



ARBORICULTURAL REPORT

to BS 5837:2012 at:

***Proposed Transport Interchange
South Shields
Tyne & Wear***

Prepared For:
Nexus, Muse Developments Ltd and South Tyneside Council

July 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 Nexus, 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, access roads, a railway line and an adjacent bus stop terminal.

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 1 group of small trees and shrubs, labelled G1 on the attached plans and data schedule.
- 3.2.2 The surveyed vegetation consists of shrubby natural regeneration, predominantly comprised of elder shrubs and young ash trees, situated along sloped railway banking.
- 3.2.3 The surveyed vegetation is all low value, retention category 'C' (explanatory details regarding the retention categories are included within Appendix 3).
- 3.2.4 The surveyed vegetation has only limited long term prospects and is poorly suited for its location, along steeply sloped railway line banking.

3.3 Arboricultural Impact Assessment

- 3.3.1 It is proposed to demolish the existing Metro station on King Street, Keppel Street Post Office, 3, 5 and 7 Keppel Street and properties on William Street, Burrow Street and Albermarle Street and erect a new Transport Interchange, comprising new interchange building, Metro station, bus station, retail unit and passenger drop-off area and separate retail unit with office accommodation at first and second floors.

- 3.3.2 The development proposals have been provided by my client and inform the Tree Impacts Plan at Appendix 6.
- 3.3.3 The new development will require the removal of G1. Due to the low value and limited prospects of trees and shrubs within G1, the development provides the opportunity to replace them with better quality trees and shrubs elsewhere within the application site boundaries.
- 3.3.4 The new development includes extensive new tree planting of semi-mature trees that will mitigate the removal of G1. 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 by the existing surveyed vegetation.

4. Signature

I trust this report provides all the required information.

Signed



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

1st July 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 Descriptions and Recommendations**
- 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.

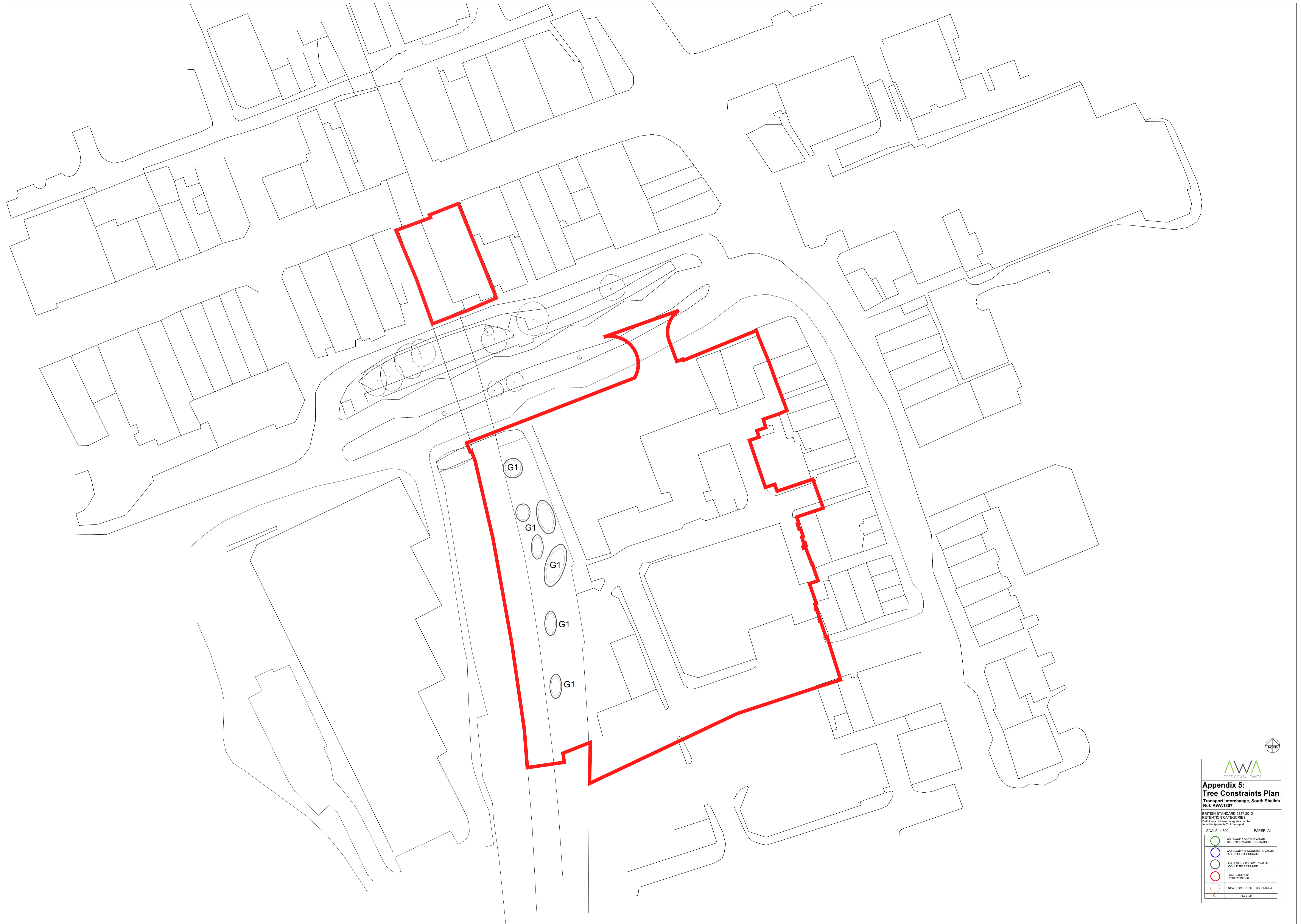
B (marked in blue on Appendix 5) = retention desirable. These trees are of good quality and value with a significant life expectancy.


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)	First branch	Ave Height	N	E	S	W	Comments	Physiology	Structural	Life Expectancy	Amenity	Category	Works	Priority (Mths)
G1	Elder, Ash	<i>Sambucas nigra</i> , <i>Fraxinus excelsior</i>	Young & Semi-mature	4	1	200	1n	1	See plan				Group of shrubby low value natural regeneration situated along sloped railway banking. Limited access around stem bases prevented a full detailed inspection. Multiple-stemmed Elder shrubs dominant, with occasional single-stemmed ash saplings. Occasional dieback to Elder crowns. Limited long term future prospects due to location.	Fair	Fair	10 to 20 yrs	Low	C	No action (Removal required as part of new development)	NA








Appendix 5:
Tree Constraints Plan
 Transport Interchange, South Shields
 Ref: AWA1307

BRITISH STANDARD 5837:2012
 RETENTION CATEGORIES
 Dimensions of trees categories can be found in Appendix 2 of the report.





SCALE: 1:500	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






Appendix 6:
Tree Impacts Plan
 Transport Interchange, South Shields
 Ref: AWA1307

BRITISH STANDARD 5837:2012
 RETENTION CATEGORIES
 Definitions of these categories can be found in Appendix 2 of the report.

SCALE: 1:500	PAPER: A1
 TREE TO BE RETAINED	 TREE TO BE REMOVED
 NEW TREE PLANTING	 RPA: ROOT PROTECTION AREA
 TREE STEM	