# Arboricultural Impact Assessment





Aldi - Mafon Road, Nelson, Caerphilly, CF46 6PE ae 21st February 2024

Project No:	Report No.	Date	Revision		
13571	R02a	21st February 2024	-		
Qu	thor	Checked and Approved			
но	1101	Checked and i	ippioved		

#### Disclosure:

This report, all plans, illustrations, and other associated material remains the property of Tyler Grange Group Ltd until paid for in full. Copyright and intellectual property rights remain with Tyler Grange Group Ltd.

The contents of this report are valid at the time of writing. Tyler Grange shall not be liable for any use of this report other than for the purposes for which it was produced. Owing to the dynamic nature of ecological, landscape, and arboricultural resources, if more than twelve months have elapsed since the date of this report, further advice must be taken before you rely on the contents of this report. Notwithstanding any provision of the Tyler Grange Group Ltd Terms & Conditions, Tyler Grange Group Ltd shall not be liable for any losses (howsoever incurred) arising as a result of reliance by the client or any third party on this report more than 12 months after the date of this report.



#### Contents:

Section 1: Introduction	2
Section 2: Arboricultural Baseline	4
Section 3: Arboricultural Impact Assessment	5

### **Appendices:**

Appendix 1: Planning Policy Relating to Trees

Appendix 2: BS 5837:2012 Cascade Chart for Tree Quality Assessment

Appendix 3: Tree Survey Schedule (13571/TSS01)

Appendix 4: Report Limitations

#### Plans:

Plan 1: Tree Constraints Plan (TCP), (13571/P02a)

Plan 2: Tree Retention Plan (TRP), (13571/P03)



# **Section 1: Introduction**

#### Table 1: Overview and Summary

Purpose of report:	Following the recommendations of the British Standard <sup>1</sup> , this report includes the necessary arboricultural information to support the planning application. It demonstrates that the impact, both direct and indirect, of the proposal, has been assessed and where appropriate, mitigation and tree protection may be required.
Site description:	The site is approximately 1.05 ha in size and comprises a building, hardstanding, parking spaces, shrubs, woodland and scattered trees. The site is located within the urban area of Nelson, Caerphilly and is bordered by residences and businesses to the north and greenspace to the south, east and west. (See Figure 1 overleaf).
Application type and description:	Full planning permission is sought for the proposed erection of an Aldi food store.
Report prepared on behalf of:	Aldi Stores Ltd.
Local Planning Authority (LPA):	Caerphilly County Borough Council.
Planning policies relating to arboricultural features:	Policy CW6: Trees, Woodlands and Hedgerow Protection of the CCBC's Local Development Plan (Adopted November 2010). Planning policy is further detailed at Appendix 1.
Report Summary:	There will be no tree removal to facilitate the development.
	This report details where tree pruning works are required along with mitigative measures for working with the rooting areas of trees where this is required.
	The protection of the retained trees during the construction stage will require a detailed Arboricultural Method Statement (AMS). This report provides recommendations for protection to demonstrate how this can be achieved. An AMS is therefore recommended to be secured by planning conditions should consent be granted.







Figure 1: Site Location with Approximate Boundary (Bing Map ©).



### **Section 2: Arboricultural Baseline**

#### Table 2: Survey Summary

Survey approach:	The tree survey was completed by a suitably qualified Arboricultural Surveyor of Tyler Grange on 6 <sup>th</sup> November 2023. The survey was completed in accordance with BS5837. A measured topographical survey was used to identify the location of trees and their surrounding context.
Survey findings:	Findings for each of the trees surveyed are detailed in the Tree Survey Schedule (See Appendix 3). This provides a tabulated record of the trees surveyed, including reference numbers, species composition, tree dimensions, life stage, physiological and structural condition, and the arboricultural value of each survey entry.
Survey mapping:	The distribution of the trees surveyed is illustrated on the <b>Tree Constraints Plan (TCP)</b> together details of their constraints to new development in accordance with BS5837, including, tree quality gradings <sup>2</sup> , Root Protection Areas (RPAs) <sup>3</sup> , tree canopy spreads <sup>4</sup> and tree shading <sup>5</sup> .

#### Table 3: Tree related Designations

Designation Type	TG Tree Reference Number(s)
Tree Preservation Order <sup>6</sup>	None
Conservation Area <sup>7</sup>	None
Ancient Woodland <sup>8</sup>	None
Other Woodland Habitat <sup>9</sup>	None

<sup>&</sup>lt;sup>9</sup> Spatial data of woodlands identified under the Priority Habitat Inventory (England) Published by Natural England. The Magic Maps website https://magic.defra.gov.uk/MagicMap.aspx has been used to search for woodland on or adjacent to a site.



<sup>&</sup>lt;sup>2</sup> The arboricultural value of surveyed features under the criteria shown at Appendix 1. Allowing informed decisions to be made concerning which trees should be removed or retained in the event of development occurring.

<sup>&</sup>lt;sup>3</sup> a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.

<sup>&</sup>lt;sup>4</sup> Dimensions of the trees crown spread and clearance from ground level.

<sup>&</sup>lt;sup>5</sup> Shade cast by existing trees which may affect the availability of sunlight and daylight within a new development.

<sup>&</sup>lt;sup>6</sup> A Tree Preservation Order is an order made by a local planning authority in England to protect specific trees, groups of trees or woodlands in the interests of amenity. An Order prohibits the any works and damage to trees (with some exceptions) without the local planning authority's written consent. More information can be found online <a href="https://www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas#tree-preservation-orders--general">https://www.gov.uk/guidance/tree-preservation-orders--general</a>.

Trees in a conservation area that are not protected by an Order are protected by the provisions in section 211 of the Town and Country Planning Act 1990. These provisions require people to notify the local planning authority, using a 'section 211 notice', 6 weeks before carrying out certain work on such trees, unless an exception applies. More information can be found online https://www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas#tree-preservation-orders--general.

<sup>8</sup> Ancient woods are areas of woodland that have persisted since 1600 in England and Wales, and 1750 in Scotland. The Magic Maps website <a href="https://magic.defra.gov.uk/MagicMap.aspx">https://magic.defra.gov.uk/MagicMap.aspx</a> has been used to search for ancient woodland on or adjacent to a site.

## **Section 3: Arboricultural Impact Assessment**

#### **Tree Pruning Works**

3.1. Tree T2 will require crown lifting pruning on its northeastern side to provide a 2.5m height clearance for car parking spaces. Tree T3 will require crown lifting works on its eastern side to provide 4.5m height clearance for HGV turning area. The pruning works are not considered detrimental to the trees which have a current crown clearance of 2m and 3m respectively.

#### **New Tree Planting**

3.2. A proposed soft-landscaping scheme has been prepared and submitted separately as part of the application. The proposal includes for new tree planting across the site and within the new street scenes. This includes the planting of 12 new trees.

#### **Works within Root Protection Areas**

- 3.3. Works required within the RPAs of trees to facilitate the construction stage of the development are detailed in the table below. Recommendations to mitigate the working activities with respect to minimising impacts to roots and their environment is provided.
- 3.4. Adoption of the recommended protective measures is subject to the approval of a detailed Arboricultural Method Statement (AMS) which will be provided by condition should consent be granted.

Table 4: Works within RPAs

Tree Number	Description of works	Protective measures
T1	4.5% incursion of footpath at the periphery of the RPA.	Surface to not exceed an area greater than 20% of the existing unsurfaced ground within the RPA.,No-dig construction approach with permeable specification and non-invasive edge supports. Should the surface require de-icing, an impermeable barrier should be incorporated to prevent contamination of the rooting area. Runoff should be directed away from the RPA.

#### **Construction Mitigation**

- 3.5. Trees to be retained will remain unaffected by the proposed development subject to the adoption of tree protection measures during the construction phase.
- 3.6. It is recommended that a full Arboricultural Method Statement (AMS) is prepared as part of the Technical design stage as recommended by BS5837. Should planning permission be granted, this can be secured through the imposition of a suitably worded condition.
- 3.7. The AMS will set out a practical methodology to the protection of retained trees based on detailed construction plans. The AMS will typically include the following key items:



- A schedule and specification of tree pruning works;
- Specifications for tree protection barriers and ground protection;
- Procedures for any specialist construction techniques / any supervised excavations within RPAs;
- Phasing of work;
- Site monitoring (where required); and
- A Tree Protection Plan.

#### Conclusion

- 3.8. There will be no tree removal to facilitate the development and 12 new trees will be planted. Tree pruning works to T2 and T3 will be required to facilitate new parking and HGV uses.
- 3.9. Retained trees will require protection during the construction phase. Further work is recommended to include an AMS which can be secured by a suitably worded planning condition.



# **Appendix 1: Planning Policy Relating to Trees**

**Table 5:** National and Local Planning Policy Relating to Trees

Policy Document	Policy References	Policy Wording / Description						
PPW Edition 12 (Adopted February 2024)	_	Policy Wales (PPW) sets out the land use planning policies of the Welsh t translates the Government's commitment to sustainable developmenting system.						
	Paragraph 6.2.1	Green infrastructure is the network of natural and semi-natural features, green spaces, rivers and lakes that intersperse and connect places. Component elements of green infrastructure can function at different scales and some components, such as trees and woodland, are often universally present and function at all levels. At the landscape scale green infrastructure can comprise entire ecosystems such as wetlands, waterways, peatlands and mountain ranges or be connected networks of mosaic habitats, including grasslands. At a local scale, it might comprise parks, fields, ponds, natural green spaces, public rights of way, allotments, cemeteries and gardens or may be designed or managed features such as sustainable drainage systems. At smaller scales, individual urban interventions such as street trees, hedgerows, roadside verges, and green roofs/walls can all contribute to green infrastructure networks						
	Paragraph 6.4.39	Planning authorities must protect trees, hedgerows, groups of trees and areas of woodland where they have ecological value, contribute to the character or amenity of a particular locality, or perform a beneficial green infrastructure function. Planning authorities should consider the importance of trees and woodland, particularly native woodland and valued trees, and should have regard to local authority tree strategies or SPG and the Green Infrastructure Assessment.						
	Paragraph 6.4.40	Where trees, woodland and hedgerows are present, their retention, protection and integration should be identified within planning applications. Where surveys identify trees, hedgerows, groups of trees and areas of woodland capable of making a significant contribution to the area, these trees should be retained and protected. The provision of services and utilities infrastructure to the application site should also avoid the loss of trees, woodlands or hedges and must be considered as part of the development proposal; where such trees are lost, they will be subject to the replacement planting ratios set out below.						
	Paragraph 6.4.42	Permanent removal of trees, woodland and hedgerows will only be permitted where it would achieve significant and clearly defined public benefits. Where individual or groups of trees and hedgerows are removed as part of a proposed scheme, planning authorities must first follow the step-wise approach as set out in paragraph 6.4.15. Where loss is unavoidable developers will be required to provide compensatory planting (which is proportionate to the proposed loss as identified through an assessment of green infrastructure Further advice in relation to ancient woodland is available on NRW's website. value including biodiversity, landscape value and carbon capture). Replacement						



		planting shall be at a ratio equivalent to the quality, environmental and ecological importance of the tree(s) lost and this must be preferably onsite, or immediately adjacent to the site, and at a minimum ratio of at least 3 trees of a similar type and compensatory size planted for every 1 lost. Where a woodland or a shelterbelt area is lost as part of a proposed scheme, the compensation planting must be at a scale, design and species mix reflective of that area lost. In such circumstances, the planting rate must be at a minimum of 1600 trees per hectare for broadleaves, and 2500 trees per hectare for conifers. The planting position for each replacement tree shall be fit to support its establishment and health, and ensure its unconstrained long-term growth to optimise the environmental and ecological benefits it affords.
	Paragraph 6.4.43	Ancient woodland, semi-natural woodlands, individual ancient, veteran and heritage trees and ancient hedgerows are irreplaceable natural resources, and have significant landscape, biodiversity and cultural value. Such trees, woodlands and hedgerows are to be afforded protection from development which would result in their loss or deterioration unless very exceptionally there are significant and clearly defined public benefits; this protection must prevent potentially damaging operations and their unnecessary loss. In the case of a site recorded on the Ancient Woodland Inventory, authorities should consider the advice of NRW. Planning authorities should also have regard to the Ancient Tree Inventory, work to improve its completeness and use it to ensure the protection of trees and woodland and identify opportunities for more planting as part of the Green Infrastructure Assessment, particularly in terms of canopy cover.
Caerphilly County Borough Counciil's Local Development Plan	CW6	Development proposals on sites containing trees, woodlands and hedgerows, or which are bordered by one of more such trees or hedgerows, will only be permitted provided that: A Where arboricultural surveys are required, they are submitted and approved, including any mitigation, compensation or management requirements, as part of the planning application. B Root systems will be retained and adequately protected for the duration of all development activity on site. C Development proposals have made all reasonable efforts to retain, protect and integrate trees, woodlands or hedgerows within the development site. D Where trees, woodlands or hedgerows are removed, suitable replacements are provided where appropriate.
Supplementary Planning Guidance	LDP4 - Trees and Development (January 2017)	Policies SP10 and CW6 will facilitate the provision and protection of trees within development sites within the county borough. LDP4 seeks to ensure that trees are adequately addressed throughout the development process by seeking the protection and integration of trees into the design of new development from an early stage in the development process.



# Appendix 2: BS 5837:2012 Cascade Chart for Tree Quality Assessment

TREES FOR REMOVAL										
Category and Definition	Criteria									
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 lategory U										
Those in such a condition that they cannot realistically be retained as	Trees that are dead or are showing signs of significar	nt, immediate, and irreversible overall decline.		DARK RED						
living trees in the context of the current land use for longer than 10 years	' 3 3	nealth and/or safety of other trees nearby or very low-qualit conservation value which it might be desirable to preserve)	y trees suppressing adjacent trees of better quality.	DHRKRED						
TREES TO BE CONSIDERED FOR RETI	ENTION									
Category and Definition	Criteria - Subcategories			Identification on Plan						
	Mainly Arboricultural Values	2. Mainly Landscape Values	3. Mainly Cultural Values, including Conservation							
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 semiformal 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)	LIGHT GREEN						
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 remedial 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	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 benefits.	MID BLUE						
Category C <b>Trees of low quality</b> with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	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 temporary/transient landscape benefit.	Trees with no material conservation or other cultural value.	GREY						



# **Appendix 3: Tree Survey Schedule (13571/TSS01)**



	Common Species		Trunk Diameter and	Crown Spread (m)				Height of Crown Age Class	Age Class	Physiological	Structural	BS5837	Comments/Preliminary Management	RPA Radius (m)	Root Protection
Number	Name	(m)	stem count	Ν	Е	S	W	Clearance (m)		Condition	Condition	Category	Recommendations	Radius (m)	Area (m2)
T1	English oak	9m	550	3.00	6.00	6.00	5.00	1.00	Mature	Good	Good	B2	No significant observable defects.	6.6	137
T2	English oak	11m	400	6.00	7.00	5.00	5.00	2.00	Mature	Good	Good	B2	No significant observable defects.	4.8	72
Т3	English oak	10m	560	7.00	6.00	6.00	6.00	3.00	Mature	Good	Good	B2	No significant observable defects.	6.7	142
T4	Rowan	5m	150	2.00	2.00	2.00	2.00	2.00	Semi- mature	Fair	Fair	C2	Could not access trunk. Diameter estimated.	1.8	10
G1	Alder x 3	7m	120	-	-	-	-	3.00	Semi- mature	Good	Good	C2	No significant observable defects.	1.4	7
G2*	Hawthorn, goat willow	5m	200	-	-	-	-	1.00	Early- mature	Good	Fair	B2	Not plotted on topo. Location estimated	2.4	18
W1*	Mixed broadleaf	10m	400	-	-	-	-	2.00	Mature	Good	Good	A2	Mixed broadleaf wooded area dissected by watercourse. Species predominantly alder with some oak and hazel.	4.8	72



# **Appendix 4: Report Limitations**

#### Limitations

- A4.1. The comments made are based on observable factors present at the time of inspection. Although the health and stability of trees in their current context is an integral part of their suitability for retention, it must be understood that this report is not a tree risk assessment and should not be construed as such. While every attempt has been made to provide a realistic and accurate assessment of the trees' condition at the time of inspection, it may have not been appropriate, or possible, to view all parts or all sides of every tree to fulfil the assessment criteria of a risk assessment.
- A4.2. No tree can be considered entirely safe, given the possibility that exceptionally strong winds could damage or uproot even a mechanically 'perfect' specimen. It is therefore usually accepted that hazards are only recognisable from distinct defects or from other failure-prone characteristics of the tree or the site. An assessment of the potential influence of trees upon existing buildings or other structures resulting from the effects of trees upon shrinkable load-bearing soils or the effects of incremental root or branch growth, are specifically excluded from this report.

#### **Un-assessable Risks**

- A4.3. Any alteration to the application site or development proposals could change the current circumstances and may invalidate this report and any recommendations made.
- A4.4. The Wildlife and Countryside Act (WCA) 1981 (as amended) makes it an offence to disturb nesting birds or recklessly endanger a bat or its roost. Bats are also a European protected species and are additionally protected under the Conservation (Habitats & c) Regulations 1994 and 2010 (as amended). The survey findings, constraints, opportunities and design or mitigation recommendations included within that report must be read alongside this document.

A lack of recommended work does not imply that a tree does not pose an unacceptable level of risk and likewise, it should not be implied that a tree will present an acceptable level of risk following the completion of any recommended work.



## Plans:

Plan 1: Tree Constraints Plan (TCP), (13571/P02a)

Plan 2: Tree Retention Plan (TRP), (13571/P03)









