



Arboricultural assessment & method statement

Ford Market, Ford Airfield, Yapton, West Sussex

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23rd October 2019 18189-AA5-AS

Site location and report purpose

Site location



This aerial image is provided courtesy of Google. The yellow line indicates the approximate site boundary and is illustrative only.

Report purpose

This arboricultural assessment report provides sufficient information for the Local Planning Authority (LPA) to consider the effect of the proposed development on local character from a tree perspective. It is fully compliant with the BS 5837 advice relating to the planning application stage of the process and it meets national standard planning application validation requirements.

More specifically, the development proposal is full planning application for the reconfiguration of Ford Market, including revised market access, hardstanding for replacement vehicular parking and associated infrastructure, landscape, ancillary and site preparation works.

This report includes:

- A **Tree protection plan** illustrating tree locations, categories, the location of the proposed development, and the proposed tree protection measures.
- An **Arboricultural assessment** (section 1 of the report) providing an analysis of the tree issues to assist the LPA in assessing the impact on local character.
- An **Arboricultural method statement** (section 2 of the report) describing how retained trees will be protected and managed during the development activity.
- **Appendices (Appendix 1** –Background administrative information, and data collection; **Appendix 2** – Tree schedule and explanatory notes; and, **Appendix 3** – QR Codes for SGNs).



Site location and report purpose

- A companion document to supplement the main report titled ***Manual for managing trees on development sites (Version 2.1)***, which provides explanations of how retained trees will be managed on site in the form of Site Guidance Notes (SGNs) covering the relevant issues.

1: Arboricultural assessment

1.1 Table 1: Summary of trees affected and protected by the proposal

From my review of the constraints and the proposed layout, my assessment of the impact on trees, both during and after development, and those that need protection using special precautions, is summarised in Table 1:

	British Standard 5837 Category		
	A (High quality)	B (Moderate quality)	C (Low quality)
Remove	None	G83 (part)	H42 (part)
Prune	None	G78 (part), G83 (part)	None
Protect using special precautions See Notes below	None	G78 (part), G83 (part)	None
Post development considerations	None	None	None

T = Tree; H = Hedge; G = Group

Note on types of protection: All retained trees will be protected during development, and only those requiring special precautions to limit the impact of encroachment are listed in Table 1.

1.2 The impact of tree removals on local character

Trees H42 (part), G83 (part)

These trees are well within the site and are not prominent as skyline features from any public viewpoints. Although the group is B category the ones to be removed will be low quality trees with very little potential to contribute to local character because of the large trees to be retained. The significant retained trees will buffer any loss to the extent that there will be no impact on local character.

1.3 The impact of tree pruning on local character

Although trees G78 (part) and G83 (part) will need crown lifting in places to enable the new no dig footpath to be installed, these works fall within the bounds of normal tree management. Such pruning would have no long-term detrimental impact on tree health and, because the profile from public viewpoints would remain unchanged, it will have no significant impact on local character.

1.4 The impact of works in precautionary areas

There will be encroachment into the RPAs of G78(part) and G83 (part) in the form of new no-dig surfacing. I have carefully reviewed the levels in these areas and it would be feasible to install custom designed no-dig specification surfacing without causing any significant disturbance to the RPA. From our previous experience at installing such surfacing (www.barrelltreecare.co.uk/case-studies/SurfacingNearTrees.pdf), I am confident that this can be implemented without any long term detrimental impact on tree health. This surfacing solution is within the advice set out in BS 5837 (8.6) and would be appropriate in this situation. In summary, if the guidance set out in SGN 7 *Excavating in RPAs* and SGN 9 *Installing/upgrading surfacing in RPAs* is observed, I believe that the proposed works can be implemented without any long term detrimental impact on tree health, and therefore local character. All new surfacing must be installed before any construction access to prevent damage to the RPA from the construction activity.

1: Arboricultural assessment

1.5 Post development considerations

My assessment is that there will be no adverse impacts on retained trees once the development is completed.

1.6 New tree planting to enhance local character

New tree planting is feasible as a means of supplementing retained trees and enhancing local character. All new trees will be specified and planted in accordance with the recommendations in BS 8545 (2014) *Trees: from nursery to independence in the landscape –Recommendations*. My preliminary assessment is that there is sufficient space for new trees to be planted in locations where they will have the potential to reach a significant height without excessive inconvenience and be sustainable into the long term, significantly improving the potential of the site to contribute to local character.

1.7 Summary of impact on local character

This proposal will result in the loss of a small number of trees which provide insignificant visual amenity to the locality. Their loss will have no long-term detrimental impact on the present character of the area. All the significant boundary tree cover will remain intact and no high category trees will need to be removed. The matter of adverse impacts on retained trees due to post-development pressures to fell or prune has been considered and I concluded that no further trees will be affected. There is plenty of space for tree planting and a new tree planting scheme is feasible. The size of these new trees and their future growth will significantly enhance the contribution of this site to local character and more than compensate for the loss of existing trees. The construction activity may affect further trees if appropriate protective measures are not taken. However, if adequate precautions to protect the retained trees are specified and implemented through the arboricultural method statement included in this report, the development proposal will have no long-term detrimental impact on tree health or the contribution of trees to character in the wider setting.

For these reasons, I conclude that the proposed development would not cause an unacceptable or adverse impact on the long-term vitality of the retained trees, and therefore the character and appearance of the area. Furthermore, it fully aligns with the broad guidance set out in the National Planning Policy Framework.

2: Arboricultural method statement

2.1 Site Guidance Notes (SGNs)

This section of the report identifies which trees on this site will be protected and managed, and by what means. This site-specific summary is supplemented by more detailed explanations and descriptions of specific operations set out in the accompanying *Manual for managing trees on development sites*. That document is a compilation of 12 individual SGNs addressing the following tree protection and management issues that regularly arise in the construction phase of development:

- SGN 1 *Monitoring tree protection* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn01?stage=Stage>)
- SGN 2 *Fencing protected trees* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn02?stage=Stage>)
- SGN 3 *Ground protection* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn03?stage=Stage>)
- SGN 4 *Pollution control* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn04?stage=Stage>)
- SGN 5 *Site cranes & piling rigs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn05?stage=Stage>)
- SGN 6 *Height restrictions* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn06?stage=Stage>)
- SGN 7 *Excavating in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn07?stage=Stage>)
- SGN 8 *Removing surfacing and structures in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn08?stage=Stage>)
- SGN 9 *Installing/upgrading surfacing in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn09?stage=Stage>)
- SGN 10 *Installing structures in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn10?stage=Stage>)
- SGN 11 *Installing services in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn11?stage=Stage>)
- SGN 12 *Landscaping in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn12?stage=Stage>)

NOTE: Each individual SGN can be downloaded by using the links above and the QR Code links in Appendix 3.

2.2 Identification of areas to be protected

The tree protection plan shows the areas where protective measures are necessary.

2.3 Arboricultural supervision

An arboricultural consultant will be appointed to advise on the tree management for the site and to attend:

- a pre-commencement meeting before any work starts;
- regular supervision visits to oversee the agreed tree protection, as agreed at the pre-commencement meeting; and
- further supervision visits, as necessary, to oversee any unexpected works that could affect trees.

2: Arboricultural method statement

The detail of how the arboricultural supervision will be carried out is explained in SGN 1 *Monitoring tree protection* in the accompanying Manual.

2.4 Table 2: Summary of the site operations requiring arboricultural input

For this site, arboricultural input will be needed for the following operations:

Brief operation summary	Trees affected	Location of detailed explanations
Pre-commencement meeting: Meeting on site with all parties to agree protective measures, as described in SGN 1. <u>Will be carried out before any significant site works begin.</u>	All trees	SGN 1 <i>Monitoring tree protection</i>
Tree felling and pruning: Contractor will carry out agreed works as described in Appendix 2. <u>Will be completed before any significant site works begin.</u>	Fell trees H42 (part), G83 (part) Prune trees G78 (part), G83 (part)	Appendix 2
Pollution control near retained trees: Any pollution control measures identified during risk assessment will be installed as described in SGN 4. <u>Will be completed before any potential pollutants arrive on site.</u>	All trees	SGN 4 <i>Pollution control</i>
Regular arboricultural supervision: Provision will be made to carry out and record agreed arboricultural supervision, as described in SGN 1.	All trees	SGN 1 <i>Monitoring tree protection</i>
Installing/upgrading surfacing in RPAs: These operations will be carried out as described in the SGN 9.	G78 (part), G83 (part)	SGN 9 <i>Installing/upgrading surfacing in RPAs</i>
Installing services in RPAs: These operations will be carried out with care, as described in SGN 11.	All trees	SGN 11 <i>Installing services in RPAs</i>
Landscaping in RPAs: These operations will be carried out with care, as described in SGN 12.	All trees	SGN 12 <i>Landscaping in RPAs</i>
Removing tree protection: <u>Protection can only be removed when there is no risk of damage to retained trees, as described in SGN 1.</u>	All trees	SGN 1 <i>Monitoring tree protection</i>

The operations summarised in this table, and supplemented by the more detailed explanations set out in the SGNs and the rest of this document, form the arboricultural method statement for this site. The Site Manager will ensure that its details and any agreed amendments are known and understood by all site personnel. Copies of the agreed documents will be available on site. All personnel who could have an impact on trees will be briefed on the specific tree protection requirements as part of the site induction procedures. This requirement will be written into the site management documentation.

Appendix 1: Background administrative information and data collection

A1.1 Table 3: Background administrative information

	Background administrative information
Report date & reference	23 rd October 2019; 18189-AA5-AS
Tree protection plan reference	BT6
Instructing client	Barton Willmore
Instructions	Visit the site, assess the relevant trees, prepare a schedule of their details, describe the impact of the proposal on those trees and identify the tree protection issues in an arboricultural method statement with a tree protection plan, if appropriate.
Provided documents	Topographical survey, drawing number WD/1704042/OS, received by email on 7 th June 2018, and layout drawing numbers 23885 RG-M-118 Rev D & RG-M-108 Rev G, received by email on 22 nd October 2019.
Report author and credentials	Andrew Sherlock has taken and passed the LANTRA Professional Tree Inspection course (https://www.lantra.co.uk/awards/product/professional-tree-inspection), is a Chartered Forester (www.charteredforesters.org), and a Fellow of the Arboricultural Association (www.trees.org.uk), and is fully qualified to undertake the assessments in this report (https://www.barrelltreecare.co.uk/who-we-are/).
Report limitations	• We have not checked if there is any statutory protection on the trees because this can delay the production of the report. If any tree works are proposed before a planning consent is given, then the possible existence of any statutory protection must be checked with the LPA. • This report does not consider ecological or archaeological issues, or any other matter beyond the assessment of the trees.
Technical references	In preparing the analysis in this report, we considered the guidance and advice in the following technical references: • Climate Change Act (2008) www.legislation.gov.uk/ukpga/2008/27/contents • Town and Country Planning Act 1990 www.legislation.gov.uk/ukpga/1990/8/contents • National Planning Policy Framework, published by the DCLG www.gov.uk/government/publications/national-planning-policy-framework--2 • BS 5837 (2012) <i>Trees in relation to design, demolition and construction – Recommendations</i>, BSI www.shop.bsigroup.com/ • BS 8545 (2014) <i>Trees: from nursery to independence in the landscape – Recommendations</i>, www.shop.bsigroup.com/ • BS 3998 (2010) <i>Tree work – Recommendations</i>, BSI www.shop.bsigroup.com/ • <i>Trees in the Townscape: A Guide for Decision Makers</i>, published by the Trees & Design Action Group http://www.tdag.org.uk/ • <i>Trees in Hard Landscapes: A Guide for Delivery</i>, published by the Trees & Design Action Group www.tdag.org.uk/ • National Joint Utilities Group (2007) Volume 4, Issue 2: <i>Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees</i> www.njug.org.uk/publications/

Appendix 1: Background administrative information and data collection

A1.2 Table 4: Data collection

	Data collection
Date of site visit	13 th June 2018
People present during site visit	Andrew Sherlock
Weather & visibility	Clear and dry, with good visibility
Limitations to observations	- The inspection of the trees for the purposes of assessing their condition and work requirements was made on the basis that they will be annually inspected in the future to identify any changes in condition and review the original recommendations. For these reasons, the tree assessment advice only remains valid for one year from the date that the trees were last inspected. - All observations were of a preliminary nature and did not involve any climbing or detailed investigation beyond what was visible from accessible points at ground level. - Observations of trees outside the site boundaries are confined to what was visible from within the site. - All dimensions were estimated unless otherwise indicated.
Tree Preservation Orders (TPOs), Conservation Areas, and tree categorisation	TPOs cannot always be reliably interpreted from the documentation to identify which trees are protected, especially as time passes and site conditions change from when they were originally made. It is common for TPO plans to be inaccurate and schedules often become out of date as trees die or are removed. Frequently, trees deteriorate and, although they may be technically protected by the TPO, are in such poor condition or causing such unreasonable inconvenience that their suitability for retention becomes questionable. In a planning context, if poor trees are assessed as unsuitable for retention, then it would be inappropriate to show them as a material constraint in development planning. For these reasons, although TPOs do need to be considered, they do not form the primary basis for tree categorisation. Poor quality trees assessed as not worthy of retention will be shown as such, irrespective of whether they are protected or not. Similarly, good quality trees that are not protected will still be shown as material constraints. The same rationale will be applied to Conservation Areas.
Tree location and numbering	Each tree, hedge, and group, was inspected, and the numbering scheme is indicated on the tree protection plan. Where important trees were found on site that were not included on the provided plan, their approximate positions and canopy extents are indicated on the plan.
Recording of tree data	For each identified tree, hedge, and group, the information collected was recorded on the tree schedule in Appendix 2 and the tree protection plan.
Compliance of data collection with BS 5837	The data collection is fully compliant with the advice in subsection 4.4.2 of BS 5837. When collecting this information, specific consideration was given to any low branches that may influence future use, age class, physiological condition, structural condition, and remaining contribution. Where appropriate, crown spreads were also noted where they differed from those shown on the provided land survey.
Calculation of RPAs	Following the recommendations in Table D1 of BS 5837, the diameter of each tree was rounded up to the next 2.5cm increment, with the radius of a nominal circle and the resultant RPA taken directly from that table. This information is listed for each tree in the tree schedule in Appendix 2.



Appendix 2: Tree schedule and explanatory notes

NOTE: Colour annotation is A & B trees with green background; C & U trees with blue background; trees to be removed in red text.

Tree No	Species	Height (m)	Diameter (cm) @ 1.5m	Maturity	Low Branches	Category	Notes	Tree Works	RPA radius (m)	RPA area (m2)
All retained trees & hedges								Carry out safety check and lift over site to 3-4m as necessary.		
G38	Aspen	18	40	Maturing	-	B	-	-	4.8	72
H39	Leyland cypress	15	40	Maturing	-	B	Good screening value	-	4.8	72
G40	Poplar	18	40	Maturing	-	B	-	-	4.8	72
G41	Poplar	20	40	Maturing	-	B	-	-	4.8	72
H42	Poplar	4	30	Maturing	-	C	Maintained hedge	Fell (part)	3.6	41
T43	Laburnum	5	35	Mature	-	C	-	-	4.2	55
H73	Poplar	3	30	Maturing	-	C	Maintained hedge	-	3.6	41
H74	Leyland cypress	4	20	Maturing	-	C	Maintained hedge	-	2.4	18
G75	Pine, oak, willow, hawthorn, poplar, birch, ash	12	30	Maturing	-	B	-	-	3.6	41
H76	Leyland cypress	4	30	Maturing	-	C	Maintained hedge	-	3.6	41
G77	Ash, willow, hornbeam, alder, birch	10	30	Maturing	-	B	-	-	3.6	41
G78	Poplar	22	50	Maturing	-	B	-	-	6.0	113
G79	Poplar	10	15	Maturing	-	C	-	-	1.8	10
G80	Ash, birch, field maple, hornbeam	10	30	Maturing	-	B	-	-	3.6	41
G81	Poplar	20	45	Maturing	-	B	-	-	5.4	92
G82	Leyland cypress	18	50	Maturing	-	B	Good screen	-	6.0	113
G83	Ash, field maple, hornbeam	10	30	Maturing	-	B	-	Fell (part)	3.6	41

Appendix 2: Tree schedule and explanatory notes

Explanatory Notes

- **Abbreviations:**

G: Group
H: Hedge
T: Tree

- **Botanical tree names:**

Alder	: <i>Alnus glutinosa</i>
Ash	: <i>Fraxinus excelsior</i>
Aspen	: <i>Populus tremula</i>
Birch	: <i>Betula pendula</i>
Field maple	: <i>Acer campestre</i>
Hawthorn	: <i>Crataegus monogyna</i>
Hornbeam	: <i>Carpinus betulus</i>
Laburnum	: <i>Laburnum</i> sp
Leyland cypress	: <i>X Cuprocyparis leylandii</i>
Maple	: <i>Acer</i> sp
Oak	: <i>Quercus robur</i>
Poplar	: <i>Populus</i> sp
Pine	: <i>Pinus</i> sp
Willow	: <i>Salix</i> sp

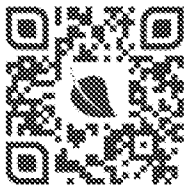
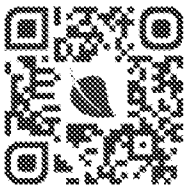
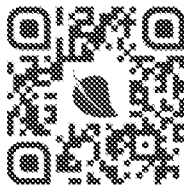
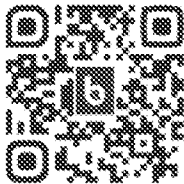
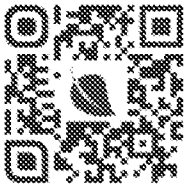
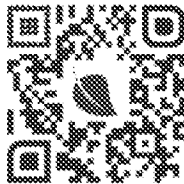
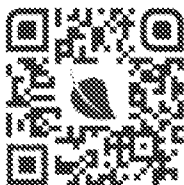
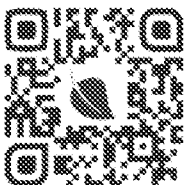
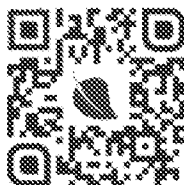
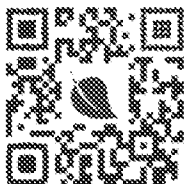
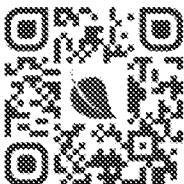
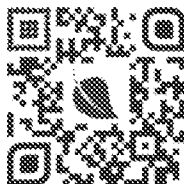
- **BS 5837 (2012) compliance:** All data has been collected based on the recommendations set out in subsection 4.4 of BS 5837.
- **Tree inspections and site limitations:** Each tree was subjected to a quick visual check level of inspection. Where there is restricted access to the base of a tree, its attributes are assessed from the nearest point of access. Climbing inspections are not carried out during this level of inspection and, if heavy ivy is present, tree condition is assessed from what can be seen from the ground. A separate note is recorded if further investigation may be required to clarify its status.
- **Crown spreads:** Crown spread dimensions are not listed in the tree schedule because they are illustrated on the land survey base to all the plans in this document. Where crown spreads of significant trees on site are found to deviate from those shown on the provided land survey, we have noted it in the text of the report and annotated it on our plans.
- **Dimensions:** All dimensions are estimated unless otherwise indicated with an asterisk (*) after the figure.
- **Species:** Species identification is based on visual observations. Where there is some doubt over tree identity, sp is noted after the genus name to indicate that the species cannot be reliably identified at the time of the survey. Where there is more than one species in a group, only the most frequent are noted and not all the species present may be listed.
- **Height:** Height is estimated to provide a broad indication of the size of the tree.
- **Trunk diameter:** Trunk diameter is estimated or measured (with a diameter tape), at the discretion of the consultant, and recorded in 2.5cm increments as advised in BS 5837 Table D1. Estimates may be made where access is restricted, direct measurement is prevented because of ivy on the trunk, or the tree is assessed as low quality. The point of measurement and the adjustments for stem variations are as advised in Figure C1 of BS 5837.
- **Maturity:** In planning context, maturity provides a simplistic indication of a tree's ability to cope with change and its potential for further growth. For the purposes of this report, young indicates a potential to significantly increase in size and a high ability to cope with change, maturing indicates some potential to increase in size and a medium ability to cope with change, and mature indicates little potential to increase in size and limited ability to cope with change.
- **Low branches:** Any low branches that would not be feasible for removal during normal management and should be considered as a design constraint are noted here and explained in the notes.
- **Category:** Our assessment automatically considered tree physiological/structural condition (BS 5837, 4.4.2.5h), and so these are not listed separately in the schedule. Additionally, the category accounts for the remaining contribution (BS 5837, 4.4.2.5i) as greater than 40 years for A trees, greater than 20 years for B trees, at least 10

Appendix 2: Tree schedule and explanatory notes

years for C trees and less than 10 years for U trees, so this is also not listed separately in the schedule. Category A, B and C trees are automatically listed as sub-category 1 unless otherwise stated.

- **Notes:** Only relevant features relating to physiological or structural condition and low branches that may help clarify the categorisation are recorded. If there are no notes, then the presumption should be that no relevant features were observed.
- **Tree works:** The recommended tree works are based on the quick visual check level of inspection and only intended to address significant hazards identified during that inspection. The following points should also be considered before carrying out any works:
 1. **Reporting during work operations:** In the context of the preliminary nature of the tree inspection, any defects that may affect tree safety discovered by the contractor when carrying out the work recommendations should be reported to the supervising officer. Modification to the schedule of works may be required because of these reports. The contractor should be specifically instructed on this point.
 2. **Implementation of works:** All tree works should be carried out to BS 3998 *Recommendations for Tree Work* as modified by more recent research. It is advisable to select a contractor from the local authority list and preferably one approved by the Arboricultural Association. Their Register of Contractors is available free from The Malthouse, Stroud Green, Standish, Stonehouse, Gloucestershire GL10 3DL; phone 01242 522152; website www.trees.org.uk.
 3. **Statutory wildlife obligations:** The Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000 provides statutory protection to birds, bats and other species that inhabit trees. All tree work operations are covered by these provisions and advice from an ecologist must be obtained before undertaking any works that might constitute an offence.
 4. **Stumps:** Stumps to be removed within the RPAs of retained trees should be ground out with a stump grinder to minimise any disturbance unless otherwise authorised by the supervising officer.
- **Future tree safety inspections:** Due to the time that may elapse between the original survey and the start of development, all trees should be re-inspected as part of the standard risk management process before any works start on site. Our assessment of the trees was carried out on the basis that a re-inspection would be carried out within a year of the assessment visit and our advice on tree condition must be reviewed annually from the date of that visit.

Appendix 3: QR Codes for SGNs (Scan with reader to download)

		
<i>SGN 1 Monitoring tree protection</i>	<i>SGN 2 Fencing protected trees</i>	<i>SGN 3 Ground protection</i>
		
<i>SGN 4 Pollution control</i>	<i>SGN 5 Site cranes & piling rigs</i>	<i>SGN 6 Height restrictions</i>
		
<i>SGN 7 Excavating in RPAs</i>	<i>SGN 8 Removing surfacing and structures in RPAs</i>	<i>SGN 9 Installing/upgrading surfacing in RPAs</i>
		
<i>SGN 10 Installing structures in RPAs</i>	<i>SGN 11 Installing services in RPAs</i>	<i>SGN 12 Landscaping in RPAs</i>

