



ARBORICULTURAL REPORT

to BS 5837:2012 at:
Outline Masterplan Site
South Shields
Tyne & Wear

Prepared For:
Muse Developments Ltd and South Tyneside Council

June 2015



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1. Introduction

1.1 Instructions and Brief

- 1.1.1 I am instructed by Terry Shaw of Muse Developments Ltd, on behalf of Muse Developments Ltd and South Tyneside Council to visit the site and prepare my findings in a report.
- 1.1.2 The report is required in accordance with *BS 5837:2012 Trees in relation to design, demolition and construction –Recommendations*, to provide detailed, independent, arboricultural advice on the trees present, in the context of potential development.

1.2 Survey Details

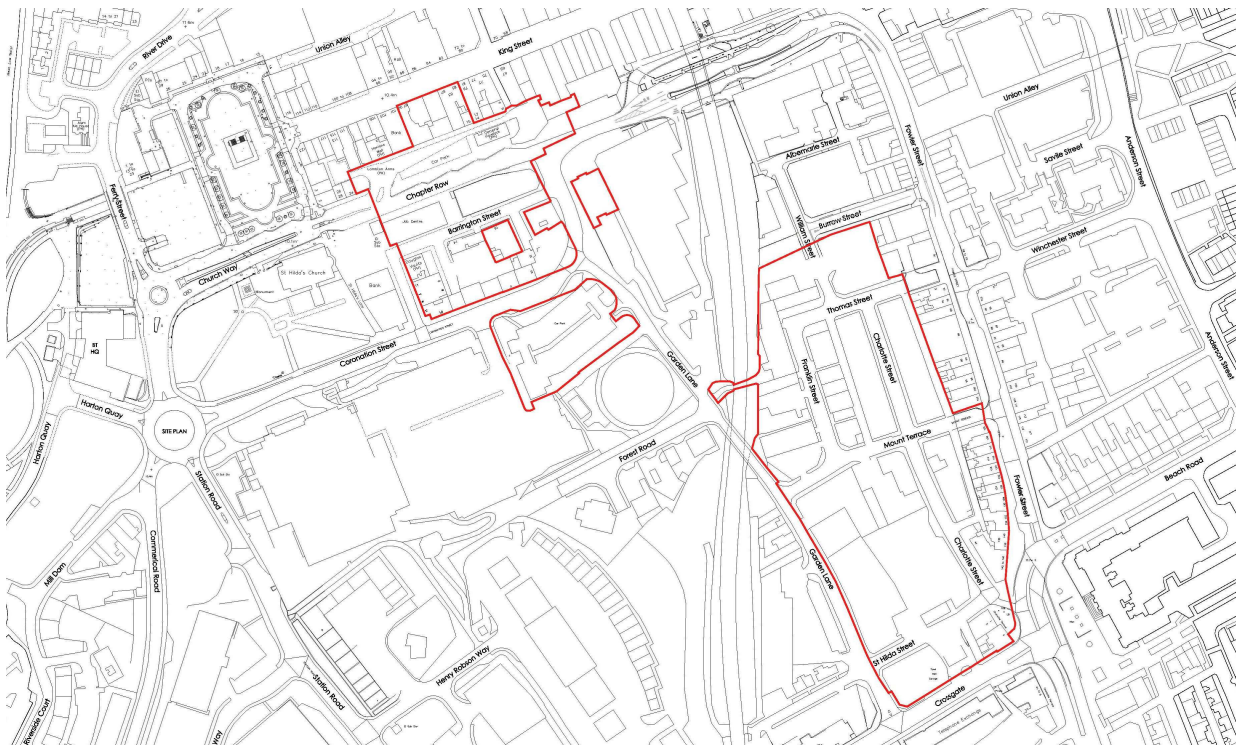
- 1.2.1 The survey took place during January 2015 by Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons) MICFor, ACIEEM (the author's qualifications and experience are included within **Appendix 1**).
- 1.2.2 The trees were surveyed visually from the ground using "Visual Tree Assessment" techniques and in accordance with the guiding principles of British Standard 5837:2012 (explanatory details regarding the survey methodology are included within **Appendix 2**).
- 1.2.3 A full explanation of the tree data can be found at **Appendix 3**. Full details of all the trees surveyed are found in **Appendix 4**. For tree locations please refer to the Tree Constraints Plan at **Appendix 5** and for the arboricultural implications of the new development refer to the Tree Impacts Plan at **Appendix 6**.

2. The Site

2.1 Location

2.1.1 The site is located in the town of South Shields, a coastal town in Tyne and Wear.

2.1.2 The tree survey was limited to the areas within the red lines, shown in the drawing below:



2.2 Site Description

2.2.1 The site is located within central South Shields; it consists of commercial buildings, car parking areas and access roads.

3. The Trees

3.1 Legal

- 3.1.1 Due to the large potential penalties for illegally carrying out work to protected trees, before authorising any tree works a check should be made with the Local Planning Authority to see if the trees are covered by a Tree Preservation Order or if they are within a Conservation Area. If either applies, then statutory permission is required before any works can take place.
- 3.1.2 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance. All tree work should be carried out according to British Standard 3998: 2010 *Tree Work - Recommendations*.

3.2 Summary of Results

- 3.2.1 The tree survey revealed 23 items of vegetation, consisting of 21 individual trees and 2 groups of trees.
- 3.2.2 All of the surveyed vegetation is low value, retention category 'C' (explanatory details regarding the retention categories are included within Appendix 3).
- 3.2.3 The surveyed trees are largely comprised of very recently established tree planting as part of soft landscaping for the car park site or roadside planting, and low value shrubs that have recently established on unmanaged land.
- 3.2.4 Collectively the young planted trees provide some limited landscape value to the surrounding area, yet individually they are lower value trees.
- 3.2.5 Occasional small trees and shrubs have been detailed on the attached tree plan but were not surveyed in detail.

3.3 Arboricultural Impact Assessment

- 3.3.1 It is proposed to redevelop South Shields Town Centre. The work will consist of the demolition of properties on King Street, Barrington Street, Coronation Street, Fowler Street, Thomas Street, Franklin Street, Charlotte Street, Mount Terrace, St Hilda Street and Crossgate and existing bus stands on Chapter Row; and the erection of A1 retail uses (7,390sq m), A3 restaurants and cafés (2,060sq m), D2 cinema (2,745sq m) and an A1 foodstore (6,039sq m) with multi-storey and surface car parking.
- 3.3.2 The proposal has been provided by my client and informs the Tree Impact Plan at appendix 6.
- 3.3.3 The redevelopment of the site will require the removal almost all of the surveyed vegetation (T1 to T5 and G9 to T23)
- 3.3.4 It is possible that some of the better quality recently established planted trees could be re-located as part of the new landscaping scheme. Yet in general it is recommended to use the development of the site as an opportunity to replace them with better quality trees and shrubs.
- 3.3.5 A small group of three recently planted Rowan trees may be able to be retained (T6, T7 & T8); however, if the trees required to be removed as part of the surrounding site works then their loss could be mitigated for by replacement planting elsewhere within the site boundaries.
- 3.3.6 While the removal of the existing trees may have some negative impact on the surrounding amenity in the short term, the new development includes extensive new tree planting of semi-mature trees that will mitigate the removals.
- 3.3.7 In the longer term, as the new trees become established, they will provide greater visual amenity and more robust tree cover than is currently provided.

4. Signature

I trust this report provides all the required information.

Signed



.....
Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons), MICFor, AIEEM.

26th June 2015

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Appendices

Appendix 1: Authors Qualifications and Experience

Appendix 2: Survey Methodology and Limitations

Appendix 3: Explanation of Tree Descriptions

Appendix 4: Tree Data

Appendix 5: Tree Constraints Plan

Appendix 6: Tree Impacts Plan

Appendix 1: Authors Qualifications & Experience

Mr Adam Winson Chartered Arboriculturist, MSc, BSc (Hons), ND, MICFor, AIEEM.

Experience

I have worked within the tree care profession for 18 years. I am a Chartered Arboriculturist and a Registered Consultant with the Institute of Chartered Foresters. My work ranges from individual expert tree inspections to managing trees on major multimillion pound housing and park developments and highway and infrastructure projects. My work often involves trees with Preservation Orders, insurance claims, subsidence claims and litigation. In 2010 I obtained an MSc in Arboriculture and Urban Forestry (with distinction), also gaining the top student award, and have had articles published in industry magazines and have original research published by the UK Forestry Commission.

Membership of Professional Bodies

Professional Member and Registered Consultant of the Institute of Chartered Foresters

Associate of the Chartered Institute of Ecology and Environmental Management

Education and Qualifications

MSc Arboriculture and Urban Forestry (Distinction) University of Central Lancashire - Myerscough College. 2006 -2009

BSc (Hons) Environmental Conservation 2:1. Sheffield Hallam University. 2002 2005

National Diploma in Arboriculture University of Lincoln/ Riseholme.1996-1998

Previous Experience

Consulting Arboriculturist at JCA Ltd. Halifax, Yorkshire 2005 to 2012

Freelance Arborist for various companies. Sheffield, South Yorkshire 2002 - 2005

Arborist for AAA Arbor /Sydney City Council Australia 2001- 2002

Arborist for The Tree Surgeon, Brisbane, Australia 2000- 2001

Groundsman/Climber at Lindsey Tree Services, Grimsby, Lincolnshire 1998 -2000

Groundsman/Climber at Freelance Baumpflege, Frankfurt, Germany 1998

Freelance Groundsman/Climber for various companies, Lincoln Area 1996-1998

Training, Awards & Qualifications

MSc Top Student Award University of Central Lancashire 2010

Bats and Bat Surveys- a foundation course for ecological consultants. BCT 2007

Arboriculture & Bats: A Guide for Practitioners BCT and AA 2007

CPRE: Prize for best BSc dissertation on the theme of land management 2006

Appendix 2: Survey Methodology and Limitations of Report

The survey was undertaken in accordance with British Standard 5837 (2012) *Trees in relation to design, demolition and construction –Recommendations*. The trees were assessed objectively and without reference to any proposed site layout. The trees were surveyed from the ground using 'Visual Tree Assessment' (VTA) methodology. VTA is appropriate and is endorsed by industry guidance. It is used by arboriculturists to evaluate the structural integrity of a tree, relying on observation of trees biomechanical and physiological features. Measurements are obtained using a diameter tape, clinometer, distometer and loggers tape. Where this is not practical measurements are estimated. Tree groups have been identified in instances as defined in BS 5837 (2012). Shrubs and insignificant trees may have been omitted from the survey.

This report represents a BS5837 tree survey and should not be accepted as a detailed tree safety inspection report; however, tree related hazards are recorded and commented upon where observed, yet no guarantee can be given as to the absolute safety or otherwise of any individual tree. All recommended tree work must be to BS 3998: 2010 - '*Tree Work: Recommendations*'.

The findings and recommendations contained within this report are valid for a period of twelve months from the date of survey. The author shall not be responsible for events which happen after this time due to factors which were not apparent at the time, and the acceptance of this report constitutes an agreement with these guidelines and terms.

Appendix 3: Explanation of Tree Descriptions

HEIGHT of the tree is measured from the stem base in metres. Where the ground has a significant slope the higher ground is selected.

CROWN HEIGHT is an indication of the average height at which the crown begins and includes information of the first significant branch and direction of growth.

STEM DIAMETER is measured at 1.5 metres above (higher) ground level. Where the tree is multi-stemmed at this point; the diameter is measured close to ground level or else a combined stem diameter is calculated.

CROWN SPREAD is measured from the centre of the stem base to the tips of the branches in all four cardinal points.

AGE CLASS of the tree is described as young, semi-mature, early-mature, mature, or over-mature.

PHYSIOLOGICAL CONDITION is classed as good, fair, poor, or dead. This is an indication of the health of the tree and takes into account vigour, presence of disease and dieback.

STRUCTURAL CONDITION is classed as good, fair or poor. This is an indication of the structural integrity of the tree and takes into account significant wounds, decay and quality of branch junctions.

LIFE EXPECTANCY is classed as; less than 10 years, 10-20 years, 20-40 years, or more than 40 years. This is an indication of the number of years before removal of the tree is likely to be required.

Retention Categories

A (marked green on Appendix 5) = retention most desirable. These trees are of very high quality and value with a good life expectancy.

B (marked in blue on Appendix 5) = retention desirable. These trees are of good quality and value with a significant life expectancy.

C (marked in grey on Appendix 5) = trees which could be retained. These trees are of low or average quality and value, and are in adequate condition to remain until new planting could be established.

U (marked in red on Appendix 5) = trees for removal. These trees are in such a condition that any existing value would be lost within 10 years.

Appendix 4: Tree Data

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management		
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	First branch	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiology	Structural	Life Expectancy	Amenity	Category	Works	Priority (Mths)
T1	Small-Leafed Lime	<i>Tilia cordata</i>	Semi-mature	5	1	140	No	2.5n	2	2.5	3	2	1.5	No visual defects	Single stemmed; Slight lean; Twin stemmed at 2m; Tight union; Partially included bark	Normal	Street tree situated within footpath area. Planted within steel grill.	Good	Fair	20 to 40 yrs	Mod	C	No action (removal required to facilitate development)	NA
T2	Small-Leafed Lime	<i>Tilia cordata</i>	Semi-mature	5	1	130	No	2n	2	2.5	2	2.5	2	No visual defects;	Single stemmed; Vertical; Bark damage; Minor decay	Normal; Minor dieback	Street tree situated within footpath area. Planted within steel grill.	Fair	Fair	10 to 20 yrs	Mod	C	No action (removal required to facilitate development)	NA
T3	Small-Leafed Lime	<i>Tilia cordata</i>	Semi-mature	4.5	1	120	No	2n	2	2	2	1.5	No visual defects	Single stemmed; Vertical	Small / sparse	Street tree situated within footpath area. Planted within steel grill.	Fair	Fair	10 to 20 yrs	Mod	C	No action (removal required to facilitate development)	NA	
T4	Small-Leafed Lime	<i>Tilia cordata</i>	Semi-mature	4	1	120	No	2n	2	2.5	3	1.5	1.5	No visual defects	Single stemmed; Vertical	Normal; Small / sparse	Street tree situated within footpath area. Planted within steel grill.	Fair	Good	10 to 20 yrs	Mod	C	No action (removal required to facilitate development)	NA
T5	Small-Leafed Lime	<i>Tilia cordata</i>	Semi-mature	4	1	110	No	2e	2	1	2	2	1	No visual defects	Single stemmed; Vertical	Small / sparse; Minor dieback	Street tree situated within footpath area. Planted within steel grill.	Fair	Fair	<10 yrs	Low	C	No action (removal required to facilitate development)	NA
T6	Sorbus	<i>Sorbus aucuparia</i>	Young	3	1	80	No	1n	1.5	0.5	1	0.5	0.5	No visual defects	Single stemmed; Vertical	Normal; Minor dieback	Recent planting with stakes & tie	Fair	Good	10 to 20 yrs	Low	C	No action	NA

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management		
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	First branch	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiology	Structural	Life Expectancy	Amenity	Category	Works	Priority (Mths)
T7	Sorbus	<i>Sorbus aucuparia</i>	Young	3	1	80	No	1n	1.5	0.5	1	0.5	0.5	No visual defects	Single stemmed; slight lean.	Normal; Minor dieback	Recent planting with stakes & tie	Fair	Good	10 to 20 yrs	Low	C	No action	NA
T8	Sorbus	<i>Sorbus aucuparia</i>	Young	3	1	90	No	1n	1.5	0.5	1	0.5	0.5	No visual defects	Single stemmed; Vertical	Normal	Recent planting with stakes & tie	Fair	Good	10 to 20 yrs	Low	C	No action	NA
G9	Field Maple	<i>Acer campestre</i>	Young	4	1	60	No	2n	2	0.5	1	0.5	0.5	No visual defects	Single stemmed; Vertical; Bark damage from strimmer	Normal	Group of 3 recent plantings with stakes	Good	Fair	20 to 40 yrs	Mod	C	No action (removal required to facilitate development)	NA
T10	Field Maple	<i>Acer campestre</i>	Young	4	1	60	No	2n	2	0.5	1	0.5	0.5	No visual defects	Single stemmed; Vertical;	Normal	Recent planting	Good	Fair	20 to 40 yrs	Mod	C	No action (removal required to facilitate development)	NA
T11	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	Young	5	1	90	No	1n	2	0.5	1	0.5	0.5	No visual defects	Single stemmed; Vertical	Normal	Recent planting	Good	Fair	20 to 40 yrs	Mod	C	No action (removal required to facilitate development)	NA
T12	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	Young	3	1	80	No	0	1	0.5	1	0.5	0.5	No visual defects	Single stemmed; Epicormic growths	Small / sparse	Recent planting			10 to 20 yrs	Low	C	No action (removal required to facilitate development)	NA
T13	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	Young	4.5	1	80	No	0	1	0.5	1	0.5	0.5	No visual defects	Slight lean	Normal	Recent planting	Good	Fair	20 to 40 yrs	Mod	C	No action (removal required to facilitate development)	NA

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management		
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	First branch	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiology	Structural	Life Expectancy	Amenity	Category	Works	Priority (Mths)
T14	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	Young	4.5	1	80	No	0	1	0.5	1	0.5	0.5	No visual defects	Slight lean	Normal	Recent planting	Good	Fair	20 to 40 yrs	Mod	C	No action (removal required to facilitate development)	NA
T15	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	Young	4.5	1	80	No	0	1	0.5	1	0.5	0.5	No visual defects	Slight lean	Small / sparse	Recent planting	Good	Fair	20 to 40 yrs	Mod	C	No action (removal required to facilitate development)	NA
T16	Field Maple	<i>Acer campestre</i>	Young	4	1	60	No	1n	1	0.5	1	0.5	0.5	No visual defects	Single stemmed; Epicormic growths	Normal	Recent planting	Fair	Fair	10 to 20 yrs	Low	C	No action (removal required to facilitate development)	NA
T17	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	Young	5	1	90	No	1n	2	0.5	1	0.5	0.5	No visual defects	Single stemmed; Vertical	Normal	Recent planting	Good	Fair	20 to 40 yrs	Mod	C	No action (removal required to facilitate development)	NA
T18	Field Maple	<i>Acer campestre</i>	Young	4	1	60	No	1n	1	0.5	1	0.5	0.5	No visual defects	Single stemmed; Epicormic growths	Normal	Recent planting	Fair	Fair	10 to 20 yrs	Low	C	No action (removal required to facilitate development)	NA
G19	Mountain Ash	<i>Sorbus aucuparia</i>	Young	3	1	60	No	2n	2	0.5	1	0.5	0.5	No visual defects	Single stemmed; Vertical	Normal; Small / sparse	Line of 9 recent plantings with stakes and ties	Good	Good	10 to 20 yrs	Low	C	No action (removal required to facilitate development)	NA
T20	Field Maple	<i>Acer campestre</i>	Young	4	1	70	No	1n	2	0.5	1	0.5	0.5	No visual defects	Single stemmed	Normal	Recent planting	Good	Good	10 to 20 yrs	Low	C	No action (removal required to facilitate development)	NA

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management		
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	First branch	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiology	Structural	Life Expectancy	Amenity	Category	Works	Priority (Mths)
T21	Flowering Pear	<i>Pyrus calleryana 'Chanticleer'</i>	Young	5	1	110	No	2n	2	1.5	1	1.5	1	No visual defects	Single stemmed; Vertical	Normal	Well established recent planting	Good	Good	20 to 40 yrs	Mod	C	No action (removal required to facilitate development)	NA
T22	Field Maple	<i>Acer campestre</i>	Young	5	1	130	No	2e	2	2	2	2	2	No visual defects	Single stemmed; Vertical	Normal	Well established recent planting	Good	Good	40+	Mod	C	No action (removal required to facilitate development)	NA
T23	Flowering Pear	<i>Pyrus calleryana 'Chanticleer'</i>	Young	5	1	110	No	2n	2	1.5	1	1.5	1	No visual defects	Single stemmed; Vertical	Normal	Well established recent planting	Good	Good	20 to 40 yrs	Mod	C	No action (removal required to facilitate development)	NA



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TREE CONSULTANTS

**Appendix 5:
Tree Constraints Plan**
Outline Planning Application,
South Shields
Ref: AWA1306

BRITISH STANDARD BS37:2012
RETENTION CATEGORIES
Definitions of these categories can be found in Appendix 2 of the report.

SCALE: 1:1000 PAPER: A1

	CATEGORY A: HIGH VALUE RETENTION MOST DESIRABLE
	CATEGORY B: MODERATE VALUE RETENTION DESIRABLE
	CATEGORY C: LOWER VALUE COULD BE RETAINED
	CATEGORY U: FOR REMOVAL
	RPA: ROOT PROTECTION AREA
	TREE STEM



ACCOMMODATION SCHEDULE			
01	Digital Media Centre	10000sqft G/A	approx. over 3 floors
02	Market Place	8000sqft G/A	approx. over 2 floors
03	Transport Interchange	10000sqft G/A	over 2 floors
04	(New Building)	8000sqft G/A	over 2 floors
05	Foodstore	5000sqft G/A	300 parking spaces
06	Car Park	300 spaces	over 4 floors
07	Leisure Site Cinema	7800sqft G/A	at ground at 3rd floor
08	15 cinema, approx. 800 seats	18000sqft G/A	at ground
09	Retail	4000sqft G/A	over 2 floors
10	Retail	11000sqft G/A	over 2 floors
11	Retail	5000sqft G/A	Single Storey
12	Retail	10000sqft G/A	Single Storey
13	Cafe	3000sqft G/A	over 2 floors
14	Retail	8000sqft G/A	over 2 floors
15	Cafe	2500sqft G/A	Single Storey
Existing Buildings:			
A	15 Barrington Street	1000sqft G/A	
B	17 Barrington Street	600sqft G/A	

Appendix 6:
Tree Impacts Plan
 Outline Planning Application,
 South Shields
 Ref: AWA1306
 BRITISH STANDARD 5837:2012
 RETENTION CATEGORIES
Classification of trees and groups set out
 found in Appendix 2 of the report.

SCALE: 1:1000 PAPER: A1

- TREE TO BE RETAINED
- TREE TO BE REMOVED
- NEW TREE PLANTING
- RPA ROOT PROTECTION AREA
- TREE STEM

