Tree Survey Report

Lincoln Way Pond

Lincoln Way

Bembridge

Isle of Wight

PO35 5RR

Site Surveyed by lan Lightfoot

Report Prepared by Simon Rogers

Approved by
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Date 23rd July 2024





Contents

3
3
3
3
3
3
4
4
5
6
6
7
7
15
17



1. Introduction

Assignment

Gristwood & Toms has been instructed by Mark Rochell of Bembridge Parish Council to carry out a survey of the trees within the grounds of Lincoln Way Pond, Lincoln Way, Bembridge, Isle of Wight, PO35 5RR. Where appropriate, I am to make recommendations on the immediate and future management in the interest of safety.

2. Documents and Information Provided

• No documents or information were provided

3. Scope of This Report

This report solely relates to the trees that Ian Lightfoot surveyed on 18th July 2024.

4. Limitations of Use

The content and format of this report are for the exclusive use of the addressee in dealing with this site. It may not be sold, lent, hired out or divulged to any third party not directly involved in this site without the written consent of Gristwood & Toms.

5. Site Visit Observations

An unaccompanied site visit of Lincoln Way Pond, Lincoln Way, Bembridge, Isle of Wight, PO35 5RR was carried out by Ian Lightfoot on 18th July 2024. The trees were inspected using the visual tree assessment method described by Mattheck and Breloer (*The Body Language of Trees*, DOE booklet Research for Amenity Trees No. 4. 1994) and endorsed by the Arboricultural Association (LANTRA Professional Tree Inspection course, 2007). All observations were from ground level without detailed investigations. All dimensions were estimated unless otherwise indicated. The weather at the time of the survey was sunny and mild with good visibility.

6. Identification and Location of Trees

The survey schedule lists the species, based on visual observation, giving the scientific and common names of the tree. The tree survey schedule is included in the appendices of this report.



7. Observations

There were **12 trees** in total inspected on the site. **8 trees** were identified to be in a fair condition. **4 trees** were identified to be in a poor condition.

8. Works Priority

Urgent - Public Safety

Works are urgently required to make safe a tree that has been identified as dead/structurally unsound and is putting public safety at risk.

These works are recommended to be completed within **3 months**.

High Priority

Works may be required for the following reasons:

To keep the highways infrastructure (e.g., streetlights and road signs) clear of obstructions and maintain sight lines for vehicles or pedestrians.

To abate an actionable nuisance (e.g., branches damaging windows and gutters).

When an inspection has identified visible decay, fungal brackets, or other structural defects.

To reduce a significant overhang of tree branches into an adjacent property.

When previous maintenance regimes have determined that future works are of the same specification for that specimen (e.g., pollarding and crown reduction).

These works are recommended to be completed within 18 months.

Low Priority

Works may be carried out on a cyclic pruning regime to provide long term health and safety benefits to the tree.

These works are recommended to be completed within **36 months**.

No Action Required

Where a tree's health and condition indicate no works are required at the time of inspection.



The presence of any defect will increase the chances of failure. Each species has its own profile of defects. Some factors that must be considered include the species growth habit, tree condition, branch attachments, resistance to decay, condition of anchoring roots, cultural or maintenance history and previous damage.

Failure	Urgent – Public	High Priority	Low Priority	No Action
Potential	Safety			Required
Works Within	0			
3 Months				
Works Within		6		
18 Months				
Works Within			0	
36 Months				
No Action				6
Required				

9. Recommendations

Recommendations have been made for tree works in line with sound arboricultural management and it is recommended that the works are undertaken within the suggested timescales.

There are **0 trees/tree groups** identified that require **Urgent – Public Safety** tree work. It is recommended that the works should be completed within the next **3 months**.

There are **6 trees** identified that require **High Priority** tree work. It is recommended that the works should be completed within the next **18 months**.

There are **0 trees/tree groups** identified that require **Low Priority** tree work. It is recommended that the works should be completed within the next **36 months**.

There are 6 trees identified as No Action Required.

All recommended tree works are to be carried out in accordance with BS 3998: 2010 – Tree Work Recommendations.

Nesting Birds: Any recommended tree works should be undertaken outside the bird nesting season (1st March to 31st July); however, it should be assumed that birds will nest before and after this period. A wildlife assessment should be carried out immediately prior to the commencement of works. This will inform on whether there are nesting birds and if works on a specific tree can proceed without harming any birds.



Bats: Prior to commencing aerial works or felling, the arborists should carry out a visual assessment for the potential for bat habitation. If there is a possibility of bats using a tree for roosting, the Commissioning Officer (Agent) should be contacted and works to the tree suspended until an ecologist has visited the site to provide advice on whether works can proceed without any risk of harm to bats.

10. Future Considerations

When the recommended tree work has been carried out, it is suggested that an inspection regime is introduced so that the subject trees are managed on a **36-monthly cycle**, unless otherwise indicated within Appendix 2: Tree Schedule – Priority Works of this report.

11. Other Considerations

Trees subject to statutory controls

If any trees are covered by a Tree Preservation Order or located in a conservation area it will be necessary to consult the local authority before any tree work can be carried out. The works specified above are necessary for reasonable management and should be acceptable to the local authority.



Appendix 1: Glossary of Terminology

Ash Dieback Ash dieback is a disease that affects ash trees (Fraxinus spp.), caused by

a fungus called *Hymenoscyphus fraxineus*. The fungus block water transportation within the tree, leading to bark lesions, leaf loss and

dieback of the crown.

Asymmetrical Crown Unbalanced crown often resulting from storm damage, uneven pruning

work or the proximity of neighbouring trees.

Arboriculture The culture of management of trees as groups and individual primarily

for amenity and other non-forestry purposes.

Arborist A person possessing the technical competence through experience and

related training to provide management of trees or woody plants in a

landscape setting.

Bark exudate A flow of viscous liquid (bleeding from bark) exuded onto the surface of

the bark from the underlying tissues consisting of largely of *gum, resin* kino or latex depending on the species of tree. Bark exudate indicates the inner bark is dead, dying, or injured owing to disease, physical injury,

root damage etc.

Bracket A type of fruiting body by produced various fungal species, plate like to hoof

like in shape and often a one-sided attachment to the wood or bark.

Branch bark ridge A ridged area located at the union of a branch to a trunk of stem.

Branch collar Trunk tissue that forms around the base of a branch between the main stem

and the branch, or between a main branch and a lateral branch. As a branch

decreases in vigour or begins to die, the collar usually becomes more

pronounced and completely encircles the branch.

Branch Stub That part of a decapitated or broken branch protruding beyond the branch

collar, sometimes called a snag. It is considered not good pruning practice to leave stubs. Branch stubs may give rise to unwanted epicormic shoots or lack

vigor and die back when they are prone to decay.

Brown rot Form of decay where cellulose is degraded, while lignin is only modified.

Buttress root Roots that emerge from the base of the tree stem, normally large and well

developed that rapidly forming the connection between the stem and the

transport roots.

Cable bracing Installing cables within the crown of a tree to prevent collapse.



Cambium A thin layer of actively growing and dividing cells, located between the xylem

(sapwood) and the bark of a plant, the part responsible for radial growth of a

tree stem or branch.

Canopy The topmost layer of twigs and foliage in a woodland, tree, or group of trees.

Canker A localised area of dead bark and cambium on a stem or branch, caused by

fungal or bacterial organisms, characterised by wound wood development on

the periphery. This may be annual or perennial.

Cavity An open and exposed area of wood, where the bark is missing, and internal

wood has been decayed or dissolved.

Co-dominant stem/

trunk

Forked branches or trunks of nearly the same size in diameter and lacking a

normal branch union.

Compacted soils Soils in which the airspace (oxygen space) has been reduced or eliminated,

reducing water infiltration and percolation, reducing root presence, and

inhibiting the new root development.

Compartmentalisation The physiological process that creates the chemical and mechanical

boundaries that act to limit the spread of disease and decay organisms.

Compression wood Abnormal wood formed on the lower side of branches and curved stems, with

physical properties different from normal wood.

Conservation area Designated areas of architectural or historical interest, in which there are

special procedures for planning applications. Additionally, tree works cannot

generally be undertaken without prior notification to the relevant local

planning authority.

Crotch The union of two or more branches, the auxiliary zone between branches.

Crown The upper canopy of a tree, including upper trunk, scaffold branches,

secondary branches, stems, and leaves.

Crown lifting Crown lift the removal of the lowest branches, usually to a given height. It

allows more residual light and greater clearance underneath for vehicles etc.

Crown reduction The reduction of a tree's height or spread while preserving the tree's natural

shape.

Crown thinning The removal of some of the density of a tree's crown, usually 5-25% allowing

more light through its canopy and reducing wind resistance.



Deadwood Deadwood is often present within the crown or on the stems of trees. It may

be an indication of ill health; however, it may also indicate growth processes. If a target beneath the tree, deadwood may fall and cause injury or damage

and should be removed, otherwise deadwood can remain intact for

conservation purposes (insects, fungi, birds etc), also, the removal of dead branches from a tree's canopy, usually of a specified size (in diameter).

Decay Progressive deterioration of organic tissues, usually caused by fungal or

bacterial organisms, resulting in loss of cell structure, strength, and function.

In wood, the loss of structural strength.

Decay Detection The assessment of decay within a tree has been traditionally difficult, but

recent advances have made it possible to achieve accurate representations of the internal section of a tree in both 2D and 3D, removing doubt over the

condition of the tree and allowing accurate management decisions.

Defect In relation to tree hazards, any feature of a tree which detracts from the

uniform distribution of mechanical stress, or which makes the tree

mechanically unsuited to its environment.

Dieback Progressive death of buds, twigs, and branch tissues, on individual limbs

resulting in Deadwood, or throughout the canopy, extreme cases can result in

Stag Heading.

Dripline A projected line on the ground that corresponds to the spread of branches in

the canopy, the farthest spread of branches.

Epicormic growth Fast growing, weakly attached shoots/branches that often grow as a response

to stress factors upon a tree or branch removal.

Failure In connection with tree hazards, a partial or total fracture within the wood

tissue or loss of cohesion between roots and soil. (In total failure, affected parts will snap or tear away completely, partial failure there is a crack or deformation, which results in an altered distribution of mechanical stress.

Feeder roots Fine fibrous water and nutrient absorbing roots located in the outer root

system.

Fell to ground level The removal of a tree by means of dismantling the crown and main stem to

ground level or clear felling of the whole tree.

Flush-Cut In trees and shrub, a pruning cut close to the parent stem, which removes the

branch bark ridge.

Foliage The live leaves or needles of the tree; the plant part primarily responsible for

Photosynthesis.



Formative pruning The trimming of a tree to remove weaknesses and irregularities which may

lead to problems. The formative pruning operation is aimed at reducing the

potential for future weaknesses or problems within the tree's crown.

Gall An abnormal, disorganised growth of plant tissue, caused by parasitic or

infectious organisms such as insects, fungi, bacteria, or viruses.

Girdling Root In woody plants, a root that grows across the buttress, or across other roots,

eventually causing constriction of the radial growth.

Hanging/broken

branch

Dead branch fallen from within the tree's crown but caught by, resting on,

branches lower down. A hanger may or may not be liable to fall.

Hazard Beam An upwardly curved branch in which strong internal stresses may occur

without the compensatory formation of extra wood (longitudinal splitting may

occur in some cases).

Heartwood Inner non-functioning tissues that provide structural support to a trunk / main

stem.

Heave In relation to shrinkable clay soils, expansion due to rewetting of a volume of

soil previously subjected to the removal or water by plant / trees following felling or root severance. Also, in relation to root growth, the lifting of pavements and other structures by radial expansion. Also, in relation to tree

stability, the lifting of one side of a wind rocked root plate.

Horse Chestnut Bleeding Canker

Formally attributed to Phytophthora spp. thought to be responsible for 5-10% of cases but following an upsurge of the disease it is now mostly attributed to the bacterium 'Pseudomonas syringae pv. Aesculi'. Horse Chestnut Bleeding Canker kill the bark, resulting in conspicuous bleeding that dries into a black bark exudate. Branches and trees, including young trees, can be completely

girdled resulting in the death of the tree.

Included Bark Bark that becomes embedded in a crotch between branch and trunk or

between co-dominant stems, found in narrow or tight cotches, and causes a

weak structure.

Leader The primary terminal shoot or trunk of a tree.

Limb A large lateral branch growing from the main trunk or from another larger

branch.

Lion Tailing Often the result of poor pruning practices; the main leader or branches are

largely devoid of side branches; growth is restricted to the end of branches

and is likely to suffer damage through end loading.



Massaria

Massaria (*Splanchnonema platani*) is a disease of London Plane (*Platanus x hispanica*, also known as *Platanus x acerifolia*) which causes large legions on the upper surfaces of major branches and branch dieback and can cause branches to break off the tree and fall.

Monitoring

Due to the relative life span of trees in relation to our own, long-term monitoring provides a valuable insight to the health of trees, identifying decline and or stabilisation and or improvement.

Monolith

Retaining a standing stem for wildlife habitat or conservation purposes at any given height. The height a monolith is left at is often determined by the proximity to any given target to be less than the falling distance to that target.

Oak Processionary Moth A cause of defoliation, especially of oaks and trees of other species growing next to defoliated oaks. Eggs are laid within the outer crown of the host tree in late summer and hatch the following spring. The larvae feed on the leaves and often move head-to-tail in a procession, hence their common name. They make communal nests (sometimes called tents) out of silken threadin which they shelter when not feeding. Nests may be spun on the underside of a branch or on the trunk. The hairs of (later stage) larvae are a serious irritant and may provoke an allergic reaction. They easily break off, or are shed when the caterpillars are disturbed, to be dispersed in the air, as well as their abandoned nests, should be treated with extreme caution. Every year oaks in public places are surveyed for OPM and treated with insecticide. Private tree owners may be responsible their own survey and control, potentially enforced by a plant health notice or the powers of the local authority.

Occluding tissue

The general term of wood, cambium and bark that develop around the site of a wound on a woody plant.

Pathogen

A micro-organism that causes diseases within another organism.

Picus Tomography

PiCus testing is a non-invasive method of determining the extent of decay in trees. The PiCUS Sonic Tomograph is an instrument that can detect decay in trees by taking readings of the velocity of soundwaves through the trunk/stem from several sensors, installed with small nails around the trunk, which are each struck to pass sound through the trunk/stem. These readings are used to create a tomogram, which shows the consistency of the wood within the tree and identifies area/s of decay.

Pollard/Re-Pollard

The complete or partial removal of the crown of a young tree so as to encourage the development of numerous branches either for amenity or historically as fodder, repeated management is required cyclically to maintain the feature.

Pollard head/s

The swollen section of branch / stem that forms behind the pollarding cut.



Prune or Pruning Selective removal of woody plant parts of any size, using power / hand saws,

secateurs, or other pruning tools.

Reaction Wood Wood with distinctive anatomical characteristics, formed in parts of leaning or

crooked stems and in branches to provide additional strength / support. In hardwoods, tension usually forms. In conifers, compression wood is usually

found.

Remedial pruning The removal of old stubs, deadwood, epicormic growth, rubbing or crossing

branches and other unwanted items from the tree's crown.

Resistograph The Resistograph equipment is a drill-based tool using a stainless-steel drill bit

that is approx. 1/16 inch in diameter and about 20 inches in length and is used to establish the strength of wood, without the need for destructive testing. As the subject tree is drilled, sound wood being denser than decayed wood offers greater resistance to the drill bit as it passes through the wood. This resistance is recorded electronically across the radius of the section being tested. The depth of drilling is dependent on the drill length and dimension of the tree part being tested. The measurement depth is recorded in centimetres while the amplitude (resistance) reading is given as a percentage across a

range of 0 to 100%. The readings allow the Arboriculturalist to assess the

internal condition of the subject tree.

Rib In tree body language, a long narrow, axial protuberance which often overlays

a crack.

Ring Barking Artificial girdling of a stem, to result in the death of a tree.

Root barriersBoth buildings and services can benefit from the installation of root barriers to

protect a soil volume from the fine absorbing roots, all underground parts of

the tree.

Root collar The basal area of the tree; transition zone from trunk to root. Also sometimes

called trunk flare.

Sail area The area of the tree subjected to wind load.

Scaffold limbs / The branches that form the main network framework of the crown of a tree.

scaffold branches

Sever ivy andCut or sever a band of ivy from ground level to a defined height, usually 1.5m

re-inspect above ground level to allow for the inspection and reporting of the base of the tree.

above ground level to allow for the inspection and reporting of the base of the tree. Severing ivy also allows the ivy above to die back over a period of time to facilitate

future inspections.



Slime Flux Relating to a toxic condition from the spreading of bacteria or their products

from a source of infection: characterised by malodorous gases, or salt deposits upon the bark. Should these enter the sap stream, localised vessel

necrosis can result.

Soft rot A kind of wood decay, where a fungi degrades cellulose within the cell wall,

without causing overall degradation.

Soil compaction The compression of soil, causing a reduction of pore space and an increase in

the density of the soil. Air is squeezed out and nutrients become locked. Tree

roots cannot grow in compacted soil.

Sooty Bark Disease Cryptostroma corticale (Sooty bark disease) is a species of fungus that causes

sooty bark disease of maples, particularly sycamore (Acer pseudoplatanus). The spores grow in large amounts under the bark of affected trees or stacked allergenic and cause a debilitating pneumonitis (inflammation of the lungs) in

humans.

Stag Heading In a tree, a state of dieback where dead branches protrude beyond the

current living crown.

Stress In plant physiology, conditions where one or more physiological functions are

not working within normal parameters.

Stump Grinding The removal of a tree stump using a specialist grinding machine.

Subsidence In relation to vegetation, the removal of water by plant growth resulting in

localised shrinkage in the soil volume.

Suppressed Trees which are dominated by surrounding vegetation and whose crown

development is restricted from above.

Target Any person or object within reach of a falling tree or part of a tree that may

be injured or damaged.

Tension Wood Reaction wood typically formed on the upper side of limbs or curved stems;

characterized by lack of cell wall lignifications (higher ratios of cellulose to

lignin).

Tight Union / Tight Crotch

A crotch with a narrow angle between branches, often having included bark.

Tree A woody plant that typically has a single stem, at maturity has a height of a

least 4 metres and a stem diameter at breast height of at least 75mm.

Tree Preservation

Order

An order made by the local planning authority, where consent must be gained

before undertaking all but exempt works to a tree.



Trunk Flare The basal area of the trunk that flares or widens and merges with the main

roots. (Also see 'Root collar').

Veteran Tree Veteran trees are often found in large parks or estates and commonly

affected by extensive decay or have been subject to extensive works. These trees are retained for historical importance and often pose greater risk than normal, which is generally justified. They need careful management and often propping or bracing to support them, some require fencing to limit access.

Vigour Active, healthy growth of plants: ability to respond to stress factors.

Visual Tree
Assessment (VTA)

An assessment of the mechanical condition of trees based upon their 'body language'. Trees are dynamic and respond to faults / decay / environmental

factors in various ways, these responses can be indicative of structural

integrity.

Wetwood An infection caused by bacteria living inside the plant tissues. The bacteria

ferment the plant fluids, resulting in death of nearby cells, and often causing

exudations of fluid from the bark, often referred to as a Slime Flux.

White Rot A kind if wood decay were a fungi attacks the lignin within the wood matrix.

Wind loading Forces placed upon tree canopy, branches, trunk, and roots of a tree under

windy conditions.

Wind Throw The failure of a tree due to wind loading.

Witches Broom A deformed or unusual growth of twigs from adventitious buds, caused by

insects, disease, or dieback of twigs and buds.

Wood Secondary Xylem; the main structural support and water conducting tissue of

trees and shrubs.

Wound Response

Tissue

Also Occluding Tissue, Wound Wood, or Callus. Differentiated wood tissue

that grows around the margins of a wound or injury.

Wound Wood Wood with atypical features, formed in the vicinity of a wound and a term to

describe the occluding tissues around a wound.



Appendix 2: Tree Schedule – Priority Works

Tree number	Tree Location	Site features	Tree species (Common Name)		Crown spread (m)	Stem diameter at breast height (cm)		Condition	Recommendations	Priority	Date of inspection	Date of next inspection
1	Outside 41	* Grass * Public access: high	Acer platanoides 'Crimson King' (Purple Norway Maple)	5.0m	2.5m	6cm	* Die back whole crown	Poor	* Fell to ground level and remove all arisings * Grind Stump 150mm Single Stump	High Priority	18/07/2024	July 2027
2	Outside 41	* Grass * Public access: high	Acer platanoides 'Crimson King' (Purple Norway Maple)	5.0m	2.5m	10cm	* Die back whole crown (Mortality spiral unlikely to recover) * Leaves small or discoloured	Poor	* Fell to ground level and remove all arisings * Grind Stump 150mm Single Stump	High Priority	18/07/2024	July 2027
3	Outside 41	* Grass * Public access: high	Pinus radiata (Monterey Pine)	11.0m	9.0m	40cm	* Asymmetrical crown * Low branches * Leaning tree * Minor dead wood <50mm * Evidence of recent major surgery (End weight reduced) * Multi-stemmed * Raised roots/buttressing	Fair	* No work required	No action required	18/07/2024	July 2027
4	Outside 41, adj to pond	* Grass * Public access: high	Prunus avium (Wild Cherry)	10.0m	8.5m	35cm	* Asymmetrical crown * Low branches * Leaning tree * Minor dead wood <50mm * Raised roots/buttressing	Fair	* No work required	No action required	18/07/2024	July 2027
5	Outside 41, adj to pond	* Grass * Public access: high	Populus nigra (Black Poplar)	17.5m	14.0m	66cm	* Ivy restricting full Inspection - Main stem * Minor dead wood <50mm * Multi-stemmed * Raised roots/buttressing	Fair	* Sever Ivy to 1.5m agl reporting all structural defects	High Priority	18/07/2024	July 2027
6	Outside 41, adj to pond	* Grass * Public access: high	Populus alba (White Poplar)	18.0m	13.0m	60cm	* Hanging broken branch (Broken limb hung up in Western vegetation) * Leaning tree * Minor dead wood <50mm * Main stem rot (Minor decay within historical pruning wound approx. 1m above ground level) * Raised roots/buttressing	Fair	* No work required	No action required	18/07/2024	July 2027
7	Outside 41, adj to pond	* Grass * Public access: high	Populus alba (White Poplar)	18.0m	14.0m	74cm	* Leaning tree * Minor dead wood <50mm * Raised roots/buttressing	Fair	* No work required	No action required	18/07/2024	July 2027
8	Adj to pond	* Grass * Public access: high	Salix caprea (Goat Willow)	10.0m	11.5m	58cm	* Asymmetrical crown * Branch stubs * Basal and trunk suckers * Historic pruning wounds * Low branches * Leaning tree	Fair	* No work required	No action required	18/07/2024	July 2027

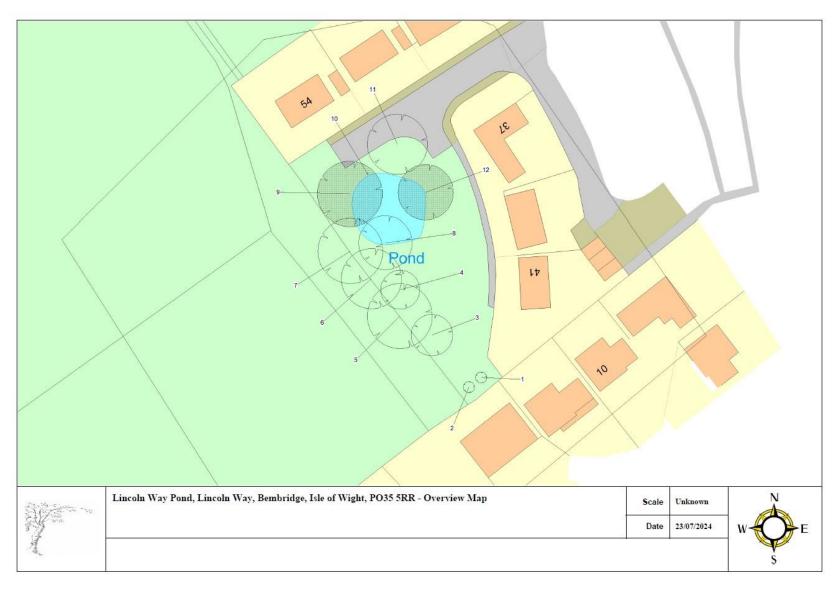


Tree number	Tree Location	Site features	Tree species (Common Name)	Height (m)	spread	Stem diameter at breast height (cm)		Condition	Recommendations	Priority	Date of inspection	Date of next inspection
9	Adj to pond	* Grass * Public access: high	Salix babylonica (Weeping Willow)	16.5m	14.0m	70cm	* Asymmetrical crown * Historic pruning wounds * Low branches * Leaning tree * Minor dead wood <50mm Main Stem/Trunk - Other considerations (Trunk ribbing Northern aspect) * Regrown pollard or topped tree * Raised roots/buttressing * Tear out wound	Fair	* Re-Pollard	High Priority	18/07/2024	July 2027
10	Adj to pond	* Grass * Public access: high	Salix caprea (Goat Willow)	0.1m	0.5m	63cm	* Stump	Fair	* No work required	No action required	18/07/2024	July 2027
11	Adj to pond	* Grass * Public access: high	Salix caprea (Goat Willow)	12.0m	13.0m	65cm	* Branch stubs * Cavity (Cavity in scaffold in lower crown) * Low branches * Mechanical damage to branches * Minor dead wood <50mm * Narrow forks with included bark * Raised roots/buttressing * Possible wildlife	Poor	* Reduce and reshape crown by 2.5m	High Priority	18/07/2024	July 2027
12	Adj to pond	* Grass * Public access: high	Salix alba (White Willow)	10.0m	12.0m	28cm	* Basal rot * Ivy or climbing plants - Main stem * Low branches * Multi-stemmed * Regrown pollard or topped tree	Poor	* Re-Pollard	High Priority	18/07/2024	July 2027

Priority Key	
No action required	
Low Priority	
High Priority	
Urgent-Public safety	



Appendix 3: Tree Location Plan



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