WHARTON
Natural
Infrastructure
Consultant

PREPARED FOR
c/o Joanna Tarleton
Space Logistics and
Planning Manager,
Worthing College,
Sanditon Way,
BN14 9FD

ISSUE DATE
14th January 2025

OUR REFERENCE
250114 1964 LBR V1

Dear Joanna,

Tree Health and Safety Assessment: Worthing College – G10 – Mature Holm Oaks (*Quercus ilex*)

The following letter-based report has been prepared in relation to a health and safety tree assessment at Worthing College (the Site) see aerial photograph at Appendix 1.

Background

The assessment of a group of 15no. holm oak (*Quercus ilex*) trees, located east of a sports field was commissioned due to the owner's concerns about the recent failure of 2no. large limbs on an individual tree (T1205 on Wharton Tree Survey - 220308 1363 TSv1) within the group. There were also concerns regarding the group's impact on the surrounding open space and its proximity to a high-risk area, specifically a sports playing field.

This survey and report will provide an electronic record which can be monitored, updated and used as a management tool for future works. This will ensure a proactive role is adopted to maintain the trees with a planned, systematic and integrated approach.

Worthing College is located within the borough of West Sussex and is west of the A24. It is surrounded by residential properties, residential gardens and public recreational grounds. The main access is gained from Hill Barn Lane to the east of the College.

The group is protected by a Tree Preservation Order (TPO), with the TPO reference for these trees being 58/00001/TPO under The Borough of Worthing, Tree Preservation Order No. 1 of 1958.

Terms of Engagement

The scope of the survey and report is twofold:

1. Undertake a visual assessment from ground level of woodland trees. The assessment is in-line with the LANTRA basic level surveying criteria and provides a more detailed professional level inspection where required;
2. To provide a letter-based tree report including proposed tree works, priority for them to be undertaken and reinspection frequencies. A Tree Schedule have also been provided.

This report has been prepared by Becky Bristow *BSc (Hons),* Arboricultural Consultant at Wharton. Becky is an Associate Member of the Institute of Chartered Foresters (ICF) and is therefore required to uphold the professional and ethical standards within the ICF Code of Conduct. The principal author is LANTRA certified to undertake Professional Tree Inspections.

All trees have been inspected using a) the Basic or Professional level surveying methodology, which can be undertaken by an arboriculturist as set out by LANTRA and b) visual tree assessment (VTA) methodology. The report also provides details in relation to the management of the trees and ensures that the tree owner is fulfilling the 'duty of care' set out within the Occupiers' Liability Acts 1957 and 1984 and also following guidance provided by the National Tree Safety Group (NTSG).

Tree Assessment

The tree inspection was undertaken on 10th December 2024 by Becky Bristow *BSc (Hons)* and the trees were inspected from ground level. No drilling, excavation or aerial inspections were carried out for the purposes of this assessment. The assessment identifies particular structural and/or physiological defects, as well as any remedial works necessary to reduce or minimise a hazard posing risk to the target area, to a reasonable level.

The weather conditions during the survey were good with cloud and a light prevailing wind. Visibility was good whilst surveying was undertaken.

A complete survey of the trees within G10 was undertaken, which is the focus of this letter-based report.

The target within this area includes a sports field and open space.

The Risk Zone has been classified as high due to the increased usage of the area, the nature of its use, and the size and condition of the trees. Reinspection's should be conducted bi-annually. However, a visual walk-over inspection should always follow any storm events.

Visual Assessment Observations

A total of 15no. individual trees, have been assessed within G10 during the inspection.

A portion of the trees requires remedial works, which are outlined in detail within the Tree Schedule in Appendix 3.

Very High Priority Works

There are 2no trees assessed which require very high priority works to be undertaken within one month.

- **T1206** – This is a mature holm oak with a tall, drawn form that is biased toward the northeast and northwest. The stem exhibits helical twists from ground level. A large decay cavity is present on the southwestern side, resulting from a historic limb tear-out. A resonance hammer test suggested sound wood remains. There is a longitudinal bark inclusion on the western side of the stem above the tear-out. The stem bifurcates at approximately c. 6m. Large-diameter deadwood is present throughout the canopy, and the lower northern canopy features lever arms around 16 meters in length.

  Recommendation - End weight reduction by 5-6m to reduce wind load on extender arms. Remove branch at c7.5m from ground level with hazard beam crack. Aerially inspect south-eastern cavity to rule out suspected fungal fruiting body within cavity. Work specification guide below.



Figure 1. T1206 – Guidance for Tree Operation Works Recommended.



Figure 1.2 T1206 – Southeastern cavity to be inspected to rule out suspected fungal fruiting body within cavity

- **T1210** – is a mature Holm oak, with vigorous epicormic growth at its base. Failure at main union has resulted in 1no. western limb remaining. There is a cavity with a split visible on the eastern side of the main union. Some reaction growth is present. The remaining limb has historically been pollarded with new regrowth present. Eastern basal occluding bark wounds are associated with the individual.

  Recommendation – Reduce limb to 1m in length from branch collar to reduce leverage on split main union.



Figure 2. T1210 Guidance for Tree Operation Works Recommended.

High Priority Works

There are 6no. trees assessed which require high priority works to be undertaken within one year. These include: T1212, T1213, T1215, T1216 and T1217.

- **T1212** This is the largest mature holm oak, located to the southwest within G10. The tree features an extensive buttress flare with visible surface roots. The stem has a southwestern leaning tendency, with large limbs that are heavily end-weighted. Several occluded decay pockets are present within its main stem. A large occluding pruning wound is visible on the eastern side of the tree. The easternmost limb shows signs of historic pruning, with visible epicormic regrowth. However, saprophytic fungi along the length of the large-diameter deadwood indicate internal decay. Additionally, large-diameter deadwood is present throughout the canopy.

  Recommendation – End weight reduction by c. 2.5-3m.



Figure 3. T1212 - Guidance for Tree Operation Works Recommended.

- **T1213** – is a mature holm oak is located slightly east within G10. It features a tall, drawn canopy that is biased to the east, with significant end-weighting. Dense vegetation and ivy covering the stem prevented a full basal inspection. Ivy also covers the main union at approximately 6 meters. T1205, located nearby, recently failed, which may have altered the wind load on T1213's canopy. This environmental change could be mitigated through an end-weight reduction.

  Recommendation – Sever and remove ivy. End weighted canopy reduction c. 2.5-3m.



Figure 4. T1213 - Guidance for Tree Operation Works Recommended.

- **T1215** – is a mature holm oak located east within G10. It features a tall, drawn canopy that is biased to the east, with significant end-weighting. Its stem trifurcates at c. 3m. Dense vegetation and ivy covering the stem prevented a full basal inspection. There is visible reaction growth around its main unions.

  Recommendation – End weight reduction by c. 2.5-3m.



Figure 5. T1215 - *Guidance for Tree Operation Works Recommended.*

- **T1216** – is a mature holm oak located southeast within G10. Dense vegetation and ivy covering the stem prevented a full basal inspection. It features a tall, drawn canopy that is biased to the east, with significant end-weighting. Its stem trifurcates at c. 2m. There is a large occluding wound on the east side of the stem at 0.5 meters, as well as a wound on the northern side. The northern wound features an open bark wound with a crack in the heartwood, which was examined with a sounding hammer. Some historic pruning is evident on outer branches, which have since developed new epicormic regrowth. Saprophytic fungi are present on pruned limbs, indicating decay in several large-diameter branches.

  Recommendation – End weight reduction by c. 2.5-3m.



Figure 6. T1216 - *Guidance for Tree Operation Works Recommended.*

- **T1217 –** is a mature single stemmed holm oak located east within G10. Dense vegetation and ivy covering the stem prevented a full basal inspection. It features a tall, drawn canopy that has both a stem and canopy biased to the east, with significant end-weighting.

  Recommendation – End weight reduction by c. 2.5-3m.



Figure 7. T1217 - *Guidance for Tree Operation Works Recommended.*

- **T1218 –** is a mature single stemmed holm oak located south within G10. Dense vegetation and ivy covering the stem prevented a full basal inspection. It features a tall, drawn canopy that has both a stem and canopy biased to the south, with significant end-weighting.

  Recommendation – End weight reduction by c. 2.5-3m.



Figure 8. T1218 - *Guidance for Tree Operation Works Recommended.*

There are **6no**. trees that have no works recommended.

General Guidance

Trees and Ecology

In general terms, the bird-nesting season is accepted to be between March and September (inclusive – though this varies with species) and therefore vegetation clearance outside of this time is unlikely to cause disturbance. Prior to any works being undertaken, rigorous assessment should be carried out for nesting birds.

Great care is required to avoid disturbance to legally protected species (such as roosting bats) and consideration should be given to the timing of tree works in order to avoid disturbance. Where the presence of legally protected species is suspected, the project ecologist or Natural England must be contacted for advice.

Implementation of Tree Works

Remedial tree works will require a specialist arboricultural contractor using tree climbers or MEWPs (mobile elevated work platforms) to work in the crowns, wood-chippers to minimise brash and traffic control on the roads according to *Traffic Signs Manual, Chapter 8; Traffic Safety Measures and Signs for Road Works and Temporary Situations.*

Guidance on hiring an arboricultural contractor is available from the author. The contractor should carry out all tree works to British Standard 3998 Tree Work - Recommendations (2010).

On undertaking the recommended works, the arboricultural contractor must without delay report any defects that become apparent while climbing or working on the tree/s in question. Those defects must be reported immediately to the tree owner and/or the author of this report to enable the appropriate remedial action.

Formal Inspections

If resources allow it is recommended that an annual formal inspection of the tree is undertaken, this could take the form of a simple walk-by inspection to identify gross defects. In addition, it is recommended following extreme weather events that trees are inspected for storm damage or root plate lifting.

Walk-Through Assessments

Following high winds or unexpected/prolonged bad weather conditions it is recommended that a walk-through assessment of trees be undertaken. This is to ensure that any damage to the tree is identified, and the appropriate remedial action occurs. Following each assessment, a brief file note should be made in relation to any hazards identified and appropriate remedial action taken.

Conclusions and Overall Recommendations

The letter-based report has been prepared in relation to a health and safety tree assessment at Worthing College (the Site) (see aerial photograph at Appendix 1). The assessment has been commissioned due to the owner's concerns about the recent failure of 2no. large limbs on an individual tree (T1205 on Wharton Tree Survey - 220308 1363 TS V1) within the group. There were also concerns regarding the group's impact on the surrounding open space and its proximity to a high-risk area, specifically a sports playing field.

The Risk Zone has been pre-determined as high given the increased use of the area and the nature of its use, combined with the size and condition of the trees. Reinspection should be carried out on a bi-annual basis.

A total of 15no. individual trees, have been assessed across the entire site.

There are 2no. trees assessed which require very high-priority works to be undertaken within one year and 6no. which require high-priority works to be undertaken within one year.

A separate application for works will need to be submitted under the TPO prior to this all being undertaken.

The recommendations within this report provide remedial tree works to reduce or minimise a hazard on a tree posing risk to the associated target areas. Certain hazards will remain, as absolute tree safety is in practice unachievable. These recommendations are in the author's professional opinion considered 'reasonable' and pragmatic, so they are neither too prescriptive nor inadequate to address the tree owners' 'duty of care' towards public safety.

Trees are growing dynamic structures. Whilst reasonable effort has been made to identify defects within the trees inspected, no guarantee can be given as to the absolute safety or otherwise of any individual tree. No tree is ever absolutely safe due to the unpredictable laws and forces of nature. As a result of this, natural failure of intact trees will occur; extreme climatic conditions can cause damage to even apparently healthy trees.

Trees are living organisms whose health, condition and structure can change quickly and without warning. Therefore, the contents of this report are valid for a period of two years from the date of this survey, subject to implementation of preliminary tree work recommendations as stated above. As such, it would be prudent for the trees discussed in this report to be re-inspected by a competent person where the frequency of inspection has been recommended.

I trust that this will be of use in managing the trees in G10 at Worthing College. If you have any further queries, please do not hesitate to contact me.

Yours sincerely,



Becky Bristow
PhD, *BSc (Hons)*
Arboricultural Consultant
Wharton Natural Infrastructure Consultants Ltd

Appendix 1: Aerial Photograph

Worthing College



Appendix 2: Schedule

Tree Schedule