

Arboricultural Survey

St Mary's Close
Hurst Road
East Preston
West Sussex
BN16 3AP

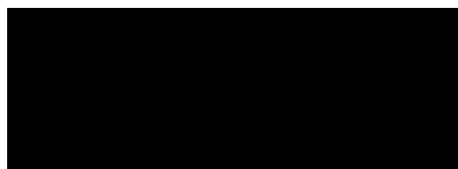
2nd February 2017



PJC ref: 4274/17-01

This report has been prepared by
PJC Consultancy Ltd
on behalf of
MJH Executive Homes

Prepared by	Peter Davies FdSc Arboriculture M.Arbor.A Peter has a Foundation Degree in Arboriculture and is a professional member of the Arboricultural Association. He has ten years experience in the arboricultural industry, originally working as a groundsman and feller, and progressing into consultancy. He is a Lantra accredited professional tree inspector.
Checked by	Nick Betts HND For M.Arbor.A Nick has attained an HND in forestry management and is a professional member of both the Arboricultural Association and the Consulting Arborists Society. He has worked in the arboricultural and forestry industries for 14 years. He started his career as a forestry worker before qualifying as a tree surgeon, working in both the private and commercial sectors. He has been a practising consultant since 2004. He is a Lantra accredited professional tree inspector.



Chapter House, Priesthawes Farm
Hailsham Road, Polegate,
East Sussex BN26 6QU

CONTENTS

1 Introduction

2 Site visit and survey methodology

3 Site details and survey findings

4 Conclusions

5 Other considerations

Appendices:

1. Tree Constraints Plan
2. Tree Survey Schedule
3. Cascade Chart for tree quality assessment
4. Root protection area formulas
5. Photographs

1 INTRODUCTION

1.1 **Instruction:** PJC Consultancy has been instructed by MJH Executive Homes to provide an arboricultural survey of St Mary's Close in East Preston.

1.2 **Brief:** PJC Consultancy has been commissioned to undertake an initial arboricultural survey following the guidelines set out in BS5837: 2012 '*Trees in relation to design, demolition and construction – Recommendations*'.

1.3 **Scope of this report:** This report is concerned with all significant trees located within the property boundaries of the site. Additionally, trees located around the curtilage of the site have also been surveyed when they are considered likely to have the potential to impact on the development (in relation to root and crown protection or foundation design).

1.4 **Purpose of report:** This survey has been undertaken to record the condition and value of all significant trees at the site as well as the material constraints they pose on the development. The information in this report should be used to guide the design proposals.

1.5 **Documents and information provided:** The following documents were provided by the client to produce this report:

- Drawing ref. P1017 – Topographical Survey

2 SITE VISIT AND SURVEY METHODOLOGY

2.1 Site visit: A site visit was carried out on 20th January 2017. The weather conditions at the time were clear and dry. The visibility was adequate for visual tree inspection from ground level.

2.2 Tree information: The following measurements and information were recorded in the Tree Survey Schedule for each individual tree (average dimensions are recorded for groups):

- Tree reference number. (T=tree, G=group, H=hedgerow). Tree numbers suffixed with PA on the Tree Constraints Plan indicate the trees location was not included on the site plan provided so the tree's position was approximated on site.
- Species (common and scientific name).
- Overall tree height (m).
- Stem diameter (mm) per stem or average diameter for multi-stemmed trees with six or more stems.
- Branch spread (m) measured to the four cardinal points.
- Existing height (m) above ground level of lowest significant branch and direction of growth (for individual trees only).
- Existing height (m) above ground level of canopy.
- Age class (young, semi mature, early mature, mature, over mature or veteran).
- Physiological condition (good, fair, poor).
- Structural condition (good, fair, poor).
- Comments (general description of tree including any notable features).
- Preliminary management recommendations (prescriptions for tree management processes based on the current land use and not related to the proposed development).
- Tree categorisation (see below).
- Root protection area (m²).
- Root protection radius (m).

2.3 Tree categorisation: The condition and value of each tree was evaluated based on the current land use. Each tree or tree group has been awarded either category A, B, C or U and a sub category of either 1,2 or 3 or a combination of the sub categories.

2.4 Tree categorisation summary:

- A – Trees of good condition or high value, with a predicted life span in excess of forty years.
- B – Trees of moderate condition or value, with a predicted life span in excess of twenty years.
- C – Trees of poor condition or low value, with a predicted life span in excess of ten years.
- U – Trees of such impaired condition that they cannot realistically be retained as living trees in the context of the current land use for more than ten years.

2.5 Tree sub categorisation summary:

- 1 – Trees have mainly arboricultural value, e.g. trees of good condition, form and vitality or rare tree species.
- 2 – Trees have mainly landscape value, e.g. trees of landscape prominence, that serve to screen unsightly views or that are required for privacy.
- 3 – Trees with mainly cultural value including conservation, e.g. commemorative trees, trees of historical significance, trees of ecological significance or veteran trees.

2.6 Each tree can only be categorised as A, B or C but may comply with more than one sub category. A cascade chart further explaining how tree categorisation is decided is included in Appendix 3.

2.7 **Root protection areas:** Each tree's stem diameter was recorded, and applied to the formula found in Appendix 4 to establish its root protection area. A root protection area represents a calculation of the minimum area of root growth required to support the tree, not the total rooting area.

2.8 The root protection areas are plotted onto the Tree Constraints Plan in Appendix 1, and recorded in the Tree Survey Schedule in Appendix 2. These are represented as a circle on the plan (unless significant rooting constraints are present), and are colour coded depending on the category the tree has been awarded. Where existing site conditions/features are present that are deemed likely to have affected the root morphology, the root protection areas have represented as a polygon of equivalent size.

2.9 The disturbance of a tree's root system can result in crown dieback and even death of the tree. Roots are used to support the tree structurally and act as transport for water and nutrients. Direct damage such as root severance can lead to ill health, as can compaction of the soil by construction traffic, heavy plant and storage of materials. Changing the nature of the surface above the growing medium, (i.e. from porous to non-porous), can alter the resources available to the tree, which in turn can lead to its decline.

2.10 The root protection areas must be left free from excavation and disturbance, and protected from compaction or contamination during any proposed works. The majority of root growth is usually found within the top meter of soil. As such, even shallow disturbance within root protection areas can potentially have a significant impact on the trees.

2.11 **Limitations of site visit:** The survey methodology was restricted to a visual tree assessment from ground level. No tree climbing or ground investigation was carried out for this report. Where existing site constraints are present such as ivy covered trees, a very dense under-storey, or where trees are located on third party land to which access was not granted, tree dimensions were estimated by eye as accurately as possible.

3 SITE DETAILS AND SURVEY FINDINGS

3.1 Site location: The site is situated on the south side of East Preston, close to the junction with Station Road. It has a central OS national grid reference of TQ064025. The surrounding land use is comprised suburban residential development in all directions. The location of the site within its environs is shown in figure 1.



Figure 1: Location of Site and Environs

3.2 Site layout: The site comprises an existing detached residential property with front driveway connecting to Hurst Road in two locations, and a large side and rear garden. The garden is largely open with limited screening from neighbouring properties (particularly to the south) but has a small formal area surrounded by a yew hedgerow. Trees are located around the curtilage of the site (on both sides of the property boundary), with a dense concentration of trees and shrubs on the frontage of the Hurst Road.

3.3 A number of good quality limes are also located on the grass verge in front of the property. It was not clear during the site visit whether these are located within the property boundary of the site, however they contribute to the character of Hurst Road and it is recommended that they be retained and incorporated into any development of the site.

3.4 Information and measurements for each tree can be viewed in the Tree Survey Schedule in Appendix 2.

3.5 Tree categorisation summary: A total of forty-four trees, six tree/shrub groups and three hedgerows were surveyed and recorded in the Tree Survey Schedule.

Table 1: Tree categorisation summary

Categorisation	Individual tree	Tree group	Hedgerow
A	-	-	-
B	11	-	-
C	29	6	3
U	4	-	-
Total	44	6	3

3.6 Statutory tree protection: Arun District Council Planning Department's online mapping service was used on 19th January 2017 to establish restrictions to tree works at the site. No Tree Preservation Order (TPO) was shown to protect the trees on this site and the site is not located within a Conservation Area. However, any persons proposing to undertake tree works must check the status of these trees with the local authority, and gain necessary consent before works are undertaken.

3.7 Financial penalties and/or criminal proceedings can result if tree works are carried out on a protected tree without consent. The entirety of the tree is protected, both above and below ground.

4 CONCLUSIONS

4.1 To comply with BS5837: 2012, it is recommended that an arboricultural impact assessment be produced when the proposed layout has been fixed. The arboricultural impact assessment should include a schedule of trees to be retained and removed as well as pruning required to enable the construction works. It should also evaluate the likely effects of the construction works on retained trees including post development pressures and provide recommendations on mitigation measures to be implemented. The arboricultural impact assessment should be accompanied by an arboricultural method statement and a dimensioned Tree Protection Plan to show how retained trees will be protected whilst the development is constructed.

4.2 As far as possible new buildings and areas of hard surfacing should be located outside of the root protection areas of retained trees. In certain situations, engineered solutions are available to allow construction within the root protection areas. Further input from an arboriculturalist should be sought regarding their site-specific viability before these methods are relied upon.

4.3 Over-shading of gardens and dwellings for prolonged periods, nuisance caused by leaf/fruit drop or honeydew drip (particularly onto footpaths, parking areas or roof guttering) and an over-bearing presence of large trees can result in significant pressure from future residents to carry out harsh remedial pruning works or to remove trees post development. All of these factors should be considered at the design stage.

4.4 Allowance should be made for future canopy growth of both existing and newly planted trees. Trees growing in areas of limited space may require regular future pruning works. The suitability of different species for regular crown reductions, the affect on their amenity value and the cost of future tree works should be considered.

4.5 The final design should show service locations and their routing. New utilities should be located outside of the trees root protection areas where they are underground and outside of the anticipated area of mature crown spread where above ground. If this is not possible, recommendations outlined in NJUG10 '*Guidelines for the planning, installation and maintenance of utilities in proximity to trees*' should be followed. Advice should also be sought from the project arboriculturalist.

4.6 Where tree removal is necessary to facilitate the wider regeneration benefits associated with development, a tree replacement strategy could be implemented to mitigate tree loss. If further tree planting does occur, consideration should be given to species selection (in relation to form and potential size) and planting locations to ensure their successful integration into the new development.

5 OTHER CONSIDERATIONS

5.1 Trees should be checked for protected species before works are undertaken. It is against the law to disturb bats or their roosts under the Conservation of Habitat and Species Regulations. Nesting birds are protected by the Wildlife and Countryside Act. If protected species are discovered, Natural England should be contacted for advice.

5.2 The tree works contractors should carry out all tree works to BS3998: 2010 '*Tree works – recommendations*', as modified by research that is more recent. They should also carry relevant, adequate and up to date insurance.

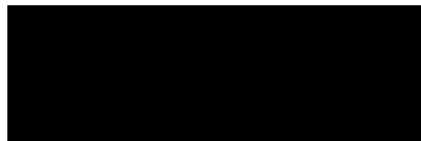
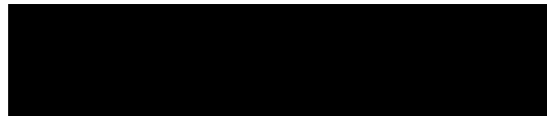
5.3 It is also recommended that all tree works be carried out by an Arboricultural Association approved contractor. Approved contractors are expected to work to industry best standards, and the Arboricultural Association website contains contact details and information on engaging a suitable contractor.

5.4 The trees at this site were assessed for their condition and safety in relation to the average range of weather conditions that the region experiences. Any weather events that exceed the average norm cannot be predicted, and so their effects are not considered within this report.

5.5 The views and opinions contained within this report are entirely those of the author.

Contact details

PJC Consultancy Ltd
Chapter House
Priesthawes Farm
Hailsham Road
Polegate
East Sussex
BN26 6QU

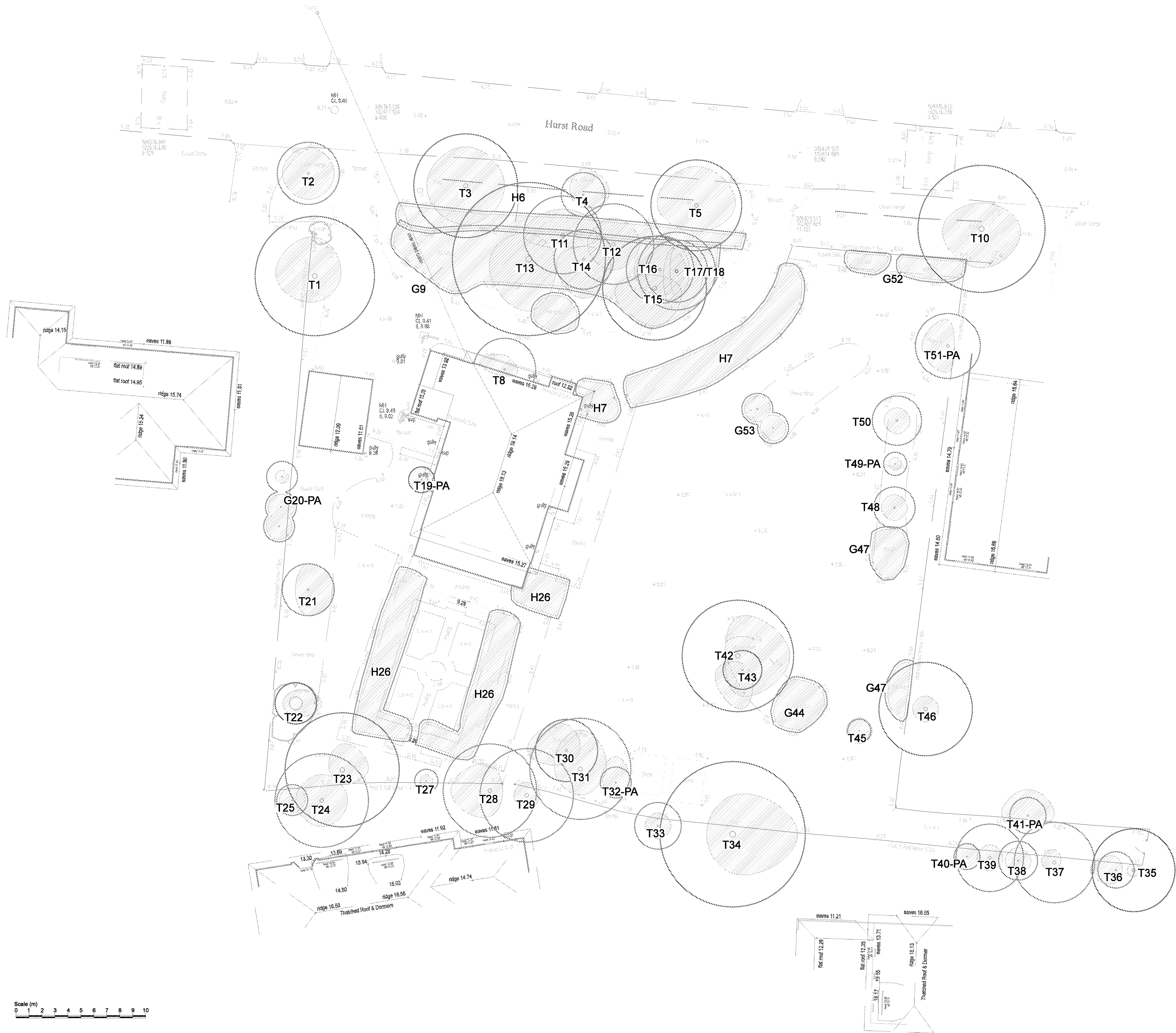


Author: Peter Davies

Date: 2nd February 2017

APPENDIX 1

Tree Constraints Plan



Key:

- RPA for CAT B* tree
- RPA for CAT C* tree
- RPA for CAT U* tree
- Tree canopy

* Tree categorised in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.

Appendix 2, (Tree Survey Schedule) contained within the arboricultural report ref. no. PJC/4274/17-01 contains further information for each tree.

This drawing should be viewed in colour.

Tree numbers suffixed with PA indicate the tree position is approximate.

Drawing no: PJC/4274/17/A Rev: - Sheet number: 1 of 1

Client and site:
MJH Executive Homes

St Mary's Close
Hurst Road
East Preston

Drawing title: Tree Constraints Plan

Date drawn: 02/02/2017

Scale: 1:200 at A2

Drawn by: PD

Checked by: NB



PJC Consultancy
Chapter House, Priesthaves Farm, Hailsham
Road, Polegate, East Sussex, BN26 6QU.
01323 400311
contact@pjcconsultancy.com
www.pjcconsultancy.com

APPENDIX 2

Tree Survey Schedule

Tree Survey Schedule

				Client: MJH Executive Homes Site: St Mary's Close, East Preston Survey date: 20/01/2017 Surveyor: Peter Davies						T: Individual tree or shrub G: Group of 2 or more trees H: Hedgerow W: Woodland block			
Tree ref. no.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m2)	Root Protection Radius (m)
T1	Cypress (Thuja plicata)	12	380	N: 3 E: 2 S: 2 W: 3	Crown: 1 south Branch: 2 south	Early mature	Fair	Good	Previously crown lifted. Minor wind burn on south side.	No action required on date of survey.	B1/2	65.3	4.6
T2	Hawthorn (Crataegus monogyna)	4	200 at 1m	N: 2 E: 2 S: 2 W: 2	Crown: 1 average Branch: 1 average	Early mature	Good	Good	Good example of species.	No action required on date of survey.	C1/2	18.1	2.4
T3	Lime (Tilia cordata)	8	330	N: 3 E: 3 S: 3 W: 3	Crown: 2 north Branch: 2 south	Early mature	Good	Good	Previously crown lifted and reduced from road. No major visible defects.	No action required on date of survey.	B1/2	49.3	4.0
T4	Hawthorn (Crataegus monogyna)	5	140	N: 2 E: 2 S: 1 W: 1	Crown: 2 average Branch: 2 average	Early mature	Good	Good	Slight north lean due to suppression. No major visible defects.	No action required on date of survey.	C2	8.9	1.7
T5	Lime (Tilia cordata)	9	290	N: 3 E: 3 S: 2 W: 3	Crown: 2 average Branch: 2 north	Early mature	Good	Good	Previously crown lifted. No major visible defects.	No action required on date of survey.	B1/2	38.0	3.5
H6	Privet (Ligustrum ovalifolium)	1-2 average	Under 75 average	1 average	0 average	Semi mature	Fair	Fair	Formal hedgerow on road frontage. Sparse in areas and smothered by ivy at east end.	Strip ivy where possible. Consider replanting with more shade tolerant species.	C2	2.5 average	0.9 average

Tree Survey Schedule

				Client: MJH Executive Homes Site: St Mary's Close, East Preston Survey date: 20/01/2017 Surveyor: Peter Davies							T: Individual tree or shrub G: Group of 2 or more trees H: Hedgerow W: Woodland block		
Tree ref. no.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m2)	Root Protection Radius (m)
H7	Yew (Taxus baccata)	3 average	100 average est	1 average	0 average	Semi mature	Good	Good	Formal hedgerow clad with ivy and bramble in places.	Strip ivy where possible.	C2	4.5 average	1.2 average
T8	Silk Tassel Bush (Garrya elliptica)	3	150 est	N: 1 E: 1 S: 0 W: 2	Crown: 0 east Branch: 0.5 average	Early mature	Good	Fair	Heavily reduced shrub growing against building.	No action required on date of survey.	C1	10.2	1.8
G9	Holly, Griselinia spp, bramble, privet	1-6 average	Under 75 average	Refer to plan	0 average	Semi mature	Fair	Fair	Mixed shrubs. Some ivy clad.	Clear ivy and bramble where possible.	C1	2.5 average	0.9 average
T10	Lime (Tilia cordata)	9	410	N: 2 E: 3 S: 3 W: 3	Crown: 2 average Branch: 1 south	Early mature	Good	Good	Previously crown lifted and reduced from road.	No action required on date of survey.	B1/2	76.0	4.9
T11	Purple leaf plum (Prunus cerasifera)	7	210, 90, 110	N: 2 E: 3 S: 1 W: 3	Crown: 2 north Branch: 0 average	Mature	Good	Fair	Multi-stemmed. Drawn up habit. Previously reduced over hedgerow.	No action required on date of survey.	C2	29.1	3.0
T12	Purple leaf plum (Prunus cerasifera)	6	90, 230, 80	N: 2 E: 2 S: 2 W: 2	Crown: 1 average Branch: 1 south	Mature	Fair	Fair	Multi-stemmed. Small deadwood due to suppression. Ivy previously severed.	Remove deadwood from north side of crown (for aesthetics reasons only).	C2	30.5	3.1

Tree Survey Schedule

				Client: MJH Executive Homes Site: St Mary's Close, East Preston Survey date: 20/01/2017 Surveyor: Peter Davies							T: Individual tree or shrub G: Group of 2 or more trees H: Hedgerow W: Woodland block		
Tree ref. no.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
T13	Griselinia spp.	7	270, 200, 160, 320	N: 2 E: 2 S: 4 W: 3	Crown: 0 average Branch: 0 south	Mature	Good	Fair	Large multi-stemmed shrub. Reduced on north side. Ivy encroaches crown.	Sever ivy around base.	B2	109.0	5.9
T14	Holly (Ilex aquifolium)	8	190	N: 1 E: 2 S: 3 W: 2	Crown: 2 south Branch: 3 south	Mature	Poor	Fair	Ivy previously severed but has very sparse crown.	Maintain ivy free crown and monitor.	C2	16.3	2.3
T15	Griselinia spp.	6	200, 170, 160, 100, 80	N: 1 E: 2 S: 3 W: 3	Crown: 0 south Branch: 0 average	Mature	Good	Good	Large multi-stemmed shrub. No major visible defects.	No action required on date of survey.	B2	50.2	4.0
T16	Sycamore (Acer pseudoplatanus)	10	220	N: 2 E: 2 S: 2 W: 2	Crown: 5 south Branch: 4 south	Early mature	Good	Fair	Drawn up growth habit. Squirrel damage in crown.	No action required on date of survey.	C2	21.9	2.6
T17	Prunus spp.	5	200, 100, 80, 80 est	N: 2 E: 2 S: 3 W: 1	Crown: 1 south Branch: 1 average	Semi mature	Poor	Poor	Regrowth from stump. Very sparse budding. Smothered by ivy.	Strip ivy where possible.	C2	28.4	3.0
T18	Hazel (Corylus avellana)	6	80 average x6 stems	N: 2 E: 1 S: 2 W: 0	Crown: 1 south Branch: N/A	Early mature	Good	Fair	Hazel clump growing around buttress of T17.	No action required on date of survey.	C1	17.4	2.4

Tree Survey Schedule

				Client: MJH Executive Homes Site: St Mary's Close, East Preston Survey date: 20/01/2017 Surveyor: Peter Davies							T: Individual tree or shrub G: Group of 2 or more trees H: Hedgerow W: Woodland block		
Tree ref. no.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
T19	Norway maple (Acer platanoides)	3	30 average x7 stems	N: 1 E: 0 S: 1 W: 1	Crown: 0 average Branch: 0 average	Young	Good	Poor	Self set, multi-stemmed tree growing from crack in patio.	Fell to avoid future damage to property.	U	2.9	1.0
G20	Mix cypress spp.	3-4 average	100 average est	0.5-2 average	1 over site	Semi mature	Good	Good	Third party trees only viewed from site.	No action required on date of survey.	C1	4.5 average	1.2 average
T21	Sallow (Salix caprea)	4	150, 70 at 0.5m	N: 2 E: 2 S: 2 W: 1	Crown: 0 average Branch: 0 south	Young	Good	Fair	Small multi-stemmed tree.	No action required on date of survey.	C1	12.4	2.0
T22	Pin oak (Quercus palustris)	4	30 average x 20 stems est	N: 1 E: 2 S: 1 W: 1	0 average	Young	Good	Poor	Regrowth on old large stump.	Remove/treat stump.	U	8.1	1.6
T23	Purple leaf plum (Prunus cerasifera)	5	370	N: 2 E: 2 S: 1 W: 1	Crown: 0 average Branch: 2 east	Mature	Good	Fair	Previously pollarded. Epicormic growth on stem.	No action required on date of survey.	B1/2	61.9	4.4
T24	Cypress (Cuprocyparis leylandii)	4	300 est	N: 2 E: 2 S: 2 W: 2	Crown: 1 average Branch: 1 west	Early mature	Good	Fair	Third party trees only viewed from site.	No action required on date of survey.	C2	40.7	3.6

Tree Survey Schedule

				Client: MJH Executive Homes Site: St Mary's Close, East Preston Survey date: 20/01/2017 Surveyor: Peter Davies							T: Individual tree or shrub G: Group of 2 or more trees H: Hedgerow W: Woodland block		
Tree ref. no.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m ²)	Root Protection Radius (m)
T25	Cypress (Chamaecyparis lawsoniana)	2	100 est	N: 1 E: 1 S: 1 W: 1	Crown: 0 average Branch: 0 average	Semi mature	Good	Good	Third party trees only viewed from site.	No action required on date of survey.	C2	4.5	1.2
H26	Yew (Taxus baccata)	2 average	100 average est	1 average	0 average	Semi mature	Good	Good	Managed hedgerow around formal garden area.	No action required on date of survey.	C2	4.5 average	1.2 average
T27	Bay (Laurus nobilis)	1	Under 75 average	N: 0.5 E: 0.5 S: 0.5 W: 0.5	Crown: 0 average Branch: 0 average	Young	Good	Good	Bay sapling.	No action required on date of survey.	C1	2.5	0.9
T28	Prunus spp.	6	300 est	N: 2 E: 1 S: 2 W: 3	Crown: 2 west Branch: 2 north	Over mature	Good	Poor	Third party ornamental tree only viewed from site. Heavily reduced.	No action required on date of survey.	C1	40.7	3.6
T29	Cypress (Cupressus macrocarpa)	5	300 est	N: 1 E: 1 S: 1 W: 1	Crown: 1 west Branch: 1 south	Mature	Good	Fair	Third party tree only viewed from site. Topped at 4m.	No action required on date of survey.	C1	40.7	3.6
T30	Holly (Ilex aquifolium)	7	200 est	N: 2 E: 1 S: 1 W: 3	Crown: 0 average Branch: 3 average	Mature	Good	Good	Foliage inhibits inspection of crown.	No action required on date of survey.	B2	18.1	2.4

Tree Survey Schedule

				Client: MJH Executive Homes Site: St Mary's Close, East Preston Survey date: 20/01/2017 Surveyor: Peter Davies						T: Individual tree or shrub G: Group of 2 or more trees H: Hedgerow W: Woodland block			
Tree ref. no.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m2)	Root Protection Radius (m)
T31	Griselinia spp.	6	180, 230, 100, 100	N: 3 E: 2 S: 2 W: 2	Crown: 0 average Branch: 1 average	Mature	Good	Fair	Large, multi-stemmed shrub.	No action required on date of survey.	C2	47.6	3.9
T32	Cotoneaster spp.	4	100 est	N: 2 E: 1 S: 1 W: 1	Crown: 0 average Branch: 0 average	Early mature	Fair	Fair	Multi-stemmed shrub. Suppressed by T31.	No action required on date of survey.	C2	4.5	1.2
T33	Cypress (Chamaecyparis lawsoniana)	7	150 est	N: 1 E: 1 S: 1 W: 1	Crown: 2 south Branch: 2 south	Semi mature	Good	Good	Third party tree only viewed from site. Previously crown lifted over site.	No action required on date of survey.	C1	10.2	1.8
T34	Weeping willow (Salix babylonica)	8	470	N: 3 E: 5 S: 3 W: 2	Crown: 1 north Branch: 1 north	Mature	Good	Fair	Third party tree only viewed from site. Previously lifted over site and pollarded.	No action required on date of survey.	B2	99.9	5.6
T35	Horse chestnut (Aesculus hippocastanum)	2	270	N: 0.5 E: 0.5 S: 0.5 W: 0.5	Crown: 2 average Branch: 2 average	Mature	Poor	Poor	Third party trees only viewed from site. Large basal wound with fungal fructification.	No action required on date of survey.	U	33.0	3.2
T36	Ash (Fraxinus excelsior)	4	80, 80	N: 1 E: 0 S: 1 W: 2	Crown: 1 west Branch: 1 average	Young	Good	Poor	Third party tree only viewed from site. Co-dominant stems crossing each other.	No action required on date of survey.	C1	5.8	1.4

Tree Survey Schedule

				Client: MJH Executive Homes Site: St Mary's Close, East Preston Survey date: 20/01/2017 Surveyor: Peter Davies							T: Individual tree or shrub G: Group of 2 or more trees H: Hedgerow W: Woodland block		
Tree ref. no.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m2)	Root Protection Radius (m)
T37	Horse chestnut (Aesculus hippocastanum)	3	260	N: 1 E: 0.5 S: 0.5 W: 1	Crown: 11 north Branch: 2 average	Early mature	Good	Poor	Third party tree only viewed from site. Pollarded at 3m. Large pruning wounds on stem.	No action required on date of survey.	C1	30.6	3.1
T38	Hazel (Corylus avellana)	4	30 average x18 stems est	N: 1 E: 1 S: 1 W: 1	Crown: 1 average Branch: 0 average	Semi mature	Good	Good	Third party hazel clump.	No action required on date of survey.	C1	7.3	1.5
T39	Horse chestnut (Aesculus hippocastanum)	3	140, 170	N: 1 E: 1 S: 1 W: 1	Crown: 1 east Branch: 0 average	Semi mature	Good	Poor	Third party tree only viewed from site. Dual stemmed from base. Pollarded to 3m.	No action required on date of survey.	C1	21.9	2.6
T40	Pittosporum (Pittosporum tenuifolium)	3	80 est	N: 1 E: 1 S: 1 W: 1	Crown: 0 average Branch: 0 average	Semi mature	Good	Good	Third party shrub.	No action required on date of survey.	C1	2.9	1.0
T41	Holly (Ilex aquifolium)	5	120 est	N: 2 E: 2 S: 1 W: 2	Crown: 2 south Branch: N/A	Semi mature	Fair	Fair	Third party tree only viewed from site. Located behind close board fence.	No action required on date of survey.	C1	6.5	1.4
T42	Magnolia (Magnolia spp.)	7	170, 150, 260, 100 over ivy	N: 3 E: 4 S: 3 W: 1	Crown: 2 north Branch: 1 north	Mature	Good	Fair	Multi-stemmed. Heavily ivy clad stem.	Sever ivy around base.	B1	58.4	4.3

Tree Survey Schedule

				Client: MJH Executive Homes Site: St Mary's Close, East Preston Survey date: 20/01/2017 Surveyor: Peter Davies						T: Individual tree or shrub G: Group of 2 or more trees H: Hedgerow W: Woodland block			
Tree ref. no.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m2)	Root Protection Radius (m)
T43	Magnolia (Magnolia spp.)	3	90, 50, 50, 50 est	N: 0 E: 0 S: 3 W: 2	Crown: N/A Branch: 0 average	Dead	Poor	Poor	Small standing dead tree.	No action required on date of survey.	U	7.1	1.5
G44	Bay, Rhododendron	3 average	Under 75 average	Refer to plan	0 average	Semi mature	Fair	Fair	Shrub, smothered by bramble.	Strip out brambles.	C1	2.5 average	0.9 average
T45	Peruvian nutmeg (Laurelia sempervirens)	2	Under 75	N: 1 E: 1 S: 1 W: 1	Crown: 0 average Branch: 0 average	Young	Good	Good	Small shrub.	No action required on date of survey.	C1	2.5	0.9
T46	Cypress (Thuja spp.)	7	300 est	N: 1 E: 1 S: 1 W: 1	Crown: 1 average Branch: N/A	Early mature	Good	Good	Third party tree only viewed from site. No major visible defects.	No action required on date of survey.	B1	40.7	3.6
G47	Privet, hazel, Norway maple, Griselinia	2-4 average	Under 75 average	Refer to plan	0 average	Young-semi mature	Fair	Fair	Shrub bed with tree saplings, clad in bramble.	Strip out brambles.	C1	2.5 average	0.9 average
T48	Beech (Fagus sylvatica)	4	130 at base	N: 1 E: 1 S: 1 W: 1	Crown: 0 average Branch: 0 average	Young	Good	Fair	Multi-stemmed sapling.	No action required on date of survey.	C1	7.6	1.6

Tree Survey Schedule

		Client: MJH Executive Homes Site: St Mary's Close, East Preston Survey date: 20/01/2017 Surveyor: Peter Davies									T: Individual tree or shrub G: Group of 2 or more trees H: Hedgerow W: Woodland block		
Tree ref. no.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Preliminary management recommendation	Category grading	Root Protection Area (m2)	Root Protection Radius (m)
T49	Yew (Taxus baccata)	2	Under 75	N: 0.5 E: 0 S: 0.5 W: 0.5	Crown: 0 average Branch: 0 average	Young	Good	Good	Sapling.	No action required on date of survey.	C1	2.5	0.9
T50	Bay (Laurus nobilis)	4	80, 80, 80, 80 est	N: 1 E: 1 S: 1 W: 1	Crown: 0 average Branch: 0 average	Semi mature	Good	Good	Multi-stemmed shrub.	No action required on date of survey.	C1	11.6	1.9
T51	Pittosporum (Pittosporum tenuifolium)	6	80 average x7 stems est	N: 2 E: 0 S: 2 W: 2	Crown: 0 average Branch: 0 average	Early mature	Good	Good	Large multi-stemmed shrub. Previously reduced to site boundary.	No action required on date of survey.	C2	20.3	2.5
G52	Oak, box, bay, Griselinia, pittosporum, blackthorn	2-4 average	Under 75 average	1 average	0 average	Young-semi mature	Good	Good	Shrubs and tree saplings.	No action required on date of survey.	C2	2.5 average	0.9 average
G53	2x hazel (Corylus avellana)	2 average	100 average est	1 average	0 average	Young	Good	Good	2x hazel saplings.	No action required on date of survey.	C1	4.5 average	1.2 average

APPENDIX 3

Cascade Chart for Tree Quality Assessment

Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of their current land use for longer than 10 years.	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after the removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning). • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline. • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality. <i>Note Category U trees can have existing or potential conservation value which it might be desirable to preserve</i>			Red
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years.	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue).	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture).	Green
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remedial defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation.	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.	Trees with material conservation or other cultural value.	Blue
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits.	Trees with no material conservation or other cultural value.	Grey

APPENDIX 4

Root Protection Area Formulas

CALCULATING THE RPA

For single stemmed trees

$$\text{RPA(m}^2\text{)} = \frac{(\text{stem diameter (mm)} @ 1.5 \text{ m x } 12)^2 \times 3.142}{1000}$$

For trees with two to five stems, a combined stem diameter is calculated as follows:

$$\sqrt{(\text{stem diameter } 1)^2 + (\text{stem diameter } 2)^2 \dots + (\text{stem diameter } 5)^2}$$

For trees with more than five stems, the combine stem diameter is calculated as follows:

$$\sqrt{(\text{mean stem diameter})^2 \times \text{number of stems}}$$

APPENDIX 5

Photographs



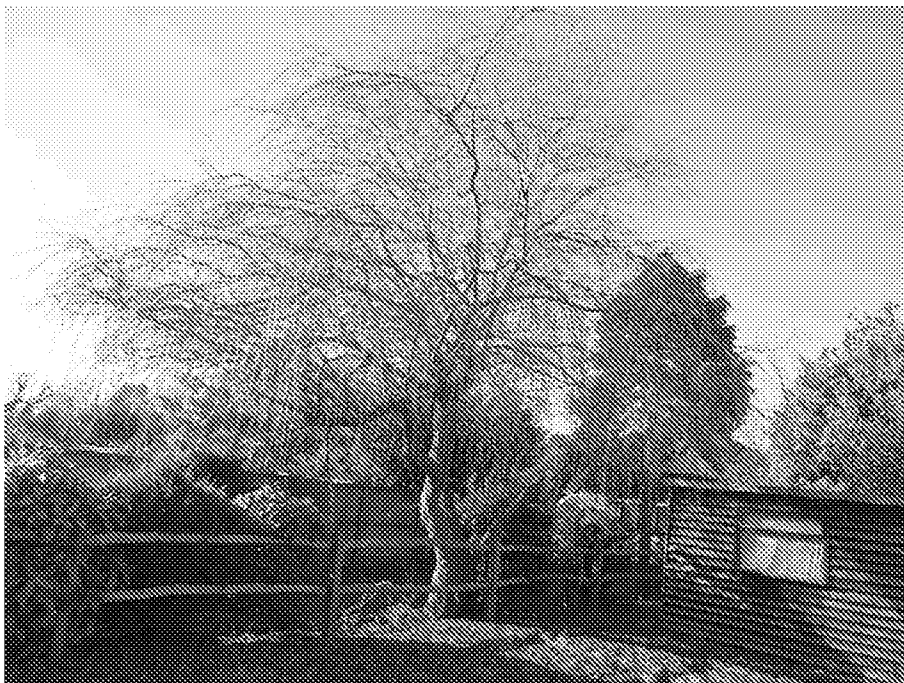
Photograph 1 – Tree T1



Photograph 2 – Trees T3-H6



Photograph 3 – Trees T35-T36



Photograph 4 – Tree T34



Photograph 5 – Tree T42



Photograph 6 – Tree T46