	15	3.5	3	3.5	1.5	390	57.3	2.5	av	Co-dominant at 2.5m, ivy covered	B2	
t4a	Lime; <i>Tilia cordata</i> Tiliaceae	c a	m	18	3.5	3.5	3.5	2	870	285.4	1	av	Pollarded at base, excessive regrowth	B2	
t5	Horse chestnut; <i>Aesculus hippocastanum</i> Hippocastanaceae	c a	m	14	3	4	4	4	580	126.8	1.5	av	Girdling root, leaf moth	B2	
t5a	Horse chestnut; <i>Aesculus hippocastanum</i> Hippocastanaceae	c a	em	11	4	4	4	2	600	135.7	2	av	Pollard at base, multi stem	C3	
t5b	Sycamore; <i>Acer Pseudoplatanus</i> Aceraceae	c a	em	11	4	4	4	2	600	135.7	2	av	Pollard at base, multi stem	C3	
t6	Horse chestnut; <i>Aesculus hippocastanum</i> Hippocastanaceae	c a	lm	17	7	5	5	7	850	272.4	2	av	Epicormic, crown cavities, touching wall	B2	Prune to clear wall by 1m
t7	Lime; <i>Tilia cordata</i> Tiliaceae	c a	lm	18	4	4	3.3	3.5	900	305.4	2.5	av	Ivy throughout crown	B2	Sever ivy
t8	London plane; <i>Platanus x hispanica</i> Platanaceae	c a	lm	18	6	4.5	4.5	4.5	860	278.9	2.5	av	Pollarded at 3m, ivy, crown cavities	B2	Monitor annually
t9	Sycamore; <i>Acer Pseudoplatanus</i> Aceraceae	c a	y	12	4	3	3	2	450	76.4	2	av	Co-dominant at base, sap	C2	
t10	London plane; <i>Platanus x hispanica</i> Platanaceae	c a	lm	18	6	4.5	4.5	4.5	860	278.9	2.5	av	Pollarded at 3m, crown cavities	B2	Monitor annually
t11	London plane; <i>Platanus x hispanica</i> Platanaceae	c a	lm	18	6	4.5	4.5	4.5	870	285.4	2.5	av	Pollarded at 3m, crown cavities	B2	Monitor annually
t12	London plane; <i>Platanus x hispanica</i> Platanaceae	c a	lm	18	6	4.5	4.5	4.5	890	298.7	2.5	av	Pollarded at 3m, crown cavities	B2	Monitor annually

t13	London plane; <i>Platanus x hispanica</i> Platanaceae	c a	lm	18	6	4.5	4.5	4.5	860	278.9	2.5	av	Pollarded at 3m, crown cavities	B2	Monitor annually
t14	Wych elm; <i>Ulmus glabra</i> Ulmaceae	c a	y	11	3.5	3.3	3	2.5	360	48.9	1	av	2x multi stem, included, poor form	C2	
t15	London plane; <i>Platanus x hispanica</i> Platanaceae	c a	lm	18	6	4.5	4.5	4.5	850	272.4	2.5	av	Pollarded at 3m, crown cavities	B2	Monitor annually
t16	London plane; <i>Platanus x hispanica</i> Platanaceae	c a	lm	18	6	4.5	4.5	4.5	880	292.0	2.5	av	Pollarded at 3m, crown cavities	B2	Monitor annually

**TREE SURVEY TO THE BRITISH STANDARD 5837:2005 "TREES IN RELATION TO CONSTRUCTION - RECOMMENDATIONS"**

**FIELD KEY:**

TREE REF	-	Tree identification method - tag or plan number;
SPECIES	-	Genus, species and/or common name;
TPO/CA	-	Presence of Tree Preservation Orders, catchment within a Conservation Area - when instructed/informed;
AGE	-	Age classification (young; Y, early-mature; EM, mature; M, late-mature; LM, over-mature; OM);
HEIGHT in (m)	-	Approximate height of tree in metres;
CANOPY in (m)	N - S - E - W	Branch spread in metres reflecting the spread at the four principal compass points;
DBH in (mm)	-	Stem diameter in millimetres taken at 1.5 metres above ground level;
RPA in (m <sup>2</sup> )	-	Area directly calculated from the DBH measurement (single stem/multiple stem variant, as outlined within the Standard);
CLEARANCE in (m)	-	Height in metres of crown clearance above adjacent ground level;
VITALITY	-	Physiological condition (normal, poor, dead);
NOTES	-	Structural condition (notes);
BS CATEGORY	-	Standard retention category: R or, A1 to C3 - resulting from structural/physiological condition and remaining contribution - Standard retention category R: a condition which would result in the minimal contribution being lost within 10 years; - Standard retention category A: high quality and value, a condition able to make significant contribution of 40+ years; - Standard retention category B: moderate quality and value, a condition able to make significant contribution of 20-40 years; - Standard retention category C: low quality and value, a condition able to make significant contribution of 10-20 years; - Standard retention sub-category, mainly due to: 1- Arboricultural values, 2- Landscape values, 3- Cultural values
MANAGEMENT	-	Preliminary management recommendations (as appropriate);

Whereby '\*' denotes an estimate & all heights are estimates

Project #	070233
Employer reference	HEATHHO1
Site	Heath House, North End Way, London, NW3
Contract appointment	Arboricultural consultant
Employer	Heath House Property Partnership
Instruction from	Mr. N. Woodruff of APS Project Management Ltd.
Prepared by	Andrew Turnbull, Senior Consultant
Correspondence to	1, Well House Barns, Chester Road, Chester, CH40DH 212, St. Anns Hill, Wandsworth, SW182RU
In respect of	BS5837:2005 Trees in relation to construction
Planning authority	London Borough of Camden

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If this report has been released electronically the appendices listed above can be found in annexed zip folders as *.pdf* or *.dwg* files. If this report has been released in hard copy the above appendices will be bound into the back of this report. Plans may be annexed separately as A1 or A0 copies where a bound-in A3 copy is not appropriate.



## 1 FOREWORD

1.1 BS5837:2005 supersedes BS5837:1991 which has since been withdrawn. The scope of 'Trees in relation to construction' is to provide recommendations and guidance on how trees and other vegetation may be satisfactorily integrated into construction and development projects. The overall aim of this is to ensure the continued longevity and quality of amenity contribution that trees appropriate for retention and protection provide. This report and its appendices follow precisely the strategy for arboricultural appraisal and input intended to provide Councils with evidence that trees have been properly considered throughout the development process.

## 2 TERMS AND DEFINITIONS

*The following terms and definitions are reproduced under license with the kind permission of BSI Global.*

2.1 An "arboriculturist" is a person who has, through relevant education, training and experience, gained recognized qualifications and expertise in the field of trees in relation to construction.

2.2 A "tree survey" in the context of planning and development is taken to mean an assessment of the tree stock on site, as individuals or groups. **(This is undertaken independent of and prior to any knowledge of a scheme being produced.)** Management recommendations in the tree survey schedule reflect the structural and physiological condition of the trees only. It is essential that the trees are assessed objectively and without reference to site layout proposals.

2.3 A "root protection area", or RPA, is the area surrounding a tree that contains a calculated functional minimum of rooting volume that is necessary for the survival of the tree, shown in m<sup>2</sup>. The RPA should be calculated as a circle with a radius of 12x the stem diameter. The calculation for this is shown below. From this, the RPA can be augmented to change shape, but never reduce its area.

$$\text{RPA in m}^2 = (\text{stem diameter in m} \times 12)^2 \times 3.142$$

2.4 A "tree constraints plan", or TCP, is a scaled plan prepared by an arboriculturist showing the RPA and the accurate canopy spread of a tree, along with information to identify the tree by reference to a survey schedule. ACL produce this in AutoCAD.

2.5 An "arboricultural implications assessment", or AIA, is a study undertaken by an arboriculturist to identify, evaluate and possibly mitigate the extent of direct and indirect impacts on existing trees that may arise as a result of the implementation of any site layout/proposal.

2.6 An "arboricultural method statement", or AMS, is a methodology for the implementation of any aspect of development that has the potential to result in loss of or damage to a tree.

NOTE The AMS is likely to include details of an on-site tree protection monitoring regime

2.7 A "tree protection plan", or TPP, is a scale plan prepared by an arboriculturist showing the finalized layout proposals, tree retention and tree and landscape protection measures detailed within the arboricultural method statement which can be shown graphically.

2.8 Other plans and documents may be referred to and annexed where appropriate.

## 3 PARTICULARS OF INSTRUCTION

3.1 This report has been prepared to discharge the instruction of our Employer, APS Project Management Limited for the Heath House Property Partnership in respect of detailed planning permissions at Heath House (and grounds), North End Way, Hampstead, Camden, London, NW3.

## 4 CAVEAT

4.1 This advice and all appendices are subject to caveat as follows:

4.2 This report is nullified if any remedial works are undertaken on any area of the site, on or after the date of study/survey.

4.3 The report is only valid on the date on inspection and any deletion, editing or alteration will void it in its entirety.

4.4 The responsibility for any works undertaken on the basis of the recommendations of this report does not form part of this contract. No responsibility is assumed by the Author of this report or by ACL for any legal matters that may arise as a consequence.

4.5 Neither the Author, nor ACL will be required to attend court or give testimony as part of this contract. The report is not valid in adverse or unpredictable weather conditions or for any failure due to *Force Majeure*.

4.6 No liability is assumed by the Author or by ACL for any misuse, misinterpretation or misrepresentation of information contained herein.

4.7 This report has been compiled using only the information made available to the Author as at the above date of inspection.

4.8 The assessment, unless described as "detailed" was of a preliminary nature, conducted from ground only; no soil samples were taken for analysis, the tree was not climbed or inspected below ground level (inc. roots).

4.9 The Author did not have at the time of writing any information as to the integrity of the main structure, its annexes or the drainage system.

4.10 Water supply/drainage systems, if damaged, can allow roots to penetrate, however, if the system is sound, or after repair, roots have little capacity to access/damage underground services.

4.11 Any doubt as to the structural condition of the property would require the advice of a structural engineer.

4.12 ACL is not responsible for any works other than those invoiced for.

## 5 INFORMAL GLOSSARY

Contractor	ACL
Client	Heath House Property Partnership
Council	London Borough of Camden
Site	Heath House, North End Way, Hampstead, London, NW3
HH	Heath House
HP	Heath Park
Standard	BS5837:2005 Trees in relation to construction – Recommendations
Architect	Robert Adam Architects Ltd.
Landscape Architect	Clifton Nurseries Ltd.
Planning Consultant	Montagu Evans LLP
Engineer	N/A
TPO	Tree Preservation Order
CA	Conservation Area
TPOP	Tree Preservation Order Plan
Plan	N/A
Landscape Scheme	Landscape Layout; 7181.10.SK02
PBF	Protective Barrier Fencing (type 1, 2 or 3)
CEZ	Construction Exclusion Zone
RIR	Root Investigation Report
UDP	Unitary Development Plan

## 6 SITE HISTORY & APPLICATION BACKGROUND

6.1 The Site is presently disused though in the recent past it has been a family residence. The Site is the triangular area sandwiched between Spaniard's Road to the east, North End Way to the west and Hampstead Heath to the north.

6.2 The Site presently is host to Heath House "HH", a historic listed grade II\* building and another dwelling Heath Park "HP", which is a more recent construction and not of any conservation value worthy of mention .

6.3 The proposal, to which this report pertains to, involves the demolition and re construction of HP and the extension and restoration of HH. Additionally, HP and HH will have amenities such as swimming pools, car parking, storage introduced at basement levels.

## 7 CONSIDERATIONS

7.1 There are a number of issues to be addressed in this arboricultural implications assessment, and broadly these are as follows –

- a) The effect and extent of the proposed development within RPAs of retained trees.
- b) The potential conflicts of the proposed development with canopies of retained trees.
- c) The likelihood and reasonableness of any future pressures arising in respect of remedial works to retained trees, above and beyond that which would in the course of sound arboricultural management, have been scheduled in any event.

## 8 GENERAL AND POLICY INFORMATION

8.1 The Site falls within the catchment of the following arboricultural constraints as determined by the London Borough of Camden's Proposals Map and UDP policies. From the [Unitary Development Plan](#) (2006) written statement –

General design principles – B1 (k)

Alterations and extensions – B3

Ancient woodlands and trees – N8 (a – c)

8.2 The ancient woodlands and trees policy makes specific reference to the Standard – albeit the outdated version of 1991, as it was revised in 2005 – and the unwillingness of the Council to consider applications not in line with the thinking of the Standard. This can be found by referencing policy 'N8', para.4.46, pg.78 of the London Borough of Camden UDP (2006) written statement.

From the [Proposals Map](#) –

Metropolitan Open Land (MOL), #N1 & N2

Conservation Area (CA), B7

## 9 FACTUAL INFORMATION RELATING TO THE SITE & APPLICATION

9.1 In strict accordance with the Landscape Scheme, the Site is to undergo much level change. A significant area of the Site within the proposed location of HP is to be re graded to a level between -1.2m and -1.5m from the existing grade. This area is to be precisely confirmed by the Landscape Architect; Mark Anthony Walker of Clifton Nurseries Ltd.

9.2 There is a TPO in place on the Site which covers 12 trees. Only 7 of these trees had survived at the time of survey. It is accepted and is apparent that the discrepancy trees have not been present on Site for many years as no evidence exists to suggest otherwise.

9.3 An informal meeting with Alex Hutson for the London Borough of Camden confirmed the discrepancy in the TPO schedules and gave an informal opinion of the likely view of the Council in respect of the retention/management of certain trees on Site. This opinion can be summarized thus –

- a) The Council will wish to see that any development that takes place will enhance and improve the biodiversity contribution of the Site.
- b) The Council will wish to see that good quality trees, as assessed by the tree survey, are retained and protected throughout the development process.
- c) The Council will wish to see, in respect of b), the precise methodology detailing how the retention and protection of good quality trees will be achieved.
- d) The expediency of the TPO has not been the subject of review since its inception.
- e) Many of the trees on and adjacent to the Site will need their RPAs and canopies protecting where this is consistent with the thinking of the British Standard 5837:2005 (Standard).

9.4 The tree survey schedule (appended) highlights which of the remaining trees are the subject of a TPO. This is also illustrated graphically on the TPOP.

9.5 It is accepted that one exemption of a TPO/CA is detailed planning permissions and the Standard does not take account of TPOs or CAs. For these reasons, **no further distinction will be drawn between trees with and/or without statutory protection.**

## 10 EXECUTIVE SUMMARY

10.1 Some trees of moderate or low quality are to be removed to facilitate the proposals.

10.2 Some trees of moderate or low quality should be removed for reasons of sound arboricultural management.

10.3 A large number of trees and other vegetation are specified to be planted in the Landscape Scheme with the aim of creating a considerable improvement on the amenity contribution and biodiversity of the Site.

10.4 The proposed development involves some intensive earthworks, demolition and construction. For this reason adequate provisions must be implemented to protect retained trees to the fullest standard throughout the development process.

10.5 ACL can fully support this application as sound from the view of a competent and qualified arboriculturist.

10.6 A schedule of tree works can be found in the AIA/AMS sections of this report.

## 11 ARBORICULTURAL IMPLICATIONS ASSESSMENT (AIA)

11.1 Before continuing it is useful at this point for the reader to become familiar with the following documents found appended to this report –

Tree survey schedule  
Root investigation report  
Root investigation plan  
Tree constraints plan

11.2 Throughout this AIA, statements made in a technical capacity or relating to the opinion of the Contractor will be followed by justification.

Example –

*Tree #14 is to be removed. (Reason): it is structurally defective (see comments in tree survey schedule) and poses a significant hazard to the public.*

11.3 At various points in this AIA, the quality, attributes and condition of individual trees will be discussed. This is necessary to provide sufficient justification for either scheme revision or remedial tree works/removal. However, this often dilutes the bigger picture of the intentions for the site and/or makes for difficult reading. Therefore, at the end of each section of this AIA (e.g. RPA Incursion and Below Ground Constraints) we provide a tabulated summary of remedial works/removal/scheme revision. A complete summary of all remedial works/removal can also be found in the Specification for Tree Works section of the AMS.

## 11.4 RPA INCURSION & BELOW GROUND CONSTRAINTS

11.4.1 It is not anticipated for any materials to be transported or stored within the RPAs of retained trees. However, if this is necessary for any reason a specification that adequately protects the soil conditions from shearing, compaction, toxic contamination and direct root damage will be required. This is to form part of the specification for “Special RPA Incursion” in the AMS to follow. (Reason): to ensure good quality retained trees are protected to the fullest standard throughout the demolition and construction processes.

11.4.2 Where possible, PBF of an appropriate specification can be erected to exclude demolition/construction processes from CEZs. (Reason): to protect RPAs of good quality retained trees. A specification for PBF will form part of the AMS to follow.

11.4.3 There are many large, mature plane trees (and others) adjacent to the Site boundary wall. It was suggested by the Contractor that should the rooting volume of these trees encroach onto the Site it will severely constrain the development in that area, in particular, with regard to level changes.

11.4.4 To ascertain the nature of the rooting volume of these trees the Contractor undertook (using an air spade) an investigation by opening up trenches along the length of the Site boundaries in search of roots. The findings of this investigation are documented in our annexed Root Investigation Report (RIR)

and have informed the TCP where RPAs have been altered from the traditional circle for open grown trees.

11.4.5 Where the RPAs of trees do not enter the Site on the TCP, this has been a conclusion drawn directly from the air spade investigation (a trench along the entire Site boundary on the west and north sides in search of evidence to confirm that trees outside the Site have/have no roots encroaching within the boundary).

11.4.6 No such encroachment was found as a consequence of the dramatic level changes either side of the boundary wall, and the unusual depth of the wall's foundations. It is accepted therefore, that the wall has acted as a permanent root barrier and no RPA should encroach on to the Site from any tree outside of it.

11.4.7 There is no requirement to consider RPAs of trees adjacent to the Site. (Reason): the RIR has informed the TCP which shows clearly there are no constraints presented to the Site by the RPAs of those trees bounding North End Way, Hampstead Heath and Spaniards Road.

NOTE The following paragraphs (11.4.8 to 11.4.19) should be read in conjunction with the TCP.

11.4.8 A number of trees (#s 961, 962, 963 and 964a) have a direct RPA and footprint conflict with the proposed driveway and intensive earthworks for HP. They are not of sufficient quality to justify a scheme revision, in particular because their retention would render the scheme infeasible. It is accepted by the Contractor that these trees are to be removed. (Reason): these trees are of moderate quality and contribution to the Site. They confer no contribution to the locality as they are entirely obscured from the view of the roadside of North End Way by the London planes outside of the Site (tree #s T8 to T16).

11.4.9 The Landscape Scheme shows these trees (#s 961, 962, 963 and 964a) replaced as they will help in the informal separation of the gardens of HH and HP. It is the Contractor's view that the loss of these trees is (i) not a significant loss and (ii) can be effectively mitigated by high specification re planting. A final note is that tree no. #964a is the subject of statutory protection in the form of a tree preservation order (T11 in the first schedule). In summary then, it is accepted that the TPO in respect of this tree is of questionable expediency, chiefly because of the now diminished amenity contribution of the tree and the fact it cannot be viewed from outside the Site.

11.4.10 The Standard uses the most up to date and objective method of tree quality assessment where development is concerned. The tree (964a) has been appraised against this criteria and it has been classified as B2. In this instance, revising the scheme to retain the tree is not desirable as this would impinge on the entire scheme's financial feasibility – the entire scheme is unviable without the re grading earthworks taking place. The proposed earthworks will result in level changes that would effectively kill the tree.

11.4.11 Generally, the re grading on Site (earthworks and excavations to a maximum of -1.5m) over the area specified by the Landscape Architect in the Landscape Scheme will require retained trees which are within materially impacting distance of this works to have these RPAs offset by 20% which the Contractor deems appropriate in cases where trees are open grown. (Reason): the Standard accepts this view at para.5.2.4(a) as to do so will not curtail the quality or longevity of amenity contribution by any measurable degree. This offset will be reflected in the TPP and in the positions of PBF.



11.4.12 Soils within RPAs of retained trees and re planting areas should be ameliorated following the construction process. This can be achieved by radial air spade trenching and incorporating a well composted mulch into the soils following air spade de compaction. (Reason): while the incursion of the demolition and construction processes into circa 20% of the RPA (if represented by a circle) is viewed as sound practice by the Contractor (and the Standard), this amelioration is pertinent in order to fully restore the 'value' the soils held pre development.

11.4.13 This will ensure that the not inconsequential sum spent on landscaping and tree planting has the minimum possible risk of wastage through post development plant and tree mortality rates. Amelioration can be achieved by the implementation of rhizosphere amelioration zones which are in effect the same area as the trees' RPAs. The specification for rhizosphere amelioration treatment will be detailed in the AMS.

11.4.14 The RPA of tree #947 can and has been offset by 20% and will be protected by PBF. (Reason): this will allow adequate space for the demolition of HP's present building, the earthworks and re grading, the construction process and any scaffold and materials transport. This tree is considered to be worthy of constraining the scheme and significant landscape revisions have resulted in its retention.

11.4.15 The RPA of tree #943 will be affected to a minor degree by the construction of a small footpath running parallel to Spaniards Road along the eastern boundary. Special consideration has been given to this tree to ensure that the methods employed for the installation of a footpath are consistent with the thinking of the Standard. It has been concluded that the RPA incursion is acceptable. (Reason): This could require a cellular confinement system or a similar special engineering solution to be used, though the Standard accepts the Contractor's view that if the likely root disturbance is kept to a maximum of 20% of the tree's RPA there is no requirement for such measures.

11.4.16 The RPAs of tree #s 939 – 941 require consideration due to the close proximity of works as per the Landscape Scheme. The re grading works (as per the revised Landscape Scheme) have been significantly altered to take account of the RPA and canopy areas of the trees. This accommodates these sufficiently so as to represent only a minor incursion, certainly <20% and is coherent with the thinking of the Standard as acceptable. The walkway implementation creates no significant incursion as to require further augmentation of the scheme. (Reason): the alterations to the existing walkway represent no additional RPA incursion and the offsetting of the RPAs in an easterly direction enables the retention of the rooting volume with only minor incursion.

11.4.17 Tree #s 932 and 933 are to be removed. (Reason): attracting the Standard retention category C3 these tree do warrant constraining the site and the RPA incursion arising from the Landscape Scheme's plans to re surface the driveway at the front entrance to HH.

11.4.18 Tree # 935 is to be removed for reasons of sound arboricultural management. (Reason): attracting the Standard category 'R', replacement planting will correspond to a significant increase in amenity contribution.

11.4.19 It is accepted by the Contractor that the remaining trees on Site (not directly addressed thus far; 932-934, 936-938, 942, 944-946, G1, 948-961, 964 and 965) are to be removed. (Reason): attracting the Standard retention category of 'C', individually these trees do not warrant such significant consideration which would result in the alteration of the design. The minimal contributions made are only apparent to

the immediate users of the Site; no significant alteration to the amenity of the surroundings is recognized. Replacement planting will convey a much greater level of amenity contribution to both the Site and surroundings.

## SUMMARY OF THIS SECTION

TREE REFERENCE #	BS5837:2005 RETENTION CATEGORY	DESCRIPTION OF WORKS	REASON(S)
961	C3	Remove	Does not warrant scheme constraint
962	C2	Remove	Does not warrant scheme constraint
963	C3	Remove	Does not warrant scheme constraint
964a	C2	Remove	Does not warrant scheme constraint
947	B3	Offset RPA by 20%	To retain the tree while posing minimum constraint on scheme layout
943	B1	RPA incursion of <20%	Low intensity incursion affecting <20% of RPA for footpath alteration is acceptable
939-941	B2	RPA incursion of <20%	High intensity RPA incursion of <20% for re grading works and walkway alteration
932	C3	Remove	Does not warrant scheme constraint
933	C3	Remove	Does not warrant scheme constraint
935	R	Remove	For reasons of sound arboricultural management
934	C3	Remove	Does not warrant scheme constraint
936	C3	Remove	Does not warrant scheme constraint
937-938	C2	Remove	Does not warrant scheme constraint
942	C3	Remove	Does not warrant scheme constraint
944-946	C3	Remove	Does not warrant scheme constraint

G1	C3	Remove	Does not warrant scheme constraint
948-961	C3	Remove	Does not warrant scheme constraint
964	C3	Remove	Does not warrant scheme constraint
965	C3	Remove	Does not warrant scheme constraint

## 11.5 CANOPY ISSUES AND FOOTPRINT CONFLICTS

11.5.1 The removal of tree T1 will be required. (Reason): the close proximity to HH will ultimately result in direct conflict and will constrain the refurbishment works and Landscape Scheme. Rated 'C' (cascade chart for tree assessment – see Standard), the argument that this tree offers sufficient amenity to constrain the development is very weak. The amenity contribution is easily replicated through replacement planting.

11.5.2 Canopies of retained trees pose no problem. (Reason): the position of PBF will effectively negate any potential for the development process to damage, or be hindered by, the retained trees' canopies.

### SUMMARY OF THIS SECTION

TREE REFERENCE #	BS5837:2005 RETENTION CATEGORY	DESCRIPTION OF WORKS	REASON(S)
T1	C3	Remove	Does not warrant scheme constraint

## 11.6 SPECIAL CONSIDERATIONS (TPO TREES)

11.6.1 An objective assessment of the good quality trees subject to a TPO (939-941, 943 and 947) has taken account of the above and below ground constraints. This, in all cases, has resulted in significant alterations of the design providing adequate means for their retention.

### SUMMARY OF THIS SECTION

TREE REFERENCE #	BS5837:2005 RETENTION CATEGORY	DESCRIPTION OF WORKS	REASON(S)
All TPO trees retained on site	Various cat. B	Retain and protect	The amenity contribution warrants scheme constraint

## 11.7 FUTURE PRESSURES FOR TREE WORKS

11.7.1 Following the implementation of this the above tree works and removals, some minor remedial works will be required as per the recommendations of the tree survey schedule for the long term

benefit of the retained trees or general safety. No further pruning should be required, either as part of planned maintenance or from conflicts arising with between trees and buildings once this is complete.

11.7.2 It would probably be a pertinent use of the Council's authority to make the retained trees and specimen replacement planting the subject of a tree preservation order. (Reason): to ensure adequate protection is afforded to the valuable amenity assets present on the Site without being over prescriptive and without the need for unnecessary complexities in conditioning the consent.

11.7.3 Once a preservation order is in situ, there is no argument for consenting any request for tree works not pursuant under s.198(6) of the Town and Country Planning Act. The leaf litter and minor twig debris is not oppressively burdensome to cope with and does not render the buildings unsafe.

11.7.4 Para. 11.7.2 and 11.7.3 highlights the expediency of statutory protection of some retained trees, and affirms the Contractor's view that any request not in line with the Council's thinking or policies need not be granted for tree works which are not part of routine maintenance or sound arboricultural management.

## 12 CONCLUDING STATEMENT

12.1 Having appraised the proposals and balanced the Standard's thinking against the will of our Employer's proposals, the Contractor can fully support this application as sound from the view of a competent, independent arboriculturist. (Reason): all reasonable concerns have been satisfied to the fullest standard.

12.2 This application will require an AMS. (Reason): if accepted by the Council the AMS will bind the developer to the thinking of the Standard and the retention and protection of good quality trees.

12.3 The AMS will require a TPP. (Reason): if accepted by the Council the TPP will bind the developer to the thinking of the Standard ensuring the retention of the good quality trees.

## 13 ARBORICULTURAL METHOD STATEMENT

13.1 All tree works recommended are to be carried out prior to any Site personnel being present or commencing works or any materials being delivered. (Reason): to ensure the Site is prepared and ready for the demolition and construction processes to commence.

### SUMMARY OF TREE WORKS & REMOVALS

TREE REFERENCE NUMBER	REMEDIAL WORKS			
	REMOVE	DEADWOOD	CANOPY PRUNING	OTHER
939				CROWN CLEAN
940, 941				CROWN CLEAN AND REMOVE LIGHTS AFFIXED TO STEM
947			RESTORATIVE REDUCTION OF DIEBACK/PONDEROUS LATERALS	CROWN CLEAN
961, 962, 963, 964a, 935, 932, 933, 934, 936, 937, 938, 942, 944, 945, 946, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 964, 965	REMOVE			
G1	REMOVE			
943				ANNUAL INSPECTION

13.2 All tree works must be undertaken in accordance with detailed planning permissions or otherwise with the consent of the Council if trees are subject of statutory protection (subject to the normal statutory exemptions).

13.3 All tree works must be undertaken to BS3998:1989 and by a tree service contractor who is preferably an Arboricultural Association Approved Contractor with a minimum of £5,000,000 public and products liability insurance policies.

13.4 SPECIFICATION FOR PROTECTIVE BARRIER FENCING (PBF)

13.4.1 Protective barrier fencing (PBF) is to be installed immediately following the completion of the tree works as per TPP-01. (Reason): to ensure the retained trees are protected at the outset.

13.4.2 PBF is to remain in situ for the entire duration of the construction and demolition processes unless otherwise agreed in writing by the Council. It will only be removed for the purpose of soft landscaping, just prior to build completion. (Reason): to ensure protection is afforded at all times.

13.4.3 The PBF will be appropriate for the intensity and proximity of the development and so will come in one form relevant for this construction.

13.4.4 'PBF type I' will protect trees where earthworks and construction will be going on outside of RPAs. This will be illustrated as per the TPP and will comprise a scaffold construction of *"a vertical and horizontal framework, well braced to resist impact with the vertical tubes spaced at a maximum of 3m. Onto this, weld mesh panels should be securely fixed with wire or scaffold clamps. Weld mesh panels on rubber or concrete feet are not resistant to impact and should not be used."* On to this PBF I will be fixed signage denoting the words *"TREE PROTECTION ZONE – KEEP OUT"* at 5m intervals.

13.4.5 PBF II and III are of lesser integrity and will not be suitable for the purpose of this development.

## 13.5 SPECIAL RPA INCURSION

13.5.1 Any RPA incursion not specified above that is consented to by the Council will require it to be fully protected during this process. Before special RPA incursion, the Contractor should be consulted in respect of any special provision which may be necessary. This may include the installation of geo textiles, cellular confinement systems or simple scaffold boards atop a layer of wood chips.

## 13.6 SPECIFICATION FOR SOIL AMELIORATION

13.6.1 The RPAs of retained trees are to have amelioration works undertaken following construction completion. The creation of a rhizosphere amelioration zone is to include:

13.6.2 Aeration (via air spade) of an area, illustrated as per TPP-02, to a depth of approximately 50cm is to be undertaken using a radial technique. (Reason): this assists in creating preferential conditions for root development by improving drainage enabling vertical and lateral transport of necessary oxygen, water and nutrients.

13.6.3 The soils are to have an NPK fertilizer and decomposed bark mulch incorporated via the air spade amelioration. (Reason): the provision of essential nutrients creates preferential conditions for root development over and above those currently in situ.

13.6.4 A mulch of decomposed woodchip/bark mulch is to be applied to a maximum depth of 40mm atop the RPA. (Reason): to control moisture levels and weed growth.

13.6.5 This work can be undertaken by the Contractor but will form part of a separate contract.

## 13.7 SPECIFICATION FOR PROHIBITION

13.7.1 RPAs may not be breached for any reason without the prior advice of the Contractor and/or consent of the Council.

13.7.2 PBF may not be moved without the permission of the Council.

13.7.3 No mechanical digging or scraping is permitted within an RPA.

13.7.4 No fires are to be lit within 10m of a tree's canopy.

13.7.5 No machinery, plant or vehicles are to be washed down within 5m of an RPA.

13.7.6 No tree works not specified above (or leaning against or attaching of things to a tree) is permitted.

13.7.7 No chemicals or materials are to be transported or stored or used or mixed within an RPA.

## 14 COMMUNICATION

14.1 All Site personnel are to be provided with a copy of this AMS and the TPP.

14.2 It is the recommendation of the Contractor that this report is released to the lead consultant (architect) for them to distribute at their discretion. All Site personnel are to have access at all times to a copy of this advice and the TPP. The contractor can be contacted at any time for clarification of information contained herein, or further advice (which will form part of a separate contract) via the methods on pg.1.

## 15 SITE MONITORING

15.1 The Site is to be checked by the Contractor on at three points during the demolition and construction process to ensure the tree protective measures are being adhered to. This information will be reported to the Council for their assessment and records.

15.2 A Site check will need to be undertaken (i) as soon as the protective barrier fencing (PBF) is installed, (ii) at monthly intervals during the demolition and construction process, and (iii) immediately prior to the PBF being removed, to sign off the Site as having correctly adhered to this AMS. All reporting will be delivered to the Council electronically as a brief written statement.

This concludes our advice.

## APPENDIX i

### Root Investigation Report



Heath House Property Partnership  
Sixty Circular Road  
Douglas  
Isle of Man  
IM1 1SA

Dear Sirs,

REFERENCE: HEATH HOUSE - ROOT INVESTIGATION REPORT 17.7.2007

## Introduction

As highlighted during our initial site consultation, trees T4-T16 have potential to significantly constrain any proposed development due to encroachment of Root Protection Areas (RPAs) which are within and without the site.

Speculation as to the exact rooting strategies of the trees was considered erroneous due to several compounding factors:

- (a) the close proximity of the trees to the boundary wall
- (b) the gradient differentiation from within and outside of the site (either side of the boundary wall)
- (c) the unknown depths to which the walls foundations are present

On this basis it was recommended that the non invasive (root friendly) technique of air spade excavation was employed to investigate the encroachment expose the exact position and quantity of roots within the site.

## Methodology

In light of factors a–c above and the requirement to re grade the north and west site boundaries it was determined that these areas within the boundary wall were to be the focus of the excavation. The west boundary excavation was undertaken from the area in close proximity to T16 to the most northerly point. The north boundary was excavated in its entirety. The area of excavation is more clearly illustrated through the use of the appended root investigation plan (ACL6), with associated photographic representation (ACL3).

Excavation was undertaken to a width of approximately 0.5 metres from the wall to a minimum depth of 1 metre throughout.

## Findings

Throughout the entire excavation minimal rooting volume was exposed.

Tree Ref.	Roots Observed	Comments	Photo Reference
T4, T4a	None		
T5	1 root, maximum girth 40mm Ø	No fibrous systems were observed emanating from or linking to the larger uncovered root (photo 3395). Further investigation took place beneath the surrounding paved area which revealed cemented paving but no rooting volume was observed.	Photo 3393
T5a, T5b	None		
T6	Fibrous roots <15mm Ø	These were confirmed to have emanated from the ivy covering the wall.	Photo 3383 and 3385
T7	Fibrous roots <20mm Ø	These were confirmed to have emanated from the ivy covering the wall.	Photo 3376
T8	None		
T9	None		
T10	Fibrous roots <20mm Ø	These were confirmed to have emanated from the ivy covering the wall.	Photo 3367
T11	None		
T12	None		
T13	None		
T14	None		
T15	None		
T16	Single root maximum girth 25mm Ø	This root is considered to have emanated from T16. The root extends to within the site, beneath the paving, exploiting the more favorable conditions provided by the loose sand. This was of a tertiary nature and was no larger than 20mm Ø	Photo 3365

## Conclusions

Both the west and north walls have acted as very effective root barriers. Only in two instances was very minor rooting uncovered. It is proven conclusively therefore, that the foundations of the wall have had a major influence on the rooting development of the investigated trees (T4 – T16).

It is accepted then, that disturbance or excavation of soil volume present on site would not be detrimental to the health (physiological) or stability (structural condition) of any of the trees investigated.

Taking into account the normal 'on site' root development of the surrounding trees, adaptations of the required RPAs, to be outlined in the Tree Constraints Plans (TCP), can be accommodated. This will be reflected in the TCP, whereby the relevant RPAs have been altered, taking account of the wall as an effective root barrier.

Please feel free to contact me on 08450176950 (ext. 267) if you should have any further questions.

Yours sincerely

A handwritten signature in black ink, appearing to read 'A. Turnbull', is displayed on a light grey rectangular background.

A. Turnbull  
Senior Consultant

For and on behalf of **Arbtech Consulting Ltd. (ACL)**



Plate 1: (photo 3393) showing lifted paving relating to tree T5



Plate 2: (photo 3383) showing excavated trench in relation to T6



Plate 3: (photo 3385) showing lifted paving in relation to T6



Plate 4: (photo 3376) showing excavated trench in relation to T7



Plate 5: (photo 3367) showing excavated trench in relation to T10



Plate 6: (photo 3365) showing lifted paving in relation to T16



