

Arboricultural report

For

Fontenay Barracks

Wakefield Road

Barnsley

South Yorkshire

S71 1NU

Arboriculture Report For:

Fontenay Barracks, Wakefield Road, Barnsley, S71 1NU

1.0 Introduction

1.1 Purpose of the Report

- A tree survey has been requested by the Reserve Forces Association, following several complaints from Neighbouring properties at Number 24 and 26 High Greave Barnsley, regarding leave and small falling branches blocking guttering to detached garages, and a concern regarding safety due to the overhang of the Crown of the trees over the garden and detached garages.

1.2 Terms of Reference

- I am instructed by AWS Landscapes to visit the site and prepare a tree survey for this site.

1.3 Scope of the Report

- This report is compiled in accordance with BS 5837:2005 Trees in relation to design demolition and construction 2012.
- Preliminary recommendations are given regarding trees on the site, regarding the current condition and safety of the trees and recommendations for the future management of the tree-scape.
- Recommendations in the report are made on the condition of the trees or groups of trees

1.4 Tree Survey Details

- The survey took place on 24/8/2016 and was undertaken by Trevor Heptinstall.
- The tree survey was undertaken from ground level and any visible defects in the trees have been noted. Other forms of investigation such as, such as climbed inspections and decay detection surveys may be required as a result of information gathered in this survey.
- Measurements were obtained using clinometers, measuring wheel, and tree measuring callipers. Where this was not possible measurements were estimated.

2.0 Site Description

- The site is a "Territorial army" base and has a screen planting of Manchester Poplars along the Western frontage with Wakefield Road and the Southern edge of the site, adjacent to the footpath sandwiched between the site and the adjacent properties on High Greave.

2.2 Topography

- The site is relatively flat with existing tarmac surfaces and stone surfacing, with several existing buildings. The site slopes down from the car park on site to the trees which are situated close to the T/A boundary fence.

2.3 Tree scape

The trees are planted close to the boundary and were originally planted as a quick growing screen to the site, with an under-planting to the front of Wakefield road of Laurel. The trees are now very tall and overhang the neighbouring boundary to High Greave

2.4 Amenity Value

The trees on site collectively provide an excellent visual amenity and screening to the surrounding area.

2.5 Age of trees and Class Mix

The nine trees surveyed are all predominantly mature to over-mature specimens and have several large limbs that overhang the adjacent footpath and the two properties number 24 and 26 High Greave.

2.6 Species Diversity

There are a range of trees on site, however the TPO only covers the Manchester Poplars

2.7 Status of trees

Check was made with: **Barnsley metropolitan Borough Council**

We are informed that there is a Tree Preservation Orders in force on the site. Ref No GRP1/36/1974

3.0 Tree Descriptions and Recommendations

Full details of all individual trees surveyed are recorded in the tables, **Tree Description and Recommendations** shown at **Appendix A**

Trees have been categorised using the Cascade chart for tree quality assessment from BS 5837:2012

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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 the 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 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

NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve

Trees to be considered for retention

Category A

Trees of high quality with an estimated remaining life expectancy of at least 40 years

Mainly arboricultural qualities

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)

Mainly landscape qualities

Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features

Mainly cultural values, including conservation

Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)

Category B

Mainly arboricultural qualities

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 remediable 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

Mainly landscape qualities

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 visual contribution to the wider locality

Mainly cultural values, including conservation

Trees with material conservation or other cultural value

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

Mainly arboricultural qualities

Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories

Mainly landscape qualities

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

Mainly cultural values, including conservation

Trees with no material conservation or other cultural value

BRITISH STANDARD BS 5837:2012

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5.0 Discussion

Tree Condition and Recommended Works

The nine Manchester Poplars along the Southern boundary of the site vary in size with nearly all of the trees hanging over the adjacent footpath and the gardens of Number 22 and 24 High Greave. The adjacent footpath looks to be reasonably well used, although it is littered heavily with discarded drinks cans and bottles

The trees are large, with several leaning out from the site, and appear ungainly with massive arching down curved branches.

Management regimes for the trees usually involves pruning for safety, as the large arching limbs can become fragile and prone to break

The concerns of the neighbours regarding the possibility of the trees failing needs to be considered, as both the detached garages, fences and any members of the public using the gardens or the footpath would be in the trees target zone should they fail.

It is recommended that the trees are pruned in accordance with the attached schedule, and trees T6 and T8 are removed to ground level with two Extra Heavy Standard Fastigate Oak trees.

6.0 Conclusions

The trees surveyed were in the main found to be in variable condition with some trees requiring more works than others.

The long-term management of the trees by pruning needs to be planned and implemented to retain the Amenity value that these trees provide, with consideration to a replacement planting programme being put in place.

Pruning the trees will allow their retention for many years to come, whilst abating the nuisance likely to be caused should any of the trees fail.

Appendix 3: General Guidelines

- All work must be to BS 3998:1989 – *‘Recommendations for tree work’*
- Staff carrying out the tree work must be qualified and experienced contractors.
- Contractors should be covered by adequate public liability insurance.
- This report is, as stated based upon a visual inspection. BHF Landscapes Ltd shall not be responsible for events which happen after the inspection due to factors which were not apparent at the time.
- The acceptance of this report constitutes an agreement with the guidelines and the terms listed in this report.
- Any defects seen by a contractor of the employer that were not apparent to the BHF landscapes Ltd must be notified to BHF landscapes Ltd as soon as possible.
- No liability can be accepted in respect of the trees unless the recommendations of this report are carried out
- It is advisable to have trees inspected by an arboricultural consultant regularly. In this instance it is recommended that specific trees as noted in the **Tree Description and Recommendation at Appendix A** be inspected every two years.

Glossary of Terms and Abbreviations

Arboriculture -is the cultivation, management, and study of individual trees, shrubs, vines, and other perennial woody plants, for ornament and shelter.

Canker – Disease damaged area of a tree, usually caused by fungus or bacteria.

Co-dominant Stem – A stem which has grown in direct competition to the main stem and which has formed a substantial size affecting the appearance of the tree.

Crown Lift – The removal of the lowest branches. It allows more residual light and greater clearance underneath for pedestrians and vehicles. It is usual to specify the height of crown lift.

Crown Reduce – The reduction of a tree's height or spread while preserving its natural shape.

Crown Thin – The removal of some of the density of a tree's crown, (usually to a specified percentage) allowing more light through its canopy and reducing wind resistance.

Deadwood – a procedure involving the removal of dead, dying and diseased branches.

Dieback – Where branches are beginning to show signs of death usually at the tips in the crown.

Epicormic Shoots – Small branches that grow in uncharacteristic clusters around the base or the stem of a tree, usually as a result of bad pruning or some other stress factor.

Formative Pruning – The trimming of a tree to remove weaknesses and irregularities, for example crossing and rubbing branches. The formative pruning operation is aimed at reducing the potential for future weaknesses or problems within the tree's crown.

Included Bark – Where the bark on two adjoining branches or stems is growing tight together, forming a joint with limited physical strength.

Pole- A tree that has grown as a single stemmed tree with little or no significant crown developing. Usually found in woodland situations where pressure from adjacent trees inhibits the formation of lateral branches/crown

Pollarding – A method of tree management in which the main trunk of the tree is cut at about 4m, and the resulting branches are then cropped on a regular basis.

Remedial Pruning – The removal of old stubs, deadwood, Epicormic growth, rubbing or crossing branches and other unwanted items from the tree's crown. Sometimes referred to as crown cleaning.

RPA – Root Protection Area – The theoretical rooting area of a tree as defined in BS5837:2005 '*Tree's in relation to construction*'.

Topping – Topping is a form of pruning that removes terminal growth leaving a 'stub' cut end. Topping causes serious health problems to a tree.

Appendix A

Tree Description and Recommendations

Tree ref no	Age	Height (m)	Crown Height (m)	Stem Diam (m)	Crown spread (m)	Observations	Recommendations	Physiological condition	Life expectancy	Retention category									
	Species							Structural Cond											
	Latin name																		
T1	Mature/Over mature. Manchester Poplar Populus nigra species	14m	5m	25cm	<table><tr><td></td><td>N</td><td></td></tr><tr><td>W</td><td></td><td>E</td></tr><tr><td></td><td>S</td><td></td></tr></table>		N		W		E		S		Small tree, minor overhang to footpath	No works required at this time	Good Good	20yr	B
	N																		
W		E																	
	S																		
T2	Mature/Over mature. Manchester Poplar Populus nigra species	13m	5m	30cm	<table><tr><td></td><td>3</td><td></td></tr><tr><td>3</td><td></td><td>3</td></tr><tr><td></td><td>3</td><td></td></tr></table>		3		3		3		3		Small tree minor overhang to footpath	No works required at this time	Good Good	20yr	B
	3																		
3		3																	
	3																		
T3	Mature/Over mature. Manchester Poplar Populus nigra species	14m	5m	38cm	<table><tr><td></td><td>4</td><td></td></tr><tr><td>4</td><td></td><td>4</td></tr><tr><td></td><td>5</td><td></td></tr></table>		4		4		4		5		2 branches overhang boundary	Reduce 2 branches back to site boundary	Good Poor	20yr	B
	4																		
4		4																	
	5																		

T4	Mature/Over mature. Manchester Poplar Populus nigra species	14m	6m	40cm	<table><tr><td></td><td>3</td><td></td></tr><tr><td>4</td><td></td><td>4</td></tr><tr><td></td><td>5</td><td></td></tr></table>		3		4		4		5		Dead wood in crown. Tree overhangs boundary.	Reduce branches back to site boundary. Reduce crown by 10%	Good Poor	20yr	B
	3																		
4		4																	
	5																		
T5	Mature/Over mature. Manchester Poplar Populus nigra species	15m	6m	40cm	<table><tr><td></td><td>7</td><td></td></tr><tr><td>6</td><td></td><td>5</td></tr><tr><td></td><td>8</td><td></td></tr></table>		7		6		5		8		Dead wood in crown Poorly shaped tree. Tree overhangs boundary	Prune branches back to boundary	Good Poor	20yr	B
	7																		
6		5																	
	8																		
T6	Mature/Over mature. Manchester Poplar Populus nigra species	16m	6m	42cm	<table><tr><td></td><td>6</td><td></td></tr><tr><td>5</td><td></td><td>5</td></tr><tr><td></td><td>7</td><td></td></tr></table>		6		5		5		7		Dead wood in crown with several dead stubs. Branches extend over footpath and Neighbours garden	Remove tree to ground level. Replant with Fastigate Oak to ensure continuity of screening.	Fair Poor	20yr	U
	6																		
5		5																	
	7																		
T7	Mature/Over mature. Manchester Poplar Populus nigra species	15m	7m	42cm	<table><tr><td></td><td>5</td><td></td></tr><tr><td>3</td><td></td><td>3</td></tr><tr><td></td><td>6</td><td></td></tr></table>		5		3		3		6		Dead wood with several dead stubs in crown. Crown overhangs boundary Single stem forking to two main stems, previously pruned back to remove overhang to Neighbours garden	Prune to remove overhang to boundary	Fair Poor	20yr	B
	5																		
3		3																	
	6																		

T8	Mature/Over mature. Manchester Poplar Populus nigra species	18m	7m	53cm	<table><tr><td></td><td>7</td><td></td></tr><tr><td>7</td><td></td><td>7</td></tr><tr><td></td><td>8</td><td></td></tr></table>		7		7		7		8		Along with T9 this is one of the largest trees in the row. Tree has 5 main limbs in the crown, extending over the boundary to the neighbouring gardens. There is slime flux exuding from a wound at 1.5 metres from the base of the tree.	This is one of the trees of most concern. Remove tree to ground level. Replant with Fastigate Oak to ensure continuity of screening.	Poor Poor	20yr	U
	7																		
7		7																	
	8																		
T9	Mature/Over mature. Manchester Poplar Populus nigra species	17m	6m	68cm	<table><tr><td></td><td>7</td><td></td></tr><tr><td>5</td><td></td><td>7</td></tr><tr><td></td><td>8</td><td></td></tr></table>		7		5		7		8		The tree leans towards the adjacent properties and has previously had limbs removed. Limb to Northern side has decay extending into trunk, limb to Southern aspect has a clear split developing and extending into trunk	This is one of the trees of most concern. Prune to remove overhang from boundary.	Poor Poor	20yr	B
	7																		
5		7																	
	8																		

Photo to right shows decay developing in T9 to Northern aspect



Photo to left showing split and decay extending into trunk to Southern aspect of T9



Photo above showing overhang to boundary of trees from T/A centre towards properties on High Greave looking East from Wakefield road

Photo to right shows slime flux exuding from wound on T8





Photo looking west from footpath down to Wakefield road, showing overhang and proximity to properties on High Greave,