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**TREE SURVEY & CONDITION AND MANAGEMENT REPORT**

**OUR REF:** JM/3095YR 2R/sh

**DATE:** Tuesday 23rd June 2015

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**CLIENT:**  The Honourable Society of Gray’s Inn

Care of Ms. Helen Harbour

**SITE ADDRESS**: Gray’s Inn

8 South Square

London

WC1R 5ET.

**DATE/TIME OF VISIT:** Wednesday 3rd and Thursday 4th June 2015.

**PEOPLE PRESENT:** Mr J. Mills and Mr J. Reid.

**REPORT COMPLETED BY:** Mr. Jason Mills.

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**Summary:**

This report has been carried out to update the existing survey tables for all trees inspected during the previous annual survey in 2014. Please note that all the trees included in this report have a unique reference number so that the trees on site can be easily cross-referenced with this document, allowing for clear and effective undertaking of the recommendations made in this report, both currently and at any future time if deemed necessary. In addition, the survey tables within this report include current recommendations given following previous climbing inspections as well as internal decay detection tests carried out since 2010. This provides all current recommendations to be in one place simplifying future reference.

In reading and understanding the contents of this report, it should be remembered that no tree can be deemed risk free. As with all things in the natural environment, trees are subject to unpredictable forces such as extreme weather, effects of disease, and man’s influence upon them. We investigate every obvious and available facet of the tree’s structure and its surroundings in reaching a conclusion as to a level of risk.

Where applicable, these conclusions and recommendations seek to reduce to a level as low as reasonably practical given the tree’s location and the perception of its value to the environment; the site use; and the owners’ acceptance of the level of risk.

TABLE OF CONTENTS

[1.0 SCOPE OF REPORT 3](#_Toc423357171)

[1.1 Survey Brief 3](#_Toc423357172)

[1.2 Background 3](#_Toc423357173)

[1.3 Report References 3](#_Toc423357174)

[1.4 Report Methodology and Limitations 3](#_Toc423357175)

[2.0 TREE PRESERVATION ORDER & CONSERVATION AREA PROTECTION STATUS 4](#_Toc423357176)

[2.1 Tree Preservation Order Status 4](#_Toc423357177)

[2.2 Conservation Area Status 4](#_Toc423357178)

[2.3 Tree Management Implications 4](#_Toc423357179)

[3.0 GENERAL SITE DETAILS 5](#_Toc423357180)

[3.1 Weather Conditions at Time of Survey 5](#_Toc423357181)

[3.2 Site Location 5](#_Toc423357182)

[3.3 Local Landscape Evaluation 5](#_Toc423357183)

[3.4 Underlying Soils 5](#_Toc423357184)

[3.5 Grounds 5](#_Toc423357185)

[3.6 Slopes and Boundaries 5](#_Toc423357186)

[3.7 Assessment of Ecological Status & Potential Constraints 5](#_Toc423357187)

[4.0 FUNGAL, DISEASE, OR INSECT PATHOGEN 6](#_Toc423357188)

[4.1 Rigidiporus ulmarius 6](#_Toc423357189)

[4.2 Phellinus spp 6](#_Toc423357190)

[4.3 Inonotus dryadeus 7](#_Toc423357191)

[5.0 RISK ASSESSMENT 8](#_Toc423357192)

[6.0 RECOMMENDATIONS 9](#_Toc423357193)

[7.0 TREE SURVEY & CONDITION AND MANAGEMENT REPORT 13](#_Toc423357194)

# 1.0 SCOPE OF REPORT

## 1.1 Survey Brief

To inspect the trees on the site that are within the ownership of the Honourable Society of Gray’s Inn; to assess their condition, describe their features and make suitable management recommendations, in accordance with current Arboricultural best practice and tree health care techniques.

The tree survey was conducted in accordance with the guiding principles of a **Level 2\* inspection**.

## 1.2 Background

As part of the on-going management of the site the trees contained within it have been subject to an annual tree survey and this report updates the previous survey conducted during the summer of 2014.

## 1.3 Report References

As a progressive company, we keep abreast of research data relating to arboriculture. All observations, recommendations and works are based on current industry standard reference material and extensive FA Bartlett research findings derived from the company’s own facilities at the University of Reading in the United Kingdom, as well as in Charlotte, North Carolina, in the USA. A selection of pertinent items is shown in Appendix 2.

Tree survey methodologies and references applied by Bartlett Consulting for this project include:

• Smiley, T, Fraedrich, B & Hendrickson, N. (2011) *Tree Risk Management*.

Bartlett Tree Research Laboratories. Charlotte, NC.

• Dunstar, J.A, Smiley. T, Matheny. N, Lilly. S. (2013) *Tree Risk Assessment Manual*.

International Society of Arboriculture. Champaign, IL.

• Lonsdale, D. (1999) *The Principles of Tree Hazard Assessment & Management (Research for Amenity Trees).* Department of the Environment. London.

• Schwarze, F. W. M. R, Engels. J, Mattheck. C. (2000) *Fungal Strategies of Wood Decay in Trees.*

Springer-Verlag. Berlin. Heidelberg. New York.

• Schwarze, F. W. M. R. (2008) *Diagnosis & Prognosis of the Development of Wood Decay in Urban Trees.*

ENSPEC. Pennsylvania State University. State College, PA.

• Shigo, A. (1991) *Modern Arboriculture*.

Shigo & Trees Associates. Durham, NH.

## 1.4 Report Methodology and Limitations

This report is restricted to those trees shown on the attached Tree Location Plan(s) and described in the tree survey schedule. The statements, findings, and recommendations made within the report do not take into account any effects of extreme climate and weather incidences; vandalism; changes in the natural and built environment around the trees after the date of this report; any damage whether physical, chemical or otherwise.

Bartlett Consulting cannot accept any liability in connection with the above factors; nor where recommended tree management is not carried out in accordance with modern tree health care techniques, within the timelines proposed. The trees were not climbed at the time of the tree survey.

**1.0 SCOPE OF REPORT (continued….)**

It is important to understand that as trees are living and dynamic organisms, it is not possible to maintain them free of risk. Some level of risk must be accepted in order to experience the full range of benefits that trees provide. As such we reference the recently published document by the National Tree Safety Group (NTSG), Common sense risk management of trees (Forestry Commission 2011). This document provides guidance on trees and public safety in the UK for owners’ managers and advisors.

**Note - \* Levels of Tree Assessment**

**Level 1 Limited Visual Assessment:** A visual assessment of an individual tree or a population of trees near a specified target, conducted from a specific perspective, in order to identify certain obvious defects or specified conditions. Observations are made from ground level and the tree is not climbed.

**Level 2 Basic Assessment:** A detailed visual inspection and assessment of a tree, and the surrounding site. The basic assessment requires the tree risk assessor to walk completely around the tree. Tree dimensions are recorded using hand tools such as a diameter tape, laser range finder, and measuring tape. Further information is gathered using a “sounding hammer”, binoculars, and other tools such as a depth probe.

**Level 3 Advanced Assessment:** An advanced assessment is performed to provide detailed information about specific tree parts, defects, targets, or site conditions. Methods of advanced assessment can include climbing inspections; decay detection; root excavations; lean monitoring and pull tests.

# 2.0 TREE PRESERVATION ORDER & CONSERVATION AREA PROTECTION STATUS

Town & Country Planning Act (Tree Preservation) (England) Regulations 2012 and the Town & Country Planning Act 1990 (as amended) provide legislative protection for trees within England.

## 2.1 Tree Preservation Order Status

We are unaware that any trees are subject to a Tree Preservation Order.

## 2.2 Conservation Area Status

All the trees on this site stand in a Conservation Area as administered by the London Borough of Camden.

## 2.3 Tree Management Implications

Under the Town and Country Planning Act 1990, a Section 211 Notice must be served upon the LPA, providing them with 6 weeks’ notice of any intention to implement works to protected trees. The purpose of this is to give the LPA an opportunity to consider whether a Tree Preservation Order (TPO) should be made in respect of these trees.

# 3.0 GENERAL SITE DETAILS

## 3.1 Weather Conditions at Time of Survey

Sunny, clear and dry during both days of the survey.

## 3.2 Site Location

The site is located at the intersection of High Holborn and Gray’s Inn Road in Central London.

## 3.3 Local Landscape Evaluation

The site is located in a busy area of Central London and is surrounded by offices and retail outlets. As such, both the trees located within the gardens and outlying areas provide important greenery in the street scene and an oasis from the hard landscape in the locality.

## 3.4 Underlying Soils

Using the British Geological Survey ‘Geology of Britain Viewer’ ([www.bgs.ac.uk](http://www.bgs.ac.uk)) as viewed on 7th May 2015 it has been determined that the underlying superficial sub-soils are likely: Lynch Hill Gravel Member – Sand and Gravel.

## 3.5 Grounds

The site contains several blocks of offices, a chapel, a hall and a large and important garden in the locality that is accessible to the public during prescribed hours during periods of clement weather.

## 3.6 Slopes and Boundaries

The site is predominantly level and is bound by brick boundary walls to the north and a mixture of buildings and brick walls to the east, south and west.

## 3.7 Assessment of Ecological Status & Potential Constraints

Following our survey of the site and analysis of climax and sub climax vegetation, we are of the opinion that the site is likely to provide a habitat for nesting birds.

The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000, provides statutory protection to birds, bats, insects and other species that inhabit trees, hedgerows, or other associated vegetation.

These could impose significant constraints on the use, management and development of these areas, as well as the timing of tree works. The finer points of these matters are beyond Bartlett Consulting’s area of expertise and you must seek advice from an ecologist to confirm the opinion of Bartlett Consulting and check if any such constraints apply to this site.

# 4.0 FUNGAL, DISEASE, OR INSECT PATHOGEN

## 4.1 Rigidiporus ulmarius

The presence of fungal fruiting body, suspected *Rigidiporus ulmarius* has been noted over preceding years within a cavity on the tree T629 London Plane.

The fungus is reported to predominantly affect the stem base of trees, but can also enter via large wounds, as suspected in this case, in which heart/ ripe-wood is exposed; it causes brown-rot decay, which can lead to stem fracture.

*Ref: Green, T. & Watson, G. (2011) Fungi on Trees, an Arborists Field Guide. Arboricultural Association, Gloucestershire.*

|  |
| --- |
| DSCF1443 |
| Photograph of the fungal bracket attached to the main stem of T629 London Plane. |

## 4.2 Phellinus spp

An old fungal bracket thought to be that of *Phellinus spp* was observed attached to the main stem of T924 Hawthorn in 2014*.* The fungus remains and is reported to cause a white rot (Ref: Lonsdale. D, ‘Principles of Tree Hazard Assessment and Management’, 1999, TSO, London), and breakage can occur when the decay is extensive.

|  |
| --- |
| DSCF0509 |
| Photograph of the fungal bracket attached to the main stem of T924 Hawthorn. |

## 4.3 Inonotus dryadeus

A fruiting bracket found to be the decay fungus *Inonotus dryadeus* has been observed attached to the base of T641 London Plane. This decay funguscauses a white rot that seems to start in the inner part of the root system (Ref: ‘Principles of Tree Hazard Assessment and Management’ Lonsdale. D, 1999, The Stationary Office, London) and is mainly restricted to the undersides of the roots (Ref: Schwarze. F. W. M. R, Engels. J, Mattheck. C, ‘Fungal Strategies of Wood Decay in Trees’, 2000, Springer-Verlag). Extensive decay can lead to windthrow as a result of ductile fracture of the roots.

|  |
| --- |
| **DSCF0496** |
| Photograph of the fungus *Inonotus dryadeus* attached to the base of T641 London Plane, taken in 2013. |

A further investigation was carried out at the base of T641 London Plane in 2013 to establish the extent of decay in the main stem. At that time, no fungal fruiting bodies had been observed at the base of the tree.

# 5.0 RISK ASSESSMENT

Bartlett Consulting uses the International Society of Arboriculture’s (ISA) Tree Risk Assessment methodology, referred to as TRAQ.  This is a ‘qualitative’ system, which uses a matrix-based combination of ratings to reach a conclusion of associated risk.  The standard Bartlett Consulting time-line within the TRAQ is three (03) years unless otherwise stated in the report.

Risk is the combination of the ‘likelihood’ of an event, in this case the failure or a tree or part of a tree, and the severity of the potential consequences.  A hazard is the likely source of harm.  The two tables below define both the likelihood and risk levels as per the TRAQ system.

Trees which have not been subject to the Level 2 assessment were not risk rated.

**Table 01:  Likelihood of Failure**

|  |  |
| --- | --- |
| **Classification** | **Description of Likelihood** (As per Dunster, Smiley, Matheny, Lilly 2013) |
| Improbable | Failure is not likely during normal weather conditions, and may not fail during severe weather conditions, within the specified time frame. |
| Possible | Failure could occur, but is unlikely, during normal weather conditions with the specified time frame. |
| Probable | Failure may be expected under normal weather conditions within the specified time frame. |
| Imminent | Failure has started, or is most likely to occur in the near future, even if there is no significant wind, weather, or increased load. |

**Table 02:    Risk Rating**

|  |  |
| --- | --- |
| **Risk Level** | **Description of Risk** (As per Dunster, Smiley, Matheny, Lilly 2013) |
| Extreme Risk | Failure is imminent, with a high likelihood of impact on people and/or property with severe consequences. |
| High Risk | Failure likely to very likely with significant consequences; or failure likely with severe consequences – to impact on people and/or property. |
| Moderate Risk | Failure likely to very likely with minor consequences; or failure somewhat likely with significant to severe consequences – to impact on people and/or property. |
| Low Risk | Failure unlikely with negligible consequences; or failure somewhat likely with minor consequences – to impact on people and/or property. |

**NOTE: Customer Must Make Tree Workers Aware of this Statement**

**CAUTION:** Trees with structurally weak root systems, main stems or branches may not have sufficient structural strength to withstand dismantling works. The weight of people climbing the tree or using the tree branches as load carrying points may increase the load to the point of tree or branch failure. Persons engaged on such works must undertake a thorough risk assessment of the tree structure before finalising a working method. Alternative work methods to consider may include the use of crane or mobile elevated platform.

# 6.0 RECOMMENDATIONS

The respective recommendations are included in the attached tree schedules.

These works are to be carried out in the timescales specified in the eleventh column of the tree schedules below.

|  |
| --- |
| 7.0 TREE SURVEY & CONDITION AND MANAGEMENT REPORT |
| **Client:** The Honourable Society of Gray’s Inn **Report No:** JM 3095YR2R/sh |
| **Completed by:** Jason Mills |
| **Trees Tagged:** Yes **Weather:** Sunny, clear and dry |
| **Site:** Gray’s Inn, London, WC1R 5ET **Date of Survey:** 3rd and 4th June 2015 |

**Timescale for Works**

|  |  |
| --- | --- |
|  |  |
| ASAP – 6 months | 1 Year |

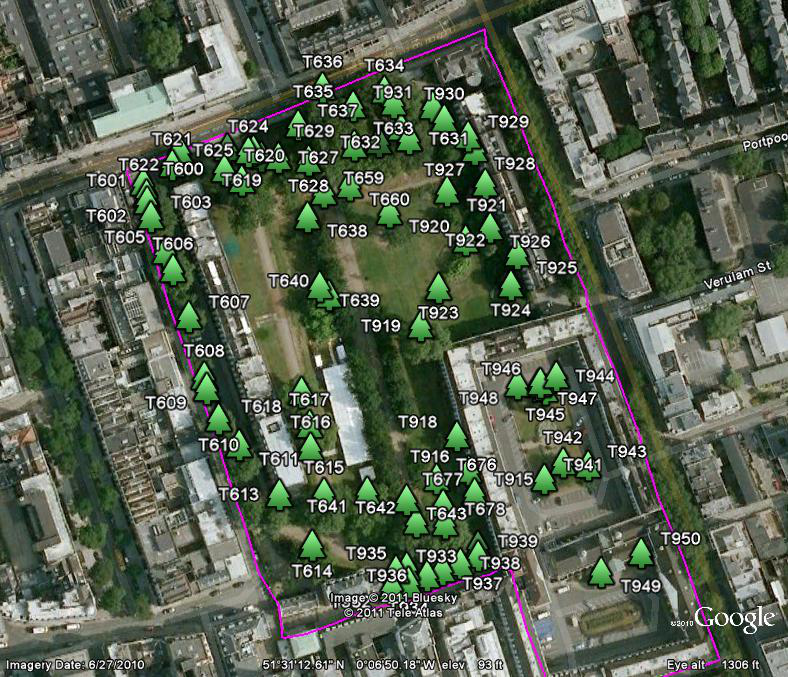
**All trees require re-inspection and re-evaluation of risk, within 12 months unless noted otherwise.**

| **Tree No.** | **Location** | **Species** | **DBH (mm)** | **Ht (m)** | **Crown**  **Spread**  **(m)**  **N E**  **S W** | **Age** | **Vig.** | **Condition** | **Works Required** | **Time Scale** | **Risk Factor** | **ULE** | **Annual Growth Increment (mm)** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 600 | Opposite No. 1 Raymond Building | London Plane (*Platanus x acerifolia)* | 1100 | 34 | 10 11 5 9 | MAT | NORM | * Previously suspected internal basal decay has been investigated and recommendations given within AP/1912R/tg 31.08.12; to crown thin by 20% was carried out on (01.06.13). * Otherwise good structural condition. * Note: Notification currently being processed by Camden Council to reduce the crown in order to reduce potential influence on adjacent damaged boundary wall. | * Recommendation brought forward from report AP1912R/tg 31.08.12   Further internal decay testing required to monitor the spread of decay, by summer 2015. | 2  months | MOD\* | 20+ | +10 |
| 601 | Opposite No. 1 Raymond Building | London Plane (*Platanus x acerifolia)* | 931 | 34 | Av.8.5 | MAT | NORM | * Crown has been raised in past, wounds are occluding. * 100 x 100 mm patch of dead bark on north-east side of main stem, currently insignificant. * Good structural condition. * Note: Notification currently being processed by Camden Council to reduce the crown in order to reduce potential influence on adjacent damaged boundary wall. | * No works presently required (other than crown reduction). | N/A | MOD | 20+ | +8 |
| 602 | Opposite No 2 Raymond Building | London Plane (*Platanus x acerifolia)* | 479 | 19 | Av.6.5 | EM | NORM | * Heavily weighted lateral on west side recently removed as previously recommended. * Crown has been previously thinned. It is recommended that no further thinning is carried out at this time. * Good structural condition. | * No works presently required. | N/A | MOD | 40+ | +40 |
| 606 | Opposite No.4 Raymond Building | London Plane (*Platanus x acerifolia)* | 1048 | 33 | 8 6 6 7 | MAT | NORM | * 350 x 350mm patch of dead bark and decay observed on west side of the tree stem, which cannot be probed, not currently significant. * Inspection of root system during foundation investigation highlighted white rot in root system. * Historically thinned, wounds are occluding. * Fair structural condition. * Note: Notification currently being processed by Camden Council to reduce the crown in order to reduce potential influence on adjacent damaged boundary wall. | * Recommendation brought forward from report AP/1912R/tg 31.08.12   Further internal decay testing required to monitor the spread of decay, by summer 2015.   * Root collar investigation | 2 months  2 months | MOD\* | 20+ | +15 |
| 607 | Opposite No. 5 Raymond Building | London Plane (*Platanus x acerifolia)* | 612 | 20.5 | Av.8 | EM | NORM | * Good structural condition. | * No works presently required. | N/A | MOD | 40+ | +14 |
| 608 | Opposite No. 6 Raymond Building | London Plane (*Platanus x acerifolia)* | 934 | 28 | 6.5 4 5 7 | MAT | NORM | * Roots at base have dislodged stone kerb, areas of dead bark and decay observed on stem/base, noted previously no significant deterioration since 2014.   Fair structural condition   * Exposed root system with 3 girdling roots. * Note: Notification currently being processed by Camden Council to reduce the crown in order to reduce potential influence on adjacent damaged boundary wall. | * Recommendation brought forward from report AP/1912R/tg 31.08.12   Further internal decay testing to monitor the spread of decay, by summer 2015.   * Sever/ remove all girdling roots less than 25mm diameter * Apply woodchip mulch at base to reduce scuff damage to exposed roots. | 2 months | MOD\* | 20+ | +19 |
| 12 months |
| 609 | Opposite Atkin Building | London Plane (*Platanus x acerifolia)* | 722 | 24 | 5 5.5 7 6 | EM | NORM | * Car parking over buttress roots of tree. * Dense tree crown. * Good structural condition. * Picus test carried out in 2013 established minor central decay at base of main stem. * Note: Notification currently being processed by Camden Council to reduce the crown in order to reduce potential influence on adjacent damaged boundary wall. | * Apply woodchip mulch at base to reduce scuff damage to exposed roots. | 12 months | MOD | 20+ | +18 |
| 610 | Opposite 1 Atkin Chambers | London Plane (*Platanus x acerifolia)* | 953 | 28 | Av.10 | MAT | NORM | * Long-standing direct vehicular damage to the top sides of exposed roots on the south side of the main stem. * Good structural condition. * Note: Notification currently being processed by Camden Council to reduce the crown in order to reduce potential influence on adjacent damaged boundary wall. | * Install woodchip mulch in the 4.0 x 2.5 metre planter area to protect exposed roots. | 12 months | MOD | 20+ | +15 |
| 611 | At head of  Pedestrian walk | London Plane (*Platanus x acerifolia)* | 795 | 27 | Av.7 | M | NORM | * Lateral on west side of main stem at 12.0 metres with 100 x 100 mm decay cavity at old pruning wound. * Fair structural condition * West side of crown recently reduced. * Note: Notification currently being processed by Camden Council to reduce the crown in order to reduce potential influence on adjacent damaged boundary wall. | * No works presently required (Other than crown reduction) | N/A | MOD | 20+ | +6 |
| 613 | Adjacent Raymond Building’s gate | London Plane (*Platanus x acerifolia)* | 810 | 27 | 12 10 8 12 | M | NORM | * Good structural condition. | * No works presently required | N/A | MOD | 30+ | +6 |
| 614 | Lawn outside Stone Chambers | Silver Maple  *(Acer*  *saccharinum)* | 820 | 17 | Av.5.5 | EM | NORM | * Crown has been recently reduced as recommended in 2014. * Fair structural condition. | * No works presently required | N/A | LOW | 30+ | +22 |
| 615 | On bank R/O Atkin Building | London Plane (*Platanus x acerifolia)* | 1320 | 36 | Av10 | MAT | NORM | * Old decayed pruning wound on the south side of the tree stem at a height of 10 metres. * Further to internal decay testing October 2014 recommended to reduce crown by approximately 4.0 metres in height and 2.0 metres in lateral spread to all cardinal points, back to suitable secondary growth points, to reduce crown-sail over weakened base, not been carried out at time of inspection. | * No works presently required, further to crown reduction. | N/A | MOD | 20+ | +15 |
| 616 | On bank R/O Atkin Building | Canadian Maple  *(Acer rubrum)* | 265 | 11 | Av.6 | EM | NORM | * Fair structural condition. * Crown has been reduced and shaped since 2014. | * No works presently required | N/A | LOW | 40+ | +5 |
| 617 | On bank R/O Atkin Building | London Plane (*Platanus x acerifolia)* | 1290 | 37 | Av.9 | MAT | NORM | * Good structural condition. * Minor decay at old wounds throughout crown. | * No works presently required | N/A | MOD | 40+ | +11 |
| 618 | Rear of Raymond Building on bank | London Plane (*Platanus x acerifolia)* | 1248 | 31 | 8 10 7 7 | MAT | NORM | * Good structural condition * Large canker, measuring 700 x 500mm at 13.0 metres, no decay evident, not currently significant. * Lateral to east at 13.0 metres is over-extended. | * Reduce over-extended lateral to east at 13.0 metres by approximately 1.5 metres back to a suitable growth point. | 12 months | MOD | 40+ | +5 |
| 619 | On bank, rear of Raymond Building | London Plane (*Platanus x acerifolia)* | 1360 | 32 | 8 11 8 8 | MAT | NORM | * Fair structural condition. | * No works presently required | N/A | MOD | 40+ | +13 |
| 620 | Lawn area. | Deodar Cedar *(Cedrus deodara)* | 367 | 13 | Av.4 | SM | NORM | * Good structural condition. | * No works presently required | N/A | LOW | 40+ | +15 |
| 621 | North end of Raymond Building | False Acacia, (*Robinia pseudoacacia)* | 211 | 13 | Av.5 | SM | NORM | * Fair structural condition. * 5% minor deadwood observed in tree crown, currently insignificant. | * No works presently required | N/A | LOW | 30+ | +6 |
| 622 | At end of Raymond Building adjacent Theobalds Road | Hornbeam (*Carpinus betulu*s) | 347 | 17 | Av.7 | SM | NORM | * Fair structural condition. * Root collar buried. * Rubbing and crossing branches on north side of crown. | * Remove rubbing and crossing branches and thin branch tips by 15%.on north side of crown over public footway * Remove built up soil around base to expose root collar, as soon as possible. | 12 months  12 months | LOW | 40+ | +6 |
| 623 | Rear of Raymond Building | London Plane (*Platanus x acerifolia)* | 1344 | 34 | 10 9 6 7 | MAT | NORM | * Fair structural condition. * Small pocket of decay between buttress roots on east side of main stem, can be probed 200mm, extent of decay has not significantly increased since May 2014. * Buttress root to south with powdery white rot decay just below ground level. Brief inspection of remaining buttresses did not reveal decay close to ground level. | * Root collar inspection using air-spade and hand tools. | 12 months | LOW\* | 20+ | +10 |
| 624 | Lawn area, north of Raymond Building | False Acacia, (*Robinia pseudoacacia)* | 180 | 10.0 | Av.3 | SM | NORM | * Fair structural condition. * 2% minor deadwood in crown. | * No works presently required | N/A | LOW | 40+ | +2 |
| 625 | Lawn area, north of Raymond Building | False Acacia, (*Robinia pseudoacacia)* | 172 | 9.5 | Av.4 | SM | NORM | * Fair structural condition. * 5% major and minor deadwood in crown. | * Remove deadwood in crown | 12 months | LOW | 40+ | +2 |
| 626 | Lawn area, north of Raymond Building | False Acacia, (*Robinia pseudoacacia)* | 174 | 8.5 | Av.3 | SM | NORM | * Fair structural condition. * 5% minor deadwood in crown. | * No works presently required | N/A | LOW | 40+ | +2 |
| 627 | On upper bank Theobalds Road side | London Plane (*Platanus x acerifolia)* | 1255 | 29.5 | 10 8 9 10 | MAT | NORM | * Fair structural condition. * Decay evident in buttress roots just below ground level on south and east sides of the main stem. * Woodpecker hole with decay within lateral to south at approximately 14.0 metres above ground level observed in 2013, lateral has been crown reduced in accordance with report dated 13.9.13. | * Root collar inspection using air-spade and hand tools. | 12 months | LOW\* | 20+ | +16 |
| 628 | On upper bank Theobalds Road side. | London Plane (*Platanus x acerifolia)* | 1415 | 37.5 | 13 8 10 7 | OM | NORM | * Fair structural condition. * Apex of crown thinning by estimated 20% in 2013 and 2014 no significant progression of decline in 2015. | * No works presently required | N/A | LOW | 20+ | +5 |
| 629 | On upper bank Theobalds Road side | London Plane (*Platanus x acerifolia)* | 952 | 25 | 7 5 7 8 | MAT | NORM | * Fair structural condition. * Cavities to main stem between 2 and 3 metres above ground level, with *Rigidiporus ulmarius* fungal fruiting body, previously investigated and crown reduction recommended, which has been carried out. | * No works presently required | N/A | LOW | 10+ | +2 |
| 630 | On upper bank Theobalds Road side | London Plane (*Platanus x acerifolia)* | 1127 | 34 | 11 7 10 6 | MAT | NORM | * Good structural condition. * Originally trifurcated at 5.0 metres, but large co-dominant previously removed, leaving two co-dominants, wound is occluding. | * No works presently required | N/A | MOD | 10+ | +9 |
| 631 | Adjacent service yard drive | London Plane (*Platanus x acerifolia)* | 1230 | 34.5 | 16 12 6 7 | MAT | NORM | * Good structural condition. * Laterals to south and south-west sides of tree have been previously reduced over garden bench. * Crown on east side with sparse internal growth and relatively dense branch ends, not currently of concern but will require monitoring – no significant deterioration in 2015. * Evidence of decay in buttress roots on north and east sides of main stem just below ground level. | * Recommendation brought forward from report AP/1912R/tg 31.08.12   Further internal decay testing required to monitor the spread of decay, by summer 2015.   * Carry out root collar investigation at same time as for 623 and 627. | 2 months  2 months | MOD\* | 20+ | +6 |
| 632 | Next to service road | Ash  (*Fraxinu*s spp.) | 253 | 12.5 | Av.4 | YNG | NORM | * Good structural condition. | * No works presently required | N/A | LOW | 40+ | +9 |
| 633 | Within service yard | London Plane (*Platanus x acerifolia)* | 1295 | 33 | 6 14 8 8 | MAT | NORM | * Good structural condition. * Soil compaction at base. * Occluding pruning wounds throughout crown. | * No works presently required | N/A | MOD | 20+ | +5 |
| 634 | By Theobalds Road fence | London Plane (*Platanus x acerifolia)* | 1342 | 34 | 8 12 8 8 | MAT | NORM | * Fair structural condition. * Cavities at old wounds at 12.0 metres on eastern lateral; surrounding response growth appears strong, not currently significant. * 2% major and minor deadwood, predominantly between 25 and 30 metres height in crown overhanging public footway. | * Remove deadwood in crown. * At same time as deadwood removal inspect crown structure at height. | 6 months  6 months | MOD | 20+ | +5 |
| 635 | Theobalds Road lawn | London Plane (*Platanus x acerifolia)* | 1208 | 26 | Avg 5.5 | MAT | NORM | * Fair structural condition. * Crown has been previously reduced as previously recommended in June 2012 as a result of previous internal decay testing. * Tree has responded adequately since crown reduction and is displaying vigorous growth. | * Recommendation brought forward from report AP/1912R/tg 31.08.12   Further internal decay testing to monitor the spread of decay, by summer 2015. | 2 months | LOW | 20+ | +3 |
| 636 | By compost heaps | London Plane (*Platanus x acerifolia)* | 1210 | 33 | 10 14 8 8 | MAT | NORM | * Fair structural condition * Climbing inspection carried out in 2013 and limb removed at 14.0 metres in accordance with report. | * No works presently required. | N/A | MOD | 20+ | +2 |
| 637 | Lawn area | Indian Bean Tree  *(Catalpa bignonioides)* | 207 | 10.2 | Av.4.2 | YNG | NORM | * Good structural condition | * No works presently required. | N/A | LOW | 40+ | +12 |
| 638 | Lawn area | Atlantic Cedar, (*Cedrus atlantica).* | 375 | 13 | Av.4 | SM | NORM | * Good structural condition | * No works presently required. | N/A | LOW | 40+ | +27 |
| 639 | Lawn area | Indian Bean tree (*Catalpa bignonioides)* | 390 | 13 | Av.6 | EM | NORM | * Fair structural condition * 5% major and minor deadwood predominantly in lower crown. * Hazard beam to south at 3.0 metres | * Remove entire lateral with hazard beam on south-east side of stem. | 12 months | LOW | 20+ | +2 |
| 640 | Lawn area | Indian Bean tree (*Catalpa bignonioides)* | 464 | 9 | Av.8 | OM | NORM | * Poor structural condition. * Tree has partially fallen over, currently stem rests on lawn. * Dead limb with hazard beam on south side of stem. | * Remove dead lateral with hazard beam. | 12 months | LOW | 20+ | +4 |
| 641 | In gravel area with seat around | London Plane (*Platanus x acerifolia)* | 1505 | 25 | Av.11 | OM | NORM | * Fair structural condition. * *Inonotus dryadeus* fungal bracket attached to northern side of stem base observed 2014 remains but now old and deteriorating, no new fungal bodies observed. * Crown reduction previously recommended to reduce risk has now been carried out. | * No works presently required. | N/A | MOD | 40+ | +4 |
| 642 | On west lawn near main gate | London Plane (*Platanus x acerifolia)* | 1220 | 35 | 10 10 12 10 | MAT | NORM | * Fair to poor structural condition. * Climbing inspection carried out September 2012, report reference DM1913Rss 10.09.12 to investigate defects between 19 and 23 metres above ground level, recommended a significant crown reduction of western co-dominant stem by 6.4 metres in height and 2 metres in crown spread, which has not been carried out. * Decay cavities within western co-dominant at 16.0 and 20.0 metres. | * Reduce entire crown by 6.0 metres in height, reduce lateral to south and south-west emanating at 13.0 metres by 3.0 metres and reduce lateral spread of remaining crown by between 1 and 2 metres to balance. | 6 months | MOD | 10+ | +5 |
| 643 | Main Avenue | Red Oak, (*Quercus rubra)* | 237 | 15.5 | Av.4 | SM | NORM | * Good structural condition. * Previously crown raised to 4.0 metres, wounds have occluded. * 2% minor deadwood in crown. * Tag missing. | * Attach new tag, non-urgent work that can be carried out by Gray’s Inn staff or Bartlett. | N/A | LOW | 40+ | +7 |
| 644 | Main Avenue | Red Oak, (*Quercus rubra)* | 325 | 15 | Av.5.7 | SM | NORM | * Fair structural condition * Adequate tree form, previously lost leading stem at a height of 6 metres. * Previously crown raised to 4.0 metres, wounds have occluded. * Vigorous epicormic shoots at pruning wounds between 4 and 6 metres. * Tag missing. | * Thin-out epicormic shoots between 4 and 6.0 metres above ground level during dormancy. * Attach new tag, non-urgent work that can be carried out by Gray’s Inn staff or Bartlett.. | 12 months | LOW | 20+ | +7 |
| 645 | Main Avenue | Red Oak, (*Quercus rubra)* | 322 | 17 | Av.5.5 | SM | NORM | * Good structural condition. * Previously crown raised to 4.0 metres, wounds have occluded. * Two small girdling roots at base. | * Remove the two girdling roots. * Attach new tag, non-urgent work that can be carried out by Gray’s Inn staff or Bartlett.. | 12 months | LOW | 40+ | +10 |
| 646 | Main Avenue | Red Oak, (*Quercus rubra)* | 432 | 20.5 | Av.7.0 | EM | NORM | * Previously crown raised to 4.0 metres, wounds have occluded. * Wide-spreading crown, but good structural condition. * One small isolated area of squirrel damage at 9.0 metres, not currently significant. | * No works presently required. | N/A | LOW | 40+ | +8 |
| 647 | Main Avenue | Red Oak, (*Quercus rubra)* | 438 | 17 | Av.6.5 | EM | Poor | * Fair structural condition. * Approximately 10% die-back in crown on north and east sides of crown, suspected to be related to previous pruning works. Adequate epicormic development below. * Tag missing. | * Remove deadwood in crown. * Attach new tag, non-urgent work that can be carried out by Gray’s Inn staff or Bartlett. | 12 months | LOW | 20+ | +8 |
| 648 | Main Avenue | Red Oak, (*Quercus rubra)* | 293 | 16.5 | Av.6 | SM | NORM | * Fair structural condition. * Previously crown raised to 3.5 metres, wounds have occluded. * Less than 2% minor deadwood in crown. | * No works presently required. | N/A | LOW | 20+ | +4 |
| 649 | Main Avenue | Red Oak, (*Quercus rubra)* | 469 | 20.5 | Av.6 | EM | NORM | * Good structural condition. * Previously crown raised to 4.5 metres, minor decay at wounds that have occluded. * Less than 2% minor deadwood in crown. | * No works presently required. | N/A | LOW | 40+ | +11 |
| 650 | Main Avenue | Red Oak, (*Quercus rubra)* | 475 | 19.5 | Av.6.0 | EM | NORM | * Good structural condition. * Loose and dead bark on south and south-west sides of main stem close to ground level, measuring 350mm wide, no significant progression of extent since 2014. * Over-extended crown to west has been reduced since 2014 as recommended. | * No works presently required. | N/A | LOW | 40+ | +7 |
| 651 | Main Avenue | Red Oak, (*Quercus rubra)* | 316 | 15.5 | Av.5 | SM | NORM | * Fair structural condition. * Small patches of dried bacterial ooze between 1.0 and 1.6 metres on north side of main stem, to edge of occluding wound observed in 2013 remains evident, extent has not increased, currently insignificant. * Foliage less dense than neighbouring trees and noticeably pale. * 2% minor deadwood in crown. | * Take soil samples and test for nutrient levels – Treat root-zone based on results of testing. . | 2 months | LOW | 20+ | +9 |
| 652 | Main Avenue | Red Oak, (*Quercus rubra)* | 169 | 8.5 | Av.3.5 | YNG | NORM | * Good structural condition. | * No works presently required. | N/A | LOW | 40+ | +11 |
| 653 | Main Avenue | Red Oak, (*Quercus rubra)* | 349 | 13 | Av.5.5 | SM | NORM | * Good structural condition. * Less than 5% minor deadwood in crown. * Crown raised to 3.5m, wounds are occluding. * Vigorous epicormic shoots throughout crown, but not currently conflicting. * One isolated area of squirrel damage at centre of crown. | * Thin-out epicormic shoots between 4 and 6.0 metres above ground level during dormancy. | 12 months | LOW | 40+ | +9 |
| 654 | Main Avenue | Red Oak, (*Quercus rubra)* | 450 | 18.5 | Av.7 | EM | NORM | * Good structural condition. * Girdling roots at base. * 5% minor deadwood in crown. * Vigorous epicormic shoot production at old pruning wounds. | * Remove deadwood and thin out epicormic shoots at the old pruning wounds – during dormancy. * Remove girdling roots | 12 months | LOW | 40+ | +7 |
| 655 | Main Avenue | Red Oak, (*Quercus rubra)* | 384 | 16.2 | Av.6 | EM | NORM | * Good structural condition. * 2% minor deadwood in crown. * Descending sub-lateral branch on west side of main stem encroaching avenue walkway. * Squirrel damage to south-west at 5.0 metres, lateral branch is girdled. | * Remove descending sub-lateral back to branch collar and remove 2 No. sub-laterals above squirrel damage at 5.0 metres also back to branch collar. | 12 months | LOW | 40+ | +4 |
| 656 | Main Avenue | Red Oak, (*Quercus rubra)* | 406 | 16.5 | Av.6 | EM | NORM | * Good structural condition. * Minor squirrel damage. * Dead hanging branches at 5.0 and 9.0 metres above ground level. * 5% minor deadwood in crown. * Tag missing. | * Remove hangers at 5.0 and 9.0 metres. * Attach new tag, non-urgent work that can be carried out by Gray’s Inn staff or Bartlett. | 12 months | LOW | 40+ | +11 |
| 657 | Main Avenue | Red Oak, (*Quercus rubra)* | 425 | 17.5 | Av.8 | EM | LOW | * Crack on east side of main stem extends from ground level to 1.0m, bark local to crack is loose and flaky. Crack appears active. Dead loose bark and cambium dead on west side 200mm wide extends from ground level to 1.2m – No significant further deterioration noted in 2015. * Dried black ooze on main stem at 1.2-1.4m, thought to be bacterial wet-wood. * Crown slightly sparse compared to neighbouring trees and imbalanced, but currently adequate. | * Reduce lateral spread of crown to north and west by 1.5 metres maximum to balance. | 12 months | LOW | 10+ | +12 |
| 658 | Main Avenue | Red Oak, (*Quercus rubra)* | 374 | 16.0 | Av.6 | SM | NORM | * Good structural condition. * Tag missing. | * Attach new tag, non-urgent work that can be carried out by Gray’s Inn staff or Bartlett. | N/A | LOW | 40+ | +9 |
| 659 | Main Avenue | Red Oak, (*Quercus rubra)* | 315 | 18.5 | Av.5.5 | SM | NORM | * Good structural condition. * Tag missing. | * Attach new tag, non-urgent work that can be carried out by Gray’s Inn staff or Bartlett. | N/A | LOW | 40+ | +12 |
| 660 | Main Avenue | Red Oak, (*Quercus rubra)* | 371 | 16 | Av.6.5 | SM | NORM | * Good structural condition. | * No works presently required | N/A | LOW | 40+ | +12 |
| 661 | Main Avenue | Red Oak, (*Quercus rubra)* | 156 | 10.5 | Av.3 | YNG | NORM | * Fair structural condition. * 5% die-back in lower crown. * Previously sparse crown, vigour has improved since 2013. | * No works presently required | N/A | LOW | 20+ | +11 |
| 662 | Main Avenue | Hornbeam  (*Carpinus betulus*) | 60 | 5.7 | Av.1.0 | YNG | NORM | * Good structural condition. * Not tagged and not currently required. * Good root-hold. * Tree stake and tie remain in place. | * Remove tree stake and tie before girdling of the main stem occurs. | 6 months | LOW | 40+ | +5 |
| 663 | Main Avenue | Red Oak, (*Quercus rubra)* | 148 | 9.5 | Av.4 | SM | LOW | * Fair structural condition. * Slightly sparse crown but adequate. | * No works presently required | N/A | LOW | 20+ | +13 |
| 664 | Main Avenue | Red Oak, (*Quercus rubra)* | 140 | 9.0 | Av.2.5 | SM | NORM | * Good structural condition. | * No works presently required | N/A | LOW | 40+ | +13 |
| 665 | Main Avenue | Red Oak, (*Quercus rubra)* | 325 | 10.5 | Av.5.5 | SM | NORM | * Fair structural condition. * Poor tree form, old pruning wounds observed on the tree stem with minor decay evident. * Tag missing. | * Attach new tag, non-urgent work that can be carried out by Gray’s Inn staff or Bartlett. | N/A | LOW | 20+ | +10 |
| 666 | Main Avenue | Red Oak, (*Quercus rubra)* | 449 | 15 | Av.6 | EM | NORM | * Fair structural condition. * Historically crown raised to 4.5m, resulting in several (10+) wounds on main stem which are occluding adequately. * 2% minor deadwood in crown. | * No works presently required | N/A | LOW | 40+ | +15 |
| 667 | Main Avenue | Red Oak, (*Quercus rubra)* | 416 | 20.5 | Av.6 | EM | NORM | * Fair structural condition. * Strong apical dominance. | * No works presently required | N/A | LOW | 40+ | +7 |
| 668 | Main Avenue | Red Oak, (*Quercus rubra)* | 338 | 15.5 | Av.6 | EM | NORM | * Good structural condition. * Historically crown raised to 4m, wounds are occluding. * 2% minor deadwood in crown. * Tag missing | * Attach new tag, non-urgent work that can be carried out by Gray’s Inn staff or Bartlett. | N/A | LOW | 40+ | +5 |
| 669 | Main Avenue | Red Oak, (*Quercus rubra)* | 412 | 16 | Av.6.5 | EM | NORM | * Good structural condition. * Vigorous epicormic shoot growth in zones of previous pruning cuts. * Tag missing | * Thin-out all epicormic shoots during dormancy. * Attach new tag, non-urgent work that can be carried out by Gray’s Inn staff or Bartlett. | 12 months | LOW | 40+ | +9 |
| 670 | Main Avenue | Red Oak, (*Quercus rubra)* | 445 | 14 | Av.6 | EM | NORM | * Good structural condition. * 2% minor deadwood in crown. | * No works presently required | N/A | LOW | 40+ | +22 |
| 671 | Main Avenue | Red Oak, (*Quercus rubra)* | 412 | 17.8 | Av.6.5 | EM | NORM | * Good structural condition. * 2% minor deadwood in crown. | * No works presently required | N/A | LOW | 40+ | +8 |
| 672 | Main Avenue | Red Oak, (*Quercus rubra)* | 305 | 15 | Av.6 | EM | NORM | * Fair structural condition. | * No works presently required | N/A | LOW | 40+ | +10 |
| 673 | Main Avenue | Hornbeam | 58 | 4.7 | Av.1.0 | Yng | NORM | * Good structural condition. * Tag missing, but not currently required. | * No works presently required | N/A | LOW | 40+ | +5 |
| 674 | Main Avenue | Red Oak, (*Quercus rubra)* | 354 | 16.0 | Av.6 | EM | NORM | * Fair structural condition. * Girdling roots. * Tag missing. | * Remove girdling roots. * Attach new tag, non-urgent work that can be carried out by Gray’s Inn staff or Bartlett. | 12 months | LOW | 40+ | +9 |
| 675 | Main Avenue | Red Oak, (*Quercus rubra)* | 345 | 15.5 | Av.6 | EM | LOW | * Fair structural condition. * Pockets of loose bark between buttress roots, suspected weakened wood beneath, but integrity of buttress roots currently adequate. * Crown displays minor asymmetry. * 2% dieback in crown to north-west. * Foliage density slightly sparse, but adequate. | * No works presently required | N/A | LOW | 40+ | +22 |
| 676 | Main Avenue | Red Oak, (*Quercus rubra)* | 163 | 10 | Av.3.5 | YNG | NORM | * Good structural condition | * No works presently required | N/A | LOW | 40+ | +6 |
| 677 | Adjacent main gates | London Plane (*Platanus x acerifolia)* | 1333 | 35.5 | 12 14 5 8 | MAT | NORM | * Good structural condition. * Wide-spreading crown, predominating to the east. * Heavily weighted above 90 degree angled branch at 14.0 metres. | * Reduce weight of crown above 90 degree angled branch by raising descending growth by approximately 4.0 metres | 12 months | MOD | 20+ | +13 |
| 678 | In bed adjacent to main gate | London Plane (*Platanus x acerifolia)* | 1667 | 33 | 4 16 14 7 | OM | NORM | * Fair structural condition. * 100mm x 100mm decay cavity at base on south side between buttress roots, can be probed 250mm – no significant progression since but will require on-going monitoring. * Proliferation of young surface roots on east and south sides of main stem, together with the significant bulging at the base are indicative of underlying decay. * Low lying, descending crown to east, south and west (5 – 8 metre vertical clearance). | * Carry out non-invasive PICUS test to establish extent of decay at base, within 12 months (Large stem, approx. 20 sensors required). * Reduce and lateral spread of crown to south, east and west sides of main stem by between 2 and 3 metres and raise descending growth by approximately 4.0 metres. | 2 months  6 months | MOD\* | 20+ | +5 |
| 915 | Adjacent rear of 2 Gray’s Inn Square | Ornamental cherry (*Prunus serrulata* ‘Kanzan’) | 340 | 7 | Av.6 | EM | NORM | * Fair structural condition. * Minor decay at old pruning wounds throughout crown, otherwise adequate structural condition. | * No works presently required | N/A | LOW | 10+ | +6 |
| 916 | Lawn area | Crab Apple variety  *(Malus spp.)* | 272 | 8 | Av.4.5 | EM | NORM | * Good structural condition. * Rubbing and crossing branches throughout crown, otherwise adequate structural condition. | * Remove rubbing and crossing branches from throughout crown. | 12 months | LOW | 20+ | +3 |
| 918 | Lawn area | Japanese Flowering Cherry  *(Prunus spp.)* | 342 | 11.5 | Av.5.5 | MAT | NORM | * Fair structural condition. * Mower damage to exposed surface roots, comparatively minor – risk of future damage would be reduced by installing wood-chip mulch ring at base. * 5% major and minor deadwood in crown. * Dense branch ends | * Remove deadwood in crown. * Tip reduce lateral spread to all points by approximately 1.0 metre in order to reduce weight of branch tips and to balance. * Apply woodchip mulch at base to reduce risk of damage. | 12 months | LOW | 20+ | +8 |
| 919 | Adjacent corner of building in East lawn | London Plane (*Platanus x acerifolia)* | 1433 | 35.5 | 9 9 12 12 | MAT | NORM | * Good structural condition. | * No works presently required | N/A | MOD | 40+ | +10 |
| 920 | On main lawn | London Plane (*Platanus x acerifolia)* | 947 | 34 | 7 12 7 4 | MAT | NORM | * Fair structural condition. * 200 x 200mm area of decay at base on west side of main stem, below ground level the wood is wet, soft and spongey, indicative of white rot. Remaining buttress roots sounded with a mallet which returned a solid sound. * Sparse, thinning crown, declining specimen tree. * Minor decay at old pruning wounds throughout crown. * Crown to east has been thinned and reduced since previous annual survey in 2013 as recommended. | * Root collar inspection using air-spade equipment and hand tools. | 12 months | LOW | 10+ | +2 |
| 921 | Lawn area | Magnolia, (*Magnolia spp)* | 328 | 14 | Av.6 | MAT | NORM | * Good structural condition. | * No works presently required | N/A | LOW | 40+ | +18 |
| 922 | Lawn area | Indian Bean tree  *(Catalpa bignonioides)* | 345 | 8 | Av.7 | OM | NORM | * Poor structural condition, but stable. * Old collapsed multi-stem specimen. * The remaining standing stem has 40 degree lean to east and there is decay in the basal area. | * No works presently required   Note: It is suggested that the plants beneath are left to grow to discourage access below tree. | N/A | LOW | 20+ | +8 |
| 923 | Lawn area | Atlantic Cedar  *(Cedrus atlantic)* | 474 | 10 | Av.5.5 | SM | NORM | * Good structural condition | * No works presently required | N/A | LOW | 40+ | +26 |
| 924 | Boarder shrub bed | Hawthorn  *(Crataegus monogyna)* | 383 | 11 | Av.6 | OM | NORM | * Decay fungus thought to be *Phellinus spp* attached to north side of main stem at 0.5 metres. * Decay above and below fungus can be probed 200 millimetres. * Surrounding area emits a hollow sound when tapped with a sounding mallet. * Brown cubical rot at bifurcation at 1.3 metres above ground level. * Crown has been further reduced since 2014. * Low incremental growth of stem. | * No works presently required | N/A | LOW | <10 | +1 |
| 926 | Boarder shrub bed | Cider Gum (*Eucalyptus gunnii).* | 512 | 16.5 | Av.3.5 | EM | NORM | * Good structural condition. | * No works presently required | N/A | LOW | 20+ | +38 |
| 927 | Boarder shrub bed | Purple -leafed Plum *(Prunus cerasifera* ‘Atropurpurea | 455 | 14.5 | Av.5.5 | MAT | NORM | * Fair structural condition. * Minor deadwood in tree crown. * Vigorous water shoots throughout crown. | * Thin-out water shoots by 80% leaving those in excess of 25mm diameter. | 12 months | LOW | 10+ | +4 |
| 928 | Border shrub bed | Maidenhair tree  (*Ginkgo biloba)* | 248 | 12.0 | Av.4 | YNG | NORM | * Good structural condition. * Over-extended and heavily weighted lateral on east side of main stem at 2.5 metres. | * Reduce over-extended lateral on east side of main stem by approximately 2.0 metres, making pruning cut at a suitable growth point. | 12 months | MOD | 20+ | +27 |
| 929 | Border shrub bed | False acacia, (*Robinia pseudoacacia)* | 440 | 16.5 | Av.6.5 | EM | NORM | * Fresh small resupinate fungal fruiting bodies attached to small cavity at 1.0m on east side of main stem. * Underlying decay can be probed 30mm, no significant increase in extent of decay since 2013. * 5% minor deadwood in crown. * Adequate structural condition. | * Re-inspection and re-evaluation of risk Monitor decay at 1m. | 12 months | LOW | 20+ | +27 |
| 930 | Border shrub bed | Field Maple, (*Acer campestre)* | 255 | 11 | Av.4 | SM | NORM | * Good structural condition. | * No works presently required | N/A | LOW | 40+ | +4 |
| 931 | Border shrub bed | Black Mulberry, (*Morus nigra).* | 320 | 11 | Av.4 | SM | NORM | * Fair structural condition. | * No works presently required | N/A | LOW | 40+ | +4 |
| 933 | Field Court | London Plane (*Platanus x hispanica)* | 401 | 6.7 | Av.0.5 | EM | NORM | * Fair structural condition. * Decay cavity on north side of main stem at 1.5m. Cavity measures 700 x 80mm and occupies 50% of stem cross section residual wall 80mm wide – No significant deterioration 2015. * Recently re-pollarded, back to old points at height and making new cuts at 4.5 metres. | * No works presently required | N/A | LOW | 10+ | +1 |
| 934 | Field Court | London Plane (*Platanus x hispanica)* | 395 | 6.5 | Av.0.5 | EM | NORM | * Fair structural condition. * Historically pollarded. * Recently re-pollarded, which has revealed heart-rot occupying estimated 30% of cross-section, not currently significant. | * No works presently required | N/A | LOW | 10+ | +5 |
| 935 | Field Court | London Plane (*Platanus x hispanica)* | 380 | 6.5 | Av. 1 | EM | NORM | * Fair structural condition. * Historically pollarded tree. * Canker at 2.5m with decay can be probed 150mm, no significant decay progression since 2013. * Recently re-pollarded. | * No works presently required | N/A | LOW | 10+ | +5 |
| 936 | Field Court | London Plane (*Platanus x hispanica)* | 378 | 6 | Av.1 | EM | NORM | * Fair structural condition. * Historically pollarded tree. * Recently re-pollarded back to old pruning points. Dead and dysfunctional limbs have been removed. | * No works presently required | N/A | LOW | 10+ | +2 |
| 937 | Field Court | London Plane (*Platanus x hispanica)* | 280 | 5.5 | Av.0.5 | EM | NORM | * Fair structural condition. * Historically pollarded tree. * Recently re-pollarded making new bolling cuts. * Decay at old wounds throughout. | * No works presently required | N/A | LOW | 10+ | +1 |
| 938 | Field Court | London Plane (*Platanus x hispanica* | 248 | 6 | Av.1 | EM | NORM | * Fair structural condition. * Historically pollarded tree. * Old pruning wounds observed on tree stem, not currently significant, but would be of concern if the decay columns coalesce. * Minor decay at pollard points. * Recently re-pollarded. | * No works presently required | N/A | LOW | 10+ | +0 |
| 939 | Field Court | London Plane (*Platanus x hispanica)* | 315 | 7 | Av.1 | EM | NORM | * Fair structural condition. * Historically pollarded tree. * Minor decay at pollard points. * Recently re-pollarded. | * No works presently required | N/A | LOW | 10+ | +4 |
| 940 | Field Court | London Plane (*Platanus x hispanica)* | 319 | 6.5 | Av.1.5 | EM | NORM | * Historically pollarded tree. * Decay at pollard points. * Recently re-pollarded. | * No works presently required | N/A | LOW | 10+ | +2 |
| 941 | Gray’s Inn Square | Silver Birch  *(Betula pendula)* | 246 | 5.2 | Av.4 | EM | NORM | * Fair structural condition. | * No works presently required | N/A | LOW | 20+ | +5 |
| 942 | Gray’s Inn Square | Golden Honey Locust *(Robinia pseudoacacia ’*Sunburst*’)* | 413 | 18.3 | Av.8 | EM | Below NORM | * Sparse, thinning crown, with twig and small branch die-back occupying estimated 15 - 20% of crown volume, predominantly in lower crown but also at branch tips, conditions persist in 2015. | * Take soil and leaf samples to assess nutrient and pH levels and apply supplementary feed based on the results. | 6 months | LOW | 20+ | +6 |
| 943 | Gray’s Inn Square | Camerdown (Weeping) Elm  *(Ulmus glabra ‘*Camperdown | 467 | 5 | Av.4 | EM | NORM | * Fair structural condition. * Crown encroaching on car park. | * Tip-reduce to clear edge of car park by up to 1.5 metres. | N/A | LOW | 20+ | +10 |
| 944 | Gray’s Inn Square | Portugal Laurel  *(Prunus lusitanica)* | 235 | 3 | Av.4 | EM | NORM | * Fair structural condition. | * No works presently required | N/A | LOW | 20+ | +10 |
| 945 | Gray’s Inn Square | Himalayan Birch  *(Betula utilis)* | 191 | 9.5 | Av.3.8 | SM | NORM | * Good structural condition. * *Meripilus giganteus* fungus 1.3 metres to south, thought to be active on root system of previously felled tree observed in 2014, no longer evident. * Tag included in stem. | * Attach new tag, non-urgent work that can be carried out by Gray’s Inn staff or Bartlett.. | N/A | LOW | 20+ | +9 |
| 946 | Gray’s Inn Square | Himalayan Birch  *(Betula utilis)* | 206 | 10 | Av.3.5 | SM | NORM | * Good structural condition. * *Meripilus giganteus* fungus 1.3 metres to south, thought to be active on root system of previously felled tree observed in 2014, no longer evident. * Tag missing. * 2% minor deadwood in crown. | * Attach new tag, non-urgent work that can be carried out by Gray’s Inn staff or Bartlett.. | N/A | LOW | 20+ | +8 |
| 947 | Gray’s Inn Square | Himalayan Birch  *(Betula utilis)* | 191.5 | 10 | Av.3 | SM | NORM | * Good structural condition. * *Meripilus giganteus* fungus 1.3 metres to south, thought to be active on root system of previously felled tree observed in 2014, no longer evident. * Tag included in stem. * 2% minor deadwood in crown. | * Attach new tag, non-urgent work that can be carried out by Gray’s Inn staff or Bartlett.. | N/A | LOW | 20+ | +13 |
| 948 | Gray’s Inn Square | Weeping Silver Birch  *(Betula pendula* ‘Youngii’*)* | 324 | 5 | Av.5 | EM | NORM | * Fair structural condition. * 2% minor deadwood in crown. | * Tip-reduce by between 1.5 and 2.0 metres to clear edge of car park. | 12 months | LOW | 20+ | +2 |
| 949 | South Square | Chinese Privet, (*Ligustrum lucidum Variegata)* | 261 | 8.5 | Av.3.7 | EM | NORM | * Good structural condition. * Historically crown raised leaving small occluding wounds. * Crack in slab adjacent main stem not currently significant. * Girdling roots. * Crossing and rubbing branches in lower crown. * 2% minor deadwood in crown. | * Remove crossing and rubbing branches, deadwood and girdling roots | 12 months | LOW | 20+ | +10 |
| 950 | South Square | Chinese Privet, (*Ligustrum lucidum Variegata)* | 158 | 6.5 | Av.3 | EM | NORM | * Good structural condition. | * No works presently required | N/A | LOW | 20+ | +5 |

Key

**Tree Numbers** refer to site plan and tree tags attached to the trunk of the trees on the site. **Location a** brief description is provided **Species** – tree species giving English common name and scientific name in italic text below. **DBH** is stem diameter measured at 1.5 metres above ground level on the tree stem, recorded in millimetres (mm); **Ht** is height measured using a clinometer in metres (m); **Crown spread** is crown spread to the four cardinal compass points, measured in metres (m where appropriate or average radius); **Age** is assessed as young (**YNG)** up to 1/5 of trees life-cycle,semi-mature **(SM**) up to 2/5 of trees life-cycle, early mature **(EM**) up to 3/5 of trees life-cycle, mature **(MAT)** up to 4/5 of trees life-cycle and over mature **(OM)** up to 5/5 or above of trees life cycle. **Vig** is vigour described as either normal (NORM) for species or LOW or Dead. **ULE** is useful life expectancy is an objective assessment of the remaining life expectancy of the tree, estimated in years, **Time Scale** is the duration of time in which the works are recommended to be carried out, **Risk Factor**  is defined as being the overall risk that the tree in question poses to either person(s) and or property, this is a qualitative assessment made by the tree inspector, with trees being classified into three distinct categories either LOW, MODERATE and HIGH. **Annual growth increment** is a measure of the annual growth rate of the tree, expressed as the increase in trunk diameter over the period since the tree was last inspected and measured. This is measured at a height of 1.5 metres on the tree stem and is compared with the same measurement taken at the last inspection; the increase is measured in millimetres (mm). \* Risk factor subject to further testing.

**INDICATIVE SITE PLAN**

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*Indicative site plan showing the approximate locations of the trees that are the subject of this report.*

*Please note that the ID numbers shown on the plan correspond to the metal tree tags that have been fixed to the trunk of each individual tree.*

I trust that the contents and recommendations contained within this report are informative, easy to understand and helpful to you, with regards to managing your tree stock. Should you have any further questions or concerns, please do not hesitate to contact me.

**REPORT CLASSIFICATION:** **Tree Survey & Condition and Management Report**

**REPORT STATUS:** **Final**

**REPORT COMPLETED BY:** **Mr. Jason Mills**

***Arboricultural Consultant***

**SIGNATURE:**  **DATE: 23rd June 2015**

**REPORT REVIEWED BY:** **Mr. John Lawson BSc. Hons (For), C.Biol, MSB**

***Chartered Biologist***

***Arboricultural Consultant***

**SIGNATURE:** **** **DATE: 25th June 2015**