



**Preliminary Tree Survey and Report**  
**Trees at Proposed Site at**  
**Newcastle Road**  
**Grange Castle**  
**Co Dublin**

**February 2021**

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**086-3819011**



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This report should be read in conjunction with the “Tree Constraints Plan” drawing “Grange Castle Tree Constraints Plan”



## **1.0 Summary of Findings**

- 1.1 This survey builds upon an earlier review of site vegetation, from which no substantive changes have been recorded. However, the northern site has become increasingly overgrown. Additionally, a greater proportion of the young emergent Elm population has now been affected by Dutch Elm Disease
- 1.2 Much of the material associated with this site relates to its original agricultural usage. All described hedge lines being represented on both the 1837-42 and the 1888-13, though the historical mapping shows that some hedges, particularly to the south of the site have been lost. Current field demarcation is dominated by hedges, that appear to be associated with topographical features including ditches and embankments. In some instances, the features are large however, in other instances, for example towards the north of the site, such features tended to be of a smaller scale and in some instances have been partially eroded out. Nonetheless and in respect of any intent to retain such material, it must be appreciated that the retention of hedges is intrinsically linked with the retention and preservation of the ditches or embankments that support them.
- 1.3 Many of the hedges appear to have originated as Hawthorn alignments. While many of these Hawthorns remain, many hedges are now becoming invaded by other species, most notably Blackthorn, Elder, Bramble, Ash and Wych Elm. Many of the hedges retain reasonable continuity however, such continuity is not always provided by the original Hawthorn.
- 1.4 Regarding the southernmost areas of the site, note is made of the numbers of emergent Elms arising from hedgerows. Since the survey undertaken in 2018, it is noted that many more trees have died because of ongoing Dutch Elm disease attack. It is likely that many is not all remaining Elm on the site will be lost to the disease in the near future.
- 1.5 Similar concerns are developing in respect of Ash. Chalara Canker disease is developing widely in Ireland, with many specimens already affected or dead. Therefore Ash should not be relied upon as part of sustainable tree retention strategy as the Ash on the site at present may be lost in the near future.
- 1.6 Within the region of the outbuildings and farm yards towards the north of the site, note is made of substantial, apparently recent environmental change and vandalism that has seen substantial ground works and ground disturbance as well as fire damage. Many such hedges are beyond any reasonable suitability for retention.
- 1.7 It is about the north of the site that we see most individual tree specimens. Unfortunately, very few specimens can be regarded as being suitable for retention and indeed some are recommended for immediate removal.
- 1.8 With regard to the western end of the site's northern boundary, note is made that though located outside of the site confines, the embankment descending towards the Grand Canal supports a developing tree population typically including Sycamore, Alder and Ash. Many such trees would be suitable for retention and have immense potential for ongoing growth over time. Note should however be made that there is evidence to suggest substantial fill and disturbance along the boundary line that may have disturbed both trees directly adjoining and some metres outside of the site. Note is also made that

some trees in this area and particularly a Crack Willow, are in particularly poor condition. As noted within the survey, an Ash and Sycamore have been harshly cut back because of their position beneath high tension cables and the Crack Willow has collapsed affecting another described Ash. These poorly condition trees are located substantially outside of the site confines but potentially close enough to influence them as result of ongoing growth over time.

- 1.9 In conclusion it is worthy of note that the site supports little material of Arboricultural interest though it is appreciated that some elements may have ecological and heritage value. Regarding the tree population very few specimens would be regarded as valuable though it is appreciated that some of the hedges, dependent upon the context within which they might be retained, do offer some degree of sustainability.

## **2.0      Introduction**

### **2.1      Kevin Fitzpatrick Landscape Architecture**

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### **2.2      The survey has been prepared by- Andy Worsnop Tech Arbor A, NCH Arb (PTI LANTRA)**

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## **Report Brief**

- 2.3      In accordance with the request for information, the intention of the tree survey is to register, describe and evaluate the trees regarding their current health status and current condition within their current context. The survey is based upon and has been compiled considering the recommendations of BS5837: 2012 Trees in Relation to Design, Demolition and Construction – Recommendations.

## **Report Context**

- 2.4      In line with the recommendations of “BS5837: 2012 Trees in Relation to Design, Demolition and Construction – Recommendations”, this assessment has been advised by the results and findings of a tree survey, the findings of which are included as “Appendix 1” to this report.
- 2.5      In line with client instructions, this report comprises a simple qualitative tree survey and a summary report describing the material of Arboricultural interest, upon and adjoining the subject site.
- 2.6      This information has been provided without any review of possible construction or development works. Accordingly, this information does not include any “Arboricultural Implication Assessment”, nor does not provide an “Arboricultural Method Statement” or “Tree Protection Plan” and therefore is not a full Arboricultural report.
- 2.7      It does however provide some of the basic information that would assist in the compilation of such information and documentation, should it be requested/required in the future.
- 2.8      This tree report should be read in conjunction with the combined tree constraints plan “Grange Castle Tree Constraints Plan”. This drawing provides a graphic representation of the tree survey depicting the constraints and the spatial retention requirements of the trees, as well as colour coded categorisation their condition and potential value.

- 2.9 Accordingly, and in line with BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations, this documentation does provide an invaluable “design tool” in respect of the review of potentially sustainable trees on a particular site.

### **Report Limitations**

- 2.10 This report is based on the Arborists interpretation of information provided to his prior to report compilation and gained from the site during the undertaking of the site review. The site review data is subject to the limitation as set out under “Inspection and Evaluation Limitations and Disclaimers” in “Appendix 1” to this report. The findings and recommendations made within this report are based upon the knowledge and expertise of the inspecting Arborist.

### **3.0 Management Recommendations**

- 3.1 Preliminary management recommendations have been put forward within the context of the survey table (see column PMR). Such recommendations are based on the current and “do nothing” site scenario. They do not consider any possible construction activity or site developments that may affect the trees.
- 3.2 In the case of construction or development works, it will be necessary for the project Arborist to re-assess all trees in respect of development impacts and implications, including shelter loss and exposure and any other changes in site context.
- 3.3 Regardless of any possible site development, it is advised that all retained trees be reviewed on regular basis and particularly, after any actions that may affect the trees, be those site development works, or tree management works that involve tree removal or pruning.
- 3.4 It should be appreciated that some of the concerns raised in the tree survey were based on evidence suggesting ongoing decline or mechanical failure. Such deterioration may well continue to a point where additional trees need to be removed. For this reason, trees must be reviewed regularly so that early intervention and action can be applied in a timely manner.
- 3.5 Additionally, many of the sites trees were affected by Ivy development. Whilst itself not an indicator of ill-health, Ivy cover can readily obscure signs and symptoms of ill-health or physical defect. Therefore, and whilst nominal assessments have been made for the purposes of this survey, the true condition of trees affected by Ivy cover might not be fully known until Ivy cover has been dealt with, either by cutting resulting in shedding or by the undertaking of climbing inspections.

### **4.0 Development Implications**

- 4.1 This document comprises only a review of trees that exist upon or adjoining the site in respect to its existing context and relating to the “do nothing” scenario. It is appreciated that site development works may alter this scenario or may affect the suitability of various trees to be retained.
- 4.2 In respect of this, any development proposals must be reviewed under the auspices of



an “Arboricultural Implication Assessment” that will review the development proposals and provide an assessment of the potential for tree retention within the new context. This information can then be used to develop an “Arboricultural Method Statement” and a “Tree Protection Plan” to control and guide site works in a manner that will be least detrimental to tree health and thus may maximise tree sustainability.

## **5.0 Bibliography**

- 5.1 British Standards Institution (2010) BS 3998:2010: Tree Work - Recommendations. London: British Standards Institution.
- 5.2 British Standards Institution (2012) BS 5837:2012: Trees in Relation to Design, Demolition and Construction - Recommendations. London: British Standards Institution.
- 5.3 Jackson, R.B et al (1996) A Global Analysis for Root Distribution in Terrestrial Biomes *Oecologica*, 108 (1996) pp389-411, Springer Verlag
- 5.4 Lonsdale, D. (2005) *Principals of Tree Hazard Assessment and Management*, London, TSO
- 5.5 Mattheck, C. and Breloer, H. (1994) *The Body Language of Trees*, London, TSO
- 5.6 Roberts, J. and Jackson, N. and Smith, M. (2006) *Tree Roots in the Built Environment*, London, TSO
- 5.7 Strouts, R.G. and Winter, T.G. (1994) *Diagnosis of Ill-Health in Trees*, London, HMSO



## **A1 Appendix 1 – Tree Survey**

### **Nature of Survey**

- A1.1 This survey has been based upon many of the criteria put forward in BS 5837: 2012 – Trees in Relation to Design, Demolition and Construction – Recommendations. The data collected has been represented in table form as “Table 1” within “Appendix 1” to this report. This appendix includes a Survey Methodology, Survey Key, Survey Abbreviations, Condition Category Definitions.
- A1.2 The survey relates to the site and the conditions thereon at the time of the survey. It is likely that changes in site usage, development or other environmental changes will require an amendment of recommendations and in some instances, may require the re-classification of a tree’s category and/or suitability for retention.

### **Drawing References**

- A1.3 The survey must be read in conjunction with drawing “Grange Castle Tree Constraints Plan”. This provides a scaled graphic representation of tree positions, crown forms, “RPA” (root protection area) extents and a colour reference to category systems. Where tree positions were not indicated on the supplied topographical drawing, their positions may have been given a “sketched” location within “Grange Castle Tree Constraints Plan”. It is advised that any such trees are accurately located by professional means so that the constraints such trees have upon the site can be accurately gauged.
- A1.4 Each tree is represented by a coloured spline, scaled to represent the north, east, south and west crown radii as denoted in the survey table. Each tree (categories A-green, B-blue and C-grey only) have been apportioned a “Root Protection Area” (RPA) denoted as a dashed orange circle. This circle represents the nominal minimum area requiring protection from the effects of development activity. It should, for the purposes of design, be considered, as approximating the position of the tree protection fencing that must be erected prior to the commencement of any site works, thus excluding all site activities other than those dealt with by way of the “Arboricultural Implication Assessment” and “Arboricultural Method Statement”

### **Survey Intent and Context**

- A1.5 Intention of this document is to describe the extent, nature and quality of material of Arboricultural interest on the site in question.

### **Site Description**

- A1.6 The site in question is located south of Lucan, Co Dublin and to the south of the Grand Canal with the sites eastern boundary being adjoined by the Lucan to Newcastle road. The site appears broadly level and comprises agricultural land divided into various fields. Towards the north of the site area and adjoining the canal towpath there are several derelict buildings and farm yards.

- A1.7 In comparison to the current context, the 18<sup>th</sup> century historical mapping notes a single building group referred to as The Grange accessed from the Newcastle Road and within the townland of Ballymakailly. To the west of the house, there appears to have been areas of quarrying.
- A1.8 Much of the vegetation associated with the site is associated with field or paddock demarcations with the site supporting a larger number of hedges and alignments than it does individual trees. All of the hedges remaining to date are noted on historical mapping, though it appears that some hedges have been removed during the 20<sup>th</sup> century. The 1837-42 mapping suggests most field demarcations supported vegetation, most likely hedges. If trees had existed, there is nothing remaining still on the site that would date from this period.
- A1.9 During the review, the bulk of the central and southern portion of the site exhibited evidence of recent agricultural use however, the northern area, south of the towpath and associated with the derelict buildings and outbuildings appears to have undergone varying degrees of disturbance and modification in the recent past.

## **Survey Intent and Context**

A1.10 This document intends to highlight the extent and nature of the material of Arboricultural interest on the site in question.

## **Survey Data Collection and Methodology**

### **The Survey**

A1.11 The original survey was carried out in December of 2018 and updated in February of 2021. This survey portion of the overall report is not an Implication Assessment though but provided some of the basic information regarding its compilation. The compilation of this survey was guided by the recommendations of BS 5837: 2012. This survey typically includes trees of stem diameters exceeding 150mm at approximately 1.50 metres from ground level. The survey relates to current site conditions, setting and context.

A1.12 Each tree in the survey has a consecutive number that relates directly to the survey text. Measurements are metric and defined in metres and millimetres. All trees referred to in the survey text have been measured to provide information regarding canopy height and canopy spread (north, east, south, and west radii), level of canopy base and stem diameter at 1.50 meters from ground level. The dimensions provided are intended to provide a reasonable representation of a tree's size and form. While efforts are made to maintain accuracy, visual obstruction, especially regarding trees in groups, requires that some tree dimensions be estimated only.

### **Inspection and Evaluation Limitations and Disclaimers**

A1.13 The information set out in this report relates to the review of a tree population on the site in question. As such, the information provided is based on a general review of trees and does not constitute a detailed review of any one of the individual specimens. Such an evaluation (tree report) would require the gathering of substantially more information than that dealt with in this survey.

A1.14 The survey is not a safety assessment and the parameters reviewed within this survey context would be substantially deficient in extent to provide for a reliable safety assessment. The survey is intended to provide a general and qualitative review to assist in gauging the suitability of an individual tree for retention within a development context. All trees are subject to impromptu failure and damage. The assessment of risk as may be presented by a tree requires the review of numerous factors more than those noted herein and as such, remains outside the scope of this document and any attempt to use the information herein for such purposes will render the information invalid.

A1.15 A competent and experienced Arborist has completed all inspection and tree assessment. The inspection involves visual assessment only, which has been carried out

from ground level. No below ground, internal, invasive, or aerial (climbing) inspection has been carried out.

A1.16 Trees are living organisms whose health, condition and safety can change rapidly. All trees should be re-evaluated regarding their condition on an annual basis or after substantial trauma such a storm event, other damage, or injury. The results and recommendations of this survey will require review and reassessment after one year from the date of execution. This survey does not constitute a review of tree or site safety. Attempts to use the contents herein for such purposes will render the contents invalid.

A1.17 Throughout the undertaking of the survey, several factors acted against the inspectors, contriving to reduce the accuracy of the survey.

### **Seasonality**

A1.18 The surveys were carried out during the winter periods. Some of the signs, typically symptomatic of ill-health or defect within a tree, may not have been available to view at the time of the survey or may have been obscured by seasonality related factors. Some of the fruiting bodies of various fungi, parasitic upon or causing decay or disease in trees, may have been out of season and unavailable to view. This survey can only comment upon symptoms of ill-health or defects visible at the time of the inspection.

## **A1.2 Survey Key**

<b>Species</b>	Refers to the specific tree species
<b>Age</b>	Referred to in generalized categories including: -
Y - Young	A young and typically small tree specimen.
S/M - Semi-Mature	A young tree, having attained dimensions that allow it to be regarded independently of its neighbours but typically, would be less than 50% of its ultimate size.
E/M - Early-Mature	A specimen, typically 50% - 100% of ultimate dimensions but with substantial capacity for mass and dimensional increase remaining.
M - Mature	A specimen of dimensions typical of a full-grown specimen of its species. Future growth would tend to be extremely slow with little if any dimensional increase.
O/M - Over-Mature	An old specimen of a species having already attained or exceeded its naturally expected longevity.
V - Veteran	An extremely old, veteran specimen of a species, usually of low vigour and typically subject to rapid decline and deterioration or of very limited future longevity.
<b>Tree Dimensions</b>	All dimensions are in meters. See notes regarding limitation of accuracy.
<b>Ht.</b>	Tree Height
<b>CH</b>	Lowest canopy height

<b>N, E, S, W</b>	Tree Canopy Spread measured by radii at north, east, south, and west
<b>Dia.</b>	Stem diameter at approx. 1.50m from ground level.
<b>RPA</b>	Root Protection Area, as a radius measured from the tree's stem centre.
<b>Con</b>	Physical Condition
G Good	A specimen of generally good form and health
G/F Good/Fair	
F Fair	A specimen with defects or ill health that can be either rectified or managed typically allowing for retention
F/P Fair/Poor	
P Poor	A specimen whom through defect, disease attack or reduced vigour has limited longevity or maybe un-safe
D Dead	A dead tree
<b>Structural Condition</b>	Information on structural form, defects, damage, injury, or disease supported by the tree
<b>PMR – Preliminary Management Recommendations</b>	Recommendation for Arboricultural actions or works considered necessary at the time of the inspection and relating to the existing site context and tree condition. Works considered as urgent will be noted.
<b>Retention Period</b>	
S – Short	Typically, 0 -10 years
M – Medium	Typically, 10 -20 years
L – Long	Typically, 20 – 40 years
L+	Typically, more than 40 years
<b>Category System</b>	The Category System is intended to quantify a tree regarding its Arboricultural value as well as a combination of its structural and physical health.
Category U	Particularly poor quality, dangerous or diseased trees that offer no realistic sustainability
Category A	A typically a good quality specimen, which is considered to make a substantial Arboricultural contribution
Category B	Typically including trees regarded as being of moderate quality
Category C	Typically including generally poor-quality trees that may be of only limited value. The above categories are further subdivided regarding the nature of their values or qualities.
Sub-Category 1	Values such as species interest, species context, landscape design or prominent aspect.
Sub-Category 2	Mainly cumulative landscape values such as woods, groups, avenues, lines.
Sub-Category 3	Mainly cultural values such as conservation, commemorative or historical links.



**Table 1 – Tree Data Table**

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
12	Ash ( <i>Fraxinus excelsior</i> )	M	P	12.00	3.00	5.00	3.50	3.50	2.00	1	471	5.65	A poor-quality specimen in a state of ongoing decline and exhibiting evidence of <i>Polyporus</i> infection. Is wholly unsuitable for retention in roadside position.	Remove immediately.	N/A	U
13	Sycamore ( <i>Acer pseudoplatanus</i> )	M	F	10.00	2.00	5.00	4.50	4.50	4.50	1	681	8.17	Is of variable vigour and vitality, arising from what appears to be disturbed ground. Note is made of buttress root damage and localised bark loss about buttress zone.	Review regarding retention context.	M	C2
14	Horse Chestnut ( <i>Aesculus hippocastanum</i> )	M	P	8.00	2.00	5.00	5.00	5.00	5.00	1	993	11.92	Crudely decapitated and affected by chronic limb loss and decay. Is unsuitable for retention.		N/A	U
15	Sycamore ( <i>Acer pseudoplatanus</i> )	M	D	11.00	2.00	4.00	4.00	4.00	4.00	1	780	9.36	Completely dead and in a state of ongoing collapse.	Remove immediately.	N/A	U
16	Ash ( <i>Fraxinus excelsior</i> )	E/M	F	12.00	2.25	4.00	4.00	3.00	4.00	1	376	4.51	Relatively young and still vigorous. Arises from disturbed bank and area of dumped spoil between Canal towpath and area of hardstanding. Vigour and vitality appear reasonable however much of tree is obscured by dense Ivy cover.	Cut Ivy and rereview.	M	C2



No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
17	Ash Group ( <i>Fraxinus excelsior</i> )	E/M	F/P	12.00	3.00	5.00	5.00	4.00	4.50	4	462	5.54	Close-knit group of multiple stems arising from disturbed spoil between Canal towpath and area of hardstanding. Eastern and south-eastern stems have sustained notable mechanical damage. Broader crown appears be maintaining reasonable vigour and vitality.	Review regarding retention context.	M	C2
18	Crack Willow ( <i>Salix fragilis</i> )	E/M	F/P	10.00	1.00	3.00	5.00	5.00	5.00	3	493	5.92	Distorted and apparently naturally arising comprises part of a broader multi-stemmed thicket development to north and north-east. Tree vigour and vitality remains good though tree has been subject to prior mechanical damage and has sustained notable bark wounding to south of lower stems.	Review regarding retention context.	M	C2
19	Ash Group ( <i>Fraxinus excelsior</i> )	E/M	F	9.00	2.50	0.00	4.50	4.00	4.00	1	290	3.48	One-sided and typically unbalanced to south as a result of being part of a broader group that extends down embankment to north and towards Canal. Tree appears broadly vigorous though has been affected by substantial dumping and creation of embankment to south of stem.		M	C2
20	Ash ( <i>Fraxinus excelsior</i> )	S/M	F	6.00	1.00	1.00	2.00	1.50		1	207	2.48	Suppressed distorted and affected by failure of Willow from Canal embankment.	Review regarding retention context.	M	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
21	Ash Group ( <i>Fraxinus excelsior</i> )	E/M	P	12.00	0.00	5.00	4.00	3.00	2.00	5	592	7.10	A broader multi-stemmed group arising from lower embankment above Canal. Has been crudely decapitated in past presumably in respect of position adjoining and beneath high-tension power cables. Is of poor quality and ill-suited to retention.	consider early removal.	S	C2
22	Sycamore ( <i>Acer pseudoplatanus</i> )	M	P	13.00	0.00	6.00	4.00	2.00	5.00	1	579	6.95	Crudely decapitated with much of southern upper crown removed to facilitate clearance of overhead power cables. Is of dubious sustainability.		S	C2

**Tree Lines and Hedges**

H1	Hedge 1 Hawthorn ( <i>Crataegus monogyna</i> ) Blackthorn ( <i>Prunus spinosa</i> ) Wych Elm ( <i>Ulmus glabra</i> ) Ash ( <i>Fraxinus excelsior</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> ) Privet ( <i>Ligustrum ovalifolium</i> ) Spindle ( <i>Euonymus europaeus</i> ) Dog Rose ( <i>Rosa canina</i> )	M	F	3.00-6.00	0.00	Spread 4.00-6.00m	m/s	207	2.48	A broadly can tenuous but highly variable hedge arising from the descending slope of a shallow embankment that descends to a ditch circa 1.50 m below field levels to the South. the original Thorn is of variable continuity with notable gaps, particularly where suppression has occurred as a result of ash, elder and Bramble infestations. There are multiple sections where hedge continuity is provided solely by low level Bramble thicket. suitability for retention will be context dependent and dependent upon management needs/potential. The alignment supports a notable, emergent tree population, typically dominated by ash and which Elm. All trees are present can be readily regarded as semimature most not exceeding 5 – 6.00 m. Note is made of the proportion of elms that have died, presumably as result of Dutch Elm disease. Those remaining alive are not expected to last beyond imaging short-term.	M	C2
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H2	Hedge 2 Hawthorn ( <i>Crataegus monogyna</i> ) Blackthorn ( <i>Prunus spinosa</i> ) Wych Elm ( <i>Ulmus glabra</i> ) Ash ( <i>Fraxinus excelsior</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> ) Privet ( <i>Ligustrum ovalifolium</i> )	M	F	1.25-7.00	0.00	Spread 1.50-4.00m	m/s	207	2.48	<p>This hedge is associated with a shallow but nonetheless raised embankment located on the western side of a substantial ditch. A large proportion of the material associated with this alignment arises from the eastern bank of the ditch and appears to include a distinct hedge format at the upper edge of the ditch embankment that has been added to by natural thicket development extending to the east by circa 3 – 4.00 m. Elements of this hedge exhibit evidence of mechanical cutting to circa 1.25 m though other areas are substantially outgrown. Continuity is again a result of plant combinations with substantial elements comprising Bramble thicket only. This alignment supports a more significant emergent tree population, this time dominated by ash though all specimens remain young with most being between a semi maturity and early maturity. Suitability for retention will again be context and management potential dependent.</p>	M	C2
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H3	Hedge 3 Hawthorn ( <i>Crataegus monogyna</i> ) Blackthorn ( <i>Prunus spinosa</i> ) Wych Elm ( <i>Ulmus glabra</i> ) Ash ( <i>Fraxinus excelsior</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> ) Elder ( <i>Sambucus nigra</i> )	M	F	4.00-6.00	0.00	Spread 5.00-7.00m	m/s	207	2.48	The hedge alignment arises predominantly to the north of a substantial ditch and in association with a raised embankment. The original hedge thicket has been substantially contributed to by extensive thicket developed, typically dominated by Blackthorn and Bramble. Note is made of a substantial number of emergent trees that at this time would be regarded as semimature including both ash and which Elm. Already, numerous specimens of the Wych Elm exhibit evidence of Dutch Elm disease suggesting limited sustainability and an unlikelihood of survival beyond the immediate short-term.	M	C2
H4	Hedge 4 Hawthorn ( <i>Crataegus monogyna</i> ) Blackthorn ( <i>Prunus spinosa</i> ) Wych Elm ( <i>Ulmus glabra</i> ) Ash ( <i>Fraxinus excelsior</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> )	M	F	1.50-3.50	0.00	Spread 5.00m	m/s	207	2.48	A broadly continuous alignment arising from the ascending embankment to a notable ditch to the west with the embankment to the east. Small elements of this alignment have been destroyed through fire damage though elsewhere the alignment tends to be broadly continuous however, continuity tends to be as a result of vegetation combinations as opposed to the original Thorn hedge. In this respect, note is made of the substantial proportion of the hedge continuity is provided by Bramble.	M	C2

H5	Hedge 5 Hawthorn ( <i>Crataegus monogyna</i> ) Blackthorn ( <i>Prunus spinosa</i> ) Wych Elm ( <i>Ulmus glabra</i> ) Ash ( <i>Fraxinus excelsior</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> ) Holly ( <i>Ilex aquifolium</i> )	M	F	2.50-6.00	0.00	Spread 4.00-6.00m	m/s	207	2.48	Continuity within this hedge remains good notwithstanding the proportion provided by Bramble at lower levels. The hedge supports only a small number of emergent Ash that could readily be regarded as semimature only with singular poor-quality poplar at its northernmost end. Once again, this hedge exists in association with a ditch and embankment feature with the more significant material arising from the north-western embankment of the ditch.	M	C2
H6	Hedge 6 Hawthorn ( <i>Crataegus monogyna</i> ) Blackthorn ( <i>Prunus spinosa</i> ) Wych Elm ( <i>Ulmus glabra</i> ) Ash ( <i>Fraxinus excelsior</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> )	M	F	1.00-2.50	0.00	Spread 3.00m	m/s	207	2.48	Substantially smaller than previously reviewed hedges with an apparent reduced degree of maturity. Continuity within the line is substantially contributed to by Bramble thicker at lower levels. In keeping with other hedges, the materials associated with a substantial ditch and embankment feature with most of the significant material arising from the northern bank of the ditch feature.	M	C2

H7	Hedge 7 Hawthorn ( <i>Crataegus monogyna</i> ) Blackthorn ( <i>Prunus spinosa</i> ) Wych Elm ( <i>Ulmus glabra</i> ) Ash ( <i>Fraxinus excelsior</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> )	M	F	5.00-7.00	0.00	Spread 5.00-7.00m	m/s	207	2.48	A mature hedge, originally dominated by Hawthorn but where broader continuity is now provided by a combination of plants, most notably elder and emergent ash. Eradication of invasive species would leave a particularly fragmented alignment. Note is made that many of the emergent trees tend to be of poor quality, namely being distorted as result of prior decapitation presumed to be associated with original hedge management works.	M	C2
H8	Hedge 8 Hawthorn ( <i>Crataegus monogyna</i> ) Blackthorn ( <i>Prunus spinosa</i> ) Wych Elm ( <i>Ulmus glabra</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> ) Elder ( <i>Sambucus nigra</i> )	M	F	2.50-5.50	0.00	Spread 3.00-4.00m	m/s	207	2.48	A broadly mature hedge alignment of reasonable continuity associated with the eastern ascending embankment from a ditch feature. General continuity amongst the thorns tends to be broadly good though suppression is developing as result of more invasive plants such as Elder and ash. The hedge alignment is affected by only a small number of gaps where continuity is provided for only by lower level Privet and Bramble Scrub.	M	C2



H9	Hedge 9 Hawthorn ( <i>Crataegus monogyna</i> ) Elder ( <i>Sambucus nigra</i> ) Ivy ( <i>Hedera helix</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ash ( <i>Fraxinus excelsior</i> )	M	F	2.50-5.50	0.00	Spread 3.00-4.00m	m/s	207	2.48	A broadly continuous hedge associated with a raised embankment on the eastern side of a drainage ditch. Some continuity tends to be reasonable though imperfect with the small number of gaps being filled by invasive species such as Elder and Bramble. The alignment supports only a small number of emergent trees typically not exceeding 6.00 m and regarded as being of poor quality being distorted as a result of prior hedge management related decapitation.	M	C2
H10	Hedge 10 Hawthorn ( <i>Crataegus monogyna</i> ) Elder ( <i>Sambucus nigra</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> ) Blackthorn ( <i>Prunus spinosa</i> )	M	F/P	5.00-6.00	0.00	Spread 5.00-6.00m	m/s	207	2.48	A remnant of an original Thorn based hedge however, at this time for you of the thorns remain with the broader alignment continuity being provided for by emergent elder. In individual terms, most plants are reasonable but overall the hedge alignment is of broadly poor quality. Substantially eroded, the hedge appears to be associated with a shallow ditch and embankment feature.	M	C2



H11	Hedge 11 Hawthorn ( <i>Crataegus monogyna</i> ) Elder ( <i>Sambucus nigra</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> ) Blackthorn ( <i>Prunus spinosa</i> ) Dog Rose ( <i>Rosa canina</i> )	M	P	0.00-4.00	0.00	Spread 3.00m	m/s	207	2.48	A particularly overgrown and effectively defunct hedge comprising a broad corridor of material loosely based around an original Hawthorn alignment. The original alignment appears to be associated with a raised and embankment though this is substantially dilapidated and broadly eroded, particularly considering earthworks having occurred at its northernmost end. Additionally, note is also made at circa 30 m of the hedge at its northernmost end has been destroyed by what appears to be recent fire damage.	N/A	U
H12	Hedge 12 Hawthorn ( <i>Crataegus monogyna</i> ) Elder ( <i>Sambucus nigra</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> ) Blackthorn ( <i>Prunus spinosa</i> )	M	P	7.00	0.00	Spread 6.00-7.00m	m/s	207	2.48	A dilapidated section of hedging originally comprising a Thorn hedge but now supporting only an intermittent alignment of plants, some of which have been affected by either ground disturbance or by fire damage. The few remaining Hawthorne's are substantially affected by chronic Ivy cover to the point where there are effectively defunct and unworthy of retention.	N/A	U

H13	Hedge 13 Elder ( <i>Sambucus nigra</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> ) Sycamore ( <i>Acer pseudoplatanus</i> )	M	P	3.00-4.00	0.00	Spread 5.00	m/s	207	2.48	Effectively comprises a thick development only with no evidence remaining of any original Thorn based hedge. The material arises from both sides of an apparent field drainage ditch.	M	C2
H14	Hedge 14 Sycamore ( <i>Acer pseudoplatanus</i> ) Ash ( <i>Fraxinus excelsior</i> ) Hawthorn ( <i>Crataegus monogyna</i> ) Bramble ( <i>Rubus fruticosus</i> ) Elder ( <i>Sambucus nigra</i> ) Ivy ( <i>Hedera helix</i> )	M	P	1.50-5.00	0.00	Spread 3.00m	m/s	207	2.48	A relic an old hedge now substantially disturbed by ongoing earthworks. Original ground contours in vicinity of this hedge have effectively been lost and the few remaining plants are considered unsuitable for retention.	N/A	U

H15	Hedge 15 Hawthorn ( <i>Crataegus monogyna</i> ) Blackthorn ( <i>Prunus spinosa</i> ) Bramble ( <i>Rubus fruticosus</i> ) Elder ( <i>Sambucus nigra</i> ) Ivy ( <i>Hedera helix</i> ) Dog Rose ( <i>Rosa canina</i> )	M	F	2.50-3.00	0.00	Spread 3.00m	m/s	207	2.48	A short remnant section of hedging disturbed to its eastern side as result of ongoing roadworks. The hedge appears to be broadly young and in general terms remains continuous however, a notable proportion of the hedge alignment continuity is provided by spurious invasive plants such as Bramble.	Review regard retention context.	M	C2
H16	Hedge 16 Hawthorn ( <i>Crataegus monogyna</i> ) Elder ( <i>Sambucus nigra</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> ) Snowberry ( <i>Symphoricarpos Sp.</i> ) Cherry Laurel ( <i>Prunus laurocerasus</i> )	M	P	4.50-5.00	0.00	Spread 3.00-4.00m	m/s	207	2.48	A dilapidated and effectively defunct remnant of an original hedge now best defined by low level thicket development. Is considered Unsuited for retention.	Remove.	N/A	U

H17	Hedge 17 Elder ( <i>Sambucus nigra</i> ) Cherry Laurel ( <i>Prunus laurocerasus</i> ) Lawson Cypress ( <i>Chamaecyparis lawsoniana</i> )	M	D	4.50-5.00	0.00	Spread 4.00-6.00m	m/s	207	2.48	Effectively defunct and much material is now dead as a result of fire damage.	Remove.	N/A	U
H18	Hedge 18 Sycamore ( <i>Acer pseudoplatanus</i> ) Elder ( <i>Sambucus nigra</i> ) Bramble ( <i>Rubus fruticosus</i> ) Hawthorn ( <i>Crataegus monogyna</i> ) Ivy ( <i>Hedera helix</i> )	M	P	2.00-4.00	0.00	Spread 5.00m	m/s	207	2.48	A defunct thicket now dominated by Bramble. Unsuitable for retention.	Remove.	N/A	U
H19	Hedge 19 Hawthorn ( <i>Crataegus monogyna</i> ) Elder ( <i>Sambucus nigra</i> ) Bramble ( <i>Rubus fruticosus</i> ) Ivy ( <i>Hedera helix</i> )	M	F/P	4.00-6.00	0.00	Spread 4.00-5.00m	m/s	207	2.48	A dilapidated and disturbed remnant of an original hedge now affected by spoil dumping. Ground conditions in vicinity of hedge are substantially disturbed. Very few of the original Hawthorn is remain suggesting limited sustainability.	Consider early removal.	N/A	U