

ARBORICULTURAL IMPACT ASSESSMENT, PROTECTION PLAN AND METHOD STATEMENT

SITE:	COLNBROOK IMMIGRATION CENTRE CAR PARK, HARMONDSWORTH, WEST DRAYTON UB7 0HG
SURVEY DATE:	28 APRIL 2026
REPORT DATE:	26 AUGUST 2026
OUR REFERENCE:	754-2229-5/1/2026
ON BEHALF OF:	Will Thorpe, Southwest Environmental Limited,
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DIGITALLY APPENDED TREE PROTECTION PLAN (IN PDF FORMAT)	

ABBREVIATIONS

AIA	Arboricultural Impact Assessment	CMS	Construction Method Statement
AMS	Arboricultural Method Statement	RICS	Royal Institute of Chartered Surveyors
BRE	Building Research Establishment	RPA	Root Protection Area
BS	British Standard	TPBE	Trees and People in the Built Environment
CCS	Cellular Confinement System	TPO	Tree Preservation Order
CEZ	Construction Exclusion Zone	TPP	Tree Protection Plan



1. INTRODUCTION

- 1.1. Harrison Arboriculture Ltd. was commissioned to provide an arboricultural report to include an arboricultural impact assessment, tree protection plan and preliminary method statement for development proposals at Colnbrook Immigration Centre Car Park, Harmondsworth, West Drayton UB7 0HG.
- 1.2. The site co-ordinates are 51°29'04.7"N 0°29'05.9"W which lies within the administrative area of London Borough of Hillingdon.

2. TERMS OF REFERENCE

- 2.1. To provide an assessment of the trees on and around the site regarding their suitability for retention within the context of the development based on the details provided. It assesses which of those will either have an impact on and/or be impacted upon by the development. The report includes methods by which those impacts can be mitigated if they are available and adheres to the recommendations provided in British Standard 5837:2012 'Trees in relation to design, demolition and construction - Recommendations' (BS 5837)
- 2.2. The report includes:

An Arboricultural Survey

The survey provides a plan indicating the size and positions of the trees present at the time of the survey on and close to the site. They are plotted and scaled based on the topographical survey, the final plan will be at 1:500 or larger as per RICS specification, it provides:

- Identification details and assessment of the current condition of trees within and close to the red line site.
- Recommendations for remedial works necessary and available to maintain their health and/or safety within the context of the development (for trees within the ownership of the applicants).
- Categorisation as per BS 5837 : 2012.

An Impact Assessment (AIA) / Constraints Plan

Based on the tree survey and proposed layout as illustrated by drawing reference



300776-360DS-CP-GF-DR-A-EX-PP provided by 360 DS. The impact assessment provides:

- Details of tree loss and works (if any) required in implementing the proposed design.
- Identification of both above and below ground activities proposed in the vicinity of retained trees which may be potentially damaging e.g. removal of existing structures, the installation of hard surfacing, services installation and the location and dimensions of all proposed excavations or changes in ground level, including those necessary for the implementation of the recommended mitigation measures.
- The practicability of the scheme regarding access, adequate working space and provision for the storage of materials.
- Theoretical Root Protection Areas (RPA's) denoted as nominal circular areas centred on the trunk for all trees categorised A and B will be listed in the tree schedule.
- The RPAs for trees categorised C will be included in the tree schedule but will only be relevant where they are not under the ownership or management of the applicant or where they are to be retained within the development.

A Tree Protection Plan (TPP)

This will provide:

- Recommendations for the construction and positioning of suitable tree protection. It includes barrier fencing and both permanent and temporary ground protection where appropriate based on the AIA.
- The report will include possible methods to mitigate the adverse impacts of the development. The TPP illustrates the areas within or close to the RPA's within which measures are necessary to protect the root areas of retained trees.

An Arboricultural Method Statement



This will provide a precautionary approach appropriate to the proposals. It will describe the methods and sequence of tree protection that should be adopted in order to demonstrate that the operations can be undertaken with minimal risk of adverse impact on trees to be retained. It may require relevant information from other specialists. It will include some or all of the following:

- any operations proposed within the RPA (or crown spread where this is greater);
- removal of existing structures and hard surfacing;
- installation of temporary ground protection ;
- excavations and the requirement for specialised trenchless techniques ;
- installation of new hard surfacing including materials, design constraints and implications for levels;
- specialist foundations including installation techniques and the effect on finished floor levels and overall height;
- retaining structures to facilitate changes in ground levels;
- preparatory works for new landscaping;
- An auditable/audited system of arboricultural site monitoring, including a process by which adherence to the agreed methods and phasing within this report can be monitored;
- A schedule of specific site events requiring specialist arboricultural input or supervision; and
- A list of contact details for the relevant parties.

2.3. The scope and limitations of the report are listed in Appendix B – Generic Information.

3. PROTECTION STATUS

3.1. Trees subject to constraints such as Tree Preservation Orders and Conservation Areas are protected under the law. An online search at <https://lbhillingdon.maps.arcgis.com>. Indicates that there are no Preservation



orders covering the site and it is not within a conservation area. It is suggested that written confirmation from London Borough of Hillingdon is sought formally establishing the legal status of these trees prior to any works being undertaken outside the remit of an approved planning application.

ARBORICULTURAL IMPACT ASSESSMENT



4. DEVELOPMENT / SITE APPRAISAL

- 4.1. The site is car park serving the Colnbrook Immigration Centre, Harmondsworth, West Drayton UB7 0HG.
- 4.2. The development proposal is for the addition of extra car parking spaces.

5. TREE CATEGORISATION

- 5.1. The method of categorisation as provided by BS5837 can be found at Appendix A. The following is a summary of the trees present on the site and their grade (table 1). A and B category trees are a material consideration in the development process; the subcategories 1, 2 and 3 are intended to reflect arboricultural, landscape and cultural values respectively.

Table 1 - Tree Category Summary

C1	19		A	0
C2	0		B	19
C3	0		C	19
B1	0		U	0
B2	19		Total	38
B3	0			
A1	0		T	34
A2	0		G	4
A3	0		H	0
U	0		W	0
Total	38		Total	38

6. DEVELOPMENT IMPLICATIONS

- 6.1. The primary criterion, in Arboricultural terms, is the retention of as many appropriate trees as practicable, allowing development to proceed whilst providing them with space and protection both during and subsequent to the completion of the development. The following is an assessment of the likely impact of the development on trees which are worthy of retention and guidance on the type and extent of protection required to ensure their continued wellbeing within the



proposed development and the future landscape.

- 6.2. Most tree roots are typically found in the upper 600mm of soil and any excavation or compaction of the ground within these areas has the potential to damage roots and impact the future health and potentially the stability of the trees.
- 6.3. Soil levels over tree root areas must be left largely unaltered and the soil structure maintained. The recommended root protection area is the theoretical space required sufficient to maintain tree health.
- 6.4. The additional spaces over existing tarmac will not impact the retained trees. The additional tarmac for proposed parking spaces lies close to or over trees number 8 – 32 such that their retention is not viable and they have been recommended for removal.
- 6.5. Additionally a section of the southern end of G38 as well as individuals close to the proposed additions will need removal.

BARRIER FENCE

- 6.6. Barrier fencing is to be erected to provide appropriate protection required for the remaining trees where existing barriers or conditions do not restrict access. It has been designed to reflect the scale and nature of the proposed development, the short construction duration, and the limited extent of works in proximity to retained trees. All barrier fence and ground protection is to remain serviceable and in position for the duration of the development and no adjustments made without the written agreement of the planning/arboricultural officer.
- 6.7. Locations are shown on the Tree Protection Plan 754-2229-5/1/2026 TPP and it will be installed in accordance with Figure 3 of BS5837:2012.

SURFACES WITHIN ROOT PROTECTION AREAS

- 6.8. Excavation of the ground where additional spaces requiring new surface within root protection areas has the potential to damage roots and impact the future health and potentially the stability of the trees. Therefore, soil levels over tree root areas must be left largely unaltered.
- 6.9. A Cellular confinement system (CCS) installed using “no dig” techniques and of a sufficient depth appropriate to the vehicles expected to use the access will



be installed as described in section 10 to provide a surface with sufficient rigidity to spread loads and prevent soil compaction or rutting. Water permeation into the root area will be maintained by the use of a permeable surface.

- 6.10. The prohibition on excavation within the RPA also applies to kerbing. Kerbing must also lie over the existing ground level and pegged into place. Excavation for a concrete kerb bed is not viable. Spikes through the kerb and geotextile separation layer or support posts sunken 600mm into post holes on the outside of the kerbing reduces the area disturbed.

7. SERVICE RUNS

- 7.1. Should underground electricity, gas or foul and grey water services be required, they will require routing well outside the protection areas of trees which are to be retained. If the route is likely to pass close to or within the RPAs of the retained trees prohibitions on excavation within the RPA's applies. A specific method statement will be required describing the method to be used to minimise any root damage. These may potentially involve hand digging within the root areas and laying pipework between any significant roots or moling from a position outside the RPA's

8. SITE PARKING, SITE HUTS, MIXING AND MATERIAL STORAGE AREAS

- 8.1. Areas used for construction activities, including material storage, plant parking, mixing of materials, and waste storage, are recognised as potentially damaging to trees and shall be strictly controlled throughout the construction period.
- 8.2. All deliveries, contractor parking, and material handling shall make use of the existing site accesses and hardstanding areas only.
- 8.3. No materials, plant, equipment, fuels, chemicals, spoil, waste, or site facilities shall be stored within the Root Protection Areas (RPAs) or Construction Exclusion Zones (CEZs) of retained trees, as illustrated on the approved Tree Protection Plan (reference 754-2229-5/1/2026 TPP) and demarcated on site by protective barrier fencing.



- 8.4. Storage, loading, unloading, and mixing of materials shall be restricted to the designated locations shown on the approved Tree Protection Plan and shall be maintained in those locations for the duration of the construction phase.
- 8.5. No storage, parking, access, refuelling, turning of vehicles, or other construction activity shall take place within the fenced Tree Protection Areas at any time.
- 8.6. Site huts are not required for the proposed development. Should this position change, any proposed siting of site huts shall be located outside the RPAs of retained trees and shall be subject to prior written agreement with the Local Planning Authority following consultation with the project arboricultural consultant.
- 8.7. Protective barrier fencing in accordance with BS5837:2012 shall be installed prior to the commencement of development and shall remain in place, intact, and effective for the duration of the construction period. Any accidental or unauthorised breach of fencing or encroachment into RPAs shall be reported immediately and rectified without delay.
- 8.8. Storage locations shall not be altered without prior written approval from the Local Planning Authority in consultation with the project arboricultural consultant.

9. TREE PROTECTION

- 9.1. Exclusion of construction activity from the unprotected recommended root protection areas from the outset will ensure those trees identified for retention are maintained in a safe and healthy condition preventing the following. They should be retained in place for the duration of the development to prevent:
- Root severance
 - Damage to the bark, branches and trunks
 - Compaction of the soil within the Construction Exclusion Zone
 - Alterations in soil level
 - Soil contamination by phytotoxic materials such as herbicides, petrol, oils, diesel, cement and concrete washings or other construction additives



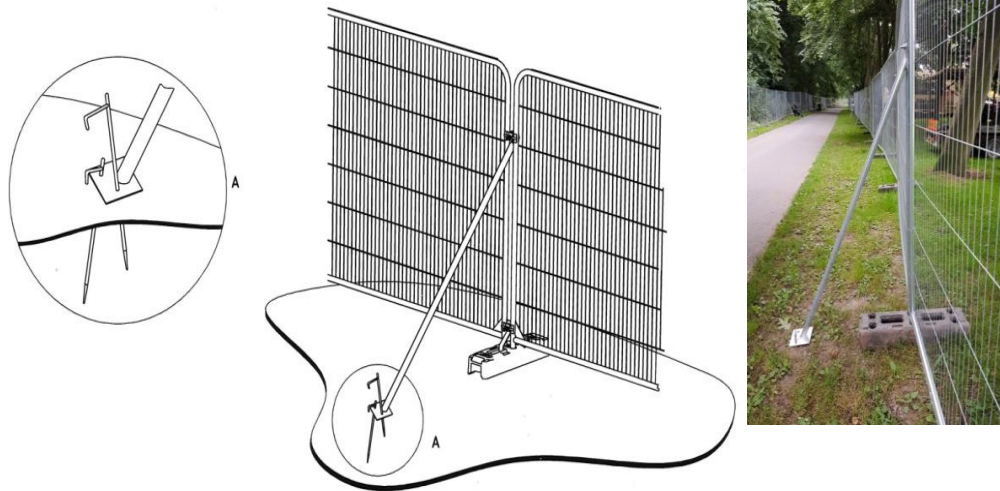
Barrier Fence

- 9.2. Tree protection barriers shall be erected prior to the commencement of any construction works and shall remain in place and effective until completion of the development. Weatherproof signage shall be affixed to the fencing to inform all site operatives that the enclosed areas are protected and must remain undisturbed for the duration of the works.
- 9.3. Protective barrier fencing installed in accordance with BS5837:2012, Section 6, Figure 3, is considered fit for purpose for this site, having regard to the scale of the development and the limited extent of works in proximity to retained trees. The position of the tree protection fencing is shown on the approved Tree Protection Plan (reference 754-2229-5/1/2026 TPP) appended to this document.
- 9.4. The fencing shall comprise welded mesh panels a minimum of 2.0 metres in height, securely fixed together using wire or scaffold clamps, and braced with ground-anchored supports at a maximum spacing of one support per two panels (approximately every 6 metres) to provide sufficient resistance to impact. A copy of the relevant BS5837 fencing specification is reproduced at the end of this section for reference.
- 9.5. Any adjustment, relocation, or removal of the tree protection fencing or associated protection measures shall only be undertaken following prior consultation with, and written agreement from, the project arboricultural consultant and the Local Planning Authority.
- 9.6. The following restrictions shall apply at all times within the fenced Tree Protection Areas:
 - No mechanical excavation.
 - Excavation by other means only under arboricultural supervision and in accordance with an approved written method statement.
 - No changes to existing ground levels.
 - No storage of materials, plant, or equipment.
 - No storage, mixing, or handling of fuels, chemicals, or cement (including wash-out).



- No vehicular access or parking.
- No fires or discharge of heat.

Figure 1 - (BS5837 Figure 3) example of fence stabilization system



a) Stabilizer strut with base plate secured with ground pins

10. Ground Protection

- 10.1. Ground protection will be required where construction activity within or access across the RPA's is necessary. This is to prevent root damage and soil disturbance or compaction and is required for the duration of the development. This will be temporary where incursion is to facilitate the construction and permanent where traffic over the root area is required subsequent to the completion of the development.
- 10.2. The existing surface provides sufficient ground protection to facilitate the RPA's. Permanent ground protection is required to facilitate the creation of new spaces within the root areas of retained trees.

Permanent Ground Protection

- 10.3. Most tree roots are typically found in the upper 600mm of soil and the traditional construction of roads and paths which require excavation of the soil and compaction of multiple load bearing sub layers is not available within such areas. In addition, increasing the depth of soil over the roots can impede the movement of oxygen and water to the root area. Therefore, soil levels over tree



root areas must be left largely unaltered.

- 10.4. Where construction activity is necessary close to trees for example roads, driveways, paths and parking areas (within or close to the recommended RPA's) ground protection is required to prevent root damage, disturbance of the soil structure and/or compaction.
- 10.5. A Cellular confinement system (CCS) allows a “no dig” solution, providing a surface with sufficient rigidity to spread loads and prevent significant soil compaction and rutting. Cellweb [™] or ACO Ground Guard (figure 2) are examples of suitable systems.
- 10.6. When installing a CCS using ‘no dig’ techniques it should be a minimum distance of 500mm from the tree base, no more than 5m wide and there must be:
 - No excavation within the root protection area – roots must not be cut, ripped, broken or severed.
 - No soil stripping or grading within the root protection area – ground levels must not be changed
 - No compaction within the root protection area – all traffic must be excluded from the area
 - CCS construction should not be undertaken while soil is saturated as it is less prone to compaction when dry.
- 10.7. Prior to commencing any construction, including surface protection, protective fencing must be erected around trees as per section 9 in positions denoted on plan reference 754/2229/5/1/2026 TPP to form an exclusion zone. This will ensure roots within the exclusion zone will not be severed and the soil will not be compacted during the construction work, allowing continued water permeation and oxygen diffusion to the soil beneath.

Permanent Ground Protection Construction

- 10.8. The CCS must be installed at ground level. High spots must not be graded off and hollows should be filled with clean sharp sand. This may raise final levels



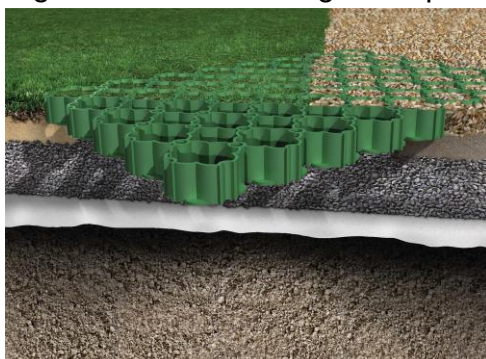
which should be considered by architects and designers.

10.9. Once the surface layer has been removed there should be no vehicular movement over the root area until the CCS has been installed and then only those for which it has been designed.

10.10. The CCS will be installed in the following sequence.

- Following the removal of the existing surface layer the structure will be constructed over a geotextile separation layer placed on the ground. This prevents material being pressed into the underlying soil.
- The prohibition on excavation within the RPA also applies to kerbing. Kerbing may be concrete or wooden but in any case must lie over the existing ground level and pegged into place using spikes through the geotextile separation layer. This will contain the cellular confinement system preventing lateral spread.
- A three-dimensional CCS made out of High-Density Polyethylene (HDPE) and conforming to ISO 13426-1:2003 is placed over the geotextile separation layer. The CCS requires expanding to its maximum and secured to the kerbing and filled with no fines angular aggregate.
- The required thickness of CCS is dependent on the California Bearing Ratio (CBR) of the soil. Typically, 100mm in depth is sufficient to support light traffic such as cars and light vans for soil with a CBR >3 and 200mm in depth if heavier vehicle use is expected. The project engineer should specify the appropriate depth based on the CBR.
- A further geotextile is to be placed over the CCS and the final porous wearing layer laid over the top of that.

Figure 2 - Permanent ground protection examples



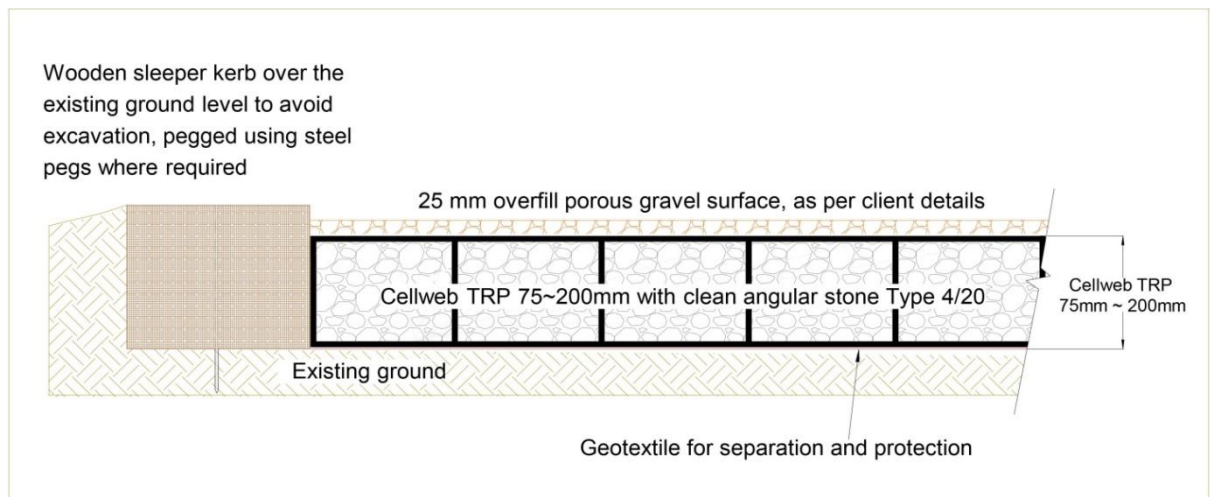
Ground Guard



Cell Web



Figure 3 - Example specification for permanent ground protection (Cellweb)



11. POST DEVELOPMENT PRESSURES

Future pressure for removal.

The nature of the site does not present any unreasonable impacts or pressures over and above existing conditions and no post development pressures for removal are expected.

ARBORICULTURAL METHOD STATEMENT (Preliminary)

12. METHOD AND PHASING OF WORKS

13. PRE CONSTRUCTION



- 13.1. Trees subject to constraints such as Tree Preservation Orders and Conservation Areas are protected under the law. It is suggested that written confirmation from London Borough of Hillingdon is sought formally establishing the legal status of these trees prior to any works being undertaken outside the remit of an approved planning application.
- 13.2. All permitted or approved tree work will be undertaken prior to the commencement of site preparation, demolition or construction works.
- 13.3. Tree work will be carried out in accordance with the British Standard *“Recommendations for Tree Work”* BS3998:2010, by suitably qualified and experienced professional arborists. Under no circumstances shall site personnel undertake any tree pruning operations.

14. CONSTRUCTION

- 14.1. The protective barrier fencing shall be positioned as shown on the approved Tree Protection Plan (reference 754-2229-5/1/2026 TPP) and shall define the Tree Protection Areas of all retained trees.
- 14.2. The fencing shall be installed prior to the commencement of works and shall remain in place, intact, and effective for the duration of the construction phase. No works, storage of materials, parking, or site access shall occur within the fenced Tree Protection Areas unless otherwise agreed in writing by the project arboricultural consultant and the Local Planning Authority.
- 14.3. Weatherproof signage shall be affixed to the protective fencing to inform all site operatives that the enclosed areas are protected and must remain undisturbed for the duration of the development.
- 14.4. No loading, refuelling, or storage shall take place on the access drive within the RPAs, which shall remain free-draining and unaltered throughout the construction period.
- 14.5. Landscaping works may be necessary prior to the completion of the build. In this case prohibitions on traffic and movement over the Construction Exclusion Zones will remain in effect and activity will require additional fit for purpose temporary ground protection, no machine movements and the transport of materials into



these areas will be made manually.

- 14.6. The project arboriculturalist will be on hand to provide arboricultural advice if it is needed.

POST CONSTRUCTION

- 14.7. Barrier fence and temporary ground protection is to be removed.
- 14.8. Site reinstatement and landscaping will be undertaken. Prohibitions on traffic and movement over the Construction Exclusion Zones will remain in effect and activity will require additional fit for purpose temporary ground protection, no machine movements and the transport of materials into these areas will be made manually.

15. CONTACTS

Organisation	Contact Name	Contact number	Email / online contact
Agent	Will Thorpe, Southwest Environmental Limited,		
Harrison Arboriculture	Mark Harrison	07915 847 367	mark@harrisonarboriculture.co.uk
London Borough of Hillingdon	Case officer		

16. DECLARATION

- 16.1. The statements in this report are based on information provided by the client. It does not take into account, the effects of extremes of climate, vandalism or accident. Harrison Arboriculture cannot accept liability in connection with these factors, nor where prescribed work is not carried out in a correct and professional manner in accordance with current good practice.
- 16.2. The authority of this report is effective for two years from the date of the survey or when any site conditions change, or pruning or other works unspecified in the Report are carried out to, or affecting, the subject tree(s), whichever is the sooner. It is recommended that a new survey be carried out after twelve months or



following any severe weather event or change in the site.

17. CONCLUSION

- Tree removals are required to facilitate the proposals.
- Landscaping to include tree planting could mitigate for their loss in the long term.
- Post development pressures for works on the retained trees are not expected as a result of the proposal.
- This document complies with statutory protection, planning conditions, and BS5837 guidance ensuring that retained trees are safeguarded before, during, and after construction. All measures are designed to prevent direct or indirect damage, or other adverse impacts, providing long-term protection for retained trees and ensuring that the development is sympathetic to the existing treescape.



APPENDIX A – TREE SCHEDULE

Site: Colnbrook Immigration Centre Car Park, Harmondsworth, West Drayton UB7 0HG

Date: 28 April 2026

* Recommendations are provided based on the initial survey independent of the proposal by default. Recommendations in italics within parentheses relate to works required to facilitate the development as identified by the impact assessment.

Tree no	Species	Height/m	Stem Diameter/mm (no. stems)	Age	Condition		Life Exp / yrs	Canopy Height/m				First Significant Branch Hgt/m	Canopy Spread/m				Comments	Recommendations	Category	Root protection	
					Physiological	Structural		N	E	S	W		N	E	S	W				Radius/m	Area/sqm
T1	Salix caprea (Willow)	9	260(1)	Mature	Fair	Fair	10+	1		3	2.5	1	5	2	2	5	Previously pollarded.	None required at time of inspection.	C1	3.12	30.59
T2	Salix caprea (Willow)	9	280, 140, 120(3)	Mature	Fair	Fair	10+	1		3	2.5	1	5	1	5	1.5	Previously pollarded. Narrow forks with included bark. Stem divides at ground level.	None required at time of inspection.	C1	4.02	50.78
G3	Salix caprea (Willow)	9	140, 130, 130, 120(4)	Mature	Fair	Fair	10+	1		3	2.5	1.5	5	3.5	4	1	Previously pollarded. Narrow forks with included bark. Stem divides at ground level.	None required at time of inspection.	C1	3.12	30.59
T4	Fraxinus excelsior (Ash)	10	140(1)	Semi Mature	Fair	Fair	10+	8	8	8	8	1.5	1	1	2	2	No significant defects noted. Minor dead wood <50mm.	None required at time of inspection.	C1	1.68	8.87
T5	Fraxinus excelsior (Ash)	12	180(1)	Semi Mature	Fair	Fair	10+	8	10	8	6	4.5(NW)	2	1.5	2	2.5	No significant defects noted. Minor dead wood <50mm.	None required at time of inspection.	C1	2.16	14.66
T6	Acer campestre (Field Maple)	10	260(1)	Semi Mature	Fair	Fair	10+	8	10	8	6	4.5(NW)	6	2	1.5	6	Animal Damage. Minor dead wood <50mm.(squirrel)	None required at time of inspection.	C1	3.12	30.59
G7	Acer campestre (Field Maple),Populus species (Poplar),Betula pendula (Birch),Quercus robur (Pedunculate Oak),Acer pseudoplatanus (Sycamore)	10	200-300(1)	Semi Mature	Fair	Fair	10+	8	10	8	6	4.5(NW)	6	2	1.5	6	Ash dieback. Animal Damage. Foliage/bud density thin. Minor dead wood <50mm.(squirrel)	None required at time of inspection.	C1	2.4	18.1
T8	Betula pendula (Birch)	13	210(1)	Semi Mature	Fair	Fair	10+	2	2	2	4	3(N)	2	2.5	3	2	No significant defects noted.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	2.52	19.95



Tree no	Species	Height/m	Stem Diameter/mm (no. stems)	Age	Condition		Life Exp / yrs	Canopy Height/m				First Significant Branch Hgt/m	Canopy Spread/m				Comments	Recommendations	Category	Root protection	
					Physiological	Structural		N	E	S	W		N	E	S	W				Radius/m	Area/sqm
T9	Betula pendula (Birch)	12	130(1)	Semi Mature	Fair	Fair	10+	3	2	2.5	3	3(N)	1	1.5	1.5	1.5	No significant defects noted.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	1.56	7.65
T10	Betula pendula (Birch)	4	100(1)	Semi Mature	Fair	Fair	10+	3	2	2	3	3(N)	1.5	2	1.5	1	No significant defects noted.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	C1	1.2	4.52
T11	Betula pendula (Birch)	4	100(1)	Semi Mature	Fair	Fair	10+	2	2.5		2	3(N)	1.5	2	1	1.5	Cavity in stem.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	C1	1.2	4.52
T12	Betula pendula (Birch)	13	280(1)	Semi Mature	Fair	Fair	10+	2	4	2	4	3(S)	3.5	3	3.5	2.5	Hanging broken branch.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	3.36	35.47
T13	Betula pendula (Birch)	7	100(1)	Semi Mature	Fair	Fair	10+	2	3	3.5	2	3(NW)	1.5	1.5	1.5	1.5	No significant defects noted.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	C1	1.2	4.52
T14	Betula pendula (Birch)	7	110(1)	Semi Mature	Fair	Fair	10+	2	2	2	2	3(NW)	2	2	2	1.5	No significant defects noted.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	C1	1.32	5.47
T15	Betula pendula (Birch)	9	140(1)	Semi Mature	Fair	Fair	10+	3	2	1.5	2.5	3(NW)	2	2	2	2	No significant defects noted.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	1.68	8.87
T16	Betula pendula (Birch)	10	180(1)	Semi Mature	Fair	Fair	10+	2.5	3	3	3	3(NW)	2.5	2.5	2	2.5	No significant defects noted.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	2.16	14.66
T17	Betula pendula (Birch)	15	220(1)	Semi Mature	Fair	Fair	10+	3	4		3	3(N)	3	3	2	2.5	No significant defects noted.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	2.64	21.9
T18	Betula pendula (Birch)	14	270(1)	Semi Mature	Fair	Fair	10+	2	4	2	2.5	3(N)	3	4	2.5	3	No significant defects noted.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	3.24	32.98
T19	Betula pendula (Birch)	16	270(1)	Semi Mature	Fair	Fair	10+	2	4	2	2.5	3(N)	2.5	2.5	3	3	Hanging broken branch.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	3.24	32.98
T20	Betula pendula (Birch)	7	130(1)	Semi Mature	Fair	Fair	10+	3.5	2.5	3	2.5	3(N)	2	2	2	1.5	Hanging broken branch.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	C1	1.56	7.65
T21	Betula pendula (Birch)	9	180(1)	Semi Mature	Fair	Fair	10+	3.5	3.5	4	3	3.5(NW)	3	2	3	2.5	No significant defects noted. Dense Ivy.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	C1	2.16	14.66
T22	Betula pendula (Birch)	10	210(1)	Semi Mature	Fair	Fair	10+	3	3	4	2	3(N)	3	3.5	2	3	No significant defects noted.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	2.52	19.95
T23	Carpinus betulus (Hornbeam)	10	210(1)	Semi Mature	Fair	Fair	10+	3.5	2.5	2	3	2(S)	3	3	3	3	No significant defects noted.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	2.52	19.95
T24	Betula pendula (Birch)	17	280(1)	Semi Mature	Fair	Fair	10+	4	4	3	3	2(S)	4	2.5	4	2	No significant defects noted.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	3.36	35.47
T25	Betula pendula (Birch)	16	280(1)	Semi Mature	Fair	Fair	10+	4	4	3	3	2(S)	3	3.5	3	3	No significant defects noted. Dense Ivy.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	3.36	35.47
T26	Betula pendula (Birch)	16	250(1)	Semi Mature	Fair	Fair	10+	4	4	3	3	2(S)	2.5	2.5	2.5	2.5	No significant defects noted. Dense Ivy.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	3	28.28
T27	Betula pendula (Birch)	16	300(1)	Semi Mature	Fair	Fair	<10	3	5	3.5	3	2(S)	3	2	3	3	Narrow forks with included bark.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	C1	3.6	40.72



Tree no	Species	Height/m	Stem Diameter/mm (no. stems)	Age	Condition		Life Exp / yrs	Canopy Height/m				First Significant Branch Hgt/m	Canopy Spread/m				Comments	Recommendations	Category	Root protection	
					Physiological	Structural		N	E	S	W		N	E	S	W				Radius/m	Area/sqm
T28	Betula pendula (Birch)	18	300(1)	Semi Mature	Fair	Fair	<10	3.5	4	4.5	2	2(S)	3	3	3	2	No significant defects noted.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	3.6	40.72
T29	Betula pendula (Birch)	13	230(1)	Semi Mature	Fair	Fair	10+	3	3	3	4	2(S)	3	2.5	3	2	Dense Ivy. Foliage/bud density thin.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	C1	2.76	23.93
T30	Betula pendula (Birch)	11	210(1)	Semi Mature	Fair	Fair	10+	4	3.5	3	2.5	2(S)	2.5	3	2.5	3.5	Dense Ivy. Foliage/bud density thin.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	C1	2.52	19.95
T31	Betula pendula (Birch)	14	350(1)	Semi Mature	Fair	Fair	10+	4	5	2	4	2(S)	4	2	2.5	2	Dense Ivy.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	4.2	55.42
T32	Betula pendula (Birch)	14	320(1)	Semi Mature	Fair	Fair	10+	3	3	4	2.5	2(S)	4	2	3	3.5	Dense Ivy. Foliage/bud density thin.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	3.84	46.33
T33	Populus species (Poplar)	14	380(1)	Early Mature	Fair	Fair	10+	3	3	4	2.5	2(S)	6	4	6	5	Dense Ivy. Foliage/bud density thin.	None required at time of inspection. <i>*(Remove to facilitate the proposal)</i>	B2	4.56	65.33
	Fraxinus excelsior (Ash)	15	140(1)	Early Mature	Fair	Fair	10+				5	2(S)	2	1	1	1.5		None required at time of inspection.	C1	1.68	8.87
	Quercus robur (Pedunculate Oak)	15	130(1)	Early Mature	Fair	Fair	10+				5	2(S)	2	1	1	2		None required at time of inspection.	C1	1.56	7.65
	Fraxinus excelsior (Ash)	15	180(1)	Early Mature	Fair	Fair	10+				5	2(S)	2	1	1	1.5		None required at time of inspection.	C1	2.16	14.66
T34	Populus species (Poplar)	18	310(1)	Early Mature	Fair	Fair	10+				12	8(S)	4	2	4.5	5.5	Dense Ivy. Foliage/bud density thin.	None required at time of inspection.	B2	3.72	43.48
T35	Populus species (Poplar)	18	420(1)	Early Mature	Fair	Fair	10+				10	8(N)	6	5	2	3	Dense Ivy.	None required at time of inspection.	B2	5.04	79.81
T36	Fraxinus excelsior (Ash)	15	180(1)	Early Mature	Fair	Fair	10+				5	2(S)	2.5	2	2	2		None required at time of inspection.	C1	2.16	14.66
G37	Fraxinus excelsior (Ash), Quercus robur (Pedunculate Oak)	15	180(3)	Early Mature	Fair	Fair	10+				5	2(S)	2	1	1	1.5		None required at time of inspection.	C1	3.74	43.95
37.1	Quercus robur (Pedunculate Oak)	15	130(1)	Early Mature	Fair	Fair	10+				5	2(S)	2	1	1	2		None required at time of inspection.	C1	1.56	7.65
37.2	Fraxinus excelsior (Ash)	15	180(1)	Early Mature	Fair	Fair	10+				5	2(S)	2	1	1	1.5		None required at time of inspection.	C1	2.16	14.66



Tree no	Species	Height/m	Stem Diameter/mm (no. stems)	Age	Condition		Life Exp / yrs	Canopy Height/m				First Significant Branch Hgt/m	Canopy Spread/m				Comments	Recommendations	Category	Root protection	
					Physiological	Structural		N	E	S	W		N	E	S	W				Radius/m	Area/sqm
37.3	Fraxinus excelsior (Ash), Quercus robur (Pedunculate Oak)	15	140(3)	Early Mature	Fair	Fair	10+				5	2(S)	2	1	1	1.5		None required at time of inspection.	C1	2.9	26.42
G38	Various group	24	up to 600mm	Mature	Fair	Fair	10+										Off site. Ivy or climbing plants. Major dead wood >50mm. Minor dead wood <50mm.	None required at time of inspection. <i>*(Remove section overlying proposed new parking area)</i>	C1	-	-



Key

1. Tree Ref No:

This relates to the numbers on the plan. Where trees have been tagged, the tag number will be used as the tree reference number. Individual trees are not prefixed and prefixed with a G, W or H represent a group, woodland or hedge respectively.

2. Species:

The name given is the Latin name by default. Where common names are given they are shown in parentheses.

3. DBH (Diameter at breast height):

This is the stem diameter at 1.5 metres (breast height) above ground level, given in millimetres. Where trees are multi-stemmed trees the square root of the combined stem diameter is calculated.

4. H (Height):

The height of the tree measured where possible or estimated and recorded in metres.

5. Canopy Spread (Crown radius):

The average crown spread taken from the centre of the trunk to the tips of the live lateral branches given in metres. Measurements following the compass points North, East, South and West.

6. Canopy height:

Ave - Average Crown Height Clearance: (HaB Height above ground) — ground clearance of the canopy for each cardinal point given in metres.

7. First significant branch

The height of the first significant branch the direction of which is shown in parentheses.

8. Age:

Age assessment is based on growth stages rather than actual age in years and are recorded as follows

Y Young



SM Semi Mature – having reached up to 1/3 life expectancy

EM Early mature - having reached 1/3 of the expected life expectancy and is transitioning into maturity.

M Mature - over 2/3 life expectancy

OM Over-mature - fully mature, past peak condition and beginning to decline

V Veteran - trees of interest biologically, aesthetically or culturally because of significant age.

9. Condition

Physiological – Assessment of the overall health and vigour of the tree compared to what would normally be considered typical of a healthy tree of the species.

Condition categories are given as good, fair, poor or dead.

Structural – Assessment of the structural stability of the tree based on visible signs of decay, damage, genetic weaknesses or faults. Structural categories are given as good, fair, poor or dead

10. Life Expectancy:

An estimate of the potential worthwhile remaining contribution – future life expectancy of the tree(s) in the present setting given normal circumstances, given in years (< = less than > = greater than) categorised <10 years, 10 – 20 years, 20 – 40 years and > 40 years.

11. Category:

A quality assessment of the trees based on criteria detailed in BS5837:2012 Table 1

U: Trees unsuitable for retention

A: Those of high quality and value

B: Those of moderate quality and value

C: Those of low quality and value

Assessments are based on their condition on the day of inspection and cannot account for future changes in circumstances.

12. Recommendations:

Preliminary management recommendations in relation to the proposed



development are made where appropriate. These may include remedial tree works that are deemed necessary to improve the quality of the tree or for safety reasons. Recommended tree works will be required to be in accordance with British Standard 3998:2010 Tree Work.

13. Root Protection

Radius – nominal circle centred at the stem centre providing the recommended radius of a circular area necessary for the continue wellbeing of the tree based on recommendations provided in British Standard 5837:2012

Area – The area necessary for the continue wellbeing of the tree based on recommendations provided in British Standard 5837:2012



Table 1

Category and definition	Criteria			Identification on plan
Category U Those in such a condition that cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to the health and/or safety of other trees nearby or very low quality trees suppressing adjacent trees of better quality <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve</i>			DARK RED
TREES TO BE CONSIDERED FOR RETENTION				
Category and definition	Criteria — Subcategories			Identification on plan
	1 Mainly arboricultural values	2 Mainly landscape values	3 Mainly cultural values, including conservation	
Category A Tree of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	LIGHT GREEN
Category B. Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of remediable defects including unsympathetic past management and minor storm damage) such that they are unlikely to be suitable for retention beyond 40 years; of trees lacking the special quality necessary to merit A categorisation	Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi-formal arboricultural features (e.g. trees of moderate quality within an avenue that includes better, A category specimens), or trees situated mainly internally to the site, therefore individually having little visual impact on the wider locality	Trees with material conservation or other cultural benefits	MID BLUE
Category C. Trees of low quality with an estimated life expectancy of at least 10 years, or younger trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit	Trees with very limited conservation or other cultural benefits	GREY
	NOTE Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150 mm should be considered for relocation			



Appendix B – Generic information

TREE SURVEY

Scope and Limitations of Survey

1. This survey and report are concerned with the arboricultural aspects of the site only.
2. Only trees of significant stature were surveyed. Trees with a stem diameter of less than 75mm when measured at 1.5m above ground level (DBH) have been excluded unless they have particular merit that warrants comment.
3. The survey is restricted to trees that will be affected by the development within and adjacent to the site in accordance with guidelines detailed in British Standard 5837:2012 and with good practice as promoted by the Arboricultural Association and Arboricultural and Forestry Advisory Group (AFAG).
4. This survey is based on a ground level tree assessment and examination of external features only — described as the 'Visual Tree Assessment' (Mattheck and Breloer, The Body Language of Trees, DoE booklet Research for Amenity Trees No. 4, 1994). Although the structural conditions of the trees are considered and remedial action may be recommended it does not constitute a comprehensive Health and Safety report and if one is required it should be commissioned separately. No tissue samples were taken or internal investigations carried out.
5. No soil samples were taken or soil analyses carried out and the risk of tree-related subsidence to structures has not been assessed.
6. Consideration should be given to the timing of the proposed tree works to avoid the active growing period of trees. Tree work should ideally be carried out during the dormant period from November through to February and then again from June to August.
7. Although considered and wildlife habitat potential highlighted, no specific wildlife assessment has been carried out. It should be noted that The Wildlife and Countryside Act 1981, as amended by the Countryside Rights of Way Act 2000 and Conservation - Natural Habitats -Regulations 1994 provides statutory



protection to birds, bats and other species that inhabit trees.

8. This report should be read in conjunction with the Tree Protection Plan. The position of all trees and existing or proposed features are based on the plans provided by the client or other instructed professionals. Where trees have been omitted from the plans provided their position has been estimated or where possible plotted by triangulation.

Survey Method

1. In order to provide a systematic and consistent evaluation of the trees situated on the site, the following methodology was used in accordance with BS 5837: 2012.
2. The stem diameters of single stemmed trees were measured in millimetres at 1.5m above ground level (DBH). Multi-stemmed trees were measured at 1.5m above ground level and the RPA arrived at as per section 4.6a BS 5837:2012.
3. The height of visible trees was measured using a clinometer and estimated visually where view to the upper canopy obstructed.
4. The crown radii were measured where possible or estimated where access is restricted and are given for each cardinal point.
5. Where access to trees was obstructed or obscured, dimensions have been estimated.
6. Each tree has been assessed in terms of its arboricultural, landscape, cultural and conservation values in accordance with BS 5837: 2012 which are detailed in the Tree Schedule.



APPENDIX C – BARRIER INFORMATION

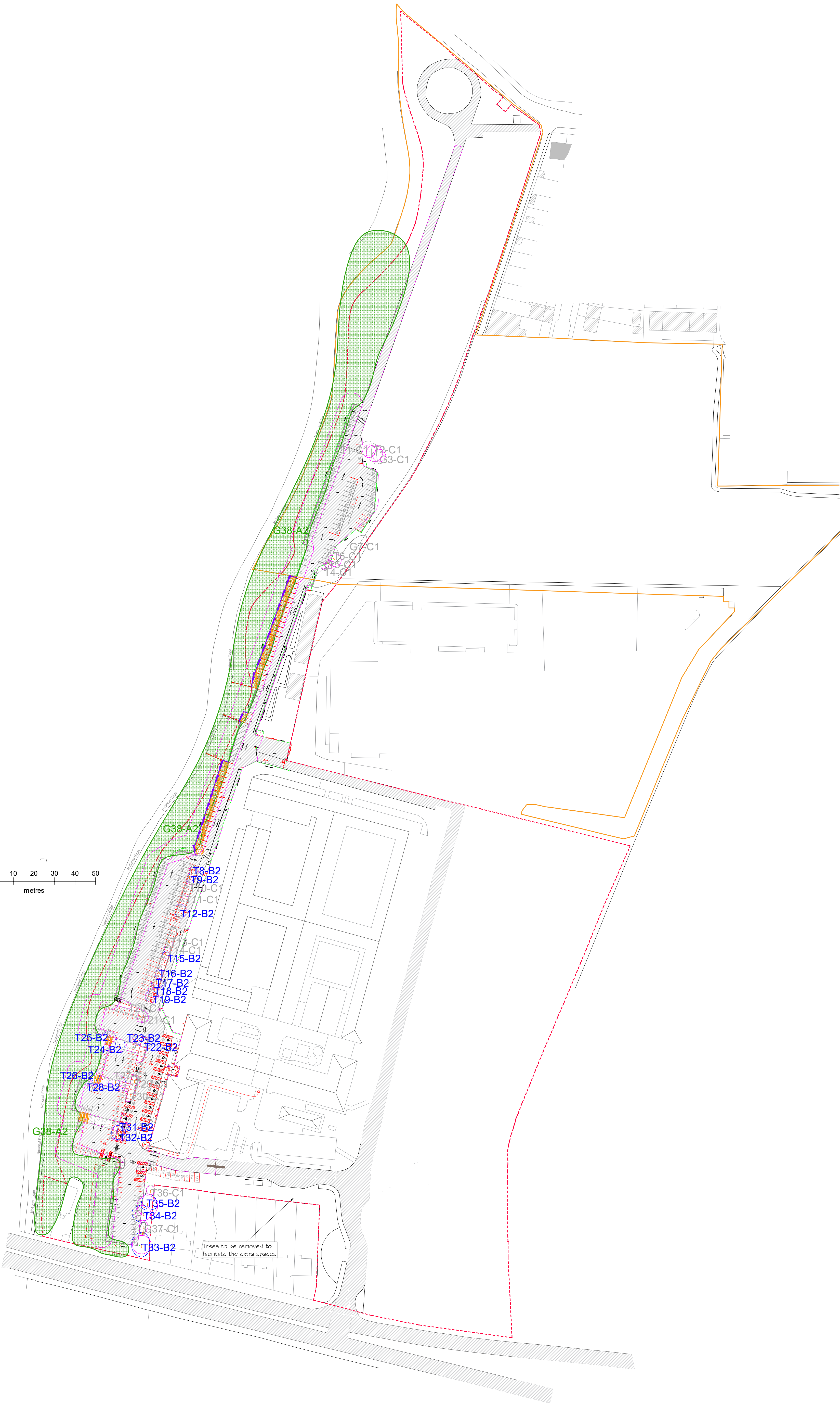
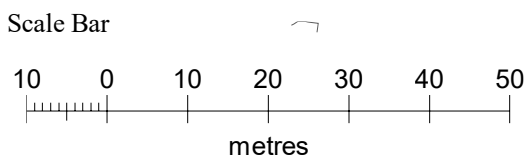
Additional examples of suitable signage





REFERENCES

- BRE. (1991). *Site Layout Planning For Daylight and Sunlight - A guide to good practice*. Construction Research Communications Ltd.
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- Lonsdale, D. (2001). *Principles of Tree Hazard Assessment and Management*. London: HMSO.
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- Wildlife and Countryside Act. (1981). London: HMSO.



Legend

Category A trees - Trees of high quality and value such that they make a substantial existing and future contribution for an expected 40 years or more.

Category B trees - Trees of moderate quality and value such that they make a significant future contribution for an expected 20 years or more.

Category C trees - Trees of low quality and value which might be expected to remain for around 10 years or less or with stems of less than 150 mm diameter.

Category U trees - Trees of low quality and value which are considered to have little or no potential due to disease or defects.

Number suffixes relate to the subcategories 1, 2 and 3 which are intended to reflect arboricultural, landscape and cultural values respectively.

Direction of the first significant branch

The root protection area is the theoretical area considered necessary to provide sufficient room for the root growth required to support the tree - activity impacting the soil should be avoided.

The construction exclusion zone (CEZ) is the area within the root protection area. Access into this area should be prohibited for the duration of the project unless suitably protected to prevent any construction activities including storage.

Permanent ground protection provides protection to roots and underlying soil within the RPA's of retained trees during and subsequent to the development.

Existing Tarmac

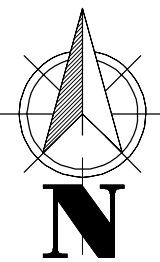
New Tarmac

Barrier fence to be installed as per BS5837, section 6, Figure 3.

Figure 3 BS 5837 : 2012 - Default Specification for Protective Barrier

Proposals

Trees to be removed to facilitate the development (dashed line of category colour)



CLIENT	360 Design				
SITE	Heathrow Immigration Centre				
DRAWING	Title Tree Protection Plan				
	Version	0.1		Revision	A
Base plan ref.		FOR-ISSUE-300776-360DS-CP-GF-DR-A-EX-TP			
DRAWING NO.	754-2229-5/1/2026 TPP				
SCALE	1:200 @ A2				
DATE	24 August 2026				
DRAWN BY	M.Harrison				
Harrison Arboriculture Ltd.					
					
Telephone - 07915 847 367					
email: admin@harrisonarboriculture.co.uk					