

Tree Survey and Constraints Plan

**Penallta Colliery
Ystrad Mynach**

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1.0 Date of survey

1.1 January 2024

2.0 Surveyor

2.1 Tim Pursey

3.0 Instructions

3.1 As a result of a potential planning application, I am instructed on behalf of the owners of the property to carry out a tree survey in accordance with BS5837:2012 *Trees in Relation to Design, Demolition and Construction – Recommendations* in order to aid in the design of proposed development within the site.

3.2 The report includes:

- An indication of the constraints placed on the design by the trees on site
- Site plan detailing the existing trees on site – drawing TP 3101/2312/TCP appended
- A schedule indicating the tree survey results

4.0 Report limitations

4.1 All inspections were made from ground level, using binoculars where necessary. Should a more detailed inspection, by climbing or by elevated platform, be required then this will be highlighted within the survey recommendations.

4.2 I have not contacted the local authority to determine the legal status of any trees either on or around the site. If any are subject to legal protection, then prior permission must be obtained from the local authority before undertaking tree works.

4.3 Trees are living, dynamic organisms. Their health and overall condition changes as the trees grow and can be affected by external conditions. For this reason, the condition survey and any recommendations given are valid for a period not exceeding one calendar year from the date of issue of this report.

5.0 Findings

- 5.1 The attached site plan is based upon a topographical survey of the site which identifies tree reference numbers and which also indicates the positions and crown spreads of the trees on site.
- 5.2 The areas in red lines surrounding the trees indicate the theoretical extent of root protection areas within each group. These represent areas where construction activities should if possible be avoided (if trees retained) and care taken when removing any existing structures including services, hard surfacing etc.
- 5.3 The site consists of a long-disused colliery. Vegetation has grown unmanaged for decades and now covers much of the site; this has made accessing certain areas very difficult. The majority of vegetation consists of Goat Willow and Birch with occasional other species, all of which is of low quality.
- 5.4 To the northern part of the site, more mature trees grow. These are mostly Willow and Birch and appear more mature. These have grown to form a small copse which forms a useful screen to Penallta Industrial Estate to the north. The copse has been used as a dumping ground for several years and would benefit from some positive management.
- 5.5 Along the western boundary to the property grow several more mature trees, mostly Oak. Again, these form a useful screen to adjacent newer housing.
- 5.6 The vast majority of the site is populated with low quality vegetation which should not present any constraint to development.

5th February 2024
Tim Pursey
Chartered Arboriculturist

Tree Survey

Key:

Height:	Estimated in metres.
Stem diameter:	Measured at 1.5m above ground level.
Branch spread:	Estimated in metres at four cardinal points.
Height of crown Clearance:	Height in metres (estimated) above adjacent ground level to inform on ground clearance, crown stem ratio and shading.
Age class:	<u>Y</u> oung tree in first third of its life expectancy <u>M</u> iddle age tree <u>M</u> ature trees <u>O</u> ver <u>M</u> ature <u>V</u> eteran
Category grading:	A/B/C/U – In accordance with BS 5837:2012 <i>Trees in relation to Design, Demolition and Construction – Recommendations</i> . Attached plan indicates rooting areas (circled in red). The colours used to mark their stems indicate the following: Category A – High Quality - stems are marked in green on the attached plan. Category B – moderate quality - are marked in dark blue. Category C- low quality - are marked in grey. Category U – very poor quality - are marked in dark red.

All surveys and inspections made from ground level unless otherwise stated.

Penallta Colliery, Ystrad Mynach

Tree No.	Species	Height (m)	Stem Dia. (mm)	Crown Radius (m)				Crown Ht. (m)	Age Class	Remaining Contribution	Structural and Physiological Condition	Preliminary Management Recommendations	Retention Category
				N	E	S	W						
G1	Willow, Birch	12-15	200-450					2	Mat	20-40	Copse/woodland used as local dumping ground. Several Willows collapsing. Would benefit from some management	Consider clearing rubbish and debris and management	B2
G2	Mostly Oak, Willow	18	400-500					2.5	Mat	40+	Group of mature trees growing at boundary. Useful screen to adjacent homes	None	B1 B2
G3	Mostly Oak	18	400-500					2.5	Mat	40+	Group of mature trees growing at boundary. Useful screen to adjacent homes	None	B1 B2
G4	Birch, Goat Willow, Buddleia, occasional Pine	5-7	100-200					1	Mid - Mat	20-40	Large area of self-sown vegetation. Unmanaged, presumably since the colliery closed in 1991. Unexceptional	None at present	C1
G5	Birch, Goat Willow, Buddleia, occasional Pine	5-7	100-200					1	Mid - Mat	20-40	Large area of self-sown vegetation. Unmanaged, presumably since the colliery closed in 1991. Unexceptional	None at present	C1
G6	Birch	7-9	200-300					2	Mid	20-40	Group of self-set trees	None	C1

Bibliography

British Standard 3936-1:1992	Nursery Stock- Specification for Trees and Shrubs
British Standard 3998:2010	Recommendations for Tree Work
British Standard 4428:1989	Code of Practice for General Landscaping Operations
British Standard 5837:2012	Trees in Relation to Design, Demolition and Construction – Recommendations

Tree Preservation Orders: A Guide to The Law and Good Practice	2000
Subsidence of Low-Rise Buildings	2000 Institution of Structural Engineers
Standards-Chapter 4.2 Building Near Trees	2003 National House Building Council

Guidelines for The Planning, Installation and Maintenance of Utility Services in Proximity to Trees 1995 National Joint Utilities Group

Controlling Water Use of Trees to Alleviate Subsidence Risk 2004 Horticulture Link Project 212

Inspection of Highway Trees Roads 52/75	1975 Department of the Environment Circular
Site Layout Planning for Daylight and Sunlight	2007 Littlefair, P.J. BRE 209

Forestry Commission Information Notes	
Phytophthora Pathogens of Trees: Their Rising Profile in Europe	FCIN030 1999
Forests, Carbon and Climate Change: the UK Contribution	FCIN048 2003

Forestry Commission Bulletin Climate Change: Impact on UK Forests	FCBU125 2002
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Essential Soil Science	2003	Ashman, M.R. & Puri, G.
Visual Amenity Valuation of Trees and Woodlands	2003	Helliwell, D.R.
The Hillier Manual of Trees and Shrubs	2004	Hillier, J. & Coombes, A.
The Arboriculturalist's Companion	1990	James, N.D.G.
Collins Tree Guide	2004	Johnson, O. & More, D.
Habitat Management for Invertebrates	2001	Kirby, P.
Dead Wood Matters: The Ecology and Conservation of Saproxylic Invertebrates in Britain	1992	Kirby, K.J. & Drake, C.M.
Physiology of Woody Plants	1979	Kramer, P.J. & Kozlowski, T.T.
Hazards from Trees: A General Guide	2000	Lonsdale, D.
Principles of Tree Hazard Assessment and Management	2001	Lonsdale, D.
The Body Language of Trees	2003	Mattheck, C. & Breloer, H
Trees of Britain and Northern Europe	1978	Mitchell, A.
Fungal Strategies of Wood Decay in Trees	2004	Schwarze, F., Engels, J, Mattheck, C.
Modern Arboriculture	2003	Shigo, A.L.
Diagnosis of Ill-Health in Trees	2000	Strouts, R.G. & Winter, T.G.
Soil Types: A Field Identification Guide	1989	Trudgill, S.
Manual of Wood Decays in Trees	2003	Weber, K. & Mattheck, C.
Reducing Infrastructure Damage by Tree Roots	2003	Costello L.R. & Jones K.S.
Tree Roots in the Built Environment	2006	Roberts, Jackson, Smith
Porous Pavements	2005	Ferguson, B.K.

Publications from Arboricultural Advisory and Information Service

APN1 Driveways Close to Trees	Patch, D. & Dobson, M.
APN12 Through the Trees to Development	Patch, D. & Holding, B.
ARIN 130/95/ARB Tree Root Systems	Dobson



Category C trees

Category B trees

Root protection area

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TITLE

Tree Constraints Plan
Penallta Colliery

SIZE

A1

CAGE CODE

TP 3101/2312/TCP

DWG NO

5th Feb 2024

REV

SHEET

SCALE

1:500