

LEGAL AND GENERAL (STRATEGIC LAND NORTH HORSHAM) LIMITED

SPORTS HUB

BS:5837 ARBORICULTURAL IMPACT ASSESSMENT & METHOD STATEMENT

ISSUE: Friday, 28 November 2025

CLIENT Legal and General (Strategic Land North Horsham) Limited

PROJECT Mowbray (Formerly Land North of Horsham)

REPORT TITLE Sports Hub - BS:5837 AIA / AMS

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REPORT REVISIONS

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1. INTRODUCTION

Background

- 1.1 David Jarvis Associates Ltd have been commissioned by Legal and General (Strategic Land North Horsham Limited) ('The Applicant') to provide an Arboricultural Report to support an application for the North Horsham Sports Hub.
- 1.2 The purpose of the report is to identify all trees which may be affected by the proposed construction of the North Horsham Sports Hub. This report looks at any short or longer-term impact the proposed development will have on the surrounding trees and makes recommendations for amendments or mitigation where appropriate.

Scope

- 1.3 The scope and level of detail included in this report, complies with the requirements of British Standard (BS) 5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations (BS:5837 Table B.1) and includes reference to the following:
 - Tree Survey
 - Arboricultural Impact Assessment
 - Arboricultural Method Statement and
 - Tree Protection Plan
- 1.4 This report should also be read in conjunction with the arboricultural survey ref: PJC ref: 5265/19-01 Rev 03 (August 2020). Further site visits were made on 18th October 2021 and 24th March 2022 to confirm the condition of trees adjacent to the build site.
- 1.5 The British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction' is designed to assist those concerned with trees in relation to construction to form balanced judgments. This report does not therefore seek to put arguments for or against development but provides a means of protecting trees which may be affected during development.
- 1.6 The report is for the sole use of the client and their appointed agents. Its reproduction or use by anyone else is forbidden unless written consent is given by the author.

2. LEGAL PROTECTION

Tree Preservation Orders

- 2.1 I have confirmed on the Horsham District Council online mapping portal that trees on site are not subject of a Tree Preservation Order, and the site is not within a Conservation Area.
- 2.2 The offsite woodland north of the site known as 'Bush Copse' is subject of Tree Preservation Order 1476. This woodland is also designated as ancient woodland which is afforded additional protection under the National Planning Policy Framework (NPPF).



Figure 1 – (Plan) Extract from Horsham District Council Tree Preservation Order Map

3. PLANNING BACKGROUND

- 3.1 An application for outline Planning Permission (LPA ref. DC/16/1677: 'the OPP') for the following development was submitted to Horsham District Council on 4th August 2016.
- 3.2 'Outline planning application with all matters reserved except access for a mixed-use strategic development to include housing (up to 2,750 dwellings), business park (up to 46,450m²), retail community, leisure facilities, education facilities, public open space, landscaping and related infrastructure.'
- 3.3 Permission was granted subject to conditions on the 1st of March 2018
- 3.4 The applicant has progressed applications pursuant to the OPP and stand-alone to allow construction to commence and further strategic development to be delivered.
- 3.5 The Applicant is applying for the approval of Reserved Matters pursuant to the OPP. Care has been taken to follow the principles, requirements, and best practices of the OPP in assessing impacts on trees and hedgerows in this report, including consideration of the requirements of OPP Condition 16:

16. Pre-Commencement Condition:

No development shall commence within any Reserved Matters Area or on works to construct the accesses hereby approved, including demolition pursuant to the permission granted, ground clearance, or bringing equipment, machinery or materials onto the relevant part of the site, until the following preliminaries have been completed in the sequence set out below:

a) A plan shall be submitted to show all trees on the relevant part of the site to be retained as well as those off-site whose root protection areas ingress into the relevant part of the site, such trees shall be fully protected by tree protective fencing affixed to the ground in full accordance with section 6 of BS 5837 'Trees in Relation to Design, Demolition and Construction - Recommendations' (2012).

b) Once installed, the fencing shall be maintained during the course of the development works for that phase or sub-phase and until all machinery and surplus materials have been removed from the site.

c) Areas so fenced off shall be treated as zones of prohibited access, and shall not be used for the storage of materials, equipment or machinery in any circumstances. No mixing of cement, concrete, or use of other materials or substances shall take place within any tree protective zone, or close enough to such a zone that seepage or displacement of those materials and substances could cause them to enter a zone.

Reason: As this matter is fundamental to ensure the successful and satisfactory retention of important trees and hedgerows on the site in accordance with Policy 33 of the Horsham District Planning Framework (2015).

- 3.6 The existing access and site entrance is constructed as approved under application ref: DC/24/0917.

4. CONTACTS

Arboricultural Consultant

Sarah Duckworth

Glebelands Bungalow

Mildenhall

Marlborough

Wiltshire, SN8 2LR

E: sarahcduckworth@hotmail.com

T: 07810 440546

Agent

Alex Jones

Stantec UK Limited

T: 0207 4466826

E: +44 7825264528

Landscape Architect

Paul Gibbs

David Jarvis Associates Ltd,

1 Tennyson St,

Swindon, SN1 5DT

E: Paulgibbs@davidjarvis.biz

T: 01793 612173

Local Planning Authority

Horsham District Council

Tree Section,

Horsham District Council,

Parkside,

Chart Way,

Horsham, RH12 1RL

E: trees@horsham.gov.uk

5. ARBORICULTURAL IMPACT ASSESSMENT

Introduction

- 5.1 The purpose of this Arboricultural Impact Assessment is to evaluate the direct and indirect effects of the proposed development, ground works and landscaping of the North Horsham Sports Hub on the adjacent trees. The assessment will take account of the effects of any potentially damaging activities proposed near the trees growing on and adjacent to the site. Where conflict is identified, this report will recommend solutions or mitigation as appropriate.

Site Description

- 5.2 The North Horsham Sports Hub site is accessed via an existing road (permitted under application ref: DC/24/0917) which bridges a culvert for Channell's Brook.
- 5.3 The Sports Hub site consists of an agricultural field which is level and with no pre-existing development. There is dense, mature tree cover around all four boundaries of the site.
- 5.4 To the north of the site is Bush Copse, a designated area of Semi-natural and ancient woodland which is also subject of a Tree Preservation Order (See Section 2 – Legal Protection). The woodland is also a Priority Habitat Deciduous Woodland. There are many mature and high-quality trees within the woodland. Between the boundary of the development site and the woodland to the north runs a public bridleway.
- 5.5 Trees growing adjacent to Channell's Brook along the eastern boundary are mixed age class trees with established Oak and Ash trees growing alongside dense young Alder and Hazel coppice. Channell's Brook will have influenced the spread of tree roots for the adjacent trees with some tree roots growing parallel along the ditch-line exploiting the feature as a water source.
- 5.6 Along the western boundary the existing field edge tree planting has been enhanced with dense new whip planting to create a Dormouse ecological enhancement area.
- 5.7 Trees beyond the southern boundary are younger specimens which screen the site from the public highway. All are a similar age and likely to have been planted in the last 30 - 40 years to enhance and mitigate and screen the adjacent A264 carriageway.

Soil

- 5.8 The British Geological Survey 1:50 000 scale bedrock geology description for this area is Weald Clay Formation consisting of mudstone. This is a sedimentary bedrock formed in a local environment previously dominated by swamps, estuaries and deltas.
- 5.9 The soil in the area is therefore expected to be vulnerable to damage through compaction. Weald Clay is a 'shrinkable' soil and may have some capacity to shrink and swell with changing moisture levels.
- 5.10 Due care must be taken to construct foundations to a depth sufficient to resist property movement (subsidence) as a result of soil shrinkage through desiccation, taking into account the presence and future growth of the adjacent high water demand trees.

Plotting the RPA

- 5.11 The British Standard 5837 advises that a Root Protection Area (RPA) should initially be plotted as a circle centred on the base of the stem. However, where pre-existing site conditions or other factors exist which indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced.
- 5.12 Root Protection Areas have been drawn up based on an arboricultural assessment of the site:
- Trees on site are all considered 'open grown' with no pre-existing development which may have impacted on tree roots.
 - The existing bridleway to the north of the site is well-established and has been regularly used by large farming vehicles for many decades. As porous ground, tree roots are likely to be growing under this track.
 - Roots of trees growing adjacent to the brook are not expected to grow under the stream but will run along the banks of the stream often extending beyond the calculated radius for the individual tree.

Site specific Assessment

- 5.13 The suitability of planning development in relation to trees is assessed in accordance with the British Standard 5837: 2012 'Trees in Relation to Design, Demolition and Construction.
- 5.14 This document requires that the conception and design of the final development layout must take into account the constraints posed by the trees on site. These constraints include not only the existing canopy and likely root spread but also:
- The ultimate height and spread of the trees.
 - Potential impact of species characteristics for future residents – evergreen / deciduous, density of foliage, seasonal leaf drop / berries etc.
 - Current and future shade patterns.
- 5.15 The default position in planning is that every effort should be made to retain and protect the category A and B trees on site and that new structures, areas of hard standing and services should be located outside of the identified RPAs of trees to be retained.
- 5.16 The proposed Sports Hub will be accessed via an existing roadway which has been constructed for the purpose. The roadway connects to the A264 south of the site via a new 'left in - left out' dual carriageway exit.
- 5.17 The proposed Sports Hub and associated infrastructure have been designed around the constraints posed by trees. New buildings and sports pitches are positioned outside of the rooting area of all trees and beyond the 15m Ancient Woodland Buffer Zone.
- 5.18 To the north of the site, the proposed line of the foul sewer has been adjusted to avoid trenching within the rooting area of T71 – a mature Oak subject of a Tree Preservation Order and to reduce the ground works within the Ancient Woodland 30m buffer zone.
- 5.19 The pedestrian access to Bush Lane north of the site will connect to an existing bridleway and the existing bridleway surface will be retained.

- 5.20 There will be a good and sustainable distance between the new buildings, sport pitches, roadways and footpaths to ensure that shade and leaf drop is not excessive and there will be no foreseeable need for tree pruning works in the future.
- 5.21 New landscape planting is proposed which includes a robust scheme of specimen tree planting centrally within the site will increase the tree population and tree canopy cover to help soften and enhance the Sports Hub in keeping with the surrounding landscape.

Temporary Tree Protection

- 5.22 The rooting areas of all boundary trees and woodland areas shall be protected with fit for purpose Tree Protection Barriers set out as shown in the Tree Protection Plans and in accordance with BS:5837 (2012).
- 5.23 The fencing will be located to protect the trees and their rooting areas and will remain rigid and complete during the construction works.

Conclusions

- 5.24 Trees on and adjacent to the proposed new Sports Hub site have been surveyed in accordance with the guidelines and recommendations from BS:5837 'Trees in Relation to Design, Demolition and Construction'.
- 5.25 The survey has identified high quality, mature trees and woodland groups growing around the site boundaries which enhance the amenity and ecology of the site, and which help screen the sports hub development in wider views from Mowbray and the adjacent road network.
- 5.26 The current scheme site has been designed around the identified arboricultural constraints to ensure any impact on the retained trees is kept to an absolute minimum.
- 5.27 New development, buildings, pitches and hard surfacing is positioned outside of the identified root protection areas of all trees, and the trees will be excluded during the development with fit for purpose Tree Protection Fencing. New tree planting on completion of the build will enhance the developed landscape and increase the overall tree canopy cover on site. The proposed development is therefore respectful to the protection of trees and the preservation of tree canopy cover.
- 5.28 Provided the methodology specified within the Arboricultural Method Statement is followed during these landscaping works I am satisfied that this application can be undertaken in accordance with the guidelines and recommendations in BS:5837 2012 – Trees in Relation to Design, Demolition and Construction and is acceptable in arboricultural terms.

6. ARBORICULTURAL METHOD STATEMENT (AMS)

Introduction

- 6.1 This Arboricultural Method Statement specifies the detailed methodology that will be employed to prevent harm to trees during the construction of the North Horsham Sports Hub and associated ground works and infrastructure installations.
- 6.2 The correct and timely installation of tree protection measures such as tree protection fencing is critical to ensure the long-term retention of the trees and woodland areas adjacent to the development site.
- 6.3 This method statement will be read, approved, and agreed to by all key personnel prior to the commencement of works within the site.

Phasing of works

STAGE 1 (PRE-COMMENCEMENT)

ERECTION OF TREE PROTECTION FENCING
& SITE HOARDING



PRE-COMMENCEMENT SITE MEETING
(NOTIFY LOCAL AUTHORITY -MIN 5 DAYS)



STAGE 2 (DEMOLITION AND CONSTRUCTION)

GROUND WORKS & CONSTRUCTION
TREE PROTECTION MEASURES TO REMAIN RIGID & INTACT



STAGE 3 (POST DEVELOPMENT)

REMOVE TREE PROTECTION FENCING, SITE HOARDING
& TEMPORARY SITE BUILDINGS
(NOTIFY LOCAL AUTHORITY -MIN 5 DAYS)



TOPSOIL AND PLANTING OPERATIONS

Site Supervision and Monitoring

- 6.4 The build project requires work activities in arboriculturally sensitive areas and will require an auditable system of arboricultural site monitoring during ground works and construction.
- 6.5 A pre-commencement site visit will be held once the Tree Protection Fencing is installed as shown on the Tree Protection Plan and prior to the commencement of building works on site. The Local Authority Tree Officer will be given a minimum of five days' notice of the time and date of the meeting so that they may attend should they wish to do so.
- 6.6 The purpose of the pre-commencement meeting will be to confirm the location and construction of the Tree Protection Measures and ensure a common understanding of the requirements for Tree Protection within the site. If the Local Planning Authority is unable to attend, photographic evidence of the tree protection fencing will be emailed to the appointed planning officer once it has been erected.
- 6.7 All tree protection measures shall also be routinely monitored by an appointed and suitably qualified Arboricultural Advisor at 8-10-week intervals for the duration of all works. A signed copy of the inspection report will be sent to Horsham Council's Planning Department following each visit.

On-site Supervisor

- 6.8 In addition to the appointed Arboricultural Consultant, there will be a designated on-site Supervisor who will be responsible for ensuring no works are undertaken on site except in complete accordance with the approved Arboricultural Method Statement when the Arboricultural Consultant is not present.
- 6.9 The on-site Supervisor will:
- Be present on site most of the time.
 - Be aware of the arboricultural responsibilities relating to the retained trees on site.
 - Have the authority to stop any work that will, or have the potential to, cause harm to any tree.
 - Be responsible for ensuring that all site personnel are aware of their responsibilities towards trees on site and the consequences of the failure to observe those responsibilities.
 - Make immediate contact with Horsham District Council and/or the retained arboriculturalist in the event of any related tree problems occurring whether actual or potential.
 - To ensure a commitment from all parties to the healthy retention of the trees. These details will be passed to any contractors working on site, so that the practical aspects of the above precautions are included in their method statements, and financial provision made for these.
 - Notify the local authority 5 days prior to the tree protection measures being removed on completion of development.
- 6.10 The designated on-site Project Arboricultural Supervisor will be responsible for ensuring no works are undertaken on site except in complete accordance with the approved Arboricultural Method Statement.
- 6.11 A copy of the Arboricultural Method Statement and Tree Protection Plan will be available on site for reference.

Tree Works

- 6.12 No tree works are required to facilitate the build.

Tree Protection Fencing

- 6.13 No works in relation to the development will be undertaken, including deliveries, excavation or construction, prior to the Tree Protection Fencing being installed, as identified in the Tree Protection Plan.
- 6.14 The Tree Protection Fencing will be constructed from wooden posts sunk into the ground which will support Heras fence panels. This style of fencing will reduce risk of injury to operatives with the installation of fencing near to over / underground services. The fencing will be robust and fit for purpose. Panels will be rigidly attached to the posts to prevent movement.
- 6.15 All-weather signage stating 'TREE PROTECTION AREA – KEEP OUT' will be attached to the outer perimeter of the Tree Protection Fencing. A sample sign is attached in Appendix 6 of this report.
- 6.16 The fencing will be located to protect the trees and their rooting areas and will remain rigid and complete during the demolition and ground works.
- 6.17 At no time will Tree Protection Fencing be removed or relocated contrary to the recommendations in this report, without professional arboricultural advice and without the prior consent of the Local Authority Tree Officer.

Construction Exclusion Zone

- 6.18 The area behind the tree protection fencing is designated the Construction Exclusion Zone and is to be isolated from all activity during work on the site.
- 6.19 Construction Exclusion Zones are to remain completely undisturbed for the duration of all development works. No construction activity of any description including (but not limited to) the following will occur within these areas at any time:
- No storage, disposal of soil, rubble or materials of any other description.
 - No alterations to existing levels or ground conditions.
 - No vehicular access, parking or use of any tracked or wheeled machinery of any description.
 - No tree works, without the written consent of the Council's Tree Service.
 - No erection of temporary structures of any description.
 - No storage disposal handling or use of any Chemicals including cement washings.
 - No fixtures or fittings of any description, security lighting, signage etc shall be attached to any part of a tree.
 - No fires shall be lit within 10 metres of the canopies of any tree or spread of any hedge.
 - No chemicals, fuel, liquids/waste residues of any other description to be stored or disposed of within close proximity to or drained towards/into protection areas.

THERE WILL BE NO STORAGE, PARKING, VEHICLE MOVEMENT OR PEDESTRIAN ACTIVITY, TEMPORARY OR OTHERWISE, WITHIN THE ROOT PROTECTION AREAS OF RETAINED TREES OR WITHIN THE CONSTRUCTION EXCLUSION ZONES, AT ANY TIME DURING THE COURSE OF THE PROPOSED ROAD CONSTRUCTION AND ASSOCIATED WORKS.

General Considerations

- 6.20 Roots can be killed by pollution of the rooting area by chemicals and leaching. Loose, granular or liquid materials, including cement mix and fuel will be stored well away from the Tree Protection Fencing and Construction Exclusion Zones.
- 6.21 Care will be taken in the planning of deliveries if they require wide or tall loads and plants with booms, rigs or counterweights which can cause serious and permanent damage to trees making their safe retention impossible.
- 6.22 There will be no open fires on site during the building works.

Unforeseen Circumstances

- 6.23 In the event of unforeseen circumstances whereby it is not possible to work in accordance with the Arboricultural Method Statement then advice should be sought immediately from a qualified Arboriculturist.
- 6.24 THERE SHALL BE NO DEVIATION FROM THIS METHOD STATEMENT WITHOUT CONSULTATION WITH A QUALIFIED ARBORICULTURIST AND / OR THE WRITTEN CONSENT OF THE LOCAL PLANNING AUTHORITY.

7. POST CONSTRUCTION

Landscaping

- 7.1 Only on completion of all construction works and hard landscaping will the Tree Protection Fencing be removed in preparation for landscape planting.
- 7.2 The following rules will be followed during all future landscaping works in order to prevent harm to the trees:
- New plants within the identified RPAs of retained trees will be in small pots (nothing larger than 3lt). All planting within RPA of existing trees shall be notched planted and locally adjusted to avoid tree roots. All shrub planting to be undertaken by hand using hand tools only to minimize root damage. If significant roots are encountered, these will be left undamaged and dug around.
 - Tree roots can be damaged by severance, compaction, pollution and desiccation. In view of this, there should be no excavation or changes in ground levels within the identified rooting areas of retained trees following completion of the development.
 - Bulbs where proposed will be planted in random locations manually using dibbers and bulb planters relocating positions where necessary to avoid tree roots.
 - Planted areas will be maintained with irrigation and post planting maintenance as per the landscape specifications.
 - Where new fencing is proposed, post holes within the rooting areas of trees will be dug using a post hole digger to keep hole size to a minimum. Where substantial roots over 25mm are encountered, the location of the hole will be moved where possible in order to avoid them. Post holes will be fully lined in order to prevent concrete coming into direct contact with tree roots.

Tree Planting

- 7.3 New trees will be planted as per the landscaping scheme within the next or current planting season November to March (whichever is soonest) on completion of the building project. Planting will be undertaken when soils are moist and free from frost.
- 7.4 Planting trees too deep is a major cause for premature decline. Tree planting pits will be dug to the same depth as the woody roots to prevent settlement and sinking post planting. The soil backfilled into the planting pit will consist of 1/3 organic matter (well rooted manure or other compost) with 2/3 existing soil.
- 7.5 During the third year the new plants will continue to be monitored, with irrigation resumed during periods of drought or where plants are showing signs of drought stress. Any new trees or plants which fail to establish and thrive, or which die, are removed or become seriously diseased within a period of 5 years following completion of the development, will be replaced with another of a similar size and species.

APPENDIX 1

Survey Appraisal

- The trees were surveyed by PJC Consultancy in May 2019. A further site visit was made on Monday 18th October 2021 and Thursday 24th March 2022 by Sarah Duckworth (Arboricultural Consultant) to confirm the presence and condition of trees adjacent to the build areas.
- Tree numbers used in this report correspond with those of the original tree survey by PJC Consultancy ref: 5265/19-01 Rev 03 (August 2020). Additional trees adjacent to the site access have been plotted by eye and labelled T1-10-SCD.
- Trees were viewed from ground level only. Site visits were undertaken when weather conditions were dry and clear. Visibility was good.
- Heights were estimated where part of a group. Soil samples were not taken.
- Obvious defects have been noted on the trees, however, this survey is for planning use only and does not constitute a detailed health and safety survey of the trees. Its use as such is invalid.
- Access into many treed areas was restricted by stock fencing and dense vegetation and this will have limited any visual assessment of the trees.
- Trees are dynamic living organisms subject to change, whose health and condition can be subject to significant change influenced by internal and external factors. The trees on site were assessed for their quality and benefits within the context of the proposed development and categorised in accordance with the recommendations in the BS:5837:2012. The assessment of trees in this report are based on the condition assessed at the time of inspection and is valid for 24 months.
- If the condition of the trees evidently changes or the trees are subject to extreme weather conditions before this date; further inspection may be required. No tree is ever absolutely safe due to the unpredictable laws and forces of nature.

APPENDIX 2

Survey Key

Ref:	SCD T001 = Tree 1 SCD A001 = Area 1	SCD G001 = Group 1 SCD W001 = Woodland 1
Species:	Common name (Botanical name)	
Height:	Measured with a clinometer (m) where possible or estimated when part of a group	
Stem:	Stem diameter taken at 1.5m with girth tape or rule and recorded in millimetres	
Branch spread:	Paced measurements at compass points or with a laser measure.	
	Crown clearance: Existing height above ground level of canopy and / or first significant branch direction of growth in metres e.g. 2.4 (N) where relevant.	
Epics:	Lower canopy created by epicormic growth.	
Age Class:	Newly planted - 3 years following planting Young - Tree well established but with juvenile crown form Young Mature - Tree in first third of usual life expectancy for species Mature - Tree in second third of usual life expectancy for species Over Mature - Tree in final third of usual life expectancy for species / exhibiting signs of crown retrenchment & senescence Veteran - Older than usual for species or with historical/ cultural / ecological value	
General Observations:	Made with reference to physiological condition (health, vigour) and structural condition, noting evidence of decay, structural weakness and physical defect and preliminary management recommendations.	
Estimated Remaining Contribution:	Estimated in years - less than 10, 10-20, 20-40, 40+	
BS: 5837:2012 category rating:	In accordance with the guidelines of the British Standard.	
	 Category 'A' tree (Green)  Category 'B' tree (Blue)	 Category 'C' tree (Grey)  Category 'U' tree – Fell (Red)

RPA Area BS:5837 (2012) Root Protection Area calculation in square metres

RPA Radius BS:5837 (2012) Root Protection Area calculation circle radius in metres. ¹

¹ The root protection area radius is for information only and may not be appropriate in every case. BS:5837 advises that 'the RPA for each tree should initially be plotted as a circle centred on the base of the stem. Where pre-existing site conditions or other factors indicate that rooting may have occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distributions.'

APPENDIX 3

BS:5837 (2012): Cascade chart for tree quality assessment

CATEGORY & DEFINITION	CRITERIA (INCLUDING SUB-CATEGORIES WHERE APPROPRIATE)		
Trees unsuitable for retention			
CATEGORY U Those 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.	Trees that have a serious, irremediable, structural defect such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning. Trees that are dead or showing signs of significant, immediate and irreversible overall decline. Trees infected with pathogens of significance to the health and / or safety of other trees nearby or very low quality trees suppressing adjacent trees of better quality. NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve		
	Mainly Arboricultural Qualities	Mainly Landscape Qualities	Mainly cultural values including conservation
Trees considered suitable for retention			
CATEGORY A Trees of High Quality with an estimated remaining life expectancy of at least 40 years.	Trees that are particularly good examples of their species especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and / or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and / or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood pasture)
CATEGORY B Trees of Moderate Quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remedial defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality to merit the category A designation.	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little contribution to the wider locality.	Trees with material conservation or other cultural value.
CATEGORY C Trees of Low Quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Trees present in groups or woodlands but without this conferring on them significantly greater collective landscape value; and/ or trees offering low or only temporary / transient landscape benefits.	Trees with no material conservation or other cultural value.

APPENDIX 4

Tree Survey Data

Ref:	Species	Type	Data	Spread	Comments	BS:5837 Category.	RPA	Summary
G44 - PA	Mixed Species	Group	Height (m): 18(ave) Stem Diam.(mm): 200 (ave) Life Stage: Young Mature Rem. Contrib.: 40+ Years	N:4 E:4 S:4 W:4	Mixed ash, birch, oak, willow, hawthorn, blackthorn, field maple. Copse around stream. Slender, upright growth habits typical of woodland setting. Sporadic understorey	B2	Radius: 3.6m Area: 41 sq m.	Physiological Cond: Fair Structural Cond: Fair
T45- PA	Mixed Species	Group	Height (m): 2-8 Stem Diam.(mm): 200 (ave) Life Stage: Young Mature Rem. Contrib.: 40+ Years	N: 4 E: 4 S: 4 W: 4	Low crown to ground level. Dense scrub along field boundary with small trees. Failed ash and holly stems. Minor encroachment beyond boundary fence.	B2	Radius: 2.4m Area: 18 sq m.	Physiological Cond: Fair Structural Cond: Fair
T46- PA	Oak (<i>Quercus robur</i>)	Tree	Height (m): 16 Stem Diam.(mm): 500 Crown Clearance (m): 3 Life Stage: Mature Rem. Contrib.: 40+ Years	N: 5 E: 3 S: 7 W: 6	Third party tree on bank of stream. Majority of roots assumed present within site. Asymmetric crown suppression.	B2	Radius: 6m Area: 113 sq m.	Physiological Cond: Fair Structural Cond: Fair
T47- PA	Oak (<i>Quercus robur</i>)	Tree	Height (m): 20 Stem Diam.(mm): 700 Crown Clearance (m): 5 Life Stage: Mature Rem. Contrib.: 40+ Years	N: 7 E: 7 S: 7 W: 7	Third party tree beyond ditch. No direct access to survey. Lower stem suppressed by G45	A1	Radius: 8.4 Area: 222 sq m.	Physiological Cond: Good Structural Cond: Unknown
T48- PA	Alnus (<i>Alnus glutinosa</i>)	Tree	Height (m): 13 Twin Stem Diam.(mm): 500,540 Crown Clearance (m): 4 Life Stage: Mature Rem. Contrib.: 40+Years	N: 6 E: 5 S: 4 W: 6	Co-dominant stems from base. Third party tree viewed from site. Deadwood in crown, not over site	B1	Radius: 8.1m Area: 205 sq m.	Physiological Cond: Fair Structural Cond: Fair
T49- PA	Silver birch (<i>Betula pendula</i>)	Tree	Height (m): 16 Twin Stem Diam.(mm): 350, 350 Crown Clearance (m): 4 Life Stage: Mature Rem. Contrib.: 40+ Years	N: 7 E: 5 S: 7 W: 7	Multi-stem tree. Restricted access to base.	C1	Radius: 7.3m Area: 166 sq m.	Physiological Cond: Fair Structural Cond: Fair
T50- PA	Oak (<i>Quercus robur</i>)	Tree	Height (m): 15 Stem Diam.(mm): 550 Crown Clearance (m): 1 Life Stage: Mature Rem. Contrib.: 40+ Years	N: 7 E: 6 S: 6 W: 8	Ivy and under-storey inhibit inspection of stem. Profuse epicormic growth in crown. Low vitality.	B1	Radius: 6.6m Area: 137 sq m.	Physiological Cond: Fair Structural Cond: Fair
T51- PA	Ash (<i>Fraxinus excelsior</i>)	Tree	Height (m): 13 Stem Diam.(mm): 420 Crown Clearance (m): 0 Life Stage: Mature Rem. Contrib.: 40+ Years	N: 6 E: 4 S: 3 W: 6	Located on steep bank. Most roots anticipated to be within site. Slightly suppressed on south side by ash	B1	Radius: 5m Area: 80 sq m.	Physiological Cond: Fair Structural Cond: Fair

Ref:	Species	Type	Data	Spread	Comments	BS:5837 Category.	RPA	Summary
G52- PA	Silver birch (<i>Betula pendula</i>)	Group	Height (m): 13-15 Stem Diam.(mm): 250 (ave) Crown Clearance (m): 6 Life Stage: Mature Rem. Contrib.: 40+ Years	N: 4 E: 3 S: 3 W: 6	Birch clump. Some leaning over site due to phototrophic growth. Ivy clad stems.	C1	Radius: 3m Area: 28 sq m.	Physiological Cond: Fair Structural Cond: Fair
T53- PA	Beech (<i>Fagus sylvatica</i>)	Tree	Height (m): 14 Stem Diam.(mm): 500, 450, 300, 300 Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: 40+ Years	N: 6 E: 5 S: 5 W: 8	Large multi-stemmed beech exhibits phototrophic growth. Holly under-storey prevents direct access to survey.	A1	Radius: 9.5m Area: 286 sq m.	Physiological Cond: Good Structural Cond: Unknown
G54- PA	Mixed Species	Tree	Height (m): 2-20 Stem Diam.(mm): 400(ave) Crown Clearance (m): 0-10 Life Stage: Mature Rem. Contrib.: 40+ Years	N: 3 E: 3 S: 3 W: 3	Mixed (ash, oak, field maple, willow, hazel, holly, hawthorn, blackthorn). Woodland belt along ditch beyond field boundary. Group of ash towards north end of group exhibit poor vitality	B2	Radius: 4.8m Area: 72 sq m.	Physiological Cond: Good Structural Cond: Fair
G55- PA	Mixed group, (oak & Ash dominant)	Group	Height (m): 20 Stem Diam.(mm): < 1000 Crown Clearance (m): 0 Life Stage: Mature Rem. Contrib.: 40+ Years	N: 10 E: 10 S: 10 W: 10	Mature deciduous woodland belt. Large specimens. Designated ancient woodland	A1,2,3	Radius: 12m Area: 452 sq m.	Physiological Cond: Good Structural Cond: Fair
H56- PA	Mixed species (blackthorn, holly, dog-rose)	Hedge	Height (m): 2-4 Stem Diam.(mm): < 100 Crown Clearance (m): 0 Life Stage: Young Rem. Contrib.: 40+ Years	N: 3 E: 3 S: 3 W: 3	Managed hedgerow between field and W55 as well as farm track.	C2	Radius: 1.2m Area: 4.5 sq m.	Physiological Cond: Fair Structural Cond: Fair
T65- PA	Oak (<i>Quercus robur</i>)	Tree	Height (m): 13 Stem Diam.(mm): 610 Crown Clearance (m): 4 Life Stage: Mature Rem. Contrib.: 40+ Years	N: E: S: W:	Open grown habit. Previously crown lifted over track. No major visible defects. Profuse epicormic growth in crown.	B1, 2	Radius: 7.3m Area: 168 sq m.	Physiological Cond: Good Structural Cond: Good
T66- PA	Oak (<i>Quercus robur</i>)	Tree	Height (m): 16 Stem Diam.(mm): 900(e) Crown Clearance (m): 4 Life Stage: Over Mature Rem. Contrib.: 40+ Years	N: 9 E: 9 S: 8 W: 10	Open grown habit. Evidence of secondary crown formation. Dense ivy on stem.	A1	Radius: 11m Area: 366 sq m.	Physiological Cond: Fair Structural Cond: Fair
T67- PA	Ash (<i>Fraxinus excelsior</i>)	Tree	Height (m): 10 Stem Diam.(mm): 120 (ave) x 9 Crown Clearance (m): 3 Life Stage: Mature Rem. Contrib.: 20-40 Years	N: 4 E: 5 S: 7 W: 5	Multi-stem tree non steep bank, sparse foliage in upper crown.	C1	Radius: 4.3m Area: 10.8 sq m.	Physiological Cond: Fair Structural Cond: Unknown

Ref:	Species	Type	Data	Spread	Comments	BS:5837 Category.	RPA	Summary
T68- PA	Oak (<i>Quercus robur</i>)	Tree	Height (m): 19 Stem Diam.(mm): 900(e) Crown Clearance (m): 1 Life Stage: Over Mature Rem. Contrib.: 40+ Years	N: 6 E: 7 S: 8 W: 7	Under-storey and ivy inhibit inspection. No major visible defects.	A1	Radius: m Area: sq m.	Physiological Cond: Fair Structural Cond: Unknown
T69- PA	Oak (<i>Quercus robur</i>)	Tree	Height (m): 20 Stem Diam.(mm): 900 Crown Clearance (m): 1 Life Stage: Mature Rem. Contrib.: 20-40 Years	N: 8 E: 8 S: 8 W: 6	Ganoderma brackets on opposite sides by buttress. Minor dieback on north-east side of crown	U	Radius: 9.7 m Area: 366 sq m	Physiological Cond: Poor Structural Cond: Poor
T70- PA	Oak (<i>Quercus robur</i>)	Tree	Height (m): 21 Stem Diam.(mm): 810 Crown Clearance (m): 4 Life Stage: Mature Rem. Contrib.: 40+ Years	N: 3 E: 7 S: 7 W: 6	Excellent overall condition. Deadwood from self-suppression. No major visible defects	A1	Radius: 9.5 m Area: 270 sq m.	Physiological Cond: Good Structural Cond: Good
T71- PA	Oak (<i>Quercus robur</i>)	Tree	Height (m): 20 Stem Diam.(mm): 790 Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: 40+ Years	N: 9 E: 6 S: 6 W: 9	Ivy encroaches crown. Large lateral limb at 1.5m forms secondary stem	A1	Radius: 9.5m Area: 282 sq m.	Physiological Cond: Good Structural Cond: Unknown
T72- PA	Oak (<i>Quercus robur</i>)	Tree	Height (m): 12 Stem Diam.(mm): 540 Crown Clearance (m): 2 Life Stage: Mature Rem. Contrib.: 40+ Years	N: 6 E: 6 S: 3 W: 4	Asymmetric crown due to suppression. Japanese knotweed around base of stem. Deadwood due to self-suppression	B1	Radius: 6.5m Area: 132 sq m.	Physiological Cond: Fair Structural Cond: Fair
G73- PA	Mixed species (<i>ash, willow, elder, hawthorn</i>)	Group	Height (m): 1-14 Stem Diam.(mm): 400 (ave) Crown Clearance (m): Life Stage: Mature Rem. Contrib.: 40+ Years	N: 2 E: 2 S: 2 W: 2	Woodland copse adjacent to ditch comprising of ash standards with sporadic, mixed understorey.	B1, 2	Radius: 4.8m Area: 72 sq m.	Physiological Cond: Good Structural Cond: Various
G74- PA	Mixed species	Group	Height (m): 1-22 Stem Diam.(mm): 350 (ave) Crown Clearance (m): 0-4 Life Stage: Mature Rem. Contrib.: 40+ Years	N: 4 E: 4 S: 4 W: 4	Mixed (<i>ash, alder, oak, field maple, hawthorn, hazel blackthorn, willow, cherry</i>). Mixed deciduous woodland belt along stream. Some alders dying back at north end of group.	B1-3	Radius: 4.2m Area: 55 sq m.	Physiological Cond: Good Structural Cond: Various
T75- PA	Ash (<i>Fraxinus excelsior</i>)	Tree	Height (m): 12 Stem Diam.(mm): 400, 350, 300, 300 Crown Clearance (m): 1 Life Stage: Mature Rem. Contrib.: 20-40 Years	N: 6 E: 7 S: 6 W: 4	Multi-stemmed tree on edge of stream. Reduced from field. Under-storey inhibits inspection.	B1	Radius: 8.2m Area: 209 sq m.	Physiological Cond: Fair Structural Cond: Unknown

APPENDIX 5

Tree Protection Fencing ²



² Tree protection fencing within the North Horsham Strategic Development Area will be formed Heras fence panels supported on wooden posts sunk into the ground. This style of fencing will reduce risk of injury to operatives with the installation of fencing near to over / underground services. The fencing will be robust and fit for purpose. Panels will be rigidly attached to the posts to prevent movement.

APPENDIX 6

All-weather Tree Protection Fencing Signage



APPENDIX 7

Qualifications

This Arboricultural report has been prepared by Sarah Duckworth, Independent Arboricultural Consultant, trading as Duckworth's Arboriculture Limited.

I have over 19 years' experience working in the field of Arboriculture and for the past 16 years I have worked as a Local Authority Tree Officer both directly and independently providing contracted support. Since 2010 I have worked as a private consultant carrying out a range of Arboricultural Reports and Assessments for private clients.

I hold the Royal Forestry Society's Professional Diploma (Level 6) for which I received the Lockhart Garrett Award. I also hold the Arboricultural Association's Technicians Certificate (with Distinction).

I am a LANTRA qualified Professional Tree Inspector and a Professional Member of the Arboricultural Association.