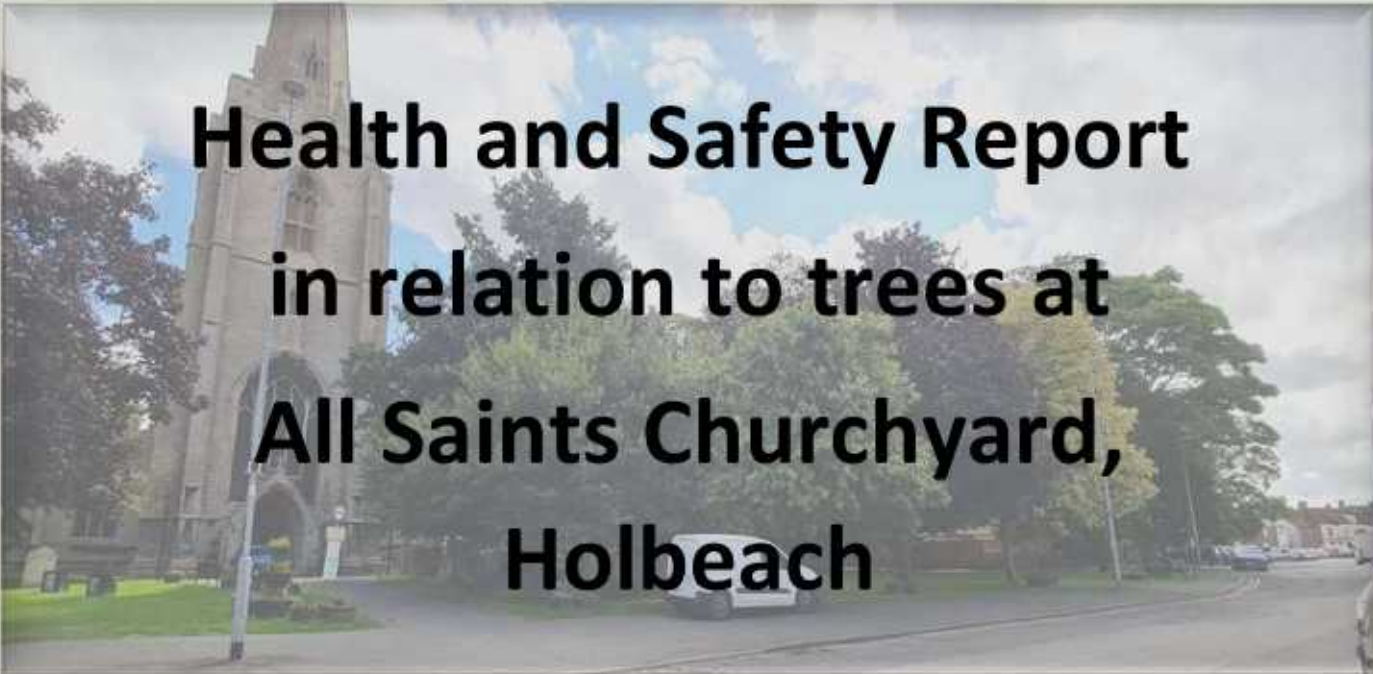




Health and Safety Report in relation to trees at All Saints Churchyard, Holbeach

Prepared by: East Midlands Tree Surveys Ltd.

Date: 08/09/2022

Ref: EMTS_H&S_ASC

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Instructions

This report relating to trees at All Saints Churchyard, Holbeach was commissioned by Holbeach Parish Council. The objectives of this report are as follows:

- To make an assessment of the trees' condition and identify any faults.
- To provide management recommendations based on the data gathered.

Report Limitations

Trees are living organisms whose health and condition can change rapidly. The health, condition and safety of the trees therefore should be checked on a regular basis, preferably once a year; this is the responsibility of the tree owner. The conclusions and recommendations in this report are only valid in line with the recommendations provided commencing from the date of the survey. The period of validity maybe reduced in the case of any change in condition or to proximity to the tree. Only those features that are apparent at the time of inspection could be assessed.

No soil samples were taken in preparation of this report and therefore no comments have been made in relation to any soil conditions.

An assessment was made of the trees' condition visually from ground level using Mattheck's Visual Tree Assessment methodology. No climbed inspection or detailed investigation of decay was made; however, this was not considered necessary as enough information was gained about the trees from a ground level inspection. If any faults or potential failings were identified on the tree these have been picked up in the tree survey notes. It should be noted that trees can change significantly over a relatively short period of time, and therefore trees should be monitored on a regular basis for sign of deterioration.

The following assessment procedure was carried out: -

1) observational assessment of the tree in a logical sequence, sub-divided into:

biological indicators

- Foliage – size, colour, distribution etc.
- Upper crown – extension growth, vigour, fungal fruit bodies etc.

mechanical indicators

- Branches – hazard beams, end loading, subsiding, fibre buckling etc.
- Bole – splits, cracks, ribs, bulges, 'bottle-butt', fungi, exudates etc.
- Ground level – soil heave, cracks, compaction, waterlogging etc.

2) mechanical confirmation of suspicion aroused by the observational process, in a logical sequence, starting with non-invasive (sounding hammer) and then semi-invasive if required – e.g. Picus.



Background

The majority of tree roots, even for a mature tree, are found in the top 60cm of the soil and are vulnerable to sudden changes in the rooting environment. These roots absorb moisture and nutrients needed for growth and contrary to popular belief, mature trees do not have a large deep taproot that obtains moisture from great depth.

Any damage to the rooting environment can upset the balance between the crown and roots established by a tree over many years, and this may be detrimental to the health status or may compromise the stability and structural integrity of the tree. It should be noted that healthy trees will usually withstand a loss of a proportion of their root system.

The storage of materials, plant machinery etc. can cause compaction to the upper soil horizons which may result in damage to feeder roots. These feeder roots absorb oxygen, water & nutrients that are then transported around various parts of the tree to fulfil their part in the growth processes of the tree.

Particular care needs to be addressed in dealing with legally protected species such as nesting birds and roosting bats which are protected under the Wildlife and Countryside Act 1981 (as amended) from intentional harm and killing and applies to roosting and hibernating bats and active bird nests. The bird nesting season generally runs from March 1st to 31st August, ideally, any works should be avoided within this period. If the presence of bats is suspected, it is recommended that the Local Bat group is contacted for advice.

Site Information

The trees are located within the grounds of the Churchyard and are a mix of individual broadleaf trees located throughout the graveyard around the church itself and along the frontage.

Tree Protection

The Town and Country Planning Act 1990 protects trees within Conservation Areas that are not already subject to TPO protection. Conservation Areas are defined as "areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance". Although Conservation Areas are primarily designated due to the built environment, trees also contribute to the character of these areas. Trees with a diameter in excess of 7.5cm (3 inches) measured 1.5 metres (5 feet) above ground level are protected by law, and 6 weeks' written notice must be given before any tree work, not just felling, is undertaken. For trees being felled to aid the growth of others (i.e. thinning operations), the threshold diameter is 10cm (4 inches).

Within a conservation area there are restrictions to the work that may be carried out on trees. The LPA must be given at least six weeks' notice in writing before works are carried out to most trees within conservation areas. The notice must describe:

- which trees require work
- the nature of the work



Work must not be carried out during that period without permission. (If it is, a heavy fine could be imposed, and replacement planting will generally be required). After six weeks the Council has to make a decision, either negotiate to a favourable position for both parties, approve the works or serve a Tree Preservation Order. Works must be completed within two years of the date of serving the notice.

Notification is not needed if the tree intended to be worked on is:

- less than 7.5 cm (3 inches) in diameter.
- less than 10 cm (4 inches) in diameter if removal is to improve the growth of other trees.
- Dead.
- in a commercial orchard or pruning fruit trees in accordance with good horticultural practice.
- directly in the way of development that is about to start, and for which detailed planning permission has been granted.

The diameter is to be measured over the bark of the tree at 1.5m (5ft) above ground level and can be taken to be roughly equal to a third of the girth at that height divided by 3.

Work may also be undertaken without notice:

- to prevent or control a nuisance (in the legal sense, in which case it may be helpful to consult a solicitor).
- to comply with an obligation under an Act of Parliament.
- at the request of certain government departments and other specified organisations.
- For pruning fruit trees for the production of fruit, so long as it is line with best horticultural practice.

Tree Preservation Orders (TPO)

These are made by Local Planning Authorities to prohibit the cutting down, uprooting, topping, lopping, wilful damage or destruction of trees without the authority's consent. They can be placed on trees deemed to be of high amenity value within the local landscape, ranging in location from public open spaces to roadsides and private residential gardens.

Once a TPO is made it usually takes immediate effect but can be confirmed or terminated at any time up to six months' time, with or without modifications. Modifications can be a change in description or map details, or a removal of certain trees from the order, but cannot include extra trees to be protected - if the Authority wants to add trees to the order as originally made it is usually necessary to make a



new Order. The landowner is still responsible for the trees, their condition and any damage they might cause at all times.

Details of Orders, applications for work and decisions are kept by the local authority and should be available for public inspection. A landowner is also served notice if a new order is made on their land. It is normal, but not required, for other interested parties (for example neighbours, parish councils etc) to be sent copies of new orders too. There is no requirement for applications to do work to protected trees to be advertised, although many authorities choose to do so.

A check of the current status of the trees on site has not been made with the Local Planning Authority and it is advised that this is carried out before any tree works commence on site.

If trees protected by a TPO are cut-down, topped, lopped, uprooted or wilfully damaged or destroyed, the owner of the tree(s) and the contractor responsible for the work can both be legally prosecuted. The current maximum fine is £20,000 per tree at the Magistrates Court or unlimited fine at the Crown Court.

Trees that are dead or dangerous are exempt from legislation. It is common good practice to notify the LPA of intention to carry out work to trees that fall into these categories, preferably with some notice (e.g. one working week).

Any works prescriptions for protected trees can be dealt with by way of inclusion into a Planning Application for development purposes; this avoids the need to make a separate tree application.

A leaflet produced by the DCLG (Protected Trees), covers the issues raised by this legislation and can be found on <https://www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas>

Statutory wildlife obligations: The Wildlife and Countryside Act 1981 as amended by the Countryside and The Habitat Regulations 2012 provide 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 should be obtained before undertaking any works that might constitute an offence.

Aspirations of the survey

The aim of this survey is to determine the current health and condition of the trees and to thereafter, identify and highlight hazardous defects and assess potential risks in relation to the owner's Duty of Care.

Duty of care relating to trees

In broad terms, a tree owner, and/or whoever has control over it (the duty holder), has a duty of care in both civil and criminal law to take reasonable management measures to avoid foreseeable injury or harm. Duty holders are expected to consider the risks posed by their trees and manage those risks in a reasonable and proportionate way.



There is well established case law upholding the principle that the standard of the duty of care varies according to the resources available to the duty holder, i.e. a large land owner such as an estate or a highway authority would be expected to apply a higher standard of management than smaller landowners such as residential householders.

In short, the law expects duty holders to act in a practical and sensible way, according to the size of their properties.

However, in the event that a duty holder is found neglectful of their duty of care in terms of checking, i.e. they did not have their trees checked where a significant potential for harm existed, it does not automatically follow that they will be liable for any harm that arises.

Liability will only flow from that negligence if it can be established that a competent check would have identified an unacceptable risk of harm and resulted in remedial works that would have prevented that harm occurring. If a defect that resulted in failure would not have been found in a competent check, then, irrespective of any negligence from not carrying out a check, the duty holder is unlikely to be held liable for the consequences of the failure.

Negligence, liability and Acts of God

More specifically, negligence, liability and Acts of God are commonly used terms when discussing duty of care and how blame will be apportioned in the event of harm arising.

Although they are the subject of detailed legal definitions, their everyday meaning during normal use is more helpful. Negligence occurs when someone fails to do something that a reasonable person would have done. Liability is where the responsibility lies when something happens, i.e. who is to blame, with an implication that this is where compensation may be due for any harm that arises. An Act of God means an event that is beyond human control, i.e. there were no obvious indications that it was going to happen before the event.

Case histories suggest that act of God is only a means of defence if the tree(s) have been inspected by a competently trained person and any advice acted upon.

Criteria For Risk Assessment

The Risk Assessment system used is based on the *Tree Hazard: Risk Evaluation and Treatment System* (THREATS) and has been used to record the facts of the inspection as per: -

- Lists any observed defects
- Assessment of the three components of tree risk (defect, target and impact – after Matheny & Clark (1994)¹)
- The system contains an algorithm that provides for a relatively subtle interaction between these three components



- Arrives at a conclusion which was in tune with what can be termed 'unassisted arboricultural decision making' (aka gut instinct)
- Establishes a defensible hierarchy of response that includes delayed intervention and phased re-inspection.

Score range	Threat category	recommended action and completion deadline
4000 +	7 - Extreme	Evacuate/prevent access to impact site, emergency call-out of contractors
2001-3999	6 - Serious	Close site if practical; arrange for work to be completed within 7 days
1000-2000	5 - Significant	Arrange for work to be completed within four weeks maximum
330-999	4- Moderate	Remediate within 13 weeks, reinspect after SWE meantime (inc. gales to Force 7+)
160-329	3- Slight	Reinspect annually /after storms (Force 10+), expect to schedule work within 2 yrs
50-159	2- Minimal	Reinspect within 3 yrs if public access, schedule work as required
0-49	1- Insignificant	Reinspect within 5 yrs if general public access or 3 yrs if child-specific access & TS ≥20

Findings

Appendix 1 lists the trees surveyed along with site observations recorded at the time of inspection.

A total of 33 individually tagged trees, 1 tree with no tags (NT) and 2 groups were surveyed.

Overall, no significant defects were noted.

NT 1 Birch & T978 Cherry are both dead and should be felled.

T972 Lime has not been given a score due to due to vegetation at the base and access issues, this will need to be cleared in order to be reinspected.

The remaining works identified are minor crown raises and lifting away from structures.

The site plan can be found at Appendix 2.

Recommendations

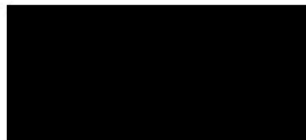
Carry out the works identified at Appendix 1 within the time frames noted.

Following a recent court case ruling whereby an individual was left with life changing injuries, a judge determined that trees should be inspected every 18 months.

It is recommended therefore that the most pragmatic and cost effective solution is that a survey is carried out across the whole site every 18 months to pick up seasonal variances between Summer and Autumn/Winter.

With this in mind, it is suggested that a full survey is carried out again spring 2024.

Additional to this, trees should also be inspected following significant storm events.



John Wilcockson – Director, East Midlands Tree Surveys LTD.

Tech Cert (Arbor A), NDF For

08/09/2022

Appendix 1 - Tree Survey Data

Tree Survey Report

Client: Holbeach Parish Council
Site: All Saints Churchyard

Condition	No. trees
Dead	2
Good	33
Total	35



Ref.	Species	Target	Measurements	Observations	Condition	Threat Category	Inspection period months	Recommendations
G1	Mixed species (Mixed species)	Footpath Churchyard	Life Stage: Mature Life Exp.: 40+ Years	2 x Holly, 1 x Yew Trunk - multi stemmed at ground level Trunk - historic pruning wounds/stubs Crown - minor deadwood < 100mm	Good	1: Insignificant	18	No significant defects/no work required.
G2	Mixed species (Mixed species)	Footpath Road Churchyard	Life Stage: Semi Mature Life Exp.: 40+ Years	2 x Maple, 1 Whitebeam, 1 Oak Trunk - Codominant stems Trunk - historic pruning wounds/stubs Crown - minor deadwood < 100mm Crown - low branches Oak	Good	1: Insignificant	18	Actionable defects: Crown - low branches Control Measures: Crown Lifting Oak To 3m Over Footpath Timescale: 28-Feb-2023
NT1	Birch (Betula sp.)	Footpath Churchyard Road	Life Stage: Dead	Dead	Dead	4: Moderate	18	Actionable defects: Dead Control Measures: Fell Timescale: 28-Feb-2023
T954	Norway Maple (Acer platanoides)	Footpath Road Churchyard	Life Stage: Early Mature Life Exp.: 40+ Years	Trunk - Codominant stems at 2.5m Crown - minor deadwood < 100mm Overhead cables Roots - surface root damage	Good	1: Insignificant	18	No significant defects/no work required.
T955	Norway Maple (Acer platanoides)	Footpath Road Churchyard Building	Life Stage: Early Mature Life Exp.: 40+ Years	Trunk - Codominant stems at 2.5m Crown - minor deadwood < 100mm Overhead cables Roots - surface root damage Crown - low branches	Good	1: Insignificant	18	Actionable defects: Crown - low branches Control Measures: Buildings clearance by 3m Timescale: 28-Feb-2023
T956	Yew (Taxus sp.)	Churchyard Building	Life Stage: Semi Mature Life Exp.: 40+ Years	Trunk - Codominant stems at 0.5m	Good	1: Insignificant	18	No significant defects/no work required.
T957	Tulip Tree (Liriodendron tulipifera)	Footpath Churchyard	Life Stage: Semi Mature Life Exp.: 40+ Years	Crown - minor deadwood < 100mm Trunk - historic pruning wounds/stubs	Good	1: Insignificant	18	No significant defects/no work required.
T958	Cut-leaf Beech (Fagus sylvatica 'Asplenifolia')	Churchyard	Life Stage: Young Life Exp.: 40+ Years	No significant defects	Good	1: Insignificant	18	No significant defects/no work required.
T959	Hornbeam (Carpinus betulus)	Churchyard	Life Stage: Mature Life Exp.: 40+ Years	Trunk - Codominant stems at 1.7m Roots - surface root damage Crown - minor deadwood < 100mm Minor vandalism on main trunk	Good	1: Insignificant	18	No significant defects/no work required.
T960	Sweet Chestnut (Castanea sativa)	Footpath Churchyard Building	Life Stage: Early Mature Life Exp.: 40+ Years	Crown - minor deadwood < 100mm Trunk - historic pruning wounds/stubs Trunk - surface bark wound	Good	1: Insignificant	18	No significant defects/no work required.

Ref.	Species	Target	Measurements	Observations	Condition	Threat Category	Inspection period months	Recommendations
T961	Douglas Fir (<i>Pseudotsuga menziesii</i>)	Footpath Churchyard Building Road	Life Stage: Semi Mature Life Exp.: 40+ Years	No significant defects Trunk - leaning <15°	Good	1: Insignificant	18	No significant defects/no work required.
T962	Whitebeam (<i>Sorbus aria</i>)	Churchyard	Life Stage: Semi Mature Life Exp.: 40+ Years	No significant defects	Good	1: Insignificant	18	No significant defects/no work required.
T963	Birch (<i>Betula</i> sp.)	Footpath Churchyard Building Road	Life Stage: Mature Life Exp.: 40+ Years	No significant defects Crown - minor deadwood < 100mm	Good	1: Insignificant	18	No significant defects/no work required.
T964	Acacia (<i>Acacia</i> sp.)	Footpath Churchyard Building Road	Life Stage: Mature Life Exp.: 40+ Years	Crown - minor deadwood < 100mm Trunk - Codominant stems at 1m Tree is suckering, these should be removed	Good	1: Insignificant	18	Actionable defects: Crown - low branches Control Measures: Buildings clearance 3m Timescale: 28-Feb-2023
T965	Cherry (<i>Prunus</i> sp. 'Cherry')	Footpath Churchyard Road Building	Life Stage: Semi Mature Life Exp.: 40+ Years	Crown - minor deadwood < 100mm	Good	1: Insignificant	18	No significant defects/no work required.
T966	Birch (<i>Betula</i> sp.)	Footpath Churchyard Building Road	Life Stage: Semi Mature Life Exp.: 40+ Years	No significant defects Trunk - Codominant stems at ground level	Good	1: Insignificant	18	No significant defects/no work required.
T967	Indian bean tree (<i>Catalpa bignonioides</i>)	Footpath Churchyard Building Road	Life Stage: Mature Life Exp.: 40+ Years	Trunk - historic pruning wounds/stubs Trunk - leaning 15° to 30° Crown - minor deadwood < 100mm	Good	1: Insignificant	18	No significant defects/no work required.
T968	Cherry (<i>Prunus</i> sp. 'Cherry')	Footpath Churchyard Building Road	Life Stage: Mature Life Exp.: 40+ Years	No significant defects Trunk - Codominant stems at 1m, weak union Crown - minor deadwood < 100mm	Good	1: Insignificant	18	No significant defects/no work required.
T969	Cherry (<i>Prunus</i> sp. 'Cherry')	Footpath Churchyard Building Road	Life Stage: Semi Mature Life Exp.: 40+ Years	No significant defects Trunk - Codominant stems at 1, 2m Crown - minor deadwood < 100mm Crown - suppressed	Good	1: Insignificant	18	No significant defects/no work required.
T970	Cut-leaf Beech (<i>Fagus sylvatica</i> 'Asplenifolia')	Footpath Churchyard Building Road	Life Stage: Mature Life Exp.: 40+ Years	Trunk - multi stemmed at 2m Crown - minor deadwood < 100mm Crown - major deadwood >100mm Roots - surface root damage Trunk - historic pruning wounds/stubs, part occluded	Good	1: Insignificant	18	No significant defects/no work required.
T971	Holly (<i>Ilex</i> sp.)	Churchyard	Life Stage: Mature Life Exp.: 40+ Years	Trunk - leaning 15° to 30° Crown - minor deadwood < 100mm	Good	1: Insignificant	18	No significant defects/no work required.
T972	Lime (<i>Tilia</i> sp.)	Churchyard	Life Stage: Mature Life Exp.: 40+ Years	Trunk - epicormics/suckers Crown - minor deadwood < 100mm Crown - major deadwood >100mm Unable to assess effectively due to vegetation.	Good		18	Actionable defects: Unable to assess effectively due to vegetation. Trunk - epicormics/suckers Control Measures: Clear round base to allow for reinspection. Crown Lifting/Raising To 3 Metres Minimum Epicormic removal Timescale: 28-Feb-2023

Ref.	Species	Target	Measurements	Observations	Condition	Threat Category	Inspection period months	Recommendations
T973	Hornbeam (<i>Carpinus betulus</i>)	Churchyard Garden Footpath	Life Stage: Semi Mature Life Exp.: 40+ Years	Trunk - Codominant stems at 2m Trunk - historic pruning wounds/stubs Crown - suppressed	Good	1: Insignificant	18	No significant defects/no work required.
T974	Holly (<i>Ilex</i> sp.)	Churchyard Garden Footpath	Life Stage: Semi Mature Life Exp.: 40+ Years	No significant defects	Good	1: Insignificant	18	No significant defects/no work required.
T975	Beech (<i>Fagus</i> sp.)	Footpath Churchyard Building	Life Stage: Mature Life Exp.: 40+ Years	Crown - minor deadwood < 100mm Roots - surface root damage Trunk - historic pruning wounds/stubs Trunk - Codominant stems at 2m	Good	1: Insignificant	18	Actionable defects: Crown - low branches Control Measures: Buildings clearance 3m Timescale: 28-Feb-2023
T976	Beech (<i>Fagus</i> sp.)	Footpath Churchyard Building	Life Stage: Mature Life Exp.: 40+ Years	Crown - minor deadwood < 100mm Roots - surface root damage Trunk - historic pruning wounds/stubs Trunk - leaning <15° Crown - asymmetric Crown - major deadwood >100mm	Good	1: Insignificant	18	No significant defects/no work required.
T977	Sycamore (<i>Acer pseudoplatanus</i>)	Footpath Churchyard Building	Life Stage: Mature Life Exp.: 40+ Years	Crown - minor deadwood < 100mm Crown - major deadwood >100mm Trunk - historic pruning wounds/stub Fibre buckling near base of trunk Trunk - Codominant stems at 4m	Good	1: Insignificant	18	Actionable defects: Trunk - fibre buckling Control Measures: Further investigation required Timescale: 28-Feb-2023
T978	Cherry (<i>Prunus</i> sp. 'Cherry')	Footpath Churchyard Building Garden	Life Stage: Dead	Dead	Dead	4: Moderate	18	Actionable defects: Dead Control Measures: Fell Timescale: 30-Nov-2022
T979	Hazel (<i>Corylus avellana</i>)	Churchyard Garden Footpath Building	Life Stage: Semi Mature Life Exp.: 40+ Years	No significant defects Coppice stool, consider recoppicing to prevent damage to fence	Good	1: Insignificant	18	No significant defects/no work required.
T980	Turkey Oak (<i>Quercus cerris</i>)	Footpath Churchyard Building	Life Stage: Mature Life Exp.: 40+ Years	Crown - minor deadwood < 100mm Trunk - historic pruning wounds/stub	Good	1: Insignificant	18	No significant defects/no work required.
T981	Holly (<i>Ilex</i> sp.)	Footpath Churchyard Building	Life Stage: Early Mature Life Exp.: 40+ Years	Crown - minor deadwood < 100mm Trunk - ivy/climber Trunk - historic pruning wounds/stubs	Good	1: Insignificant	18	No significant defects/no work required.
T982	Beech (<i>Fagus</i> sp.)	Footpath Churchyard Building Road	Life Stage: Mature Life Exp.: 40+ Years	Crown - minor deadwood < 100mm Roots - surface root damage Trunk - historic pruning wounds/stubs	Good	1: Insignificant	18	No significant defects/no work required.
T983	Holly (<i>Ilex</i> sp.)	Churchyard Garden Footpath	Life Stage: Semi Mature Life Exp.: 40+ Years	No significant defects	Good	1: Insignificant	18	No significant defects/no work required.
T985	Ginkgo biloba (<i>Ginkgo biloba</i>)	Footpath Building Road	Life Stage: Mature Life Exp.: 40+ Years	Crown - minor deadwood < 100mm Roots - surface root damage Trunk - historic pruning wounds/stubs Trunk - Codominant stems at 2m Crown - low branches	Good	1: Insignificant	18	Actionable defects: Crown - low branches Control Measures: Crown Lifting over footpath and buildings clearance by 3m Timescale: 28-Feb-2023

Ref.	Species	Target	Measurements	Observations	Condition	Threat Category	Inspection period months	Recommendations
T986	Tree of heaven (<i>Ailanthus altissima</i>)	Footpath Building Road	Life Stage: Mature Life Exp.: 40+ Years	Crown - minor deadwood < 100mm Trunk - historic pruning wounds/stubs Trunk - Codominant stems at 4m Crown - low branches Crown - major deadwood >100mm Roots - surface root damage	Good	1: Insignificant	18	Actionable defects: Crown - low branches Crown - major deadwood >100mm Control Measures: Crown lifting over footpath/fence 3m Complete dead wooding Timescale: 28-Feb-2023

Holbeach Parish Council
All Saints Churchyard

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