JAMES BLAKE A S S O c I A T E S

## Arboricultural Impact Assessment

Anglia Business Park, Wattisham Road, Ringshall, Ipswich IP14 2HX<br>on behalf of<br>Wilkinson Planning (lpswich)

6 December 2021

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| Project | Anglia Business Park, Wattisham Road, Ringshall, Ipswich IP14 2HX |
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| Report | Arboricultural Impact Assessment |
| Date | 6 December 2021 |
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## 1 SUMMARY

1.1 This Arboricultural Impact Assessment has been commissioned by Wilkinson Planning (lpswich) to accompany their planning submission for the construction of 44 units, with associated infrastructure and car parking including EV charging points.
1.2 This report has been prepared in accordance with British Standard 5837: Trees in relation to design, demolition and construction - Recommendations (2012). This document provides best practice advice, assessment and guidance with regards to the design, planning and implementation of new developments.
1.3 The recommendation is that the proposal is approved subject to a successful tree protection methodology and a scheme of new tree planting.

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## 2 INSTRUCTIONS

2.1 James Blake Associates has been instructed to carry out a survey of trees and significant vegetation within and directly adjoining land at Anglia Business Park, Wattisham Road, Ringshall, Ipswich in relation to the application for redevelopment of the site.
2.2 Our assessment was carried out in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.
2.3 Details of all surveyed vegetation can be found within the Tree Survey Schedule in Appendix 1. All trees were visually inspected from ground level only and no diagnostic equipment or detailed decay investigation was carried out.
2.4 Our report is prepared to provide supporting evidence and justification for redevelopment in relation to the existing trees and vegetation within and neighbouring the site.
2.5 The contents of this report are copyright of James Blake Associates and may not be copied without the author's permission. James Blake Associates' Terms and Conditions apply to this report and all associated works in conjunction with this project.

## Documents provided

2.6 This report has been prepared with reference to the following documentation:

- Topographical survey reference AS1523-01-02 by Alpha Surveys; and
- Proposed site layout reference 5442-0102-P02- Site Plan as Proposed

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## 3 OBSERVATIONS

## Site visit

3.1 The site was visited by Peter Brais, Principal Arboriculturist, on 14 October 2021 to identify, measure and locate trees and significant vegetation within and directly adjoining the site.

## Site and context

3.2 The roughly square site is an existing business park approximately 7 Km southwest of Needham Market, Suffolk. The site is surrounded by trees and hedgerows with fields to the west, north and east. Wattisham Road runs parallel with the southern boundary, with Wattisham Airfield beyond.
3.3 A large area of hard surfacing occupies the entrance to the site in the southeast corner. Two internal access roads extend across the site to the northwest and north, with the remainder of the site covered in grass.
3.4 Continuous hedges and groups of trees run along all boundaries, with deciduous woodland extending along the western side of the site. The eastern boundary consists of larger semi mature trees, separating the site from neighbouring fields.
3.5 Throughout the site there are a range of specimen trees and groups that contribute significantly to the wider landscape. However, the overall quality varies considerably, and many are of low value as individuals due to structural defects or poor historical management.


Fig 1. Approximate site boundary in relation to its surroundings

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## 4 VIEWS OF TREES



Photograph 1 (above). G1, mixed species, located immediately to the west of the main entrance. Viewed looking towards the west from the southern boundary.


Photograph 2. G1, mixed species, located further to the west of the main entrance. Viewed looking towards the south-west from the southern boundary.

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Photograph 3 (left). T2, cherry, located centrally to the north of the southern boundary. Viewed looking towards the northwest.

Photograph 4 (below). G3, mainly goat willow. Viewed looking towards the north from the south-west corner of the site.



Photograph 5 (above). G4, mixed species, and T5, giant sequoia (centre) located off-site along the western boundary. Viewed looking towards the north from the western site boundary.


Photograph 6. G4, mixed species, located off-site to the north of the western boundary.
Viewed looking towards the south-west from the northern site boundary.

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Photograph 7 (above). G6, blackthorn, elm, hazel and field maple, located along the northern boundary. Viewed looking towards the north-west from the centre of the northern boundary.

Photograph 8 (right). T7, goat willow, located centrally to the south of the northern boundary. Viewed looking towards the south-west.


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Photograph 9 (above). G8, aspen, blackthorn and hawthorn, located along the eastern boundary. Viewed looking towards the south-east.


Photograph 10. G9, elm and dogwood, located centrally to the west of the eastern boundary. Viewed looking towards the north-west from the eastern boundary.

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Photograph 11 (above). G1, mixed species, located to the east of the site entrance. Viewed looking towards the south-west from the eastern boundary.

Photograph 12 (left). T10, hawthorn.
Viewed looking towards the west.

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Photograph 13 (above). T11, bullace, located centrally. Viewed looking towards the southwest.


Photograph 14. T13, silver birch, T14, bullace, T15 Swedish whitebeam and G16, English oak, located next to existing buildings to the south of the site. Viewed looking towards the south-west.

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Photograph 15. G17, English oak and field maple, located to the north of the southern internal road. Viewed looking towards the north-west.

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## 5 TECHNICAL INFORMATION

## Statutory protection

5.1 According to Babergh and Mid Suffolk District Council Interactive Mapping Service http://maps.midsuffolk.gov.uk/ (accessed 7 December 2021) the site was not located within the Conservation Area, nor were any of the trees within, or adjacent to, the site the subject of a Tree Preservation Order.

## Soils and Geology

5.2 This information is obtained from The British Geological Survey (online) 'Geology of Britain Viewer' but is provided only as a guideline to assist with assessment of site conditions in relation to rooting habits of trees.
5.3 Soil conditions have the potential to affect tree growth, rooting depth and extent, species selection and foundation design and therefore a detailed soil assessment should be carried out by a competent person.
5.4 Bedrock geology is described as being London Clay Formation - Clay, Silt and Sand. Superficial deposits are shown as Lowestoft Formation - Diamicton.

## Planning policy

5.5 The National Planning Policy Framework sets out the government's planning policies for England and how these should be applied. The document replaces all previous documents and came into action in July 2018, subsequently updated February 2019.
5.6 The NPPF supports and promotes sustainable development, which it defines as having three dimensions; social, economic and environmental. It goes on to state that these three dimensions are mutually dependent and to achieve sustainable development they must be sought simultaneously.
5.7 Specifically the NPPF states that "development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland or ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists".
5.8 No veteran or ancient trees were identified within or adjacent to the site.

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## 6 ARBORICULTURAL APPRAISAL

6.1 Dimensions, comments and information gathered for each survey entry are provided in the tree schedule in Appendix 1. The location, root protection area, crown spread and BS5837 categorisation is shown on the appended tree survey drawing JBA 21-299 Tree Constraints Plan-TCP01 in Appendix 2.
6.2 Of the 17 survey entries, one was young, 14 were assessed as being semi-mature, one was early mature and one was mature.
6.3 The survey assessed the tree population as consisting predominantly of low and moderate-quality trees. Of the 17 survey entries one was category $U$, four were of low quality and value (category C), 11 were assessed as being moderate quality and value (category B ) and the remaining tree was high quality (category A ).

## Identified impacts

6.4 Drawing JBA 21299 TRP01 in Appendix 2 shows the proposed layout and tree removals necessary to implement the proposed development.
6.5 The arboricultural impacts have been assessed and are deemed to be acceptable. In respect of the proposal the following have been identified as being of most significance;

- Tree removals
- Tree protection requirements
- Replacement planting


## Tree removals

6.6 To implement the proposed development, it will be necessary to undertake the tree work specified in the table below:

| Tree <br> Number | Species | Work Requirements | Reason(s) for works |
| :---: | :--- | :--- | :--- |
| G1 | English oak <br> Goat willow <br> Blackthorn <br> Field maple <br> Hazel <br> Elm | Remove most southeast <br> corner. | To facilitate access road <br> construction. |
| T2 | Cherry | Remove tree and stump. | To facilitate parking space <br> and building construction. |

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| Tree <br> Number | Species | Work Requirements | Reason(s) for works |
| :---: | :--- | :--- | :--- |
| G3 | Goat willow <br> Hawthorn <br> Beech <br> Silver birch <br> Common <br> walnut | Remove sections to the <br> north and east. | To facilitate building and <br> internal road construction <br> respectively. |
| G6 | Blackthorn <br> Elm <br> Hazel <br> Field maple | Remove southern section <br> in the centre of the <br> northern boundary. | To facilitate building <br> construction. |
| G8 | Aspen <br> Blackthorn <br> Hawthorn | Remove western section in <br> the centre of the eastern <br> boundary. | To facilitate building <br> construction. |
| T10 | Hawthorn | Remove tree and stump. | To facilitate building <br> construction. |
| T11 | Bullace | Remove tree and stump. | To facilitate parking space <br> construction. |
| T12 | Bullace | Remove | Reduced safe useful life <br> expectancy of less than 10 <br> years. |
| T13 | Silver birch | Remove tree and stump. | To facilitate building <br> construction. |
| T14 | Bullace | Remove tree and stump. | To facilitate building <br> construction. |
| T15 | Swedish <br> whitebeam | Remove tree and stump. | To facilitate building <br> construction. |
| G16 | English oak | Remove tree and stump. | To facilitate parking space <br> construction. |
| G17 | English oak <br> Field maple | Remove tree and stump. | To facilitate internal road <br> construction. |

6.7 Tree work recommendations, based on good arboricultural practice but irrespective of development, are listed in the Tree Management Recommendations column in the Tree Survey Schedule in Appendix 1.
6.8 Relatively little vegetation requires removal and is all located internally. Consequently, its loss to public amenity is considered to be negligible due to its overall condition, lack of visual presence and the ability to replace with high quality planting.
6.9 Most of the vegetation growing around the boundaries of the site is to be retained and can be adequately protected throughout the development process.

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## Tree Protection

6.10 Drawing JBA 21299 TPP01 in Appendix 2 shows the position and extent of tree protection that will be required during construction.
6.11 No specialised construction methods are required, and all works are outside precautionary RPAs of retained trees.
6.12 Tree protection will therefore consist of robust fencing secured to a solid framework as recommended within BS5837:2012.

## Replacement planting

6.13 The development proposals include a comprehensive landscape strategy which includes significant tree, shrub and hedgerow planting.
6.14 As part of the proposals new trees will be planted at key locations throughout the development.
6.15 These new trees offer the opportunity to replace the low quality, tree population that currently occupies the site and ensures the continuation of visual and green amenity for future generations.

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## 7 CONCLUSIONS AND RECOMMENDATIONS

7.1 The constraints that existing trees and vegetation pose to development have been assessed in accordance with BS5837: 2012 and through ongoing liaison between the design team and James Blake Associates.
7.2 This continuing involvement has culminated in a proposal that seeks to improve and enhance the tree scape of the site and the wider area whilst offering a sustainable approach to development.
7.3 All trees to be removed are located internally to the site thereby minimising the impact of development on the local landscape.
7.4 A pre-commencement meeting and arboricultural supervision for key stages in the development, that have a potentially detrimental impact on trees, is recommended, to ensure that the tree protection methodology is clearly understood and correctly implemented.
7.5 It is recommended that the proposal is approved subject to scheme of new tree planting and successful tree protection methodology.

APPENDIX 1: TREE SURVEY SCHEDULE

## Tree Survey Schedule - Key

| $\begin{gathered} \hline \text { Life } \\ \text { Stage } \\ \hline \end{gathered}$ | Description | Key | Description | $\begin{array}{\|c\|} \hline \text { BS } \\ \text { Category } \\ \hline \end{array}$ | Description |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NP | Newly planted | $\begin{gathered} \text { Stem } \varnothing \\ (\mathrm{mm}) \text { at } \\ 1.5 \mathrm{~m} \end{gathered}$ | Diameter of stem(s) in millimetres measured at 1.5 m above ground level in accordance with BS 5837:2012. | A | Tree(s) of high quality with an estimated remaining life expectancy of at least 40 years. |  |
| Y: Young | An establishing tree that could be easily transplanted. | Stems | Trees are single-stemmed unless noted otherwise in schedule. | B | Tree(s) of moderate quality with an estimated remaining life expectancy of at least 20 years. |  |
| SM: Semi Mature | An established tree still to reach its ultimate height and spread and with considerable growth potential. | Height of (FSB) | Height of first significant branch above ground level. | c | Tree(s) of low quality and value with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm . |  |
| $\begin{gathered} \text { EM: } \\ \text { Early } \\ \text { Mature } \end{gathered}$ | A tree reaching its ultimate height and whose growth is slowing however it will still increase in stem diameter and crown spread. | Crown Spread | Crown spread at the four cardinal points, North, South, East and West. | U | Unsuitable for retention. Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. |  |
| $\begin{array}{\|c\|} \text { M: } \\ \text { Mature } \end{array}$ | A tree with limited potential for further significant increase in size although is likely to have a long safe useful life expectancy. | Condition | Assessment of the physiological and structural condition of the tree observed at the time of surveying. |  | RPA radius (m) | Radius of Root Protection Area (RPA) in metres based on relevant calculation in BS5837:2012 section 4.6. |
| $\begin{array}{\|c\|} \hline \text { OM: } \\ \text { Over } \\ \text { Mature } \end{array}$ | A senescent or moribund tree with a limited useful life expectancy. |  |  |  | RPA Area (m2) | A layout design tool indicating the minimum area surrounding the tree that contains sufficient rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority. Size and shape based on calculations and constraints noted in BS5837:2012 section 4.6. |
| v : Veteran | A tree older than typical for its species and of significant ecological, cultural or aesthetic value. | ERC (Years) | Estimated Remaining Contribution in Years (<10, 10+, 20+, 40+) |  |  |  |



## Tree Survey Schedule


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| Tree No. | Tree Species | $\begin{aligned} & \text { Life } \\ & \text { Stage } \end{aligned}$ | $\left.\begin{array}{\|c} \text { Stem } \varnothing \\ (\mathrm{mm}) \text { at } \\ 1.5 \mathrm{~m} \end{array} \right\rvert\,$ | Height (crown height) (m) | Height <br> of (FSB) | Crown Spread |  |  |  | Condition | Comments | Tree Management Recommendations | ERC (Years) | $\begin{aligned} & \text { BS } \\ & \text { Cat } \end{aligned}$ | $\begin{aligned} & \text { RPA } \\ & \text { Radius } \\ & \text { (m) } \end{aligned}$ | $\begin{aligned} & \hline \text { RPA } \\ & \text { area } \\ & \text { (m2) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | N | E | $s$ | w |  |  |  |  |  |  |  |
| T7 | Goat willow | SM | 260 | 7 (2) | 2 W | 4 | 4 | 4 | 4 | Fair | Intermediate tree. Significant dead branches and dieback. Large pruning wounds 210 and 130 mm diameter at 0.8 and 1.8 m to the north respectively. | No work recommended. | 10+ | C1 | 3.1 | 31 |
| G8 | Aspen (Populus tremula) Blackthorn Hawthorn | SM | 250 | 9 (0) | - | 5 | 5 | 5 | 5 | Good | Boundary group with mutual crown formation. Contains dead elm. | No work recommended. | 20+ | B2, 3 | 3.0 | 28 |
| G9 | Elm Dogwood | SM | 200 | 8 (0) | - | 4 | 4 | 4 | 4 | Fair | Group comprising mainly elm. Unable to Assess for detailed assessment. Estimated diameter. Contains some dead trees. Aerodynamically optimised form. | No work recommended. | 20+ | B2,3 | 2.4 | 18 |
| T10 | Hawthorn | SM | $\begin{array}{r} 60 \\ \times 10 \end{array}$ | 4.5 (0.5) | 1 S | 3 | 3 | 3 | 3 | Good | Intermediate tree. Good form and condition. Multistemmed form. | No work recommended. | 20+ | B1 | 2.3 | 17 |
| T11 | Bullace (Prunus domestica subsp. Insititia) | SM | $\begin{array}{r} 80 \\ \times 8 \end{array}$ | 5 (2) | - | 4 | 4 | 4 | 4 | Fair | Intermediate tree. Multi-stemmed form. Some deadwood. | No work recommended. | 10+ | C1 | 2.8 | 24 |
| T12 | Bullace (Prunus domestica subsp. Insititia) | M | $\begin{aligned} & 300 \\ & 400 \end{aligned}$ | 6 (2) | - | 4 | 4 | 4 | 4 | Poor | Intermediate tree. Large unoccluded topping wounds, 150 mm diameter. Multi-stemmed at ground level. Dense ivy cover. Dead wood in crown | Remove for health and safety reasons. | <10 | u | 6.0 | 113 |
| T13 | Silver birch | SM | 300 | 9 (3.5) | - | 5 | 5 | 5 | 5 | Good | Estimated diameter. Unable to access. Not shown on topo. | No work recommended. | 20+ | B1 | 3.6 | 41 |
| T14 | Bullace (Prunus domestica subsp. Insititia) | SM | $\begin{aligned} & 120 \\ & 200 \\ & 170 \end{aligned}$ | 8 (0.5) | - | 2 | 2 | 2 | 2 | Good | Forms three stems at 0.5 m with V -shaped union and bark inclusion. Not shown on topo. | No work recommended. | 20+ | B1 | 3.5 | 38 |
| T15 | Swedish whitebeam (Sorbus intermedia) | Y | $\begin{aligned} & 80 \\ & 60 \end{aligned}$ | 4.5 (0.5) | - | 2 | 2 | 2 | 2 | Good | Intermediate tree. Forms co-dominant stems at 1.2 m . Not shown on topo. | No work recommended. | 20+ | C1 | 1.2 | 5 |
| G16 | English oak | SM | 190 | 7 (1.5) | - | 5 | 5 | 5 | 5 | Good | Co-dominant pair of trees. Good form and extension growth. Not shown on topo. | No work recommended. | 20+ | B2 | 2.3 | 16 |
| G17 | English oak Field maple | SM | $\begin{aligned} & 130 \\ & 120 \end{aligned}$ | 4 (0) | - | 3 | 3 | 3 | 3 | Good | Pair of trees with mutual crown. Not shown on topo. | No work recommended. | 20+ | B2 | 2.2 | 15 |

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APPENDIX 2: JBA DRAWINGS

## KEY




