

Arboricultural Impact Assessment

(in accordance with BS5837: 2012 Trees in Relation to Construction)

For:

Client: Tom Strawson

Location: land off Main St, Scawby, Nr Brigg, Lincs

Date: 27th August 2021

(Note: this report should be read in conjunction with the attached plans)



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Appendix “A” Tree Removal and Retention Plans

Note: This AIA should be read in conjunction with the original Arboricultural Report, Tree Schedule, and Tree Constraint Plans

1.0 Purpose of Assessment

Using the information detailed within the formal Arboricultural Report and the preparation of a design/layout for the site, this assessment will evaluate the direct and indirect effects of the proposed development on retained trees. This assessment is supported by and should be read in conjunction with the following:

- Arboricultural Report - Principle Formal Arboricultural Report/Survey
- Tree Survey Schedule (Appendix "A" of the Arboricultural Report)
- Tree Constraint Plan (Appendix "B" of the Arboricultural Report)

1.1 Terms of Reference

ENGIE Arboricultural Consultancy has been instructed to prepare an Arboricultural Impact Assessment (AIA). This assessment will comply with the recommendations and guidance set out within the BS 5837:2012 Trees in Relation to Design, Demolition and Construction and will take account of the effects of any tree/hedge loss required to implement the design, and any potentially damaging activities proposed in the vicinity of retained trees/hedges.

1.2 Description of the Development

A design/layout has been prepared and made available for the purpose of this AIA. It is proposed to develop this site to deliver a number of residential dwellings with associated access, driveways, garages, and garden space. It is proposed to access this site from a new access point off Main Street, Scawby.

1.3 Proposed Site Layout (snip shot)



Image source: © 2021 Hyde Architecture – Proposed Site Plan Dwg. No. 1339 / 0004

2.0 Status of the Site

The Local Planning Authority (LPA) is North Lincolnshire Borough Council. In accordance with their online e-mapping system, accessed on the 21st of July 2021, this confirms there are no trees afforded the protection of a Tree Preservation Order. This also confirms that the site and land adjacent is not within a Conservation Area.

2.1 Hedgerow Regulations

With respect to the current land use the hedgerows as identified to this particular site would, mostly, come under the Hedgerow Regulations (1997) and as such, outside of any planning approval, any proposed removal of hedgerow would require a Hedgerow Removal Notice. Quite simply, the Regulations contain a detailed arrangement for a system to protect “important hedgerows”. The presumption is in favour of protecting and retaining important hedgerows, although the LPA cannot refuse consent for removal if the hedgerow is not important. An important hedgerow must fulfil specific criteria to be deemed “important”. Having assessed this site and the hedgerows I would consider it extremely unlikely the hedgerows to this particular site are “important” as defined within the Regulations. It will, of course be the Local Planning Authority that would need to determine this. There would be an exemption for the need to notify the LPA where development has been authorised by a planning permission.

3.0 Current Arboricultural Baseline Data

Referring to the survey data and formal Arboricultural Report the quality and value of the existing tree stock has been evaluated (also see Appendix “B” Tree Constraints Plan of the original report,) with the following conclusion:

Category Grading (see 3.1 Cascade Chart)									
A1	A2	A3	B1	B2	B3	C1	C2	C3	U
			T11	H1		T2			T1
			T12	H2		T3			T4
				H3		T5			T6
				H4		T7			T9
				H5		T8			T10
						T13			

3.1 Cascade Chart for Tree Quality Assessment

Category and definition	Criteria (including subcategories where appropriate)		
Trees unsuitable for retention (see Note)			
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: none"> Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <p><i>NOTE</i> Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</p>		
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation
Trees to be considered for retention			
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value

4.0 Tree Survey

In accordance with the BS 5837:2012 'Trees in Relation to Design, Demolition and Construction – Recommendations' a tree survey has been undertaken, recording the relevant data regarding the sites tree & hedge population, enabling a distinction of the tree/hedge stock according to quality and value. This assessment is informed primarily by the condition of the trees and their future potential. As well as the quality and value of the tree stock, trees are assessed according to an estimate over remaining time over which trees can be reasonably retained. Four categories are set out within the BS 5837:2012, as per the Cascade Chart for Tree Quality Assessment (see Page 7 - 3.1). Species longevity, age class, physiological condition and structural integrity are all taken into consideration in order to arrive at the appropriate category grading.

4.1 Tree/Hedge Stock

Referring to the survey data informed by the topographical survey, there are 13 individual trees and 5 hedgerows. The age class distribution falls mostly within the semi mature and mature classifications. In terms of quality and value the assessment concluded:

- A1 - High (quality & value) - 0 individual trees
- A2 - High (quality & value) - 0 groups of trees
- B1 - Moderate (quality & value) - 2 individual trees
- B2 - Moderate (quality & value) - 5 hedges
- C1 - Low (quality & value) - 6 individual trees
- C2 - Low (quality & value) - 0 groups of trees
- U – Unsuitable for retention - 5 trees

4.2 Hedges

There is no specific selection process for hedgerows as defined within the BS 5837:2012. However, the hedges have been assessed and categorised using a similar approach to the group categorisation, as a collective or landscape feature, namely boundary hedgerow.

4.3 5 hedgerows have been assessed. The hedgerow size (approx.) is as follows:

- H1 – 26.7m
- H2 – 53.7m
- H3 – 13.0m
- H4 – 31.7m
- H5 – 48.5m

Total length of hedgerow, inclusive = 173.6m

5.0 Development Proposal

Following the results of the formal tree report and constraints plan a design/layout has been prepared and made available. Due consideration has been given to the existing tree/hedge stock and a balanced judgement has now been made with regards to the future relationship with trees/hedges in context with the proposed use of the site. Some trees are considered unsuitable for retention irrespective of whether development of the site takes place. 5 individual trees have been categorised 'U'. These trees are in such a condition that early loss is expected, or they show signs of irreversible overall decline. A number of trees have been identified as category "C" trees. In accordance with the proposed design layout and good arboricultural practice, 5 of the individual category "C1" trees (T3, T5, T7, T8, & T13) are expected to be removed. These trees are considered to be of low quality and value and would not usually be retained where they may impose a significant constraint on the development of the site. 2 individual trees and 2 hedgerows that fall within the 'B1' / 'B2' category grading are expected to be removed in order to facilitate the successful development of the site. Due consideration has been given into how category 'B' trees/hedges could be incorporated into the development of the site, however the practicalities for retention proved unattainable. The removal will be an unfortunate consequence of development taking place.

5.1 It is proposed to develop this site to form a residential led development of dwellings with associated access, driveways, garages, and garden space. It is proposed to access this site off Main Street. Generally, it would be reasonable to suggest that in any circumstance the land use is expected to change to residential. On this basis a realistic judgement has been made in terms of the probable impact the trees/hedges may have on the development of the site and its future users. The removal of trees/hedges as proposed is considered transient and in turn will create an opportunity to refresh the tree/hedge stock and avoid misplaced retention.

6.0 Arboricultural Implications Assessment (AIA)

For the preparation of this AIA, I have been supplied with a final design/layout for the site. The implications of development in accordance with the supplied design/layout are as follows:

6.1 Implications of Development (also refer to Appendix "A" Tree Removal & Retention Plan)

a) Direct Loss of Trees / Hedges:

- 12 individual trees and 2 hedgerows (44.7m) have been identified for removal in order to facilitate development and also in accordance with good arboricultural practice.

b) Direct Impact of Tree Loss:

The tree survey, as identified within the arboricultural report, shows in total 13 trees and 5 hedgerows. 12 trees and 2 hedges are proposed for removal.

Description	Tree Nos.
Trees surveyed	13
Hedges surveyed	5 (inclusive 173.6m)
Trees removed due to current condition	5
Hedges removed due to current condition	0
Trees removed to facilitate the development of the site	7
Hedges removed to facilitate the development of the site	2 (inclusive 44.7m)

6.2 Mitigation for Loss of Trees / Hedges

a) This development proposal has given serious consideration to landscaping and how a scheme of planting could enhance the site and its locality to the benefit of future users and the wider community. The design/layout provides an excellent opportunity for new strategic planting at a high standard.

b) The developer has recognised the importance of the landscape element and commissioned a detailed landscape plan to support this development proposal. Provision has been given to new tree planting, swaths of wildflower, hedges, and flowering lawn. Wide verges create an opportunity for a tree lined street with native mix hedges marking boundaries to dwellings.

c) The extent of landscaping is significant compared to that of the current situation. 51 individual trees are proposed throughout the site. This is a net-gain of 31 new trees. The roadside verges will incorporate 3,165sq m of wildflower mix. Native mix hedging is specified throughout the site, marking property boundary lines. Approximately 372m of new native mix hedging is proposed, a net-gain of nearly 200m to that of the current situation.

d) The landscape proposal for this site has been designed to provide an exceptional visual contribution to future residents and the wider locality. The allocation of landscaping, as proposed, will complement the character and appearance of the site and its locality and mitigate for any adverse impacts the development may have upon the site and neighbouring land uses. New tree and hedge planting will soften the visual impact of development and settle the development into the environment as seen from outside the site.

6.3 Indirect Impacts

a) Changes in Ground Level:

There are not expected to be any changes in ground levels within the RPA of T2.

b) Changes in Ground Surfaces within the RPA:

There may be a change of ground surface within the RPA of T2. In the rear garden of 'Plot 1' a pedestrian garden footpath is proposed to provide a link from the garage to the dwelling. The impact on T2 could be reduced with the use of a no-dig solution.

c) Structures within the RPA:

There are not expected to be any structures placed within the RPA of retained trees (T2).

6.4 Changes in Site Use and Tree Management

a) General:

T2 - Once the initial trees work has been carried out, future management requirements resulting from the proposed development may be periodic crown lifting of the canopy and the reduction of any overextending branches that may interfere with structures and amenity garden space. Further management requirements would be the regular removal of epicormic/sucker growth along with a clean out of any dead wood that may be present as well as the continued management of any ivy growth.

Hedges - Once the initial trees work has been carried out, future management requirements resulting from the proposed development may be the regular trimming of sides and tops.

b) Roads and Footpaths:

N/A

c) Potential Root Damage to Infrastructure:

There is no evidence to suggest the roots of retained trees (T2) or retained hedges have damaged structures or hard surfaces. Provided the proposed development is constructed taking into consideration the below ground constraints it is unlikely damage will occur from roots.

6.5 Potential Nuisance

a) Apprehension:

The proposed layout has been sympathetic to the retention of T2 and to the retained hedge lines, allowing a tolerable distance between structures. Apprehension is expected to be strictly limited as a result of this development.

b) Shade:

Generally, the proposed design/layout has been designed to take account of retained tree T2 and the retained hedgerows. The availability of light is not expected to be a particular inconvenience. Generally, garden space is particularly generous for each plot. The availability of light to the areas most used is not expected to be a constraint.

c) Tree/Hedge Litter:

All trees/hedges produce a litter of some description, which is only a natural occurrence that is unavoidable. Management requirements such as the removal of leaf litter will be the responsibility of the landowner. Occasionally the amount of litter produced could be reduced slightly through appropriate pruning; however, it would never be eradicated. Also leaf litter nuisance can be reduced by using appropriate gutter and drain guards.

7.0 Conclusion

7.1 The formal tree report and survey reveals an existing tree stock that generally has moderate to low quality and value, with a number of trees that are in such a condition that they have a relatively short, safe, useful life expectancy. The proposed development of this land is intended for residential use. Those trees/hedges that merit retention, category “B”, have been given serious consideration, however the practicalities for retention for some proved unattainable.

7.2 Mostly, it would be reasonable to suggest that the existing tree population is unremarkable and of very limited merit. As a consequence of development taking place the removal of these trees is considered inconsequential. Due to the practicalities of design and fulfilling the sites potential, in terms of density, two category ‘B’ trees and 2 hedgerows would need to be removed. This is an unfortunate consequence of development, however measures for mitigation have been put in place to ensure the long-term landscape structure is secured.

7.3 It should be taken into consideration that the majority of the trees associated with this site are sub-standard, unremarkable trees of very limited merit, with very limited long-term future prospects or in such a condition that long-term retention is not viable. There is a clear opportunity to refresh the tree stock at both a strategic scale and to a high standard. Removal of sub-standard trees, trees with limited prospects, will allow a substantial amount of new tree and hedge planting or “greening” of the environment, which will only enhance the landscape character to this part of Scawby. Public interest would be poorly served in an attempt to cling on to trees with limited future prospects. The development proposal for this site would deliver a qualitative and quantitative landscape and ecological enhancement over the current situation, an opportunity that would not have presented itself without the prospect of development occurring. On this basis, public interest rests firmly with the development of this site.

Personal Professional Statement

8.0 Personal Professional Statement (Andrew Hudson ND Btec Forestry/Arboriculture / TechArborA)

Acting consultant preparing reports for various organisations including British Standard reports for architects and developers in supporting planning applications.

Andrew holds a Btec National Diploma in Forestry and Arboriculture which was awarded at distinction level.

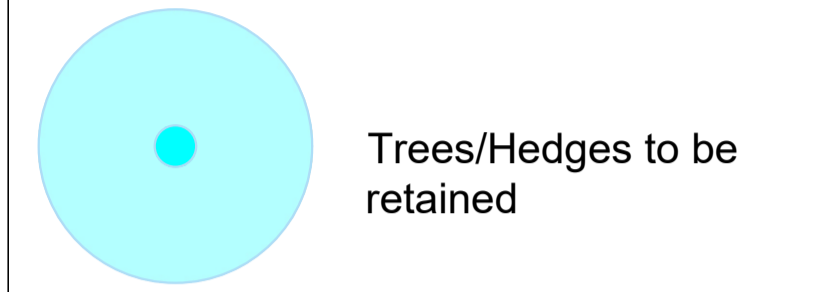
Andrew began working with trees as a forestry contractor, obtaining extensive knowledge and practical experience on various contracts throughout Lincolnshire, East Midlands, East Yorkshire, and East Anglia. Having worked for a number of years within the forestry sector Andrew moved to arboriculture, eventually becoming a fully qualified tree surgeon. This presented a broad spectrum of experience in arboriculture, which was enough to acquire the position of Arboricultural Officer at Local Authority level. This provided valuable experience in all aspects of arboriculture providing him with an inclusive insight into the social, legal and safety issues associated with the management of urban trees in the planning system and Local Authority owned tree stock.

Andrew is part of ENGIE Services Ltd Arboricultural Consultancy providing a service advising on a whole range of tree issues.



Appendix "A"

Tree/Hedge Retention & Removal Plan



Tree Removal

12 individual trees and 2 hedgerows to be removed in order to successfully facilitate the development of the site

ALL NECESSARY DIMENSIONS SHALL BE CHECKED ON SITE BEFORE ANY WORK IS PUT IN HAND. DO NOT SCALE.

REVISIONS

Letter	Amendment	Drawn	Date

ARBORICULTURAL CONSULTANCY



CLIENT Tom Strawson

PROJECT Residential Development
land off Main St, Scawby, Nr Brigg, North Lincs

TITLE Tree/Hedge Removal & Retention Plan

DRAWN AH	CHECKED	APPROVED
DATE 27th July 2021	ORIGINAL SIZE A1 (594 x 841)	SCALE 1:250
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