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TREE & HEDGEROW ASSESSMENT REPORT

For

CREAGH, GOREY

November 2018

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1. Introduction

The trees and hedgerows were surveyed on the 12th January 2018 and 31st July 2018 by this practice and the findings have been summarised and recorded in the following report. All significant trees and hedgerows have been individually identified and numbers referenced in the following survey table. This report should be read in conjunction with Drawings No. 1706_TS_P_01 and 1706_TS_P_02, which shows the location of trees and hedgerows on the site. A total of 30 individual trees were assessed as part of the survey fieldwork.

2. Scope

It is proposed to develop agricultural lands at Creagh; located on the outskirts of Gorey Town, County Wexford. The site contains numerous mature trees and hedges and this report has been commissioned to provide an Arboricultural assessment of the site to assist the design team as they prepare detailed plans for the new development. This report forms part of a series of survey reports covering different sections of land that together make up the entire land parcel at Creagh subject to potential development. This survey identifies the trees and hedgerows, providing an assessment and recommendations for their management and protection. For details of the proposed works see drawings by STRUTEC Architects & Engineers.

3. Survey Limitations

The trees are subject to a visual inspection only. A more detailed inspection can be carried out if requested. This survey has been carried out in support of the planning and design of the new development and only concerns trees on and around the site that are considered relevant to the project; the survey is not presented as a health and condition survey of all the trees on the property.

Every attempt was made to identify hazardous trees in this report however this survey was carried out from the ground and therefore cannot be held to have identified elements of decay which may be hidden out of sight within the crown or beneath ivy or other obstructions. Climbing plants such as Ivy can obscure structural defects and some symptoms of disease, where such plants prevent a thorough examination it is recommended that the climber be cut at ground level and the tree re-inspected when it has died back. It is vital that during tree works any additional defects found by the climbing arborist are communicated to the consulting arborist to allow appropriate action to be taken.

The details within this survey are based on the condition of the trees during the survey period only. The findings in this survey cannot be held to be valid after any site disturbance, man-made or natural, which may have an adverse effect on any trees present. This tree survey contains only the trees and hedgerows within the site and on the boundaries of the proposed development site in detail. The survey methodology and supporting drawings and documentation follow the recommendations contained within BS 5837:2012.

4. Site Evaluation

The proposed site is located at Gorey, North of County Wexford. The lands are situated between Gorey's northern urban centre, western border of Ramsford Woodland Park and existing agricultural land with associated scattered rural dwellings, 2.70 kilometres to the north-west of the M11 and 1.30 kilometres to the north of Gorey railway station. This general area is accessed by Fort Road from Gorey town centre. At the present the site is zoned for residential development.

The southern and western boundaries to the lands are on the northern urban fringe of Gorey, with existing housing developments bordering the site. The eastern boundary of the site immediately borders Ramsfort Park, while a recent housing development is immediately adjacent to the south-west, in Creagh.

The north boundary is edged by an arable field, framed by hedgerows with isolated mature trees, along with an area to the south of the site which is fallow and shows signs of previous industrial development which has been demolished.

Figure 1. Large open field located North of the site.

Figure 2. Demolished structures and buildings South of the site.

The site is bounded by the following Trees and associated hedgerows (Fig.3):

Mature overgrown hedgerows located north and north-west of the site. This hedge falls outside the boundaries of the housing development area; however, recommendations are necessary regarding tree and hedge treatment due to lack of present maintenance and potential adjacency of root protection areas:

1) The first hedge surveyed is located adjacent to Fort Road, west of the site (Fig. 4 and 5 - Hedge no. 1), which is formed by a large continuous earth embankment, over 2.00m high running almost parallel to the road, where mature trees are growing close together along approximately 150 meters. All its vegetation has been neglected for some time, with resultant uneven tree growth, densely overgrown understorey areas and some large gaps in the fabric of the hedge. Generally, it is composed of several mature specimens of Ash (*Fraxinus excelsior*) and Oak (*Quercus robur*) all of which are mostly covered in Ivy and Bramble. Bracken (*Pteridium aquilinum*), Bramble (*Rubus sp.*), Gorse (*Ulex europaeus*), Hawthorn (*Crataegus monogyna*), Holly (*Ilex aquifolium*) and Ivy (*Hedera helix hibernica*) form what is left any past hedge boundary, although these species are very scattered. The main boundary is ostensibly the earth embankment with associated cover of Bramble and Ivy. The Ivy is frequently found covering trees impeding an appropriate tree visual assessment. It is considered that due to the form of the existing embankment that the roots of existing trees that are on top of the embankment do not extend into the field. The field has also been harrowed and ploughed over time, which also further restricts root growth into the field.

2) The hedge located north of the site (Hedge no. 2) is composed of a distinctive arboricultural feature of mature isolated trees, such as Ash (*Fraxinus excelsior*) and Common Lime (*Tilia x europaea*). Overgrown Ivy (*Hedera sp.*) covers many trunks. The tree-line covers over 400 meters and is particularly prominent as it follows the hedgerow along the top of the site. These trees have an even spread and round crown with epicormic growth mostly at the base of the trunk. The hedgerow is dominated by overgrown Hawthorn (*Crataegus mongyna*), with large gaps present in the fabric of hedge. Large specimen of Hawthorn, Holly (*Ilex aquifolium*) and Gorse (*Ulex europaeus* make up the hedge accompanied by Bramble (*Rubus sp.*), Bracken and small amounts of Elder *(Sambucus nigra*) and Prunus sp. towards Ramsfort Park to the east.

   To the very north there is a portion of overgrown hedgerow inside the boundary hedgerow that contains juvenile to young Cherry (Prunus sp.), with associated overgrown understorey of Bramble and Ivy.

3) The boundary with the Coillte lands of Ramsfort Park Forest consists of young recently planted oaks (*Quercus robur*), no higher than 10 meters, and a concrete post with chain-link fence located north-east of the site with low height Ivy and Bracken, extending for over 380 meters. These oaks are to be found outside the boundary of the future development area and establishing a transition between the site and Ramsfort Park (Fig. 9 - Hedge no. 3). The Oaks were planted close together, however upon visual inspection, all have a healthy appearance with no signs of crown malformation (which can be caused by competition with neighbouring trees), even apical growth and balanced canopy.

4) In the south-east boundary, the hedge is mostly composed of mature *Cupressus* sp. (dominant species in this hedge) with approximate 18 meters high, extending for over 280 meters. Multi-stemmed Alder (*Alnus* glutinosa), Bracken (*Pteridium aquilinum*), Bramble (*Rubus sp.*) compose the lower layer of this boundary. Because of the deep embankment located east

of the boundary and overgrown shrubs and ferns to the South, the trees were inaccessible, hindering the survey (Fig. 10 and 11 - Hedge no. 4);

5) South-west of the site is a medium sized, under maintenance Griselina (*Griselina littoralis*) hedge of approximately 2.00m high and palisade fence that extends over approximately 200 meters from the old mushroom farm gate to the conifers hedge (Fig. 12 - Hedge no. 5).

Within internal areas to the south of the site within the brownfield area, pioneer scrub vegetation has started to grow. This consists of small stands of Hazel (Corylus sp.), Alder (Alnus glutinosa) and some scattered Birch (Betula sp.), mainly juvenile to a height of 3-4 metres.

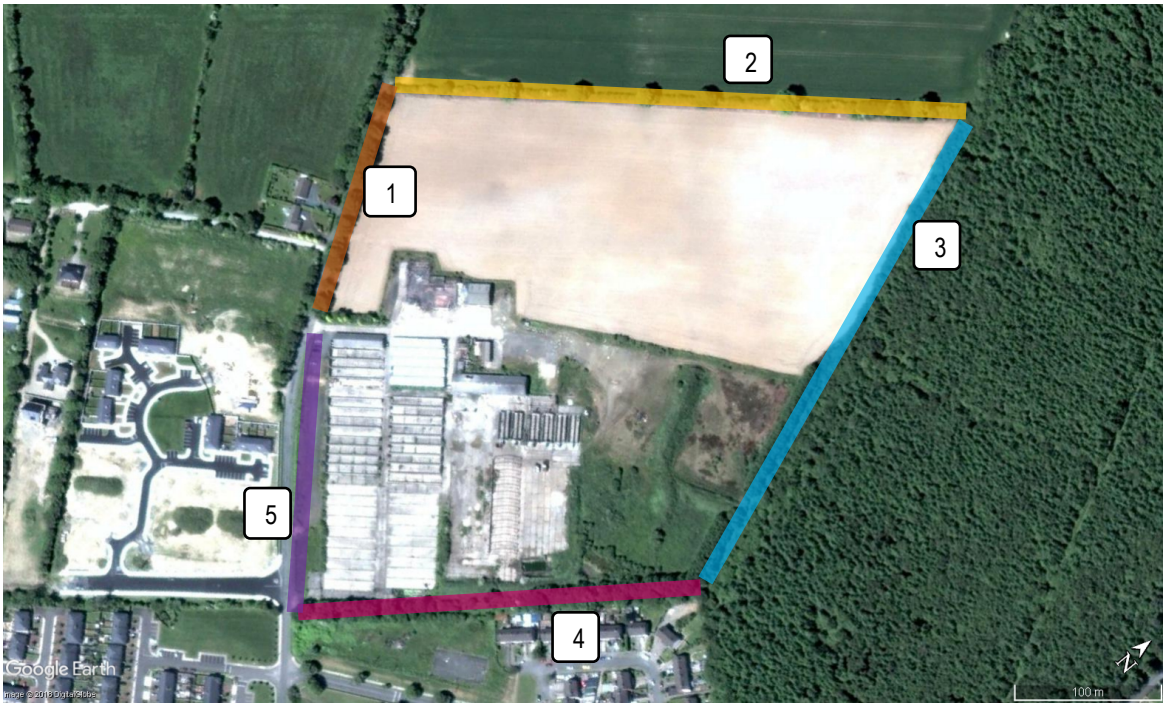

Figure 3. Map showing locations of surveyed Hedgerows.
See Appendix 1 Tree and Hedgerow Survey Tables for details.

Figure 4. Hedge embankment, east facing Front Road (located West of the site – Hedge no. 1a)

Figure 5. Overgrown hedge, adjacent to Front Road, facing opened field (West of the site – Hedge no. 1a)

Figure 6. Specimens of matured Ash to east of Front Road (located west of site – Hedge no. 1)

Figure 7. Specimens of matured Ash and Oak to east of Front Road (located west of site – Hedge no. 1)

Figure 8. Hedge embankment, east facing Front Road (located west of the site – Hedge no. 2)

Figure 9. Specimen Lime to north

Figure 10. North-east Oak hedge (deciduous trees in the foreground - Hedge no. 3). Ramsfort Park in the background (evergreen trees).

Figure 11. South-east Conifers hedge (evergreen trees – Hedge no.3/4)

Figure 12. South-east Conifers hedge (Hedge no. 4). Gorey Corporation Housing in the background.

Figure 13. South-west Griselina hedge with palisade fence (Hedge no. 5)

5. Conclusions

The trees on site are generally mature and in good to fair condition. The existing trees are not of major significance in terms of their historical or arboricultural values. These trees have seen little management over the years and require maintenance. For the most part the hedgerows and associated trees provide a partial screening of the site, are in fair condition, offering moderate amenity value. The existing trees and hedges require general tidying works to improve their appearance and control the spread of ivy and bramble.

6. Relevant Legislation

There are no Tree Protection Orders (TPOs) on any of the trees on this site however under Section 37 of the Forestry Act, 1946, it is illegal to uproot any tree over ten years old or to cut down any tree of any age (including trees which form part of a hedgerow), unless a Felling Notice has been lodged at the Garda Station nearest to the trees at least 21 days before felling commences.

The requirement for a felling licence for the uprooting or cutting down of trees does not apply where:

1) The tree in question is a hazel, apple, plum, damson, pear, or cherry tree grown for the value of its fruit or any ozier;
2) The tree in question is less than 100 feet from a dwelling other than a wall or temporary structure;
3) The tree in question is standing in a County or other Borough or an urban district (that is, within the boundaries of a town council, or city council area).
4) The tree is considered dangerous and hazardous.

Other exceptions apply in the case of local authority road construction, road safety and electricity supply operations.

The Act is administered by the Forest Service (Department of Agriculture, Fisheries and Food). The Felling Section of the Forest Service is based in Johnstown Castle, Co. Wexford (053-9160200 or 1890-200223).

If you have any queries about felling in general or are unsure whether or not the trees fall under any of the above cases, it is recommended that you seek the advice of the Felling Section or of your local forestry development officer for further information.

Trees may contain bats. Bats are protected under Schedule 5 of the Wildlife Act 1976 and Schedule 1 of the European Communities (Natural Habitats) Regulations 1997. Professional advice from a licenced surveyor should be sought prior to any works commencing on trees.

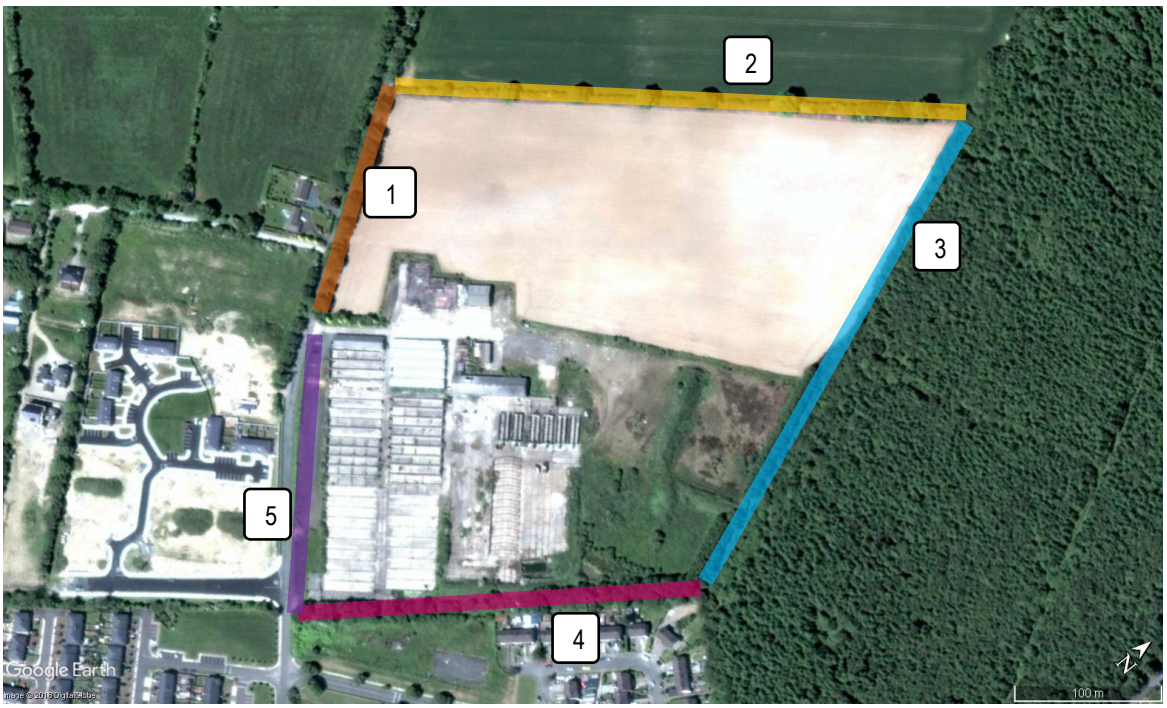

Figure 14. Map showing locations of surveyed Hedgerows.
See Appendix 1 Tree and Hedgerow Survey Tables for details.

7. Tree Survey Key

Date of Survey: 19th January 2018 / 17th July 2018 **Location:** Creagh, Gorey, North of County Wexford

Reference to tree numbers on plan: Trees have metal tags attached and these correspond with the numbers in this report.

Reference to Tree Species: Trees species are identified and logged in both the Latin botanical name and common name in English.

Reference to height: Refers to height of tree measured in meters.

Reference to stem diameter: Refers to stem diameter measured in millimetres at 1.50m above adjacent ground level (on sloping ground to be taken on the upslope side of the tree base) or immediately above the root flare for multi-stemmed trees

Reference to branch spread: Refers to branch spread in meters taken at the four cardinal points, north, south, east and west to derive an accurate representation of the crown

Reference to height of crown clearance: Refers to height of crown clearance is the height in meters of crown clearance above adjacent ground level

Reference to age / class is as follows:

Young: A tree, which has been planted in the last 10 years or is less than 1/3 expected height of the species in question.

Semi-Mature: A tree, which is between a 1/3 and 2/3's the expected height of the species in question.

Mature: A tree that has reached the expected height of the species in question, but still increasing in size.

Over Mature: A tree at the end of its life cycle and the crown is starting to break up and decrease in size.

Veteran: A tree showing features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.

Reference to Physiological Condition is as follows:

Good: A full healthy crown and trunk, but possibly including some suppressed, physically damaged branches or other small defects.

Fair: Canopy slightly sparse when in leaf; some minor or isolated major deadwood and some defects such as bark wounds or included bark.

Poor: A tree with more serious sparse leaf cover, extensive deadwood or defective to the point of being dangerous.

Dead: A tree that is dead or is showing signs of significant, immediate and irreversible overall decline.

Reference to Structural Condition: Refers to the general condition of a tree, e.g. tree collapsing, the presence of any decay or physical defect, etc.

Reference to Preliminary Management Recommendations: Refers to preliminary management recommendations e.g. further investigation of suspected defects that require more detailed assessment or potential for wildlife habitat, etc.

Reference to Estimated Remaining Contribution: Refers to estimated remaining contribution in years e.g. less than 10, 10-20, 20-40, more than 40.

Reference to Tree Categorization is as follows (BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations):

- **Category A** (Green) Trees of high quality and value: in such condition as to be able to make a substantial contribution (a minimum of 40 years is suggested).

  Sub categories

  1. Mainly Arboricultural values – Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or informal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue);

  2. Mainly landscape values – Trees, groups or woodland which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance e.g. avenues or other arboricultural features assessed as groups);

  3. Mainly cultural values, including conservation – Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood pasture).

- **Category B (Blue)** Trees of moderate quality and value: those in such a condition as to make a significant contribution (a minimum of 20 years is suggested).

  Sub categories

  1. Mainly Arboricultural values – Trees that might be included in the high category, but are downgraded because of slightly impaired condition e.g. presence of redeemable defects including unsympathetic past management and minor storm damage);

  2. Mainly landscape values – Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not,

individually, essential components of formal or semi-formal arboricultural features (e.g. trees of moderate quality within an avenue that includes better, A category specimens), or trees situated mainly internally to the site, therefore individually having little visual impact on the wider locality;

3. Mainly cultural values, including conservation – Trees with clearly identifiable conservation or other cultural benefits.

- **Category C** (Grey) Trees of low quality and value: currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested) or young trees with a stem diameter below 150mm.

Sub categories

1. Mainly Arboricultural values – Trees not qualifying in higher categories;

2. Mainly landscape values – Trees present in groups or woodlands, but without this conferring on them a greater landscape value, and/or trees offering little or no screening benefit;

3. Mainly cultural values, including conservation – Trees with very limited conservation or other cultural benefits.

- **Category U** (Red) Trees in such a condition that any existing value would be lost within 10 years and which should, in the current context be removed for reasons of sound arboricultural management.

Sub categories

1. Trees that have a serious, irremediable, structural defect, such that their loss is expected due to collapse including those that will become unviable after removal of other R category trees (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)

2. Trees that are dead or are showing signs of significant, immediate and irreversible overall decline.

3. Trees infected with pathogens of significance to the health and/or safety of other trees nearby (Dutch elm disease) or very low quality trees suppressing adjacent trees of better quality.

Reference to Root Protection Area: The Root Protection Area (RPA) is the minimum area around individual trees to be protected from disturbance during construction works; RPA is recorded as a radius (rad) in metres measured from the tree stem and is shown on the tree survey drawing as a circle with the tree stem in the centre. For single stem trees, the root protection area (RPA) should be calculated as an area equivalent to a circle with a radius 12 times the stem diameter, to a maximum of 15m. For trees with more than one stem, one of the two calculation methods below should be used.

The calculated RPA for each tree should be capped to 707 m2.

a) For trees with two to five stems, the combined stem diameter should be calculated as follows: √ ((stem diameter 1)2 + (stem diameter 2)2 ... + (stem diameter 5)2)

b) For trees with more than five stems, the combined stem diameter should be calculated as follows: √ ((mean stem diameter)2 × number of stems)

8. Disclaimers

This report is intended solely for the benefit of the parties to whom it is addressed and no responsibility is extended to any third party for the whole or any part of its contents. The conclusions and recommendations in this report are only valid for a period of one year. This period of validity may be reduced in the case of any change in conditions to or in proximity to the tree. In the event of adverse weather conditions, there is the possibility of any tree despite good report surveys, falling over.

In the event of a falling tree causing damage to residential or non-residential buildings in their proximity, no liability will attach to this firm, in the event of damage by such trees, to any person, any building public or private, or any mechanical vehicle or otherwise. Recommendations made in this report are subject to the knowledge and expertise of the qualified Arborist that carried out the above inspections.

Signed_____ Dated: 12th November 2018

Senior Landscape Architect

9. Appendix 1 – Tree Survey Tables