



## Arboricultural assessment & method statement

Forty Acres Farm, Havant Road, Bedhampton



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26<sup>th</sup> April 2018 16270-AA-MW

## 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 to erect 320 dwellings (including a 30% provision of affordable homes), 66 bed care home, provision of public open space, habitat mitigation zone, allotments, community building and associated infrastructure at Forty Acres Farm, Havant Road, Bedhampton.

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.



## Site location and report purpose

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- **Appendices** (**Appendix 1** – Local plan policy, background administrative information, and data collection; **Appendix 2** – Tree schedule and explanatory notes; and, **Appendix 3** – QR Codes for SGNs).
- A companion document to supplement the main report titled ***Manual for managing trees on development sites (Version 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)                                                                                                                                |
| <b>Remove</b>                                                           | None                           | G8 (three trees), G9 (one tree), G11 (two parts), G43, G52 (two parts) | G2 (part), G6, G7, T14, G15, T16, T18, T19, T20, T21, T23, T26, G28, G37 (two parts), G42, G44, G45, G46, G47, G51 (four trees), G53, T54, G55 |
| <b>Prune</b>                                                            | None                           | None                                                                   | None                                                                                                                                           |
| <b>Protect using special precautions</b> <small>See Notes below</small> | None                           | G11 (one tree), G62 (four trees)                                       | None                                                                                                                                           |
| <b>Post development considerations</b>                                  | None                           | None                                                                   | None                                                                                                                                           |

T = Tree; G = Group

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

**Note on category U trees:** Trees categorised as U (T17, T22, T24, T25, T27, T32, T33, T40, T41, G49 (part), G50, G63 (part), and G67 (part)) are in such poor condition that they have been assessed as needing removal for management reasons irrespective of any development proposals. Removal of any category U trees will be a management decision and not caused by this proposal, so should not be considered a direct impact.

### 1.2 The impact of tree removals on local character

My assessment of the impact of tree removals on local character is as follows:

**Category B trees (G8 (three trees), G9 (one tree), G11 (two parts), G43, G52 (two parts)):** These trees are in good condition generally and collectively contribute to the tree cover around the site. However, they are not individually special or prominent and their losses could be adequately replaced elsewhere around the site with better new tree planting. Although their loss will be noticeable in the immediate vicinity in the short term, there will not be a significant impact on local character in the wider setting because of the mature site boundary cover and the two large internal groups that will be retained.

**Category C trees (G2 (part), G6, G7, T14, G15, T16, T18, T19, T20, T21, T23, T26, G28, G37 (two parts), G42, G44, G45, G46, G47, G51 (four trees), G53, T54, G55):** These trees are well within the site and are not prominent as skyline features from any public viewpoints. They are either small or in such poor condition that they have limited ability to significantly contribute to the local amenity in the short term. On this basis, they are unsustainable, and would be better replaced with trees that have the more potential to contribute to the surrounding character in the longer term.

## 1: Arboricultural assessment

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### 1.3 Special precautions to limit RPA encroachment impact

My assessment of the protective measures to limit the impact on RPA encroachment is as follows:

**Installation of new surfacing:** There will be encroachment into the RPAs of two groups (G11 and G62) where new footpaths or parking is required. However, 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](http://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, with the detail to be agreed as part of a planning condition. 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 SGN7 *Excavating in RPAs* and SGN9 *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.

#### **Installation of new services or upgrading of existing services**

Retained trees may be affected by the installation of new services or upgrading of existing services. However, it is often difficult to clearly establish the detail of services until the construction is in progress, and so this advice is precautionary. Where possible, it is proposed to use the existing services into the site and keep all new services outside RPAs. Where existing services within RPAs require upgrading, or new services must be installed in RPAs, great care must be taken to minimise any disturbance. Trenchless installation will be the preferred option, but if that is not feasible, any excavation must be carried out by hand according to the guidelines in SGN11 *Installing services in RPAs*.

### 1.4 Post development considerations

If trees are retained or planted too close to occupied buildings and/or garden amenity space, it is sometimes claimed that they can cause excessive shade or anxiety, which interferes with the normal use of the property. In extreme cases, this can result in pressure from future owners to fell or severely prune, thus reducing the long-term contribution of the trees to local character. However, in our experience, these problems are extremely rare and there is very little evidence that such pressures ever result in any significant harm to the wider setting. Indeed, there is an increasing body of evidence that the benefits from trees close to occupied areas significantly outweigh any disadvantages caused by shade or anxiety. Furthermore, important trees can be protected using tree preservation orders, which come with an overarching presumption to retain protected trees unless the normal use of the property is harmed to a significant extent. To our knowledge, there is no published evidence to support that trees are being lost to the detriment of local character for these reasons. I have considered these concerns in my analysis for this site, and in this case, I do not believe there are any trees close enough to proposed occupied buildings where they are likely to interfere with their normal use.

### 1.5 New tree planting to enhance local character

To supplement retained trees and enhance local character, the project landscape architect has specified a comprehensive new tree planting scheme. I understand that the final selection of species, size and location are flexible and open to amendment, as appropriate.

## 1: Arboricultural assessment

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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*. These new trees would 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.

### 1.6 Compliance with local plan policy

These proposals comply with the relevant local plan policy **DM8 Conservation, protection and enhancement of existing natural features** (Appendix A1.1) because the proposal has sympathetically incorporated the existing tree features into the overall design of the scheme, and will enhance the environment by making provision for new structural tree planting and landscaping, protecting the attractiveness of the visual amenity and green open space.

### 1.7 Summary of impact on local character

This proposal will result in the loss of several trees that are low category because of their poor condition or small size. Some moderate category trees will also be lost but they are well within the site or close to retained trees that will buffer the initial impact and their loss will have no long term detrimental impact on tree health or the present character of the area. 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 comprehensive new tree planting scheme using significant stock is included as part of the proposal. 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 not have a 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, and specifically complies with the Havant Borough Council local plan policy DM8, as reproduced in Appendix A1.1.

## 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:

- SGN1 Monitoring tree protection (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn01?stage=Stage>)
- SGN2 Fencing protected trees (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn02?stage=Stage>)
- SGN3 Ground protection (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn03?stage=Stage>)
- SGN4 Pollution control (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn04?stage=Stage>)
- SGN5 Site cranes & piling rigs (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn05?stage=Stage>)
- SGN6 Height restrictions (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn06?stage=Stage>)
- SGN7 Excavating in RPAs (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn07?stage=Stage>)
- SGN8 Removing surfacing and structures in RPAs (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn08?stage=Stage>)
- SGN9 Installing/upgrading surfacing in RPAs (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn09?stage=Stage>)
- SGN10 Installing structures in RPAs (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn10?stage=Stage>)
- SGN11 Installing services in RPAs (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn11?stage=Stage>)
- SGN12 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. The fencing location is shown by the heavy black dashed lines, with the construction exclusion zone behind as the lighter black diagonal hatch. Precautionary areas are shown by a yellow fill.

### 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;

## 2: Arboricultural method statement

- 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.

The detail of how the arboricultural supervision will be carried out is explained in SGN1 *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                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| <b>Pre-commencement meeting:</b> Meeting on site with all parties to agree protective measures, as described in SGN1. <u>Will be carried out before any significant site works begin.</u>                                       | All trees                                                                                                                                                                                                                                                                      | SGN1 <i>Monitoring tree protection</i>                    |
| <b>Tree felling:</b> Contractor will carry out agreed works as described in Appendix 2. <u>Will be completed before any significant site works begin.</u>                                                                       | Fell trees and groups G2 (part), G6, G7, G8 (part), G9 (three trees), G11 (two parts), T14, G15, T16, T17, T18, T19, T20, T21, T23, T26, G28, G37 (two parts) G42, G43, G44, G45, G46, G47, G49, G50, G51 (four trees), G52 (two parts), G53, T54, G55, G63 (part), G67 (part) | Appendix 2                                                |
| <b>Installing fencing:</b> Agreed tree protection measures will be installed and checked, as described in SGN2 and SGN3. <u>Will be completed before any significant site works begin.</u>                                      | All retained trees                                                                                                                                                                                                                                                             | Tree protection plan, SGN2 <i>Fencing protected trees</i> |
| <b>Pollution control near retained trees:</b> Any pollution control measures identified during risk assessment will be installed as described in SGN4. <u>Will be completed before any potential pollutants arrive on site.</u> | All trees                                                                                                                                                                                                                                                                      | SGN4 <i>Pollution control</i>                             |
| <b>Operation of site cranes:</b> Provision will be made to prevent site cranes damaging trees, as described in SGN5.                                                                                                            | All trees                                                                                                                                                                                                                                                                      | SGN5 <i>Site cranes</i>                                   |
| <b>Regular arboricultural supervision:</b> Provision will be made to carry out and record agreed arboricultural supervision, as described in SGN1.                                                                              | All trees                                                                                                                                                                                                                                                                      | SGN1 <i>Monitoring tree protection</i>                    |
| <b>Installing/upgrading surfacing in RPAs:</b> These operations will be carried out as described in the SGN9.                                                                                                                   | G11 (one tree), G62 (four trees)                                                                                                                                                                                                                                               | SGN9 <i>Installing/upgrading surfacing in RPAs</i>        |
| <b>Installing services in RPAs:</b> These operations will be carried out with care, as described in SGN11.                                                                                                                      | All trees                                                                                                                                                                                                                                                                      | SGN11 <i>Installing services in RPAs</i>                  |

## 2: Arboricultural method statement

| Brief operation summary                                                                                                                         | Trees affected | Location of detailed explanations      |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------------------|
| <b>Landscaping in RPAs:</b> These operations will be carried out with care, as described in SGN12.                                              | All trees      | SGN12 <i>Landscaping in RPAs</i>       |
| <b>Removing tree protection:</b> <u>Protection can only be removed when there is no risk of damage to retained trees, as described in SGN1.</u> | All trees      | SGN1 <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.

If unanticipated issues arise on site not referenced in the above explanations, further guidance on how to manage them can be found in the accompanying Manual.

A construction method statement is a description of how operations that may affect trees will be carried out to minimise any adverse impact on them. The details of how the site will be managed are construction and contractual matters that can only be finalised once the post-consent detailed planning begins. For that reason, at this stage in the planning process, as explained in clause 5.5.6 of BS 5837, it is normally sufficient to list a heads of terms summary of the issues requiring more detailed consideration once consent is issued. On this site, those issues are likely to include:

1. Preparation of a written site management protocol for dealing with tree issues, to be incorporated into formal site management procedures, and to specifically include induction training for all operatives related to tree protection.
2. The order of work on site, including demolition, site clearance and building work.
3. Erection and maintenance of tree protection measures.
4. Who will be responsible for protecting the trees on site.
5. Detailed proposals for inspecting and supervising the tree protection.
6. Details of facilitation pruning and access into site. What size vehicles will be used under canopies and will large machinery be lifted over trees.
7. The parking arrangements for workers and visitors.
8. A schedule of emergency contact numbers relating to trees.
9. Areas for loading and unloading of materials and storage of materials and plant.
10. Where site facilities will be located and when will they be installed.
11. How machinery and equipment (such as excavators, cranes and their loads, concrete pumps and piling rigs) will enter, move on, work on, and leave the site.
12. Pollution control to specifically consider chemical storage and wheel washing facilities in relation to trees.
13. Recycling and storage of waste in relation to trees.
14. Details of earthworks, grading and mounding and removal of spoil, including any planned lowering or raising of ground levels.
15. Precise services locations, including the method of excavation when near trees.
16. Crane location and zones of movement.
17. Details of upgrading/removing/replacing existing surfacing and areas where this will happen, including detailed and precise cross-sections where no-dig surfacing is to be installed.
18. How post-construction impacts through compaction to soil near trees will be ameliorated.

## Appendix 1: Local plan policy, background administrative information, and data collection

### A1.1 Havant Borough Council Local plan policy DM8

#### DM8 Conservation, Protection and Enhancement of Existing Natural Features

Development will only be permitted where it protects and enhances local habitats and landscape distinctiveness and which addresses all of the relevant criteria as set out below:

1. Protects natural features of nature conservation and/or amenity importance on the site, for example trees, woodlands, hedgerows, soils, streams, stream corridors, springs, ditches or ponds from damage, destruction and a deterioration in quality.
2. Sympathetically incorporates existing features into the overall design of the scheme including measures taken to ensure their continued survival.
3. Provides new landscape works that integrate successfully with the local environment and existing natural features, using local materials and plant species and making provision for future maintenance of new landscape works associated with new developments.
4. Ensures sequences of greenspaces are maintained and protects the attractiveness and visual amenity of all green open spaces that contribute to the identity of the borough.

### A1.2 Table 3: Background administrative information

|                                | Background administrative information                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Report date & reference        | 26 <sup>th</sup> April 2018; 16270-AA-MW                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Tree protection plan reference | BT2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Instructing client             | Barratt David Wilson Southampton Division                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 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 confined to the heads of terms                                                                                                                                                                                                                                                   |
| Provided documents             | Topographical survey, drawing number 36FA01, received by email on 16 August 2018, and layout drawing number N81:2393 SL-01D, received by email on 26 <sup>th</sup> April 2018                                                                                                                                                                                                                                                                                                                     |
| Report author and credentials  | Mark Wadey is a Chartered Forester ( <a href="http://www.charteredforesters.org">www.charteredforesters.org</a> ) and an AA Registered Consultant ( <a href="http://www.trees.org.uk">www.trees.org.uk</a> ), and fully qualified to undertake the assessments in this report. Further details of his credentials can be found at .                                                                                                                                                               |
| Report limitations             | <ul style="list-style-type: none"> <li>• 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.</li> <li>• This report does not consider ecological or archaeological issues, or any other matter beyond the assessment of the trees.</li> </ul>                     |
| Technical references           | <p>In preparing the analysis in this report, we considered the guidance and advice in the following technical references:</p> <ul style="list-style-type: none"> <li>• Climate Change Act (2008)<br/><a href="http://www.legislation.gov.uk/ukpga/2008/27/contents">www.legislation.gov.uk/ukpga/2008/27/contents</a></li> <li>• Town and Country Planning Act 1990<br/><a href="http://www.legislation.gov.uk/ukpga/1990/8/contents">www.legislation.gov.uk/ukpga/1990/8/contents</a></li> </ul> |

## Appendix 1: Local plan policy, background administrative information, and data collection

|  | Background administrative information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>• National Planning Policy Framework, published by the DCLG <a href="http://www.gov.uk/government/publications/national-planning-policy-framework--2">www.gov.uk/government/publications/national-planning-policy-framework--2</a></li> <li>• BS 5837 (2012) <i>Trees in relation to design, demolition and construction – Recommendations</i>, BSI <a href="http://www.shop.bsigroup.com/">www.shop.bsigroup.com/</a></li> <li>• BS 8545 (2014) <i>Trees: from nursery to independence in the landscape – Recommendations</i>, <a href="http://www.shop.bsigroup.com/">www.shop.bsigroup.com/</a></li> <li>• BS 3998 (2010) <i>Tree work – Recommendations</i>, BSI <a href="http://www.shop.bsigroup.com/">www.shop.bsigroup.com/</a></li> <li>• <i>Trees in the Townscape: A Guide for Decision Makers</i>, published by the Trees &amp; Design Action Group <a href="http://www.tdag.org.uk/">http://www.tdag.org.uk/</a></li> <li>• <i>Trees in Hard Landscapes: A Guide for Delivery</i>, published by the Trees &amp; Design Action Group <a href="http://www.tdag.org.uk/">www.tdag.org.uk/</a></li> <li>• 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> <a href="http://www.njug.org.uk/publications/">www.njug.org.uk/publications/</a></li> </ul> |

A1.3 Table 4: Data collection

|                                                                                     | Data collection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Date of site visits</b>                                                          | 19 <sup>th</sup> September 2016 & 20 <sup>th</sup> April 2018                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>People present during site visit</b>                                             | Mark Wadey accompanied by Jamie Gargett                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Weather &amp; visibility</b>                                                     | Clear, still and dry, with good visibility during both visits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Limitations to observations</b>                                                  | <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• Observations of trees outside the site boundaries are confined to what was visible from within the site.</li> <li>• All dimensions were estimated unless otherwise indicated.</li> </ul>                                                                                                                                                                                                                                                 |
| <b>Tree Preservation Orders (TPOs), Conservation Areas, and tree categorisation</b> | 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 |



## Appendix 1: Local plan policy, background administrative information, and data collection

|                                                   | Data collection                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                   | constraints. The same rationale will be applied to Conservation Areas. <b>On this site, we have been informed that a TPO was served in 2016 protecting three groups of trees on the edge of the western boundary and within the central areas of the site. This is referenced as TPO No. 2049/2016 covering Forty Acres Farm, Havant Road, Bedhampton. We are not aware of any other TPOs covering trees on this site.</b> |
| <b>Tree location and numbering</b>                | Each tree 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.                                                                                                                                                     |
| <b>Recording of tree data</b>                     | For each identified tree and group, the information collected was recorded on the tree schedule in Appendix 2 and the tree protection plan.                                                                                                                                                                                                                                                                                |
| <b>Compliance of data collection with BS 5837</b> | 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.      |
| <b>Calculation of RPAs</b>                        | 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. |                |               |
| G1                          | Sycamore                             | 15         | 40                   | Maturing | -            | B        | Large group of trees individually competing for space but as a larger feature provide a good screen between the road and the site boundary                                                        | -                                                               | 4.8            | 72            |
| G2                          | Sycamore, cherry, ash, elm, hawthorn | 10         | 30                   | Maturing | -            | C        | Small groupings of trees becoming established and providing some screening between the road and the site boundary. There are spacings between the trees which may provide planting opportunities. | Fell (part) for development                                     | 3.6            | 41            |
| G3                          | White poplar                         | 18         | 30                   | Maturing | -            | B        | Large group of trees individually competing for space but as a larger feature provide a good screen between the road and the site boundary                                                        | -                                                               | 3.6            | 41            |
| T4                          | Purple plum                          | 8          | 45                   | Maturing | -            | C        | -                                                                                                                                                                                                 | -                                                               | 5.4            | 92            |
| G5                          | Alder                                | 14         | 30                   | Maturing | -            | B        | Established trees with some future potential                                                                                                                                                      | -                                                               | 3.6            | 41            |
| G6                          | Alder                                | 12         | 25                   | Maturing | -            | C        | Trees with poor form or signs of decline                                                                                                                                                          | Fell for development                                            | 3.0            | 28            |



## Appendix 2: Tree schedule and explanatory notes

| Tree No | Species              | Height (m) | Diameter (cm) @ 1.5m | Maturity | Low Branches | Category | Notes                                                                                                                                                      | Tree Works                         | RPA radius (m) | RPA area (m2) |
|---------|----------------------|------------|----------------------|----------|--------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------|---------------|
| G7      | Alder                | 12         | 25                   | Maturing | -            | C        | Trees with poor form or signs of decline                                                                                                                   | Fell for development               | 3.0            | 28            |
| G8      | Alder                | 14         | 35                   | Maturing | -            | B        | Established trees with some future potential                                                                                                               | Fell (three trees) for development | 4.2            | 55            |
| G9      | Sycamore, ash, alder | 17         | 40                   | Maturing | -            | B        | Large group of trees individually competing for space but as a larger feature provide a good screen between the road and the site boundary                 | Fell (one tree) for development    | 4.8            | 72            |
| G10     | Alder                | 17         | 35                   | Maturing | -            | B        | Large group of trees individually competing for space but as a larger feature provide a good screen between the road and the site boundary                 | -                                  | 4.2            | 55            |
| G11     | Alder                | 16         | 40*                  | Maturing | -            | B        | Large group of trees individually competing for space but collectively they provide a large landscape feature in the centre of the site                    | Fell (two parts) for development   | 4.8            | 72            |
| T12     | Alder                | 14         | 30                   | Maturing | -            | C        | Showing signs of tip dieback                                                                                                                               | -                                  | 3.6            | 41            |
| T13     | Alder                | 7          | 25                   | Maturing | -            | C        | Lost top of crown in the past                                                                                                                              | -                                  | 3.0            | 28            |
| T14     | Alder                | 8          | 25                   | Maturing | -            | C        | Overgrown by bramble                                                                                                                                       | Fell for development               | 3.0            | 28            |
| G15     | Alder                | 12         | 35                   | Maturing | -            | C        | Signs of decay at base, probably from mower damage and significant sap bleeding on many of the trees which could be early signs of Phytophthora infection. | Fell for development               | 4.2            | 55            |



## Appendix 2: Tree schedule and explanatory notes

| Tree No | Species  | Height (m) | Diameter (cm) @ 1.5m | Maturity | Low Branches | Category | Notes                                                                                                                                                      | Tree Works           | RPA radius (m) | RPA area (m2) |
|---------|----------|------------|----------------------|----------|--------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------|---------------|
| T16     | Hawthorn | 4          | 15                   | Maturing | -            | C        | Small insignificant tree                                                                                                                                   | Fell for development | 1.8            | 10            |
| T17     | Alder    | 8          | 35                   | Young    | -            | U        | Dead                                                                                                                                                       | Fell for management  | 4.2            | 55            |
| T18     | Alder    | 8          | 25                   | Young    | -            | C        | Showing signs of tip dieback                                                                                                                               | Fell for development | 3.0            | 28            |
| T19     | Hawthorn | 4          | 15                   | Young    | -            | C        | Small insignificant tree                                                                                                                                   | Fell for development | 1.8            | 10            |
| T20     | Alder    | 5          | 10                   | Young    | -            | C        | Small insignificant tree                                                                                                                                   | Fell for development | 1.2            | 5             |
| T21     | Ash      | 5          | 10                   | Young    | -            | C        | Small insignificant tree                                                                                                                                   | Fell for development | 1.2            | 5             |
| T22     | Alder    | 8          | 20                   | Maturing | -            | U        | Dead                                                                                                                                                       | Fell for management  | 2.4            | 18            |
| T23     | Alder    | 7          | 15                   | Maturing | -            | C        | Small insignificant tree                                                                                                                                   | Fell for development | 1.8            | 10            |
| T24     | Alder    | 7          | 20                   | Maturing | -            | U        | Dead                                                                                                                                                       | Fell for management  | 2.4            | 18            |
| T25     | Alder    | 7          | 25                   | Maturing | -            | U        | Significant signs of dieback and decline                                                                                                                   | Fell for management  | 3.0            | 28            |
| T26     | Alder    | 10         | 30                   | Maturing | -            | C        | Signs of decay at base, probably from mower damage and significant sap bleeding on many of the trees which could be early signs of Phytophthora infection. | Fell for development | 3.6            | 41            |
| T27     | Alder    | 8          | 30                   | Maturing | -            | U        | Dead                                                                                                                                                       | Fell for management  | 3.6            | 41            |
| G28     | Alder    | 10         | 30                   | Maturing | -            | C        | Signs of decay at base, probably from mower damage                                                                                                         | Fell for development | 3.6            | 41            |
| G29     | Alder    | 14         | 30                   | Maturing | -            | B        | Established trees with some future potential, providing a useful screen between the railway line and the site boundary                                     | -                    | 3.6            | 41            |



## Appendix 2: Tree schedule and explanatory notes

| Tree No | Species            | Height (m) | Diameter (cm) @ 1.5m | Maturity | Low Branches | Category | Notes                                                                                                                  | Tree Works                       | RPA radius (m) | RPA area (m2) |
|---------|--------------------|------------|----------------------|----------|--------------|----------|------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------|---------------|
| G30     | Alder              | 12         | 30                   | Maturing | -            | B        | Established trees with some future potential, providing a useful screen between the railway line and the site boundary | -                                | 3.6            | 41            |
| T31     | Goat willow        | 7          | 35                   | Maturing | -            | C        | -                                                                                                                      | -                                | 4.2            | 55            |
| T32     | Alder              | 8          | 25                   | Maturing | -            | U        | Dead                                                                                                                   | Fell for management              | 3.0            | 28            |
| T33     | Alder              | 8          | 25                   | Maturing | -            | U        | Dead                                                                                                                   | Fell for management              | 3.0            | 28            |
| T34     | Alder              | 7          | 25                   | Maturing | -            | C        | Overgrown by bramble and top of crown has died back                                                                    | -                                | 3.0            | 28            |
| G35     | Alder              | 10         | 30                   | Maturing | -            | C        | Trees with poor form or signs of decline. Many trees covered in dense ivy.                                             | -                                | 3.6            | 41            |
| G36     | Elm                | 10         | 25                   | Maturing | -            | C        | Trees with poor form or signs of decline                                                                               | -                                | 3.0            | 28            |
| G37     | Elm, alder, willow | 12         | 30                   | Maturing | -            | C        | Trees with poor form or signs of decline                                                                               | Fell (two parts) for development | 3.6            | 41            |
| G38     | Elm                | 10         | 25                   | Maturing | -            | C        | Trees with poor form or signs of decline                                                                               | -                                | 3.0            | 28            |
| G39     | Alder              | 8          | 25                   | Maturing | -            | C        | Trees with poor form or signs of decline                                                                               | -                                | 3.0            | 28            |
| T40     | Alder              | 6          | 25                   | Maturing | -            | U        | Dead                                                                                                                   | Fell for management              | 3.0            | 28            |
| T41     | Alder              | 6          | 25                   | Maturing | -            | U        | Dead                                                                                                                   | Fell for management              | 3.0            | 28            |
| G42     | Lime               | 6          | 20                   | Maturing | -            | C        | Reduced in past                                                                                                        | Fell for development             | 2.4            | 18            |
| G43     | Alder              | 12         | 25                   | Maturing | -            | B        | Established trees with some future potential                                                                           | Fell for development             | 3.0            | 28            |
| G44     | Shrub sp           | 4          | 10                   | Maturing | -            | C        | Low growing shrubs covered by bramble                                                                                  | Fell for development             | 1.2            | 5             |
| G45     | Hawthorn           | 6          | 25                   | Maturing | -            | C        | -                                                                                                                      | Fell for development             | 3.0            | 28            |

## Appendix 2: Tree schedule and explanatory notes

| Tree No | Species  | Height (m) | Diameter (cm) @ 1.5m | Maturity | Low Branches | Category | Notes                                                                                                                                                                                         | Tree Works                        | RPA radius (m) | RPA area (m2) |
|---------|----------|------------|----------------------|----------|--------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|----------------|---------------|
| G46     | Hawthorn | 6          | 25                   | Maturing | -            | C        | -                                                                                                                                                                                             | Fell for development              | 3.0            | 28            |
| G47     | Hawthorn | 4          | 20                   | Maturing | -            | C        | -                                                                                                                                                                                             | Fell for development              | 2.4            | 18            |
| G48     | Alder    | 12         | 30                   | Maturing | -            | C        | Trees with poor form or signs of decline. Many trees covered in dense ivy or bramble.                                                                                                         | -                                 | 3.6            | 41            |
| G49     | Alder    | 7          | 20                   | Maturing | -            | U        | Dead                                                                                                                                                                                          | Fell for management               | 2.4            | 18            |
| G50     | Alder    | 6          | 20                   | Maturing | -            | U        | Dead                                                                                                                                                                                          | Fell for management               | 2.4            | 18            |
| G51     | Alder    | 8          | 20                   | Maturing | -            | C        | Trees with poor form or signs of decline                                                                                                                                                      | Fell (four trees) for development | 2.4            | 18            |
| G52     | Alder    | 8          | 25                   | Maturing | -            | B        | Large group of trees individually competing for space but collectively they provide a large landscape feature in the centre of the site                                                       | Fell (two parts) for development  | 3.0            | 28            |
| G53     | Elm      | 10         | 20                   | Maturing | -            | C        | Trees with poor form or signs of decline                                                                                                                                                      | Fell for development              | 2.4            | 18            |
| T54     | Hawthorn | 3          | 15                   | Maturing | -            | C        | Small insignificant tree                                                                                                                                                                      | Fell for development              | 1.8            | 10            |
| G55     | Elder    | 3          | 20                   | Maturing | -            | C        | -                                                                                                                                                                                             | Fell for development              | 2.4            | 18            |
| T56     | Elder    | 5          | 40                   | Maturing | -            | C        | -                                                                                                                                                                                             | -                                 | 4.8            | 72            |
| G57     | Alder    | 8          | 20                   | Maturing | -            | C        | A line of young trees that is becoming established, providing a small degree of screening from the road. These trees are of a size that they could be easily replaced by large nursery stock. | -                                 | 2.4            | 18            |
| T58     | Palm     | 4          | 20                   | Maturing | -            | C        | Small insignificant tree                                                                                                                                                                      | -                                 | 2.4            | 18            |
| T59     | Maple    | 5          | 20                   | Maturing | -            | C        | Small insignificant tree                                                                                                                                                                      | -                                 | 2.4            | 18            |
| T60     | Walnut   | 6          | 25                   | Maturing | -            | C        | Grows against boundary wall                                                                                                                                                                   | -                                 | 3.0            | 28            |



## Appendix 2: Tree schedule and explanatory notes

| Tree No | Species        | Height (m) | Diameter (cm) @ 1.5m | Maturity | Low Branches | Category | Notes                                                                                                                                                                                         | Tree Works          | RPA radius (m) | RPA area (m2) |
|---------|----------------|------------|----------------------|----------|--------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------|---------------|
| T61     | Lawson cypress | 8          | 25                   | Maturing | -            | C        | Poor formed tree with sparse foliage                                                                                                                                                          | -                   | 3.0            | 28            |
| G62     | Alder          | 14         | 40                   | Maturing | -            | B        | Established trees with some future potential, providing a useful screen between the adjacent properties and the site boundary. Dense bramble is restricting access to the base of many trees. | -                   | 4.8            | 72            |
| G63     | Alder          | 12         | 30                   | Maturing | -            | U        | Signs of significant sap bleeding and crown dieback which could be early signs of Phytophthora infection.                                                                                     | Fell for management | 3.6            | 41            |
| G64     | Alder          | 5          | 15                   | Young    | -            | C        | -                                                                                                                                                                                             | -                   | 1.8            | 10            |
| G65     | Goat willow    | 6          | 30                   | Maturing | -            | C        | Provides some boundary screening                                                                                                                                                              | -                   | 3.6            | 41            |
| T66     | Goat willow    | 8          | 35                   | Maturing | -            | C        | Provides some boundary screening                                                                                                                                                              | -                   | 4.2            | 55            |
| G67     | Alder          | 7          | 20                   | Maturing | -            | U        | Dead                                                                                                                                                                                          | Fell for management | 2.4            | 18            |

## Appendix 2: Tree schedule and explanatory notes

### Explanatory Notes

- **Abbreviations:**

G : Group  
T : Tree

- **Botanical tree names:**

|                |                                                |
|----------------|------------------------------------------------|
| Alder          | : <i>Alnus cordata</i>                         |
| Ash            | : <i>Fraxinus excelsior</i>                    |
| Cherry         | : <i>Prunus</i> sp                             |
| Elder          | : <i>Sambucus nigra</i>                        |
| Elm            | : <i>Ulmus</i> sp                              |
| Goat willow    | : <i>Salix caprea</i>                          |
| Hawthorn       | : <i>Crataegus monogyna</i>                    |
| Lawson cypress | : <i>Chamaecyparis lawsoniana</i>              |
| Maple          | : <i>Acer</i> sp                               |
| Palm           | : <i>Trachycarpus fortunei</i>                 |
| Purple Plum    | : <i>Prunus cerasifera</i> 'Nigra'/'Pissardii' |
| Sycamore       | : <i>Acer pseudoplatanus</i>                   |
| Walnut         | : <i>Juglans regia</i>                         |
| White poplar   | : <i>Populus alba</i>                          |
| 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 annotated with a '\*'.
- **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 and recorded in 2.5cm increments as advised in BS 5837 Table D1. It is measured with a diameter tape unless access is restricted, direct measurement is not possible 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 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.

## Appendix 2: Tree schedule and explanatory notes

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- **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](http://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)

|                                                                                                                                       |                                                                                                                                                  |                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p><i>SGN1 Monitoring tree protection</i></p>       |  <p><i>SGN2 Fencing protected trees</i></p>                     |  <p><i>SGN3 Ground protection</i></p>                        |
|  <p><i>SGN4 Pollution control</i></p>                |  <p><i>SGN5 Site cranes &amp; piling rigs</i></p>               |  <p><i>SGN6 Height restrictions</i></p>                      |
|  <p><i>SGN7 Excavating in RPAs</i></p>             |  <p><i>SGN8 Removing surfacing and structures in RPAs</i></p> |  <p><i>SGN9 Installing/upgrading surfacing in RPAs</i></p> |
|  <p><i>SGN10 Installing structures in RPAs</i></p> |  <p><i>SGN11 Installing services in RPAs</i></p>              |  <p><i>SGN12 Landscaping in RPAs</i></p>                   |



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