



— HEBDEN —  
ARBORICULTURE

# Quantified Tree Risk Assessment- St. Peter's Hospice, Brentry, Bristol

## ABSTRACT

A report detailing the findings of a Quantified Tree Risk Assessment on selected trees in and around the grounds of St. Peter's Hospice, Brentry, Bristol.

Alex Hebdens

*Dip Arb L4 (ABC), TechArborA*  
QTRA Registered User



Registered User

# Table of Contents

- Section 1 - Scope and Methodology..... 4
  - 1.1 Scope and Report Brief..... 4
  - 1.2 Methodology ..... 4
  - 1.3 Site Specific Methodology..... 4
  - 1.4 Limitations ..... 5
- Section 2 - Survey Findings..... 6
  - 2.1 Executive Summary of Findings..... 6
  - 2.2 Assessment Comments on Noteworthy Trees and QTRA Calculations..... 7
    - 2.2.1 T1 *Tilia cordata* - Small leaved Lime ..... 7
    - 2.2.2 T2 *Tilia x europea* - Common Lime ..... 7
    - 2.2.3 T5 *Quercus robur* - Pedunculate oak ..... 7
    - 2.2.4 G1 Mixed species including Pine, Field maple and Wild cherry ..... 7
    - 2.2.5 G2 Mixed species including Pine, Sweet chestnut and Wild cherry..... 8
    - 2.2.6 G3 Mixed species including Wild cherry ..... 8
    - 2.2.7 G4 Mixed species including Wild cherry ..... 8
    - 2.2.8 G5 Mixed species including Wild cherry, Leyland cypress, Dogwood, Judas tree and Fan palm..... 9
    - 2.2.9 G6 Mixed species including Leyland cypress, Wild cherry, Eucalyptus and various shrub species ..... 9
    - 2.2.10 G7 Mixed species including Willow, Wild cherry, Portuguese laurel and Himalayan birch. 9
    - 2.2.11 G11 Mixed species including Wild cherry, Pine, Service and Rowan Trees. .... 9
    - 2.2.12 G13 Mixed species including Wild cherry, Lime and Sycamore ..... 10
    - 2.2.13 G14 Mixed species including Lime, Leyland cypress and various shrub species..... 10
    - 2.2.14 G21 Mixed species including Lime, Horse chestnut and Sycamore ..... 10
    - 2.2.15 G22 Mixed species including Lime, Larch, Pines, Monterey cypress and Sycamore ..... 11
    - 2.2.16 G24 Mixed species including Lime and Oak. .... 11
- Section 3 – Recommended Works ..... 12
  - 3.1 Summary of recommended works..... 12
  - 3.2 Report validity ..... 12
  - 3.3 Priority System and Table Key ..... 12
  - 3.4 Recommended Works Table ..... 13
- Section 4 – Appendices ..... 18
  - 4.1 – Photographs ..... 18
    - 4.1.1 Figure 1 – Horse Chest to fell in G21 ..... 18
    - 4.1.2 Figure 2 – Horse Chestnut branch to remove in G21..... 19
    - 4.1.3 Figure 3 – Dead Larch in G22 to fell ..... 20

4.1.4 Figure 4 – Hanging Branch on Pine in G22 .....	21
4.1.5 Figure 5 – Dogwood Obscuring light in G5 to coppice .....	22
4.1.6 Figure 6 – Reddening needles on Pine in G10 .....	23
4.2 Site maps .....	24
4.2.1 Map 1.....	24
4.2.2 Map 2.....	25

## Section 1 - Scope and Methodology

### 1.1 Scope and Report Brief

This report has been compiled at the request of Anneke van Eijkern on behalf of St Peter's Hospice on Charlton Road, Brentry. It was performed by Alex Hebden on the 4/12/2023 and 8/12/2023. The site is comprised of a large car park with some out skirting trees, several small to large sized gardens for service users and a large paddock of mature trees on public access land. The specific brief for the survey was to assess all trees on the site for potential risk of failure which would lead to damage or harm to persons and property as well as comment on general tree maintenance and management.

### 1.2 Methodology

The method used to assess these trees is the Quantified Tree Risk Assessment (QTRA) method. This method calculates the Risk of Harm (RoH) to persons or property by looking at three aspects. Firstly the target is examined. The term "target" refers to the persons or property most likely to be damaged or harmed in the event of tree failure. Secondly the size of the falling branch or tree is assessed as this will have a large bearing on the damage or harm caused. Thirdly the probability of failure (PoF) is assessed. This takes a number of aspects into account and works out the probability of the tree failing within the coming year.

These three aspects are then put into a specialised calculator and the RoH is given in a probability (<1/1,000,000 for example). This is then compared to guidance issued by the HSE (*Reducing Risks: Protecting People 2001*) which advises on probability thresholds for the risk of death to workers and members of the public. These thresholds range from 1 in 1,000,000 which the HSE regards as "Broadly Tolerable" meaning no work to mitigate the risk is necessary, to 1 in 1000, which is regarded as an "Unacceptable Risk" and management work is definitely required. Trees that fall in between these two thresholds can be considered "Tolerable" or "Unacceptable" and so this is still a region in which management can be used to reduce the risk. Once the management operations have been carried out (if required) the risks are considered to be "As Low As Reasonably Practicable" (ALARP). That is to say that further management to reduce the risk would be disproportionate. This could be for financial reasons or because the risk someone being harmed managing the tree is higher than the initial RoH. For more information about the QTRA method please visit [www.qtra.co.uk](http://www.qtra.co.uk).

### 1.3 Site Specific Methodology

An initial site visit was made on the 4/12/2023 but owing to bad weather and poor visibility this visit was abandoned and rescheduled for 8/12/2023. The weather on the second visit was much better and visibility was considered good. The site is made up of several different areas and too many trees to be practically mapped individually. For this reason most trees on the site have been grouped together. There are still some individual trees listed in this report these are listed with the prefix "T" and a number whereas the groups are listed with the prefix "G" and a number. The number is purely for reference purposes and does not have a relationship with the risk the tree presents.

The actual risk assessment for the grouped trees was made on the tree that presented the greatest probability of failure. Once this was calculated the next tree presenting a high probability of failure was assessed and so on until the risk of harm was greater than 1 in 1,000,000.

## 1.4 Limitations

It should be noted that this survey comes with some limitations. These are;

- The assessment is only conducted from the ground and so issues high up in the crown may not be visible. If an aerial inspection is required this will be outlined in *Section 3 – Recommended Works*.
- No specialised decay detection equipment was used and so the extent of decay in the trees is unknown. If further inspection is deemed necessary this will be outlined in *Section 3 – Recommended Works*.
- No subterranean investigation was conducted during this survey. If one is deemed necessary it will be outlined in *Section 3 – Recommended Works*.
- Trees are dynamic organisms living in a dynamic environment and can be unpredictable and respond to inclement weather in ways no one could reasonably foresee. They can never be guaranteed 100% safe. Even a tree in good condition they can suffer damage under average weather conditions. Regular inspections can help to identify potential problems before they become acute. As such, Hebden Arboriculture can take no responsibility for any damages resulting from the tree's failure that occur following this report.

## Section 2 - Survey Findings

### 2.1 Executive Summary of Findings

The majority of the trees covered by this survey were found to be in a good condition and did not present risks outside of tolerable levels.

In terms of general tree maintenance and management there appears to have been a lapse in the regular work required to keep the trees their best condition possible and to prevent potential issues with trees interfering with the infrastructure of the site. This is covered in more detail below in the survey comments and in *Section 3 – Recommended Works*.

There also 2 dead trees found at the western end of the site. While neither of these presented a serious risk of harm it would be advisable to deal with these issues ahead of time before they become more dangerous and expensive to manage. Dead trees will only ever become more unstable and so it is prudent to be proactive in their management.

There were only 2 trees that presented an unacceptable risk according to the QTRA method. Both of these were Horse chestnut trees in G21 with advanced signs of decay. One is a whole tree at risk of falling onto the popular footpath in the paddock area and the other has a large decayed limb overhanging the same footpath.

Further information on the calculation used and comments on noteworthy trees can be found in the paragraphs below and all works recommended are listed in *Section 3 – Recommended Works*.

## 2.2 Assessment Comments on Noteworthy Trees and QTRA Calculations

### 2.2.1 T1 *Tilia cordata* - Small leaved Lime

T1 was a mature Small leaved Lime on the east side of the site in the main car parking area. It was recorded as having a few hanging branches in the crown and a poor branch union at 3 metres in height. There was minor amounts of deadwood in the crown as would be expected for a tree of this species and age.

The assessment was made of a 1<sup>st</sup> order branch failing onto Charlton road to the east. The target was judged to be a vehicle being hit by, or driving into a falling branch whilst using the road, the frequency of vehicular traffic was judged to be between 480 – 4,700 cars per day driving around 30 mph, which placed it in target group “2”. The size range used was “2” as the diameter of the 1<sup>st</sup> order branch was 260 – 450mm. The probability of failure in the coming year was 1/100,000 – 1/1,000,000, which put it in range “6”. **These parameters gave a Risk of Harm (RoH) of greater than 1/1,000,000 and so is considered broadly tolerable.**

### 2.2.2 T2 *Tilia x europea* - Common Lime

T2 was a mature Lime on the south eastern side of the site in the paddock adjacent to Charlton road. The tree was being extensively colonised by ivy which is obscuring a good assessment of the main branch union. There was also major (50mm in diameter and larger) and minor (less than 50mm in diameter) deadwood in its crown as would be expected for a tree of this species and age.

The assessment was made of a 1<sup>st</sup> order branch failing onto Charlton road to the east. The target was judged to be a vehicle being hit by, or driving into a falling branch whilst using the road, the frequency of vehicular traffic was judged to be between 480 – 4,700 cars per day driving around 30 mph, which placed it in target group “2”. The size range used was “2” as the diameter of the 1<sup>st</sup> order branch was 260 – 450mm. The probability of failure in the coming year was 1/100,000 – 1/1,000,000, which put it in range “6”. **These parameters gave a Risk of Harm (RoH) of greater than 1/1,000,000 and so is considered broadly tolerable.**

### 2.2.3 T5 *Quercus robur* - Pedunculate oak

T5 was a very large dead oak tree standing on the most western corner of the site near a footpath entrance into the paddock area. It has clearly been dead for some time but is offering excellent habitat potential to local wildlife including potential bat roosts.

The assessment was made of a 1<sup>st</sup> order dead branch failing on to a person using the footpath. The pedestrian usage of that particular footpath was judged to be 2 – 7 per hour which placed it in target group “3”. The size range used was “2” as the diameter of the 1<sup>st</sup> order branch was 260 – 450mm with a reduced mass of 50%. The probability of failure in the coming year was 1/1000 – 1/10,000, which put it in range “4”. **These parameters gave a Risk of Harm (RoH) of greater than 1/1,000,000 and so is considered broadly tolerable.**

### 2.2.4 G1 Mixed species including Pine, Field maple and Wild cherry

G1 was a mixed group of young to semi mature species growing at the northern corner of the site at the end of the carpark. The trees were beginning to encroach on the lighting and had low hanging branches over the parking spaces.

The assessment was made of the 1<sup>st</sup> order branch failing onto a parked car. The cost of repairs in that event were estimated at £200 - £2000 which placed it in target group “4”. The size range used was that for assessments involving property. The probability of failure in the coming year was 1/100,000 – 1/1,000,000 which put it in range “6”. **These parameters gave a Risk of Harm (RoH) of greater than 1/1,000,000 and so is considered broadly tolerable.**

### 2.2.5 G2 Mixed species including Pine, Sweet chestnut and Wild cherry

G2 was a mixed group of young to semi mature species growing at the north end of the site in the island at the centre of the carpark. As with G1 the trees were beginning to encroach on the lighting and had low hanging branches over the parking spaces. The pine tree in the island was noted to have a slight lean to the west and a raised area of soil correspondingly on the eastern side. The growth at the tips was showing a normal vertical angle which suggests the movement is not recent.

The assessment was made of the pine falling onto a parked car. The cost of repairs in that event were estimated at £2000 - £20,000 which placed it in target group "3". The size range used was that for assessments involving property. The probability of failure in the coming year was 1/10,000 – 1/100,000, which put it in range "5". **These parameters gave a Risk of Harm (RoH) of greater than 1/1,000,000 and so is considered broadly tolerable.**

### 2.2.6 G3 Mixed species including Wild cherry

G3 was a mixed group of young to semi mature species growing at the north end of the site on boundary edge of the carpark. As with G1 and G2 the trees were beginning to encroach on the lighting and had low hanging branches over the parking spaces as well as interfering with a BT service line running through the crowns of the trees.

The assessment was made of the 1<sup>st</sup> order branch failing onto a parked car. The cost of repairs in that event were estimated at £200 - £2000 which placed it in target group "4". The size range used was that for assessments involving property. The probability of failure in the coming year was 1/100,000 – 1/1,000,000 which put it in range "6". **These parameters gave a Risk of Harm (RoH) of greater than 1/1,000,000 and so is considered broadly tolerable.**

### 2.2.7 G4 Mixed species including Wild cherry

G4 was a mixed group of young to semi mature species growing at the north of the site in a courtyard area used by gardening staff and it also covers the small group of trees and shrubs outside this courtyard on the edge of the car park entrance. As with G3 these trees are interfering with a BT service line running through the crowns of the trees. There was also noted a very low branch in very close proximity to one of the tool sheds in the courtyard. It was noted the cherries in this group had very dense crowns and ivy was beginning to encroach into the trees.

The assessment was made of the 1<sup>st</sup> order branch failing onto the tool shed. The cost of repairs in that event were estimated at £20 - £200 which placed it in target group "5". The size range used was that for assessments involving property. The probability of failure in the coming year was 1/100,000 – 1/1,000,000 which put it in range "6". **These parameters gave a Risk of Harm (RoH) of greater than 1/1,000,000 and so is considered broadly tolerable.**



### 2.2.8 G5 Mixed species including Wild cherry, Leyland cypress, Dogwood, Judas tree and Fan palm

G5 was a large group of small trees and shrubs that are young to semi mature in age. They are growing on both sides of the main carpark entrance and along the edges of the carpark. It also includes the fan palms in the island directly in front of the main pedestrian entrance. The trees in this group are all very small and so present low risk of harm generally speaking. The Leyland cypress in the group has been planted beneath a light and is obscuring it. The cherries in the group on the western side of the car park both have cankers at their bases. There is also a large Dogwood that is obscuring a light.

The assessment was made of the whole dogwood tree failing onto a parked car. The cost of repairs in that event were estimated at £200 - £2000 which placed it in target group "4". The size range used was that for assessments involving property. The probability of failure in the coming year was 1/100,000 – 1/1,000,000 which put it in range "6". **These parameters gave a Risk of Harm (RoH) of greater than 1/1,000,000 and so is considered broadly tolerable.**

### 2.2.9 G6 Mixed species including Leyland cypress, Wild cherry, Eucalyptus and various shrub species

G6 was a group of small young trees growing in the service user sensory garden. As with other areas the Leyland cypresses had been planted underneath important lighting and are now obscuring this. There is also a cherry obscuring a light installation.

**No tree in this group presented a probability of failure high enough to warrant a full assessment and so this is already considered broadly tolerable.**

### 2.2.10 G7 Mixed species including Willow, Wild cherry, Portuguese laurel and Himalayan birch

G7 was the group of young to semi mature trees growing in the enclosed garden for service users on the western side of the site. The cherries in this group appeared to have some unidentified pathogen causing greatly reduced vitality. The larger willow has previously been pollarded and had a large area of dead wood on its stem. The other smaller contorted willow appears unstable in the ground and has been tied back to a scaffolding bar for support. It was noted that this garden is used by dementia sufferers and so their reduced risk awareness is taken into account with the assessment.

The assessment was made of the 1<sup>st</sup> order branch of the willow falling onto a service user. The pedestrian usage of the footpath under the willow was judged to be 3 per day – 1 per hour which placed it in target group "4". The size range used was "3" as the diameter of the 1<sup>st</sup> order branch was 110 – 250mm. The probability of failure in the coming year was 1/10,000 – 1/100,000 which put it in range "5". **These parameters gave a Risk of Harm (RoH) of greater than 1/1,000,000 and so is considered broadly tolerable.**

### 2.2.11 G11 Mixed species including Wild cherry, Pine, Service and Rowan Trees.

G11 was a group of young to semi mature trees growing to the east of the gate leading from the site to the paddock area. It was noted that this group was largely dominated by the Pine which had a very dense crown and had out competed a poor quality rowan adjacent to it.

The assessment was made of the 1<sup>st</sup> order branch falling onto a service user. The pedestrian usage of the footpath was judged to be 3 per day – 1 per hour which placed it in target group "4". The size range used was "4" as the diameter of the 1<sup>st</sup> order branch was 25 – 100mm. The probability of failure in the coming year was 1/100,000 – 1/1,000,000 which put it in range "6". **These parameters gave a Risk of Harm (RoH) of greater than 1/1,000,000 and so is considered broadly tolerable.**

### 2.2.12 G13 Mixed species including Wild cherry, Lime and Sycamore

G13 was a group of semi to early mature trees growing on the eastern side of the site. Three cherries were growing in the centre of a footpath loop, these appeared quite densely planted and were competing with each other for light. They had low hanging branches over the footpath and had included bark unions as is normal for this species. The Sycamore in the group was growing on the eastern boundary with Charlton road and had ivy encroaching into its crown.

The assessment was made of a 1<sup>st</sup> order branch of the Sycamore failing onto Charlton road to the east. The target was judged to be a vehicle being hit by, or driving into a falling branch whilst using the road, the frequency of vehicular traffic was judged to be between 480 – 4,700 cars per day driving around 30 mph, which placed it in target group “2”. The size range used was “3” as the diameter of the 1<sup>st</sup> order branch was 110 – 250mm. The probability of failure in the coming year was 1/100,000 – 1/1,000,000, which put it in range “6”. **These parameters gave a Risk of Harm (RoH) of greater than 1/1,000,000 and so is considered broadly tolerable.**

### 2.2.13 G14 Mixed species including Lime, Leyland cypress and various shrub species

G14 was a group of young to semi mature trees growing in the garden area of “The garden room” on the eastern side of the site. The Lime tree in this group is directly adjacent to the venting units for the sites air conditioning. As with other groups the Leyland cypress was obscuring a light and the signs welcoming visitors to the site.

The assessment was made of 1<sup>st</sup> order branch from the Lime tree failing on to the air conditioning units. The cost of repairs in that event were estimated at £200 - £2000 which placed it in target group “4”. The size range used was that for assessments involving property. The probability of failure in the coming year was 1/100,000 – 1/1,000,000, which put it in range “6”. **These parameters gave a Risk of Harm (RoH) of greater than 1/1,000,000 and so is considered broadly tolerable.**

### 2.2.14 G21 Mixed species including Lime, Horse chestnut and Sycamore

G21 was a group of early mature trees growing in a line adjacent to a footpath in the paddock area of the site. There were a number of noteworthy features of concern including a snapped branch hanging over the footpath and serious decay in both Horse chestnuts, one at the base and the other had a seriously decayed branch. There was also major (larger than 50mm in diameter) deadwood in all trees in the group. The area these trees stand in is open to the public and popular with dog walkers so the risks are being imposed on others who may reasonably expect the trees in the area to be safe.

Two separate assessments were made here. The first was made of the decayed branch (see Figure 2 in Appendices) failing on to a pedestrian using the footpath. The pedestrian usage of the footpath was judged to be 2 – 7 per hour which placed it in target group “3”. The size range used was “2” as the diameter of the 1<sup>st</sup> order branch was 260 – 450mm. The probability of failure in the coming year was 1/100,000 – 1/1,000,000 which put it in range “3”. **These parameters gave a Risk of Harm (RoH) of 1/100,000 and so is unacceptable and requires management.**

The second assessment was made of the other horse chestnut (see Figure 1 in Appendices) with decay at the base failing onto a pedestrian using the footpath. The pedestrian usage of the footpath was judged to be 2 – 7 per hour which placed it in target group “3”. The size range used was “1” as the diameter of the tree was greater than 460mm. The probability of failure in the coming year was 1/1000 – 1/10,000 which put it in range “4”. **These parameters gave a Risk of Harm (RoH) of 1/400,000 and so is unacceptable and requires management.**

### 2.2.15 G22 Mixed species including Lime, Larch, Pines, Monterey cypress and Sycamore

G22 was a large group of mature species running along the southern edge of the site and adjacent to an access road into the neighbouring estate. Almost all of the trees were either overhanging the access road or a public access footpath running through the paddock. There was major deadwood noted in almost all trees in this group. There is a dead larch directly adjacent to a footpath at the western end of the group (see Figure 3 in Appendices). The pine at the western end of the group has decay running up the back of its stem and is heavily weighted in the opposite direction. One of the large Austrian pines has a broken hanging branch in its crown and the Monterey cypress has a large area of necrotic bark running up its stem.

The assessment was made of the top of the decayed Scots pine failing onto the access road. The target was judged to be a vehicle being hit by, or driving into a falling branch whilst using the road, the frequency of vehicular traffic was judged to be between 48 – 470 cars per day driving around 30 mph, which placed it in target group “3”. The size range used was “3” as the diameter of the 1<sup>st</sup> order branch was 110 – 250mm. The probability of failure in the coming year was 1/1000 – 1/10,000, which put it in range “4”. **These parameters gave a Risk of Harm (RoH) of greater than 1/1,000,000 and so is considered broadly tolerable.**

### 2.2.16 G24 Mixed species including Lime and Oak.

G24 is a line of semi mature trees on the eastern side of the paddock area adjacent to the boundary of the site and Charlton road. As is common in this species of Lime most trees in the group had epicormic growth at their bases and in the crowns. Many of the trees were also being affected by Ivy encroaching into their crowns.

The assessment was made of a 1<sup>st</sup> order branch failing onto Charlton road to the east. The target was judged to be a vehicle being hit by, or driving into a falling branch whilst using the road, the frequency of vehicular traffic was judged to be between 480 – 4,700 cars per day driving around 30 mph, which placed it in target group “2”. The size range used was “3” as the diameter of the 1<sup>st</sup> order branch was 110 – 250mm. The probability of failure in the coming year was 1/100,000 – 1/1,000,000, which put it in range “6”. **These parameters gave a Risk of Harm (RoH) of greater than 1/1,000,000 and so is considered broadly tolerable.**

## Section 3 – Recommended Works

### 3.1 Summary of recommended works

As mentioned above there are only two works that are required to mitigate an unacceptable risk. This is the removal of the decayed limb and the felling of one of the Horse chestnuts in G21. As well as this there is the removal of the deadwood across various areas of the site and the removal of the dead Larch in G2, this is to mitigate future risks before they become unacceptable.

All other work is either to facilitate safe use of the site and the prevention of damage of property. This includes the suggested removal of dominating aggressive species like the Leyland cypress and the pruning of low hanging limbs. A lot of this is recommended to enable the site not only to be safe but enable trees to function at their best in their locations. Some trees will pose serious constraints on the site in the near future if not maintained effectively.

### 3.2 Report validity

As mentioned above the assessments of each tree can only judge the probability of failure in the coming year, as such this survey and report can only be valid for 1 year. This ends in December of 2024.

### 3.3 Priority System and Table Key

The table below picks out all the trees that have works recommended to be completed on them at this site. A list of all the trees on the site can be found in the Tree Risk Assessment Schedule.

The works detailed below is broken down into priority groups that can be used to aid budgeting and effective prioritisation.

Works listed with “**1**” are required to mitigate risks highlighted as “Unacceptable” so should be carried out **immediately**.

Works listed with “**2**” are required to mitigate currently acceptable but risks which are near the threshold or ones that are unlikely to remain the same or decrease. Also works that facilitate effective surveying in the future or to prevent damage to infrastructure and allow the safe use of the site. This should be carried out within the **next 6 months to a year, and certainly before the next inspection**.

Finally “**3**” refers to works required to allow the trees to be as healthy and aesthetically pleasing as possible. These should ideally be carried out **prior to the next inspection as budget allows**.

Works listed as “**1**” are the highest priority and “**3**” is the lowest.

**All works must be carried out in compliance with BS: 3998 2010.**

### 3.4 Recommended Works Table

This table has been written in such a way to be read and understood by a contracting arborist for the purposes of identifying required works and pricing accordingly. Where a part of the table is greyed out, it signifies that no works are required.

Please refer to the attached map and photographs to aid identification. If there is confusion please contact Hebden Arboriculture on 07749940331 or [Alexhtrees@gmail.com](mailto:Alexhtrees@gmail.com) for clarification.

Tree/Group Number and Name	Priority 1 Works	Priority 2 Works	Priority 3 Works
T1 Small leaved lime		Remove hanging branches	Consider bracing two leaders
T2 Large leaved lime		-Sever ivy to enable view of union at next inspection -Remove Deadwood 50mm in diameter and larger	
T4 Large Leaved lime		Remove hanging branches	
T5 Oak		Fence off to edge of crown spread with low fence or intermittent planting	
G1 Mixed species		-Prune 1m clear of lights -Lift over car parking spaces to 2.5m	
G2 Mixed species		-Prune 1m clear of lights -Lift over car parking spaces to 2.5m -Lift Pine to 3m	
G3 Mixed species		-Prune 1m clear of lights -Lift over car parking spaces to 2.5m -Prune 1m clear of BT line	
G4 Mixed species		-Remove low branch over shed -Prune 1m clear of BT line	
G5 Mixed species		-Remove Leyland cypress -Coppice dogwood (see Figure 5 in Appendices)	
G6 Mixed species		-Remove Leyland cypress -Prune 1m clear of lights	

G7 Mixed species		-Remove both pollarded willow and contorted willow	
G11 Mixed species		-Lift pine to 2m -Remove small rowan	
G12 Mixed species		-Lift Hornbeam to 2m	
G13 Mixed species		Remove 2 lowest limbs from cherry over footpath	
G14 Mixed species		Remove Leyland cypresses and consider replanting with broadleaf species	
G21 Mixed species	-Remove decayed limb on Horse chestnut (see Figure 2 in Appendices) -Remove decayed Horse chestnut (see Figure 1 in Appendices)	Remove Deadwood 50mm in diameter and larger	
G22 Mixed species		-Remove Deadwood 50mm in diameter and larger -Remove dead Larch (see Figure 3 in Appendices) -Remove hanging branch (See Figure 4 in Appendices)	

# TREE RISK ASSESSMENT SCHEDULE

**CLIENT:** St.Peter's Hospice  
**PROJECT:** St.Peter's Hospice Tree Risk Assessment  
**BRIEF:** Inspect all trees on site and assess for risk to persons and property  
**SURVEYOR:** Alex Hebden  
**DATE:** 4/12/2023, 8/12/2023  
**PROJECT REF:** St.Peter's Hospice QTRA



Tree Ref	Species	Age	Height (m)	Spread (m)	Vitality	Notes/Comments	Risk Assessment Of	Target Type	Target	Size	POF	MASS %	ROH
T1	<i>Tilia cordata</i> Small leaved lime	M	15	10	N	Hanging branches in crown, Poor union at 3m	1 <sup>st</sup> Order branch failure onto road	V	2	2	6	100%	<1/1M
T2	<i>Tilia x europea</i> Common lime	M	20	10	N	Major and minor deadwood, Ivy obscuring union, Epicormics growth	1 <sup>st</sup> Order branch failure onto road	V	2	2	6	100%	<1/1M
T3	<i>Carpinus betulus</i> Hornbeam	EM	10	15	N	Dense lower crown	POF 7 so no calc. required				7	100%	<1/1M
T4	<i>Tilia platyphyllos</i> Large leaved lime	M	20	15	N	Hanging branches in crown, several included bark unions	1 <sup>st</sup> Order branch failure onto footpath	H	3	3	6	100%	<1/1M
T5	<i>Quercus robur</i> Pedunculate oak	V	20	15	D	Dead tree, Excellent habitat value	Dead 1 <sup>st</sup> Order branch failure onto footpath	H	3	2	4	50%	<1/1M
G1	Mixed species inc. Pine, Field maple, Wild cherry	Y-SM	8	N/a	N	Trees growing near lighting, Low branches over car park	1 <sup>st</sup> Order branch failure onto parked car	P	4	P	6	100%	<1/1M
G2	Mixed species inc. Pine, Sweet chestnut, Wild cherry	Y-SM	10	N/a	N	Trees growing near lighting, Low branches over car park	Whole Pine tree failure onto parked car	P	3	P	5	100%	<1/1M
G3	Mixed species inc. Wild cherry	Y-SM	10	N/a	N	Trees growing near lighting, Low branches over car park, Branches interfering with BT line	1 <sup>st</sup> Order branch failure onto parked car	P	4	P	6	100%	<1/1M
G4	Mixed species inc. Wild cherry	Y-SM	10	N/a	N	Branches interfering with BT line, Ivy in crowns, Low Branch on shed roof, Dense crowns	1 <sup>st</sup> Order branch failure Onto tool shed	P	5	P	6	100%	<1/1M

G5	Mixed species inc. Wild cherry, Leyland cypress, Dogwood, Judas tree, Fan palm	Y-SM	5-10	N/a	N	Leylandii obscuring light, Cherries with cankers at bases, Dogwood obscuring light	Whole dogwood tree failure onto parked car	P	4	P	6	100%	<1/1M
G6	Mixed species inc. Various Shrubs, leylandii, Wild cherry	Y-SM	5-10	N/a	N	Leylandii and cherry obscuring light,	POF 7 so no calc. required				7	100%	<1/1M
G7	Mixed species inc. Willow, Wild cherry, Portuguese laurel, Himalayan birch	Y-SM	12	N/a	N/R	Dead area on willow, Cherries have blight and reduced Vitality, Contorted willow poorly strapped upright, Garden used by dementia sufferers	1 <sup>st</sup> Order willow branch failure onto footpath	H	4	3	5	100%	<1/1M
G8	Mixed species inc. Scots Pine, Austrian pine	M	15	N/a	N	Minor deadwood, lean to SW	Whole tree failure onto building	P	3	P	6	100%	<1/1M
G9	<i>Pinus nigra</i> Austrian pine	M	15-20	N/a	N	Minor deadwood, Some reddening needles	1 <sup>st</sup> Order branch failure onto seating area	H	3	2	6	100%	<1/1M
G10	<i>Pinus nigra</i> Austrian pine	M	15-20	N/a	N/R	Minor deadwood, Some reddening needles, Reduced vitality in SE tree	Whole tree failure onto Charlton road	V	2	2	7	100%	<1/1M
G11	Mixed species inc. Pine, Sweet gum, Serivice tree, Rowan	Y-SM	5-10	N/a	N	Pine has dense low hanging crown, Rowan very poor Specimen	1 <sup>st</sup> Order branch failure onto footpath	H	4	4	6	100%	<1/1M
G12	Mixed species inc. Lime, Horse chestnut, Oak, Hornbeam, Himalayan birch	Y-SM	15	N/a	N	Minor deadwood, Trees overhang childrens play area	1 <sup>st</sup> Order branch failure Onto play area	H	4	2	6	100%	<1/1M
G13	Mixed species inc. Lime, Wild cherry, Sycamore	Y-EM	5-10	N/a	N	Cherries densely planted, Low hanging branches, included Bark unions, Ivy in sycamore	1 <sup>st</sup> Order branch failure Onto Charlton road	V	2	3	6	100%	<1/1M
G14	Mixed species inc. Lime, Various shrubs, Leylandii	Y-SM	5-10	N/a	N	Leylandii obscuring light and signage, Lime overhanging AC units	1 <sup>st</sup> Order Lime branch onto AC unit	P	4	P	6	100%	<1/1M
G15	Mixed species inc. Lime, Wild cherry, Field maple, Oak	Y-EM	5-10	N/a	N/R	Scrubby appearance, Cherries in decline, Ash with Ash die Back	POF 7 so no calc. required					100%	<1/1M
G16	Mixed species inc. Oak, Beech, Sycamore	SM	5-10	N/a	N	Epicormic growth on sycamore	POF 7 so no calc. required				7	100%	<1/1M
G17	<i>Tilia x europaea</i> Common lime	SM	5-10	N/a	N	Dense Crowns, Extensive epicormic growth	POF 7 so no calc. required				7	100%	<1/1M



G18	Mixed species inc. Italian alder, Norway maple, Horse chestnut	EM-M	10-15	N/a	N	Deadwood and squirrel damage in maple, <i>Phytophthora</i> On horse chestnut	1 <sup>st</sup> Order horse chestnut branch failure onto footpath	H	3	2	6	100%	<1/1M
G19	<i>Cedrus atlantica</i> Atlantic cedar	SM	10	N/a	N	Ivy in crowns, Minor Deadwood	Whole tree failure onto Footpath	H	3	2	7	100%	<1/1M
G20	Mixed species inc. Birch, Holm oak, Sycamore	SM	5-10	N/a	N	Deadwood and squirrel damage in Sycamores	1 <sup>st</sup> Order branch failure onto footpath	H	3	3	7	100%	<1/1M
G21	Mixed species inc. Lime, Horse chestnut, Sycamore	SM	10-15	N/a	N/R	Horse chestnuts both in poor condition, extensive decay in Limb over footpath, snapped hanging branch over path, Major Deadwood in all trees, Extensive decay at base of Other horse chestnut	1 <sup>st</sup> Order horse chestnut branch failure onto footpath	H	3	2	3	100%	1/100K
G21	<i>As above</i>			N/a		<i>As above.</i> Second risk calculation ->	Whole horse chestnut tree failure onto Footpath	H	3	1	4	100%	1/400K
G22	Mixed species inc. Walnut, Sycamore, Pine, Hornbeam Monterey cypress, Lime, Larch	EM-M	15-25	N/a	N/D	Bracing in walnut, Large wound at top in scots pine Adjacent to T4, Major deadwood in all trees, Monterey has dead area of bark near base, Dead larch over footpath	Pine top failing onto access road	V	3	3	4	100%	<1/1M
G23	<i>Acer pseudoplatanus</i> Sycamore	EM	10-15	N/a	N	Pruning wounds to lower stems	1 <sup>st</sup> Order branch failure onto neighbours property	P	3	P	6	100%	<1/1M
G24	Mixed species inc. Lime, Oak	SM	5-10	N/a	N	Ivy on a lot of the stems, Epicormic growth	1 <sup>st</sup> Order branch failure Onto Charlton road	V	2	3	6	100%	<1/1M

#### HEADINGS & ABBREVIATIONS

GRP REF/TREE REF:

GROUP OR TREE REFERENCE

TAG NO:

TAG NUMBER WHERE A TAG HAS BEEN AFFIXED TO TREE

AGE:

Y = YOUNG, SM = SEMI MATURE, EM = EARLY MATURE, M = MATURE, PM = POST MATURE, V = VETERAN

HT:

HEIGHT (IN METRES) OF TREE OR MAXIMUM HEIGHT FOR THE GROUP

DBH:

STEM DIAMETER (IN MM) FOR THE TREE OR MAXIMUM DIAMETER FOR THE GROUP - MEASURED OR ESTIMATED AT A HEIGHT OF APPROXIMATELY 1.5 METRES

VITALITY:

A MEASURE OF PHYSIOLOGICAL CONDITION. N = WITHIN NORMAL RANGE FOR SPECIES AND AGE, R = REDUCED FROM THE NORMAL RANGE FOR SPECIES AND AGE, P = POOR, MD = MORIBUND, D = DEAD

TARGET TYPE:

V = VEHICLE ON HIGHWAY; H = HUMAN; P = PROPERTY (SEE QTRA PRACTICE NOTE)

Mx TARGETS:

WHERE TARGET HAS A VALUE GREATER THAN CONSTANT OCCUPATION BY ONE PERSON, OR A LIKELY REPAIR/REPLACEMENT VALUE GREATER THAN THE VALUE OF STATISTICAL LIFE (SEE QTRA PRACTICE NOTE)

TARGET:

LIKELIHOOD OF A TARGET BEING OCCUPIED OR THE REPAIR OR REPLACEMENT VALUE OF PROPERTY EXPRESSED AS A FRACTION OF 'THE VALUE OF STATISTICAL LIFE' (SEE QTRA PRACTICE NOTE)

SIZE:

QTRA SIZE RANGE (IF THE VALUE 'P' IS USED IN THE 'TARGET TYPE' COLUMN, THE RISK IS ASSESSED AGAINST THE COST OF REPAIRING OR REPLACING PROPERTY, THE SIZE COLUMN WILL BE BLANK - SEE QTRA PRACTICE NOTE)

POF:

QTRA PROBABILITY OF FAILURE RANGE (SEE QTRA PRACTICE NOTE)

MASS %:

WHERE THE MASS OF A BRANCH IS REDUCED BY DEGRADATION, A FRACTION OF 1/2 OR 1/4 MAY BE INTRODUCED TO REFLECT THE PROPORTION OF THAT REDUCTION (SEE QTRA PRACTICE NOTE)

ROH:

ANNUALISED RISK OF HARM (SEE QTRA PRACTICE NOTE)



## Section 4 – Appendices

### 4.1 – Photographs

#### 4.1.1 Figure 1 – Horse Chest to fell in G21





4.1.2 Figure 2 – Horse Chestnut branch to remove in G21





4.1.3 Figure 3 – Dead Larch in G22 to fell





4.1.4 Figure 4 – Hanging Branch on Pine in G22





4.1.5 Figure 5 – Dogwood Obscuring light in G5 to coppice





4.1.6 Figure 6 – Reddening needles on Pine in G10





## 4.2 Site maps

Please note all maps are indicative only and may not be precise.

### 4.2.1 Map 1





4.2.2 Map 2

