

Arboricultural Report

Principle Formal Arboricultural Report/Survey
(in accordance with BS 5837:2012 Trees in Relation to Design,
Demolition and Construction)

For:

Client: C A Mottram & Sons

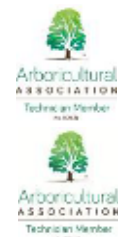
Location: Coleby Lodge Farm, Heath Road,
Coleby, Lincoln LN5 0AR

Date: 22nd August 2019

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

Surveyor/Report Author: Dina J. Mysko FdSc Arb / TechArborA
Assistant Arboricultural Consultant

Checked & Approved By: Andrew Hudson ND Btec Forestry/Arb / TechArborA
On: 27/08/2019
Principal Arboricultural Consultant





Client Details: C A Mottram & Sons
Coleby Lodge Farm
Heath Road
Coleby
Lincolnshire
LN5 0AR

Agent Details: JHG Planning Consultancy Ltd.
Orchard House
Main Road
Welbourn
Lincolnshire
LN5 0PA
W: www.jhgplanning.com

Contact: Oliver J. Grundy
Planning Consultant
E: oliver@jhgplanning.com
T: 01400 273997

Contents

Page 4	1.0	Introduction
	1.1	Purpose of Report
	1.2	Terms of Reference
	1.3	Timing
	1.4	Description of the Development
	1.5	Site Description
Page 5	2.0	Status of the Site
	2.1	Hedgerow Regulations
Page 6	3.0	Site Location Map and Plan
Page 7	4.0-4.4	Method of Survey
	5.0	Root Protection Area (RPA)
Page 8	6.0-6.6	Survey Results (general comments)
	6.7	Cascade chart for tree quality assessment
Page 9	7.0	Photos
Page 10	7.1	Photos
Page 11	7.2	Photos
Page 12	7.3	Photos
Page 13	7.4	Photos
Page 14	7.5	Photos
Page 15	7.6	Photos
Page 16	8.0-8.7	Discussion (general comments)
Page 17	8.8-8.11	Discussion (general comments)
Page 18	9.0	Foundation Design
	9.1-9.5	Design Options (referenced from BS 5837:2012)
Page 19	10.0-10.1	Installation of Services
Page 20	11.0	Conclusion
Page 21	12.0	Reference to “Tree Survey Schedule” Tree Descriptions and Recommendations
Page 22	13.0	Personal Professional Statement (Dina J. Mysko FdSc Arb / TechArborA)

Appendices

Appendix “A1”	Tree Survey Schedule
Appendix “A2”	Hedge Survey Schedule
Appendix “B1”, “B2”, “B3”, “B4” and “B5”	Tree Constraint Plans
Appendix “C1” and “C2”	Tree Retention and Removal Plans

1.0 Introduction

1.1 Purpose of Report

The purpose of this report is to provide a balanced approach with an assessment of trees and hedges in relation to a proposed commercial development. This report is in accordance with the BS 5837:2012 Trees in Relation to Design, Demolition and Construction.

1.2 Terms of Reference

ENGIE Arboricultural Consultancy has been instructed by agent JHG Planning Consultancy Limited, on behalf of client C A Mottram and Sons, to prepare a formal Arboricultural Report, inclusive of a Tree Constraints Plan. The survey and report will comply with the recommendations and guidance set out within the BS 5837:2012 and should be used to assist with site layout and design.

1.3 Timing

The tree survey has been undertaken after an initial design/layout has been prepared. Concept designs are in progress. This report will identify any significant conflicts, of which should be set against the quality and value of affected trees. Those trees that merit retention should be carefully considered in context with the proposed land use and where necessary, modifications to the design/layout should be made in order to accommodate those trees.

1.4 Description of the Development

It is proposed to convert an existing stone barn and lean-to into a café/restaurant with associated car parking and new vehicular access off Tower Lane (B1178).

1.5 Site Description

The site is located on land associated with Coleby Lodge Farm situated south of Tower Lane (B1178), approx. 1.8 miles east of the village of Coleby. Existing vehicular access into the site is off Sleaford Road (A15) to the east and off Heath Road to the south. The proposed development site is approx. 4.1 hectares (1 acre) and is part of an arable farm site. A number of farm buildings, including stone barns, sheds, a large grain store and residential dwelling are located within the existing farm site. The surrounding land associated with the farm is mainly agricultural arable land. The main proposed site area includes a large stone barn with lean-to, currently used to store farm machinery, and a concrete yard used to store various piles of building materials, including stone and roof tiles. A large straw bale stack is situated along part of the western site boundary. An L-shaped shelter belt of mostly mature trees, surrounds the north and part of the west side of the existing farm site. A stone access track, currently and historically used by heavy plant and farm machinery, passes through the tree line from the yard providing access into the adjacent farm land. The proposed site access passes through a large cropped field north of the tree line towards Tower Lane which runs parallel to the northern field boundary. Mature hedgerow defines the field boundaries along the north, east and west sides. North beyond Tower Lane the land is mostly agricultural. RAF Waddington is situated approx. 1.5 miles north west of the site and the City of Lincoln is approx. 6 miles to the north. Beyond the A15 to the east and to the south and west lies open countryside, mostly agricultural farm land. The village of Metheringham is situated 4 miles east of the site with a railway station 4.6 miles east, providing services between Lincoln and Sleaford.

2.0 Status of the Site

The Local Planning Authority (LPA) is North Kesteven District Council. In accordance with the LPA's online mapping service it was confirmed on the 19th August 2019 that the site and land adjacent to the site is not within a Conservation Area. It was also confirmed that no trees within the site or on land adjacent are afforded protection by virtue of a Tree Preservation Order (TPO).

2.1 Hedgerow Regulations

With respect to the current land use the hedgerows as identified to this particular site would, generally, 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 Site Location Map and Plan



Map data: Google



Image source: © Flare Visual Ltd. (2019) - *Proposed development at Coleby - Location Plan – Dwg. No. F2913-01*

4.0 Method of Survey

4.1 The tree/hedge survey was carried out by Dina J. Mysko on the 20th August 2019. All observations were made from ground level in clear/variably cloudy weather conditions. To assist in gathering information about the trees, the following apparatus was used:

- Clinometer – for measuring the height of trees
- Diameter tape measure – for measuring the diameter of the main stem at 1.5m above ground level
- Monocular – to aid in the visual assessment of trees
- Probe – where required, to investigate further symptoms of decay/defects
- Thor hammer– where required, to investigate further symptoms of decay/defects

An overall assessment of 9 individual trees and 2 hedgerows was made. The individual trees are identified as T1 to T9 and the hedgerows are identified as H1 and H2.

4.2 It should be taken into consideration that trees and shrubs are living organisms and run the risk of rapid condition changes, unpredictable climatic and manmade events. An assessment of risk during a survey is based upon factors evident at the time of inspection. Comments upon the condition and safety of any tree relate to the condition of the tree at the time of inspection. It should be recognised that tree condition is subject to change due to but not limited to, for example, the effects of disease, wind, development works or changes in land use. The results of an inspection are only applicable for a limited period of 12 months; any further inspections should be made periodically on a basis commensurate with the level of risk or following sudden or extreme weather conditions. The consultant is not responsible for events that happen after the date of the report or due to factors that were not apparent at the time of the inspection or due to factors unpredictable at the time of inspection.

4.3 An assessment was made of the trees physiological and structural condition, noting any disorders or biomechanical features that present an obvious hazard to present or future users of the site or effect the trees life expectancy. Preliminary management works are proposed in order to either remove/reduce hazards or promote good arboricultural management practice. These recommendations do not take account of any development proposals at this stage. The trees overall quality and value for retention was assessed in accordance with BS 5837:2012 Trees in Relation to Design, Demolition and Construction. This was dependant on the trees physiological and structural condition, safe useful life expectancy, arboricultural, landscape, cultural and ecological value. Arboricultural and landscape value takes account of the trees amenity value, which was determined by tree size, prominence, visibility, appropriateness, attractiveness, and screening value.

4.4 This survey has been undertaken in accordance with the recommendations and guidance of the BS 5837:2012; it is not intended to be a tree hazard assessment. Incidental notes may be made on a trees structural integrity, though where trees are considered to represent an immediate hazard, recommendations will be given for intervention. It will be the land owner's responsibility to make the necessary arrangements.

5.0 Root Protection Area (RPA)

The root protection area (RPA) radius and area for each tree was calculated in accordance with BS 5837:2012. The RPA is an area of ground that provides sufficient soil rooting volume to ensure the survival of the tree.

Arboricultural Report	Version 1 (22-08-2019)	Page 7 of 22
-----------------------	------------------------	--------------

6.0 Survey Results (general comments)

6.1 An overall assessment of 9 individual trees and 2 hedgerows was made. The full survey results are shown in the Tree Survey Schedule in Appendix "A1" and in the Hedge Survey Schedule in Appendix "A2".

6.2 None of the trees/hedges surveyed have been assigned as category "A", high quality and value.

6.3 2 individual trees (T1 & T6) and 2 hedgerows (H1 & H2) have been assigned to the moderate quality and value, category "B1/B2". These trees/hedges are considered to have moderate quality and value with a remaining life expectancy of at least 20 yrs.

6.4 4 individual trees (T2, T3, T7 & T8) have been assigned to the low quality and value, category "C1". These trees are considered unremarkable trees of very limited merit or such impaired condition that they do not qualify in a higher category.

6.5 3 individual trees (T4, T5 & T9) have been categorised as "U". These trees are in such a condition that they cannot realistically be retained as living trees in the context of the current land use and arrangements for their removal should be made.

6.6 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. This is referred to within the comments section of this report and also shown in the survey schedule in Appendix "A2".

6.7 Cascade chart for tree quality assessment taken from the BS 5837:2012

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: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></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

Note: Trees that have been categorized as "C", although may be a material consideration in a planning application, should not be allowed to impose a significant constraint on development of this site

Arboricultural Report	Version 1 (22-08-2019)	Page 8 of 22
-----------------------	------------------------	--------------

7.0 Photos



Looking south from the field boundary with Tower Lane along the proposed access towards the main site beyond the tree line

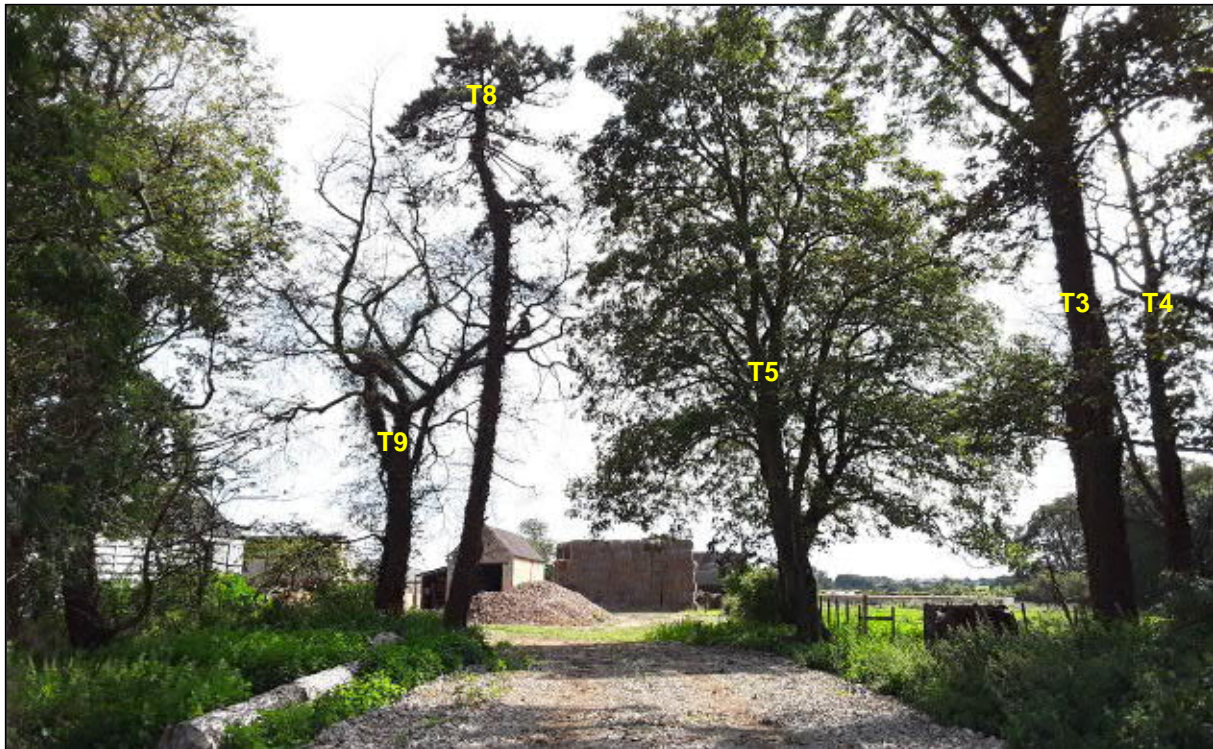


Looking north along the proposed access through the existing field north of the main site and tree line

7.1 Photos



Looking south towards the existing access through the tree line into the main site



South along the existing stone access track through the tree line towards the main yard and farm buildings

7.2 Photos



View south across the existing site; farm buildings including the barn proposed for conversion is situated in the southern area



The existing stone barn proposed for conversion, currently used to store farm machinery; adjacent farm buildings are situated outside the site 'red' edge

7.3 Photos



A shelter belt of mature trees wrap around the existing farm yard site on the north side and part of the west side



A short section of hedgerow, H1, forms part of the western site boundary; an enclosed grass paddock is situated beyond

7.4 Photos



The trees situated directly adjacent to the west side of the access track vary in condition and are categorised accordingly



A category "U" tree and two category "C" trees are situated east of and adjacent to the existing access

7.5 Photos



New vehicular access off Tower Lane is proposed through the existing hedge line (H2) growing along the northern field boundary



A short section of hedgerow (H2) is proposed for removal to facilitate the proposed new vehicular access

7.6 Photos



T2, a category "C" tree has a decay cavity in the base of the tree and has been ring-barked in an attempt to manage the ivy coverage



T9 appears to have no live canopy and the main stem has been ring-barked in an attempt to manage ivy, on this basis the tree is category "U"



T5 is twin-stemmed with included bark at the stem union; *Kreftschmaria deusta* colonises the base of the tree and bark inclusion



Large sections of concrete are embedded in the base of T5; basal decay is evident, particularly on the north and west sides of the tree

8.0 Discussion (general comments)

8.1 Trees occupy only a limited part of this development site and will pose only a limited constraint in terms of how this site is developed. The majority of the trees and hedges are positioned along or in proximity of the site boundaries; with fewer concerns over the above ground constraints the trees pose by virtue of their size and position, which can easily be controlled through correct arboricultural management, it would be the below ground constraints represented by the root protection area (RPA) where careful planning would be needed to ensure a harmonious relationship between trees and the introduction of structures and/or hard surfaces.

8.2 The morphology and disposition of the roots to some trees will be influenced by the existing site conditions. An important aspect of root growth and development is that it is dynamic and highly dependent on the soil environment. The existing ground conditions around the trees are generally quite good for root growth and proliferation with areas that are rich in water and minerals. Any modification to the RPA that may be required due to existing site conditions will reflect a soundly based arboricultural assessment of likely root distribution.

8.3 3 individual trees (T4, T5 & T9) have been categorised as “U”. These trees are 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 and arrangements for their removal should be made.

8.4 4 individual trees (T2, T3, T7 & T8) have been assigned to the low quality and value, category “C1”. Although these trees may be a planning consideration, such trees should not allow a significant constraint on how the site is developed. It would be reasonable to suggest that trees of such low quality and value would not be worthy of being given any significant weight in any planning decisions. If there is space to retain a category “C” tree, and it does not compromise the proposed design layout, then it may be appropriate to retain in the short term.

8.5 2 individual trees (T1 & T6) have been identified as having moderate quality and value, category “B1” trees. Any design/layout should avoid undue pressure on these trees and special consideration should be given to ensure a harmonious and sustainable relationship with the development achieved.

8.6 There are two defined hedgerows (H1 & H2) that form boundary features to this site, they have been identified as having moderate quality and value, category “B2”. The hedgerows have been considered mainly by their landscape qualities, occurring as a boundary hedgerow, and the visual contribution they may give to the wider locality. Generally, the hedges are in good condition and considered moderate in terms of importance. The management of the hedges is quite varied, mainly due to adjacent land uses. It would be considered good practise to bring those sections of hedgerow where management has lapsed recently into a regime of management.

8.7 In accordance with the proposed access arrangement a short section of hedgerow, H2, will require removal. The maximum length proposed for removal to facilitate the access and visibility splays is 20m. Two sections of hedgerow, approx. 60m and 112m respectively, are proposed to be retained along the northern field boundary.

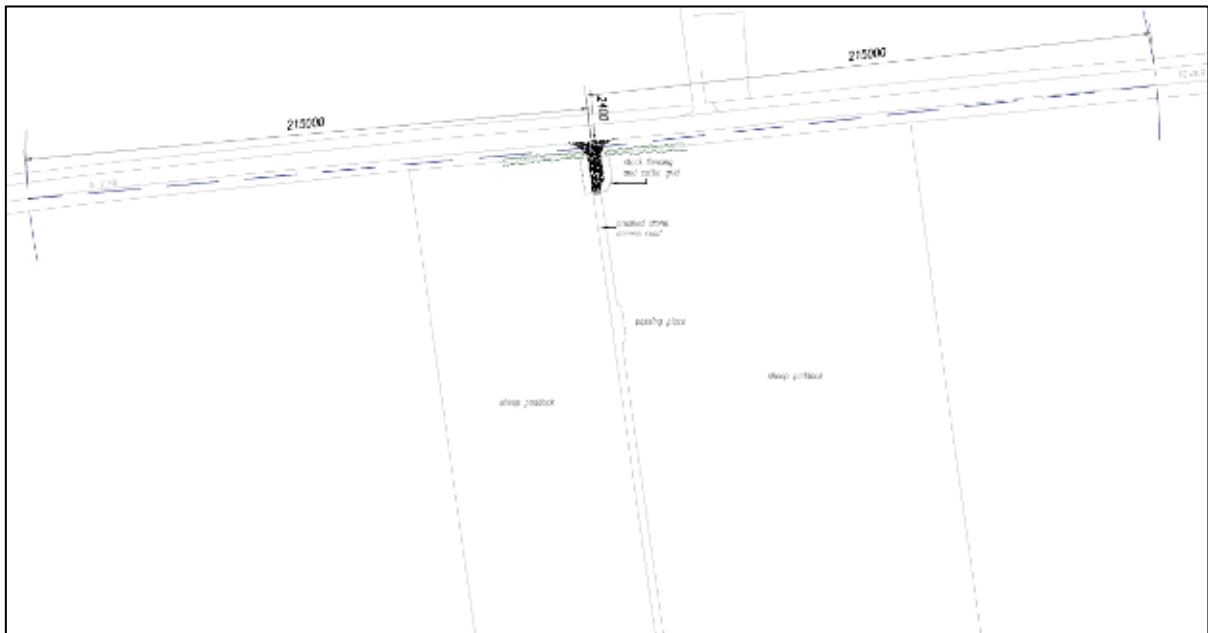


Image source: © Flare Visual Ltd. (2019) - Proposed development at Coleby – Visibility splays – Dwg. No. F2913-01

8.8 As part of the development it is proposed to utilise the existing access track through the tree line for car and light vehicular use. The existing access track has been dressed with stone for a number of years and is currently and has been historically used by heavy plant and farm machinery to provide access into the adjacent field. Beneath the stone access the soil is expected to be heavily compacted, and the most likely root distribution will have occurred asymmetrically, away from the access track, as a result of the pre-existing site conditions. It is proposed to formalise the existing track with a top dressing of crushed stone without the need to excavate. On this basis there will should be no requirement for a no-dig three dimensional cellular confinement system.

8.9 There is a clear opportunity for new landscaping and landscaping may be a planning requirement of this development proposal. This should be looked on as an opportunity in enhancing the site and its locality in context with its proposed use.

8.10 The quality and value of the existing tree stock, that I have been instructed to survey, has been identified allowing informed decisions to be made concerning which trees should be removed or retained should development occur. The results of this survey and constraints plan should be used to assist with feasibility studies and any final site layout and design.

8.11 It is essential that details of design proposals should be developed in conjunction with the project arboriculturalist and, where required, input from a suitably qualified engineer. When incorporating existing trees into a development proposal it is essential to demonstrate that proposals are technically feasible. Such details should be included within planning applications.

9.0 Foundation Design

There are no special requirements for foundation design at this stage, however should matters change during the planning process it should be taken into consideration that there are solutions for inserting structures close to trees should matters change during the planning process.

9.1 Design Options (*referenced from the BS 5837:2012*)

The use of traditional strip footing can result in extensive root loss and should be avoided. The insertion of specially engineered structures within RPA's may be justified if this enables the retention of a good quality tree that would otherwise be lost, usually category "A" or "B". Designs for foundation design that would minimise adverse impact on trees should be site specific with specialist advice being sought from a suitably qualified engineer.

9.2 Root damage can be minimised by using:

- Piles, with site investigation used to determine their optimal location whilst avoiding damage to roots important for the stability of the tree, by means of hand tools or compressed air soil displacement, to a minimum depth of 600mm.
- Beams laid at or above ground level, and cantilevered as necessary to avoid tree roots identified by site investigation.

9.3 Slabs for large structures such as dwellings should be constructed with a ventilated air space between the underside of the slab and the existing soil surface (to enable gas exchange and venting through the soil surface). In such cases, a specialist irrigation system should also be employed (e.g. roof run-off re-directed under the slab). The design of the foundation should take account of the effect of the load bearing properties of underlying soil from the re-directed roof run-off. Approval in principle for a foundation that relies on top soil retention and roof run-off under the slab should be sought from the building control authority prior to this approach being relied on.

9.4 Where piling is to be installed near to trees, the smallest practical pile diameter should be used, as this reduces the possibility of striking major tree roots, and reduces the size of the rig required to sink the piles. If a piling mat is required, this should conform to the parameters of temporary ground protection as per BS 5837:2012. Use of the smallest practical piling rig is also important where piling within the branch spread is proposed. The pile type should be selected bearing in mind the need to protect the soil and adjacent roots from the potential toxic effects of uncured concrete e.g. sleeved bored pile or screw pile.

9.5 An arboriculturalist can provide a performance specification comprising of a list of arboricultural requirements the insertion of a structure must meet. Engineers will assess the particular site characteristics and use the performance specification to devise an appropriate design.

10.0 Installation of Services

The installation of services for this proposal must be kept as far as practically possible from the root protection area (RPA) of any retained trees/hedges. Trenching near trees/hedges by conventional means, using a mechanical excavator, inevitably causes root loss, as the bucket easily rips through roots. For services such as foul, surface, electric, gas, BT etc., the most practical solution would be to run all services through one trench. Where encroachment into the RPA cannot be avoided trench-less techniques should be adopted. An alternative would be to hand dig a trench minimising the cutting of roots. Pipes and ducted cables can then be thread through enabling installation with very little damage, provided that the borehole is small and deeper than the main lateral roots

10.1 In the UK, the usual guidelines for trenching by utility companies are provided by NJUG Volume 4 (previously NJUG 10), which is available to download at <http://www.njug.org.uk/publications/>. By agreeing to the guidelines to be followed during trenching, all parties are assured that problems can be solved using a common set of criteria. Supervisors from the appointed contractor should direct operatives to follow the agreed practices and it is quite likely that the Local Authority Tree Officer will monitor for compliance.

11.0 Conclusion

The results of this survey and constraints plan should be made available to all interested parties during feasibility studies and design options and used to assist with any final site layout and design. Any trees that have been categorised as “U” cannot realistically be retained as living trees in the context of the current land use and arrangements for their removal should be made. Trees that have been given a low quality and value category “C” would not usually be retained where they would impose a significant constraint on the development of the site.

Due consideration should be given in terms of the existing tree/hedge population and how these could be incorporated into the development of the site. The retention of boundary trees/hedges would soften the visual impact of development, settling the development into the environment as seen from outside the site.

Trees can generally tolerate a certain amount of changes in rooting environment and with careful consideration to the below ground constraints represented by the root protection area and the above ground constraints the trees pose by virtue of their size and position I am confident that this site can be developed without there being an adverse impact on trees that have been identified for retention.

Should there be a need to remove trees/hedgerow in order to facilitate the development of this site I am confident that a well thought out Landscape Scheme will mitigate any adverse impact of removal, giving opportunity to enhance the site and its locality.

12.0 Reference to “Tree Survey Schedule” Tree Descriptions and Recommendations

Data collected in the “Tree Survey Schedule” of App. “A1”. Headings in the schedule are as follows:

Tree No. Reference numbers for each tree(s) as it appears in the documents are:

- T** = Individual tree (numbering starts at T1)
- G** = Groups of trees (numbering starts at G1)
- W** = Woodland (numbering starts at W1)

Species: The common (generic) name for the species has been used

Age Class: The maturity of the tree/s is defined in 5 categories:

- Y** = Young – small/recently planted tree not yet established
- SM** = Semi mature – fully established tree in the early stages
- M** = Mature – biologically mature tree.
The “M” may be prefixed by an “E” for early or an “L” for late
- OM** = Over mature – old tree showing signs of terminal decline
- V** = Veteran

Stem Diameter: Stem diameter to the nearest centimetre (cm) taken at 1.5m above ground level unless specified otherwise. For multi-stem trees the reading relates to immediately above the root flare

RPA radius: Root protection area calculated in metres (m)

Stem No.: Appears in documents as twin stemmed or multi-stemmed.

Height: Trees height calculated with the use of a clinometer in metres (m)

Crown Spread: Estimated in metres (m) taken at four cardinal points (N, E, S, W) from the stem

Physiological Condition: This is based on an assessment of the trees health and vigour, i.e. Good, Fair, Poor, Dead. Groups of trees are allocated an overall assessment. Thus individual trees within a group may have a higher or lower score

Structural Condition: Description of defects or symptoms of defects (where applicable), i.e. collapsing, compression forks, bark inclusions, fungi

Comments: A summary of comments on each tree or group of trees

Management Recommendations: Arboricultural works required

Remaining Contribution: Estimated in years, i.e. -10, 10-20, 20-40, 40+

Category Grade:

- A** = Trees of high quality and value. Shown as green on the tree constraints plan (TCP)
- B** = Trees of moderate quality and value. Shown as blue on the TCP
- C** = Trees of low quality and value. Shown as grey on the TCP
- U** = Trees to be removed. Shown as red on the TCP

13.0 Personal Professional Statement (Dina J. Mysko FdSc Arb / TechArborA)

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

Dina holds a Foundation Degree in Arboriculture and an Overall Achievement Award in Forestry and Arboriculture from Plumpton College and the University of Brighton.

Dina has obtained extensive knowledge and practical experience on a local, national and international level.

Dina began working with trees as a volunteer for The Royal Parks, surveying in London's Hyde Park for an iTree Eco pilot project, alongside her studies. In addition, she began working for an approved contractor, as a trainee arborist, on various contracts throughout London, Surrey, Berkshire and Hertfordshire. She became a fully qualified arborist and continued to gain valuable knowledge and experience in Sweden, Denmark and Poland. Dina successfully gained a placement with the International Society of Arboriculture (ISA) in the United States, and has contributed to their peer-reviewed publication, Arborist News, on various topics. This wide range of experience in arboriculture enabled Dina to acquire a position with a Local Authority as an Arboricultural Surveyor. Additionally, Dina provided assistance to the Arboricultural Officers at Leicester City Council, which gave her an inclusive insight into the social, legal and safety issues associated with the management of urban trees in Local Authority owned tree stock.

Dina is a member of the Arboricultural Association at Technician level and is a registered user of Quantified Tree Risk Assessment (QTRA).

Dina has valuable experience in all aspects of arboriculture, and is part of ENGIE Services Limited Arboricultural Consultancy, providing a service advising on a whole range of tree issues.

Appendix A1 "Tree Survey Schedule"

Site: Coleby Lodge Farm, Heath Road, Coleby, Lincoln LN5 0AR
 Client: C A Mottram & Sons
 Brief: BS 5837 Survey

Surveyor: Dina J. Mysko
 Assessment Date: 20th August 2019
 Viewing Conditions: Clear/Variable Cloud

Category Grading and Definition

■ Trees of high quality with an estimated remaining life expectancy of at least 40 years

■ Trees of low quality with an expected remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm

■ Trees of moderate quality with an estimated remaining life expectancy of at least 20 years

■ 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




Tree No.	Tag No.	Species	Age Class	Stem Diameter (cm)	RPA Radius (M)	Stem No.	Height (M)	Crown Spread (M)	Physiological Condition	Structural Condition	Comments	Management Recommendations	Remaining Contribution (yrs)	Category Grading
T1	00023	Pine	Mature	82 (over ivy)	9.8	1	19	N7, S5, E7, W5	Fair	Good	Tree located west of stone access track, adjacent to field boundary. Inspection restricted due to ivy coverage. Single stem with slight lean north east, forks at approx. 8m. Fractured stem remains from historical failure, point of failure approx. 2.5m above main fork. Canopy biased towards the north and east. Lower canopy sits approx. 7m above ground level (agl) on north east side over access. Deadwood, crossing, duplicating branches. Category grading may change following ivy management.	In context with the current land use, sever ivy at base and remove first 6m. Re-inspect. Should development occur clean out any dead, diseased, crossing, duplicating branches.	20+	B1
T2	00024	Sycamore	Mature	58 (over ivy)	7	1	18	N4, S5, E4.5, W4.5	Fair	Fair	Tree located west of access track. Ivy growth restricts full visual assessment of the tree. An attempt to manage the ivy is evident however, through doing so the base of the stem is damaged with a clear ring around the bark. Basal cavity and decay is apparent at the base of tree on the west side. Probe extends up to approx. 25cm into the cavity. First branch at 2m extends north, relatively low canopy. Canopy dieback and leaf necrosis evident. Minor cavities remain from historic wounding to lower branch east. Deadwood, crossing, duplicating branches.	In context with the current land use, sever ivy at base and remove first 6m. Should development occur remove tree.	10+	C1
T3	00025	Ash	Mature	69 (over ivy)	8.3	1	24	N6, S7, E6, W4	Fair	Fair	Tree located west of access track. Single stem up to 6m, from here co-dominant stems develop. Ivy growth restricts full visual inspection of the tree. Attempt to manage ivy has resulted in damage to the bark, although ring incomplete. High canopy with some dieback evident. Leaf wilting in places may indicate infection of ash dieback which is clearly evident in mature ash trees within wooded area adjacent to site edge. Deadwood throughout canopy.	In context with the current land use, sever ivy at base and remove first 6m. Should development occur remove tree.	10	C1
T4	Marked with yellow cross	Sycamore	Mature	44 (over ivy)	5.3	1	18	Not recorded	Dead	Poor	Tree is outside of site 'red' edge and root protection area not within influencing distance. Tree is obviously dead and due to proximity with site should be removed.	In context with the current land use remove tree.	0	U
T5	00026	Sycamore (twin stem)	Mature	38, 60	8.5	2	21	N4, S7, E6, W4	Fair	Fair	Tree located west of access track, approx. 1m east of post and wire fence. Twin stemmed at base, included bark from point of union to base of tree. <i>Kretzschmaria deusta</i> (Brittle Cinder Fungus) evident at base of tree east and within seam of bark inclusion. Large sections of concrete embedded in base of tree north west and west. Localised decay evident. Main stem and sub-dominant stem appear to be growing southwards. Long rib on sub-dominant stem extends from approx. 2m upwards to approx. 8m. Stem cavity at 1.5m on north side, no active decay apparent. Main stem forks at approx. 9m, union appears good. Previous work to remove lower branches evident. Minor deadwood.	In context with the current land use remove tree.	0-10	U
T6	00027	Sycamore	Mature	70 (over ivy)	8.4	1	18	N5, S9, E7, W7	Good	Good	Tree located west of access track and 1m east of post and wire fence. Ivy coverage restricts full visual inspection of the tree. Single stem up to 3m, from here the tree forks. Fork union appears good. Attempt to manage ivy has resulted in bark damage, although damage doesn't appear significant. Some damage apparent to buttress and roots north and west. Fractured stubs remain from possible vehicular damage to lower branches west and south. First branch at 2.5m, extends north east, sitting approx. 2m agl. Lower canopy east over access approx. 3m agl. Deadwood. Category grading may change following ivy management.	In context with the current land use sever ivy at base and remove first 6m. Re-inspect. Should development occur clean out any dead, diseased, crossing, duplicating branches. Remove lowest branch north at 2.5m and lift canopy east and south up to 6m above ground (agl).	20+	B1
T7	00028	Ash	Mature	58 (over ivy)	7	1	15	N10, S2, E5, W5	Fair	Fair	Tree located east of stone access track and adj. boundary with field. Prolific ivy growth restricts full visual inspection. Attempt to manage ivy has resulted in bark damage. Secondary stem extends from base of tree north side. Main stem and canopy biased north. Extensive canopy dieback, particularly on south side. Signs and symptoms commonly associated with ash dieback apparent, including discoloured branch tips, dieback and lesions. Main stem forks at 3m, from here the main canopy structure develops. Lower canopy approx. 3m north over field. Deadwood.	In context with the current land use sever ivy at base and remove first 6m. Re-inspect. Should development occur remove tree.	10	C1
T8	00029	Pine	Mature	50 (over ivy)	6	1	20	N1, S6, E2, W2.5	Fair	Fair	Tree located east of access track. Ivy coverage restricts full visual inspection of the tree. Attempt to manage ivy has resulted in significant damage to bark, ring barked around main stem near base of tree. High canopy sparse, asymmetrical and biased south; canopy dieback evident south and west. Large flush cut at 2.5m south west side. Historical branch failures evident west side, stubs remain. Deadwood.	In context with the current land use sever ivy at base removing first 6m. Should development occur remove tree.	10	C1


Appendix A1 "Tree Survey Schedule"


Site: Coleby Lodge Farm, Heath Road, Coleby, Lincoln LN5 0AR
 Client: C A Mottram & Sons
 Brief: BS 5837 Survey


Surveyor: Dina J. Mysko
 Assessment Date: 20th August 2019
 Viewing Conditions: Clear/Variable Cloud

Category Grading and Definition

 Trees of high quality with an estimated remaining life expectancy of at least 40 years

 Trees of low quality with an expected remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm

 Trees of moderate quality with an estimated remaining life expectancy of at least 20 years

 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



Tree No.	Tag No.	Species	Age Class	Stem Diameter (cm)	RPA Radius (M)	Stem No.	Height (M)	Crown Spread (M)	Physiological Condition	Structural Condition	Comments	Management Recommendations	Remaining Contribution (yrs)	Category Grading
T9	00030	Beech	Mature	71 (over ivy)	8.5	1	19	N3, S9, E6, W6	Poor/Dead	Poor	Tree approx. 2m east of access track. Ivy coverage restricts full visual inspection. Significant damage to the bark, i.e. ring barking, from attempt to manage ivy. Tree has poor vitality and appears dead. Leaves brown and dead, no live growth apparent. Lower canopy 3m agl south.	In context with the current land use remove tree.	0-5	U

Appendix A2 "Hedge Survey Schedule"

Site: Coleby Lodge Farm, Heath Road, Coleby, Lincoln LN5 0AR
 Client: C A Mottram & Sons
 Brief: BS 5837 Survey

Surveyor: Dina J. Mysko
 Assessment Date: 20th August 2019
 Viewing Conditions: Clear/Variable Cloud

Category Grading and Definition



Hedgerows of high quality with an estimated remaining life expectancy of at least 40 years



Hedgerows of low quality with an expected remaining life expectancy of at least 10 years



Hedgerows of moderate quality with an estimated remaining life expectancy of at least 20 years



Hedgerows 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

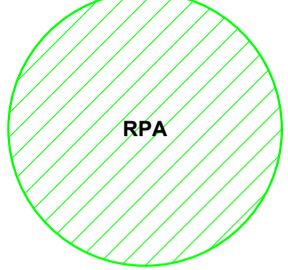


Hedge No.	Species	Height (m)	Physiological Condition	Structural Condition	Comments	Recommendations	Remaining Contribution (yrs)	Category Grading
H1	Hawthorn	1.5-2.5m	Good	Fair	Hedgerow extends approx. 40m along west side of 'red' site edge, adjacent to post and wire fence with paddock. Predominantly hawthorn with some self-set ash and elder. Gappy in places with rose and bramble dominating some sections of hedgerow. Recent management appears neglected.	Reduce/cut back hedgerow to reinstate management.	20+	B2
H2	Hawthorn, Blackthorn	1.5-2.5m	Good	Good	Hedgerow extending full length of northern field boundary with public highway, Tower Lane. Predominately blackthorn and hawthorn with elder, ash and rose interspersed. A 3m wide grass verge is situated directly north of the hedge line with the public highway. Recent management appears neglected.	Reduce/cut back hedgerow to reinstate management.	20+	B2

Appendix "B1"

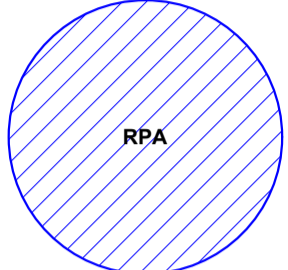
Category and Definition

CAT "A"



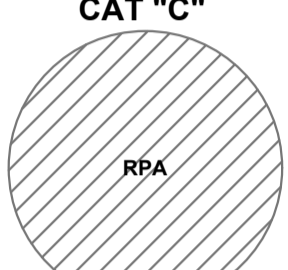
Trees of high quality with an estimated remaining life expectancy of at least 40yrs

CAT "B"



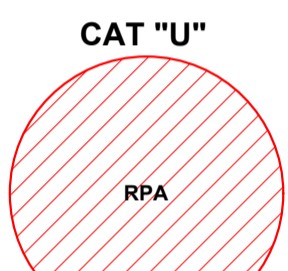
Trees of moderate quality with an estimated remaining life expectancy of at least 20yrs

CAT "C"

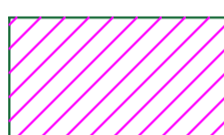


Trees of low quality with an estimated remaining life expectancy of at least 10yrs, or young trees with a stem diameter below 150mm

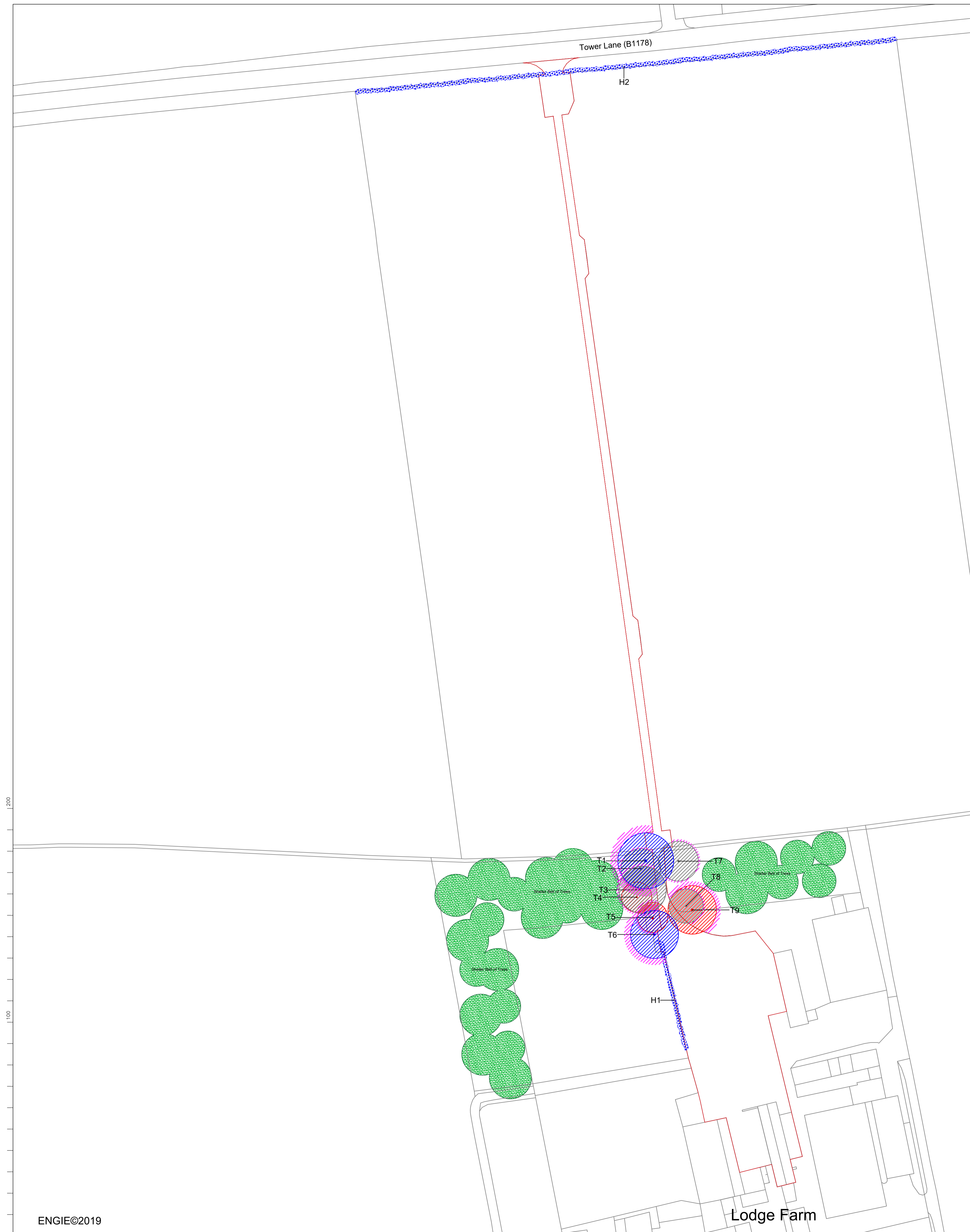
CAT "U"



Those 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 10yrs

 Area most hospitable for root growth

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: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></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



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



New Oxford House
George Street
Grimby
North East Lincolnshire
DN31 1HB
Tel: 01472 324271

CLIENT	C A Mottram & Sons		
PROJECT	Coleby Lodge Farm, Heath Road, Coleby, Lincoln LN5 0AR		
TITLE	Tree Constraints Plan		
DRAWN	DJM	CHECKED	APPROVED
		AH	AH
DATE	21st August 2019	ORIGINAL SIZE	SCALE
		A1 (594 x 841)	1:750
FILE REF	AH-ENGIE	DRAWING No.	REVISION NO
		TCP-01-210819	

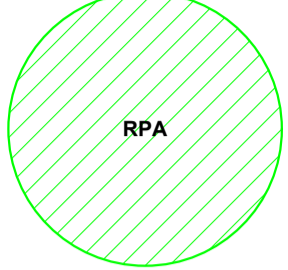
Cascade Chart for Tree Quality Assessment

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: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></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

Appendix "B2"

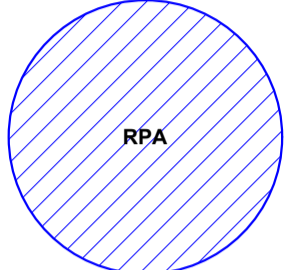
Category and Definition

CAT "A"



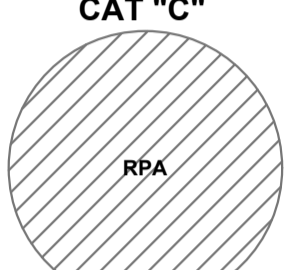
Trees of high quality with an estimated remaining life expectancy of at least 40yrs

CAT "B"



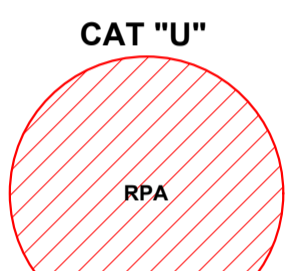
Trees of moderate quality with an estimated remaining life expectancy of at least 20yrs

CAT "C"



Trees of low quality with an estimated remaining life expectancy of at least 10yrs, or young trees with a stem diameter below 150mm

CAT "U"



Those 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 10yrs

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

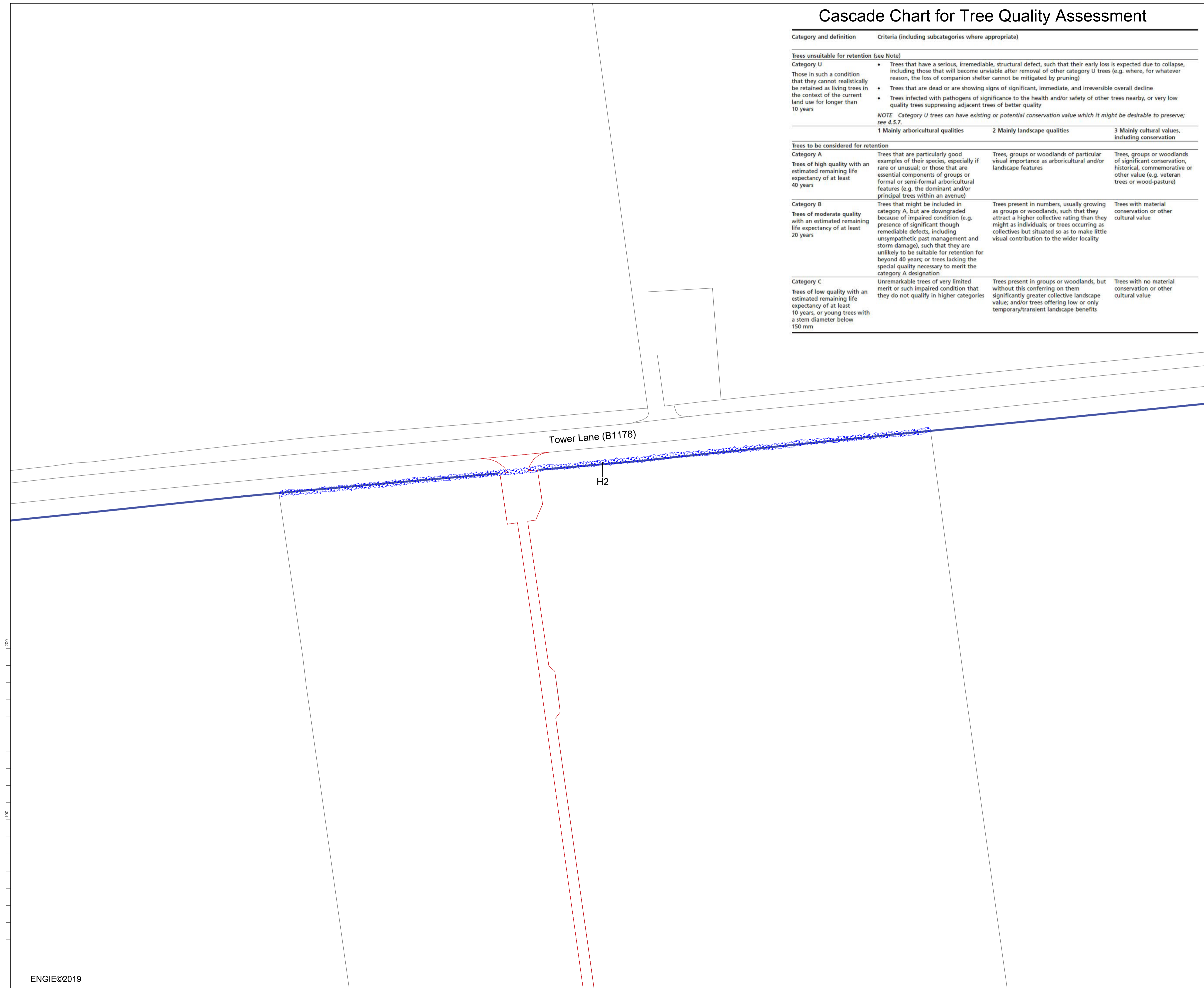
REVISIONS			
Letter	Amendment	Drawn	Date

ARBORICULTURAL CONSULTANCY



New Oxford House
George Street
Grimbsby
North East Lincolnshire
DN31 1HB
Tel: 01472 324271

CLIENT	C A Mottram & Sons		
PROJECT	Coleby Lodge Farm, Heath Road, Coleby, Lincoln LN5 0AR		
TITLE	Tree Constraints Plan (North)		
DRAWN	DJM	CHECKED	APPROVED
		AH	AH
DATE	21st August 2019	ORIGINAL SIZE	SCALE
		A1 (594 x 841)	1:500
FILE REF	AH-ENGIE	DRAWING NO.	REVISION NO.
		TCP-02-210819	



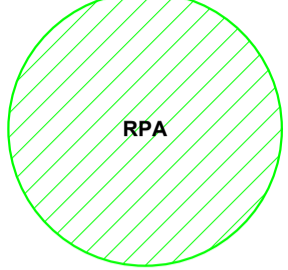
Cascade Chart for Tree Quality Assessment

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: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></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

Appendix "B3"

Category and Definition

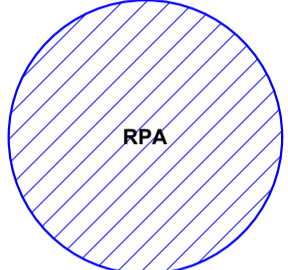
CAT "A"



RPA

Trees of high quality with an estimated remaining life expectancy of at least 40yrs

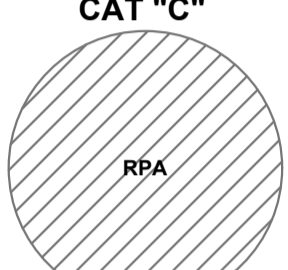
CAT "B"



RPA

Trees of moderate quality with an estimated remaining life expectancy of at least 20yrs

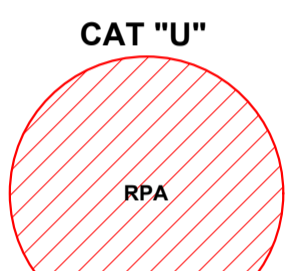
CAT "C"



RPA

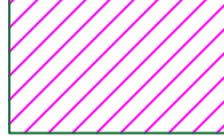
Trees of low quality with an estimated remaining life expectancy of at least 10yrs, or young trees with a stem diameter below 150mm

CAT "U"



RPA

Those 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 10yrs

 Area most hospitable for root growth

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



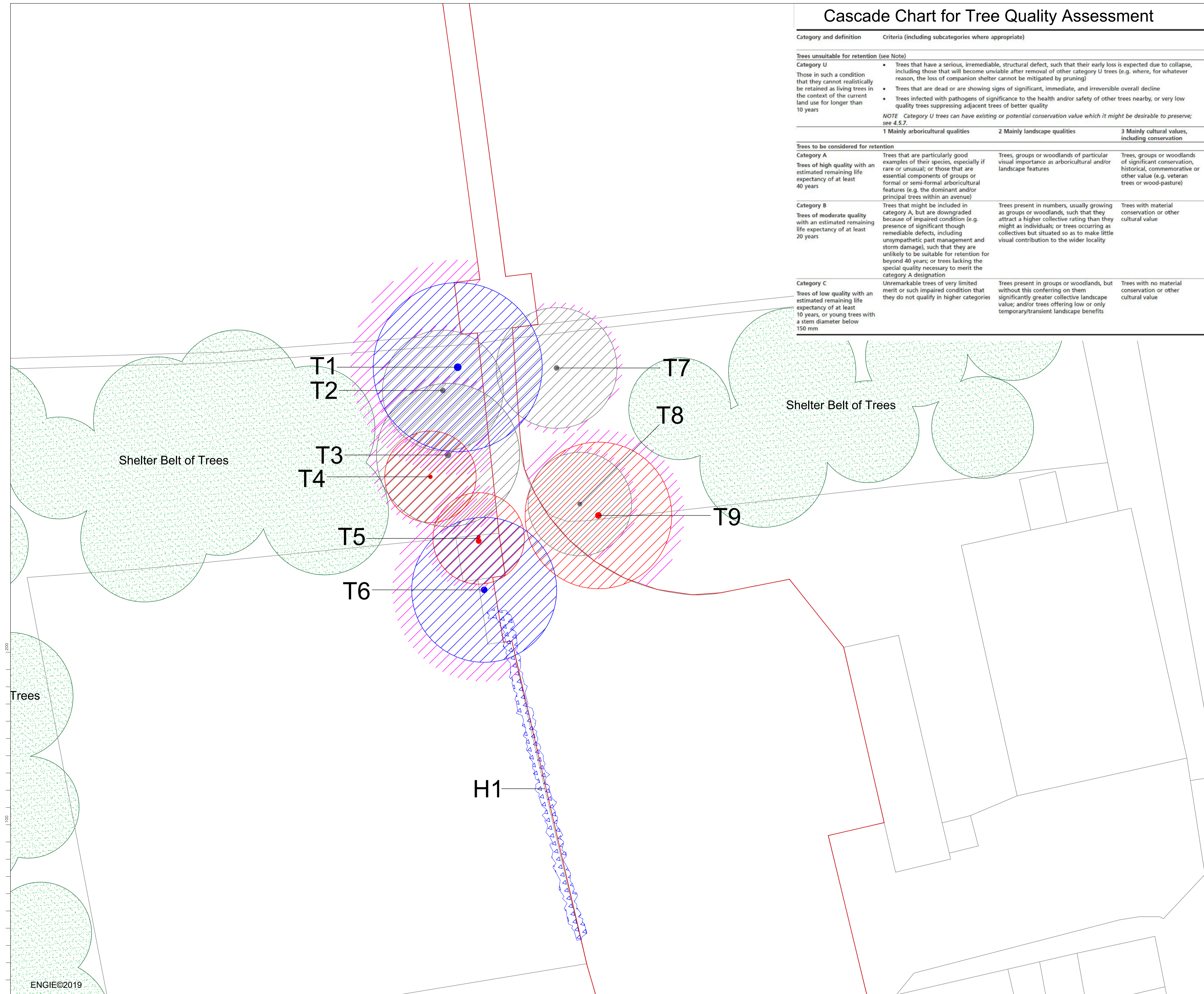
New Oxford House
George Street
Grimby
North East Lincolnshire
DN31 1HB
Tel: 01472 324271

CLIENT: C A Mottram & Sons

PROJECT: Coleby Lodge Farm, Heath Road, Coleby, Lincoln LN5 0AR

TITLE: Tree Constraints Plan (South)

DRAWN: DJM	CHECKED: AH	APPROVED: AH
DATE: 21st August 2019	ORIGINAL SIZE: A1 (594 x 841)	SCALE: 1:200
FILE REF: AH-ENGIE	DRAWING No: TCP-03-210819	REVISION NO:



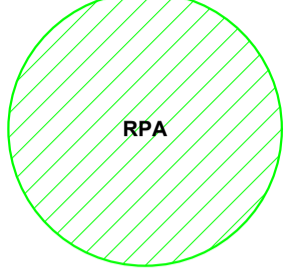
Cascade Chart for Tree Quality Assessment

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: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></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

Appendix "B4"

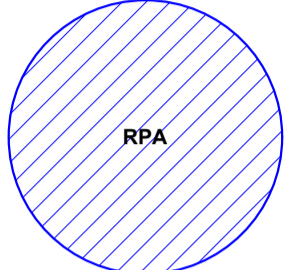
Category and Definition

CAT "A"



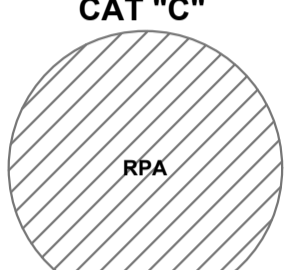
Trees of high quality with an estimated remaining life expectancy of at least 40yrs

CAT "B"



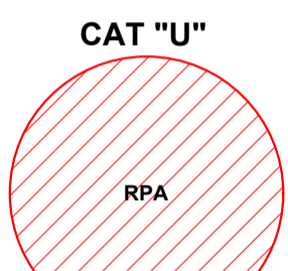
Trees of moderate quality with an estimated remaining life expectancy of at least 20yrs

CAT "C"

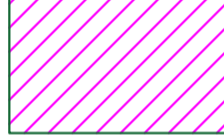


Trees of low quality with an estimated remaining life expectancy of at least 10yrs, or young trees with a stem diameter below 150mm

CAT "U"



Those 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 10yrs

 Area most hospitable for root growth

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

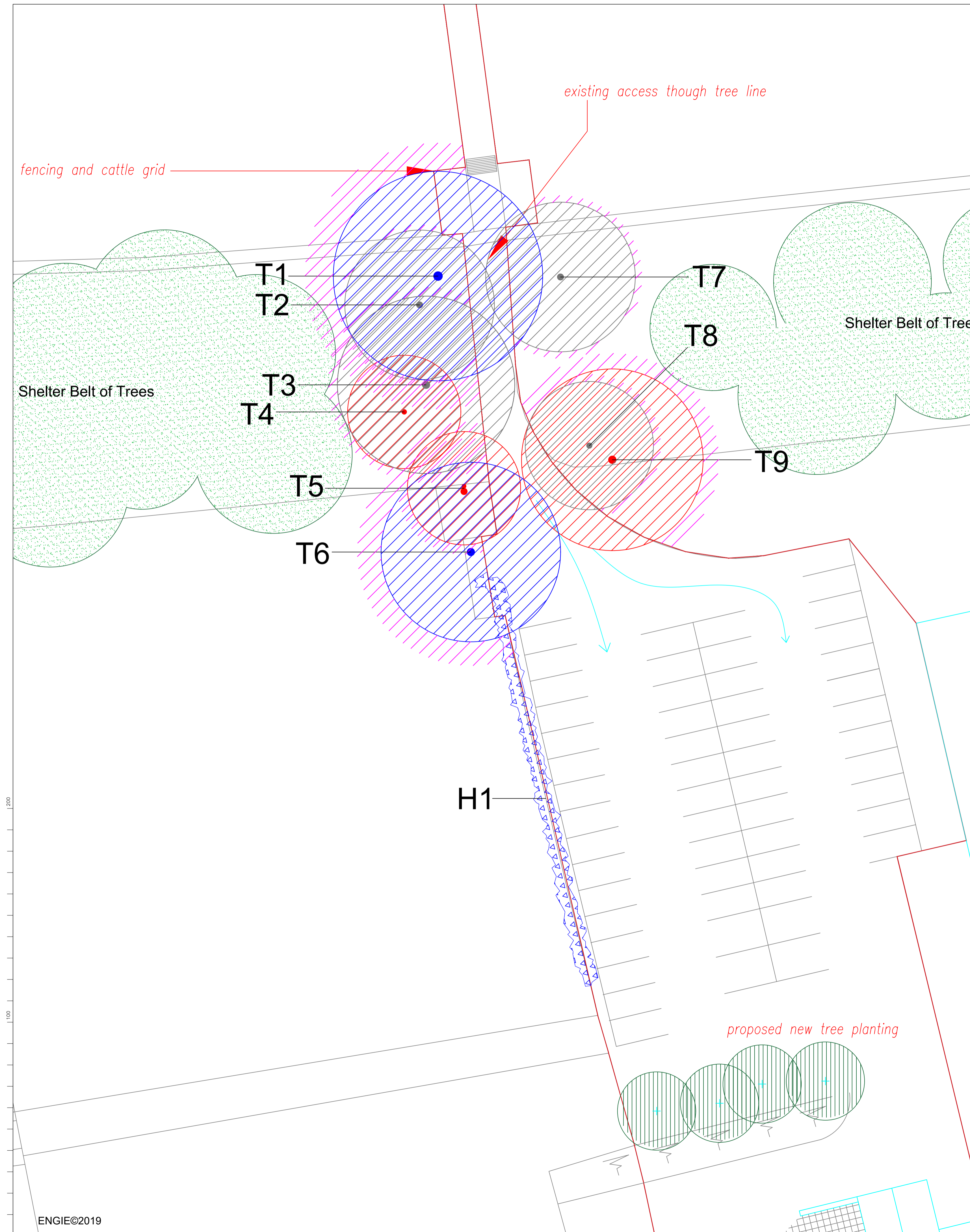
REVISIONS			
Letter	Amendment	Drawn	Date

ARBORICULTURAL CONSULTANCY



New Oxford House
George Street
Grimby
North East Lincolnshire
DN31 1HB
Tel: 01472 324271

CLIENT	C A Mottram & Sons		
PROJECT	Coleby Lodge Farm, Heath Road, Coleby, Lincoln LN5 0AR		
TITLE	Tree Constraints Plan Over Proposed Layout (South)		
DRAWN	DJM	CHECKED	APPROVED
		AH	AH
DATE	21st August 2019	ORIGINAL SIZE	SCALE
		A1 (594 x 841)	1:200
FILE REF	AH-ENGIE	DRAWING No.	REVISION NO
		TCP-04-210819	

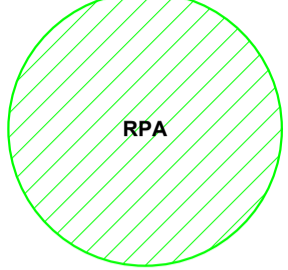


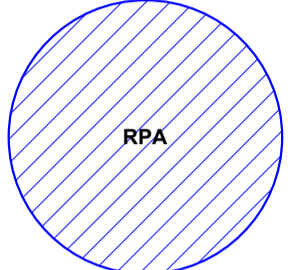
Cascade Chart for Tree Quality Assessment

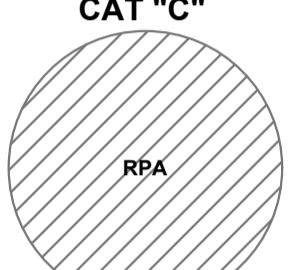
Category and definition	Criteria (including subcategories where appropriate)		
Trees unsuitable for retention (see Note)			
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: 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: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></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

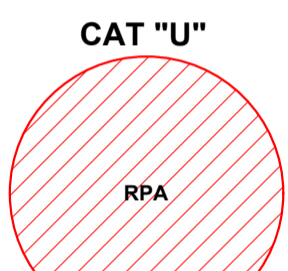
Appendix "B5"

Category and Definition

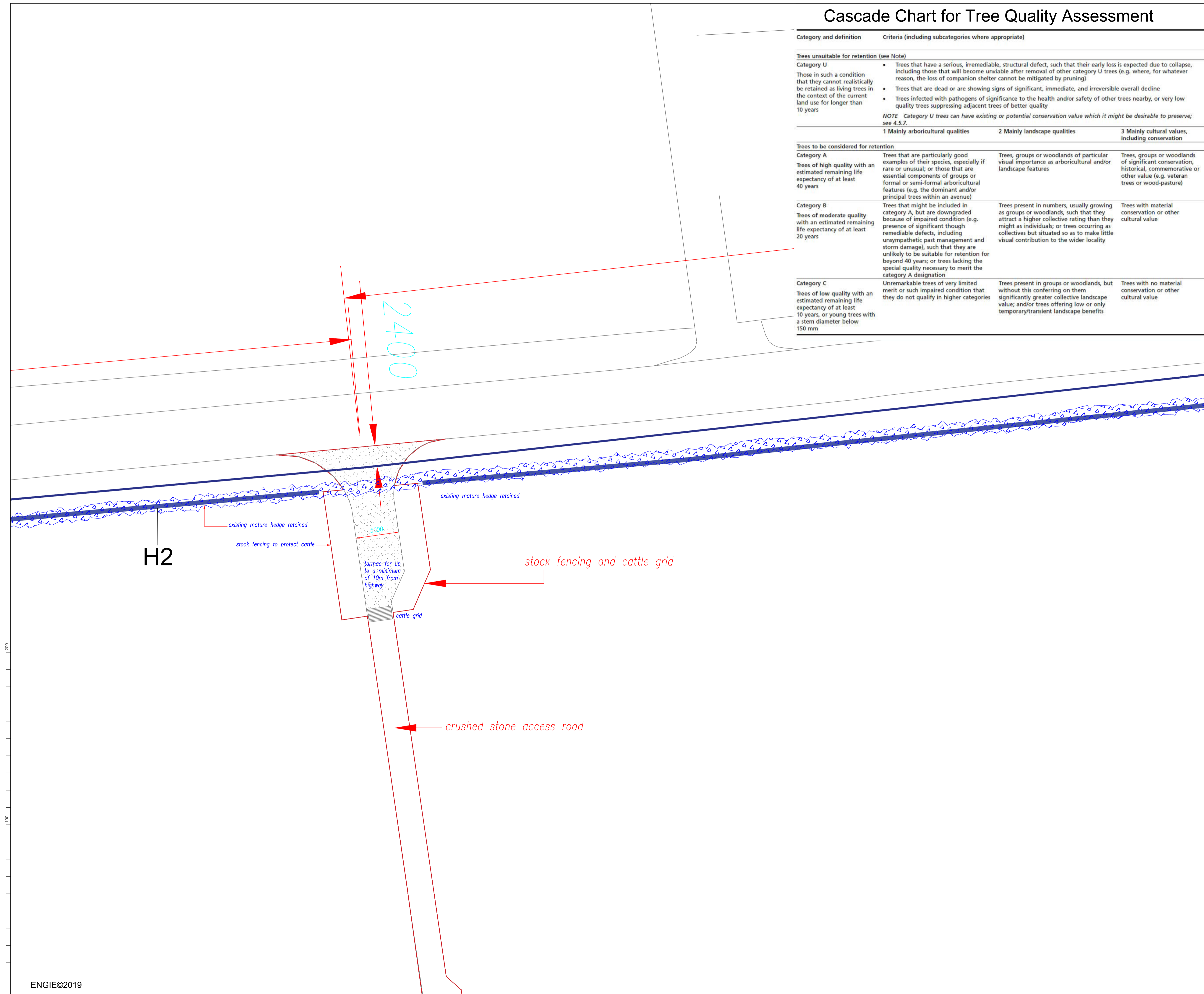
- 

CAT "A"
Trees of high quality with an estimated remaining life expectancy of at least 40yrs
- 

CAT "B"
Trees of moderate quality with an estimated remaining life expectancy of at least 20yrs
- 

CAT "C"
Trees of low quality with an estimated remaining life expectancy of at least 10yrs, or young trees with a stem diameter below 150mm
- 

CAT "U"
Those 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 10yrs



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



New Oxford House
George Street
Grimby
North East Lincolnshire
DN31 1HB
Tel: 01472 324271

CLIENT	C A Mottram & Sons		
PROJECT	Coleby Lodge Farm, Heath Road, Coleby, Lincoln LN5 0AR		
TITLE	Tree Constraints Plan Over Proposed Layout		
DRAWN	DJM	CHECKED	APPROVED
		AH	AH
DATE	21st August 2019	ORIGINAL SIZE	SCALE
		A1 (594 x 841)	1:200
FILE REF	AH-ENGIE	DRAWING NO.	REVISION NO.
		TCP-05-210819	

Appendix "C1"

Tree/Hedge Removal and Retention Plan



Tree Removal

7 individual to be removed in order to facilitate development and in accordance with good arboricultural practice

- T2 - Fell
- T3 - Fell
- T4 - Fell
- T5 - Fell
- T7 - Fell
- T8 - Fell
- T9 - Fell

Tree Works Specification

T1 - Pine - Sever ivy at base and remove first 6m. Re-inspect. Clean out any dead, diseased, crossing, duplicating branches.

T6 - Sycamore - Sever ivy at base and remove first 6m. Re-inspect. Clean out any dead, diseased, crossing, duplicating branches. Remove lowest branch north at 2.5m and lift canopy east and south up to 6m above ground level.

Hedgerow to be removed

Hedgerow to be retained

Hedgerow Removal

Removal of hedgerow section in order to facilitate development and visibility splay

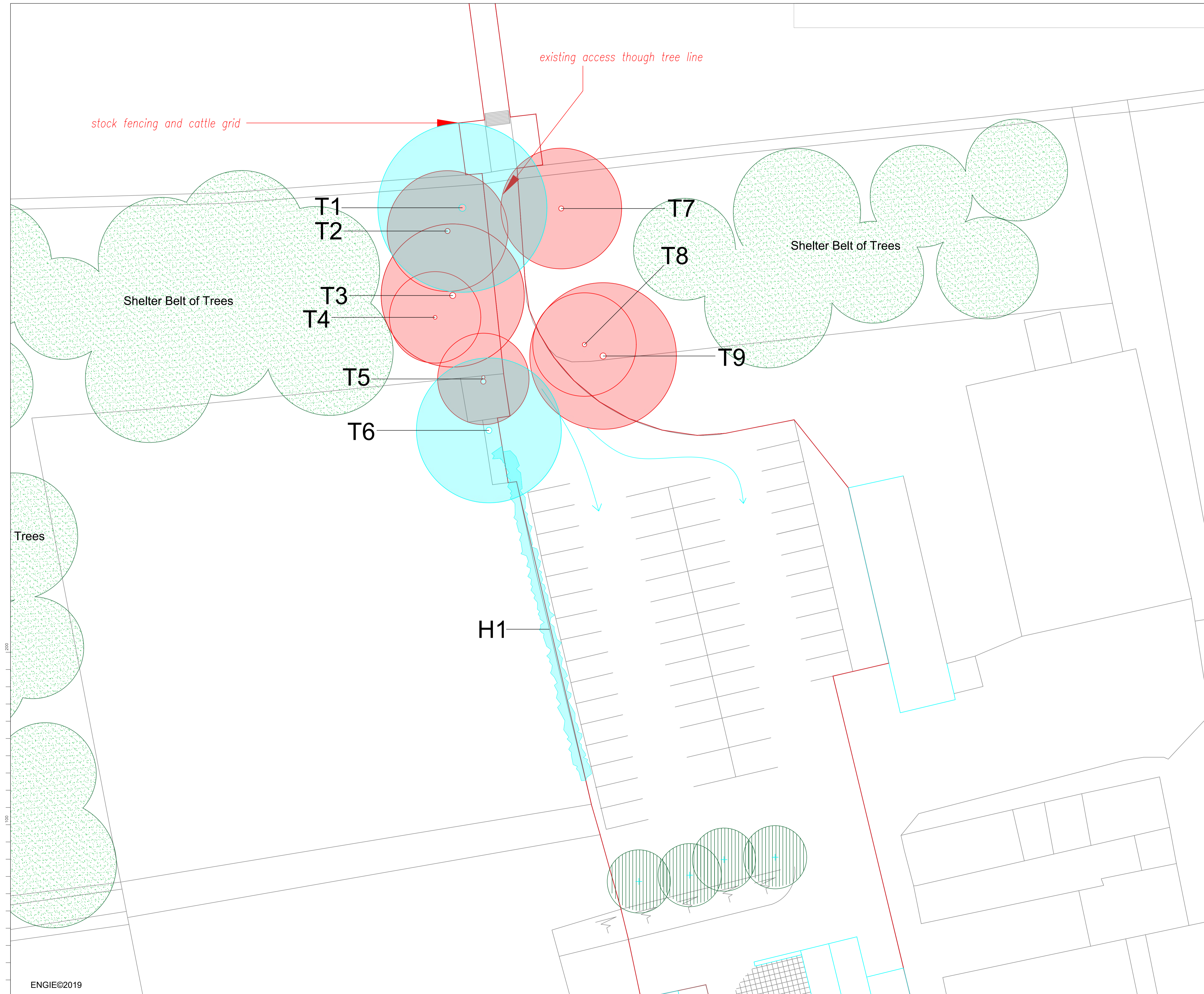
H2 - 20m section to be removed

ARBORICULTURAL CONSULTANCY



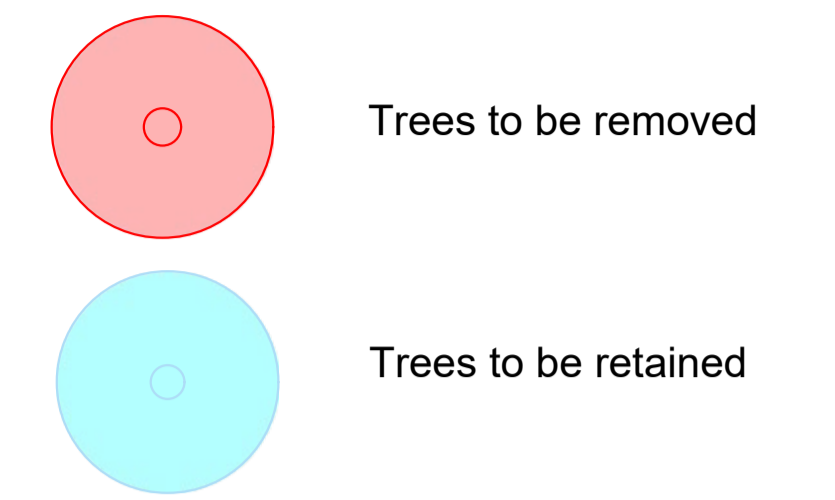
New Oxford House
George Street
Grimsby
North East Lincolnshire
DN31 1HB
Tel: 01472 324271

CLIENT	C A Mottram & Sons	
PROJECT	Coleby Lodge Farm, Heath Road, Coleby, Lincoln LN5 0AR	
TITLE	Tree/Hedge Retention & Removal Plan (South)	
DRAWN	DJM	CHECKED AH
DATE	22nd August 2019	APPROVED AH
FILE REF	AH-ENGIE	SCALE 1:200
	DRAWING NO. TRRP-06-220819	REVISION NO.



Appendix "C2"

Tree/Hedge Removal and Retention Plan



Tree Removal

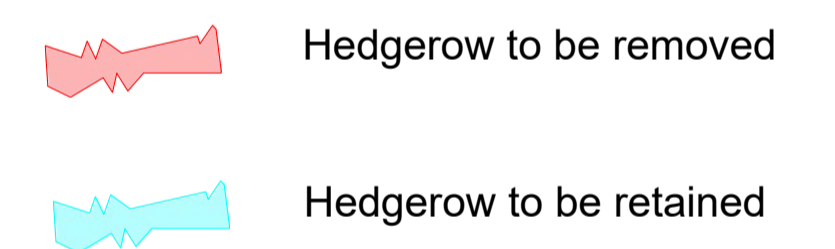
7 individual to be removed in order to facilitate development and in accordance with good arboricultural practice

- T2 - Fell
- T3 - Fell
- T4 - Fell
- T5 - Fell
- T7 - Fell
- T8 - Fell
- T9 - Fell

Tree Works Specification

T1 - Pine - Sever ivy at base and remove first 6m. Re-inspect. Clean out any dead, diseased, crossing, duplicating branches.

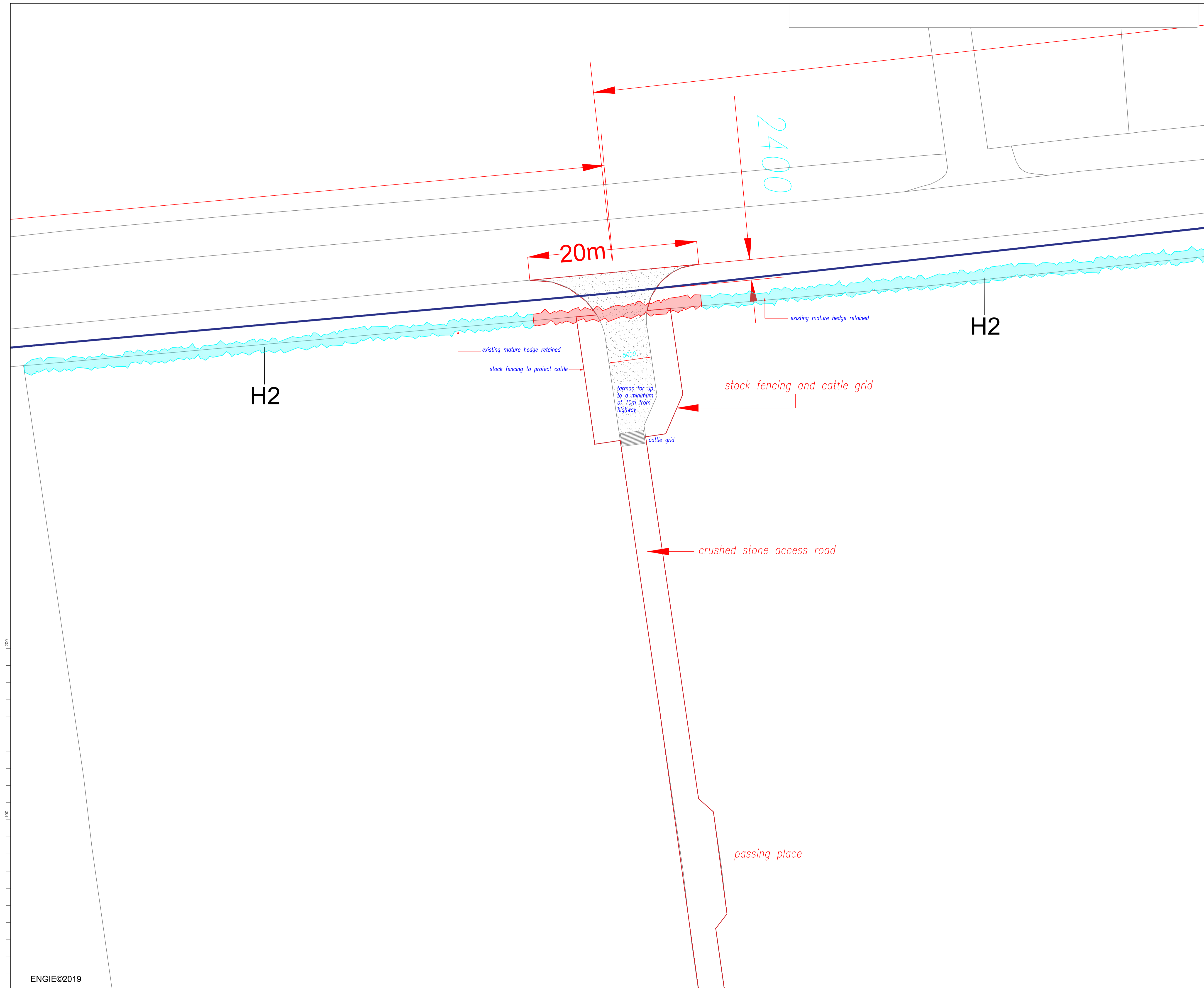
T6 - Sycamore - Sever ivy at base and remove first 6m. Re-inspect. Clean out any dead, diseased, crossing, duplicating branches. Remove lowest branch north at 2.5m and lift canopy east and south up to 6m above ground level.



Hedgerow Removal

Removal of hedgerow section in order to facilitate development and visibility splay

H2 - 20m section to be removed



ARBORICULTURAL CONSULTANCY



New Oxford House
George Street
Grimby
North East Lincolnshire
DN31 1HB
Tel: 01472 324271

CLIENT	C A Mottram & Sons	
PROJECT	Coleby Lodge Farm, Heath Road, Coleby, Lincoln LN5 0AR	
TITLE	Tree/Hedge Retention & Removal Plan (North)	
DRAWN	CHECKED	APPROVED
DJM	AH	AH
DATE	ORIGINAL SIZE	SCALE
22nd August 2019	A1 (594 x 841)	1:200
FILE REF	DRAWING No.	REVISION NO
AH-ENGIE	TRRP-07-220819	