



Arboricultural Impact Assessment & Preliminary Method Statement

Land to the north-east of Junction 11
of the M40,
Banbury,
Oxfordshire.

21st January 2019

PJC ref: 5092/19/01

This report has been prepared by

PJC Consultancy Ltd

on behalf of

Monte Blackburn Ltd

**Prepared
by**

Luke White FdSc Arboriculture M.Arbor.A

Luke is an arboriculturist with over seven years experience working within the arboricultural and forestry industry with the latter four years working within consultancy. He gained a foundation degree in arboriculture with distinction from the University of Brighton in 2012 and is a professional member of the Arboricultural Association.

**Checked
by**

Nick Betts HND For M.Arbor.A

Nick has attained an HND in forestry management and is a professional member of both the Arboricultural Association and the Consulting Arborists Society. He has worked in the arboricultural and forestry industries for 17 years. He started his career as a forestry worker before qualifying as a tree surgeon, working in both the private and commercial sectors. He has been a practising consultant since 2004. He is a Lantra accredited professional tree inspector.

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1 SUMMARY

1.1 This report should be read in conjunction with arboricultural survey ref. PJC/3627AO/17/01.

Site location: The site is situated directly north east of Junction 11 of the M40 motorway approximately 2.5km north east of central Banbury, more broadly within the County of Oxfordshire. The site has a central OS grid reference of SP 47094 42288. The surrounding land use is comprised of farmland to the north, east and south with the M40 motorway bordering the site to the west with commercial buildings beyond. The location of the site within its environs is shown in figure 1.



Figure 1: Location of Site and Environs

1.2 **Proposal:** A hybrid application is proposed, comprising; Part A: Full planning application for the development of a new priority junction to the A361, internal roads and associated landscaping with 2 no. commercial buildings having a maximum floorspace of 33,110m² and with a flexible use [to enable changes in accordance with Part 6 Class V of the Town and Country Planning (General Permitted Development) Order 2015 (as amended)] within Class B2 or B8 of the Town and Country Planning (Use Classes) Order 1987 as amended, and ancillary Class B1 offices; and

Part B: Outline planning application for the development of up to 2 no. commercial buildings having a maximum floorspace of 16,890m² and having a flexible use [to enable changes in accordance with Part 6 Class V of the Town and Country Planning (General Permitted Development) Order 2015 (as amended)] within Class B2 or B8 of the Town and Country Planning (Use Classes) Order 1987 as amended, and ancillary Class B1 offices, with all other matters reserved for future approval.

1.3 **Tree removals:** With the exception of category C tree groups G3 and G4, all arboricultural features will require removal in order to facilitate the proposed construction works. The loss of trees as a direct result of the proposals will be mitigated through a robust tree and shrub planting strategy to be implemented during the soft landscaping phase of development.

1.4 **Access facilitation pruning:** Based on information made available at the time of this report, no retained tree will require crown pruning in order to facilitate the proposed construction works.

1.5 **Works within root protection areas:** All proposed construction works have been positioned to avoid the root protection areas of retained trees. Provided the exclusion zones and methodologies described in the arboricultural method statement and Tree Protection Plan are followed, trees proposed for retention should not be adversely affected by the construction works.

2 INTRODUCTION

2.1 **Instruction:** PJC Consultancy has been instructed by Monte Blackburn Ltd to provide an arboricultural impact assessment and arboricultural method statement for proposed construction works at land to the north-east of Junction 11 of the M40, Banbury, Oxfordshire. A hybrid application is proposed, comprising; Part A: Full planning application for the development of a new priority junction to the A361, internal roads and associated landscaping with 2 no. commercial buildings having a maximum floorspace of 33,110m² and with a flexible use [to enable changes in accordance with Part 6 Class V of the Town and Country Planning (General Permitted Development) Order 2015 (as amended)] within Class B2 or B8 of the Town and Country Planning (Use Classes) Order 1987 as amended, and ancillary Class B1 offices; and

Part B: Outline planning application for the development of up to 2 no. commercial buildings having a maximum floorspace of 16,890m² and having a flexible use [to enable changes in accordance with Part 6 Class V of the Town and Country Planning (General Permitted Development) Order 2015 (as amended)] within Class B2 or B8 of the Town and Country Planning (Use Classes) Order 1987 as amended, and ancillary Class B1 offices, with all other matters reserved for future approval.

2.2 **Brief:** PJC Consultancy has been commissioned to compile an arboricultural impact assessment and arboricultural method statement in accordance with guidelines set out in BS5837: 2012 '*Trees in relation to design, demolition and construction – Recommendations*'.

2.3 **Scope of this report:** This report is concerned with all significant trees located within the site boundary and those located around the curtilage of the site with the potential to impact or be impacted by the proposed development.

2.4 **Contents of report:** This report has been produced to provide a schedule trees to be removed or pruned for the proposed development, as well as to evaluate the implications of the development on retained trees. The report includes the following:

- A schedule of trees to be retained/removed.
- A schedule of access facilitation pruning required for development.
- An assessment of the impact construction works will have on retained trees and mitigation measures to be implemented.
- An assessment of post development pressures on trees.
- Recommendations for post development arboricultural management.
- An arboricultural method statement.
- Tree Constraints Plan and Preliminary Tree Protection Plan.

2.5 **Documents and information provided:** The following documents were provided by the client to produce this report:

- 16.145.019.1 – Proposed Site Plan (*Campbell Driver Partnership*)
- 3568.MP Banbury – Landscape Masterplan (*DEP Landscape Architecture Ltd*)

3 INITIAL TREE SURVEY

3.1 **Site visit:** A site visit was carried out on Tuesday 26th September 2017. The weather conditions at the time were fine and dry and the visibility was good. The initial survey assesses the trees in the context of the existing land use, not in consideration of development proposals. Explanations for the measurements and information collected for each tree are described in arboricultural report ref. PJC/3627AO/17/01.

3.3 **Site layout:** The site consists of arable fields located between the M40 motorway and the A361. Mature hedgerows dissect the site from west to east forming three distinctive fields. Dense scrub is located on the site's eastern boundary and dense tree groups (typical highways planting) borders the site to the south. Mature trees are located sporadically throughout the site within the mature hedgerows.

3.4 **Brief landscape appraisal:** The entire site forms a landscape typical for rural Oxfordshire and provides a continuation of the wider landscape to the north and east. Trees located within the site have significant landscape presence due to the site's low, unvaried topography and its proximity to the motorway. Mature black poplar T1, T2 and G2 can be seen clearly from the north bound M40 carriageway whilst mature pedunculate oak T6 is highly visible from the south bound carriageway. Dense tree and scrub group G1 visually screens the site from the A361 situated directly adjacent to the site's eastern boundary.

3.5 **Statutory tree protection:** Cherwell District Council Planning Department was not available to comment on whether any of the tree on site were covered by a Tree Preservation Order at the time of this report. The site is however not located within a Conservation Area. Any persons proposing to undertake tree works must check the status of these trees with the local authority, and gain necessary consent before works are undertaken. Financial penalties and/or criminal proceedings can result if tree works are carried out on a protected tree without consent. The entirety of the tree is protected, both above and below ground.

3.7 **Tree categorisation summary:** A total of ten individual trees, four tree groups and five hedgerows were surveyed and recorded in the Tree Survey Schedule. Two individual trees were categorised as A due to their high arboricultural value and landscape contribution. Five individual trees, one tree group and one hedgerow were categorised as B and three individual trees, three tree groups and four hedgerows were categorised as C.

Table 1: Tree categorisation summary

Categorisation	Individual tree	Tree group	Hedgerow	Total
A	2	0	0	2
B	5	1	1	7
C	3	3	4	10
U	0	0	0	0
Total	10	4	5	19

3.8 Detailed information for each tree can be viewed in the Tree Survey Schedule in Appendix 2.

4 ARBORICULTURAL IMPACT ASSESSMENT

4.1 **Tree removals:** Trees to be removed for the proposed development are shown with coloured dashed outlines on the Tree Protection Plan in Appendix 1. These include two individual category A trees, five individual category B trees, three individual category C trees, one category B tree group, one category C tree group and five category C hedgerows.

Table 2: Summary of Tree Removals:

Tree No	Species	Category	Reason for removal
G1	Hawthorn Blackthorn	C	Conflicts with proposed landscaping works
T1	Hybrid Black poplar	B	Conflicts with proposed structure
T2	Hybrid Black poplar	A	Conflicts with proposed structure
G2	Hybrid Black poplar	B	Conflicts with proposed structure
H1	Elm, Blackthorn Elder	C	Conflicts with proposed structure
H2	Blackthorn	C	Conflicts with proposed structure
T3	Oak	B	Conflicts with proposed structure
T4	Oak	B	Conflicts with proposed structure and vehicle parking bays
T5	Hawthorn	C	Conflicts with proposed loading area
T6	Oak	B	Conflicts with proposed access road, footway and cycle route
T7	Elm	C	Conflicts with proposed landscaping
T8	Field maple	C	Conflicts with proposed access road
H3	Elm, Blackthorn, Hawthorn	C	Conflicts with proposed parking area
T9	Oak	B	Conflicts with proposed structure and parking area
T10	Oak	A	Conflicts with proposed structure and parking area
H4	Hawthorn, Dogwood, Blackthorn	C	Conflicts with proposed landscaping
H5	Hawthorn	C	Conflicts with proposed access road, parking area and loading bay

4.2 The loss of trees as a direct result of the proposed development will be mitigated through a robust tree and shrub planting strategy to be implemented during the soft landscaping phase of development. New tree and shrub planting will be focused around the sites boundaries with the aim of screening the development from adjacent areas of public access. The number of new trees to be planted will exceed that being removed. This will provide a future net increase of canopy cover across the site.

4.3 **Access facilitation pruning:** Based on information made available at the time of this report, no retained tree will require crown pruning in order to facilitate the proposed construction works. Any additional requirements for access facilitation pruning that cannot

be predicted at this stage in the design process should be discussed at the pre-commencement meeting with the project arboriculturist and agreed with the local authority arboricultural officer.

4.5 Works within root protection areas: All proposed structures, areas of new surfacing and services will be located outside the root protection areas of retained trees. Provided the tree protection measures and construction exclusion zones described in the arboricultural method statement and Tree Protection Plan are followed, trees proposed for retention should not be adversely affected by the construction works.

4.6 Based on the above assessment, trees recommended for retention in this report can be protected during the proposed construction works and successfully integrated into the site post development.

5 ARBORICULTURAL METHOD STATEMENT

5.1 **General requirements:** The arboricultural method statement and Tree Protection Plan shall remain on site for the duration of construction and landscaping works and be available to site operatives at all times. All operatives at the site shall be briefed about tree related factors as part of their site induction.

5.2 Any variation from the methodology described in this method statement shall to be agreed with the local authority arboricultural officer.

5.3 **Initial tree works:** The tree removals shall be carried out as the first stage of development.

5.4 Tree stumps and vegetation located within the root protection areas of retained trees shall be cleared with controlled hand tools (e.g. stump grinder/brush cutter). Plant machinery shall not be used to scrape vegetation within root protection areas or access the site until the tree protection barriers have been installed.

5.5 If bonfires are lit to dispose of arising's from the vegetation or tree clearance works, an assessment of wind direction and strength shall be made to ensure flames cannot extend within 5m of any part of a retained tree. No bonfires shall be lit within a root protection area.

5.6 Trees should be checked for protected species before works are undertaken. It is against the law to disturb bats or their roosts under the Conservation of Habitat and Species Regulations. Nesting birds are protected by the Wildlife and Countryside Act. If protected species are discovered, Natural England should be contacted for advice.

5.7 The tree works contractors should carry out all tree works to BS3998: 2010 '*Tree works – recommendations*' as modified by research that is more recent. They should also carry relevant, adequate and up to date insurance.

5.8 It is recommended that an Arboricultural Association approved contractor carry out all tree works. Approved contractors are expected to work to industry best standards. The Arboricultural Association website contains contact details and information on engaging a suitable contractor.

5.9 **Tree protection barriers:** The root protection areas of retained trees must be left free from disturbance, and protected from contamination or compaction during the proposed works. Protection shall comprise of tree protection fencing.

5.10 Tree protection fencing shall be installed in the locations shown on the Tree Protection Plan. The specification for tree protection fencing shall be metal welded mesh panels (e.g. Heras panels), in concrete or rubber feet. The panels shall be supported by metal stabiliser struts mounted on either a base plate secured by ground pins, or in a block tray (refer to Appendix 5). Any variation from this specification for tree protection fencing shall be discussed with the project arboriculturist and agreed in writing with the local authority arboricultural officer.

5.11 Signs shall be affixed to the fencing as shown in Appendix 6 to explain its purpose. The signs shall be affixed at a reasonable size and frequency to ensure they are easily visible to operatives at the site.

5.12 Tree protection barriers shall be installed following the initial tree works, prior to construction traffic entering the site. They shall remain in place for the duration of construction and hard landscaping works unless otherwise stated in this report.

5.13 The areas protected by fencing or ground protection shall be referred to as the construction exclusion zones. The following actions shall be prohibited within the construction exclusion zones:

- Vehicular access unless on suitable ground protection.
- Storage of construction materials.
- Regular pedestrian access unless on suitable ground protection.
- Storage or handling of harmful chemicals.
- Any change in ground level unless otherwise stated in this report or under supervision of project arboriculturist.
- Construction activities including hard surfacing unless otherwise stated in this report.

5.14 **Storage and handling of harmful chemicals:** Provision needs to be made to avoid the storage and handling of harmful chemicals in proximity to trees. Harmful chemicals include fuels, oils, builder's sand (which has a high salt content) and cement. Cement mixing shall only occur where there is no potential for cement washings to leech into a root protection area. Provision shall also be made to prevent fuelling or the handling of cement from occurring in areas proposed for further planting.

5.15 **Contractor facilities:** A suitable location for site cabins, contractor parking and site facilities for operatives shall be agreed with the project arboriculturist during a pre-commencement meeting. These facilities should be located outside the root protection areas of retained trees (unless on retained tarmac surfaces). Provision must also be taken to prevent exhaust fumes or hot air from generators or kitchen facilities from damaging the canopies of retained trees.

5.16 **Soft landscaping within root protection areas:** New soft landscaping within the root protection areas of retained trees shall occur as the final phase of development. The detailed specification for soft landscaping is to be confirmed but may include turfing and tree/shrub planting within the root protection areas.

5.17 Where new turf is to be laid within the root protection areas of retained trees, topsoil will likely need to be imported. The existing soil may be lightly tilled by hand but use of rotavators will be prohibited. A maximum increase of 100mm of topsoil may be introduced to avoid suffocating root growth. Care must be taken to prevent soil be piled against tree buttresses or buttress roots. When soil or other materials are transported across the CEZ, scaffold board pathways must be used to prevent compaction of the rooting medium. It should be noted that even light pedestrian use could compact the soil, particularly in wet conditions.

5.18 All planting pits within root protection areas shall be individually hand excavated (no trench planting). Care must be taken to avoid severing or damaging roots with a diameter greater than 25mm.

5.19 **Arboricultural supervision:** Arboricultural supervision will be required for the following stages of development:

- A pre-commencement meeting with the contractors to clarify the tree protection methodology, to ensure the tree protection barriers are installed in the correct locations/specification and to agree locations for contractor facilities. The local authority arboricultural officer shall be given reasonable notice of the pre-commencement meeting so they may attend if it is deemed necessary.

5.20 The site manager shall provide a monthly update to the project arboriculturist including photographic evidence that the tree protection barriers are intact and that the construction exclusion zones have been observed.

5.21 If significant root growth is disturbed during construction activities that are not within the scope of this report, the work shall cease until the project arboriculturist has been consulted. Roots greater than 25mm in diameter or dense/matted fibrous roots shall be considered significant root growth. It should be remembered that whilst root protection areas are part of industry best practice, tree root growth is influenced by a number of factors and may not conform to expected ideals.

5.22 If at anytime during the construction process, damage is inadvertently caused to a tree, the project arboriculturist shall be notified to assess the likely implications and to prescribe potential remedial measures to be implemented. Damage can be in the form of chemical or fuel spillage, mechanical damage to either the above ground parts of the tree or the roots, fire or any other unforeseen circumstance.

5.23 The supervising arboriculturist shall be agreed with the LPA. It will be necessary for the arboriculturist to report to the LPA on the outcome of the site visits as well as well as any unforeseen tree related issues.

6 OTHER CONSIDERATIONS

6.1 Trees should be checked for protected species before works are undertaken. It is against the law to disturb bats or their roosts under the Conservation of Habitat and Species Regulations. Nesting birds are protected by the Wildlife and Countryside Act. If protected species are discovered, Natural England should be contacted for advice.

6.2 The tree works contractors should carry out all tree works to BS3998: 2010 '*Tree works – recommendations*', as modified by research that is more recent. They should also carry relevant, adequate and up to date insurance.

6.3 It is also recommended that all tree works be carried out by an Arboricultural Association approved contractor. Approved contractors are expected to work to industry best standards, and the Arboricultural Association website contains contact details and information on engaging a suitable contractor.

6.4 The trees at this site were assessed for their condition and safety in relation to the average range of weather conditions that the region experiences. Any weather events that exceed the average norm cannot be predicted, and so their effects are not considered within this report.

6.5 The views and opinions contained within this report are entirely those of the author.

Contact details

Sussex office:

Rocks Yard
Victoria Road
Herstmonceux
East Sussex
BN27 4TQ

Tel: 01323 832120

Kent office:

Unit 1
Hanover Mill
Mersham
Ashford
Kent
TN25 6NU

Tel: 01233 225365

Author: Luke White

Date: 21st January 2019

E-mail: luke@pjconsultancy.com

APPENDIX 1

Tree Constraints Plan



Drawing no: PJC/3627AO/17/A Rev: 01 Sheet number: 1 of 3

Client and site:
Euro Garages Ltd
Land at M40 Junction 11
Banbury
Oxfordshire

Drawing title: Tree Constraints Plan







Date drawn: 03/10/2017

Scale: NTS at A1

Drawn by: LW

Checked by: TK

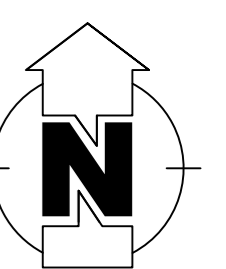
Key:

-  RPA for CAT A Tree*
-  RPA for CAT B Tree*
-  RPA for CAT C Tree*
-  RPA for CAT U Tree*
-  Tree canopy
-  Tree group canopy

* Tree categorised in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.

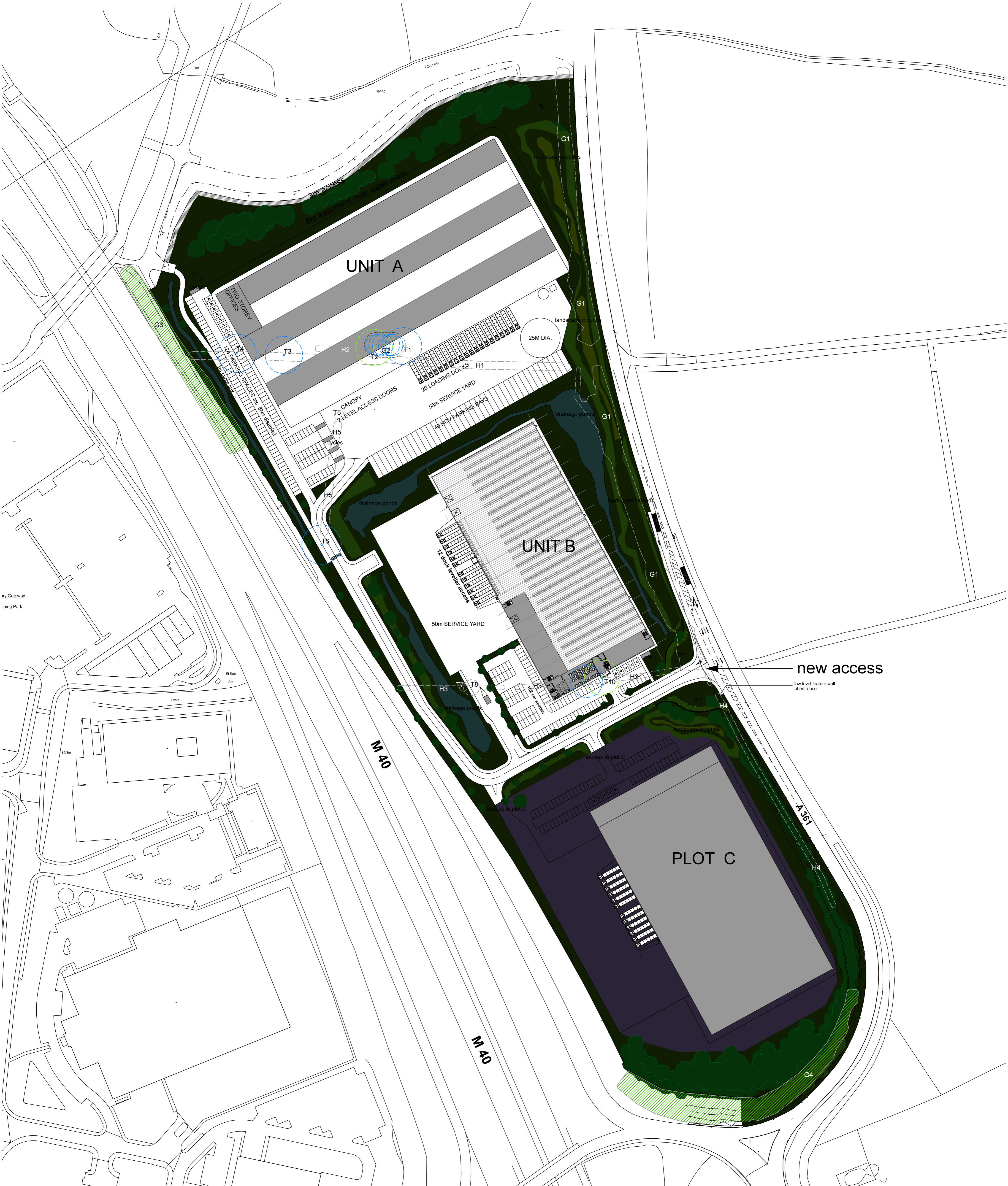
Appendix 2, (Tree Survey Schedule) contained within the arboricultural report ref. no. PJC/3627AO/17/01 contains further information for each tree.

This drawing should be viewed in colour.



APPENDIX 2

Tree Retention / Removal Plan



Drawing no: PJC/5092/19/A Rev: 01 Sheet number: 1 of 1

Client and site:
 Monte Blackburn Ltd
 Land to the north-east of Junction 11 of the M40, Banbury
 Banbury
 Oxfordshire






Drawing title: Tree Retention / Removal Plan

Date drawn: 21/01/2019

Scale: NTS at A1

Drawn by: LW **Checked by:** TK

Key:

-  RPA for CAT C Tree* to be retained
-  Canopy of tree to be retained
-  RPA for CAT A Tree* to be removed
-  RPA for CAT B Tree* to be removed
-  RPA for CAT C Tree* to be removed

** Tree categorised in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.*

Appendix 2, (Tree Survey Schedule) contained within the arboricultural report ref. no. PJC/5092/19/01 contains further information for each tree.

This drawing should be viewed in colour.

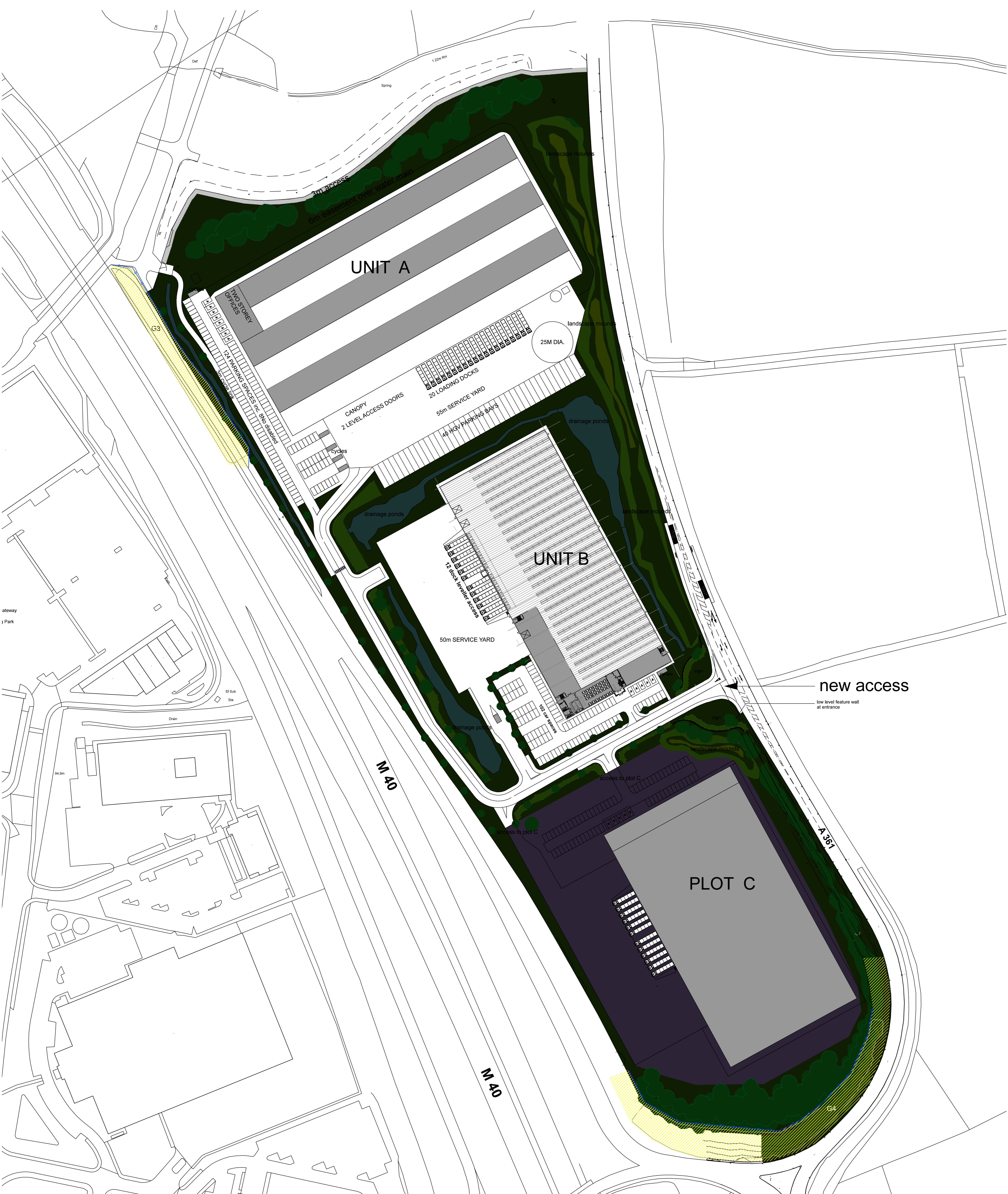


Sussex
 Rocks Yard, Victoria Road, Herstmonceux, Hailsham, East Sussex, BN27 4TQ.
 t: 01323 832120

Kent
 Unit 1, Hanover Mill, Mersham, Ashford, Kent. TN25 6NU.
 t: 01233 225365
 w: www.pjcconsultancy.com

APPENDIX 3

Tree Protection Plan



Drawing no: PJC/5092/19/B **Rev:** 01 **Sheet number:** 1 of 1





Client and site:
 Monte Blackburn Ltd
 Land to the north-east of Junction 11 of the M40, Banbury
 Banbury
 Oxfordshire

Drawing title: Tree Protection Plan

Date drawn: 21/01/2019

Scale: NTS at A1

Drawn by: LW **Checked by:** TK

- Key:**
-  RPA for CAT C Tree* to be retained
 -  Canopy of tree to be retained
 -  Tree protection fencing installed
 -  Construction exclusion zone

* Tree categorised in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.


Appendix 2, (Tree Survey Schedule) contained within the arboricultural report ref. no. PJC/5092/19/01 contains further information for each tree.

This drawing should be viewed in colour.


APPENDIX 4

Tree Survey Schedule


Tree Survey Schedule

				Client: Euro Garages Ltd Site: Land at M40 Junction 11, Banbury, Oxfordshire. Survey date: Tuesday 26th September 2016 Surveyor: Luke White					MS: Multiple stems AV: Average PA: Position approximate		T: Individual tree or shrub G: Group of 2 or more trees H: Hedgerow W: Woodland block		
Tree ref. no.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments and preliminary management recommendations	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)	
G1	hawthorn blackthorn	4 AV	125 AV	N: 2 E: 2 S: 2 W: 2	Crown: 0 AV Branch: 0 AV	Semi mature	Fair	Fair	Linear group situated on boundary. Multistem at ground level. Provides the site screening from adjacent highway. Remove to facilitate development.	C2	7.1	1.5	
T1	hybrid black poplar (<i>Populus x canadensis</i>)	20	970	N: 8 E: 8 S: 8 W: 5	Crown: 3 South Branch: 3 South	Mature	Good	Good	Single stem specimen with well formed crown. Significant landscape presence. Minor deadwood within crown. Remove to facilitate development.	B1+2	426.2	11.6	
T2	hybrid black poplar (<i>Populus x canadensis</i>)	20	960	N: 7 E: 5 S: 8 W: 8	Crown: 1 North Branch: 3 AV	Mature	Good	Good	Single stem specimen with well formed crown structure. No visible evidence of defect. Remove to facilitate development.	A1+2	417.5	11.5	
G2	hybrid black poplar (<i>Populus x canadensis</i>)	18 AV	560 AV	N: 7 E: 3 S: 7 W: 3	Crown: 3 AV Branch: 3 AV	Mature	Good	Good	Linear group of single stem specimens with upright growth habits. Ecological value (bat roosting features) Minor deadwood within crown. Remove to facilitate development.	B1+2+3	142.1	6.7	
H1	elm blackthorn elder	3 AV	210 AV	N: 1.5 E: 1.5 S: 1.5 W: 1.5	Crown: 0 AV Branch: 0 AV	Early mature	Good	Good	Well established hedgerow marking historic boundary. Not subject to recent reduction. Remove to facilitate development.	C2	20.0	2.5	
H2	blackthorn (<i>Prunus spinosa</i>)	3 AV	80 AV	N: 1 E: 1 S: 1 W: 1	Crown: 0 AV Branch: 0 AV	Semi mature	Fair	Fair	Hedgerow appears to have not been subject to regular maintenance. Numerous gaps throughout its length. Remove to facilitate development.	C2	2.9	1.0	


Tree Survey Schedule

				Client: Euro Garages Ltd Site: Land at M40 Junction 11, Banbury, Oxfordshire. Survey date: Tuesday 26th September 2016 Surveyor: Luke White					MS: Multiple stems AV: Average PA: Position approximate		T: Individual tree or shrub G: Group of 2 or more trees H: Hedgerow W: Woodland block		
Tree ref. no.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments and preliminary management recommendations	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)	
T3	pedunculate oak (<i>Quercus robur</i>)	16	980	N: 6 E: 5 S: 7 W: 5	Crown: 4 AV Branch: 3 AV	Over mature	Poor	Fair	Single stem specimen typical crown form for species. Significant folia dieback. Near veteran status with numerous ecological features. Remove to facilitate development.	B1+2+3	435.1	11.8	
T4	pedunculate oak (<i>Quercus robur</i>)	18	1010	N: 7 E: 5 S: 6 W: 5	Crown: 3 AV Branch: 5 AV	Over mature	Poor	Fair	Single stem specimen typical crown form for species. Significant folia dieback. Near veteran status with numerous ecological features. Remove to facilitate development.	B1+2+3	462.1	12.1	
G3	white willow mixed native species	11 AV	330 AV	N: 4 E: 4 S: 4 W: 4	Crown: 2 AV Branch: 2 AV	Mature	Fair	Fair	Linear group of trees located within highways estate. Poor form. Typical for unmaintained specimens. Retain and protect.	C2	49.3	4.0	
T5	hawthorn (<i>Crataegus monogyna</i>)	4	250 MS	N: 1.5 E: 1.5 S: 1.5 W: 1.5	Crown: 0.5 AV Branch: 0.5 AV	Mature	Fair	Fair	Multistem specimen at ground level. Typical form for species. Remove to facilitate development.	C1	28.3	3.0	
T6	pedunculate oak (<i>Quercus robur</i>)	20	1030	N: 6 E: 6 S: 6 W: 6	Crown: 2 AV Branch: 3 AV	Mature	Good	Good	Minor folia dieback evident suggesting crown regression. Ecological features throughout crown. Remove to facilitate development.	B1+2+3	480.6	12.4	
T7 PA	elm (<i>Ulmus procera</i>)	12	210	N: 2 E: 2 S: 2 W: 2	Crown: 4 AV Branch: 2 AV	Early mature	Fair	Fair	Single stem specimen with upright growth habit. Situated within hedgerow. Remove to facilitate development.	C1	20.0	2.5	

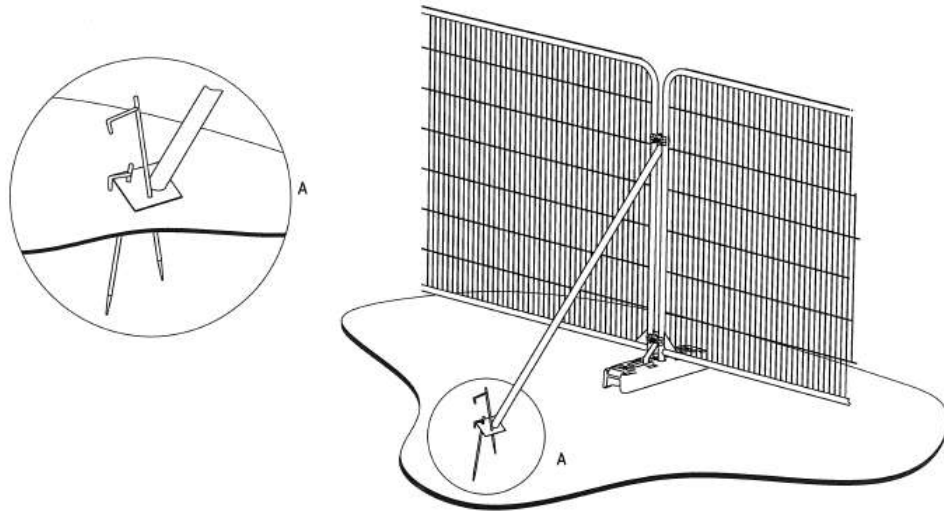
Tree Survey Schedule

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T8	field maple <i>(Acer campestre)</i>	10	420 MS	N: 3 E: 3 S: 3 W: 3	Crown: 2 AV Branch: 2 AV	Mature	Good	Fair	Multistem specimen at ground level. Upright growth habit. Situated in hedgerow. Remove to facilitate development.	C1	79.9	5.0	
H3	elm blackthorn hawthorn	3	125	N: 1.5 E: 1.5 S: 1.5 W: 1.5	Crown: 0 AV Branch: 0 AV	Semi mature	Fair	Fair	Dense hedgerow. Does not appear to have been subject to regular maintenance. Remove to facilitate development.	C2	7.1	1.5	
T9	pedunculate oak <i>(Quercus robur)</i>	14	840	N: 4 E: 5 S: 4 W: 5	Crown: 2 North Branch: 4 AV	Over mature	Poor	Fair	Single stem specimen with typical crown form for species. Significant folia dieback. Ecological features present. Remove to facilitate development.	B1+2+3	319.6	10.1	
T10	pedunculate oak <i>(Quercus robur)</i>	21	925	N: 7 E: 7 S: 7 W: 7	Crown: 3 AV Branch: 3 AV	Mature	Good	Good	Single stem specimen with well formed crown. No visible evidence of defect. Remove to facilitate development.	A1+2	387.6	11.1	
H4	hawthorn dogwood blackthorn	2 AV	124 EST	N: 1.5 E: 1.5 S: 1.5 W: 1.5	Crown: 0 AV Branch: 0 AV	Semi mature	Good	Good	Dense hedgerow. Well maintained. Remove to facilitate development.	C2	7.0	1.5	
G4 PA	mixed native species.	15 AV	250 AV	N: 3 E: 3 S: 3 W: 3	Crown: 1 AV Branch: 1 AV	Mature	Fair	Fair	Linear group of tree located within highways estate. Typical form for species. Retain and protect.	C1+2	28.3	3.0	

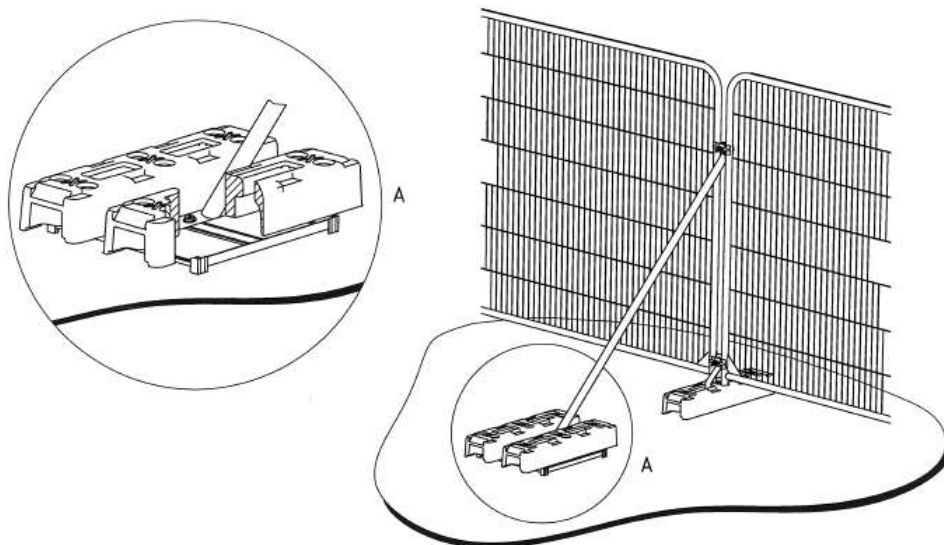
Tree Survey Schedule

				Client: Euro Garages Ltd Site: Land at M40 Junction 11, Banbury, Oxfordshire. Survey date: Tuesday 26th September 2016 Surveyor: Luke White					MS: Multiple stems AV: Average PA: Position approximate		T: Individual tree or shrub G: Group of 2 or more trees H: Hedgerow W: Woodland block		
Tree ref. no.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments and preliminary management recommendations	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)	
H5	hawthorn (<i>Crataegus monogyna</i>)	3 AV	210 AV	N: 1 E: 1 S: 1 W: 1	Crown: 0 AV Branch: 0 AV	Mature	Fair	Good	Well maintained, dense hedgerow. Denotes historic field boundary. Remove to facilitate development.	C1	20.0	2.5	

APPENDIX 5 Tree Protection Fencing Specification



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

APPENDIX 6

Example Protective Fencing Signs

