



Arboricultural site appraisal for the proposed residential
development of Owenmore Crescent, Collooney, Co Sligo.

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1 INTRODUCTION

Instruction: Beith Tree Consultancy has been instructed by David Ivers of Rhatigan Architects to carry out a tree survey in line with BS 5837:2012 trees in relation to design, demolition, and construction – recommendations for the proposed development of 31 units at Owenmore Crescent, Collooney, Co Sligo. The purpose of the survey is to provide the following information,

- A schedule of the relevant trees to include basic data and a condition assessment including.
- Tree species
- Height, Trunk diameter, spread.
- Age
- Index of Physiological condition (good/fair/poor)
- Index of Structural condition (good/fair/poor)
- Notable damage, infections, defects & weaknesses etc.
- Tree categorisation in line with BS 5837:2012 A, B, C, or U.
- Recommended root protection area.

1.2 **Relevant guidance:** The British Standard BS5837:2012 Trees in relation to design, demolition and construction- Recommendations provides a framework for considering trees in the planning process. It gives guidance on categorising the qualities of trees in order to enable decisions to be made as to which trees are appropriate for retention within the development. It then advises on options for protecting retained trees during all phases of the development.

1.1 **Overview:** The development is the construction of 31 residential units at Owenmore Crescent, Collooney, Co Sligo.

The lands to be developed are currently maintained meadow in Collooney village. In the southeast corner of the site is an unused reservoir facility now heavily overgrown with vegetation. The site is located between Kiernan Avenue to the north, Church View to the east and River Walk to the south and southwest. The site is 10km south of Sligo town via the N4 dual carriageway.



1.2.2 The site is not within a designated Conservation Area, however and no trees on site are subject to a Tree Preservation Order (TPO).

2 TREE SURVEY

2.1 **Site visits:** I undertook the survey on Monday the 16th September 2024. The weather at the time of the survey was sunny, blue skies with good visibility, enabling clear observations of the trees. The majority of the trees surveyed are along the site boundaries with an additional hedgerow travelling north to south at the sites narrowest point. See arial image below.



Image: Proposed development site pdf. Supplied by Rhatigan Architects. Site boundary outlined in red.

- 2.2 **Surveyed trees:** The tree survey schedule along with its accompanying explanatory notes, Appendix 1, provides details of single trees and hedgerows present on or immediately adjacent to the proposed development.
- 2.4 **Tree root protection areas:** The measurements for the tree root protection areas are included within the tree survey schedule and provide details of the extent of area required around retained trees to provide adequate protection.



- 2.6 **Limitations:** My survey was of a preliminary nature and did not include any detailed tree safety inspections. All my observations were taken from ground level. Where there is restricted access to the base of a tree, its attributes are assessed from the nearest point of access.

3 Methodology

- 3.1 **Method:** Trees and hedgerows were surveyed in accordance with British Standards Publication, Trees in relation to design, demolition and construction - Recommendations (BS 5837:2012).
- 3.2 **Collection of basic data:** I collected measurements and recorded observations of the trees and hedgerows from ground level.
- 3.3 **Categorisation of trees:** The Survey Schedule and Tree Protection Plan detail my recorded measurements and observations. In addition, trees and hedgerows were awarded one of the following four categories, based on their quality, value and suitability for retention:

Category A – high

Category B – moderate

Category C – low

Category U – unsuitable for retention

Trees categorised 'U' should be removed due to their condition and/or short life expectancy. 'C' trees should be retained where possible or where it suits a development layout but there is a general presumption that they can be removed to facilitate development. These trees can be adequately replaced with suitable landscaping.

Trees in categories A, B or C were also awarded a subcategory to indicate the significance or value of their presence:

1. Mainly arboricultural qualities.
2. Mainly landscape qualities.



3. Mainly cultural values, including conservation.

4 Findings of the Survey – Southern boundary



Image of the southern boundary looking west along River Walk. Tag 368 & T369 in view.

To the north of the southern boundary is a linear feature that consists of a dense unmaintained native hedgerow of mixed species with sporadic mature Ash trees (*Fraxinus excelsior*) this feature spans the full length of the southern boundary. The species mix is whitethorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), Elderberry (*Sambucus nigra*) and a young sycamore (*Acer pseudoplatanus*). Dense briars prevent access to the hedgerow and are approximately 2m in height. Ivy covers the main stems and is growing into the crowns of both the trees and hedgerow plants.

A block wall with concrete capping's provides the southern boundary of the site. See image above. This wall is approximately 1.1m in height and begins at the gate on Church View and spans along River Walk as far as House No 34. To the south of this wall is approximately 8m of maintained grass with the street scape of River Walk beyond.

Travelling just inside the hedgerow is an E.S.B 3 phase electricity overhead powerline. It begins at the southeastern corner of the site from an underground connection and stretches halfway along the southern boundary before turning northwest, crossing through the site and exiting on the far northwest corner.



The Ash trees were numbered individually where possible and classified as trees of low-quality Category C,1 or trees unsuitable for retention category U (as per Table 1 of BS5837:2012)



Image of the southeast corner of the site, looking southwest. ESB network present.





Image halfway along the southern boundary looking south. ESB network turning northwest.

The hedgerow, H01, was classified as trees of moderate quality. Category B,3 (as per Table 1 of BS5837:2012)

The western boundary

The western boundary of the site is a staggered boundary that navigates houses on River Walk. The boundary begins at a small, maintained greenspace to the south of number 34 River Walk and travels east of the back gardens of house numbers 34-39 River Walk. The boundary then doglegs west along the north of house number 39 before turning north where the site borders number 40 and 41 Riverwalk and ends at the sites most northerly point.

The boundary consists of a dense unmaintained native hedgerow of mixed species with sporadic mature Ash trees (*Fraxinus excelsior*). The species mix is whitethorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), Elderberry (*Sambucus nigra*) Holly (*Ilex aquifolium*) and Crab apple (*Malus sylvestris*).

Dense briars prevent access to the trees/hedgerow from the eastern aspect. See photo below. However, the stems of most of the trees were accessed via a track along the boundary ditch. The western boundary is also aligned by the block wall and capping stones of the properties of River Walk.

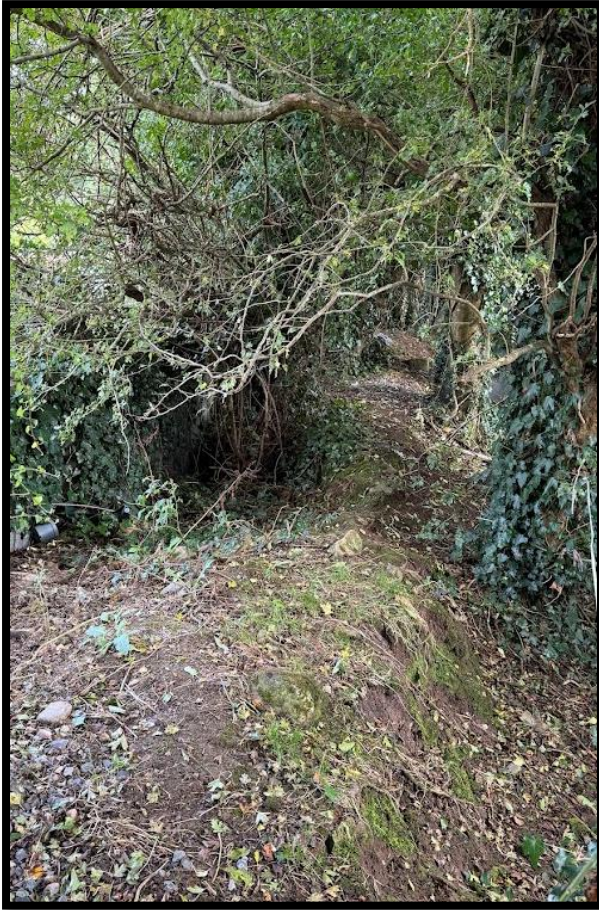
The Ash trees were numbered individually where possible and classified as trees of low quality. Category C,2 or trees of moderate quality B,2 (as per Table 1 of BS5837:2012)

The hedgerow, H02 and H03 were classified as trees of moderate quality. Category B,3 (as per Table 1 of BS5837:2012)





View of the western boundary, bordering house numbers 34-39 River Walk from inside the site looking west.



Boundary ditch at rear of 34-39 River Walk.



Northern aspect outside house 39 River Walk.



Tags 380, 381 and 382 located along the boundary of house 39 River Walk.



Western boundary bordering houses 40 -41 River Walk.

This section of the boundary was inaccessible due to the dense vegetation, briers approximately 10m wide to the eastern aspect of the site boundary. The hedgerow is unmaintained and predominantly whitethorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), Elderberry (*Sambucus nigra*) with two mature Ash trees (*Fraxinus excelsior*).

The hedgerow, H04 was classified as trees of low quality. Category C,2 (as per Table 1 of BS5837:2012)



The Northern boundary

The northern boundary stretches from the road frontage at Church View for the length of the site and borders some of the gardens of Kiernan Avenue.

The hedgerow varies in height along the boundary from 1m to 7m in height approx. The species mix is consistent with the other boundaries with whitethorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), Elderberry (*Sambucus nigra*) and some juvenile Sycamore trees (*Acer pseudoplatanus*).

At the sites most northerly point there are some Lawson cypress (*Chamaecyparis lawsonia*), however these trees could not be accessed on the day due to dense vegetation and may possibly be in a private garden on the far side of the boundary. The trees are also in close proximity to the E.S.B. overhead powerline that exits the site at this point. See photo below.



Lawson cypress trees at the most northerly point of the site.



Approximately 16m of the northern boundary with no hedgerow, bordering houses of Kiernan Avenue.



Some taller spruce trees on the northern boundary that are in the neighbouring property have been reduced in height.

The hedgerow, H05 and H05a in this feature was classified as trees of low quality. Category C,2 (as per Table 1 of BS5837:2012)



The Eastern boundary

The eastern boundary aligns the road of Church View. A large portion of this boundary is taken in with the old reservoir that is now covered in dense vegetation and inaccessible. A block wall with concrete capping's surrounds this feature. See photo below.



Block wall enclosing the old reservoir.

In the northeast corner of the site is a group of 9 Ash trees. Ash dieback is very prevalent in this group and some of the trees are dead. Dense Ivy covers the main stems and into the upper canopy and there are briars up to 2m in height at the base of the trees. The understorey for the group is whitethorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*).



The group of Ash trees in this feature were classified as trees unsuitable for retention. Category U (as per Table 1 of BS5837:2012)



The internal hedgerow

This feature crosses the site at its narrowest point, from the corner of the western boundary at the block wall of house 39 River Walk to the northern boundary. Dense nettles and briars spreading out from the hedgerow upto 2m in height around the trees prevent access to the two mature Ash (*Fraxinus excelsior*). The under storey is dominated by whitethorn (*Crataegus monogyna*).

The Ash tree was classified as a trees of moderate quality Category B,1 (as per Table 1 of BS5837:2012).

The hedgerow, H06, in this feature was classified as trees of low quality. Category C,2 (as per Table 1 of BS5837:2012)



View of internal hedgerow looking west.



Appendix 1: Tree schedule and explanatory notes - Southern boundary trees and hedgerow.

Key; Category A trees, Category B trees, Category C trees & Category U trees. Trees to be removed in red text

Tree No.	Species	Tree Height (m)	Stem dia (mm)	Crown spread (m)				Height & Direction of 1 st Branch (mm)	Min. Crown Clearance (m)				Life stage	Physiological condition	Structural condition/ Preliminary management recommendations	Remaining contribution	Retention category	RPA R (m)
				N	E	S	W		N	E	S	W						
T368a	Ash	13m		4#	4#	3.5	4#	East 3m	3	3	2	3	M	Poor	Approximately 50% crown density. Minor and major deadwood throughout the crown <50mm and >50mm. Deadwood hanging over maintained greenspace. Dense Ivy into the upper crown. Vegetation preventing access for further inspection.	10	U	
T368	Ash	12m		4#	4#	3.4	4#	South 3m	3	3	3	3	M	Poor	Approximately 10% crown density. Minor and major deadwood throughout the crown <50mm and >50mm. Deadwood hanging over maintained greenspace. Dense Ivy into the upper crown. Vegetation preventing access for further inspection.	10	U	
T369	Ash	14m		4#	4#	3.8	4#	South 3m	3	3	3	3	M	Poor	Approximately 40% crown density. Minor deadwood <50mm throughout the crown. Dense Ivy growing into upper crown. Vegetation preventing further inspection.	10	U	
T370	Ash	12m	318	3	2	4	2.5	South 3m	3	3	3	3	M	Fair	Light deadwood in the twigs of the upper crown. Heavy Ivy to 5m. Dense vegetation around the base preventing further inspection.	10+	C,1	3.9m



Appendix 1: Tree schedule and explanatory notes

Key; Category A trees, Category B trees, Category C trees & Category U trees. Trees to be removed in red text

Tree No.	Species	Tree Height (m)	Stem dia (mm)	Crown spread (m)				Height & Direction of 1 st Branch (mm)	Min. Crown Clearance (m)				Life stage	Physiological condition	Structural condition/ Preliminary management recommendations	Remaining contribution	Retention category	RPA R (m)
				N	E	S	W		N	E	S	W						
T371	Ash	15m	340	3#	3#	3#	3#	South 6m	6	6	6	6	M	Poor	Damage to the stem and buttresses to 1m above ground level on the southern aspect and large wound on the northern aspect of the stem to 1.5m above ground level, heartwood exposed.	10	U	4.2m
T372	Ash	15m	235	2	2	4	3	South 6m	6	4	3	6	M	Fair	Large wound to the base of the stem 90cm long and 15cm wide heartwood exposed.	10+	C,1	2.7m
T373a	Ash	12m											M	Fair	Multi stemmed tree. No access due to vegetation.	10+	C,1	
H01	Whitethorn Blackthorn Elderberry, Ash, Sycamore., Briers, Ivy.	8m		3	3	3	3	Ground Level	0	0	0	0	M	Good	Unmaintained native boundary hedgerow. Density of vegetation preventing access RPA an approximation.	20+	B,3	2.1m



Appendix 1: Tree schedule and explanatory notes – Western boundary trees and hedgerow (behind 34-39 River Walk)

Key; Category A trees, Category B trees, Category C trees & Category U trees. Trees to be removed in red text

Tree No.	Species	Tree Height (m)	Stem dia (mm)	Crown spread (m)				Height & Direction of 1 st Branch (mm)	Min. Crown Clearance (m)				Life stage	Physiological condition	Structural condition/ Preliminary management recommendations	Remaining contribution	Retention category	RPA R (m)
				N	E	S	W		N	E	S	W						
373	Ash	14m	337 340	5	5	5	5	West 4m	5	5	5	2	M	Fair	Co dominant stems from ground level with a bark included union 1.3m in length. Dieback present on twigs in the upper crown. Stems covered in dense Ivy potentially covering defects.	10+	B,1	5.7m
374	Ash	12m	308	4#	4#	4#	4#	East 3m	3	3	3	3	M	Good	Tree growing from the base of the boundary ditch with a lean to the east. Large tension root into the ditch.	10+	C,1	3.6m
375	Ash	12m	216 210	4#	4#	4#	4#	East 4m	3	3	3	3	M	Fair	Multi stemmed tree from ground level. Western stem has multiple bark inclusions.	10+	C,1	3.9m
376	Ash	12m	283	4#	4#	4#	4#	East 1.5m	4	4	4	4	M	Good	Single stemmed tree. Stem growing on the eastern aspect of the ditch. Dense Ivy covering parts of the main stem.	10+	B,1	3.3m
377	Ash	12m	286	4#	4#	4#	4#	North 2m	2	2	2	2	M	Poor	Co dominant stems with a bark included union to 800mm above ground level. Eastern stem is dead. Two cavities at the base of the eastern stem. 1- . at 300mm probed beyond 460mm in depth. 2 - At 500mm probed to 400mm in depth	10	U	3.3m



Appendix 1: Tree schedule and explanatory notes

Key; Category A trees, Category B trees, Category C trees & Category U trees. Trees to be removed in red text

Tree No.	Species	Tree Height (m)	Stem dia (mm)	Crown spread (m)				Height & Direction of 1 st Branch (mm)	Min. Crown Clearance (m)				Life stage	Physiological condition	Structural condition/ Preliminary management recommendations	Remaining contribution	Retention category	RPA R (m)
				N	E	S	W		N	E	S	W						
378	Ash	11m	200	4#	5#	0	0	East 4m	4	4	6	6	SM	Fair	Rotten fence post attached to the stem at 500mm with barbed wire embedded in the stem. Lean and crown bias to the east.	10+	C,1	2.4m
379	Ash	12m	261					North 4m	5	5	5	5	SM	Fair	Stem damage on the eastern aspect with bark and cambium removed, sapwood exposed-840mm high x 340mm wide.	10+	C,1	3m
H02	Whitethorn Blackthorn Elderberry Crab apple, Briers, Ivy.	6m		3	3	3	3	GL	0	0	0	0	M	Good	Unmaintained native boundary hedgerow. Briers extending out into the field by 5m in places. Density of vegetation preventing access RPA an approximation.	20+	B,3	2.1



Appendix 1: Tree schedule and explanatory notes – Western boundary (beside house 39 River Walk)

Key; Category A trees, Category B trees, Category C trees & Category U trees. Trees to be removed in red text

Tree No.	Species	Tree Height (m)	Stem dia (mm)	Crown spread (m)				Height & Direction of 1 st Branch (mm)	Min. Crown Clearance (m)				Life stage	Physiological condition	Structural condition/ Preliminary management recommendations	Remaining contribution	Retention category	RPA R (m)
				N	E	S	W		N	E	S	W						
380	Ash	15m	318 222	6	3	4	3	West 4m	4	6	3	6	M	Fair	Multi stemmed from ground level with included union. Central stem is dead 2m in length. Southern stem has a lean into garden of No39 River Walk. 1m drop in ground level north of main stem.	10+	B,1	4.8m
381	Ash	13m	232	3	3	3	2.5	North 5m	5	6	7	6	M	Fair	Crown bias and heavy lean to the north. Main stem growing out from the side of the ditch.	10+	C,1	2.7m
382	Ash	15m	308 366	4	3	3	2.5	North 3m	5	5	3	5	M	Fair	Basal stem cavity to the southwest aspect probed beyond 460mm. Co dominant stems above 600mm. Main stem is 1.3m above ground level to the north.	10+	C,1	5.7m
H03	Whitethorn Blackthorn Elderberry Holly, Briers, Ivy.	6m		3	3	3	3	GL	0	0	0	0	M	Good	Unmaintained native boundary hedgerow. Density of vegetation preventing access RPA an approximation.	20+	B,3	2.1
H04	Whitethorn Blackthorn Elderberry Briers, Ivy	4m		3	3	3	3	GL	0	0	0	0	M	Fair	Boundary with House 40-41 River Walk. Briers and Ivy are smothering many of the hedgerow species on this boundary. Briers can be 10m out from the hedgerow.	10+	C,2	2.1



Appendix 1: Tree schedule and explanatory notes – Northern boundary Hedgerow

Key; Category A trees, Category B trees, Category C trees & Category U trees. Trees to be removed in red text

Tree No.	Species	Tree Height (m)	Stem dia (mm)	Crown spread (m)				Height & Direction of 1 st Branch (mm)	Min. Crown Clearance (m)				Life stage	Physiological condition	Structural condition/ Preliminary management recommendations	Remaining contribution	Retention category	RPA R (m)
				N	E	S	W		N	E	S	W						
H05/H05a	Sycamore, Whitethorn, Blackthorn, Elderberry, Briers.	1m 7m		3#	3	5	3	GL	0	0	0	0	M	Fair	Briers and Ivy are smothering many of the hedgerow species on this boundary. Briers can be 5m out from the hedgerow.	10+	C,2	2m

Appendix 1: Tree schedule and explanatory notes – Eastern boundary Group 1

Key; Category A trees, Category B trees, Category C trees & Category U trees. Trees to be removed in red text

Tree No.	Species	Tree Height (m)	Stem dia (mm)	Crown spread (m)				Height & Direction of 1 st Branch (mm)	Min. Crown Clearance (m)				Life stage	Physiological condition	Structural condition/ Preliminary management recommendations	Remaining contribution	Retention category	RPA R (m)
				N	E	S	W		N	E	S	W						
GP 01	9 Ash	11m		2	3	4	4	South 2m	2	2	2	2	M	Poor	Ash dieback is very prevalent in this group and some of the trees are dead. Dense Ivy growing into upper crown. Vegetation preventing further inspection.	10	U	



Appendix 1: Tree schedule and explanatory notes – Internal hedgerow

Key; Category A trees, Category B trees, Category C trees & Category U trees. Trees to be removed in red text

Tree No.	Species	Tree Height (m)	Stem dia (mm)	Crown spread (m)				Height & Direction of 1 st Branch (mm)	Min. Crown Clearance (m)				Life stage	Physiological condition	Structural condition/ Preliminary management recommendations	Remaining contribution	Retention category	RPA R (m)
				N	E	S	W		N	E	S	W						
T383	Ash	11m		4#	4	4.5	4	East 3m	2	2.5	2	2	M	Fair	Ash stem inaccessible due to vegetation.	10+	B,1	
H06	Whitethorn , briers.	3m		3	3	3	3	GL	0	0	0	0	M	Fair	Many of the hedgerow trees are smothered with briers and Ivy. RPA is approximate.	10+	C,2	2.1

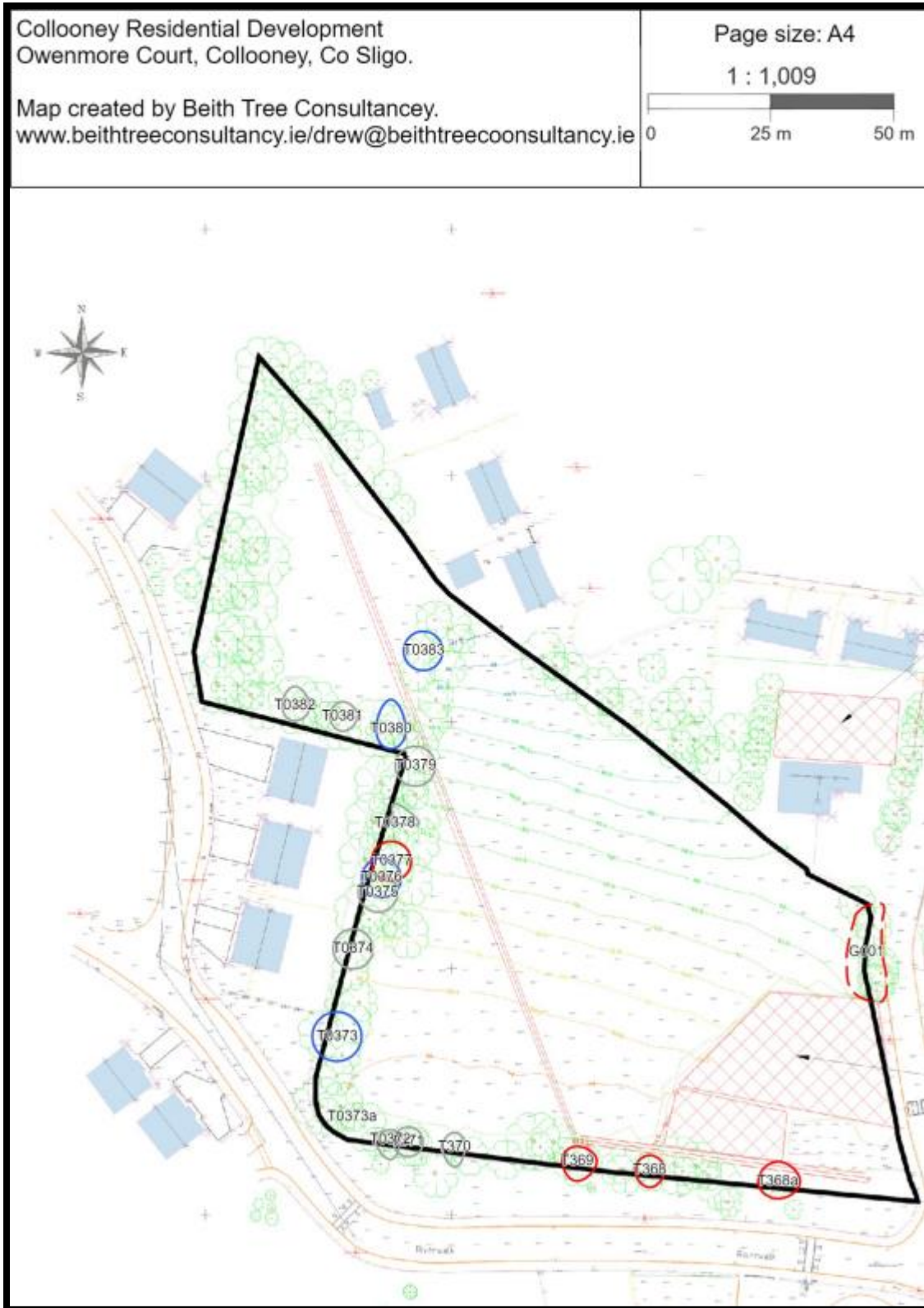


Appendix 1: Explanatory Notes

- **Suffix #:** Estimated dimensions
- **Tree No:** Prefix T= individual tree, G= group of trees, S= stump, H= Hedge No. = allocated tree number.
- **Species:** A trees common name with its botanic name given below in italics. Where a positive identification cannot be made Unknown will be stated.
- **Tree Height:** Height in metres, recorded to the nearest half metre for dimensions up to 10m and the nearest whole metre for dimensions over 10m.
- **Stem Diameter:** Stem diameter in millimetres, measured in accordance with BS 5837:2012, rounded to the nearest 10mm.
- **Spread:** The crown spread measured from the centre of the trunk to the tips of the live lateral branches and rounded up to the nearest half metre for dimensions up to 10m and the nearest whole metre for dimensions over 10m, N= north, S= south, E= east and W=west.
- **Height & direction of 1st branch:** Is the height in meters of the first significant branch and its direction of growth (N, S, E, W). Note: this is not recorded if there is a uniform crown and no significant 1st branch.
- **Minimum Crown Clearance:** Is the height in meters from ground level to lowest branch at each cardinal point (N, S, E, W).
- **Life Stage:** Age is an estimated range based on visual indicators; it should only be taken as a provisional guide. NP= Newly planted (planted within the last 5 years); Y= Young (1st 1/3 of life expectancy, MA = Middle aged (2nd 1/3rd of life expectancy), M = Mature (final 1/3rd of life expectancy), V= Veteran (of special conservation value)
- **Physiological Condition:** G= Good – no significant health problems F= Fair – minor symptoms of ill health P= Poor- significant ill health
- **General Observations / Preliminary Management Recommendations:** Information based on visual observations that may influence management proposals or BS 5837 categorisation, where appropriate recommendations are offered. Key information and management recommendations in bold.
- **Remaining Contribution:** An estimate of the trees remaining life span and contribution to site amenity, in years.
- **Retention Category:** The category and subcategory awarded the tree; it is an indication of a trees condition and value. U– Unsuitable for retention A – High quality and value B – Moderate quality and Value C – Low quality and value. Subcategory: 1 – Mainly arboricultural values 2 – Mainly landscape values 3 – Mainly cultural values including conservation
- **RPA R:** Root Protection Area Radius, the radius (R) of circle (measured from centre of trunk) required to achieve the protection area (A), in metres. Annex D of BS 5837:2012.
- **RPA A:** Root Protection Area, the calculated area (A) required to protect root system, in m². Annex D of BS 5837:2012
- **Notes:** Only relevant features relating to physiological or structural condition and low branches that may help clarify the categorisation are recorded. If there are no notes, then the presumption should be that no relevant features were observed.

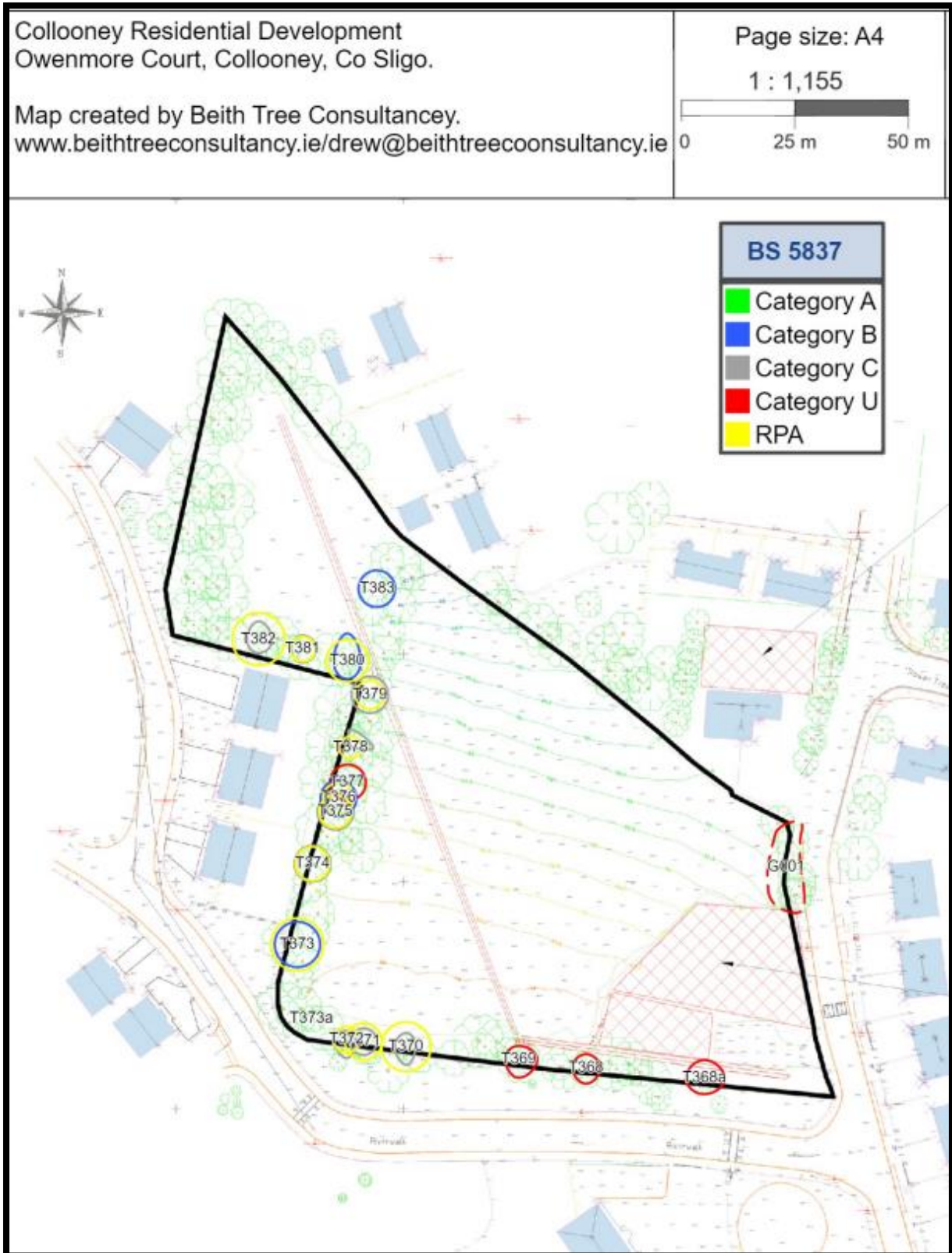


Tree location Plan



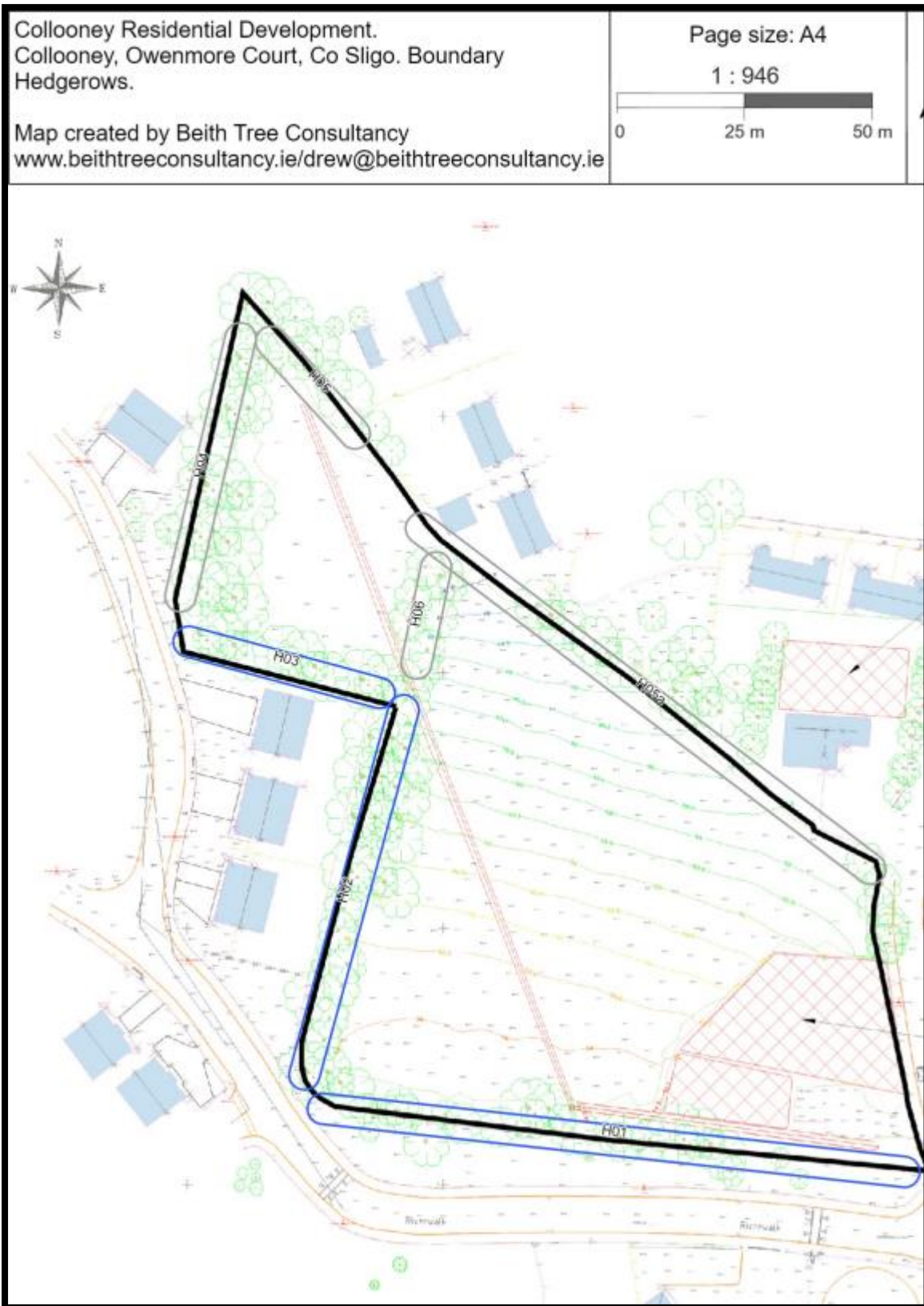


Tree Root Protection Areas





Boundary hedgerows





Summary

To summarise, this report has highlighted the trees that can be accessed on or adjacent to the proposed development site at Owenmore Crescent, Collooney, Co Sligo. The trees have been categorised in accordance with BS 5837:2012 - Trees in relation to design, demolition and construction – Recommendations. Trees in neighbouring properties or those that are currently inaccessible can be added in due course.

At this stage tree removals have been kept to trees unsuitable for retention for longer than 10 years, these trees are classified as category U as per Table 1 of BS5837:2012. and are highlighted in red crown fill on the tree location map.

Preliminary recommendations would be to increase the tree species diversity on the site as all the mature tree population are Ash and considering the ongoing progression of the fungal disease Ash die back (*Hymenoscyphus fraxineus*) their long-term future remains uncertain. Some of the trees onsite have been categorised as trees unsuitable for retention in this report due to the effects of the disease.

It is recommended to create access to any trees that will be retained and sever the Ivy from the stems, this may reduce their habitat value but will increase the trees aesthetic value. More importantly the severing of the Ivy will benefit future tree inspections as Ivy can keep defects hidden from view.

Tag -373 to 379.

It is important to highlight that these mature trees may need remedial work carried out in the future to maintain tolerable levels of safety on site as they are very close to the existing houses on River Walk and may be in close proximity to the planned development.

Access to these trees post development needs to be considered prior to making decisions on their retention.

Due to the proximity of neighbouring properties, I would recommend future tree risk management surveys be carried out at 18-month intervals to measure the structural integrity of the trees.