

ARBORICULTURAL METHOD STATEMENT **YSGOL YR HAFOD, JOHNSTOWN**

25/08/2021

SEQUENCE OF OPERATIONS

From commencement of the above development, the following methodology shall be implemented in the manner and sequence described:

1. Tree surgery works
2. Erect temporary tree protective fencing
3. Pre-commencement site inspection
4. Main engineering/construction phase
5. Removal of temporary fencing
6. Landscaping within RPA of trees

1. Tree Surgery Works

1. Before the erection of the temporary protective fencing, all tree removal shall be implemented in accordance with the Tree Survey Schedule at **Appendix 1**
2. All possible efforts must be made to prevent damage to retained trees including potential root incursion or compaction caused by vehicle access.
3. All arboricultural works shall conform to the recommendations of BS 3998 (2010) 'Recommendations for Tree Work'
4. All operatives shall be equipped with and use personal protective equipment (PPE) in accordance with current Health & Safety Executive current directives and industry codes of practice.
5. Performance of all arboricultural operations and use of equipment shall be in accordance with current Health & Safety Executive current directives and industry codes of practice.

2. Erect Temporary Tree Protective Fencing

1. Prior to commencement of any engineering works, construction, preparation, excavation, or material deliveries the main contractor shall erect the temporary protective fencing as detailed in the 'Tree Protection Specification' and in the location indicated on the Tree Protection Plan.
2. Tree protective fencing to be erected as indicated on the tree protection plan and remain in situ for the duration of all work.
3. Any damage occurring to protective fencing during the development phase shall be made good by the main contractor.

3. Pre-Commencement Site Inspection

1. The erection of all tree protection measures outlined in this AMS and as indicated on the Tree Protection Plan will be inspected by a client representative immediately after erection. Photographic evidence of the location and specification of all protective fencing will be forwarded to all interested parties upon completion.
2. Any required works that deviate from the AMS and Tree Protection Plan will be first agreed with the contract Arboricultural Consultant and WCBC Tree Officer prior to commencing.

4. Main Engineering/Construction Phase

1. There shall be no storage of construction material, site parking, site accommodation or equipment in any area designated as the Root Protection Area (RPA) and Construction Exclusion Zone (CEZ) and enclosed by Temporary Protective Fencing except in specific cases where agreed otherwise with the Arboricultural Consultant.
2. No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within 10 metres of the trunk of a tree that is to be retained. No fires will be lit
3. The site agent shall supervise deliveries by self-loading crane, with vehicles positioned in such a manner that retained trees are not at risk of damage
4. Any damage to trees as a result of construction/engineering work will be logged and reported to the project Arboricultural Consultant

Avoiding Damage to Stems and Branches

- Care shall be taken when planning site operations in proximity to trees to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without encountering retained trees. Such contact can result in serious injury resulting in safe retention impossible

On Site Storage of Spoil and Building Materials

- Prior to and during all site construction works no spoil will be stored within the Root Protection Area of any tree on or adjacent to the site even if proposed site work is to be within the crown spread. Any encroachment within this protected area will only be by the prior agreement of the project arboricultural consultant.

5. Remove all Temporary Tree Protective Fencing

1. Tree Protective fencing will only be removed upon completion of all engineering/construction work within each phase and once all machinery associated with the works has left site.

6. Landscaping within RPA of Trees

1. There shall be **no rotovating** of ground within any area designated as a Root Protection Area (RPA) and Construction Exclusion Zone (CEZ) and enclosed by Temporary Protective Fencing.
2. No hard-landscaping works or excavation for cables or any other service should be installed within the Root Protection Area (RPA) and Construction Exclusion Zone (CEZ) without the written consent of the LPA.

Useful Contacts

Arboricultural Consultant

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TREE PROTECTIVE FENCING

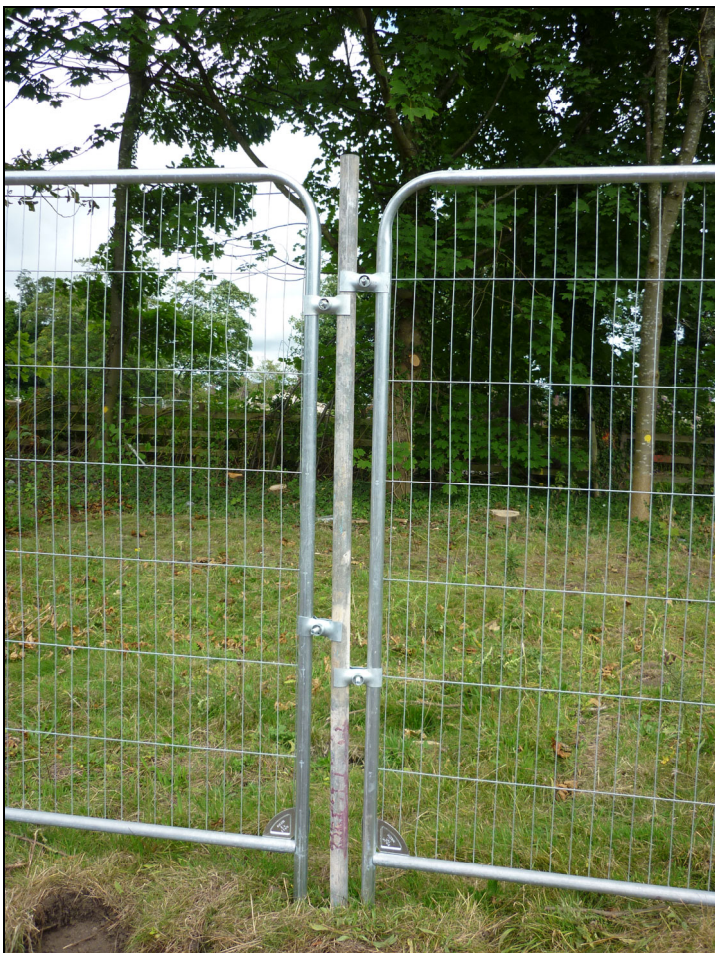
- 1 Before the commencement of any site excavations and subsequent construction works (other than those set out in the schedule of tree works contained in this document), protective fencing will be erected as detailed on the Tree Protection Plan and as specified below. The LPA Tree Officer will be given 5 days' notice upon completion of the fencing in order to inspect and approve prior to the commencement of any site works.
- 2 The fencing will consist of a scaffold framework in accordance with Figure 2 of BS 5837 – 2012 (illustration below) comprising a metal framework, both vertical and horizontal, well braced to resist impacts. Vertical tubes will be spaced at a maximum interval of 3m. Onto this, weldmesh panels shall be securely fixed with wire or scaffold clamps. Weldmesh panels on rubber or concrete feet are not considered resistant to impact and for this reason will not be used. The site manager or other suitably qualified appointed person will be responsible for inspecting the protective fencing on a daily basis; any damage to the fencing or breaches of the fenced area will be rectified immediately.
- 3 Clearly legible weatherproof signage, stating "Protected Trees – Exclusion Zone" shall be attached to the fencing 1.5m from the ground, facing out of the Tree Protection Zone located at regular intervals along the fence line.
- 4 The fencing will remain in place until completion of all site works and then only removed when all site traffic is removed from site
- 5 Other than works detailed within this method statement or approved in writing by the Local Planning Authority (LPA), no works including storage or dumping of materials shall take place within the exclusion zones defined by the protective fencing.

Protective Fencing Detail

The fence types are shown on the Tree Protection Plan with the following colour key: -

1. **Magenta** (Trees)

2.0M high heavy-duty Heras panels (with extra central support bar) mounted on scaffold poles (driven into the ground) and secured with anti-tamper bolts – as illustrated below.



Tree Protective Fencing Specification

Appendix One
Tree Survey Schedule

TREE SURVEY SCHEDULE (BS5837: 2012)

Tree Solutions

Arboricultural Consultants

SITE:	YSGOL YR HAFOD JOHNSTOWN, BANGOR RD, JOHNSTOWN, WREXHAM, LL14 2SW
CLIENT:	WYNNE CONSTRUCTION
BRIEF:	ARBORICULTURAL IMPACT ASSESSMENT

SURVEYOR:	A. HENDERSON
ASSESSMENT DATE:	16/07/2019
VIEWING CONDITIONS:	GOOD
JOB REFERENCE:	19/AIA/WCBC/249

PAGE 1 OF 2

TREE NO. T - Tree G - Group H - Hedge	SPECIES (COMMON NAME)	AGE	HEIGHT (m) + CROWN CLEARANCE/ DIRECTION OF GROWTH (N.S.E.W)	RADIAL CROWN SPREAD (m)				STEM/ MULTI-STEM* DIA. (mm)	VITALITY	COMMENTS	MANAGEMENT	CATEGORY & SUB-CATEGORY GRADING BS 5837	BS 5837 RADIUS (m) RPA (m²)
				N	S	E	W						
T1	Maple	EM	7 1N	3	3	2.5	2.5	260	G	- Twin stem/fused with acute included compression union - No long-term viability & would be better removed & replaced with new trees along the boundary - E.R.C. 10	• Remove & replace	C1	3.1 31m²
T2	Willow									• REMOVED			
T3	Sycamore	M	16 2.5N	6	7	6	6	820	G	- Bifurcates to 3 co-dominant stems from 2.5m - No visual defects - E.R.C. 40	• No works	A2	9.8 304m²
T4	Ash	M	16 2N	8.5	8	7	8	810	G	- Part of linear group - No significant defects - E.R.C. 40 •	• N/A	A2	9.7 297m²
T5	Sycamore	M	14 3N	7.5	8.5	8	7	600	G	- Part of group - Not as visually prominent as T4 - E.R.C. 20 •	• N/A	B2	7.2 163m²
T6	Beech (Weeping)	EM	11 2N	5	5	5	5	540	M/G	- Dieback in upper crown - Exposed surface roots - E.R.C. 20	• N/A	B2	6.5 132m²

HEADINGS & ABBREVIATIONS

TREE NO.
SPECIES:
AGE RANGE/LIFE STAGE:
HEIGHT:
CROWN SPREAD:
CROWN CLEARANCE & DIRECTION OF GROWTH:
STEM DIA/MULTI-STEM DIA:
VITALITY:
E.R.C. = ESTIMATED REMAINING CONTRIBUTION:
BS 5837 CATEGORY & SUB-CATEGORY GRADING:
BS 5837 RADIUS & BS 5837 RPA:

REFERENCE NUMBER. REFER TO PLAN OR NUMBERED TAGS WHERE APPLICABLE (T = TREE, G = GROUP, H = HEDGE)
COMMON NAME (LATIN NAMES AVAILABLE ON REQUEST)
Y = YOUNG, SM = SEMI MATURE, EM = EARLY MATURE, M = MATURE, PM = POST MATURE
ESTIMATED AND RECORDED IN METRES. APPROXIMATELY 1 IN 10 TREES ARE MEASURED USING A CLINOMETER AND THE REMAINDER ESTIMATED AGAINST THE MEASURED TREES
MAXIMUM CROWN RADIUS MEASURED TO THE FOUR CARDINAL COMPASS POINTS FOR SINGLE SPECIMENS ONLY (MEASUREMENT FOR TREE GROUPS - MAXIMUM RADIUS OF THE GROUP)
HEIGHT IN METERS OF CROWN CLEARANCE ABOVE ADJACENT GROUND LEVEL (TO INFORM ON GROUND CLEARANCE, CROWN/STEM RATIO AND SHADING)
STEM DIAMETER - MEASURED AT APPROXIMATELY 1.5 METRES ABOVE GROUND LEVEL OR A COMBINATION OF STEMS FOR MULTI-STEMMED TREES
A MEASURE OF PHYSIOLOGICAL CONDITION. D = DEAD, MD = MORIBUND, P = POOR, M = MODERATE, G = GOOD
RELATIVE USEFUL LIFE EXPECTANCY (YEARS)
A = HIGH QUALITY AND VALUE, B = MODERATE QUALITY AND VALUE, C = LOW QUALITY AND VALUE, U = UNSUITABLE FOR RETENTION (SUB-CATEGORY REFERS TO ARBORICULTURAL, LANDSCAPE AND CULTURAL/CONSERVATION VALUES)
PROTECTIVE DISTANCE - RADIUS FROM THE CENTRE OF THE STEM TO THE LINE OF TREE PROTECTION (CONSTRUCTION EXCLUSION ZONE - CEZ) AND PROTECTIVE BARRIER ROOT PROTECTION AREA - BS 5837 (2012) ANNEX D (THE RECOMMENDATIONS STATE THAT THE RPA SHOULD BE CAPPED AT 707 M²) NOTE – ALL CALCULATIONS ROUNDED TO NEAREST DECIMAL

TREE SURVEY SCHEDULE (BS5837: 2012)

SITE:	YSGOL YR HAFOD JOHNSTOWN, BANGOR RD, JOHNSTOWN, WREXHAM, LL14 2SW
CLIENT:	WYNNE CONSTRUCTION
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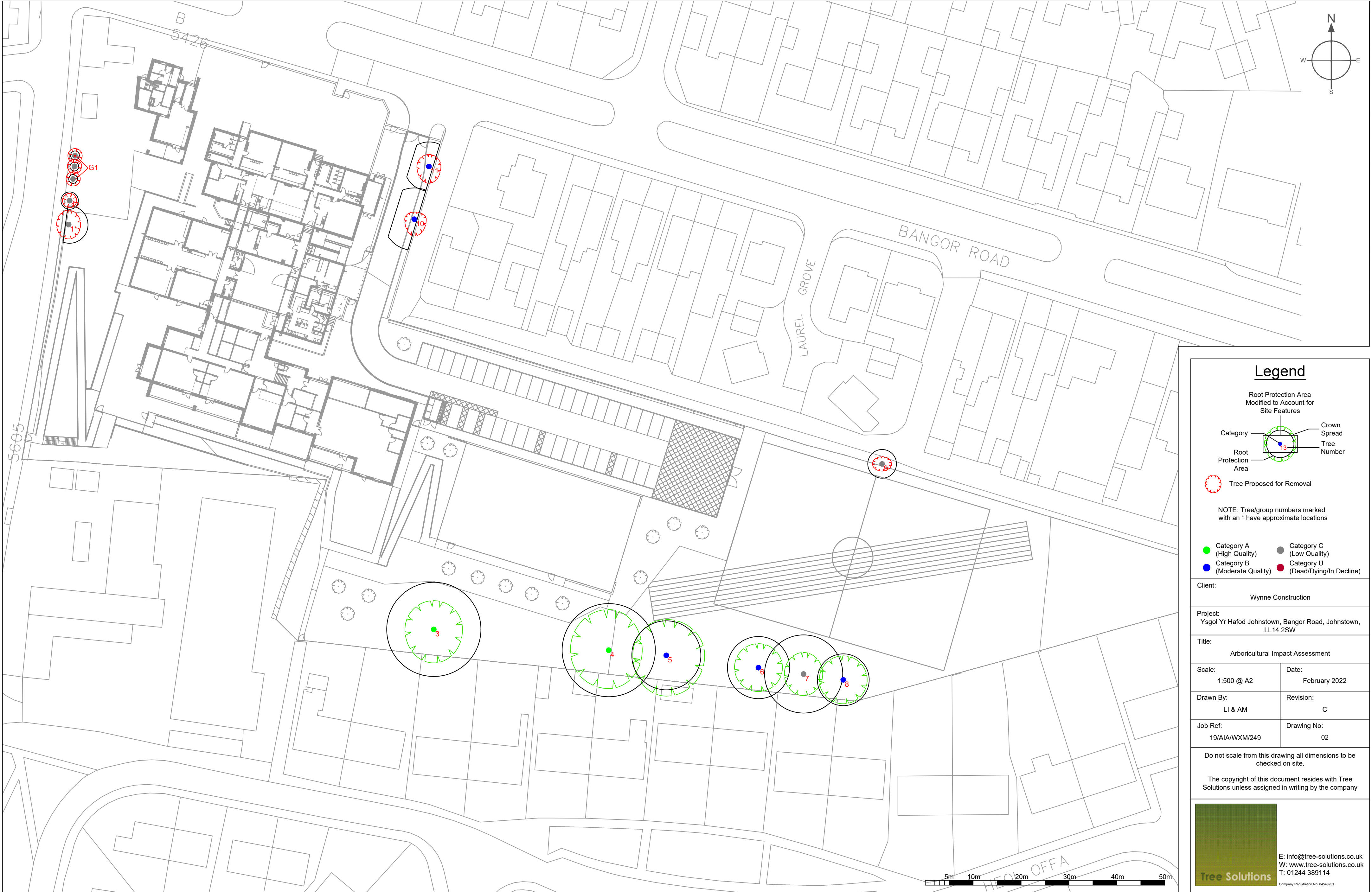
TREE NO. T - Tree G - Group H - Hedge	SPECIES (COMMON NAME)	AGE	HEIGHT (m) + CROWN CLEARANCE/ DIRECTION OF GROWTH (N.S.E.W)	RADIAL CROWN SPREAD (m)				STEM/ MULTI-STEM DIA. (mm)	VITALITY	COMMENTS	MANAGEMENT	CATEGORY & SUB-CATEGORY GRADING BS 5837	BS 5837 RADIUS (m) RPA (m²)
				N	S	E	W						
T7	Beech	M	13 4N	4.5	4.5	4	4	680	P	- Significant canker growth on stem - Dieback & dead wood in crown - Likely to require replacement within next 5 years - E.R.C. 5	Advisory - consider removing and replacing with new tree	C3	8.2 209m²
T8	Oak	EM	10 2N	5	5	5	5	450	G	- Good quality tree with no visual defects - E.R.C. 20+	No works required	B2	5.4 92m²
T9	Oak	SM	4	1.5	1.5	2	2	250	G	- Growing up through boundary fence and becoming embedded - E.R.C. 10	Remove	C1	3 28m²
T10	Birch	M	9 2W	1.5	3.5	2.5	2	360	G	- Within linear planting bed - No visual defects - E.R.C. 20	Remove for proposed works & replace	B2	4.3 59m²
T11	Whitebeam (Swedish)	M	5 1.5N	2.5	2.5	2.5	2.5	310	G	As T10	Remove for proposed works & replace	B2	3.7 43m²
T12	Eucalyptus	Y	4	1	1	1	1	150	G	- Small insignificant tree planted to close to retaining wall and has insufficient space to establish to maturity - E.R.C. <10	Remove for proposed works & replace	C1 & 3	1.8 10m²
G1	Apple x 2 Plum x 1	Y	2	1	1	1	1	50	M	Small, young trees of no value	Remove	C1 & 3	0.6

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
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 <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>			See Table 2
	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)	See Table 2
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 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	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	See Table 2
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	See Table 2

Appendix Two

Arboricultural Impact Assessment Plan



Legend

Root Protection Area
Modified to Account for
Site Features

Category

Crown Spread

Tree Number

Root Protection Area

Tree Proposed for Removal

NOTE: Tree/group numbers marked with an * have approximate locations

- Category A (High Quality)
- Category B (Moderate Quality)
- Category C (Low Quality)
- Category U (Dead/Dying/In Decline)

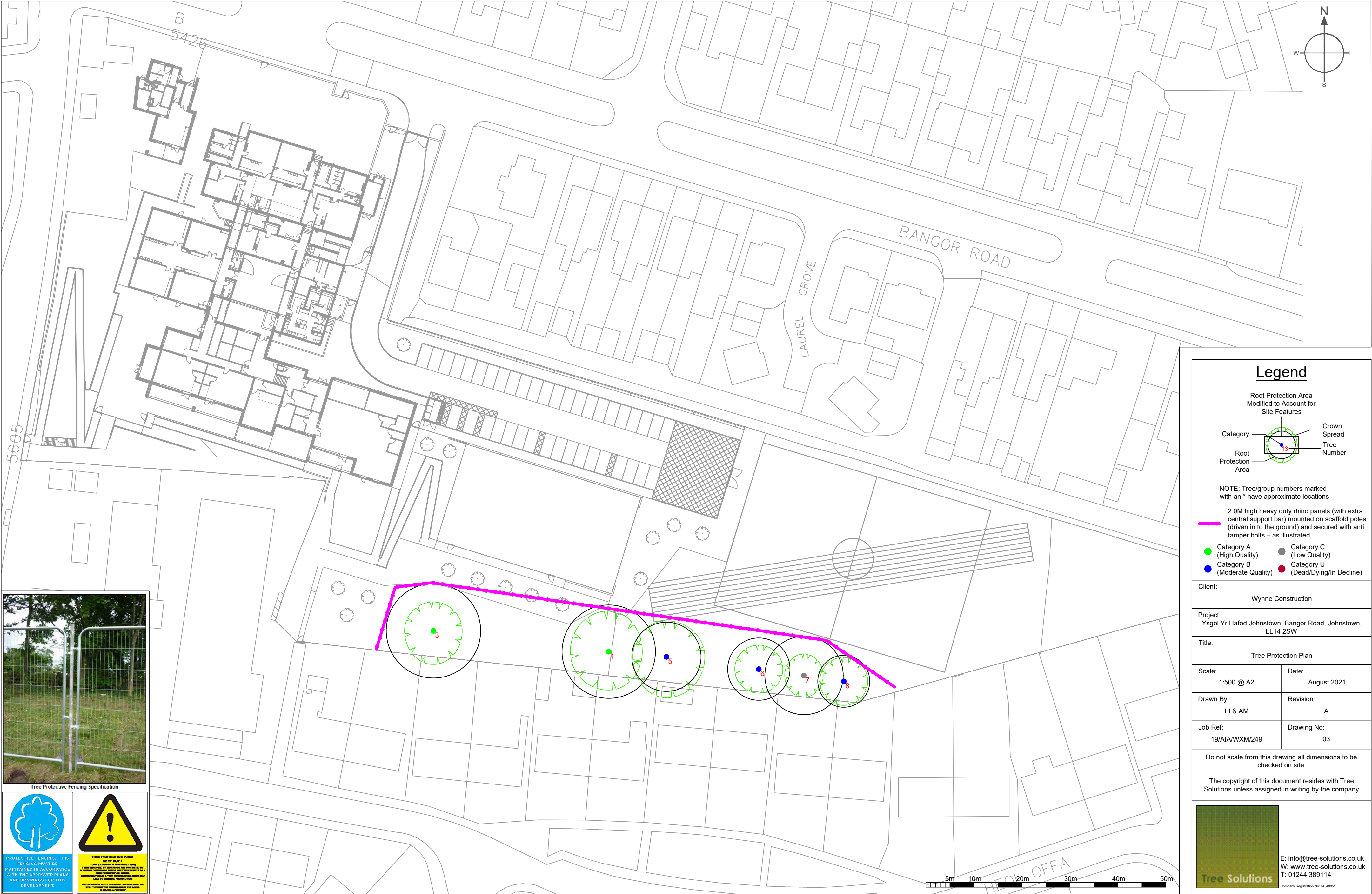
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Project: Ysgol Yr Hafod Johnstown, Bangor Road, Johnstown, LL14 2SW	
Title: Arboricultural Impact Assessment	
Scale: 1:500 @ A2	Date: February 2022
Drawn By: LI & AM	Revision: C
Job Ref: 19/AIA/WXM/249	Drawing No: 02
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Appendix Three

Tree Protection Plan



Tree Protective Fencing Specification

PROTECTIVE FENCING: THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.

TREE PROTECTION AREA
KEEP OUT!
This is a protected tree and its roots are protected by a Tree Protection Area. No work should be carried out within this area without the written permission of Tree Solutions.

Legend

Root Protection Area Modified to Account for Site Features

Category: Crown Spread, Tree Number, Root Protection Area

NOTE: Tree/group numbers marked with an * have approximate locations

2.0M high heavy duty rhino panels (with extra central support bar) mounted on scaffold poles (driven in to the ground) and secured with anti tamper bolts – as illustrated.

Category A (High Quality), Category B (Moderate Quality), Category C (Low Quality), Category U (Dead/Dying/In Decline)

Client: Wynne Construction	
Project: Ysgol Yr Hafod Johnstown, Bangor Road, Johnstown, LL14 2SW	
Title: Tree Protection Plan	
Scale: 1:500 @ A2	Date: August 2021
Drawn By: LI & AM	Revision: A
Job Ref: 19/AIA/WXM/249	Drawing No: 03

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