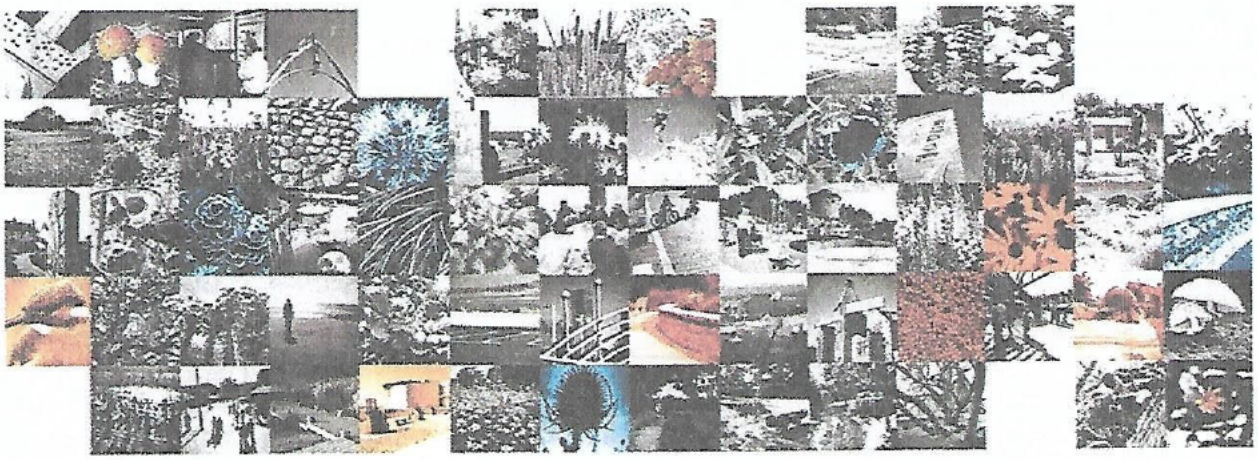
THE ENVIRONMENT PARTNERSHIP



SAINT JAMES CHURCH

MELTHAM

TREE RISK SURVEY REPORT

FEBRUARY 2020

TEP
Genesis Centre
Birchwood Science Park
Warrington
WA3 7BH

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Approved	

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DRAWINGS

1.0 Site description

Site name

1.1 Saint James Church Cemetery, Meltham

Address/location

1.2 Saint James Church, Harewood Mount, Meltham, Holmfirth, HD9 4AS

Approximate area

1.3 0.58 ha.

Site observations and current use

1.4 The site is in use as a church and graveyard with a public footpath linking Huddersfield Road to the north and Meltham Mills Road to the east; and Robert Ashton Memorial Park to the south. An occupied vicarage with associated driveway and garden space is situated to the west of the churchyard.

1.5 Within the site, there is variation in the frequency and/or type of usage. The graveyard was observed to have a low occupancy rate during the survey with no footfall; it is considered that this may fluctuate at certain times (e.g. during church services / functions etc.).

1.6 The public footpath runs around the western and southern side of the church and graveyard; this was observed to have intermittent footfall with a low occupancy overall.

1.7 It was observed that high target areas exist within and adjacent to the site boundaries. These include Saint James Church building and graveyard (including public footpath); adjacent residential / business properties to the east along Harewood Mount and Meltham Mills Road respectively; and the vicarage the west.

1.8 In addition, the park to the south presents a risk zone, particularly with the presence of large, mature trees along the adjoining southern boundary of the church yard and vicarage. Whilst intermittent footfall pertaining to a low occupancy rate was observed during inspection, this was deemed likely to be, in part, due to the presence of slightly inclement weather and strong winds at the time. Whilst there were no footpaths or significant targets observed other than large expanses of grass, it is likely that variations in use within the park will occur, with increased occupancy at certain times of the week / year (e.g. weekends / spring and summer), and at times when the weather is calmer, dry and/or warm.

Local authority

1.9 The local authority is Kirklees Council.

1.10 The local authority's tree officer can be contacted by email at trees.planning@kirklees.gov.uk; by direct dial on 01484 414909; or by contacting the planning department on 01484 414746. Statutory protection, designations and guidance

2.0 Statutory protection, designations and guidance

Tree Preservation Orders

2.1 Local authorities can create Tree Preservation Orders (TPO) to protect the amenity of trees, groups of trees, woodland or all the trees within a defined area[1]. Cutting down, lopping (including roots), topping, uprooting, and wilful damage or destruction are prohibited by TPO unless done with the Local Authority's written consent.

2.2 The council's online mapping system confirmed that some trees are protected by tree preservation orders. Based on mapping, aerial imagery and site observations, these corroborate approximately with the survey features listed below; however, no determining information (e.g. species) was available from the Council to confirm which trees are subject to protection.

Table 1: Trees protected by TPO

Tree survey reference	TPO reference
T1	15/93/t2
T2	15/93/t4
T3	15/93/t6
T5	15/93/t9
T8	15/93/t13;
T9	15/93/t14;
T10	15/93/t15;
T11	15/93/t16;
T12	15/93/t3;
T13	15/93/t5;
G3	15/93/t10; 15/93/t11; 15/93/t12

Conservation Area

2.3 Trees within Conservation Areas are protected by Section 211 of The Town and Country Planning Act 1990. The local authority must be notified 6 weeks before the any tree[2] in a Conservation Area is removed, uprooted, lopped, topped, wilfully destroyed, or wilfully damaged. During this period the Council may consider serving a Tree Preservation Order to prevent the proposed work from being undertaken.

[1] Exemptions apply, see https://www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas
[2] Exemptions apply, see https://www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas

2.4 The council confirmed that the site is not within a Conservation Area.

Ancient Woodland and Veteran Trees

2.5 Ancient woodland and ancient or veteran trees are irreplaceable and amongst the most valuable and sensitive habitats. Ancient woodland is any area that has been wooded since at least 1600. Individual trees of exceptional age, size, biodiversity or cultural significance are regarded as 'veterans'. Neither category has legal protection but they have strong protection in planning policy. Any works to veteran or ancient trees and woodland should be undertaken with the utmost sensitivity and under specialist advice.[3]

2.6 Natural England's ancient woodland inventory[4] shows no records of ancient woodland within or adjacent to the site. The inventory is provisional and may not show woodland smaller than 2ha. It is therefore possible that unmapped ancient woodland exists.

2.7 The survey recorded no veteran trees within the site.

Felling Licences

2.8 It is an offence under the Forestry Act (1967) to fell trees without a licence unless an exemption applies.

2.9 Pruning; small scale felling; and felling in a domestic garden, orchard, churchyard or designated open space are amongst those works that may be exempt.[5]

Hedgerow Regulations

2.10 The Hedgerow Regulations (1997) protect hedgerows that meet certain criteria[6]. This report does not include an assessment to determine which, if any, features would be protected under the Regulations. Hedges less than 20m long, in domestic gardens, or younger than 30 years are less likely to be protected.

2.11 Any removal of a protected hedgerow or a section of a protected hedgerow must only be done with the written consent of the Local Authority.

2.12 No hedges which meet the definition of protected hedgerow were observed duringthe survey.

Protected Species

2.13 Several protected species of animals are associated with trees and woodland and may therefore be affected by tree works, if present. The protection comes from a range of statutes and directives including both European and domestic law[7].

[3] See https://www.forestry.gov.uk/anwpracticeguide for further information
[4] http://www.natureonthemap.naturalengland.org.uk/magicmap.aspx
[5] See https://www.forestry.gov.uk/england-fellinglicences for details
[6] See https://www.gov.uk/guidance/countryside-hedgerows-regulation-and-management for details
[7] Including The Wildlife and Countryside Act 1981 (as amended); Protection of Badgers Act 1992; Conservation of Habitats and Species Regulations 2010

2.14 This report does not include an assessment of the presence or absence of any protected species. The protected animal species most associated with woodland are: bats, dormouse, otters, great crested newts, smooth snakes and sand lizards, badgers, and all nesting birds.

2.15 Most trees are a potential habitat for nesting birds. For this reason, tree work should ideally be undertaken outside the bird nesting season (March to August, inclusive). If this is not possible, an inspection of each tree prior to works should be undertaken by a competent person to confirm the absence of nesting birds.

2.16 Trees with cavities, holes, flaking bark, splits and old growth ivy may offer potential habitat for roosting bats. A preliminary ground level appraisal of each tree was undertaken by a trained layperson as part of the arboricultural survey. No features of potential interest to roosting bats were observed.

2.17 If you know or suspect that any protected species may be present and/or affected by tree works, the advice of an ecologist should be sought.

Invasive Species

2.18 Invasive plants are defined in the Wildlife and Countryside Act, Schedule 9, Part 2. Under provisions made within the Act, it is an offence to spread invasive plants; liability may also extend in situations where a landowner has permitted the spread of a plant onto neighbouring land. It is therefore prudent to control or eradicate such species wherever they are found.

2.19 This survey did not seek to identify invasive species and should not be relied upon as a comprehensive record. However, some invasive plant species are likely to be recorded incidentally during a tree survey because they are woody, large or grow on trees and hedges. Such observations as were made are recorded in Table 1.

Table 2: Invasive plant species

Species	Observations
False acacia (*Robinia pseudoacacia*)	None
Giant hogweed (*Heracleum mantegazzianum*)	None
Himalayan balsam (*Impatiens glandulifera*)	None
Cotoneaster (*5 species*)	None
Virginia creeper (*Parthenocissus quinquefolia; P. inserta*)	None
Japanese knotweed (*Fallopia japonica*)	None
Giant knotweed (*Fallopia sachalinensis*)	None

Species	Observations
Rhododendron (*Rhododendron ponticum*) and hybrid with *R. maximum*	None
Japanese rose (*Rosa rugosa*)	None

3.0 Survey methodology

3.1 The survey was undertaken on 30th January 2020 by Sean Roberts, an experienced arboriculturist with a BSc (Hons) in arboriculture and urban forestry.

3.2 The survey was by visual inspection from ground level according to the industry standard VTA survey method. The extent of the survey is shown on Drawing 1.

3.3 The survey was non-invasive and did not include an assessment of soils. A nylon sounding mallet, metal probe, and binoculars were used at the surveyor's discretion to corroborate observations or eliminate ambiguity.

3.4 All trees within the survey area were inspected but may be recorded collectively to most usefully reflect common characteristics or management requirements.

3.5 *Tree:* A single tree, normally with one conjoined rooting system, which is distinct from surrounding trees either by virtue of size, condition, species or location.

3.6 *Group:* Trees occurring collectively, but not necessarily in contact or immediate proximity, with common function, form, management requirements, or purpose.

3.7 *Woodland:* Areas of tree cover, not necessarily unbroken, that are more structurally complex than 'Groups', and comprising a natural and self-sustaining arboreal habitat.

3.8 *Hedge:* Woody species which are managed as a hedge or are capable of being returned to management as a hedge.

3.9 The results of the survey are included at Appendix A.

Survey attributes

3.10 *Reference:* Trees, Groups and Hedges are automatically assigned a reference number in the format T1, T2, T3... T*n*. Groups are referenced in the format G*n*, Woodlands as W*n* and hedges as H*n*.

3.11 *Species:* The common name is given. Multiple species may be recorded for groups, woodlands and hedges. Where tree condition or locations prevented identification to species level, genus was recorded.

3.12 *Height:* The top height of the crown in metres (for groups, woodlands and hedges, the height of the tallest crown). Tree heights were determined using a Nikon Forestry Pro hypsometer.

3.13 *Stem diameter:* At 1.5m above ground level is estimated visually and given as a 50mm range. A single stem equivalent diameter is given for multistemmed trees; for groups, woodlands and hedges the largest stem diameter is given.

3.14 *Crown diameter/width:* The largest diametric branch spread for individual trees is estimated by pacing at ground level. This need not pass through the trunk. For hedges, the average width is given. The canopy spread of Groups and Woodlands is shown approximately on Drawing 1.

3.15 *Lean/canopy bias:* The direction of any notable and natural lean or bias in crown form.

3.16 *Maturity:* The developmental stage of a tree or group of trees defined by tree size and the rate of growth; it is not possible to attribute a numerical value to each age class in terms of years because of the substantial differences between species. By indicating physiological maturity (as opposed to age) trees that are relatively small due to immaturity can be distinguished from those that are small but unlikely to grow much taller:

(i) Young trees within the initial establishment phase and growing rapidly;

(ii) Middle-aged trees established and growing steadily; and

(iii) Mature trees at or close to full size for the species in that location.

3.17 *Condition:* The condition of each feature was recorded as Good, Fair, Poor, Dead or Veteran[8]. This is a combined assessment of vigour, health, structural condition and characteristics.

3.18 *Safe Useful Life Expectancy:* A forecast of when a tree will die or begin to require disproportionately onerous management. It is based on age, species, condition and context. 'Short' indicates a 10-year outlook; 'Medium' indicates a 10 to 40-year outlook, and 'Long' indicates an outlook in excess of 40 years. For Groups, Woodland and Hedges the forecast relates to the feature as a whole. so it is less likely that these features have a 'Short' life expectancy. There may be trees within a group that are in decline or even dead but where this does not jeopardise the function of the whole, this would not necessarily influence the categorisation.

3.19 *Comments:* Observations to justify categorisation, inform works recommendations and highlight characteristics that are pertinent to the inspection, particularly those that present or may develop into defects.

3.20 The recommended works, their objective and priority are described in the following section.

[8] See Section 2.0 for further information on veteran trees

4.0 Risk assessment

4.1 The main purpose of this survey is to assess and manage risk associated with hazardous trees. According to the Health and Safety Executive:

(i) *'A hazard is the potential for harm arising from an intrinsic property or disposition of something to cause detriment'*; and

(ii) *'Risk is the chance that someone or something that is valued will be adversely affected in a stipulated way by a hazard'*.

4.2 Landowner owe a duty to take reasonable care to avoid reasonably foreseeable risk of injury to persons or property. In general terms, they should act as a 'reasonable and prudent landowner'. However, there is no duty to eliminate all risk but to achieve 'tolerable risk': sometimes described by the acronym ALARP (as low as reasonably practicable). What constitutes a 'reasonable' response to risk must be informed by the context of each tree and the benefits it provides, as well as the availability, practicality and affordability of intervention options.

4.3 Overall, the risk of death or serious injury caused by tree failures in the UK is extremely low, broadly tolerable, and many times less than the threshold regarded as 'trivial'[9]. However, the risk associated with an individual tree may be much higher and unacceptable. This variability and the dynamic nature of trees are the reason for regular surveying, which is the most common basis for tree risk management in trees.

Methodology

4.4 At the most basic level, risk management comprises a competent survey, works recommendations, and the timely implementation of those works. This process must also be repeated at an appropriate frequency because trees and land use are dynamic. The frequency of re-inspection is an expression of confidence in the condition of each tree or group and the validity of the survey data.

4.5 There are two different ways of managing tree risk by surveying. The results of the survey can be used to establish an appropriate re-inspection frequency with more hazardous trees and those more capable of causing harm tending to be inspected more frequently. Alternatively, a single re-inspection frequency can be set for a tree population and works recommended accordingly. The former approach tends to be associated with increased survey cost and is typically appropriate for large populations. The latter approach tends to be better suited to smaller tree populations and tends to increase the cost of the tree works.

4.6 In this survey, a single re-inspection frequency of 3 years has been adopted. This is to maximise survey efficiency is compatible with reasonable and prudent management of trees on this site.

[9] HSE

4.7 By virtue of their location and/or size, some trees have in inherently greater capacity to cause injury than others. In order for all trees to be inspected with the same frequency, it is necessary that works are recommended for any tree which could not otherwise be unattended for the full survey cycle. In this assessment, the works recommendations are therefore conservative and more interventionist than would be necessary under a dynamic survey frequency.

4.8 If trees are identified for which surveying at the site-wide frequency might be negligent, and where the works required to mitigate this cannot be justified, intermediate inspection at a specified date or frequency may be recommended. This measure is used only where necessary to ensure defensibility of management, and occasionally to allow inspection during a particular season.

Management objectives

4.9 The central objective of tree risk management is to ensure that the management of trees by the landowner is defensible. It is all but fundamental to the delivery of this objective that it should be done at the least possible cost. Furthermore, in consideration of the many benefits associated with trees, tree risk management should be done in a way that minimises the loss of those benefits. This can be characterised as the least possible intervention to create the best possible trees.

4.10 There is often more than one measure available to control an identified risk. In addition, surveying for hazards c identifies other opportunities for proactive intervention. It is appropriate to consider other objectives alongside safety, both to inform the means of controlling risk and also in their own right.

4.11 This report is not a management plan but recommendations have been made that do not relate to risk. If these are not undertaken, some may develop into hazards or become necessary in the future: typically at an increased cost.

4.12 For each recommendation in Appendix A, a primary works objective is given; this is the main reason for the recommendation. The definitions used are:

(i) ***Safety***: to deliver reasonable and prudent tree risk management

(ii) ***Formative:*** to promote future growth, development and structure

(iii) ***Conservation:*** to improve or maintain biodiversity and habitats

(iv) ***Aesthetic:*** to improve the appearance and visual amenity of trees

(v) ***Longevity:*** to improve life expectancy, typically by correcting defects

(vi) ***Screening:*** to maintain or improve the screening function of trees

(vii) ***Economic:*** to reduce future cost or to harvest a saleable crop; and

(viii) ***Preventative:*** to prevent or abate Nuisance or undesirable traits.

5.0 Recommendations

5.1 Recommended works are detailed in Appendix A.

5.2 All recommendations with a Primary Works Objective of *Safety* must be implemented as described in order to effect responsible risk management.

5.3 Each works item has been given a Works Priority rating to help to prioritise the most urgent works and forecast expenditure. Definitions are given in the table below.

Table 3: When recommended works should be done

Works Priority	Definition
Emergency	To do immediately; within hours or days
Priority	To do as soon as reasonably practicable; within days or weeks
Routine	To do when convenience and budgets allow; within months
Discretionary	To consider doing, according to preference; at any time

5.4 The extent of works to reduce the crown of T3 are illustrated indicatively within Figure 1. These works are recommended to reshape the crown of T3 whilst reducing the sail area of the tree (the area of a tree's aerial structure, particularly foliage, which intercepts winds) and associated strains from leverage on over extended and end-weighted limbs.

5.5 All recommended works should be carried out according to *BS3998 Tree Work - Recommendations*.

Figure 1: Indicative extent of crown reduction works to T3.

Works procurement

5.6 All works should be undertaken by a suitably qualified, competent and insured contractor. It is recommended that at least three quotations should be sought for works

5.7 All tendering contractors should be asked to demonstrate:

(i) Tree works will be undertaken according to British Standard 3998:2010;

(ii) They have adequate public liability insurance (typically £5 million);

(iii) A risk assessment of the works will be undertaken;

(iv) How they will deal with protected species;

(v) How traffic and/or pedestrian movements will be controlled;

(vi) A LOLER certificate for all lifting equipment (e.g. ropes and harnesses);

(vii) That individuals are qualified for the task being undertaken (see below).

5.8 For basic tree pruning, felling and chainsaw work, appropriate qualification normally means holding relevant National Proficiency Test Council 'CS units' or the equivalent Qualification and Credit Framework Level 2 and Level 3 Awards. It may also be possible to demonstrate competence in other ways. The most common CS units that pertain to tree works are:

(i) CS30 Maintain and operate the chainsaw

(ii) CS31 Fell and process small trees

(iii) CS32 Fell and process trees over 380mm

(iv) CS34 Sever individually uprooted trees,

(v) CS35 Sever multiple windblown trees

(vi) CS38 Climb trees and perform aerial rescue

(vii) CS39 Operate a chainsaw from a rope and harness

(viii) CS40 Carry out pruning operations

(ix) CS41 Undertake sectional felling operations

(x) CS45 Arboricultural ground worker

(xi) CS47 Safe use of a chainsaw from a mobile elevated work platform

(xii) CS48 Use of powered pole pruners

(xiii) CS50 Techniques for dealing with damaged trees

Permissions

5.9 Authority to undertake the works recommended in Appendix A must be sought in advance of commencement.

Ownership

5.10 The permission of the owner of the land around the base of the tree must be sought. For trees on boundaries, this may be more than one party.

Tree Preservation Order

5.11 The recommended works will affect TPO trees and require an application to the Local Authority before being carried out.

Conservation Area

5.12 The proposed works will not affect trees within a Conservation Area.

Felling licence

5.13 The recommended works will require a felling licence as they are not covered by exemption and/or exceed the timber volume threshold set by the Forestry Act 1967 as amended[10].

Other

5.14 Additional consenting mechanisms may apply in certain circumstances including for works affecting protected species; close to overhead lines; in churchyards; close to airports and railways; and for which access is required across or above land owned by third parties (including the Highways and Local Authorities).

5.15 Based on our knowledge of the site, the recommended works should be discussed with adjacent land / property owners prior to commencement.

[10] https://www.forestry.gov.uk/pdf/FellingLicenceApplicationFormEnglandv2.doc/SFILE/FellingLicenceApplicationFormEnglandv2.doc

APPENDIX A: Tree Survey Data

APPENDIX A: Arboricultural Survey Data Sheets

Surveyor: Sean Roberts
Survey date: 30 January 2020
Survey cycle (years): 3
Survey due: 01 February 2023
Site: Saint James Church Cemetery
Town: Meltham

Ref	Species	Height	Stem Diameter	Crown diameter / width	No. of stems / trees	Lean / canopy bias	Maturity	Condition	Safe Useful Life Expectancy	Comments on form, condition, health and significant defects	Works Recommendations	Primary works objective	Works Priority	TPO	Conservation Area
	(Common name)	(m)	(mm)	(m)	(below 1.5m)	N, S, E, W, None	Young, Middle Age, Mature, Ancient	Good, Fair, Poor, Dead, Veteran	Long, Medium, Short			Safety, Formative, Conservation, Aesthetic, Longevity, Screening, Economic, Preventative	Emergency, Priority, Routine, Discretionary	Y / N	Y / N
Trees															
T1	Copper beech	16.0	850-900	14.0	1.0	E	Mature	Good	Long	Large burrs at ground level to south, small fruiting body of Ganoderma sp. wood decay fungi towards underside of one of burrs, extent of decay unknown but considered localised. Exposed roots, minor damage, likely from grass cutting machinery. Typical structural form with crossing limbs and bark included unions, some crossing limbs appear fused, likelihood of failure assessed as low. Good crown spread and vigour.				Y	N
T2	Common lime	20.0	650-700	18.0	1.0	none	Mature	Fair	Medium	Small diameter branch failures, deadwood to c 140mm diameter, dense basal epicormics, typical of species, restricted inspection of base of trunk, blackened, wet area of sunken bark on stem at c. 2-3m with small decay cavities noted, full extent of decay unknown, wood decay fruiting bodies noted within affected area (Kretzschmaria deusta) with potential for reduced wood strength in affected area of lower stem. Targets include residential gardens and dwellings and church, although assessed as likely to fall away from church.	Fell.	Safety	Priority	Y	N
T3	Small leaved lime	20.0	850-900	17.0	1.0	N	Mature	Good	Medium	Large and notable treed apacent to residential street. Bifurcate at c 2m with acute union and included bark, no apparent natural brace above union, junction in weakened state, large arising co-dominant stem weighted to north towards residential street, likelihood of failure assessed as medium. Remaining structure appears in good condition, crown in good health with good presence of winter buds, some small diameter deadwood over road and numerous small diameter drooping branches too.	Reduce crown by 2-3m all round to reduce loading on over extended limbs and re-balance crown. Crown raise and remove deadwood above pavement / road to north to create minimum 2.5m clearance.	Safety	Routine	Y	N
T4	Common beech	21.0	650-700	11.0	1.0	SW	Mature	Good	Medium	Large, notable tree at edge of playing field. Good health, crown weight biased to south-west towards playing field, suppressed to north-east by G2. Main bifurcation at c.2m contains included bark, arising co-dominant stems previously naturally braced with bracing limb shaded out, no reaction wood observed at junction apexes, union in weakened state but likelihood of failure assessed as low. Remaining structure appears in good condition.	Biennial inspection	Safety	Routine	N	N
T5	Sycamore	18.0	850-900	14.0	1.0	E	Mature	Good	Medium	Good crown spread and vigour with many winter buds present. Bifurcate at c 2m with acute union, well formed. Further bifurcations in each arising co-dominant stem a c 5m high, stem to north previously naturally braced with associated scarring observed,, bracing branch appears to have been pruned out, ivy covering associated union below, inspection not possible, union considered to be in weakened state but assessment of likelihood of failure not made, arising limbs from union somewhat elongated / end weighted relative rest of canopy.	Sever and remove ivy to allow thorough inspection in future, reduce canopy of end weighted, previously naturally braced limbs growing to north to rebalance crown and reduce wind / gravitational loading, assess structural condition of previously naturally braced union at next inspection.	Safety	Routine	Y	N
T6	Norway maple	14.0	450-500	14.0	1.0	SE	Middle Age	Good	Long	Open grown, good crown spread and health. Good structural condition, some limbs bowed. Area of bleeding noted on stem, above main bifurcations, bleeds appear inactive. Exposed roots with minor damage, likely from grass cutting machinery. Nothing of concern.				N	N
T7	Silver birch	15.0	250-300	7.0	1.0	N	Middle Age	Good	Long	Slight kink in lower trunk, but otherwise good form and structural condition. Good health. Nothing of concern.				N	N
T8	Common beech	23.0	950-1000	21.0	1.0	E	Mature	Good	Medium	Large, notable mature tree within vicarage garden. Good crown spread and vigour with good presence of winter buds. Branches reduced previously to north-east between church. Small diameter localised deadwood, low risk of harm / damage, no requirement to remove. One minor branch failure to east above headstones leaving tear wound with some decay and small diameter regrowth. Stem leans and crown weight biased to east towards church and churchyard. Good structural condition, some acute unions with included bark, nothing to suggest risk of failure before next inspection (recommended in 2 years).				Y	N
T9	English oak	10.0	350-400	12.0	1.0	NW	Middle Age	Good	Long	Relatively young oak, good health, crown weight biased north-west towards vicarage garden including children's play area. Nothing of concern.				Y	N
T10	Small leaved lime	19.0	650-700	18.0	1.0	NE	Mature	Good	Long	Previously crown raised with some limbs reduced. Bifurcate at c 3m with acute union, arising co-dominant stems entwined, union below appears to contain included bark, but generally well formed, likelihood of failure assessed as low. Good crown health. Somewhat congested crown form, typical of species. Nothing of concern.				Y	N

APPENDIX A: Arboricultural Survey Data Sheets

Ref	Species	Height	Stem Diameter	Crown diameter / width	No. of stems / trees	Lean / canopy bias	Maturity	Condition	Safe Useful Life Expectancy	Comments on form, condition, health and significant defects	Works Recommendations	Primary works objective	Works Priority	TPO	Conservation Area
	(Common name)	(m)	(mm)	(m)	(below 1.5m)	N, S, E, W, None	Young, Middle Age, Mature, Ancient	Good, Fair, Poor, Dead, Veteran	Long, Medium, Short			Safety, Formative, Conservation, Aesthetic, Longevity, Screening, Economic, Preventative	Emergency, Priority, Routine, Discretionary	Y / N	Y / N
T11	Sycamore	15.0	750-800	14.0	1.0	N	Mature	Good	Long	Mature tree within vicarage garden. Crown raised previously, wounds occluded well, growth cracks in bark on limbs, good structural condition with no apparent defects, good health and presence of winter buds. Nothing of concern.				Y	N
T12	English oak	10.0	350-400	12.0	1.0	SW	Middle Age	Good	Long	Small diameter deadwood, low risk, good health, crown weight biased south-west. Nothing of concern.				Y	N
T13	Common lime	20.0	650-700	16.0	1.0	E	Mature	Good	Long	Dense basal epicormic shoots, restricted inspection. Stem leans to east towards graveyard and residential property, small diameter branch failures and deadwood, typical of species, low associated risk of harm to site users, good health, structural condition appears good.	Remove basal epicormic shoots to allow thorough inspection in future, re-survey within 12 months.	Safety	Routine	Y	N
Groups															
G1	Sycamore, English oak	10.0	150-200	10.0	c.5	E	Middle Age	Good	Long	1 middle aged oak, and 1 group of multi-stemmed sycamores. Oak in good health and condition, crown <1m from church gable end, no urgent requirement to crown reduce but will likely need reducing by next inspection. Multi stemmed sycamores have acute unions containing included bark at ground level, likelihood of union failure assessed as low, small, young trees unlikely to cause significant harm / damage in event of failure, some sycamore stems re-grown from bole of previously failed / felled stem which contains basal wounds and localised decay, saprophytic wood decay fungi noted on decaying woody substrate (puffballs). Nothing of concern.				N	N

APPENDIX A: Arboricultural Survey Data Sheets

Ref	Species	Height	Stem Diameter	Crown diameter / width	No. of stems / trees	Lean / canopy bias	Maturity	Condition	Safe Useful Life Expectancy	Comments on form, condition, health and significant defects	Works Recommendations	Primary works objective	Works Priority	TPO	Conservation Area
	(Common name)	(m)	(mm)	(m)	(below 1.5m)	N, S, E, W, None	Young, Middle Age, Mature, Ancient	Good, Fair, Poor, Dead, Veteran	Long, Medium, Short			Safety, Formative, Conservation, Aesthetic, Longevity, Screening, Economic, Preventative	Emergency, Priority, Routine, Discretionary	Y / N	Y / N
G2	Common beech, English oak	21.0	750-900	20.0	6 trees	SE	Middle Age to Mature	Good	Long	Group containing large, notable, mature beech trees (including T4) at edge of playing field, some smaller understorey oaks also. Beech trees in good health and structural condition, no significant structural defects observed. Southern most beech with major asymmetric crown, weighted to south-east towards playing field boundary. Middle aged oaks, in good health with moderate form, contain small diameter deadwood where branches have been shaded out, associated risks from falling deadwood low. A public footpath runs along the northern edge of the group into the graveyard; a number of young, self seeded ash trees growing along the edge of the footpath were observed to have ash dieback symptoms.				N	N
G3	Sycamore, English oak, English holly	21.0	950-1000	15.0	4 trees	n/a	Mature	Good	Long	3 sycamores and 1 oak with number of smaller holly. Sycamore growing along southern boundary of churchyard, oak growing within vicarage garden. Generally good health and structural condition with no significant structural flaws observed. Some small diameter branch failures with associated wounds and small diameter deadwood over public churchyard footpath, associated risk of harm low. Nothing of concern.				Y	N
G4	Common beech, wild cherry, Lawson cypress, spruce sp.	10.0	100-150	6.0	4 trees	none	Young to Middle Age	Good	Long	Young to middle aged trees within vicarage garden. Nothing of concern.				N	N
G5	Red leaved maple, English holly, Lawson cypress	10.0	250-300	9.0	5 trees	none	Middle Age	Good	Long	2 maples within lawn space adjacent vicarage driveway: one appears to have been topped previously at c.6m. Generally good health and condition. 2 holly and a cypress located to west of vicarage gated entrance - good health and condition, some entwined limbs in western most holly. Nothing of concern overall.				N	N

DRAWINGS

Drawing 1 – Tree Location Plan

Common line

Fell
15/93 t4

Remove dense epicormic shoots

KEY

[This drawing must be reproduced in colour]

- T1/G1 Trees / tree groups
- Approx. survey boundary
- * Tree Preservation Order

Tree Quality Categorisation

(Based on BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations)

- Emergency Works
- Priority Works
- Routine Works
- Discretionary Works
- No Works Required

NOTE: This drawing should be read in conjunction with the respective Arboricultural Survey Data (Appendix A).

NOTE: All tree and group locations are estimated based on site observations and aerial imagery.

Reduce crown by 2/3 metres

15/93 t6

Sever and remove ivy
reduce canopy and re-balance crown.

TEP | THE ENVIRONMENT PARTNERSHIP

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Project: Saint James Church Cemetery, Millham
Tree Risk Survey

Title: Drawing 1: Tree Location Plan

Drawing Number: D9060.001

Drawn	Checked	Approved	Scale	Date
SDR	EJC	JGS	1:500 @ A3	04/02/20

T13 Removal of dense basal epicormic shoots

T3 Reduce crown