ARBORICULTURAL IMPACT ASSESSMENT (AIA)

OCTOBER 2024

Land at Plas Newydd Ffordd Fynnon Prestatyn LL19 8BD



QUALITY MANAGEMENT

Project No.:	UG2687											
Project:	Land at Plas Newydd	and at Plas Newydd, Prestatyn										
Location:	Land at Plas Newydd	and at Plas Newydd, Ffordd Ffynnon, Prestatyn, LL19 8BD										
Title:	Arboricultural Impac	t Assessment										
Document Type:	BS 5837: 2012											
Date:	15/10/2024											
Prepared By:	Adam Hodgins											
Checked By:	Martin King	Martin King										
Approved By:	Adam Hodgins											
Revision Status:												
Rev:	Date:	lssue/Purpose/	Prepared:	Checked:								
		Comment:										
01	21/10/2024	Updated proposal	AH	MK								

CONTENTS

1.	Executive Summary1
2.	Introduction 2
	2.1. Instructions and References2
	2.2. Scope
	2.3. Documents Provided
	2.4. Limitations
	2.5. The Site
	2.6. Soil Profile
3.	Legislation5
	3.1. Tree Protection Status
	3.2. Ecological Considerations
4.	Arboricultural Impact Assessment (AIA)
	4.1. Summary of the Development
	4.2. Tree Constraints
	4.3. Root Protection Areas (RPAs) Explained7
	4.5. Impacts of Development
	4.6. Tree Surgery Works
	4.7. Protective Fencing
	4.8. Ground Protection for Pedestrians or Light Vehicles10
	4.9. Temporary Site Cabins10
	4.10. Utilities
	4.11. Recommendations11

Appendix 1 – Tree Data Schedule

- Appendix 2 Tree Data Schedule Definition of Terms
- Appendix 3 Tree Retention Categories
- Appendix 4 Site Plans

1. Executive Summary

- 1.1.1. Urban Green have been instructed by Castle Green Homes Ltd. to carry out an Arboricultural Survey to British Standard 5837: 2012 guidelines at Land at Plas Newydd, Fford Ffynonn, Prestatyn, LL19 8BD and produce our findings in a report.
- 1.1.2. It is proposed to develop the site into 390 plots of residential accommodation, alongside landscape improvements such as new access roads, areas of Public Open Space, parking and soft landscaping. Full details of the proposed site layout can be seen on the plans included in Appendix 4.
- 1.1.3. Access to Denbighshire County Council's online interactive mapping software on 24/09/2024 indicated that there are no TPOs in effect at the site or in the vicinity, nor does the site lie within a Conservation Area.
- 1.1.4. The proposed development necessitates the removal of two individual trees (T3 and T27), two tree groups (G16 and G17), and thirteen sections from five hedgerows (H1, H2, H10, H24 and H28) within the site boundaries. However, it is noted that the majority of these are of low value. It is recommended that this tree loss is mitigated against through onsite replacement tree planting and the production of a robust soft landscaping scheme.
- 1.1.5. Urban Green have also been appointed to carry out a Preliminary Ecological Appraisal (PEA) of the site (UG_2687_ECO_PEA_01). This report should be read and adhered to in conjunction with the PEA report.
- 1.1.6. Tree protective fencing, and ground protection will need to be installed at the alignment shown on the Tree Protection Plan in Appendix 4 before any construction activity takes place.
- 1.1.7. It will also be necessary to carry out Arboricultural supervised excavation with possible root pruning within the predicted Root Protection Area (RPA) of retained tree T8, as indicated on the Tree Protection Plan.
- 1.1.8. Information regarding the layout of new utilities and drainage and final site levels should be submitted to the Arboricultural Consultant so that the impact of these on the retained trees can be assessed.
- 1.1.9. An Arboricultural Method Statement (AMS) will be required, detailing works within the RPAs of trees to be retained.

1

2. Introduction

2.1. Instructions and References

- 2.1.1. Urban Green have been instructed by Castle Green Homes Ltd. to carry out an Arboricultural Impact Assessment (AIA) in accordance with BS 5837: 2012 '*Trees in relation to design, demolition and construction Recommendations*' at the site location and produce our findings in a report to be submitted with a detailed planning application.
- 2.1.2. All trees, regardless of their statutory status, are a material consideration in a planning application. BS 5837: 2012 recognises the potential conflict between trees and development. The standard sets out to assist those concerned with trees in relation to construction and aid with decision making. This is achieved by providing impartial and balanced information on trees and their potential impacts.
- 2.1.3. Due to the size and nature of the site, it was decided that the survey methodology would include broadly grouping trees that share very similar characteristics. This method is in line with point 4.4.2.3 of BS 5837: 2012 that states '*Trees forming groups...should be identified and considered as groups where the arboriculturist determines that this is appropriate... It may be appropriate to assess the quality and value of trees as a whole, rather than individuals.*'
- 2.1.4. The site is located in the area shown in the Site Context plan below. The Ordnance Survey (OS) Grid Reference is SJ 05011 81576.



A347			MARK HE HET	744						
Legend: ——— Red Line Boudnary		2								
		Kilometers								
Client: Castle Green Homes	Issue: 01	Figure: 01								
Land at Plas Newydd	Scale @ A4	:24,000		AN EN						
Site Context	Approved by:	Checked by: MT	A: Ground Floor, The Tow Deva City Office Park , Manchester M3 7BF	er, Trinity Way,						
Drawing Ref: UG_2687_SITE_CONTEXT	Author:	Date: 21/08/2024	T: +44 (0) 161 312 3131 weareurbangreen.co.uk							

2.2. Scope

2.2.1. The AIA considers any potential impacts on existing trees including the effect of any tree loss required to implement the design and recommendation for the establishment of new trees.

2.3. Documents Provided

- 2.3.1. A scaled topographical plan has been provided with tree positions already plotted (SurveyEng Ltd. Drawing Number CGH.TS.14). Any extra trees found on site that were not included on the original plan have been plotted according to measurements taken on site and/or using aerial photography.
- 2.3.2. Tree locations which have been estimated are illustrated on the plans included in Appendix 4, by their identifying number with a "#" suffix. The exact locations of these trees must be verified, and any discrepancies discussed with the Arboricultural Consultant before starting works on site.
- 2.3.3. A plan outlining the development proposals has been overlaid with the Tree Constraints Plan to assess the potential impacts.

2.4. Limitations

- 2.4.1. This report is based upon a visual inspection carried out from ground level only. The consultant shall not be responsible for events that happen after the date of the report due to factors that were not apparent at the time, and the acceptance of this report constitutes an agreement with the guidelines and the terms listed in this report.
- 2.4.2. The consultant accepts no liability in respect of the trees unless the recommendations of this report are carried out under their supervision.
- 2.4.3. Assessing the potential influence of trees upon load bearing soils, beneath existing and proposed structures resulting from water abstraction by trees or rehydration of shrinkable soils was not included in the contract brief and is therefore not considered in the report. The consultant cannot be held responsible for damage arising from such action.
- 2.4.4. Trees are living organisms whose health, condition and structure can change over time. The contents of this report are valid for a period of one year from the date of the report.
- 2.4.5. Potentially hazardous trees are highlighted, and appropriate recommendations are made to reduce the associated risks to an acceptable level.

2.5. The Site

2.5.1. The site is located to the north of Fford Ffynnon, Prestatyn and comprises agricultural land. The site is bounded by agricultural land to the north; residential properties to the northeast; agricultural buildings and land to the east; a caravan park to the southeast; and further agricultural land to the south and west.

2.6. Soil Profile

- 2.6.1. Reference to the Cranfield University Soil and Agrifood Institute's Soilscapes Viewer suggests the underlying soil profile across most of the site is characterised as a slowly permeable, seasonally wet, base-rich, slightly acidic loamy and clayey soil, with impeded drainage and moderate fertility. This soil type is typical of seasonally wet pasture and woodland environments.
- 2.6.2. A small section of the site to the north is described as having a soil profile which is loamy and clayey, with naturally high groundwater of coastal flats, which is naturally wet with moderate fertility. This soil profile is typical of wet brackish and coastal flood meadows.

3. Legislation

3.1. Tree Protection Status

- 3.1.1. A Tree Preservation Order (TPO) is an order made by a Local Authority to protect specific trees, groups of trees or woodlands in the interests of amenity. A TPO prohibits the cutting down, topping, lopping, uprooting and wilful damage or destruction of trees without the Local Authority's written consent.
- 3.1.2. Access to Denbighshire County Council's online interactive mapping software on 24/09/2024 indicated that there are no TPOs in effect at the site or in the vicinity, nor does the site lie within a Conservation Area.
- 3.1.3. It is recommended that the Local Authority is consulted before any tree works are undertaken, as new TPOs may have been created since the time of enquiry, and heavy fines exist for unauthorised works to protected trees.
- 3.1.4. All works to trees covered by a TPO require permission from the Local Authority, including any pruning. However, this does not include trees that are dead or have become dangerous. The removal of dead branches is also excluded from a TPO. Although the above exemptions exist, it is advisable to give the Local Authority five days' notice in writing of any intended removal. Permission is not needed where tree work is required to implement an approved planning application.
- 3.1.5. It is an offence to remove more than five cubic metres of timber in any one calendar quarter without having first obtained a felling licence from the Forestry Commission. It must be noted, however, that this excludes sites where planning permission has already been granted.

3.2. Ecological Considerations

- 3.2.1. Prior to the commencement of any tree works, the trees should be assessed for the presence of protected species, many of which are protected under the *Wildlife and Countryside Act 1981* (as amended) and/or the *Conservation of Habitats and Species Regulations 2017* (as amended).
- 3.2.2. Where there is evidence that roosting bats, nesting birds, or other protected species are present, works in these areas should pause and the advice of a suitably qualified ecologist should be sought about how best to proceed.
- 3.2.3. If tree works are carried out during the bird nesting season (March to September, inclusive), trees should be inspected by a qualified ecologist to confirm likely absence, no more than forty-eight hours prior to the commencement of works.
- 3.2.4. Urban Green have also been appointed to complete a Preliminary Ecological Appraisal (PEA) of the site (UG_2687_ECO_PEA_01), which should be read and adhered to should any tree work be required. The objectives of the PEA are to identify habitats on site and determine the suitability for any 'protected and/or notable' species, including proximate designated sites, in the context of the development proposals. This report should be read and adhered to in conjunction with the PEA report.

4. Arboricultural Impact Assessment (AIA)

4.1. Summary of the Development

4.1.1. It is proposed to develop the site into 390 plots of residential accommodation, alongside landscape improvements such as new access roads, areas of Public Open Space, parking and soft landscaping. Full details of the proposed site layout can be seen on the plans included in Appendix 4.

4.2. Tree Constraints

- 4.2.1. BS 5837: 2012 recognises that conflicting requirements of the planning system for development means that trees are only one factor which need to be taken into consideration. Although there may be certain specimens that can pose significant constraints to development due to their importance, it is essential that inappropriate tree retention is avoided.
- 4.2.2. Trees can be adversely affected on development sites if their protection is not factored into the wider project management of onsite operations. The tree survey plan has been transposed over plans detailing current proposals to assess the impact on surveyed trees.
- 4.2.3. It is essential that roots are protected from construction works including physical damage from excavation and changes in soil structure from compaction and changes in ground levels.

4.3. Root Protection Areas (RPAs) Explained

- 4.3.1. The Root Protection Area (RPA) is an area of ground around the base of a tree indicated on the plans included in Appendix 4 as an ochre yellow circle centred around the stem which is calculated in relation to the stem diameter.
- 4.3.2. Most tree roots grow within the upper 600mm of the soil profile where most nutrients are available as the result of the decomposition of organic matter close to the surface. Rooting conditions become less favourable at depth as the soil density increases, creating anaerobic conditions.
- 4.3.3. BS 5837: 2012 states that the default position for proposed structures should always be outside the RPA. It is recognised that this may not always be possible, yet tree retention would be desirable. In this instance, technical solutions might be available that prevent damage to the retained tree(s).

4.4. Surveyed Trees

- 4.4.1. The survey assessed twelve individual trees, nine tree groups and nine hedgerows, the quality and value of which are summarised below. Full details of the surveyed trees, tree groups and hedgerows can be viewed in the Tree Data Schedule in Appendix 1.
- 4.4.2. One individual tree, three tree groups and one hedgerow were assessed as BS 5837: 2012 'Moderate Quality' Retention Category 'B'; and eleven individual trees, six tree groups and eight hedgerows were assessed as BS 5837: 2012 'Low Quality' Retention Category 'C'.
- 4.4.3. Most of tree group G26 is offsite. The remaining trees, tree groups and hedgerows are within the site or on the boundaries.
- 4.4.4. The tree cover comprises mainly of low-quality field boundary planting and natural colonisation, apart from tree groups G4 and G5 which are planted boundary groups of moderate quality.
- 4.4.5. Tree groups G4 and G5 are visually important in terms of their contribution to the character and appearance of the area. Trees internal/central to the site are of secondary importance in visual terms, with restricted views from external public vantage points. The boundary hedgerows do, however, provide screening value from the neighbouring fields and residential properties.

4.5. Impacts of Development

- 4.5.1. The proposed development would necessitate the removal of five sections of hedgerow (H1) assessed as BS 5837: 2012 'Moderate Quality' Retention Category 'B'; and two individual trees (T3 and T27), two tree groups (G16 and G17) and sections from a further four hedgerows (H2, H10, H24 and H28) assessed as BS 5837: 2012 'Low Quality' Retention Category 'C' within the site boundary, as detailed on the Tree Removal Plan and Tree Works Schedule in Appendix 4.
- 4.5.2. The removal of these trees, tree groups, and sections of hedgerow would have only low, localised, albeit long-term impacts on the wider character and appearance of the site and surrounding area. It is recommended the removal of these trees, tree groups, and sections of hedgerow be mitigated against through onsite replacement tree planting and the production of a robust soft landscaping scheme.
- 4.5.3. The remaining trees, tree groups, and hedgerows are to be retained and can be protected throughout the proposed development in accordance with the standards and practices detailed in BS 5837: 2012 and in this report.
- 4.5.4. Tree protective fencing would need to be installed at the alignment indicated on the Tree Protection Plan in Appendix 4 prior to the commencement of any proposed development. A specification for protective fencing can be viewed in the Tree Protection Index in Appendix 4 and in section 4.8. of this report.
- 4.5.5. Temporary ground protection would need to be installed within a portion of the RPAs of retained hedgerow and tree group H24 and G26, as indicated on the Tree Protection Plan. A specification for temporary ground protection can be viewed in the Tree Protection Index and in section 4.9. of this report.

4.5.6. Arboricultural supervised excavation with possible root pruning would be required within a section of the RPA of retained tree T8, as indicated on the Tree Protection Plan, to facilitate construction of the proposed road/driveway for residential plots 296-298. This excavation will need to be carried out by hand, under Arboricultural supervision, in accordance with an Arboricultural Method Statement.

4.6. Tree Surgery Works

- 4.6.1. Tree works that are recommended within the Tree Works Schedule in Appendix 4 are works required to facilitate development and include details or remedial works. Tree works stated in the Tree Data Schedule are of a general maintenance nature and can be carried out at any time as per recommendations.
- 4.6.2. Tree works required to facilitate the development will be carried out prior to the commencement of any onsite operations. This should allow sufficient space for approved construction to be carried out.
- 4.6.3. Any unforeseen tree works that become apparent during the construction process will require written consent from the Local Authority Tree Officer.
- 4.6.4. All specified tree work is to be carried out in accordance with the standards and practices detailed in BS 3998: 2010 '*Tree work Recommendations*'.

4.7. Protective Fencing

- 4.7.1. Temporary protective fencing will need to be installed at the alignment indicated on the Tree Protection Plan in Appendix 4, prior to the commencement of any proposed development on site including the delivery of materials and site facilities.
- 4.7.2. Any fencing that is damaged so that it is no longer able to protect retained trees must be replaced/repaired immediately at the alignment indicated on the Tree Protection Plan.
- 4.7.3. The required specification for protective fencing is illustrated in the Tree Protection Index (Insert 1).
- 4.7.4. The 'in-ground' system involves driving vertical scaffold poles approximately 0.6m into the ground onto which are affixed horizontal scaffold poles and bracing struts.2m high anti-climb weldmesh panels are then wired to the scaffold framework. The vertical scaffold poles should be at a maximum of 3m apart.
- 4.7.5. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to the tree roots when locating uprights.
- 4.7.6. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" shall be fixed to every 10m of protective fencing, as illustrated on the Tree Protection Index (Insert 2).

4.8. Ground Protection for Pedestrians or Light Vehicles

- 4.8.1. The primary method of ground protection is the installation of a compressible layer (e.g. woodchip) over a geotextile fabric with side butting scaffold boards.
- 4.8.2. Ground protection measures whilst working the RPA must be capable of supporting the expected loads and avoid compaction of the soil.
- 4.8.3. The boarding will be left in place until the construction works are finished.
- 4.8.4. Scaffolding may first be erected with the uprights on spreader boards and the ground protection installed around the uprights.

4.9. Temporary Site Cabins

- 4.9.1. All storage facilities and deliveries will make use of existing hard surfaces to avoid unnecessary compaction within RPAs. The locations will be agreed in writing with the LPA prior to delivery and will remain in the agreed locations unless approved by the LPA.
- 4.9.2. If storage facilities require siting within RPAs, every effort will be made to ensure that any damage to aerial parts of retained trees is avoided and that appropriate footings are used to avoid root damage or compaction of the soil.

4.10. Utilities

4.10.1. At the time of writing Urban Green have not been made aware of any new utilities or service runs that will be associated with the development. Information regarding the layout of new utilities and drainage and final site levels should be submitted to the Arboricultural Consultant so that the impact of these on the retained trees can be assessed.

4.11. Recommendations

- 4.11.1. An Arboricultural Method Statement (AMS) will be required to provide solutions and working methods so that the impacts identified do not have a detrimental effect on retained trees.
- 4.11.2. All operations that could affect trees on and adjacent to the site must be considered as part of the project management of the proposed development. It is therefore recommended that an Arboricultural Consultant is appointed as part of the design and management team to advise on pre-development issues and supervise onsite operations.
- 4.11.3. The Arboricultural Consultant may also have an advisory role in the preparation of site including tree surgery works and the protection of trees during demolition processes.

Appendix 1 - Tree Data Schedule

The following pages contain information gathered at the site during the tree survey. The reader should refer to Appendices 2 and 3 to correctly interpret the tree survey data.

Reference T = Tree	Age & Species	(m)	t (m)	ranch (m)	tranch ion	(mr	Crown Spread (m) N		Recomme	endations	Physiological Condition	Life Expectancy (yrs)	RPA Radius
G = Group H = Hedge W = Woodland	(Common Name) (Botanical Name)	Height (m)	Crown Ht (m)	Lowest B Height	Lowest Branch Direction	рвн (mm)	W E S	Notes	Priority	Inspect Freq (yrs)	Structural Condition	Retention Category	(m)
	Mature Mixed						2 0.5 2 2	 Broken, slightly lapsed field boundary hedgerow growing along small ditch to south and along and through boundary post and wire fencing to north. Predominantly hawthorn with elder, blackthorn, bramble and occasional cherry sp 	developmer	sections for nt - see Tree ral Plan.	Good	20-40 B1	
H1	Species	av 3	0.5	0	м	90		 3: Minimal evidence of recent management, maintained to west away from field. 4: Occasional dead stems and decay pockets within pose no significant risk due to location. 5: Acceptable condition at present. 	n/a	3	Fair	Di	1.08
H2	Early-Mature Mixed	av 2	0	0	м	50	1 1 1	 Regularly maintained field boundary hedgerow adjacent road growing along and through post and wire fence. Predominantly hawthorn with blackthorn, bramble, rose sp., and occasional cherry sp 	developmer	e sections for nt - see Tree ral Plan.	Good	20-40 C1	0.60
	Species							3: Slightly overgrown on field side to west.4: Acceptable condition at present.	n/a	3	Fair	CI	
	Semi-Mature Sessile Oak						4 3 4	1: Growing within H2 with ivy clad stems from 2m preventing detailed inspection. 2: Open grown tree with stunted, crooked form.	Remove for - see Tree R	development emoval Plan.	Good	40+	
т3	Quercus petraea	5	3	2	NW	390	4	 3: Deadwood and multiple stubs from previous branch loss to north. 4: Stem wound to north at 1.5 m with minor decay and good wound wood formation. Wire fencing occluded by lower stem to north. 5: Acceptable condition at present. 	n/a	3	Poor	C1	4.68
	Semi-Mature Mixed							1: Moderately spaced planted screening group of sycamore, black pine, black poplar, swedish whitebeam with occasional hawthorn and horse chestnut to north with elder, bramble, ivy and stinging nettles among ground flora growing babind boundary barbed wire faces	No actior	required.	Good	40+	
G4	Species	av 14	av 2	1	Μ	av 560	6.5 each	 behind boundary barbed wire fence. 2: Predominantly single stemmed and upright form with occasional multistemmed specimen. 3: Minimal evidence of previous management. 4: Shade deadwood, stubs from branch loss predominantly to lower stems and occasional failed tree throughout internal to group, posing no significant risk due to location. 5: Canopies to west overhanging field by approximately 6.5m in places with approximately 3-4m overhead clearance. 	n/a	3	Fair	B1.2	6.72

Reference T = Tree	Age & Species	(m)	t (m)	tranch (m)	tranch ion	(mn	Crown Spread (m) N		Recomm	endations	Physiological Condition	Life Expectancy (yrs)	RPA Radius
G = Group H = Hedge W = Woodland	(Common Name) (Botanical Name)	Height (m)	Crown Ht (m)	Lowest B Height	Lowest Branch Direction	рвн (mm)	W E S	Notes	Priority	Inspect Freq (yrs)	Structural Condition	Retention Category	(m)
	Early-Mature Mixed						av 9 9 9 9	 Moderately spaced planted group of black poplar with sycamore, horse chestnut and hawthorn with elder, blackthorn, bramble and ivy among ground flora and on lower stems growing behind boundary barbed wire fence. Predominantly single stemmed and upright form with occasional 	No actior	n required.	Good	40+ B1.2	
G5	Species	av 12	av 2	1.5	Μ	av 660	each	 multistemmed specimen. 3: Minimal evidence of recent management. 4: Occasional dead stems, deadwood, branch stubs and decay pockets within internal to group, one branch snapout to east in situ on adjacent field, posing no significant risk due to location. 5: Canopies to east overhanging site by approximately 9m in places with approximately 2-3m overhead clearance. 	n/a	3	Fair	Diiz	7.92
T6	Early-Mature Hawthorn	4.5	1	1	М	140	2.5 2.5 2.5 2.5	 Growing adjacent post and wire fence within section of H1. Possibly regrowth from historic failure, stem to north leading to large surface root, growing along ground almost horizontally. Minimal evidence of recent management. Miner wounds to lower stem 	No actior	n required.	Good	20-40 C1	1.68
	Crataegus monogyna							4: Minor wounds to lower stem. 5: Acceptable condition at present.	n/a	3	Poor		
Т7	Early-Mature Ash	5	2	15	N	450	3.5 3.5 3.5 3.5	 Growing within section of H1 preventing detailed inspection. Growing on slight embankment with surface roots exposed to east. Multiple branch stubs due to branch loss and decay pockets within canopy. Large open cavity to northwest of stem from approximately 1-1.5m with 	No actior	n required.	Fair	20-40 C1	540
'/	Fraxinus excelsior	5	2	1.5		450	3-5	obvious decay and good wound wood formation. 5: No symptoms indicative of infection with ash dieback currently.	n/a	3	Poor	CI	5.40
	Early-Mature Sessile Oak						3 3 4.5 3	 Growing within small gap within H1. Bifurcated stem at ground level with wide union and minor decay. Stem and root damage, small decay cavities to lower stems, multiple branch stubs and deadwood throughout canopies and missing bark to branches, 	No actior	n required.	Fair	20-40 C1	
Τ8	Quercus petraea	5	2	2	М	720		slightly sparse canopy with necrotic foliage. 4: Audible indication of internal hollowing to lower westernmost stem. 5: Unidentified fungal fruiting body, possibly beefsteak fungus (<i>Fistulina hepatica</i>) to large dead stub at approximately 2.5m.	n/a	3	Poor		8.64

Reference T = Tree	Age & Species	(m)	t (m)	iranch (m)	iranch ion	(mr	Crown Spread (m) N		Recomm	endations	Physiological Condition	Life Expectancy (yrs)	RPA Radius
G = Group H = Hedge W = Woodland	(Common Name) (Botanical Name)	Height (m)	Crown Ht (m)	Lowest Branch Height (m)	Lowest B Direct	рвн (mm)	W E S	Notes	Priority	Inspect Freq (yrs)	Structural Condition	Retention Category	(m)
T9	Mature Hawthorn Crataegus monogyna	5	0.5	0.5	М	110	3-5 3-5 3-5 3-5	 Growing behind boundary barbed wire fence preventing detailed inspection. Open grown tree on slightly elevated bund with multiple stems arising from ground level and crossing branches throughout. Minimal evidence of previous management. Acceptable condition at present. 	No action	n required.	Good Fair	20-40 C1	1.32
H10	Mature Mixed	av	0	0	M	130	3 3 3 3	 Unmanaged field boundary hedgerow growing along post and wire fence. Species include hawthorn, blackthorn, rose sp. and bramble with some ivy clad stems. Occasional small diameter dead stems pose no significant risk due to 	developme	3 section for nt - see Tree <i>v</i> al Plan.	Good	20-40 C1	1.56
	Species	3						location. 4: Acceptable condition at present.	n/a	3	Fair		
T11	Mature Apple	5	0.5	0.5	М	420	5.5 5.5 5.5 5.5	 Growing within H10 preventing detailed inspection. Growing with pronounced lean east before self correcting at 1m with low, wide spreading form. Multiple stems arising from ground level with fusion of lower stems and 	No action	n required.	Good	20-40 B1	5.04
	<i>Malus</i> sp.							crossing stems and branches throughout. 4: Shade deadwood and branch stubs to inner canopy. 5: Foliage indicates good vitality.	n/a	3	Poor		
H12	Early-Mature Mixed	av	0	0	М	110		 1: Unmanaged field boundary hedgerow growing along drainage ditch to east. 2: Species include hawthorn, blackthorn, bramble and ivy. 3: Occasional small diameter dead stems within pose no significant risk due to location. 	No actio	n required.	Good	20-40	1.32
	Species	3					3	4: Acceptable condition at present.	n/a	3	Fair	C1	
H13	Mature Mixed	av	0	0	M	150	4.6 4.6 4.6 4.6	 Unmanaged field boundary hedgerow growing adjacent drainage ditch to north. Species include hawthorn, rose sp., and bramble with occasional goat willow to northwest, unable to access due to livestock. 	No action	n required.	Good	20-40 C1	1.80
5	Species	5				5-		3: Occasional small diameter dead and failed stems within posing no significant risk due to location.4: Acceptable condition at present.	n/a	3	Fair		

Reference T = Tree	Age & Species	(m)	t (m)	sranch (m)	Branch ion	(mn	Crown Spread (m) N		Recomm	endations	Physiological Condition	Life Expectancy (yrs)	RPA Radius
G = Group H = Hedge W = Woodland	(Common Name) (Botanical Name)	Height (m)	Crown Ht (m)	Lowest E Height	Lowest Branch Direction	рвн (mm)	W E S	Notes	Priority	Inspect Freq (yrs)	Structural Condition	Retention Category	(m)
	Mature Goat Willow							1: Large tree with bifurcated stem at ground level.2: Biased, wide spreading form to south and east due to large, low hanging branch growing against the ground, form indicates historic stem failure but no evidence of wounding at stem union.	No actior	n required.	Good	20-40 C1	
T14	Salix caprea	6	0.5	0	Μ	600		 3: Small open cavities to main stems with minor decay and good wound wood formation, large exposed surface roots. 4: Crossing, crooked branches and deadwood throughout canopy posing no significant risk due to location. 5: Acceptable condition at present. 	n/a	3	Poor		7.20
	Mature Mixed	av	av			av		 Small group of hawthorn, blackthorn, bramble and rose sp. Possibly remnants of former hedgerow. Occasional snapped and dead stems within posing no significant risk due to 		development emoval Plan.	Good	20-40	
G15	Species	2.5	0.5	0	М	100	3.5 3.5 3.5 each	location.4: Acceptable condition at present.	n/a	3	Fair	C1	1.20
	Mature Mixed	av	av			av		 Slightly scattered shrubby group of apple, blackthorn and hawthorn. Multiple stems arising from ground level with crossing stems and branches throughout. 		development emoval Plan.	Fair	10-20	
G16	Species	3	0.5	0	М	130		 3: Multiple stubs from previous branch loss and decay cavities throughout. 4: One larger stemmed historic failure to west with deadwood in situ. 5: Acceptable condition at present. 	n/a	3	Poor	C1	1.56
	Mature Hawthorn	av	av			av		 Scattered, broken group of predominantly hawthorn with some blackthorn with shrubby form, possibly remnants of former hedgerow. Multiple stems arising from ground level. 	No actior	n required.	Good	20-40	
G17	Crataegus monogyna	3	0.5	0	М	120	each	 3: Minimal evidence of recent management. 4: Small diameter deadwood throughout poses no significant risk due to location. 5: Acceptable condition at present. 	n/a	3	Fair	C1	1.44
	Early-Mature Hawthorn	av	av			av	av 3 3 3	1: Open grown group of five with slightly shrubby form. 2: One multistemmed specimen from ground level, all multistemmed from approximately 1m.	No actior	n required.	Fair	20-40	
G18	Crataegus monogyna	2.5	0.5	0.5	E	150		 3: Slightly sparse canopies. 4: Branch stubs from previous branch loss and small diameter deadwood poses no significant risk. 5: Acceptable condition at present. 	n/a	3	Fair	C1	1.80

Reference T = Tree	Age & Species	(m)	t (m)	ranch (m)	tranch	(mr	Crown Spread (m) N		Recomm	endations	Physiological Condition	Life Expectancy (yrs)	RPA Radius
G = Group H = Hedge W = Woodland	(Common Name) (Botanical Name)	Height (m)	Crown Ht (m)	Lowest B Height	Lowest Branch Direction	(шш) на а	W E S	Notes	Priority	Inspect Freq (yrs)	Structural Condition	Retention Category	(m)
T19	Mature Hawthorn	4	1	1	N	310	3.5 3.5 3.5 3.5	 1: Open grown tree with bifurcated stem at 0.5m above ground level with crossing stems and branches throughout and exposed surface roots. 2: Multiple stubs to lower stems from previous branch loss and removal. 3: Small diameter deadwood and dieback to canopy to north poses no 	No actior	n required.	Fair	10-20 C1	3.72
	Crataegus monogyna							significant risk due to location. 4: Acceptable condition at present.	n/a	3	Fair		
Т20	Mature Hawthorn	4	1	1	w	280	1 3 3 5	 Growing on slightly sloping ground with biased canopy due to neighbouring hedgerow. Trifurcated stem at 1m above ground level with fused stems below. Stubs present from previous branch loss and small diameter deadwood 	No actior	n required.	Good	20-40 C1	3.36
	Crataegus monogyna						5	poses no significant risk due to location. 4: Old barbed wire and fence post attached to lower stem. 5: Acceptable condition at present.	n/a	3	Fair		
6	Mature Goat Willow	av	av			av		 Limited access and surrounding vegetation preventing detailed inspection. Group of three growing within hedgerow behind post and wire fence. Multiple stems arising from ground level. Multiple decay pockets, crossing stems and branches, deadwood and branch 	No actior	n required.	Fair	10-20 C1	
G21	Salix caprea	5	2	0	Μ	350	5 each	snap outs throughout. 5: Poses no significant risk due to location.	n/a	3	Poor	CI	4.20
H22	Mature Mixed	av	0	0	м	100		 Limited access and surrounding vegetation preventing detailed inspection. Field boundary hawthorn and blackthorn hedgerow with goat willow and bramble growing behind post and wire fence along drainage ditch. 	No actior	n required.	Good	20-40	1.20
	Species	4					3.5	3: Minimal evidence of recent management. 4: Acceptable condition at present.	n/a	3	Fair	C1	
	Early-Mature Goat Willow							 Surrounding vegetation and limited access preventing detailed inspection. Group of five growing within H23 with multiple stems arising from ground level and crossing stems and branches throughout. 	No actior	n required.	Good	20-40	
G23	Salix caprea	av 6	av 2	0	м	av 300	4.5 each	 3: Branch stubs and small diameter deadwood internal to canopies pose no significant risk due to location. 4: Branch stubs to easternmost tree to lower stem due to historic crown lifting over field with minimal occlusion. 5: Acceptable condition at present. 	n/a	3	Fair	C1	3.60

Reference T = Tree	Age & Species	(m)	t (m)	tranch (m)	tranch ion	(mn	Crown Spread (m) N		Recomm	endations	Physiological Condition	Life Expectancy (yrs)	RPA Radius
G = Group H = Hedge W = Woodland	(Common Name) (Botanical Name)	Height (m)	Crown Ht (m)	Lowest Branch Height (m)	Lowest E Direct	рвн (mm)	W E S	Notes	Priority	Inspect Freq (yrs)	Structural Condition	Retention Category	(m)
H24	Mature Mixed	av 3	0	0	М	100	3 3 3 3	 Surrounding vegetation preventing detailed inspection. Field boundary hawthorn and blackthorn hedgerow with bramble and occasional apple and goat willow within. Small diameter dead stems throughout pose no significant risk due to 	developme	o sections for nt - see Tree <i>r</i> al Plan.	Good	20-40 C1	1.20
	Species	5					5	location. 4: Acceptable condition at present.	n/a	3	Fair	CI	
	Semi-Mature Sycamore						5	 Limited access and surrounding vegetation preventing detailed inspection. Growing behind post and wire fence and hedgerow with bifurcated stem at 2m above ground level. 	No actior	n required.	Fair	10-20	
T25	Acer pseudoplatanus	6	2.5	2	S	460	5	 3: Sparse canopy with dieback and deadwood overhanging field and grass verge offsite to north and east, poses low risk due to location. 4: Canopy to west overhanging site by 5m with approximately 3m overhead clearance. 5: Acceptable condition at present. 	n/a	1.5	Fair	C1	5.52
	Semi-Mature Sycamore						av 5.5 5.5 5.5	 Surrounding vegetation, ivy clad stems and limited access preventing detailed inspection, partially/possibly all offsite. Closely spaced group growing behind boundary hedgerow. 		n required.	Good	40+	
G26	Acer pseudoplatanus	av 8	av 3.5	2	М	av 350	5-5 each	 3: Predominantly single stemmed and upright form. 4: Large amounts of discarded soil and hardcore present around stems and rooting area. 5: Provides screening to offsite residential properties. 	n/a	3	Good	B1.2	4.20
Tor	Mature Hawthorn		1	0.5	NA	200		 Open grown tree growing with slight lean south and exposed surface roots to north. Curved lower stem with multiple stems arising from 0.5m above ground level and crossing stems and branches throughout. 	Remove for	development emoval Plan.	Good	20-40	2.49
T27	Crataegus monogyna	4	1	0.5	М	290	3	 3: Stubs from previous branch loss and small diameter deadwood poses no significant risk due to location. 4: Acceptable condition at present. 	n/a	3	Fair	C1	3.48
	Mature Mixed	av					3	1: Hawthorn and blackthorn. 2: Eastern continuation of H1. 3: One dead partially uprooted tree to east adjacent gate poses no significant	developme	sections for nt - see Tree	Good	20-40	
H28	Species	3.5	0.5	0	М	90	3	risk due to location.	Remov n/a	val Plan. 3	Fair	C1	1.08

Reference T = Tree	Age & Species	(m)	it (m)	3ranch	Branch tion	(mn	Crown Spread (m) N	Recommence		endations	Physiological Condition	Life Expectancy (yrs)	RPA Radius
G = Group H = Hedge W = Woodland	(Common Name) (Botanical Name)	Height	Crown Ht (m)	Lowest Branch Height (m)	Lowest Brand Direction	рвн (mm)	W E S	Notes	Priority	Inspect Freq (yrs)	Structural Condition	Retention Category	(m)
H29	Early-Mature Mixed	av 3	ο	ο	м	90	2.5 2.5 2.5	 Field boundary hedgerow. Hawthorn and blackthorn with occasional sycamore and bramble. Lapsed management to north, maintained at 1m to south. 	No action	n required.	Good	20-40	1.08
	Species	5					2.5	4: Acceptable condition at present.	n/a	3	Fair	C1	
	Semi-Mature Sycamore						4.5 4.5 4.5	 Limited access and surrounding vegetation preventing detailed inspection. Growing behind regularly maintained field boundary hedgerow and fence with ivy on stems. 	No actio	n required.	Good	40+	
Т30	Acer pseudoplatanus	6	3	2	S	350	4.5	3: Multiple stems arising from 2.5m above ground level.4: Occasional stubs from previous branch loss.5: Acceptable condition at present.	n/a	3	Fair	C1	4.20

Appendix 2 - Tree Data Schedule Definition of Terms

	Individual Trees Grouped Trees	T (+number) G (+number)								
Tree Referencing:	Hedgerows	H (+number)								
	Woodlands	W(+number)								
	Young	Usually <15 years								
	Semi-Mature	Significant growth expected, approximately one third of life expectancy complete								
	Early-Mature	Full height achieved with further significant growth possible, up to two thirds of life expectancy complete								
Age Category/Life Stage:	Mature	Full height has been achieved with possible spreading of the canopy, usually past two thirds of overall life expectancy								
	Veteran	Usually a tree of significant age with characteristics that give additional cultural, landscape and conservation benefits,								
	Over-Mature	A tree declining due to age as indicated by deterioration in the health and condition of its crown and trunk.								
Species:	Botanical Name Common Name	conforming to the International Code of Nomenclature for algae, fungi, and plants (ICN). For universal plant recognition. commonly used names usually on a local and national scale.								
Tree Height:	The vertical distan	ice between the base of the tree (where soil and buttress meet) and the tip of the highest branch on the tree.								
Crown Height :	Measured from gr	ound level to the height at which the main crown begins.								
Stem Diameter (DBH):	Stem diameter is r	neasured at 1.5 m above ground level								
Lowest Branch Height & Orientation:	Height above grou	ind level and direction of growth of the lowest lateral branch extending from the main tree stem ('M' denotes stems arising from multiple orientations).								
Crown Spread:	Measurements tak	easurements taken from all four cardinal points in metres.								
Notes:	Notes are made to developments.	o inform of any possible defects, peculiarities or points of interest that may relate to the trees position, physiology, safety and possible effects on								
Recommendations:	Recommendations	s are made in accordance with good Arboricultural practice. Recommendations are made regardless to the end usage of the site.								
	Priority is given dep	pendant on the perceived threat and the likelihood of failure given to a possible hazard. The priority of work is given regardless of the end usage of the site.								
	Urgent	To be carried out as soon as possible.								
Priority Scale:	Very High	To be carried out within 1 month.								
	High	To be carried out within 3 months.								
	Moderate Low	To be carried out within 1 year. To be carried out within 3 years.								
	Good	Usually healthy with no symptoms of poor health or disease.								
	Fair	Exhibiting signs of poor health or minor disease infections that are not considered to be hazardous.								
Physiological Condition:	Poor	Disease present in considerable quantities or with very poor physiological vigour.								
	Very Poor	Tree is in a moribund state in extremely poor condition, usually with little chance of recovery.								
	Good	A tree with no significant structural defects.								
Structural Condition:	Fair	Minor defects may have been observed but are not considered to be immediately hazardous.								
Structural Condition.	Poor	Significant defects found. Tree requires monitoring or remedial works.								
	Very Poor	Major defects that require immediate remedial work or the removal of the tree.								
Life Expectancy:	The estimated nur	nber of years before the tree may require removal should no unexpected mechanical or environmental impacts occur to the tree.								
Retention Category:	Please refer to Tre	ee retention categorisation table on the next page.								

Appendix 3 - Tree Retention Categories

The following table provides an explanation of the	The following table provides an explanation of the BS 5837: 2012 Tree Retention Categories and Subcategories used during the survey and in the report.												
Trees to be Removed:		Colour on Plan											
BS 5837: 2012 Category U Includes trees of very low quality that offer little or no amenity value.	Trees 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.	RED											
Trees to be Considered for Retention:													
BS 5837: 2012 Retention Category A Trees of a high quality, with an estimated life of expectancy of at least 40 years	Trees that are excellent examples of their species, usually mature, especially if rare or unusual including veteran trees. Category A trees are likely to enhance a development and should be retained wherever possible.	GREEN											
BS 5837: 2012 Retention Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	Trees that are good examples of their species. B category trees are usually mature or younger trees with the potential to reach A category in the future. Although the retention of these trees is desirable, some losses may be acceptable.	BLUE											
BS 5837: 2012 Retention 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.	GREY											
BS 5837: 2012 Tree Retention Subcategories:													
BS 5837: 2012 Retention Subcategory 1	Trees possessing mainly Arboricultural qualities.	n/a											
BS 5837: 2012 Retention Subcategory 2	Trees possessing mainly landscape qualities.	n/a											
BS 5837: 2012 Retention Subcategory 3	Trees possessing mainly cultural values, including conservation.	n/a											

NOTE 1: Trees may be assessed as belonging to more than one BS 5837: 2012 Tree Retention Subcategory depending on their perceived value and/or contribution, i.e., A1.2; B2.3 etc. **NOTE 2:** Trees that are viewed as borderline and do not fit neatly into either of the categories are given a plus or minus rating (+/-) in the tree data schedule. Therefore, C+ would denote a tree being borderline C/B although C is deemed to be the most appropriate category. Similarly, B- would denote a tree being borderline B/C with B seen as the most appropriate category.

Appendix 4 - Site Plans

The site plans referred to in the report follow this page which include the following:

- Tree Constraints Plan
- Tree Removal Plan
- Tree Works Schedule
- Tree Protection Plan
- Tree Protection Index

Although included plans are usually to scale, they are only intended to indicate positions of surveyed trees and dimensions should not be taken from these drawings.









		e Works Sche	JUUE	
Tree Number	BS 5837: 2012 Retention Category	Species	Works Required	Reason
H1	B	Mixed species	Remove five sections, as indicated on the Tree Removal Plan	To facilitate the prop development
H2			Remove two sections, as indicated on the Tree Removal Plan	
Т3		Sessile oak	Fell to ground level	
H10		Mixed species	Remove two sections, as indicated on the Tree Removal Plan	
G16			Fell to ground level and grind out the stumps Remove four sections, as indicated on the Tree Removal Plan Fell to ground level and grind out the stump	
G17		Hawthorn		
H24		Mixed species		
T27		Hawthorn		
H28		Mixed species	Remove two sections, as indicated on the Tree Removal Plan	







Insert 1: Tree protective fencing specification



Key

- Standard scaffold poles 1
- 2 Heavy gauge 2m tall galvanised tube and welded mesh infill panels
- 3 Panels secured to upright and cross-members with wire ties
- Ground level 4
- 5 Uprights driven into the ground untill secure (minimum depth 0.6m)
- 6 Standard scaffold clamps

Insert 3: Ground protection specification



Insert 2: Tree protection notice



Do not scale this drawing (printed or electronic version). Contractors must check all dimensions from site.
This drawing is copyright and is for use on this site only. This drawing should be read in conjunction with all relevant consultants drawings and specialist subcontractors / supply chain drawings and specifications. All works to be carried out in accordance with the latest British Standards / Codes of Practice unless specifically directed otherwise in the specification. Responsibility for the reproduction of this drawing in paper form, or issued in electronic format, lies with the recipient to check that all information has been replicated in full and is correct when compared to the original paper or electronic image. Graphical representations of equipment on this drawing have been co-ordinated, but are
approximations only. Please refer to the specifications and / or details for actual sizes and / or specific contractor construction information.
<u>NOICS</u>
REV. DATE DESCRIPTION DRAWN CHK'D
U R B A N G R E E N
A: Ground Floor, The Tower,
Deva City Office Park, Trinity Way, Manchester M3 7BF T: +44 (0) 161 312 3131
weareurbangreen.co.uk
Client: CASTLE GREEN HOMES LTD.
Project: LAND AT PLAS NEWYDD, PRESTATYN
Issue: PLANNING
Drawn: AH Checked: Approved: Project: LIC2687 Scale @ A0: Date:
UG2687 N/A 15/10/24 Dwg No: Revision: 00