

TREE SOLUTIONS



Arboricultural Impact Assessment

Former WMC - Woodfield Ave, Flint

Prepared for:

WALES & WEST HOUSING

Our Ref: 26/AIA/FLINTS/96

July 2026

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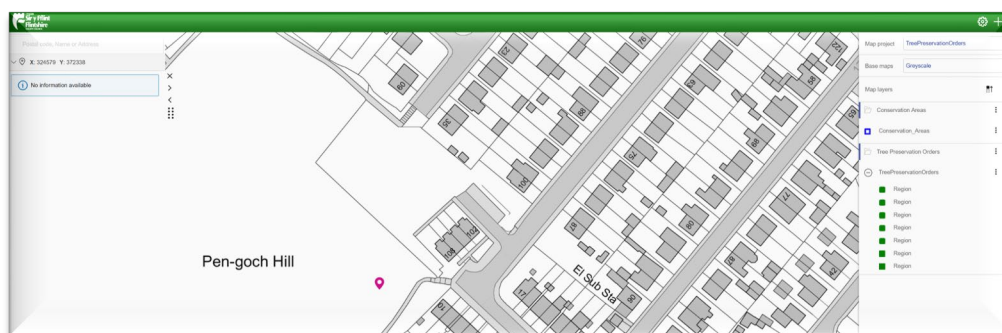
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1.0 INSTRUCTION

- 1.1 We have been instructed by Wales & West Housing (the applicant) to carry out an Arboricultural Impact Assessment (AIA) to assess the development proposal in relation to trees in accordance with the principles of British Standard 5837 'Trees in Relation to Design, Demolition & Construction - Recommendations' 2012.
- 1.2 We are instructed to prepare a report to provide information to assist all parties involved in the planning process to make balanced judgements regarding arboricultural features in relation to the proposed development at the former Flint Working Men's Club, Woodfield Ave, Flint. As such, all trees within influencing distance to the development proposal both on and adjoining the site have been surveyed and are listed within a Tree Survey Schedule (**Appendix 1**) and plotted on all accompanying plans.
- 1.3 The stage 1 tree survey was carried out in March 2025 by Alistair Henderson, Consultant to Tree Solutions Ltd. Our appraisal of the mechanical integrity of trees on the site is enough to inform the current project. The assessment of trees is carried out from ground level without invasive investigation and the disclosure of hidden defects cannot therefore be expected. Whilst the survey is not specifically commissioned to report on matters of tree safety, we report obvious defects that are significant in relation to the existing and proposed land use. We do not carry out detailed safety inspections unless specifically instructed to do so in writing and have not carried out such inspections of trees on the proposal site.
- 1.4 One individual tree (T1) and two Hedgerows (H1-H2) were surveyed and mapped on a Tree Constraints & Impact Assessment Plan Ref: 25/AIA/FLINTS/96, Drawing No. 1 & 2 at **Appendix 2**. All arboricultural information recorded during the survey is presented within a schedule at **Appendix 1**.
- 1.5 The Arboricultural Impact Assessment is based on the proposed layout plan, Drawing No: WAF-HOH-XX-00-DR-A-1201 (Rev P12) provided by Hughes O'Hanlon Architects.

2.0 STATUTORY CONTROLS & PLANNING POLICY

- 2.1 A review of the Flintshire County Council (FCC) interactive maps revealed no trees on site subject to a Tree Preservation Order (TPO) and the land does not fall within a designated Conservation Area. As such statutory planning consent is not required to remove any trees.



P1 – Extract from FCC interactive map showing no protected trees

- 2.1.2 The planning application will be assessed against the relevant policies of the Flintshire County Council Local Development Plan 2015–2030, including Policy EN15 (Trees, Woodlands and Hedgerows), together with relevant national planning policy and guidance, including Planning Policy Wales (Edition 12, February 2024), Future Wales: The National Plan 2040 and the relevant Technical Advice Notes (TANs).

2.2 Protected Species

- 2.2.1 Mature trees may contain features capable of supporting protected species, including bats and nesting birds. Bats and their roosts are protected under the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended).

- 2.2.2 This report does not constitute an ecological assessment. Where trees identified for removal or pruning contain features with potential ecological value, further advice should be sought from a suitably qualified ecologist prior to works commencing.

2.3 Wildlife Habitats

- 2.3.1 Trees and hedgerows may provide nesting opportunities for birds. Vegetation clearance and tree works should therefore be undertaken outside the main bird nesting season, generally March to September inclusive, where practicable. Where this is not possible, the vegetation should first be inspected by a suitably qualified ecologist to confirm the absence of active nests.

3.0 THE SITE

- 3.1 The application site comprises the former Flint Working Men's Club, located off Woodfield Avenue. The site contains no trees, with existing vegetation limited to boundary hedgerows. Agricultural land lies beyond the southern and western boundaries, with residential properties to the north and east.

4.0 DEVELOPMENT PROPOSAL

- 4.1 The proposal comprises residential development with associated vehicular access and parking.

5.0 GENERAL CONSTRAINTS DATA - CONSTRUCTION EXCLUSION ZONES (CEZ's)

5.1 GENERAL

- 5.1.1 *During the development process, there are three key constraints to consider in relation to retained trees. These include:*

1. **Construction Exclusion Zones (CEZ):** Areas around retained trees where no construction activity, ground compaction, or material storage is permitted, to protect the root system and overall tree health.
2. **Crown Protection Areas (or CEZ 2):** Above-ground space required to accommodate the tree's existing and future crown spread, including allowances for safe working distances and potential pruning limits.
3. **Root Protection Areas (RPA):** Below-ground zones defined to safeguard the tree's root system, as per BS5837:2012 guidelines, where development and soil disturbance are strictly limited.

5.2 ROOT PROTECTION AREA (RPA)

- 5.2.1 The Root Protection Area (RPA) is the minimum area around a tree considered necessary to protect sufficient roots and rooting environment to maintain the tree's health and viability. RPAs have been calculated in accordance with BS5837:2012 and are shown on the Tree Constraints and Arboricultural Impact Assessment Plans.
- 5.2.2 Root distribution is influenced by site conditions, including soil type, drainage, topography and the presence of physical barriers. Where appropriate, the shape of an RPA may therefore be modified to reflect likely root distribution, provided the overall area remains equivalent to that calculated in accordance with BS5837:2012.
- 5.2.3 No significant site features were identified that would justify modification of the theoretical RPAs and, accordingly, all RPAs have been plotted as unmodified circles.

5.3 CEZ 2: TREE CROWN PROTECTION ZONE

- 5.3.1 The Tree Crown Protection Zone (CEZ 2) is the area above ground occupied by the crown of a retained tree or hedgerow, together with sufficient working space to avoid damage during construction. The extent of this zone should take account of existing crown spread, the type of proposed construction activity and any acceptable level of pruning in accordance with BS3998:2010 Tree Work – Recommendations.
- 5.3.2 The proposed development works and associated infrastructure have been positioned clear of the canopies of retained arboricultural features. Accordingly, no access facilitation pruning is required to implement the development.

5.4 CEZ 3: TREE DOMINANCE ZONE

- 5.4.1 The relationship between the proposed development and retained boundary vegetation has been assessed with regard to future growth, shading and potential nuisance. The proposed separation distances are considered sufficient to avoid foreseeable conflicts or pressure for inappropriate future pruning or removal.

5.5 LANDSCAPE MITIGATION AND NEW PLANTING

- 5.5.1 New tree and shrub planting is proposed as part of the landscape strategy. Full details relating to species selection, planting locations and establishment measures are provided within the accompanying landscape proposals.

6.0 SURVEY METHODOLOGY

- 6.1 The method used in the preparation of this report is based on the principles of BS 5837: 2012.
1. Tree heights were surveyed to the nearest 1m
 2. Trunk diameters were measured by use of forestry girth tape
 3. The category assessment (Table 1) on which the tree survey is based include current and long-term arboricultural, landscape, cultural and conservation values (BS5837: 2012). This table can be found at **Appendix 1**
 4. For clarity, the grading system is summarised from **Table 2** of the BS as follows:

U grade – trees for removal, effective for less than 10 years

A grade – trees of high quality and value, effective for more than 40 years

B grade – trees of moderate quality and value, effective for more than 20 years

C grade – trees of low quality and value, effective for 10 years

Note: We have indicated colour coding on the drawing and therefore a monochrome copy should not be relied on.

6.2 SOIL ASSESSMENT

- 6.2.1 Tree Solutions Ltd does not undertake soil investigations as part of this commission. The client is therefore advised to seek specialist geotechnical or soil science expertise where site-specific soil assessment is required to inform the design, construction methodology, or future landscape management.

7.0 JUXTAPOSITION OF TREES AND STRUCTURES

7.1 Below ground constraints

- 7.1.1 Below ground constraints are generally defined as the Root Protection Area (RPA). The shape and extent of an RPA is determined by arboricultural considerations including the likely tolerance of the tree to root disturbance, root morphology and disposition (where known), past and existing site conditions, soil type and structure, and local topography and drainage.
- 7.1.2 The function of the RPA is to safeguard tree roots and the soil environment that supports them. Damage to roots may occur through excavation, soil compaction, changes in soil level, or contamination, any of which can significantly reduce tree health, vitality, and stability.
- 7.1.3 Root distribution is strongly influenced by site conditions including soil type, drainage and the presence of physical barriers. Trees growing adjacent to hard surfaces or underground constraints often display asymmetric rooting patterns, with reduced lateral spread into unfavourable conditions. The RPAs have been plotted as unmodified circles, as no other significant below-ground constraints were identified that would prevent normal radial root spread.

7.3 Underground Services

- 7.3.1 There are no proposed new service runs within the RPA of the retained hedge.

8.0 DEVELOPMENT IMPACT TO TREES

- 8.1 Tree Solutions Ltd undertook a detailed tree survey in accordance with BS5837:2012. All existing trees and hedgerows within and adjoining the site were identified, surveyed and categorised, with RPAs calculated and plotted on the Tree Constraints and Arboricultural Impact Assessment Plan. The proposed layout has been developed having regard to these arboricultural constraints and seeks to retain the existing arboricultural features wherever practicable.
- 8.2 To facilitate the proposed development it will be necessary to remove a section of H1 together with all of H2. H1 comprises an overgrown Hawthorn and Elder field boundary hedge of limited arboricultural and public amenity value. The proposed removal is confined to the minimum length necessary to accommodate the development, with the retained sections continuing to provide boundary enclosure and screening. The hedge performs a local boundary function but does not make a significant contribution to the wider landscape.
- 8.3 H2 comprises a heavily managed Leyland Cypress hedge that has been repeatedly topped, resulting in poor form and limited landscape value. Its removal will not materially affect the character or appearance of the site or surrounding area.
- 8.4 The proposed development includes replacement tree and hedgerow planting as part of the wider landscape proposals. From an arboricultural perspective, the losses are confined to vegetation of relatively low quality and are proportionate to the delivery of a much-needed social housing development. The proposed planting will compensate for these losses and reinforce the site's landscape structure.
- 8.5 The retained trees and hedgerows will be protected throughout the construction phase in accordance with an Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP), to be prepared and submitted for approval at the discharge of planning conditions stage. These documents will set out the protective fencing, construction methodology and site controls necessary to safeguard the retained arboricultural features throughout the development.
- 8.6 Subject to the implementation of the approved tree protection measures the retained trees and hedgerows can be successfully integrated into the development without adverse impact on their health, stability or long-term retention. There are therefore no overriding arboricultural constraints that would warrant refusal of the application.

9.0 PROPOSED REVISIONS TO THE SCHEME

- 9.1 It is recommended that any proposed revisions to the scheme which may have implications for retained trees, or their associated Root Protection Areas should be referred to us for review and comment. This will ensure that appropriate arboricultural advice is provided at the earliest opportunity and that the scheme remains compliant with *BS 5837:2012* throughout its implementation.

10.0 CONCLUSIONS

- 10.1 This report has been prepared in accordance with the recommendations of BS5837:2012, which provides the recognised framework for assessing trees in relation to development. The proposed layout has been assessed against the site's arboricultural constraints and has been designed to retain the principal arboricultural features wherever practicable.
- 10.2 The proposed development can be accommodated without giving rise to significant adverse impacts on the retained trees and hedgerows. The limited hedgerow removal required to facilitate the scheme is considered acceptable in arboricultural terms and can be satisfactorily mitigated through replacement planting.
- 10.3 Subject to the implementation of the tree protection measures and construction methodologies contained within the accompanying Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP), there are no overriding arboricultural constraints that would warrant refusal of the application.

11.0 LIMITING CONDITIONS

Unless stated otherwise, the following conditions apply:

- The information contained in this report pertains only to the trees that were inspected and reflects their condition at the time of the survey.
- The findings and recommendations within this report are considered valid for a period of two years from the date of inspection.
- The inspection was limited to a visual assessment from ground level only. No invasive investigations such as dissection, excavation, probing, or coring were undertaken. As such, no warranty or guarantee, express or implied, is offered that undetected issues may not arise in the future.
- This report has been prepared solely for the use and benefit of the client. Tree Solutions Ltd accepts no liability or responsibility to any third party.
- This report may not be reproduced, in whole or in part, without the prior written consent of Tree Solutions Ltd.

Appendix One
Tree Survey Schedule

TREE SURVEY SCHEDULE (BS5837: 2012)

TREE SOLUTIONS

Site	FORMER FLINT W/MC - WOODFIELD AVE, FLINT, CH5 5JQ	Surveyor	A HENDERSON	Page 1 of 1
Client	WALES & WEST HOUSING	Assessment Dates	Mar-25	
Brief	ARBORICULTURAL IMPACT ASSESSMENT	Viewing Conditions	CLEAR	
		Job Reference	25/AIA/FLINTS/96	

Tree Number	Name	Age	Height (m)	Crown clear	North	East	South	West	Diameter (mm)	Vitality	Comments	E.R.C	Management	Category	RPA (m)	RPA (m²)
H1	Hawthorn Elder	M	5	0	2	2	2.5	2	≤150	G	Overgrown & unmanaged field boundary hedgerow on top of steep embankment No significant defects noted	10+	Remove western section for development	C2	2	10
H2	Leyland Cypress	EM	2.5	0	1	1	1	1	≤100	G	Boundary hedgerow with residential dwellings beyond Full of bramble	10+	Remove for development Replace with new hedge / trees post completion of development	C2	1	4.5
T1	Sycamore	SM	7	0	2	2	1.5	1.5	100	G	Self-set tree small insignifucant tree within hedge	10	Remove for development	C2	1	4.5

HEADINGS & ABBREVIATIONS

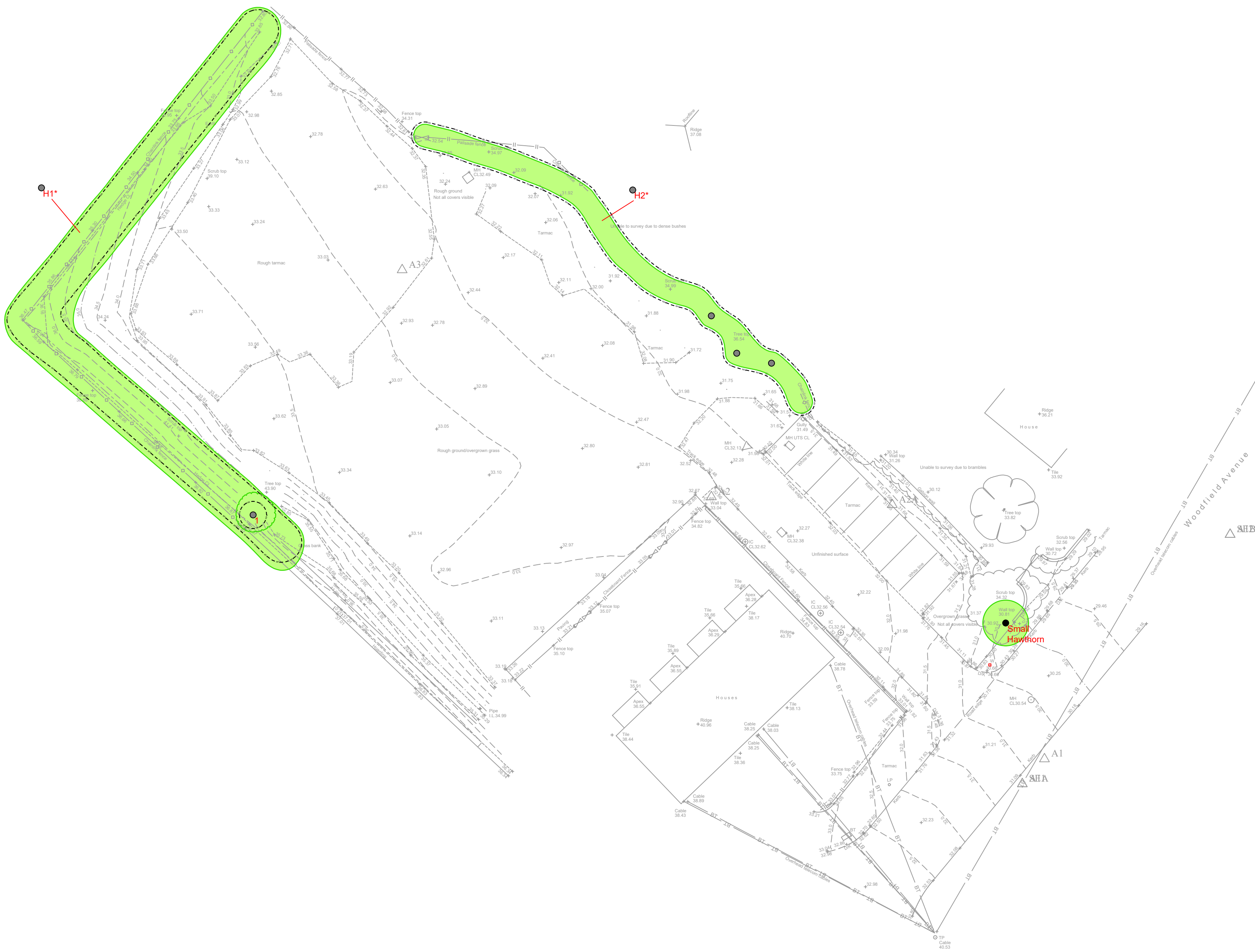
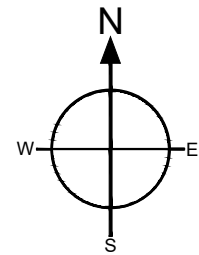
SPECIES:	COMMON NAME (LATIN NAMES AVAILABLE ON REQUEST)
AGE RANGE/LIFE STAGE:	Y = YOUNG, SM = SEMI-MATURE, EM = EARLY-MATURE, M = MATURE, PM = POST-MATURE
HEIGHT:	ESTIMATED AND RECORDED IN METRES. APPROXIMATELY 1 IN 10 TREES ARE MEASURED USING A CLINOMETER AND THE REMAINDER ESTIMATED AGAINST THE MEASURED TREES
CROWN SPREAD:	MAXIMUM CROWN RADIUS MEASURED TO THE FOUR CARDINAL COMPASS POINTS FOR SINGLE SPECIMENS ONLY (MEASUREMENT FOR TREE GROUPS - MAXIMUM RADIUS OF THE GROUP)
CROWN CLEARANCE & DIRECTION OF GROWTH:	HEIGHT IN METERS OF CROWN CLEARANCE ABOVE ADJACENT GROUND LEVEL (TO INFORM ON GROUND CLEARANCE, CROWN/STEM BATIO AND SHADING)
STEM DIA./MULTI-STEM DIA.:	STEM DIAMETER - MEASURED AT APPROXIMATELY 1.5 METRES ABOVE GROUND LEVEL OR A COMBINATION OF STEMS FOR MULTI-STEMMED TREES
VITALITY:	A MEASURE OF PHYSIOLOGICAL CONDITION. D = DEAD, MD = MORIBUND, P = POOR, M = MODERATE, G = GOOD
E.R.C. - ESTIMATED REMAINING CONTRIBUTION:	RELATIVE USEFUL LIFE EXPECTANCY (YEARS)
BS 5837 CATEGORY & SUB-CATEGORY GRADING	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)
BS 5837 RADIUS & BS 5837 RPA:	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 M³) NOTE - ALL CALCULATIONS ROUNDED TO NEAREST DECIMAL

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

Preliminary Tree Constraints Plan



Legend

- Root Protection Area
Modified to Account for
Site Features
- Category
- Root Protection Area
- Crown Spread
- Tree Number
- Category A
(High Quality)
- Category B
(Moderate Quality)
- Category C
(Low Quality)
- Category U
(Dead/Dying/In Decline)

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

Client:	
Wales & West Housing	
Project:	
Former Flint WMC, Woodfield Ave, Flint	
Title:	
Preliminary Tree Constraints Plan	
Scale:	Date:
1:250 at A2	March 2025
Drawn By:	Revision:
SD	----
Job Ref:	Drawing No:
25/AIA/FLINTS/96	01

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Appendix Three

Impact Assessment Plan



Legend

Root Protection Area
Modified to Account for
Site Features

Category

Root Protection Area

Crown Spread

Tree Number

Category A
(High Quality)

Category B
(Moderate Quality)

Category C
(Low Quality)

Category U
(Dead/Dying/In Decline)

Tree Proposed for Removal

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

Client: Wales & West Housing	
Project: Former Flint WMC, Woodfield Ave, Flint	
Title: INDICATIVE - Arboricultural Impact Assessment	
Scale: 1:250 at A2	Date: July 2026
Drawn By: SD	Revision: A
Job Ref: 25/AIA/FLINTS/96	Drawing No: 02

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