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FILE No. TP/98/2126

JAN. FEB. MCH. APL. MAY. JUNE JUL. AUG. SEPT. OCT. NOV. DEC

PART 1 PART 9

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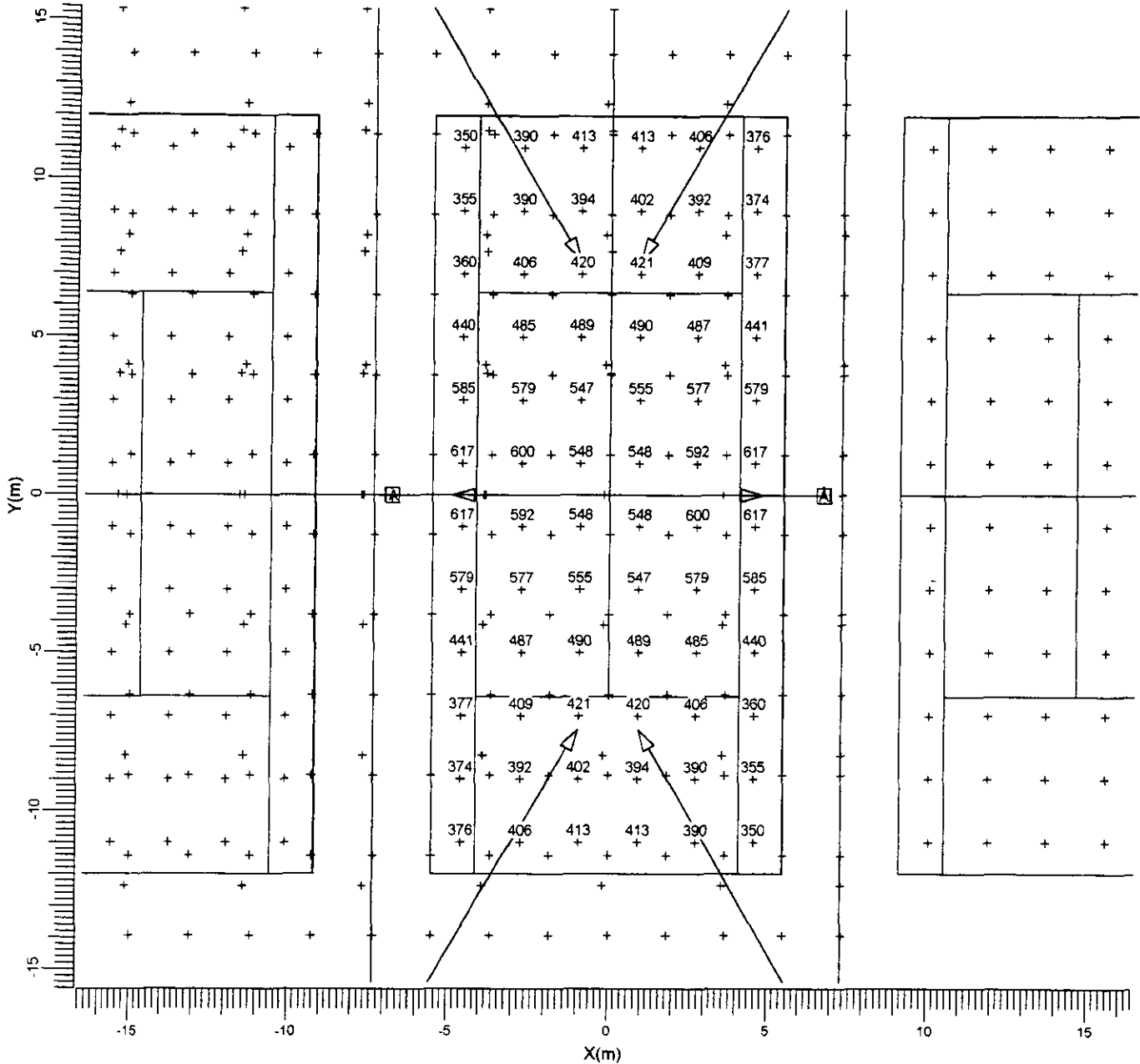
PART 8 PART 16

3. Calculation Results

3.1 Tennis2: Graphical Table

Court 2 only

Grid : Tennis2 at Z = 0.00 m
Calculation : Surface illuminance (lux)



A —> MNF 210/400 57.0 SKIRT

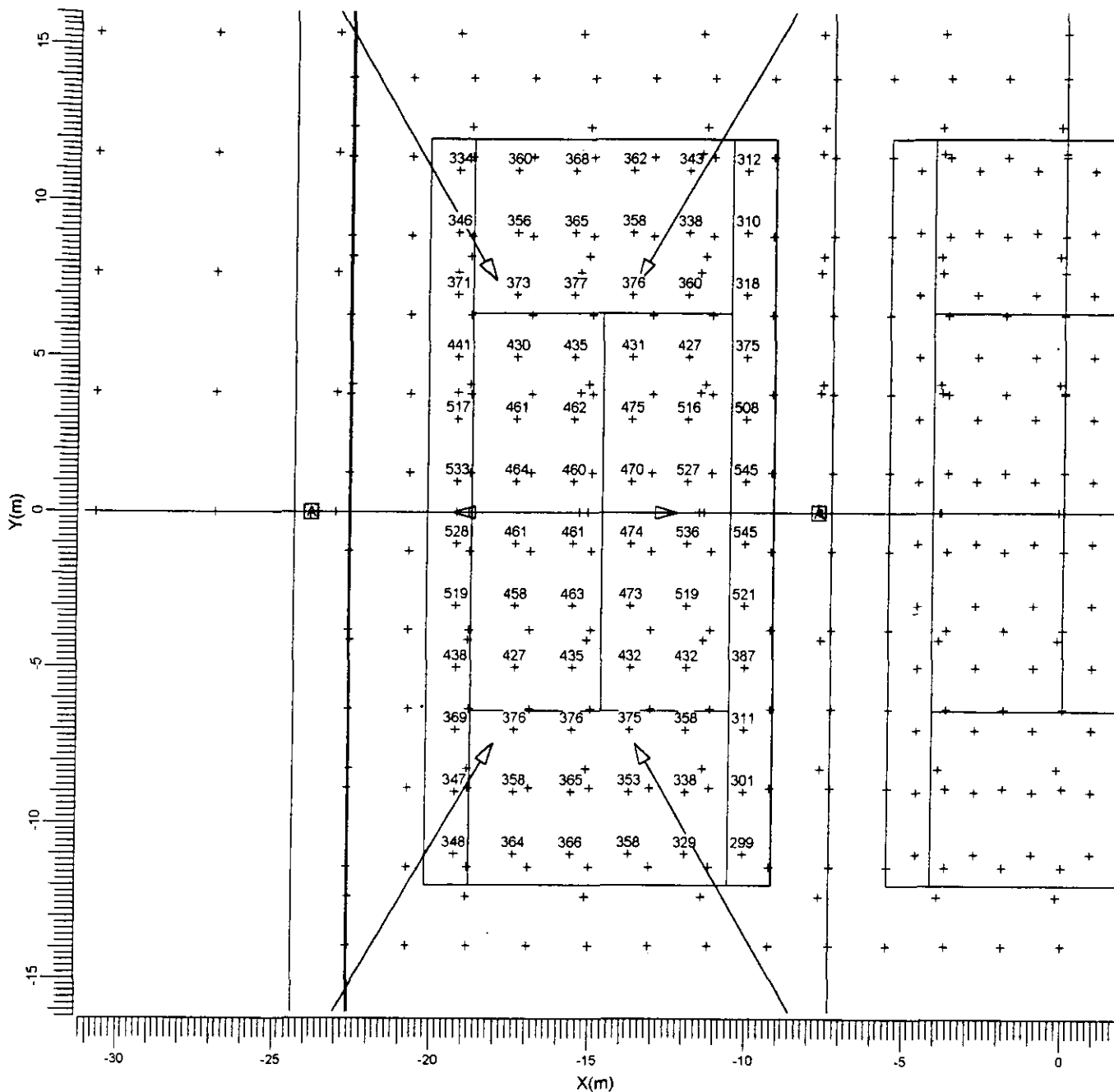
Average 467 lux	Minimum 350 lux	Maximum 617 lux	Min/Ave 0.75	Maintenance factors See summary	Scale 1:200
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3.2 Tennis1: Graphical Table

Court 1 only

Grid : Tennis1 at Z = 0.00 m
Calculation : Surface Illuminance (lux)



A MNF 210/400 57.0 SKIRT

Average
411 lux

Minimum
299 lux

Maximum
545 lux

Min/Ave
0.73

Maintenance factors
See summary

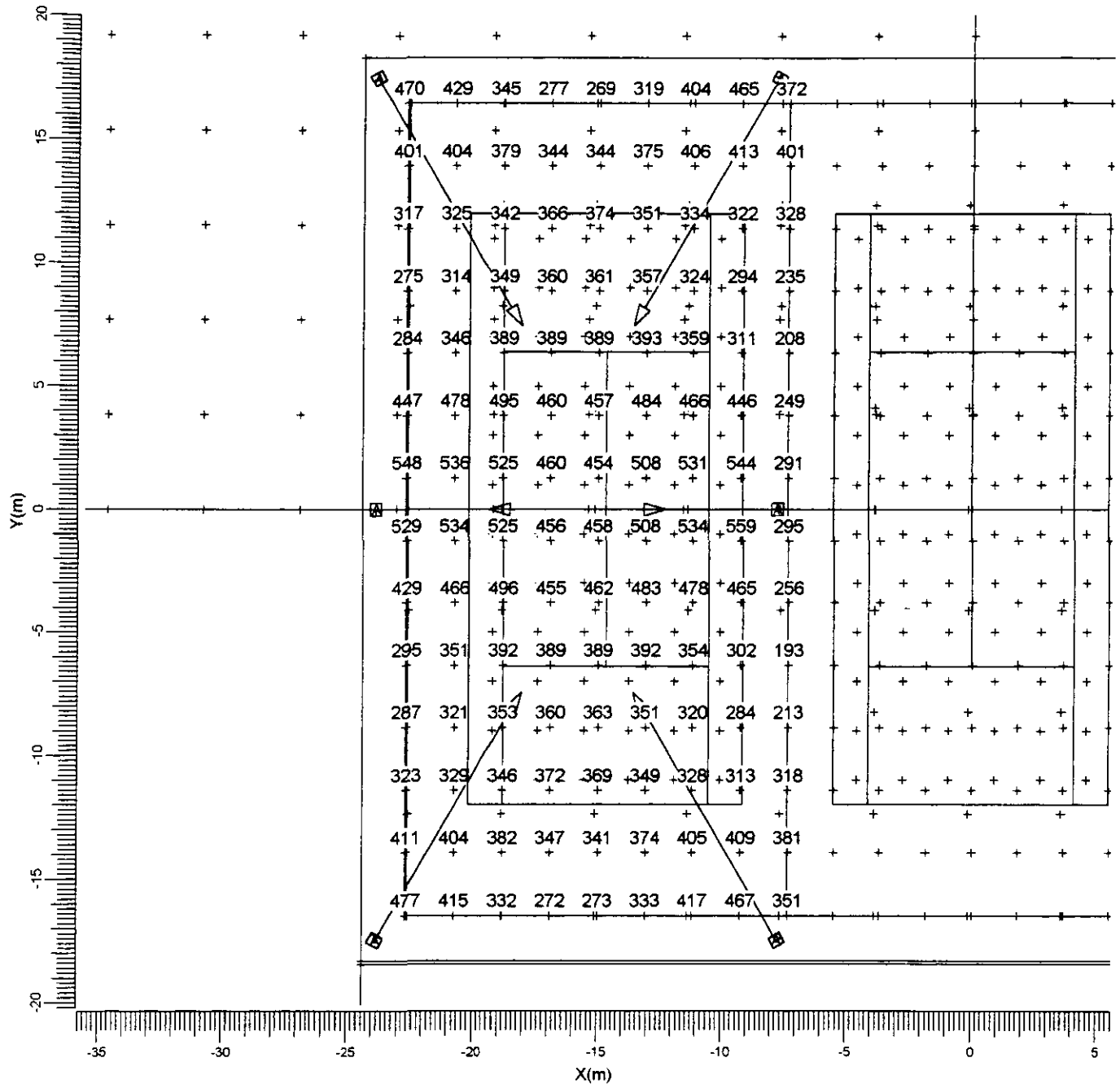
Scale
1:200

52

3.3 TPA Court1: Graphical Table

Court 1 only

Grid : TPA Court1 at Z = 0.00 m
Calculation : Surface Illuminance (lux)



A ———> MNF 210/400 57.0 SKIRT

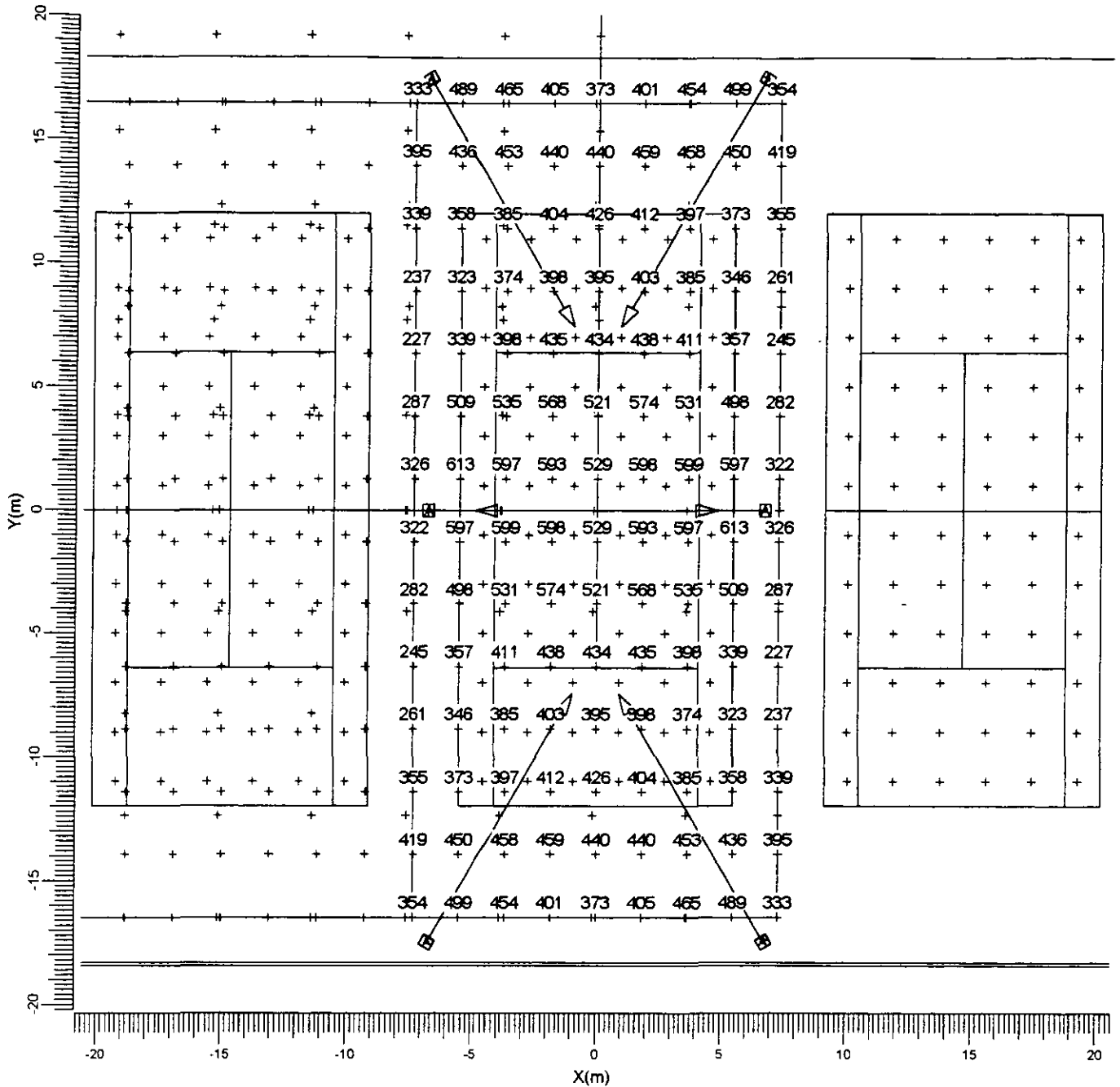
Average	Minimum	Maximum	Min/Ave	Maintenance factors	Scale
384 lux	193 lux	559 lux	0.50	See summary	1:250

53

3.4 TPA court2: Graphical Table

Court 2 only

Grid : TPA court2 at Z = 0.00 m
Calculation : Surface Illuminance (lux)



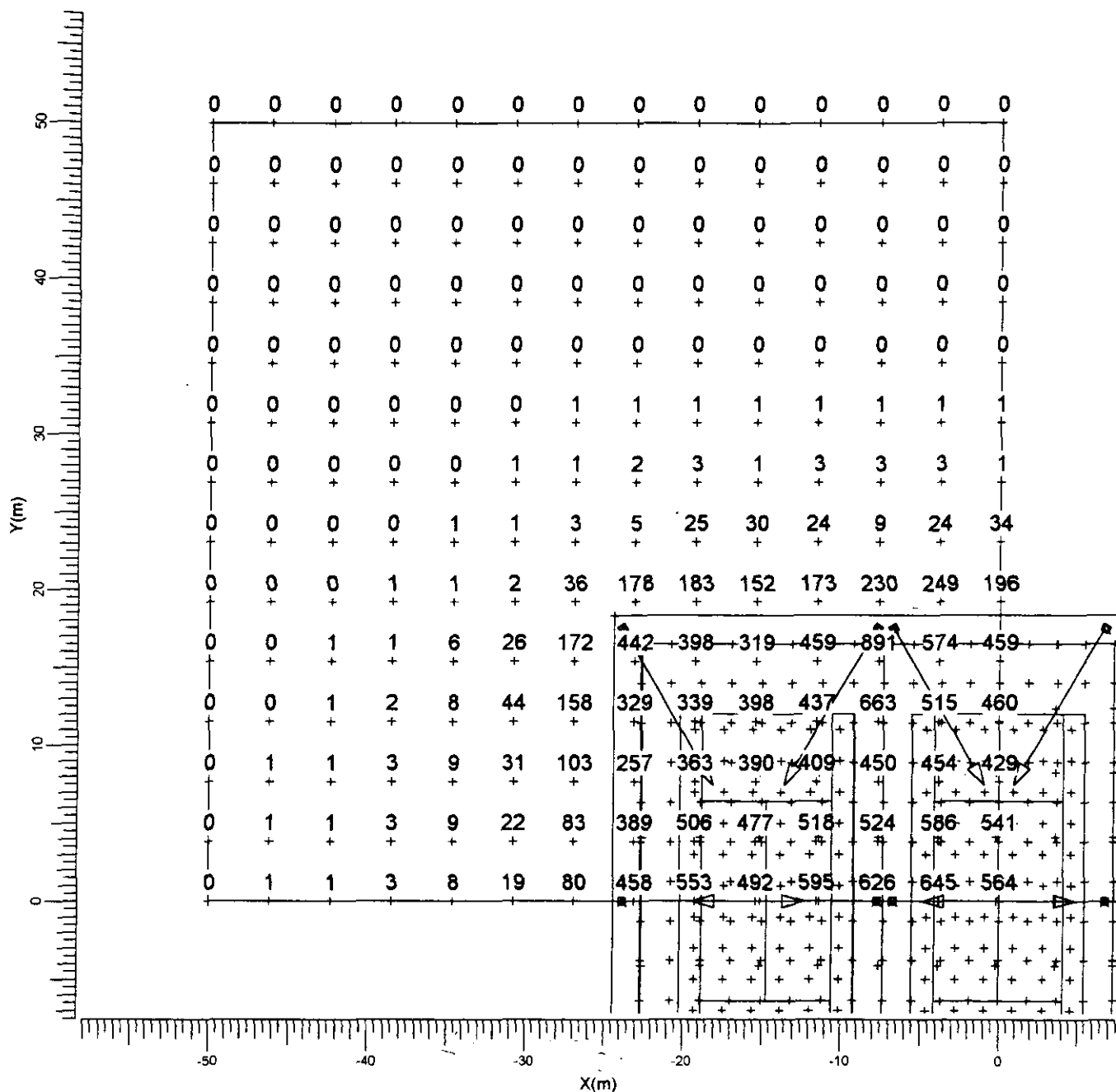
Average 423 lux	Minimum 227 lux	Maximum 613 lux	Min/Ave 0.54	Maintenance factors See summary	Scale 1:250
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3.5 OVERSPILL: Graphical Table

OVERSPILL

Grid : OVERSPILL at Z = 0.00 m
Calculation : Surface Illuminance (lux)



A —▷ MNF 210/400 57.0 SKIRT

Average
98 lux

Minimum
0 lux

Maximum
891 lux

Min/Ave
0.00

Maintenance factors
See summary

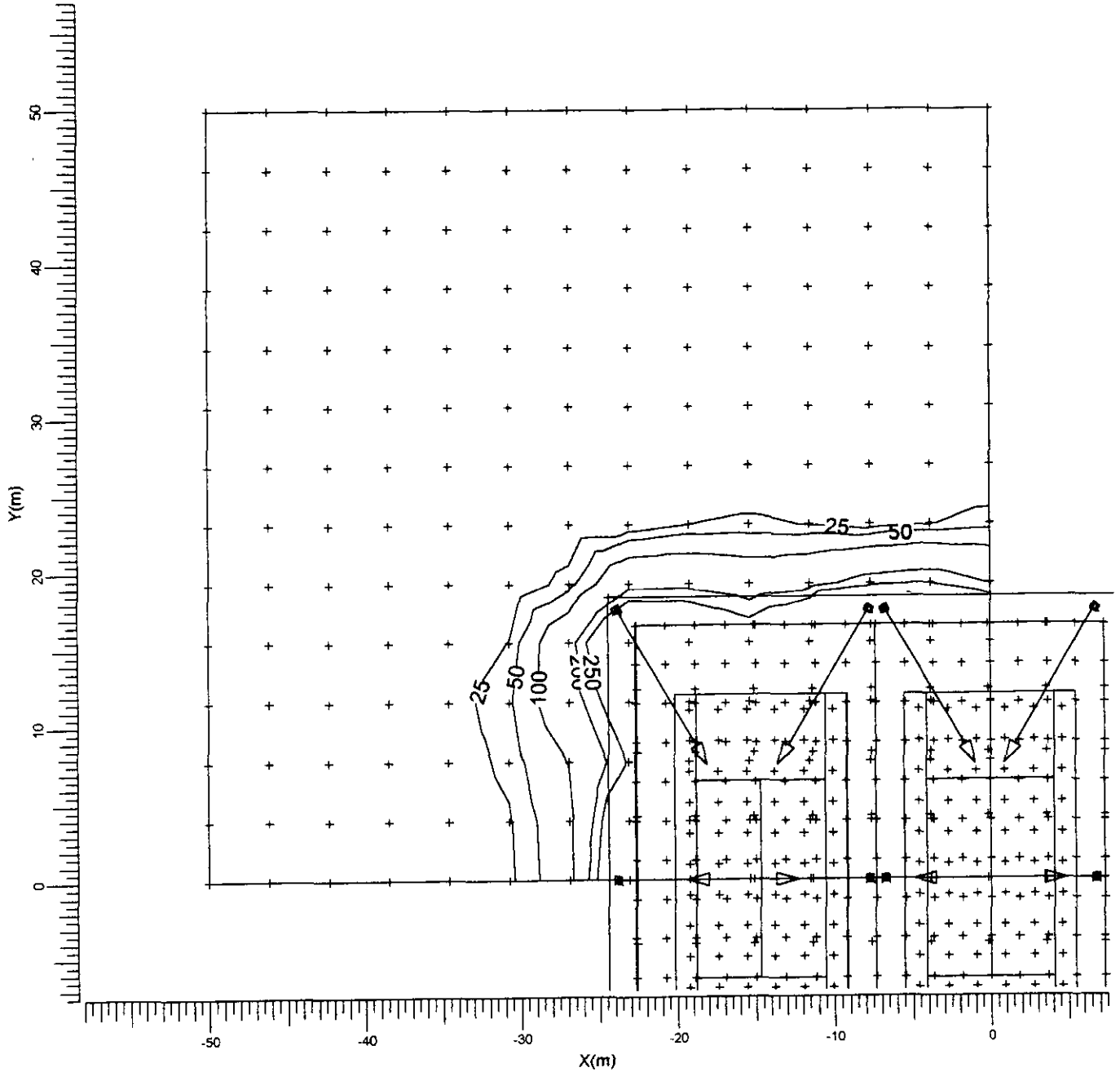
Scale
1:400

5

3.6 OVERSPILL: Iso Contour

OVERSPILL

Grid : OVERSPILL at Z = 0.00 m
Calculation : Surface Illuminance (lux)



A → MNF 210/400 57.0 SKIRT

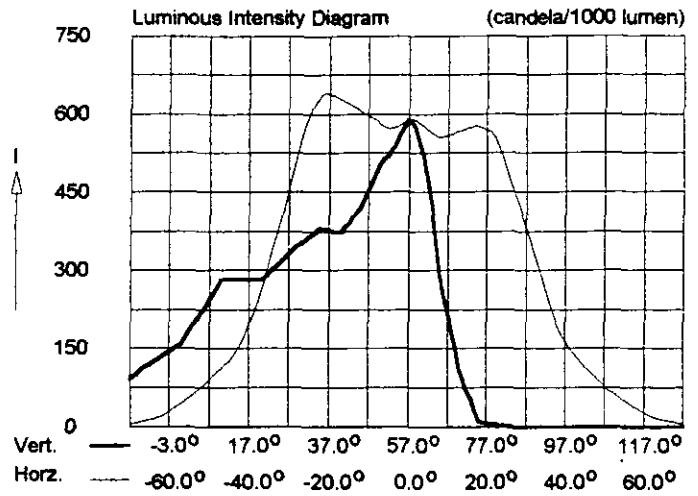
Average 98 lux	Minimum 0 lux	Maximum 891 lux	Min/Ave 0.00	Maintenance factors See summary	Scale 1:400
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4. Luminaire Details

4.1 Project Luminaires

Luminaire Name : MNF 210/400 57.0 SKIRT
 Lamp name : MHN-TD 1KW
 Number of lamps/luminaire : 1
 Lamp flux : 100000 lm
 Ballast : Standard
 Light output ratio's
 DLOR : 0.67
 ULOR : 0.00
 LOR : 0.67
 Luminaire wattage : 1060.0 W
 Luminaire maintenance factor : 0.80
 Lamp maintenance factor : 1.00
 Measurement code : LVW0656700



Note: This luminaire is a special version of the mentioned measurement code.

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5. Installation Data

5.1 Legends

Project Luminaires:

	Qty	Luminaire Type	Lamp Type	Flux (lm)
A	24	MNF 210/400 57.0 SKIRT	1 * MHN-TD 1kW	1 * 100000

Switching Modes:

Code	Switching Mode
1	Court 2 only
2	Court 1 only
3	TPA Court 1
4	TPA Court 2
5	OVERSPILL
6	TPA Court1&2

5.2 Luminaire Positioning and Orientation

Qty and Code	Position			Aiming Angles			Switching Modes					
	X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0	1	2	3	4	5	6
1 * A	-23.86	-54.50	6.70	60.00	60.00	0.00	-	-	-	-	+	+
1 * A	-23.86	-36.85	6.70	0.00	60.00	0.00	-	-	-	-	+	+
1 * A	-23.86	-19.00	6.70	300.00	60.00	0.00	-	-	-	-	+	+
1 * A	-23.86	-17.50	6.70	60.00	60.00	0.00	-	+	+	-	+	-
1 * A	-23.86	0.00	6.70	0.00	60.00	0.00	-	+	+	-	+	-
1 * A	-23.86	17.50	6.70	-60.00	60.00	0.00	-	+	+	-	+	-
1 * A	-7.75	-54.50	6.70	120.00	60.00	0.00	-	-	-	-	+	+
1 * A	-7.75	-36.85	6.70	180.00	60.00	0.00	-	-	-	-	+	+
1 * A	-7.75	-18.50	6.70	240.00	60.00	0.00	-	-	-	-	+	+
1 * A	-7.75	-17.50	6.70	120.00	60.00	0.00	-	+	+	-	+	-
1 * A	-7.75	0.00	6.70	180.00	60.00	0.00	-	+	+	-	+	-
1 * A	-7.75	17.50	6.70	-120.00	60.00	0.00	-	+	+	-	+	-
1 * A	-6.75	-54.50	6.70	60.00	60.00	0.00	-	-	-	-	+	+
1 * A	-6.75	-36.85	6.70	0.00	60.00	0.00	-	-	-	-	+	+
1 * A	-6.75	-18.50	6.70	300.00	60.00	0.00	-	-	-	-	+	+
1 * A	-6.75	-17.50	6.70	60.00	60.00	0.00	+	-	-	+	+	-
1 * A	-6.75	0.00	6.70	0.00	60.00	0.00	+	-	-	+	+	-
1 * A	-6.75	17.50	6.70	-60.00	60.00	0.00	+	-	-	+	+	-
1 * A	6.75	-54.50	6.70	120.00	60.00	0.00	-	-	-	-	+	+
1 * A	6.75	-36.85	6.70	180.00	60.00	0.00	-	-	-	-	+	+

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Qty and Code	Position			Aiming Angles			Switching Modes					
	X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0	1	2	3	4	5	6
1 * A	6.75	-18.50	6.70	240.00	60.00	0.00	-	-	-	-	+	+
1 * A	6.75	-17.50	6.70	120.00	60.00	0.00	+	-	-	+	+	-
1 * A	6.75	0.00	6.70	180.00	60.00	0.00	+	-	-	+	+	-
1 * A	6.75	17.50	6.70	240.00	60.00	0.00	+	-	-	+	+	-







BROADWAY MALYAN
LANDSCAPE

no/98/2126/A



LANDSCAPE DESIGN STATEMENT

AUBREY WALK

**The Redevelopment of Water Tower House
and the Former Campden Hill Reservoir Site**

**First Draft August
Revision A: 30 September 1998
Revision B: 23 October 1998
Revision C: 9 March 1999**

Job No: 10337

**Prepared by
Broadway Malyan Landscape**

AUBREY WALK - LANDSCAPE DESIGN STATEMENT

- 1.00 INTRODUCTION
- 2.00 EXISTING SITE
- 3.00 SITE CONTEXT
- 4.00 THE NEW DEVELOPMENT
- 5.00 ENTRANCES / ACCESS
- 6.00 KEY SPACES / GENERAL LANDSCAPE PROPOSALS
- 7.00 EXISTING TREES
- 8.00 LANDSCAPE PROPOSALS IN DETAIL
- 9.00 MAINTENANCE

APPENDICES:

- APPENDIX A: EACHUS HUCKSON EXISTING TREE SURVEY
- APPENDIX B: SUMMARY OF EXISTING TREES TO BE REMOVED
- APPENDIX C: SCHEDULE OF TREES AND SHRUBS
- APPENDIX D: SCHEDULE OF HARD EXTERNAL FINISHES
- APPENDIX E: METHOD STATEMENT FOR EXISTING TREE PROTECTION

1.00 INTRODUCTION

- 1.01 This landscape design statement has been prepared to support the detailed planning application and application for conservation area consent for a new residential development with re-arranged existing tennis facilities on the Campden Hill reservoir site.
- 1.02 Refer Broadway Malyan Landscape drawing no. 10337/100 and Eauchus Huckson Tree Survey.

2.00 EXISTING SITE

- 2.01 The existing site (1.6Ha) accommodates a covered reservoir with tennis courts on the cover level, an existing pump house building and the Thames Water offices known as "Water Tower House". Vehicle access into the site is gained from Aubrey Walk along its northern boundary with separate access into the rear of Water Tower House from Aubrey Walk and the access to Kensington Heights.
- 2.02 Pedestrian entry to the tennis courts is from an external stairway from Aubrey Walk alongside the tennis club building.
- 2.03 Existing landscape is confined to the boundaries and consists mostly of self seeded trees with a shrub understorey. Some of these trees are mature and significant (See 7.00).

3.00 SITE CONTEXT

- 3.01 The site is within the Royal Borough of Kensington in a generally residential area. Holland Park lies to the west, Aubrey House immediately to the west boundary, Holland Park School and West London College of Commerce are to the south. Residences along Campden Hill Road including Kensington Heights are located on the eastern boundary and residences along Aubrey Walk are along the northern boundary. The site is at present screened by existing trees and shrubs on its western and southern boundary, and by housing and trees on its northern boundary but with views in from the east from upper floors of the Kensington Heights block of flats and clear views from Campden Hill Road onto Water Tower House.
- 3.02 The character of the area is generally of a very high visual quality. Leafy roads and parkland and generally Georgian and Victorian housing of outstanding quality. Kensington Heights and Water Tower House are rather unsightly within this general urban fabric being 1960s period buildings of 5 and 6 floors.

4.00 THE NEW DEVELOPMENT

- 4.01 The new housing scheme takes advantage of the existing level arrangements using the floor of the existing reservoir as a new basement level. A new structure over the reservoir will act as a new level for the tennis courts set at the existing cover level. The general new street level for the housing is set close to the existing level of Aubrey Walk

approximately 3m below existing covered reservoir level. The basement area accommodates a lower level of tennis courts and car parking, leaving the upper street deck level as a pedestrianised arrangement with drop-off and delivery access only.

5.00 ENTRANCES/ACCESS

5.01 The main entrance into the scheme is off Aubrey Walk into a large paved courtyard space. From here vehicles can enter the basement level via a ramp backing onto the access to Kensington Heights or follow the narrow access route provided for deliveries and drop off.

5.02 Other pedestrian entries are provided off Aubrey Walk from a small public space and entry to the tennis courts up steps adjacent to the tennis court. Pedestrian entrances are also provided to the flats on Aubrey Walk and Campden Hill Road.

6.00 KEY SPACES/GENERAL LANDSCAPE PROPOSALS

The scheme divides into 4 main internal site areas:

- The entrance courtyard
- The main pedestrian axis off Aubrey Walk
- The tennis courts
- The turning area south of Aubrey Walk flats

6.01 Entrance courtyard

This is a predominantly hard space formed by the blocks of flats fronting onto Aubrey Walk and Campden Hill Road entered via a gated access through a wall fronting onto Aubrey Walk. It will be paved with high quality materials - granite setts with Yorkstone patterning and softened at its edges by shrub planting around the blocks of flats in raised planters.

6.02 Main pedestrian axis off Aubrey Walk

A substantial avenue of trees running at right angles to Aubrey Walk is proposed terminating at Aubrey Walk. This will give two pedestrian entries into the site and forms a "green" in the centre of the square of houses. This will be detailed to a high standard with granite setts and Yorkstone patterning around the central green providing a surface for pedestrians and occasional vehicles. The public view will be of a green space off Aubrey Walk with large street trees directing views into the "green". Railings will define the edge of the public space.

6.03 Tennis courts

Two decks of tennis courts are located on the western side of the development screened from outside views by existing trees and shrubs which are retained and enhanced by some further tree planting.

6.04 Turning area south of Aubrey Walk flats

This is a feature allowing set-down of residents by car or taxi and forming a focal point within the scheme. Again this will be detailed with granite setts in a circular pattern with

radial and concentric strips of Yorkstone. It will be planted on its perimeter with shrubs in raised planters.

7.00 EXISTING TREES

7.01 There are a number of existing mature and semi-mature trees on the boundary of the site. A tree survey has been carried out by Eachus Huckson and its findings are endorsed by this report. The survey is attached in Appendix A. The great majority of the trees are retained. Generally, there will be a great deal more new trees planted than lost but 6 trees will be removed as a direct result of the development: Existing trees, their importance in the street scene, their retention or loss in the new development and replacement proposals are dealt with below. Description is given going around the boundary in clockwise direction. A full method statement for protection of existing trees is given in Appendix E.

7.02 Trees along Aubrey Walk

The most significant trees in terms of the character of the area are the large trees along Aubrey Walk:

- Tree no. 11 a mature ash tree immediately east of the tennis club.
 - Tree nos. 1958, 1959, 1960, a group of 3 sycamores immediately west of the existing access into the site.
- These are all retained and details of their protection during construction are given in Appendix E of this statement.

7.03 Further west along Aubrey Walk are 3 young Turkish Hazel trees (tree nos: 8,9,10) in the footpath which are not currently of great value but which will mature to provide good street trees. These are retained.

7.04 The block of self-seeded vegetation to the north of the existing Pump House are not individually of great value but collectively form a block of greenery which softens the street frontage and screens views into the site. These are a group of self seeded young sycamores with one birch and an understorey of ivy and spindle. These will be lost in the new development. To compensate for this loss, there will be new shrub planting to the front of the proposed flat units along Aubrey Walk.

7.05 Trees along Campden Hill Road

There are 6 Ginkgo trees (tree nos. 2,3, 4, 5, 6) and one birch tree (tree no. 7) along the boundary with Campden Hill Road. The Ginkgos are unusual trees not frequently planted in urban areas and these semi-mature specimens will grow to form valuable street trees. The birch is semi-mature and has medium value in townscape terms. The birch is to be retained in situ, the Ginkgos are to be lifted prior to construction works and kept in a holding nursery to be replanted at completion of the development.

7.06 Trees along the access to Kensington Heights

There is a large specimen of *Ailanthus altissima* (tree no. 1) growing from the base of Water Tower House and leaning heavily away from the building. The Eachus Huckson survey recommends Engineer's advice is sought regarding the proximity of this tree to

the building. However, the building is to be demolished as part of the development proposals and the retention of the tree in such close proximity to the building is not possible.

This tree is removed in the new development. However new tree planting with an understorey of shrub planting will be provided as part of the development.

7.07 Trees along eastern boundary of site adjacent to Kensington Heights

Along the eastern boundary adjacent to Kensington Heights there is a strip of existing trees and shrubs on a shallow embankment. With the exception of one tree these are generally in good condition and screen views from the ground floor of Kensington Heights into the site. This strip of land is not in the ownership of the development site and these trees are all retained. (Tree nos 1914, 1915, 1916, 1917, 1918, 1919, 1921, 1922). It should be noted that one tree (no. 1920) is an elm which has died from Dutch Elm disease and should be removed.

7.08 Trees along the southern boundary

At the southern boundary the site borders Holland Park School and the West London College of Commerce. The trees along this embankment are large, self set sycamore in good condition and together with a shrub understorey represent a valuable screen between the College and the site.

At the western end of the site these trees are retained. (Tree nos 1937, 1938, 1939, 1940 and 1941). Tree no. 1936 will be removed to make way for practice tennis courts. Several trees are very close to the existing boundary wall and a structural engineer's advice should be sought to establish if they need to be removed (tree nos. 1938, 1939 and 1940). Along the eastern end of the southern boundary the new private gardens to the southern terrace of housing are located. Three of the six existing Sycamore trees can be retained (tree nos. 1930, 1931 and 1932) but new level arrangements will mean that three have to be removed (tree nos. 1933, 1934 and 1935).

New tree planting will be carried out along this boundary and some shrub planting as an initial provision. This will almost certainly be enhanced by planting by the new residents.

Some Japanese Knotweed is recorded at the western end of this boundary which will need to be eradicated by persistent herbicidal treatment over a 3 year period.

7.09 Trees on Western boundary

The trees along the western boundary between the tennis courts and Holland Park occur along the embankment with a dense understorey of shrubs comprising Hawthorn, Holly and laburnum. This belt of vegetation represents a valuable screen between Holland Park and the site although it is currently rather untidy. Tree species are quite varied including Sycamore, Ash, Oak, generally in good or fair condition.

This block of vegetation is retained. The vegetation will be protected as a block with protective fencing.

Some new tree planting will be provided to enhance this boundary.

7.10 A summary of existing trees to be removed is given at Appendix B.

8.00 LANDSCAPE PROPOSALS IN DETAIL

The landscape proposals have three main objectives:

- to provide a substantial green boundary to the development.
- to provide a green core to the housing
- to generally soften and furnish the development with new trees and shrubs.

8.01 Green boundary

In addition to the retention or replacement of existing trees to the boundary of the site described in 7.00 above, extensive tree and shrub planting is proposed along the Aubrey Walk and Camden Hill Road frontages. Typically, a low wall and railings will define the edge of the site at the rear of the public footpaths. Between this and the residential buildings a varied mix of shrub planting and occasional tree planting will be provided *commensurate with allowing views from and light into ground floor windows.*

Other boundary conditions along the southern, western and eastern edges of the development comprise existing vegetation retained and enhanced and new private gardens (see 9.04 below).

8.02 Green Core

The provision of an avenue of trees perpendicular to Aubrey Walk and public seating area, described in 6.02 above.

8.03 General softening of development

All of the incidental spaces between hard circulation routes and walls or buildings will be planted to maximise the presence of greenery in the development.

8.04 Private & communal gardens

All of the green space around the new residences will be grassed with some tree and shrub planting. New residents will probably wish to personalise their private gardens. Communal garden areas and areas not in any specific ownership will be the subject of a maintenance and management regime.

8.05 Irrigation & soil depths

As some of the planted and grass areas will be on topsoil contained by planter walls on the concrete deck over the basement car park, it will be necessary to provide an irrigation system to ensure adequate water and nutrients are available to be plants. Where this occurs as private garden space, irrigation systems will be individually provided to each residence. A general irrigation system will serve other green areas over the basement. Considerable care has been taken to provide adequate topsoil depths for trees, shrubs and grass and where possible trees will be planted into vertical concrete shafts rising through the basement, filled with suitable topsoil and fill materials.

Generally, planted areas over basements will be 1500mm deep although the shrub areas immediately around the terraced houses will be shallower (between 500 to 1000mm depth).

8.06 Tree and shrub species

A full planting schedule is given in Appendix C. The intention is to use a single tree species for the main avenue of trees and semi-public space off Aubrey Walk to provide a unified, formal appearance to this space. Elsewhere a diverse mix of tree and shrub species is proposed to give variety and individuality to garden and incidental spaces. The use of ground cover species is included to reduce maintenance. Climbers are proposed to soften new boundary walls.

9.00 MAINTENANCE

All green space outside of private ownership will be the subject of a maintenance contract which will ensure that grass areas are regularly mown, shrubs are pruned when necessary and tree health is monitored. Replacement planting will be carried out to deal with any plant failures.

10.00 SUMMARY

The proposed development will be built within a site with significant boundary tree cover which will be largely retained. Whilst six trees will be removed as a direct remit of the development, only five are good specimens and their loss will be more than compensated for by new planting and the new tree planted "green".

New tree and shrub planting will enhance and replace where necessary the green boundary to the development and soften and furnish the spaces between new buildings.

APPENDIX A:

Eachus Huckson Existing Tree Survey

Eachus Huckson

**CAMPDEN HILL RESERVOIR
TREE SURVEY - to be read in conjunction with drawing no 9742. 01**

NO	SPECIES	ESTIMATED HEIGHT (m)	GIRTH (cm)	SPREAD (m)	CONDITION	COMMENTS
1 STREET TREES						
1a South and East of Water Tower House, Campden Hill Road						
1	Ailanthus altissima (Tree of Heaven)	12	90	5	Growing from base of Water Tower House.	Large tree growing immediately at the base of Water Tower House and leaning heavily away from the building. Seek Engineers advice regarding proximity to building.
2	Ginkgo biloba (Maidenhair Tree)	8-10	35	1.5	Good	Young tree in paving.
3	Ginkgo biloba (Maidenhair Tree)	8	35	1.5	Good	Young tree in paving.
4	Ginkgo biloba (Maidenhair Tree)	8-10	35	1.5	Good	Young tree in paving.
5	Ginkgo biloba (Maidenhair Tree)	8-10	45	1.5	Good	Young tree in paving.

NO	SPECIES	ESTIMATED HEIGHT (m)	GIRTH (cm)	SPREAD (m)	CONDITION	COMMENTS
6	Ginkgo biloba (Maidenhair Tree)	6-8	30	1.5	Good	Young tree in paving.
7	Betula pendula (Birch)	10-12	90	3	Good	Tree set in paving.
1b Street trees to Aubrey Walk						
8	Corylus colurna (Turkish hazel)	7-8	40	1.5	Good	Street tree in edge of pavement to Aubrey Walk.
9	Corylus colurna (Turkish hazel)	7-8	48	2	Good	Street tree in edge of pavement to Aubrey Walk.
10	Corylus colurna (Turkish hazel)	7-8	45	2	Good	Street tree in edge of pavement to Aubrey Walk.
11	Fraxinus excelsior (ash)	12-15	260	6.5	Good	Large tree with 2 stems from 2m above ground level. Tree stands on elevated ground behind 1m high retaining wall. Large limbed tree which has had branches lopped in the past leading to regrowth from stems. Requires removal of any dead or dying branches together with inspection for any cavities in fork of tree (too high to be visible from ground).

NO	SPECIES	ESTIMATED HEIGHT (m)	GIRTH (cm)	SPREAD (m)	CONDITION	COMMENTS
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2 SITE TREES

Individual trees marked on site with tree tag (numbers given below)

2a Trees on a steep embankment between the existing Pump House and Aubrey Walk

1913	Betula pendula (silver birch)	8-10	max 80cm (3 stems)	2.5	Poor	Old multi stemmed tree covered in ivy and in poor condition at eastern end of Group 1.
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Gr.1	Acer pseudoplatanus (sycamore)	7+	Varies	Varies	Good	A linear group of young self set sycamore - single and multi-stemmed from ground level. The trees stand on a steep bank above a retaining wall, backed by the remains of an overgrown privet hedge.
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2b Trees to eastern side of site

The trees in this area form two distinct groups

- i) young self set sycamore at the top of an existing retaining wall, forming the boundary with Kensington Heights. The embankment has grass cover with areas of shrubs comprising Pyracantha, Viburnum tinus, Forsythia and Cotoneaster.
- ii) larger mature trees on an existing embankment at the southern corner of the site

1914	Acer pseudoplatanus (sycamore)	7.5	50	2	Good	Young self set tree very near boundary retaining wall.
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1915	Acer pseudoplatanus (sycamore)	6	40	2	Good	Young self set tree very near boundary retaining wall.
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NO	SPECIES	ESTIMATED HEIGHT (m)	GIRTH (cm)	SPREAD (m)	CONDITION	COMMENTS
1916	Acer pseudoplatanus (sycamore)	6	25	2	Good	Young tree splits at 0.5m above ground level.
1917	Acer pseudoplatanus (sycamore)	9	40	2	Good	2 young trees adjacent to retaining wall.
1918	Acer pseudoplatanus (sycamore)	9	40 (3 stems)	3	Good	Multi stem - 3 stems from base.
1919	Acer pseudoplatanus (sycamore)	6	35	1.5	Good	Young tree at top of embankment.
1920	Ulmus procera (elm)	12	50	7	Dead	Tree affected by Dutch Elm Disease. Remove.
1921	Acer pseudoplatanus (sycamore)	8	70	4	Good	Branches out from 2m above ground level.
1922	Tilia europaea (lime)	12	180-200	3	Good	Suckering from base with some dead/damaged wood in canopy. Chestnut paling fence wrapped around bole of tree. Remove suckers and fence from around base. Remove dead/dying wood from the canopy having regard for the shape of the tree.

NO	SPECIES	ESTIMATED HEIGHT (m)	GIRTH (cm)	SPREAD (m)	CONDITION	COMMENTS
1923	Ulmus procera (elm)	10	55	3	Affected by Dutch Elm Disease.	Although the tree shows apparently live bud at higher level, affected by Dutch Elm Disease. Remove.
1924	Ulmus procera (elm)	9	50	2.5	Affected by Dutch Elm Disease.	Near to boundary wall, and affected by Dutch Elm Disease. Remove.
1925	Acer pseudoplatanus (sycamore)	12	multi-stem	3	Good	Stand of trees multi stemmed from ground level standing at base of existing bank and covering area of 1.5-2m. One major trunk of elm leaning over boundary wall should be removed.
1926	Ulmus procera (elm)	6-8	60 (2 stems)	2	Dead	Twin stemmed tree close to boundary wall. Remove.
1927	Ulmus procera (elm)	6-8	25	2	Dead	Tree has died from Dutch Elm Disease. Remove.
1928	Acer pseudoplatanus (sycamore)	9-10	90	3.5	Good	Tree is sound but stands close to 1.5m high boundary brick wall which has a crack in it. The tree needs to be removed to avoid further damage to the wall or the boundary wall reconstructed in this area to accommodate the tree.

NO	SPECIES	ESTIMATED HEIGHT (m)	GIRTH (cm)	SPREAD (m)	CONDITION	COMMENTS
1929	Acer pseudoplatanus (sycamore)	8	80	2.5	Good	Single main stem which splits at 1.5m above ground level. Standing at top of the existing bank. The tree is leaning slightly towards the southern corner of the site. Remove any dead or damaged branches.
1930	Acer pseudoplatanus (sycamore)	7-8	55	3	Good	Single stem tree near internal fence.

2c Trees along the southern side of the site

These comprise mostly self set sycamore, some reasonably large, set on a shrub and grass covered embankment. At the western end the embankment has areas of dense shrub cover comprising mostly Forsythia and Viburnum tinus. Small areas of Japanese Knotweed evident at western end of site.

1931	Acer pseudoplatanus (sycamore)	8	45	2.5	Good	Coppiced sycamore with 6 major stems from base. Remove dead or damaged shoots.
1932	Acer pseudoplatanus (sycamore)	12-13	75 (2 stems)	4.5	Good	Multi stemmed tree (2 stems from ground level)
1933	Acer pseudoplatanus (sycamore)	12	55	2	Poor	Very young tree splits at 2m above ground level, suppressed by trees on adjacent site. Remove.

NO	SPECIES	ESTIMATED HEIGHT (m)	GIRTH (cm)	SPREAD (m)	CONDITION	COMMENTS
1934	Acer pseudoplatanus (sycamore)	12	40-50 (3 stems)	3	Good	Multi stemmed tree (3 stems from base) growing on top of a low concrete retaining wall. May need to be removed to avoid future problems of stability.
1935	Acer pseudoplatanus (sycamore)	12	65	2.5	Good	Single stem tree with suckers from base which should be removed.
1936	Acer pseudoplatanus (sycamore)	8-9	40 (2 stems)	2	Good	Multi stemmed tree (2 stems) growing at base of existing brick wall on perimeter of site. May need to be removed to avoid future damage to boundary wall.
1937	Acer pseudoplatanus (sycamore)	5-6	25	2	Fair	Multi stemmed self set tree growing at edge of existing steps.
1938	Acer pseudoplatanus (sycamore)	8-9	4	2-3	Good	Multi stemmed tree (4 stems from ground level) growing at the edge of concrete retaining wall. May need to be removed to avoid future problems of stability.
1939	Acer pseudoplatanus (sycamore)	6-7	multi-stem	2-3	Good	Multi stemmed tree (8-10 stems all small girth) growing at the edge of a concrete retaining wall. May need to be removed to avoid future problems of stability.

NO	SPECIES	ESTIMATED HEIGHT (m)	GIRTH (cm)	SPREAD (m)	CONDITION	COMMENTS
1943	Fraxinus excelsior (ash)	12	170	3.5	Poor	Badly pruned with dead wood in a badly congested canopy. Near boundary wall. Remove. Young oak adjacent.
1944	Quercus robur (oak)	10-12	140	2	Good	Very good condition clear stemmed oak leaning slightly towards tennis courts. Minor removal of dead or damaged shoots.
1945	Crataegus monogyna (thorn)	5-6	110	2-3	Poor	Decay is evident to the main tree stem and the canopy is showing signs of stress with dead branches and bark loss. Remove.
1946	Crataegus monogyna (thorn)	5-6	80 (2 stems)	4	Fair	2 stems from ground level with reasonable shaped crown. Some congestion and dead wood. Requires selective pruning to remove dead wood and tidying crown.
1947	Laburnum anagyroides (laburnum)	6	50 (multi-stem)	2	Good	Multi-stemmed from ground level.
1948	Acer pseudoplatanus (sycamore)	9-10	60	2	Good	Young sycamore.

NO	SPECIES	ESTIMATED HEIGHT (m)	GIRTH (cm)	SPREAD (m)	CONDITION	COMMENTS
1949	Acer pseudoplatanus (sycamore)	9	60	2	Poor	Covered with ivy throughout its height. Remove to encourage growth of adjacent trees.
1950	Crataegus monogyna (thorn)	6-7	120	2.5	Poor	Covered with ivy throughout its height. Remove ivy and tidy crown.
1951	Acer pseudoplatanus (sycamore)	9	100	3.5	Good	Single straight stem tree with ivy to 2m above ground level.
1952	Ilex aquifolium (holly)	6	35	1.5	Good	Young tree leaning slightly towards the west. No works required but removal of surrounding dense shrub growth would aid establishment.
1953	Acer pseudoplatanus (sycamore)	10-12	150	5	Good	Single stem tree with ivy to half its height. Remove ivy before it becomes established.
1954	Ilex aquifolium (holly)	5-6	50	1	Good	Nice young holly requires the removal of surrounding privet.
1955	Crataegus monogyna (thorn)	6-7	110	2	Fair	Ivy covered to half its height. Branches out at 2m above ground level and leaning slightly towards the west. Selective pruning to relieve congestion in canopy and removal of ivy.

NO	SPECIES	ESTIMATED HEIGHT (m)	GIRTH (cm)	SPREAD (m)	CONDITION	COMMENTS
1949	Acer pseudoplatanus (sycamore)	9	60	2	Poor	Covered with ivy throughout its height. Remove to encourage growth of adjacent trees.
1950	Crataegus monogyna (thorn)	6-7	120	2.5	Poor	Covered with ivy throughout its height. Remove ivy and tidy crown.
1951	Acer pseudoplatanus (sycamore)	9	100	3.5	Good	Single straight stem tree with ivy to 2m above ground level.
1952	Ilex aquifolium (holly)	6	35	1.5	Good	Young tree leaning slightly towards the west. No works required but removal of surrounding dense shrub growth would aid establishment.
1953	Acer pseudoplatanus (sycamore)	10-12	150	5	Good	Single stem tree with ivy to half its height. Remove ivy before it becomes established.
1954	Ilex aquifolium (holly)	5-6	50	1	Good	Nice young holly requires the removal of surrounding privet.
1955	Crataegus monogyna (thorn)	6-7	110	2	Fair	Ivy covered to half its height. Branches out at 2m above ground level and leaning slightly towards the west. Selective pruning to relieve congestion in canopy and removal of ivy.

NO	SPECIES	ESTIMATED HEIGHT (m)	GIRTH (cm)	SPREAD (m)	CONDITION	COMMENTS
1956	Crataegus monogyna (thorn)	5-6	110	2-3	Fair	Single main stem with some badly pruned side branches. Extensively ivy covered. Prune out dead wood and remove ivy.
1957	Acer pseudoplatanus (sycamore)	5	3 stems	1.5	Good	Young self set tree with 3 stems from previously coppiced base, lying close to existing boundary wall. Remove to avoid any future structural problems with wall.
1958	Acer pseudoplatanus (sycamore)	12-15	190	7	Good	Lying at the bottom of sloping ground. Previously pollarded to give 8+ shoots at 4.5m above ground level (mostly on Aubrey Walk side of tree). Some branches crossing and rubbing, with some dead wood. Ivy covering to break point. Selective pruning required to remove dead wood and congestion from canopy and to help balance crown.

NO	SPECIES	ESTIMATED HEIGHT (m)	GIRTH (cm)	SPREAD (m)	CONDITION	COMMENTS
1959	Acer pseudoplatanus (sycamore)	12-15	155	6.5	Good	2 main branches at 3.0m above ground level with some crossing branches within canopy and some dead wood. Not such a full shape as adjacent trees. Ivy cover to just above break point. Minor works to remove dead wood or congestion in canopy and removal of ivy from main trunk.
1960	Acer pseudoplatanus (sycamore)	13-14	190	6.5	Good	Previously pollarded to give 5 main branches at 3.5-4m above ground level. Some branches crossing and rubbing, with some dead wood. Selective pruning to remove dead wood and congestion within canopy having regard for the shape of the tree.

SUMMARY OF EXISTING TREES TO BE REMOVED

APPENDIX B

Tree No.	Species	Condition	Reason for Removal
1	Ailanthus Altissima	Growing from base of water Tower House	Structural/ New Development
1913	Betula Pendula (Silver Birch)	Poor	New Development
Group 1	Acer pseudoplatanus/ (Sycamore)	Good	New Deveopment
1933	Acer Pseudoplatanus/ (Sycamore)	Poor	Condition/New Development
1934	Acer Pseudoplatanus/ (Sycamore)	Good	New Development/ Future stability of existing wall.
1935	Acer Pseudoplatanus/ (Sycamore)	Good	New Development
1936	Acer Pseudoplatanus/ (Sycamore)	Good	New Development/ Future stability of existing wall.

Other trees that require attention:

- 1923 Elm - Dutch Elm disease
- 1924 Elm - Dutch Elm disease
- 1925 Elm - leaning badly
- 1926 Elm - Dead
- 1927 Elm - Dead
- 1928 Sycamore - Possible structural damage to existing boundary wall
- 1938 Sycamore - Possible structural damage to existing boundary wall
- 1939 Sycamore - Possible structural damage to existing boundary wall
- 1940 Sycamore - Possible structural damage to existing boundary wall
- 1943 Ash - Poor condition
- 1945 Hawthorn - Poor condition
- 1949 Sycamore - Poor condition
- 1957 Sycamore - Possible structural damage to existing boundary wall

AUBREY WALK - PLANTING SCHEDULE

APPENDIX C

SPECIES	PLANTING SIZE	PLANTING CENTRES
TREES: Main avenue, semi-public space		
Tilia euchlora	30-35cm girth	7-8m
Boundaries/gardens	12-14cm girth	5m
Fraxinus excelsior	"	"
Fraxinus angustifolia 'Raywood'	"	"
Sorbus aria	"	"
Sorbus aucuparia	"	"
Sorbus commixta	"	"
Tilia euchlora	"	"
Tilia cordata	"	"
Prunus sargentii	"	"
Robinia pseudoaccacia	"	"
Robinia frisia	"	"
Acer campestre	"	"
Betula pendula	"	"
Betula pubescens	"	"
Betula utilis jacquemontii 'Himalayan Birch'	"	"
SHRUBS		
Berberis thunbergii	450-600mm high	600mm
Berberis atropurpurea	"	"
Berberis atropurpurea 'Nana'	"	"
Choisya ternata	"	"
Cornus alba 'Aurea'	"	"
Cornus alba 'Elegantissima'	"	"
Corylus avellana	"	"
Eleagnus ebbengii	"	"
Eleagnus pungens 'Maculata'	"	"
Escallonia 'Apple Blossom'	"	"
Hebe albicans	300-450mm high	500mm
Hebe 'Autumn Glory'	"	"
Hebe 'Marjorie'	"	"

Hebe rakaiensis	"	"
Hebe 'White Gem'	300-450mm high	500mm
Lavandula stoechas 'French Lavendar'	"	"
Mahonia media 'Charity'	450-600mm high	600mm
Prunus lusitanica	"	"
Olearia macrodonta 'Major'	"	"
Potentilla 'Elizabeth'	"	"
Potentilla Davurica 'Abbotswood'	"	"
Potentilla 'Primrose Beauty'	"	"
Photinia fraseri 'Red Robin'	"	"
Rosa pimpinellifolia	"	"
Skimmia japonica	"	"
Spiraea arguta 'Bridal Wreath'	"	"
Viburnum plicatum 'Lanarth'	"	"
Viburnum plicatum davidii	"	"
GROUND COVER		
Ceanothus thyrsiflorus repens	300mm dia. spread	450mm
Cotoneaster dammeria	"	"
Cotoneaster 'Gnom'	"	"
Lonicera pileata	"	"
Euonymus fortunei	"	"
Vinca minor	"	"
Hedera helix 'Hibernica'	"	"
Prunus laurocerasus 'Otto Luyken'	"	"
Pachysandra terminalis	"	"
CLIMBERS		
Hedera helix 'Goldheart'	500mm high	500mm
Parthenocissus tricuspidata	"	"
Parthenocissus henryana	"	"
Hydrangea petiolaris	"	"
HEDGING		
Prunus lusitanica	Mature 1.5m high clipped	500mm

SCHEDULE OF HARD EXTERNAL FINISHES

APPENDIX D

Access Roads: Granite setts with Yorkstone banding.

Footpaths: Yorkstone flags with Yorkstone banding.

EXISTING TREE PROTECTION METHOD STATEMENT

APPENDIX E

TABLE OF CONTENTS

1.0 Introduction

2.0 Specification

3.0 Financial Penalties

4.0 Protection of Specific Trees

- West Boundary
- South Boundary
- East Boundary with Kensington Heights
- East Boundary – Campden Hill Road, Tree nos: 2, 3, 4, 5, 6 and 7
- North Boundary – Aubrey Walk, Tree nos: 8, 9, 10, 11, 1958, 1959, 1960.

5.0 Guidance on Operations within Protected Areas

References

Drawings:	10337.100	Landscape Proposals
	10337.101	Existing Tree Protection

1.0 INTRODUCTION

- 1.01 This detailed Method Statement follows the submission of the Landscape Design Statement for Aubrey Walk as part of a planning application for development on the Camden Hill Reservoir site, and describes the protection to existing trees to be retained during demolition and construction works for the new development.
- 1.02 BS 5837 is taken as a *minimum standard* for guidance on operations on site.
- 1.03 Trees are to be protected by fencing as shown on drawing No 10337.101 prior to any other works on site. Fencing will be marine ply hoardings 2.4m high mounted on scaffold poles as specified in Section 2. It is to be maintained in good condition throughout the contract period.
- 1.04 Areas within protective fencing are "no go" areas. No entry into these areas will be available without authorisation and any works to be carried out in these areas must be in full accordance with this specification. Generally, no disturbance to the ground below tree canopies is acceptable. The fence position makes allowance for necessary works near trees.
- 1.05 No damage to tree branches or trunks above the protected areas or where branches extend beyond the protected areas will be allowed. The contractor must be fully aware of the extent of trees and vegetation to be retained and make allowance for no damage at all to any part of them.
- 1.06 Trees damaged or lost as a result of the works will be subject to financial penalty as set out in Section 3.

2.0 PROTECTION OF EXISTING TREES TO BE RETAINED SPECIFICATION

- 2.01 **Protective Fencing** to existing vegetation to be erected to positions as shown on drawings before all other site work commences.

- Maintain in good condition throughout the whole contract period.
- Repair any accidental damage to fencing immediately it happens.
- Take down and remove off site at end of the contract.

- 2.02 **Protective Fencing to Existing Trees and Vegetation to be Retained:**

To be 2.4m high marine ply hoardings supplied on vertical and horizontal scaffolding, all in accordance with BS 5837 Section 8, Clause 2.3:

- Marine ply – 20mm exterior grade, 2.4m high.
 - Scaffolding – vertical and horizontal framework, well braced to resist impacts. Verticals at 1.8m min centres driven 900mm into ground. Ref. Fig 5 from BS5837. (If preferred, a timber framework may be used for trees numbered 8, 9 and 10.)
- 2.03 **No-Go Areas:** Areas within protective fencing are "no-go" areas. Do not enter or encroach on these for any reason.

2.04 **Works Under Tree Canopies and in Fenced-off Areas:** Follow the following guidelines, unless specifically instructed otherwise:

- All work within the canopy spread of existing vegetation to be carried out with care by hand including excavation. Do not use machinery.
- Do not store materials within the canopy spread of existing vegetation.
- Do not vary ground level within the canopy spread of existing vegetation.
- Do not cut or remove existing vegetation without written permission of Landscape Architect.
- Do not sever roots over 25mm diameter.
- Do not strip or remove topsoil unless instructed by Landscape Architect.
- Do not light fires or burn any materials within 20m of any protected area.
- Do not store oil, bitumen or cement or mix concrete within 10m of any protected area.

2.05 **Works on Site** will be monitored and inspected on a regular basis.

3.0 FINANCIAL PENALTIES

3.01 If retained vegetation is cut or damaged on site without permission, including roots, the contractor shall be liable for payment of damages as set out below:

£5,000 for trees numbered 11, 1958, 1959, 1960
£3,000 for any other tree on site.

4.0 PROTECTION OF SPECIFIC TREES

4.01 West Boundary

Trees and vegetation along the western boundary are to be fenced off with protective fencing as shown on drawing No 10337.101.

All restrictions of the specification will apply.

4.02 South Boundary

Trees and vegetation along the western end of the south boundary will be fenced off with protective fencing as shown on drawing No 10337.101.

The existing boundary wall will be retained.

All restrictions of the specification will apply.

4.03 East Boundary with Kensington Heights

Trees and vegetation along this boundary will be fenced off with protective fencing as shown on drawing No 10337.101.

All restrictions of the specification will apply. This area is outside the site ownership.

4.04 East Boundary with Campden Hill Road

The 5 Ginkgo trees numbers 2, 3, 4, 5 and 6, will be lifted by specialist contractors prior to demolition and held at a nursery until completion of the building works. They will then be replanted along this boundary in positions sympathetic to the new building elevation.

Tree No 7 (Silver Birch) will be protected in situ with protective fencing as shown on drawing No 10337.101. The existing walls around the tree will be carefully removed to just below the new ground level. In this way disturbance to the existing roots system will be minimised. Existing paving under the tree will be carefully removed and topsoil replaced. The new boundary railings will be installed carefully to the back of the existing footpath using the existing brick wall foundation.

Apart from the works above, all restrictions of the specification will apply.

4.05 North Boundary – Aubrey Walk

Trees numbered 8, 9 10 (Turkish Hazel):

These three young street trees are to be fenced off with protective fencing as shown on drawing No 10337.101, subject to receiving approval from the relevant authorities. As the fenced off area will be quite small (approx 1m² per tree), hoardings may be mounted on a timber frame if preferred by the contractor, rather than on a scaffold frame.

All restrictions of the specification will apply.

Trees numbered 1958, 1959 and 1960 (Sycamores)

This group of Sycamores is located on an embankment 2m in height and their root systems are confined by existing retaining walls on their northern, western and eastern sides and the reservoir wall on their southern side.

It is proposed to retain the existing walls except on the western side and the existing landform will be unaltered beneath the tree canopies. The existing electricity substation to the east is to be demolished and a new retaining wall will be built between the boundary and the new block of flats. Some improvements to the existing walls will be made: refacing with brick, lowering to ground level, and installing railings.

On the western side of the trees, the existing retaining wall will be demolished and a new wall with railings will be built on an alignment slightly within one of the tree canopies. This work will be done with care without the use of mechanical excavators.

The portion of the existing reservoir wall south of the trees is to be retained.

These works will minimise disturbance of the trees' root systems. Protective fencing will be installed as shown on drawing No 10337.101. All restrictions of the specification will apply.

Tree No 11 (Ash)

This tree is located on an embankment 2m in height. The existing retaining wall and steps to the north and west of the tree will be retained with some improvement to copings and the installation of railings.

No other works are proposed around this tree, some regrading of the soil is necessary to the west of the tree canopy.

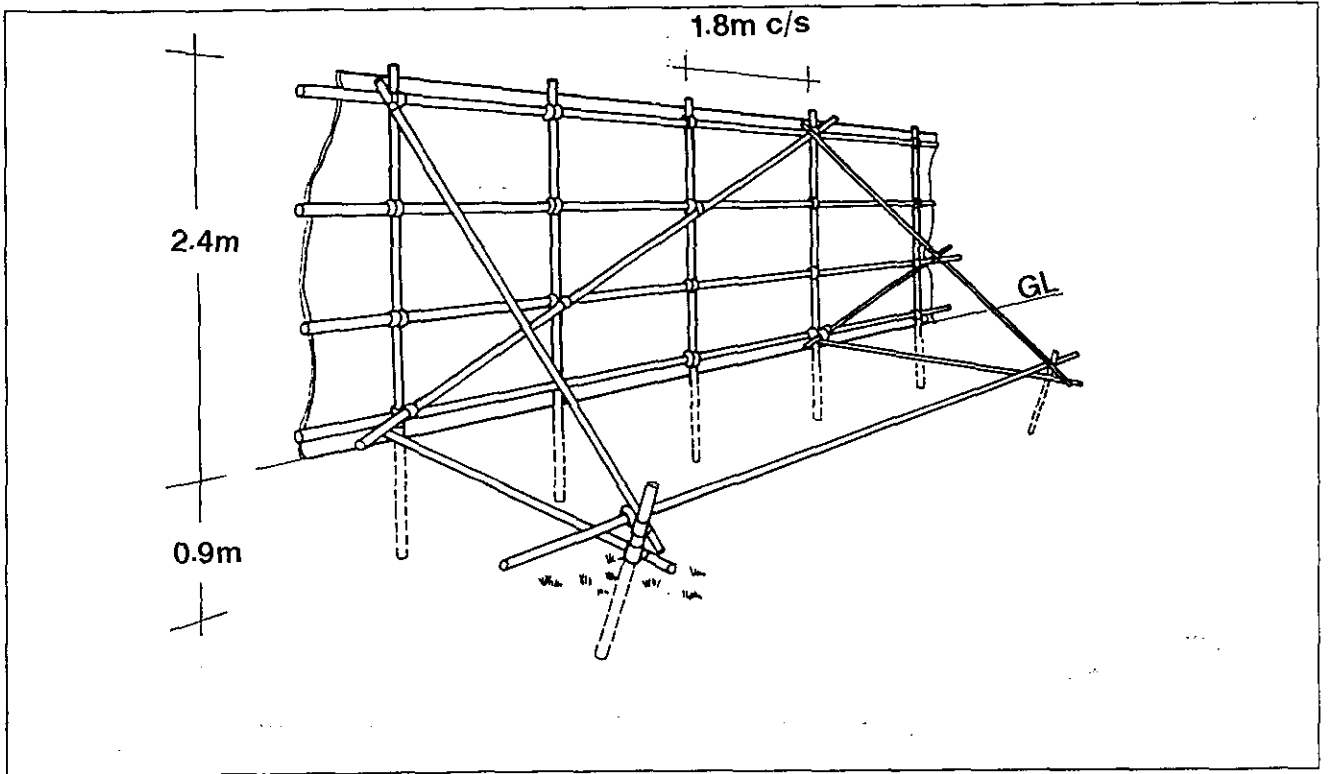
The existing close-boarded fence to the south of the tree will be retained as protection and new fencing will be installed as shown on drawing No 10337.101.

All restrictions of the specification will apply.

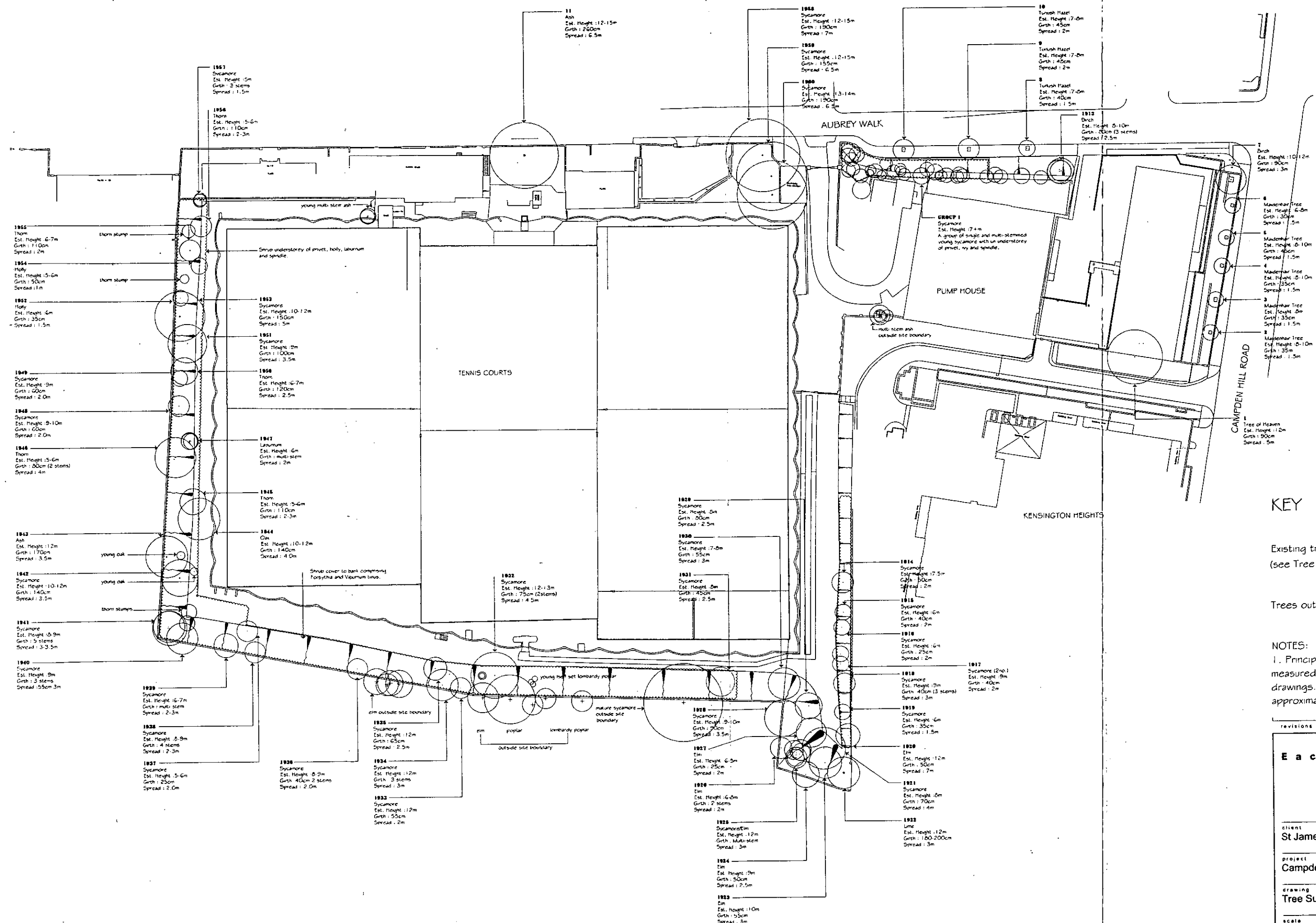
5.0 GUIDANCE ON OPERATIONS WITHIN PROTECTED AREAS

Once the development works are nearing completion, certain landscape works are to be carried out beneath tree canopies within protected areas. At this stage, protective fencing is to be removed and planting and turfing works can be carried out. All work is to be done by hand with no cultivation works. Top dressing of topsoil and the use of fertilisers will only be carried out if instructed.

- REFERENCES:** BS 5837.1991. Trees in Relation to Construction, Arboricultural Association Leaflets Nos:
- 6 Tree Roots
 - 9 Protection of Trees on Development Sites, Part 1
 - 10 Protection of Trees on Development Sites, Part 2
 - 11 Trees: Excavations and Highway Maintenance



PROTECTIVE FENCING TO EXISTING TREES



KEY

Existing trees
(see Tree Survey Report)

Trees outside site boundary

NOTES:

1. Principal trees located as part of measured survey - see ALS drawings. Positions of additional trees approximate.

revisions

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project
Campden Hill Reservoir

drawing
Tree Survey

scale Not to scale date 20 February 1998 dfg no 9742.01

TP/98/2126 and TP/98/2126/A

Applicants drawing No.s: P099, P100A, P101A, P102A, P103A, P104A, P105A,
P106A, P107A, P108A, P109A, P110A, P111A, P112A, P113A, 8809 sheet 3, 4, 5,
9029 sheet 3, 4, 9132 sheet 1, 3, 4, 5, 6,

P101A

102A

106A

107A

113A

A

-102A

112A

9132 - #

B

99 - 103

107A

112A