AWE Aldermaston – HYDRUS

ARBORICULTURAL METHOD STATEMENT AND TREE PROTECTION PLANS

MER-110-011438

STATUS: FOR PLANNING

Contents

Executive Summary

- The purpose of the report is to detail the impact of the proposed re-development works on the existing trees at Hydrus, AWE Aldermaston. The report describes how the works should be managed and the method in which the trees will be adequately protected during the construction activities. The report was prepared in general accordance with the requirements set out in *BS5837: 2005 Trees in relation to construction – Recommendations*.

- An initial Existing Amenity Vegetation Survey was undertaken by RPS on the 23rd of February 2009 followed by a supplementary survey noting the condition of the trees in full leaf made on the 6th of July 2009 (refer Appendix I). The survey covered the trees directly within the site boundary, on or near the boundary and in the broad visual realm of the proposed re-development works at Hydrus, AWE, Aldermaston. The survey noted that the trees are of mixed age structure arranged in small groupings with the occasional solitary specimen and consist predominantly native species. In the main the trees appear to be in reasonable general health.

- The tree survey identified a large veteran Oak tree in the south of the site as having high amenity value. Any works to this tree should be made in consideration of the planning guidance Planning Policy Statement 9: Biodiversity and Geological Conservation which notes that veteran trees have value for biodiversity.

- A number of trees and tree groups of moderate quality and value were identified and accordingly graded with an amenity value of category 'B'. This consisted, most notably of the wooded belt on the south-east corner of the site (G5), the three Oaks (T1-3) adjacent the north west boundary and the large plane (T13) directly to the north of the veteran Oak. The survey also identified a number of trees of low quality and value primarily the short lived Birch trees and any trees in poor general health (G3-4).

- All tree works shall be carried out in accordance with *BS 5837:2005 Trees in Relation to Construction* and *BS 3998:1989 Tree work* (copies can be obtained from BSI Tel:020 8996 7400 www.bsi.global.com) and The Arboricultural Association (AA) *Standard Conditions of Contract and Specification for Tree Works* September 1997 (copies can be obtained from the AA Tel: 01794 368717).

- The protective fence specification shall comply with the requirements of Ref no.2 of the attached Method Statement - Checklist, namely a sturdy fence in accordance with Fig 2 of *BS 5837:2005 Trees in Relation to Construction.*
- The trees are bounded by an the area known as the Root Protection Area (RPA), determined by the size of the tree and containing rooting volume vital to heath and stability. All construction works within the (RPA) shall be completed with due regard to *APN 12 'Through the Trees to Development'* and *BS5837:2005 'Trees in relation to Construction'.*
- Refer to AWE 'Construction Environmental Management Plan' for the management of environmental issues and requirements associated with the construction phase of the project.

1 Introduction

1.1 RPS was commissioned by AWE to prepare an Arboricultural Method Statement for the protection of the trees potentially affected by proposed re-development works at Hydrus, Aldermaston. The report was prepared in general accordance with the requirements set out in *BS5837: 2005 Trees in relation to construction – Recommendations.*

1.2 The location of the trees was confirmed with a topographic survey drawing prepared by RPS. Refer to drawing JKK4787:01-A: 'Hydrus Site B Area North Post Demolition Topographical Survey'

1.3 The Tree Constraints Plan JSL1692_002 identifies the following:

- Canopy spread
- Root Protection Area (RPA) of the trees

1.4 The Tree Removal and Protection Plan JSL1692_003 identifies the following:

- Trees to be retained / removed;
- Alignment and design of protective fence;
- Root Protection Area (RPA) of trees;

1.5 Nesting birds are protected by law and any removal / tree works should not be carried out during the bird nesting season (March-August inclusive). Should any vegetation be outlined for removal during this period, then an ecological survey would be required to check that no nesting birds are present. Should any be found then that vegetation must remain until September or until an ecologist has certified that the fledglings have left the nest. A visual inspection for bats shall also be carried out on mature / ivy clad trees prior to commencing operations.

1.6 All works to conform with requirements of:

- BS 3998:1989 - Tree Works
- BS 5837:2005 - Trees in Relation to Construction
- NJUG 10 - Guidelines for Utility Services in Proximity to Trees
- APN 12 - 'Through the Trees to Development'

2 Appraisal

2.1 Tree 12, a large Oak is of a particularly high amenity value. The tree demonstrates a number of features characteristic of a veteran tree. Namely, it has a girth large for the particular tree species, major trunk cavities and is of high aesthetic interest. The essential point is that the tree and its situation is checked at regular intervals throughout and beyond the construction phase and management carried out only if it is necessary.

2.2 Any management actions should be made in consideration of the Planning guidance Planning Policy Statement 9: Biodiversity and Geological Conservation which notes that veteran trees have value for biodiversity. In recognition of this and given the abundance of potential wildlife habitats associated with veteran trees any management should accord with the current environmental legislation primarily The Wildlife and Countryside Act 1981. Reference should also be made to the English Nature (Natural England) handbook, *Veteran Trees: a Guide to Good Management* (Read, H, 2000)

2.3 The proposed redevelopment includes hydrological modifications in proximity of the trees located to the south of the site. Consideration should be made to ensure the monitoring of the trees in relation to this, and indeed any general health and safety issues of the site wide vegetation, with a programme of regular inspections.

2.4 Reference should be made to the Construction Environmental Management Plan for the management of environmental issues associated with the construction phase of the project.

3 Recommendations

3.1 The RPA roughly equates to the spread of a tree canopy or an area equivalent to a radius approximately 12 times the stem diameter of the tree at 1.5m above ground level, whichever is the greatest. Where possible this area should be fenced-off and protected in accordance with BS5837: 2005. The canopy of the tree is likewise susceptible to damage during construction work and requires similar protection.

3.2 All required tree work should be undertaken in advance of any construction works to avoid undue damage to the canopy by plant / machinery etc. All pruning should be undertaken in accordance with current health and safety legislation. Tree works should maintain a natural shape and balance to the tree canopies both individually and where appropriate as part of a group.

3.3 All tree work should be carried out by an Arboricultural Association approved tree surgeon in accordance with The Arboricultural Association Standard Conditions of Contract and Specification for Tree Works September 1997, Section 3 and BS 3998:1989 Tree Work

3.4 The extent of tree protection fencing is shown on the attached plan JSL1692_002. The tree protection fencing shall be inspected and monitored during the course of the construction works, to ensure its compliance with the Tree Removal and Protection Plan JSL1692_003.

3.5 Once the protective fencing has been implemented, durable signage should be installed. The signage should state the following: "TREE PROTECTION AREA - Construction exclusion zones – Keep out".

3.6 Where construction operations are proposed within the area identified as the Root Protection Area (RPA) precautions should be taken to maintain the health and condition of the root system as detailed below and included Arboricultural Method Statement Checklist (section 4 of this document). In particular the contractor shall seek to:

- Prevent physical damage to the tree roots;
- Maintain circulation of water and air to the root zone;
- Allow for predicted future root growth;

- Preserve the existing soil structure within the root zone and prevent over compaction

3.7 Activities that result in excavations, changes in level or soil compaction should be avoided within the RPA of all retained trees. This would include the storage of materials or equipment, construction work, trafficking by vehicles or excessive trafficking by pedestrians.

3.8 The Project Manager/ Site Representative shall note areas which are not in accordance with the Tree Protection Plan; these areas shall be recorded and reinstated immediately. Where any areas of protective fencing cannot be reinstated for reasons unknown, consultation with an arboriculturalist should be sought immediately.

3.9 Where possible services should be routed outside the existing or potential root zone of trees. Where it is unavoidable, then hand excavation should be employed to avoid damage to larger roots and the services and ducts directed through or below the root system. Ducting should be used to carry cables. Reference should be made to the recommendations included within NJUG 10 (1995 as amended).

3.10 Prior to the commencement of the works an appropriate risk assessment should be produced to describe the measures required to fulfil the statutory safety obligations. It should aim to identify and prioritise the necessary control measures and precautions.

4 Arboricultural Method Statement - Checklist

Ref	Work Activity	Schedule of Works	Refer	Recommendations
01	Identification of trees to be protected / Pre-start meeting	Clearly mark trees to be protected and confirm with Project Manager/ Site Repesentative prior to commencing clearance works.	Tree Removal and Protection Plan JSL1692_003 The Arboricultural Association Standard Conditions of Contract and Specification for Tree Works Sept. 1997; 3.3	Arrange pre-start site based meeting to agree scope of works and trees to be retained; attendees to include client representative, LPA Tree Officer, site manager, ground worker/tree surgeon and consultant arboriculturalist. Identify and mark all trees prior to commencing works
02	Protect trees to be retained **Pre + post-demolition requirements**	Barriers shall be fit for the purpose of excluding construction activity and should remain rigid and complete at all times. Barriers are to be located in accordance with RPS Tree Protection Plans.	BS 5837:2005 Trees in Relation to Construction Figure 2 Tree Removal and Protection Plan JSL1692_003	Agree methodology and type with LPA prior to erecting on site
03	Protective fencing to be inspected by LPA	Project Manager/ Site Repesentative to give LPA at least 2 working days notice of the erection of the temporary protective fencing.		Appointed person to contact LPA prior to completion of fencing

Ref	Work Activity	Schedule of Works	Refer	Recommendations
04	Maintain the temporary protective fencing	Project Manager/ Site Repesentative to ensure the temporary protective fencing is maintained throughout the entire construction period and record any breach of the tree protection.	BS 5837:2005 Trees in Relation to Construction Tree Removal and Protection Plan JSL1692_003	Appointed person responsible for arboricultural protection measures shall monitor fencing **monthly**, recording details and events within the arboricultural site register held in site office
05	Works within the Root Protection Area (RPA) **Circulation**	Pedestrian and vehicle movement within the RPA shall not be permitted. Where this cannot be avoided and with the prior written approval of the LPA Tree Officer, appropriate measures shall be agreed in advance and installed to protect the ground prior to commencing operations on site. Minimum measures shall include:: Pedestrian – scaffold boards secured in position with metal pins placed on top of a compressible bark mulch layer laid onto geotextile. Vehicle – load bearing ground protection measures shall be designed by an engineer to accommodate likely loading and should involve load bearing systems such as 'trackmats' or similar approved	BS 5837:2005 Trees in Relation to Construction: Section 9 - Figure 3 Tree Removal and Protection Plan JSL1692_003	Ongoing monitoring by appointed person Type and form to be agreed with LPA Tree Officer

Ref	Work Activity	Schedule of Works	Refer	Recommendations
06	Works within the Root Protection Area (RPA) **Root severance**	Adopt hand dig methods for reducing levels to avoid damage to roots. Where limited root pruning is unavoidable it should be made at a suitable place within the root system, avoiding damage to surrounding tissue. Final pruning cuts shall be made at right angles to the axis of the root. The final cut wound should be smooth. Where root pruning is required to roots over 25mm in diameter, works should be overseen by a suitably qualified Arboriculturalist. Any root pruning should be completed in accordance with BS 3998:1997	BS 5837:2005 Trees in Relation to Construction: Section 11 BS 3998:1997 Tree Work The Arboricultural Association Standard Conditions of Contract and Specification for Tree Works Sept. 1997; 3.4.8 RPS Tree Removal and Protection Plan JSL1692_003	Ongoing monitoring by appointed person
07	Works within the Root Protection Area (RPA) **Proposed Services**	Services should be routed outside existing RPA or potential future RPA. Where this is unavoidable, then hand excavation shall be employed to avoid damage to roots and services slid through or below the root system. Ducting should be used to carry cables to extend min. 1m either side of the trunk. Trenchless techniques should also be considered.	BS 5837:2005 Trees in Relation to Construction: Section 11 Tree Removal and Protection Plan JSL1692_003 NJUG 10 1995 (As amended)	Ongoing monitoring by appointed person
08	Soft landscape works within the Root Protection Area (RPA) **Soil cultivation**	Heavy mechanical soil cultivation techniques are not to be carried out within the RPA. Any cultivation should be carried out by hand or pedestrian controlled light machinery to minimise damage to tree roots. Existing ground levels within the RPA should be maintained.	BS 5837:2005 Trees in Relation to Construction: Section 12 RPS Tree Removal and Protection Plan JSL1692_003	

Ref	Work Activity	Schedule of Works	Refer	Recommendations
09	Works within the Root Protection Area (RPA) **Fencing**	General fencing works should seek to minimise damage to tree roots and the tree canopy. Fencing should be aligned to avoid damage caused by fence post excavations, and to avoid unnecessary branch pruning.	BS 5837:2005 Trees in Relation to Construction: Section 11 RPS Tree Removal and Protection Plan JSL1692_003	

Appendix I

Tree Survey Schedule

JSL1692_Tree Survey Schedule

RPS

TREE SURVEY SCHEDULE MER-110-011438

Site: AWE Aldermaston, Hydrus | Revision: FINAL | Dwg Reference: JSL1692_001

Project Ref: JSL1692 | Date of survey: 23.02.09 | Surveyor: CC/DR

*Resurvey 06.07.09 | Surveyor: DC

Tree Ref No:	Species	Height (m)	Crown spread (m)				Stem diameter @ 1.5m (m)	Stem No.	Height of crown clearance (m)	Age class	Physical condition	Comments / Management recommendations	Estimated remaining contribution (years)	BS Category
			N	E	S	W								
1	*Quercus robur* Oak	15	5	6	6	6	Ave 0.5	373	3	M	Fair/Good	Multi-trunked solitary specimen on slightly raised plate, lower epicormic growth and deadwood stubs [protective fenced to RTA].	+20	B
2	*Quercus robur* Oak	13	5	5	3	4	0.60	372	3	M	Fair/Good	Surface rooted/buttressing at base.	+20	B
3	*Quercus robur* Oak	13	2	5	6	5	0.60	371	3	M	Fair/Good	Bias to the south. High surface roots.	+20	B
4	*Betula pendula* Birch	15	4	4	3	2	0.30	370	5	OM	Fair	North leaning. Roots have sustained damage and loss of bark. Poor, sparse crown with deadwood stubs.	+10	C
5	*Salix fragilis* Crack willow	16	5	7	7	6	0.70	2605	3	M	Fair	Leaning to the south east. Rubble piles around the base of the tree. Deadwood stubs.* Limb snapped. Summer survey indicated signs of stress, likely caused by compaction within the canopy in past. Crown reducing in upper canopy, likeness of early vigour 'flush' now in decline, supporting stress.	+10	C
6	*Salix* Willow	13	3	5	4	3	0.45	-	2	Y/MA	Fair	Slight east-south lean *Deadwood / dieback. Summer survey indicated signs of stress, likely caused by compaction within the canopy in past. Crown reducing in upper canopy, likeness of early vigour 'flush' now in decline, supporting stress.	+10	C
7	*Salix* Willow	12	3	4	4	3	0.60	363	2	Y/MA	Fair	Bifurcated at 1m. Minor deadwood throughout.* Leans north. Summer survey indicated signs of stress, likely caused by compaction within the canopy in past. Crown reducing in upper canopy, likeness of early vigour 'flush' now in decline, supporting stress.	+10	C
8	*Quercus robur* Oak	12	5	5	5	5	Ave 0.35	364/ 2602	2	MA	Fair/Good	Multi-trunked specimen with strong, well balanced, rounded canopy. Minor deadwood epicormic.	+25	A
9	*Betula* Birch	-	-	-	-	-	-	365	-	-	Poor	Moribund.	0	R
10	*Betula* Birch	11	2	3	2	2	0.15	-	4	Y	Fair/Good	Vigorous.	+15	C
11	*Quercus robur* Oak	12	6	6	5	5	0.8 at base	2615	-	M	Fair	Multi-trunked with crossing fused branches/trunks. Minor basal cavities with damaged, exposed roots. The trunk has numerous dark black lesions where the bark has lifted.	+20	B
12	*Quercus robur* Oak	22	7	8	7	7	2.75	380/ 2638	4	V	Fair/Good	Huge solitary specimen, gnarled bole with basal cavities formed by rabbits. Tree has deadwood/staghorn and senescence typically associated with a specimen of its age. Limb in southerly direction has a large split and hollowing which may be prone to fail	+50	A

Note: This survey is based on a brief visual inspection from the ground.
It is not intended as a full arboricultural inspection.

RPS

TREE SURVEY SCHEDULE MER-110-011438

Site: AWE Aldermaston, Hydrus | Revision: FINAL | Dwg Reference: JSL1692_001

Project Ref: JSL1692 | Date of survey: 23.02.09 | Surveyor: CC/DR

*Resurvey 06.07.09 | Surveyor: DC

Tree Ref No:	Species	Height (m)	Crown spread (m)				Stem diameter @ 1.5m (m)	Stem No.	Height of crown clearance (m)	Age class	Physical condition	Comments / Management recommendations	Estimated remaining contribution (years)	BS Category
			N	E	S	W								
13	*Platanus* Plane	18	7	7	7	7	0.75	379	5	M	Fair	Well balanced crown.	+30	B
14	*Alnus* Alder	20	4	4	5	4	0.50	-	7	M	Fair	Straight bole, buttressing at base.	+15	B
15	*Pinus* Pine	17	4	4	5	4	0.50	-	7	MA	Fair	In G5, deadwood stubs and little vegetation in lower third of the trunk, typical of the species.	+10	C
16	*Quercus cerris* Turkey Oak	14	6	7	4	4	0.65	2	-	MA	Fair	Fair specimen, suppressed to west. Twin trunked at 1.75m. Deadwood.	+20	C
17	*Quercus cerris* Turkey Oak	18	3	3	5	6	0.50	1	4	MA	Good	Strong, straight bole, suppressed to north/woodland side.	+15	C
18	*Quercus cerris* Turkey Oak	18	3	3	6	5	0.45	1	5	MA	Good	Vigorous, leaning away from woodlnd with a southern bias.	+15	C
19	*Quercus cerris* Turkey Oak	15	5	5	5	3	0.50	1	1.5	MA	Fair/Good	Suppressed, low crowned.	+15	C
20	*Quercus robur* Oak	23	5	8	9	9	1.2	175/ 215		M	Good	Roadside avenue tree of great stature in excellent condition, at the early stage of senescence with die back retrenchment at tips.	+50	A
21	*Quercus cerris* Turkey Oak	20	8	7	8			190			Good/fair	Strong central leader, well balanced horizontal growth.		
G1	*Acer pseudoplatanus* Sycamore x3	6	-	-	-	-	Ave 0.2	-	-	Y	Fair/Poor	Low, stunted, multi-trunked. Have sustained bark damage.	+10	C
G2	*Betula* Birch x2	11	3	3	3	3	Ave 0.2	2599/ 365	2	Y/MA	Fair	Fair.	+15	C
G3	*Betula* Birch x7	10	-	-	-	-	0.25	-	-	Y/MA	Fair	In grass, minor deadwood. Rabbit damage at base.	+15	C
G4	*Betula* Birch x5	16	-	-	-	-	Ave 0.45	-	4	M	Fair	Minor damage at the base of trees. Unremarkable.	+15	C

Note: This survey is based on a brief visual inspection from the ground.
It is not intended as a full arboricultural inspection.

RPS

TREE SURVEY SCHEDULE MER-110-011438

Site: AWE Aldermaston, Hydrus | Revision: FINAL | Dwg Reference: JSL1692_001

Project Ref: JSL1692 | Date of survey: 23.02.09 | Surveyor: CC/DR

*Resurvey 06.07.09 | Surveyor: DC

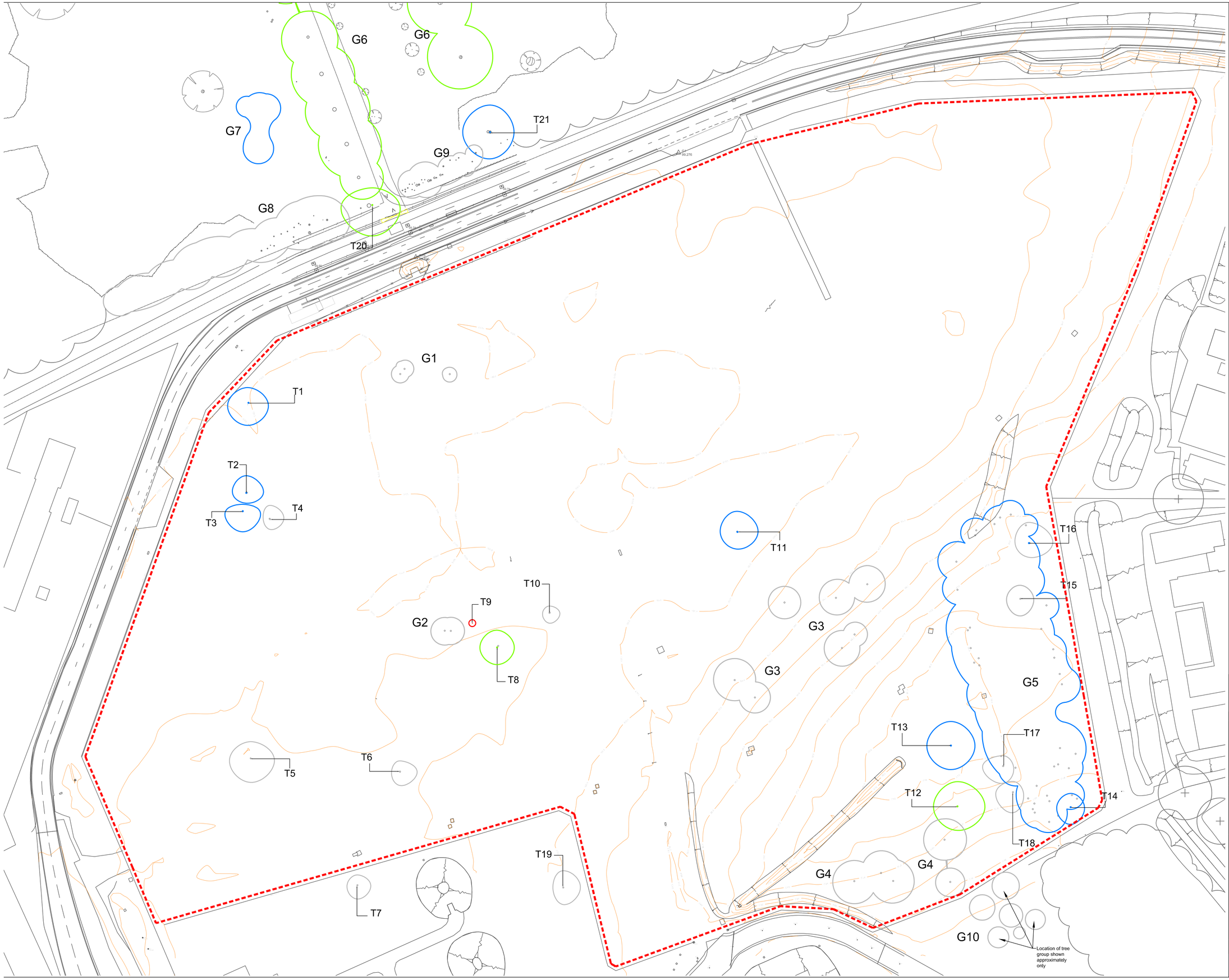
Tree Ref No:	Species	Height (m)	Crown spread (m)				Stem diameter @ 1.5m (m)	Stem No.	Height of crown clearance (m)	Age class	Physical condition	Comments / Management recommendations	Estimated remaining contribution (years)	BS Category
			N	E	S	W								
G5	*Betula, Quercus robur, Salix, Fagus, Populus* Birch 55%, Oak 15%, Elder, Willow, Poplar, Beech 30%	16	-	-	-	-	-	-	-	-	Fair	Mixed age and species group of chiefly broadleaf trees. Deadwood, piles throughout and prostrate trees in various stages of decay - ideal wildlife habitat. Partial landscape buffer.	+20	B
G6	*Quercus robur* Oak	20	-	-	-	-	Ave 1.10	208-214		M	Good/Fair	Roadside avenue trees, minor retrenchment, in various stages of senesence.	+30	A
G7	*Betula* Birch	11					Ave 0.15	-	-	Y/MA	Fair	Informal birch groupings. Grown in groves.	+15	B
G8	*Chamaecyparis lawsoniana, Quercus robur* Lawson cypress, Oak	16					Ave 0.35	-	-	MA	Fair	Fronted on the road side with lawson cypress with mixed aged, closely grown oak behind, provides a buffer to the site.	+20	C
G9	*Chamaecyparis lawsoniana* Lawson cypress	16	-	-	-	-	Ave 0.35	-	-	MA	Fair	Provides dense, evergreen screen, many may have been reduced with trunk division leading to weak trunk formation in some cases.	+20	C
G10	*Betula, Quercus robur, Aesculus hippocastanum* Birch, Oak, Horse Chestnut	7	-	-	-	-	Ave 0.25	-	3	Y	Fair	Young group, one Oak shows signs of poor leaf form	+20	C

Note: This survey is based on a brief visual inspection from the ground.
It is not intended as a full arboricultural inspection.

Appendix II

Amenity Tree Survey

JSL1692_001



Key

- Site boundary offset 1m for clarity.
- Existing Contours at 0.5m intervals
- Tree with numbered reference. Canopy spread and BS5837:2005 colour category as shown below.
- Vegetation group with numbered reference. Canopy spread and BS5837:2005 colour category as shown below.

BS 5837:2005 Tree Quality Categories - Table 1

- Category A - High quality
- Category B - Moderate quality
- Category C - Low quality
- Category R - Remove

- Tree outside of survey area, shown for context only.
- Vegetation group outside of survey area, shown for context only.

NOTES:

- Refer to RPS Tree Survey Schedule for further details.
- Survey based on a visual inspection from the ground and is not intended as a full arboricultural inspection.
- Plan produced in accordance with recommendations set out in BS 5837:2005 - 'Trees in Relation to Construction'.
- Due to the legal protection afforded to breeding birds vegetation removal should not take place during the bird nesting period; generally, although not restricted to, March - August inclusive.
- Survey based upon topographic survey.

NORTH

Rev:	Date:	Amendment:	Name:	Checked:
C	21/05/10	Revised to comments	DR	NJ
B	07/07/09	Updated Tree Survey	DR	NJ
A	06/09	Tree removed added	DR	NJ

Drawing Based Upon: JKK4787_01A

Status: FOR PLANNING

Notes: Contractors are not to scale from this drawing. All dimensions to be checked on site and any discrepancies, ambiguities and/or omissions between this drawing and information given elsewhere must be reported to this office. If in doubt, ask.

RPS
Lakesbury House Hillingbury Road Chandlers Ford Hampshire SO53 5SS
T 023 80810440 F 023 80810449 E rpseo@rpsgroup.com W www.rpsgroup.com

Client: AWE

Project: Hydrus
Aldermaston

Title: Amenity Tree Survey
MER-110-011438

Date: 03/09 Scale: 1:500 Paper Size: A1

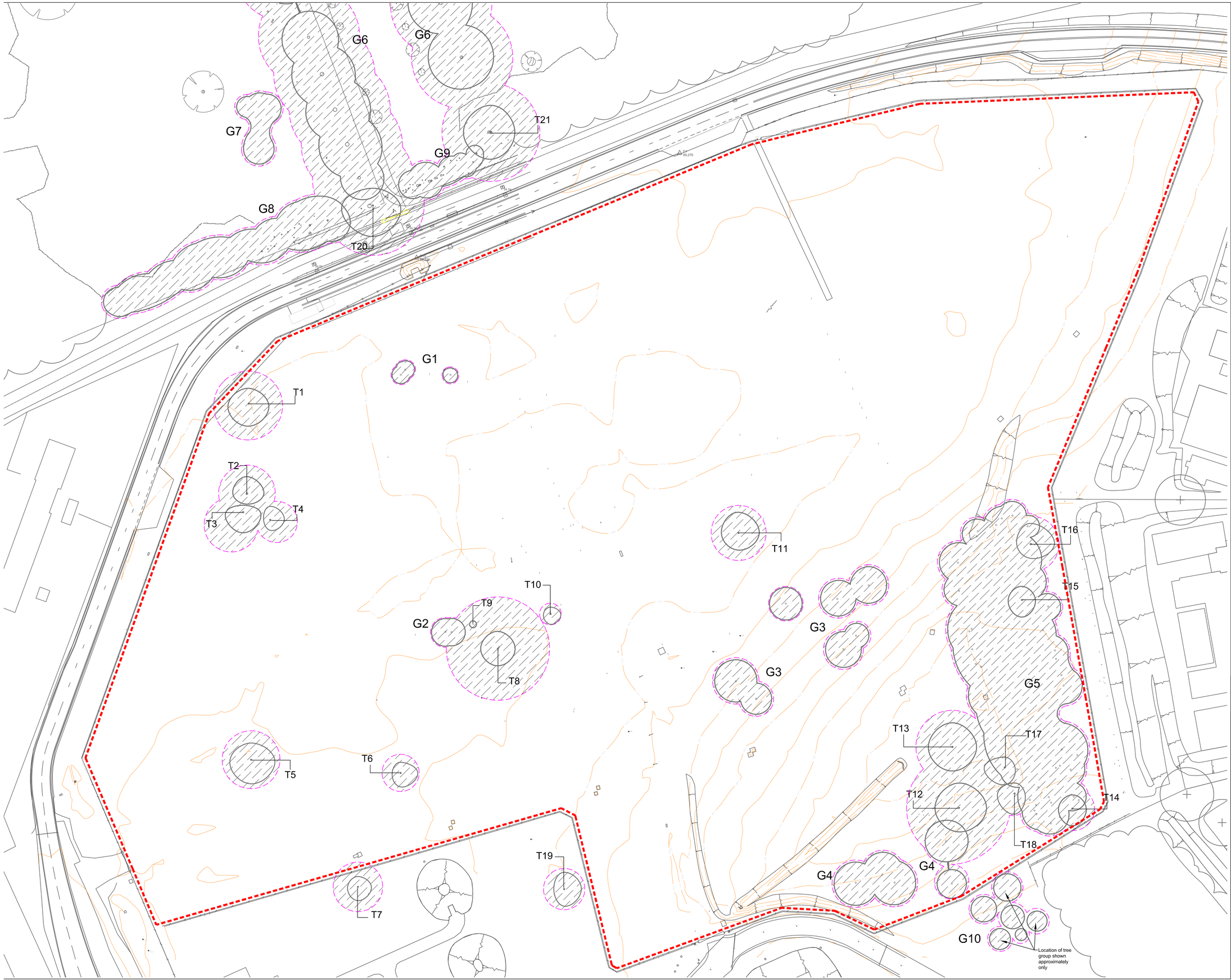
Drawn: DR Checked: NJ Job Ref: JSL 1692

Drawing Number: 001 Rev: FINAL

Appendix III

Tree Constraints Plan

JSL1692_002



Key

- Site boundary offset 1m for clarity.
- Existing Contours at 0.5m intervals
- Tree with numbered reference and Canopy spread .
- Vegetation group with numbered reference. Canopy spread and BS5837:2005 Category.
- Tree outside of survey area, shown for context only.
- Root protection area (RPA) in accordance with Table 2 - BS 5837:2005

NOTES:

- Refer to RPS Tree Survey Report & Schedule for further details.
- Survey based on a visual inspection from the ground and is not intended as a full arboricultural inspection.
- Plan produced in accordance with recommendations set out in BS 5837:2005 - 'Trees In Relation to Construction'.
- Due to the legal protection afforded to breeding birds vegetation removal should not take place during the bird nesting period; generally, although not restricted to, March - August inclusive.
- Survey based upon topographic survey.

NORTH

Rev:	Date:	Amendment:	Name:	Checked:
A	21/05/10	Revised to comments	DR	NJ

Drawing Based Upon: JKK4787_01A

Status: FOR PLANNING

Notes: Contractors are not to scale from this drawing. All dimensions to be checked on site and any discrepancies, ambiguities and/or omissions between this drawing and information given elsewhere must be reported to this office. If in doubt, ask.

RPS
Lakesbury House Hillingbury Road Chandlers Ford Hampshire SO53 5SS
T 023 80810440 F 023 80810449 E rpsso@rpsgroup.com W www.rpsgroup.com

Client: AWE

Project: Hydrus
Aldermaston

Title: Tree Constraints Plan
MER-110-011438

Date: 03/09 Scale: 1:500 Paper Size: A1

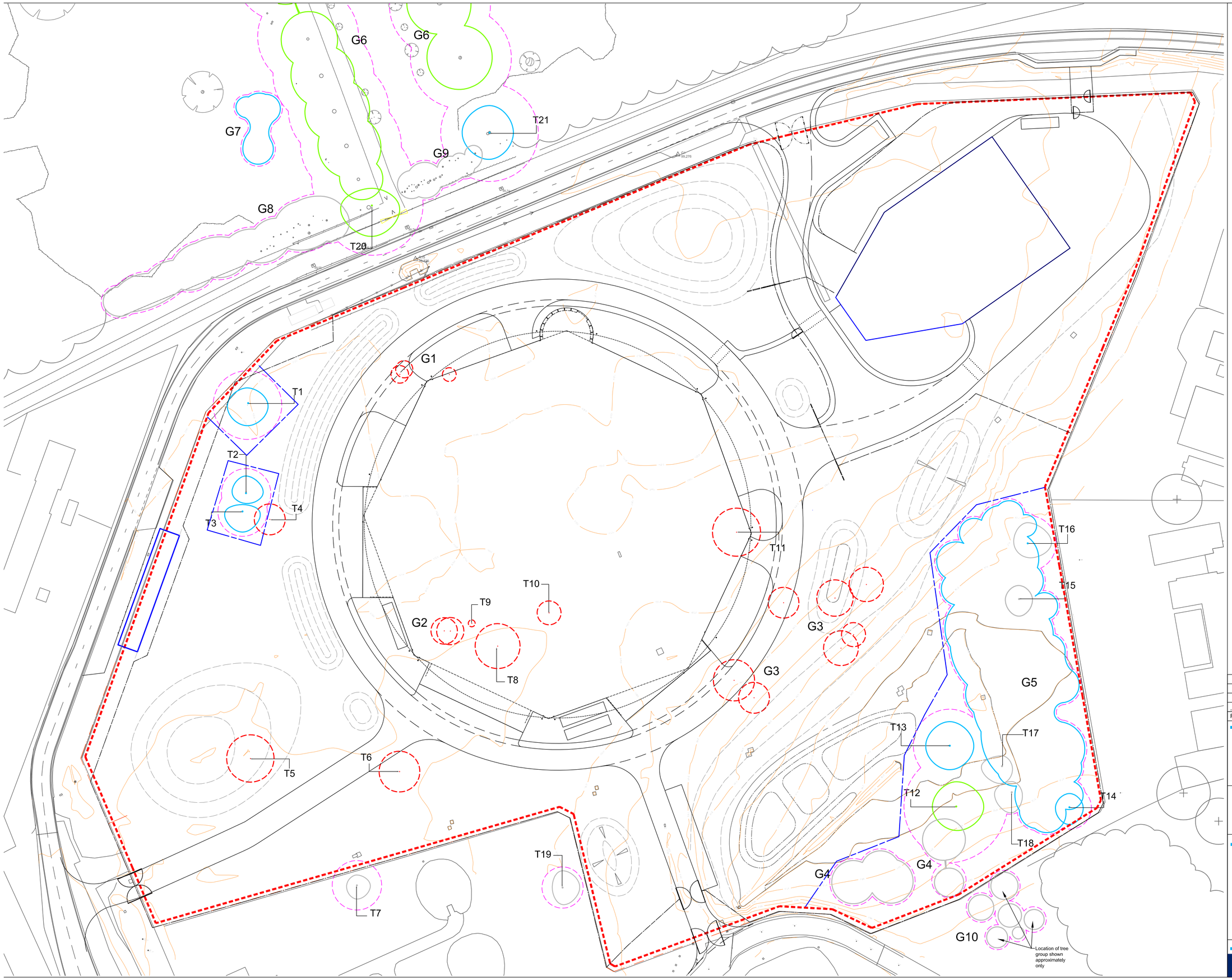
Drawn: DR Checked: NJ Job Ref: JSL 1692

Drawing Number: 002 Rev:FINAL

Appendix IV

Tree Removal and Protection Plan

JSL1692_003



Key

- Survey boundary
- Existing Contours at 0.5m intervals
- Proposed earth remodeling
- Tree to be retained and protected with numbered reference. Canopy spread and BS5837:2005 Category.
- Vegetation group to be retained and protected with numbered reference. Canopy spread and BS5837:2005 Category.

BS 5837:2005 Tree Quality Categories - Table 1

- Category A - High quality
- Category B - Moderate quality
- Category C - Low quality
- Category R - Remove

- Tree outside of survey area, shown for context only.
- Vegetation group outside of survey area, shown for context only.
- Tree to be removed with numbered reference. Canopy spread and BS5837:2005 Category.
- Temporary protective fencing in accordance with Fig2 - BS 5837:2005. See inset detail.
- Root protection area (RPA) in accordance with Table 2 - BS 5837:2005

NOTES:

- Refer to RPS Tree Survey Report & Schedule for further details.
- Plan produced in accordance with recommendations set out in BS 5837:2005 - 'Trees in Relation to Construction'.
- Due to the legal protection afforded to breeding birds vegetation removal should not take place during the bird nesting period: generally, although not restricted to, March - August inclusive.
- Pedestrian/ vehicular emergency access routes to be maintained at all times.
- All protective fencing to be completed and approved by LPA / CA prior to commencment of any site works.
- All works to conform with requirements of:
  - BS 3998:1989 - Tree Works
  - BS 5837:2005 - Trees In Relation to Construction

NORTH

Rev:	Date:	Amendment:	Name:	Checked:
A	21/05/10	Layout updated	NJ	KR

Drawing Based Upon: JKK4787_01A

Status: FOR PLANNING

Notes: Contractors are not to scale from this drawing. All dimensions to be checked on site and any discrepancies, ambiguities and/or omissions between this drawing and information given elsewhere must be reported to this office. If in doubt, ask.

RPS
Lakesbury House Hillingbury Road Chandlers Ford Hampshire SO53 5SS
T 023 80810440 F 023 80810449 E rpsso@rpsgroup.com W www.rpsgroup.com

Client: AWE

Project: Hydrus
Aldermaston

Title: Tree Removal & Protection Plan
MER-110-011438

Date: 09/09 Scale: 1:500 Paper Size: A1

Drawn: DR Checked: NJ Job Ref: JSL 1692

Drawing Number: 003 Rev: FINAL