



Welsh-Wood

Arboricultural Consultancy

Pre-Development Site Survey

Arboricultural Method Statement

BS5837:2012 Trees in Relation to Design,
Demolition and Construction

Regarding: Nant Silyn,
Pont Wen, Whitegate,
Wrexham
LL13 8SQ

Ref: NEB 19004 AMS Ver 2

Executive Summary

- S1** Welsh-Wood Arboricultural Consultancy have been instructed to prepare an Arboricultural Method Statement in accordance with the previously submitted Arboricultural Impact Assessment and subsequent planning consent in relation to construction of residential dwellings at the listed address, Nant Silyn, Pont Wen, Whitegate, Wrexham LL13 8SQ.
- S2** Permission has been granted to remove 8 trees and 3 tree groups from site prior to development, to accommodate the proposed design. It is understood that mitigation and enhancement planting schemes are being provided by the project Landscape Architect, and consulting Ecologist.
- S3** Construction of the rear gardens servicing the dwellings impact on the root protection areas for G2, G3 and T10 which are all trees for retention. Specialist construction methods, such as hand digging under supervision, were originally necessary for development of the block of flats and access footpath (as shown on the Tree Protection Plan) adjacent to G2 although now that the building footprint has been marked out on site this work now falls outside of the RPA, possibly reflecting a small margin of error in the topographical survey. It is however still necessary to undertake hand digging under supervision for all soft landscaping. All proposals are fully specified in section 2.3 of this document.
- S4** During supervisory visits to site concerns regarding impact of the retaining wall to be constructed adjacent to T1 were raised by the site manager; when measured out on the ground the current design places the retaining wall against the limit of the tree protection fencing making construction problematic. The LPA Arboricultural Officer has been alerted to this concern and has proposed a site meeting between all relevant parties to discuss a solution which may include an additional amendment to the design, specialist construction methods and/ or installation of a root barrier. This point is noted here purely for information only at this time.
- S5** This is the second version of the AMS which has been prepared to reflect a non-material amendment to the design plan which includes construction of a pumping station and a bin store. The pumping station does not impact on retained trees although it is noted that a screening hedge for this feature is proposed and as such it is recommended that arboricultural advice is sort, with regard appropriate species and future management considerations such as root and shoot growth, to ensure the success of the feature as a whole. The bin store is to be constructed outside of the root protection area for retained trees but

within the construction exclusion zone; as such the Tree Protection Fencing will need to be relocated under arboricultural supervision in order to establish this feature.

- S6** No trees on site are subject to a Tree Preservation Order, nor does the site fall within a Conservation Area. This information was provided by Wrexham County Borough Council.
- S7** It must be noted that trees provide essential habitat for birds and bats and as such any proposed works must be carried out in full consideration of the law. Birds, bats and their habitats are afforded protection within the Wildlife and Countryside Act 1981 and The Conservation of Habitats and Species Regulations 2010 (as amended).

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1.0 Introduction

- 1.0.1 This report details the exact procedures necessary to facilitate development at the listed address (the site) and must be considered in conjunction with the previously submitted Arboricultural Impact Assessment (AIA) Ref: NEB 19004 AIA Ver 1.
- 1.0.2 Planning consent for the proposed development has been granted by Wrexham County Borough Council (Code No. WRC P/2019/0263) and this document, Arboricultural Method Statement (AMS), has been prepared to discharge Conditions 13 & 14 of the consent.
- 1.0.3 Both the AIA and AMS have been prepared in compliance with BS5837: 2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'.

1.1 Brief/Instruction

- 1.1.1 Welsh-Wood Arboricultural Consultancy were instructed by Mr. Gareth Evans, Principal Architectural Assistant of the Housing and Economy Department at Wrexham County Borough Council, to undertake a survey of all trees on the site in order to facilitate development.
- 1.1.2 The site, formerly a residential care home, is currently a vacant plot with trees established around the border. The care home buildings have been demolished, with guidance regarding the necessary tree protection provided by the Wrexham County Borough Council (WCBC) Arboricultural Officer. It is understood that this guidance was adhered to throughout the demolition process.
- 1.1.3 As such this report is concerned solely with the proposed development, ensuring appropriate consideration and protection of retained trees. Proposals for suitable mitigation and enhancement planting for any suggested tree removals are being made by the project Landscape Architect and consulting Ecologist under separate cover.

1.2 *Qualifications and experience of surveyor*

1.2.1 The author holds the Higher National Certificate in Arboriculture, and LANTRA Professional Tree Inspector qualifications, and has worked in the arboricultural industry for 18 years as a Local Authority Tree Officer, Arboricultural Consultant and Lecturer in Arboriculture.

1.3 *Documents Provided in Advance*

1.3.1 The following documents were provided:

Prior to the tree survey:

- Topographical survey, Nant Silyn OPH Wrexham
- Proposed design, 1044 Site Plan Nant Silyn Rev. F

On receipt of consent:

- Amended design, 1044 A 100 Revision P Proposed Site Plan
- Planning Consent Notice 1/7/2019 WRC P/2019/0263

1.4 *Relevant background information & scope of this report*

1.4.1 This report has been commissioned to support a planning application for development of residential dwellings on site including a block of flats, 6 houses and 1 bungalow.

1.4.2 The survey is intended to appraise the quality of the tree stock and identify which trees, if any, should be removed and how retained trees should be protected in order to make a positive landscape contribution to the site in future years.

1.4.3 The survey was undertaken independently of any specific proposals for development on the site in order to provide an objective assessment of their quality. This report then considers the trees within the context of the proposed development and, following consultation with WCBC, makes recommendations for the successful retention of trees where ever possible in harmony with the new development.

1.4.4 Where tree removals have been recommended both mitigation and enhancement planting should be specified to ensure a continuation and improvement of the tree stock, both in terms of number and diversity.

1.5 Caveats and Limitations

- 1.5.1 This report relates specifically to the condition of the trees upon the day that the inspection was carried out.
- 1.5.2 Inspection was carried out from ground level, with use of binoculars where necessary. No climbing inspection was conducted. Where access to parts of the site or trees on adjacent land was not possible, estimates have been made regarding tree dimensions. This will be made clear in the tree and group schedules where relevant.
- 1.5.3 No detailed analysis of soil samples was undertaken. Root areas and possible underground conflict interaction were only investigated insofar as a surface visual inspection.
- 1.5.4 All legal documentation and information given to and used for the purposes of this report by Welsh-Wood Arboricultural Consultancy is presumed accurate.
- 1.5.5 The report is valid only for typical weather conditions. Healthy trees, or parts of healthy trees, may fail in unusually high or unpredictable winds or violent storms and as such the consequences of such weather phenomena are unforeseeable. It follows that Welsh-Wood Arboricultural Consultancy cannot be held liable for any such failures.
- 1.5.6 Where trees fall under the protection of the Local Council, permission may be required before works begin. It should be noted that the Local Council may not share the views presented in this report.
- 1.5.7 All rights in this report are reserved. No part of it may be reproduced or transmitted, in any form or by any means; electronic, mechanical, photocopying, recording or otherwise, or stored in any retrieval system of any nature, without the written permission of Welsh-Wood Arboricultural Consultancy. Its content and format are for the exclusive use of the addressee in dealing with this claim / site / situation. It may not be sold, lent, hired out or divulged to any third party not directly involved in this claim / site / situation without written consent from Welsh-Wood Arboricultural Consultancy.

2.0 Arboricultural Method Statement

- 2.0.1 Recommended control measures for development works in or near to the root protection area (RPA) are discussed in this chapter. These chapters can be regarded as a method statement of works and can be utilised as the exact principle during the construction period.
- 2.0.2 A table summarising events discussed within this chapter can be found in Appendix 7 of this document and must be kept on site and up to date by the main contractor at all times.
- 2.0.3 Tree protection on development sites is of paramount importance if trees are to be retained successfully. The inevitable stress caused by development near an existing tree can, if provision for adequate protection is not made, be a stress that can severely damage the trees or even result in their death. Although the trees appear healthy during and on completion of the works, the full effects may not become apparent for several years after works have finished.
- 2.0.4 The Tree Protection Plan accompanying this report indicates all areas for protective tree fencing, construction exclusion zones, specialist construction methods and works under supervision.
- 2.0.5 This is the second version of the AMS which has been prepared to reflect a non-material amendment to the design plan which includes construction of a pumping station and a bin store.
- 2.0.6 The pumping station does not impact on retained trees although it is noted that a screening hedge for this feature is proposed and as such it is recommended that arboricultural advice is sort, with regard appropriate species and future management considerations such as root and shoot growth, to ensure the success of the feature as a whole.
- 2.0.7 The bin store is to be constructed outside of the root protection area for retained trees but within the construction exclusion zone; as such the Tree Protection Fencing will need to be relocated under arboricultural supervision in order to establish this feature.

2.1 Protective Fencing

- 2.1.1 Before the commencement of any works on site protective fencing must be erected to the dimensions and specification shown in Appendix 5 of this report and as indicated on the Tree Protection Plan in Appendix 2.
- 2.1.2 These protection measures will be in place for the duration of the development and on site monitoring will ensure that the fencing remains in place and intact promoting the successful retention of the subject trees.
- 2.1.3 Signs must be affixed to the fencing to inform on-site contractors of the importance of the fencing barriers (Appendix 6).
- 2.1.4 The root protection areas (RPAs) must be treated as sacrosanct and the following guidelines must be followed:
- NO mechanised excavations
 - NO movement of construction traffic or parking of vehicles
 - NO storage of building materials
 - NO storage of chemicals or fuels
 - NO fires to be lit in close proximity to trees
- 2.1.5 In addition to the fencing Construction Exclusion Zones have been indicated on the Tree Protection Plan. These areas are subject to the same restrictions.
- 2.1.6 Specialist construction methods, such as hand digging under supervision, were originally necessary for development of the block of flats and access footpath (as shown on the Tree Protection Plan) adjacent to G2 although now that the building footprint has been marked out on site this work now falls outside of the RPA, possibly reflecting a small margin of error in the topographical survey. It is however still necessary to undertake hand digging under supervision for all soft landscaping. A full specification for this work is provided in section 2.3.

2.2 Tree Removals

- 2.2.1 It will be necessary to remove 8 individual trees and 3 tree groups to facilitate development as agreed with the Local Planning Authority.
- 2.2.2 All trees must be removed prior to commencement of development and in accordance with the specification provided in Appendix 1 of this document and the relevant British Standard BS:3998 2010 Tree Work – Recommendations.
- 2.2.3 It must be noted that trees provide essential habitat for birds and bats and as such any proposed works must be carried out in full consideration of the law. Birds, bats and their habitats are afforded protection within the Wildlife and Countryside Act 1981 and The Conservation of Habitats and Species Regulations 2010 (as amended).
- 2.2.4 The Wrexham County Borough Council Ecologist has identified the area around G6 as providing habitat for Badgers. As such all tree and vegetation removals for this portion of the site must be completed in accordance with guidance provided in the ecological report.
- 2.2.5 All trees to be removed or retained are listed below:

BS Category	Trees to be Removed	Trees to be Retained
A (1,2,3)	n/a	T1
B (1,2,3)	T9, T11, T12, T13, T14, T15, T16, G6, G7,	T3, T4, T5, T6, T7, T8, T10, G1, G2, G3, G4, G5,
C (1,2,3)	G8	n/a
U	T2	n/a

2.3 No Dig/ No Mechanical Excavations

- 2.3.1 The Tree Protection Plan (TPP) indicates the Construction Exclusion Zones (CEZ) for retained trees. Under no circumstances may any aspect of development take place within these areas unless specified in the following section. Further comments in this section relate to trees situated along the riverbank.

2.3.2 The majority of trees and tree groups situated along the river are either outside of the area proposed for development or only suffer a minor incursion into the RPA permitting development to take place with specialist construction methods, specifically hand digging under arboricultural supervision. This relates to G2, G3 and T10.

2.3.3 G2, G3 and T10 Gardens - Soft Landscaping Under Supervision

2.3.3.1 The incursion into the RPA for G2, and the RPA's for G3 and T10, relates to soft landscaping only. It is understood that this area is to be soiled and turfed following removal of the existing hardcore only. However, this aspect of the development is proposed within the CEZ. As such works will proceed as follows:

- Main contractor to alert supervising arboriculturalist of the timeframe for soft landscaping.
- Tree Protection Fencing to be relocated to the boundary fence line under supervision of arboricultural consultant.
- Contractor to hand dig area relating to the removal of hardcore to the required depth – this should relate purely to removal of the hardcore layer to enable application of topsoil and turf
- It is unlikely that tree roots will be detected during these works however should any roots be found under 25mm diameter, that are deterring works, they will be cleanly cut with a pruning saw or secateurs at 90° to the length of the root
- Any root over 25mm will be inspected by the supervising consultant arboriculturalist who will advise on the best course of action
- Any roots left exposed will be wrapped in damp hessian to prevent the desiccation of the root and the exposed area will be back filled at the earliest opportunity with top soil.
- Following completion of ground preparation the area will be subject to an application of topsoil and turf. On completion of the works the Tree Protective Fencing will be relocated to the boundary of the CEZ as indicated on the TPP

2.4 *Ground level changes*

- 2.4.1 The existing grassed area containing T1 – T8 and G1 is out of influence of the development however, some of the existing grassed section is to be removed and a retaining wall is proposed to address the drop in levels. Despite this work taking place outside of the RPA for the trees in this section of the site the following guidance is provided.
- 2.4.2 Only ground level changes approved by the Local Planning Authority (LPA) may be affected. It is paramount that no changes in ground levels are affected within proximity to trees without consultation with an arboricultural consultant. Under no circumstances should there be any works undertaken within the construction exclusion zones around retained trees.
- 2.4.3 During supervisory visits to site concerns regarding impact of the retaining wall to be constructed adjacent to T1 were raised by the site manager; when measured out on the ground the current design places the retaining wall against the limit of the tree protection fencing making construction problematic. The LPA Arboricultural Officer has been alerted to this concern and has proposed a site meeting between all relevant parties to discuss a solution which may include an additional amendment to the design, specialist construction methods and/ or installation of a root barrier. This point is noted here purely for information only at this time.

2.5 *Service installation*

- 2.5.1 No details regarding services have been provided at this time however no service installation should take place within the RPA's of retained trees within consultation with an arboricultural consultant and approval from the LPA.
- 2.5.2 All service runs, utilities and similar infrastructure should take note of trees and allow for working methods that will minimise damage to trees by referring to documents such as NJUG Volume 4 - Guidelines for the planning, installation and maintenance of utility services in proximity to trees. (National Joint Utilities Group 2007)

2.6 Access, Egress & Facilities

- 2.6.1 An arboricultural method statement would usually specify a point for access, egress and onsite facilities such as: contractor car parking, site huts and storage, and welfare facilities however, this section has been summarised given the on-site spatial constraints. Recommendations have been made where possible however need to be finalised and approved by the LPA.
- 2.6.2 Access and egress is likely to be via the current site access on the public highway, and cul-de-sac, Pont Wen to the south east. It is recommended that the LPA are consulted regarding specific conditions pertaining to the limitations of the servicing highway network and any traffic management required during construction.
- 2.6.3 It is recommended that the turning area at the bottom of the access road Pont Wen is, if possible, utilised for onsite welfare facilities.
- 2.6.4 Contractor parking is not thought feasible on site and as such arrangements need to be made elsewhere.
- 2.6.5 The exact location proposed for storage of materials or heavy plant must be agreed in advance with the LPA. Under no circumstances can any facilities or storage be located within the RPA's for retained trees.

2.7 Responsibilities

- 2.7.1 It will be the responsibility of the main contractor to ensure that the planning conditions attached to planning consent are adhered to at all times and that a monitoring regime in regard to tree protection is adopted on site.
- 2.7.2 The main contractor will be responsible for contacting the Local Planning Authority at any time if issues are raised related to the trees on site.
- 2.7.3 If further pruning works are required permission must be sought from the Local Planning Authority and on approval carried out in accordance with BS3998 Tree Work - Recommendations 2010.
- 2.7.4 The main contractor will ensure the construction sequence is appropriate to make certain that no damage occurs to the trees during the construction processes.

Protective fences will remain in position until completion of **ALL** construction works on the site. This includes soft landscaping and the mitigation and enhancement planting proposals.

- 2.7.5 The protective fencing and signs must be maintained in position at all times and checked on a regular basis by an on-site person designated that responsibility.

2.8 Arboricultural supervision

- 2.8.1 It is recommended that prior to development operations, a full consultation between the client, the Local Planning Authority, the Consultant Arboriculturalist and other relevant contractors take place on site to answer any questions related to the undertaking of this project.
- 2.8.2 In addition to the recommendation above, and supervised works discussed within this section, it is recommended that a number of short inspections of the subject trees should be undertaken by an Arboricultural Consultant familiar with BS5837: 2012 operations during the extent of the project as set out below.
- 2.8.3 On completion of each inspection a brief report with photographic evidence of the findings will be submitted to the Local Planning Authority via email and within 24 hours of the visit. If any unauthorised works are noted the LPA will be advised immediately by telephone.

Event/ Stage	Action
Pre Development Consultation Meeting	On site meeting between the client, the Local Planning Authority, the Consultant Arboriculturalist and other relevant contractors to answer any questions related to the undertaking of this project.
Installation of tree protection fencing	Arboricultural Consultant to check that protective tree fencing is in place as indicated on the Tree Protection Plan prior to commencement of any construction work including site preparation.
Construction Phase	Arboricultural Consultant to make periodic visits to site to check that the protective fencing is in place and that no unauthorised activities have commenced within the Construction Exclusion Zones – It is recommended that

	supervisory visits are made every week for the duration of the development.
Completion of works	Arboricultural Consultant to confirm completion of all works in order to authorise removal of the tree protection fencing.