

Trees in Development

Guidance for Landowners, Developers and
their Agents in the County of Galway



Comhairle Chontae na Gaillimhe
Galway County Council



An Chomhairle Oidhreachta
The Heritage Council

Introduction

The value and importance of trees and hedgerows to people is well established.¹ Amongst the many benefits that they provide in developments, existing and new trees and hedgerows add distinctiveness, character and value to a scheme. These qualities improve the marketability of development and help maintain values for the long term.

With the challenges we face from climate change, including its effects on biodiversity and increased risk of flooding, the retention and enhancement of trees and hedgerows as part of nature-based solutions is an essential part of good development design and landscape management by Galway County Council. Development and landscape management proposals that demonstrate best practice in the retention, protection and enhancement of tree and hedgerow cover and connectivity are considered more favourably in planning. They perform essential functions in supporting life and our quality of life^{2,3}.

This guidance summarises:

- the value of trees and hedgerows in the County of Galway and Galway County Council commitments;
- the policy background for trees and hedgerows at national and local level; a step-by-step guide for developers, landowners and their agents to properly consider and incorporate existing and proposed trees and hedgerows into their plans, so that they will provide valuable long-term benefits;
- references to further detailed guidance and resources;
- specific guidance for landowners for managing roadside trees and hedgerows.

1 Turner-Skoff, J.B., "The benefits of trees for livable and sustainable communities" (2019), See link: <https://nph.onlinelibrary.wiley.com/doi/full/10.1002/ppp3.39>

2 Turner-Skoff, J.B., "The benefits of trees for livable and sustainable communities" (2019), See link: <https://nph.onlinelibrary.wiley.com/doi/full/10.1002/ppp3.39>

3 Forestry Commission (England), "The case for trees in development and the urban environment", See link: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/718033/eng-casefortrees.pdf

The value of trees and hedgerows in County Galway:

County Galway is predominantly rural. Whilst there are valuable trees as part of our towns and villages, most of them are in the existing hedgerow network across our county. Our hedgerows are an essential part of our landscape. They perform vital functions and provide multiple benefits to us, both monetary and otherwise, including:

- carbon capture and storage,
- flood prevention,
- shelter for land, people and wildlife,
- protection of soil from erosion,
- providing food for people and wildlife,
- providing habitat for wildlife and linking habitat patches to create a living network, and
- defining the distinctive identity of our landscape and place.



Recent research estimates that between 2,000km to 6,000km of hedgerow is being lost per year nationally. The removal of what might seem to be small numbers of trees or short sections of hedgerows as part of landscape management or development, adds up to a significant negative effect on the appearance of our landscape and on the benefits that trees and hedgerows provide for nature and people.

Best practice design of new developments and the management of our landscape have vital roles to play in making sure that trees and hedgerows are protected and enhanced so that the benefits to people and nature are provided.

Based on i-Tree mapping and analysis of the existing canopy cover across County Galway, the total monetary value of carbon stored in trees is over €2.3 billion with an annual value of over €94 million in sequestered carbon. The total value of the benefits in mitigating air pollution is over €63 million across the county and the value of avoided surface water runoff is approximately €46.7 million.

This guidance is a companion to the *Galway County Council Development Plan 2022-2028*, to assist developers, landowners, land managers and their agents to appreciate the value and importance of trees and hedgerows. By following the sequence of steps and using the resources referenced in the following pages, properly considered in planning from the earliest stages.

Galway County Council's Commitment

Galway County Council is committed to protecting valuable trees and hedgerows in line with *Galway County Council Development Plan 2022-2028*, Natural Heritage, Biodiversity and Green/Blue Infrastructure objectives.

Galway County Council is also committed to the enhancement of the landscape of our countryside, towns and villages through the planting of new trees and hedgerows, particularly where they support delivery of the Council's Development Plan policy objectives and Galway County Council nascent Climate Action Plan 2024-2029.



Policy on Trees and Hedgerows

A summary of the policy framework from international through to local level is set out below. It includes all the policies that are directly and indirectly relevant to trees and hedgerows.

United Nations

As a United Nations member state, Ireland has adopted and is committed to the 2030 Agenda for Sustainable Development. This sets a focus on 17 Sustainable Development Goals and their 169 targets.⁴

EU Policy

As a member state of the EU, Ireland is committed to delivering the European Green Deal as specified in *The Environment: Ireland's Green Deal*⁵ and the EU Biodiversity Strategy for 2030⁶.

National Policy

The relevant national policy framework includes:

Project Ireland 2040, which combines the National Planning Framework and National Development Plan 2021-2030⁷

*National Landscape Strategy for Ireland 2015-2025*⁸

*National Biodiversity Plan*⁹

*Project Woodland 2022*¹⁰

*All-Ireland Pollinator Plan*¹¹

*Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas*¹²

Climate Action and Low Carbon Environment (Amendment) Bill 2021¹³

*Our Environment Our Health Our Wellbeing – Access to Blue/Green Spaces in Ireland 2021*¹⁴

*Healthy Ireland Framework 2019-2025*¹⁵

*Embracing Ireland's Outdoors – National Outdoor Recreation Strategy 2023-2027*¹⁶

*Strategy for the Future Development of National and Regional Greenways*¹⁷

Draft River Basin Management Plan 2022-2027¹⁸

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- 4 See Department of the Environment, Climate and Communications, <https://www.gov.ie/en/policy-information/ff4201-17-sustainable-development-goals/>
 - 5 See European Commission, *The Environment: Ireland's Green Deal*, https://ireland.representation.ec.europa.eu/strategy-and-priorities/key-eu-policies-ireland/environment-irelands-green-deal_en
 - 6 See European Commission, "EU 3 Billion Trees Pledge", https://environment.ec.europa.eu/strategy/biodiversity-strategy-2030/3-billion-trees_en
 - 7 See "Project Ireland 2040", <https://www.gov.ie/en/campaigns/09022006-project-ireland-2040/>
 - 8 See Department of Housing, Local Government and Heritage, <https://www.gov.ie/en/publication/8a59b-national-landscape-strategy/>
 - 9 See National Parks, "National Biodiversity Plan", <https://www.npws.ie/legislation/national-biodiversity-plan>
 - 10 See Department of Agriculture, Food and the Marine, "Project Woodland 2022", <https://www.gov.ie/en/publication/forestry-policy-and-strategy/>
 - 11 See National Biodiversity Data Centre, "All-Ireland Pollinator Plan", <https://pollinators.ie/>
 - 12 See Department of Housing, Local Government and Heritage, <https://www.gov.ie/en/publication/10d7c-nature-based-solutions-to-the-management-of-rainwater-and-surface-water-runoff-in-urban-areas-best-practice-interim-guidance-document/>
 - 13 See Department of the Environment, Climate and Communications, <https://www.gov.ie/en/publication/984d2-climate-action-and-low-carbon-development-amendment-bill-2020/>
 - 14 See Environmental Protection Agency, <https://www.epa.ie/publications/research/environment--health/our-environment-our-health-our-wellbeing-access-to-bluegreen-spaces-in-ireland.php>
 - 15 See Healthy Ireland, <https://www.gov.ie/en/publication/e8f9b1-healthy-ireland-framework-2019-2025/>
 - 16 See Department of Rural and Community Development, <https://www.gov.ie/en/policy-information/43eee-embracing-irelands-outdoors-national-outdoor-recreation-strategy-2023-2027/>
 - 17 See Department of Transport, <https://www.gov.ie/en/publication/ed5d17-strategy-for-the-future-development-of-national-and-regional-greenwa/>
 - 18 See Department of Housing, Local Government and Heritage, <https://www.gov.ie/en/consultation/2bda0-public-consultation-on-the-draft-river-basin-management-plan-for-ireland-2022-2027/>

Regional Policy

Northern and Western Regional Assembly, *Regional Spatial and Economic Strategy*¹⁹

Local Policy

*Galway County Development Plan 2022-2028*²⁰. See Chapter 10, 'Natural Heritage, Biodiversity and Green/Blue Infrastructure'. The following local plan objectives are of particular relevance:

- NHB 5 – Ecological Connectivity and Corridors
- NHB 7 – Mitigation Measures
- NHB 9 – Protection of Bats and Bat Habitats
- PO 1 - Delivery of All-Ireland Pollinator Plan
- TWHS 1 - Trees, Hedgerows, Natural Boundaries and Stone Walls
- TWHS 2 - Planting of Trees and Woodlands
- IW 1 - Inland Waterways (part (C) in particular)
- GBI 1 - New Developments (“contribute to the protection, management and enhancement of the existing green/blue infrastructure”)
- GBI 2 Green/Blue Infrastructure Network

Galway County Development Plan 2022-2028. See Chapter 14, “Climate Change, Energy and Renewable Resource”. The inclusion of trees and hedgerows as part of nature-based solutions, including sustainable surface water drainage, should be considered to respond to the following policy objectives:

- FL 6 Surface Water Drainage and Sustainable Drainage Systems (SuDs)
- FL 18 Inappropriate Development on Flood Zones

Galway County Development Plan 2022-2028. See Chapter 15, “Development Standards”. The requirements under the following headings are of particular relevance:

- Natural Features DM Standard 45: Self-Catering Developments
- DM Standard 47: Field Patterns, Stone Walls, Trees and Hedgerows (a) to (d) inclusive
- DM Standard 51: Green Infrastructure

*Galway County Council Landscape Character Assessment*²¹ identifies the key characteristics and sensitivities of the various landscape types across the county. Trees, hedgerows and woodlands are a core feature of landscape. Developers, landowners, managers and their agents must ensure that they are familiar with and sensitive to the landscape character where their proposals are situated.

- *Galway County Council, Climate Action Plan Summary Report*²²
- *Galway County Heritage and Biodiversity Plan 2017-2022*²³ (Currently under review).

The protection and enhancement of existing trees and hedgerows, as well as the planting of new trees and hedgerows, have a vital role to play in delivering the aims and objectives of this policy framework.

Guidance for Landowners,

19 Northern and Western Regional Assembly, *Regional Spatial and Economic Strategy*: <https://www.nwra.ie/rses/>

20 See *Galway County Development Plan 2022-2028*, <https://galway.ie/en/services/planning/planspolicy/cdp28/>

21 See *Galway County Council, Landscape Character Assessment*, May 2021: <https://consult.galway.ie/system/files/materials/17/Appendix%204%20Landscape%20Character%20Assessment.pdf>

22 Galway County Council, *Climate Action Plan Summary Report, Pre-Draft Public Engagement* (See link: <https://consult.galway.ie/sites/default/files/Pre-Draft%20Public%20Engagement%20final.pdf>)

23 *Galway County Heritage and Biodiversity Plan 2017-2022*, <https://dpgay9x1sxad.cloudfront.net/wp-content/uploads/sites/16/2017/02/Galway-County-Heritage-and-Biodiversity-Plan-2017-2022-final.pdf>



Developers and their Agents

The following tables set out the sequence of steps to properly consider trees and hedgerows in development and new trees and hedgerow planting, with links to further guidance. This guidance should be read in conjunction with *Galway County Development Plan 2022-2028*, Chapter 15, Development Management Standards²⁴.

Publicly accessible sources for Galway County/ Ireland for Further Guidance are provided wherever it is available. Where Irish sources are not available, international best practice sources that are recognized in Ireland, are included.

²⁴ Galway County Development Plan 2022-2028, Development Management Standards (See link: <https://www.galway.ie/en/media/E%2010%20website.pdf>)

Step 1

The Existing Site

No.	Requirement	Response	Further Guidance
1	Retain and protect existing valuable trees and hedgerows	There is a presumption in development that all trees and hedgerows of arboricultural and/or ecological value will be retained and protected on proposed development sites. For existing trees or hedgerows to be removed, evidence justifying removal must be presented as part of the planning application.	<p>For guidance on trees and the law see The Tree Council: https://www.treecouncil.ie/trees-and-the-law</p> <p>For guidance on tree preservation see: https://www.gov.ie/en/publication/4f8fd-tree-preservation-guidelines/</p> <p>For more information on professional landscape architecture services see: https://www.irishlandscapeinstitute.com/</p>
1		Tree Preservation Order (TPO): There are currently no TPOs in force in the county, but this is subject to review. As part of desktop assessment of your site, check if there are any TPOs on or adjacent to the development site.	<p>See Tree Council of Ireland Tree Register of Ireland: https://www.treeregister.ie/</p> <p>For open-source digital analysis and reporting on the multiple benefits of existing trees and hedgerows you can use the suite of i-Tree tools here: https://www.itreetools.org/tools</p>
1		Significant trees and hedgerows: There may be trees and hedgerows of significance and value to the landscape, visual and in character, on the site. Such features may have site-specific amenity value, provide screening, reflect historic landscape pattern and use etc. You should engage a landscape architect to advise on the value of existing trees/hedgerows on your site and how to incorporate them positively into development proposals. You can also use digital mapping tools to identify existing trees on your site and assess the environmental benefits and value they are providing.	<p>Arboricultural survey to meet industry standards is a specialist discipline. For more information on professional arboriculture services see: The Arboricultural Association, which is the register of professional arborist for Ireland: https://trees.org.uk/Find-a-professional</p>

Step 1

The Existing Site

No.	Requirement	Response	Further Guidance
1		<p>Applicants must provide:</p> <ul style="list-style-type: none"> • A Tree Survey Plan showing the location and extents of existing trees and hedgerows together with a written Tree/Hedgerow Survey Report identifying the species, age, condition and management recommendations in accordance with the industry recognised standard BS5837 (2012) “Trees in Relation to Design, Demolition and Construction”. • A Tree/Hedgerow Retention and Protection Plan, showing that the extent of the Root Protection Area (RPA) of existing trees/hedgerows will be provided. This plan will also clearly show the trees/hedges proposed for removal. • An Arboriculture Method Statement setting out how construction and related activities shall be carried out to ensure there is no impact on retained trees/hedgerows or their RPA. 	<p>Ecology survey of trees and hedgerows is a specialist discipline. For more information on professional ecology services in Ireland see: https://cieem.net/</p> <p>A professional arboriculturist will be able to provide advice and methods for managing and retaining standing dead or dying trees. For more information on the ecological value of dead wood and how to retain and manage it see: Deadwood in Woodland - British Habitats - Woodland Trust</p> <p>and https://cdn.forestresearch.gov.uk/2022/02/lifeinthedeadwood.pdf</p>

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Note that arboriculture surveys assess existing trees and hedgerows based on *Species, Age, Physiological Condition, Structural Condition, Useful Life Expectancy and Health* to determine a retention value. It does **not include** ecological assessment of a tree or hedgerow value. It is possible for a tree of poor arboriculture value to be of high ecological value, particularly for nesting birds and bats.

To discuss your development proposal, contact Galway County Council Planning Department:

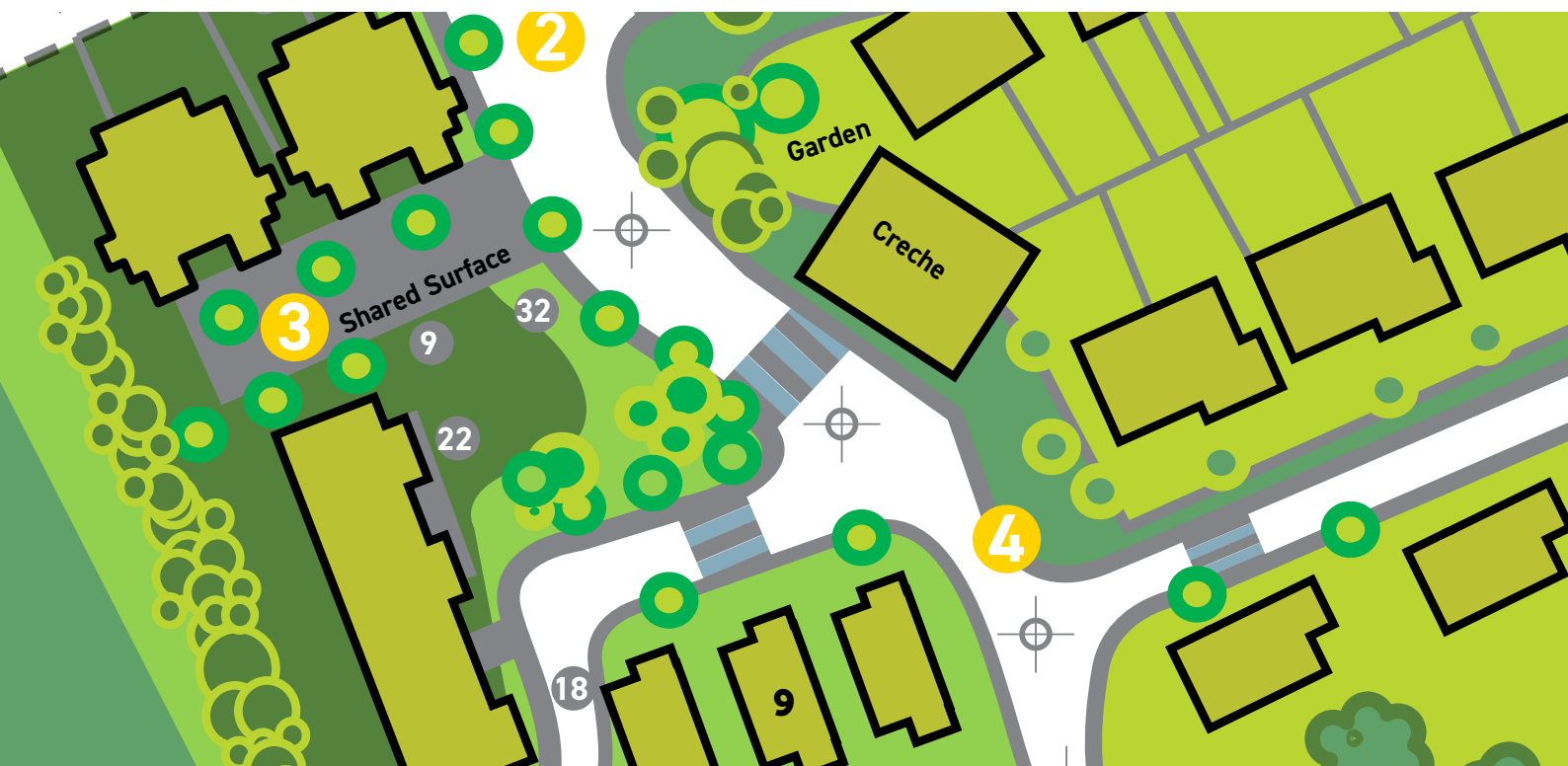
<https://www.galway.ie/en/services/planning/contactus/>

Step 1

The Existing Site

No.	Requirement	Response	Further Guidance
1		Therefore, ecological value should also be taken into consideration as part of tree and hedgerow preservation and management plans. Opportunities to retain dead or dying trees should be considered and agreed with the County Council as part of the planning application.	

- 1
- Pre-Application Advice: It is recommended that applicants discuss their development proposal at the Concept Design stage with the County Council before proceeding to detailed design for a formal planning submission. Concept design should be based on the tree/hedgerow survey of their site, supported by an ecological habitat survey to identify ecological condition and potential.



Step 2

Design

No.	Requirement	Response	Further Guidance
2	Integrate existing trees and hedgerows into the scheme design	<p>Applicants must:</p> <p>Demonstrate best practice design with regard to retention and protections of existing trees and hedgerows.</p>	<p>For comprehensive guidance on the incorporation of trees into proposed development see:</p> <p>https://www.tdag.org.uk/our-guides.html</p> <p>See Clúid Housing guidance on incorporating trees and hedgerows into development:</p> <p>Landscaping-and-Biodiversity-Guide-for-web.pdf (cluid.ie)</p> <p>and</p> <p>https://www.woodlandtrust.org.uk/publications/2019/01/residential-developments-and-trees/</p>
2		<ul style="list-style-type: none"> The Design Statement, as required under Development Management Standards for planning applications, should clearly set out how existing valuable trees and hedgerows have been integrated into the layout of the proposed scheme. It is preferred that existing trees/hedgerows are incorporated into publicly accessible land within developments, in the interest of maximising the retention, protection and value of hedgerows and trees for future generations. The proposed scheme design should seek to minimise the quantity of existing trees or hedgerow to be removed and the Design Statement should justify the need for their removal. The location of proposed development access and junctions, including sightlines, shall seek to avoid the loss of existing valuable trees or hedgerows. 	<p>For guidance on best practice design, including responding to context and incorporating existing features, see Urban Design Manual (Parts 1 and 2):</p> <p>Part 1:</p> <p>https://www.gov.ie/en/publication/5d1a7-best-practice-urban-design-manual-may-2009-part-1/</p> <p>https://www.gov.ie/pdf/?file=https://assets.gov.ie/111125/020c668c-4c56-40a5-9b60-41615cf2853e.pdf</p> <p>Part 2:</p> <p>https://www.gov.ie/en/publication/60ce2-best-practice-urban-design-manual-may-09-part-2/</p>

Step 2

Design

No.	Requirement	Response	Further Guidance
3	Incorporate trees/hedgerows and their RPA in the detailed design	<ul style="list-style-type: none"> The design of all aspects of the proposed development, including built form, access and circulation routes, above and below ground services, utilities, drainage and associated infrastructure, must respect the RPA of trees and hedgerows to be retained and protected. 	<p>For guidance on incorporating trees as part of nature-based solutions see: SuDS Manual Ciria 753F (Chapter 19, Trees) - https://www.ciria.org/ItemDetail?iProductCode=C753F&Category=FREEPUBS</p>
3		<ul style="list-style-type: none"> In circumstances where proposed works within the RPA are unavoidable, specialist methods shall be applied to design and construction in accordance with arboriculture industry best practice. Note that the Arboriculture Method Statement provided in planning must include details on proposed works to the structure of trees/hedgerows or within the RPA of trees if this is likely to be required as part of proposed development. 	<p>For guidance on detail design of new tree planting in streets and trafficked environments see:</p> <p>https://www.fao.org/sustainable-forest-management/toolbox/tools/tool-detail/en/c/522328/</p> <p>and</p> <p>TII The Treatment of Transition Zones to Towns and Villages on National Roads</p> <p>https://www.tiipublications.ie/library/DN-GEO-03084-02.pdf</p>
3		<ul style="list-style-type: none"> A qualified arboriculturist must oversee all works that are likely to impact retained trees/hedgerows on site. This includes any works being carried out by statutory undertakers and utilities providers. The arboriculture advice on site shall be adhered to. 	<p>For detailed guidance on hard surface materials around trees see: Surface Materials around trees in hard landscapes: https://www.ltoa.org.uk/surface-materials-around-trees-document/file</p> <p>For detailed guidance on works within the RPA of existing trees, see Barrell Site Guidance Notes (SGNs):</p> <p>https://barrelltreecare.co.uk/resources/technical-guidance/</p>
4	Carry out works to trees and hedgerows in the appropriate season	Applicants, landowners or land managers must only carry out works to trees and hedgerows in the appropriate season in accordance with industry best practice and the law.	<p>For guidance on the law relating to trees and hedgerows see The Tree Council: https://www.treecouncil.ie/trees-and-the-law</p>

Step 2

Design

No.	Requirement	Response	Further Guidance
4		Any felling of trees or removal of (part of) a hedgerow must avoid the bird breeding season (1 st March to 31 st March) and be in compliance with the Wildlife Act, as amended, and the Forestry Act, 2014, as amended. Should this not be possible, specific permission must be sought and works must be undertaken in accordance with ecological best practice and under supervision.	
4		Mature trees shall be assessed for bat roost potential by a licensed bat worker (ecologist). Where trees with bat roosts require felling, this shall be done between September and early November, in order to avoid the disturbance of roosting bats. Tree felling will be completed by mid-November at the latest to prevent disturbance to bats during their hibernation period (November – April). Once felled, trees will be left intact on-site for 24 hours prior to disposal to allow any bats beneath the foliage to escape overnight.	<p>For an introduction to the law relating to the protection of bats see Bat Conservation Ireland:</p> <p>https://www.batconservationireland.org/irish-bats/protection-law</p> <p>For detailed guidance on bats for developers see <i>Bat Mitigation Guidelines for Ireland</i>:</p> <p>https://www.npws.ie/sites/default/files/publications/pdf/IWM25.pdf</p>
5	New tree and hedgerow planting	It is expected that new tree/hedge planting will be included as appropriate in all proposed developments as part of the measures to support delivery of <i>Galway County Council Development Plan 2022-2028</i> and <i>Climate Action Plan</i> objectives	<p>The context for delivering biodiversity gain is set by the European Commission EU Biodiversity Strategy and the emerging Nature Restoration Law. For information on the proposed targets see:</p> <p>https://environment.ec.europa.eu/topics/nature-and-biodiversity/nature-restoration-law_en</p> <p>For detailed information on the history, value and management of Irish hedgerows to retain and enhance:</p> <p>https://www.farmingfornature.ie/wp-content/uploads/2020/08/Irish-Hedgerows-Networks-for-Nature.pdf</p> <p>and</p> <p>Hedgerows Ireland:</p> <p>https://hedgerows.ie</p>

Step 2

Design

No.	Requirement	Response	Further Guidance
5		<ul style="list-style-type: none"> Where existing trees or hedgerows are proposed for removal, the scheme design should show where compensation for loss of trees or hedgerows will be provided as part of landscape design proposals. Note that mature, established trees and hedgerows are typical more valuable than more recent young growth, both as individual specimens and as established ecosystems. Established mature trees, hedgerows, copses and woodland should be retained and protected as a priority. Opportunities to provide a net gain in biodiversity and climate resilience should be incorporated into design. New hedge planting should replace and/or establish green corridors for habitat connectivity (on and off site) to support a living network. Developers and their agents should seek opportunities from the earliest stages of the design process to incorporate new trees/hedges as part of nature-based solutions to a range of issues that arise in the design development process, particularly surface water drainage. 	<p>For Government of Ireland guidance on nature-based solutions see:</p> <p>https://www.gov.ie/pdf/?file=https://assets.gov.ie/219872/409cd225-5afc-44b8-a7b1-bb595632a904.pdf#page=null</p> <p>For technical guidance on use of SUDs you can download a free copy of SUDs Manual 753F by Ciria here:</p> <p>https://www.ciria.org/ItemDetail?iProductCode=C753F&Category=FREEPUBS</p>
6	Tree/hedgerow species selection	<p>Respond to the existing context.</p> <p>County Galway is characterised by a range of landscapes from the exposed coast, mountains and wetlands to more sheltered, fertile, inland areas, parkland estates, villages and towns.</p>	<p>Refer to Galway County Council Landscape Character Assessment for understanding of key landscape characteristics and sensitivities in the context of proposed development:</p> <p>https://www.galway.ie/en/media/Appendix%20Landscape%20Character%20Assessment.pdf</p>
6		<p>These existing aspects and conditions affect which tree/hedgerow species will succeed on proposed development sites. The trees and hedgerows that are growing successfully in the locality, with similar conditions to your site, are an indicator to guide you on which species you should choose.</p>	<p>Refer to Environment Protection Agency mapping to research existing site characteristics including soil type:</p> <p>https://gis.epa.ie/EPAMaps/Water</p>

Step 2

Design

No.	Requirement	Response	Further Guidance
7	Selecting native and non-native species	Planting native species of trees of local provenance is preferred wherever possible to protect and enhance biodiversity and improve successful establishment of new trees and hedgerows. This means plants must be purchased from an approved nursery with Declaration of Provenance Form and Certificate of Provenance showing the origin of the tree seeds.	<p>Department of Agriculture Approved plant and tree nurseries for the supply of plants of local provenance should provide proof on request before you place orders.</p> <p>Refer to this guide in the first instance to help you select a suitable shortlist of species that are appropriate to your site:</p> <p>https://www.treecouncil.ie/the-right-tree-in-the-right-place</p> <p>Refer to this guide to Irish native trees:</p> <p>https://www.treecouncil.ie/native-irish-trees</p>
7		<p>Non-native species:</p> <p>In some locations, the conditions of the site, the setting and the proposed development use may not be suitable for native species to survive or thrive. For example, the built environments of towns, villages and commercial/ industrial places may have pollution, heat, water, exposure, limited space above and below ground that would be too stressful for native species. In such cases, the selection of non-native species is acceptable where they correspond to:</p> <ul style="list-style-type: none"> • specific site conditions and requirements, • delivery of the Galway County Council Development Plan, biodiversity and climate change objectives, and • the aims of the All-Ireland Pollinator Plan. 	<p>For guidance on the aims of the All-Ireland Pollinator Plan with regard to selection of non-native species see:</p> <p>https://pollinators.ie/wp-content/uploads/2022/12/Pollinator-Planting-Code-Guide-2022-WEB.pdf</p> <p>See this study of existing hedgerows in East Galway for suitable species in this area:</p> <p>https://hedgerows.ie/wp-content/uploads/2019/11/East-Galway-Hedgerow-Survey-2006.pdf</p>

Step 2

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No.	Requirement	Response	Further Guidance
7		<p>Mix it up. Whether your planting project includes native, non-native or both types of species, select a range of species to plant. This is important for:</p> <ul style="list-style-type: none"> • biodiversity, by supporting a wider range of wildlife; • resilience, by reducing risk of loss of tree/hedgerow species in future as a result of climate change or disease; and • landscape/townscape, by reflecting the distinctive character of the landscape or townscape and reinforcing the identity of the place. <p>In woodland and hedgerow projects it is essential to plant mixes of native species appropriate to the locality and the site conditions.</p>	<p>Refer to the “10-20-30 Rule for Tree Diversity in Urban Areas” to guide selection of tree species mix and proportions https://caufc.org/wp-content/uploads/2022/09/10-20-30-Rule-1.pdf</p> <p>See Tools and Resources for Tree Species Selection in Urban Areas: https://www.forestresearch.gov.uk/tools-and-resources/fthr/urban-tree-manual/</p> <p>See Teagasc guide to Forest Premiums and woodland types/species mixes here: https://www.teagasc.ie/crops/forestry/grants/overview-of-forest-establishment-grant-rates/</p>
7		<p>Be aware of invasive species. These are plants that are not native and also disrupt the balance of nature in the local environment. Some of these plant species can be very aggressive and difficult and expensive to control. Make sure to check invasive species lists and do not plant such species. Particular species of invasive plants in County Galway include:</p> <p><i>Rhododendron ponticum</i> - risk of High Impact</p> <p><i>Japanese Knotweed (Fallopia japonica)</i> - risk of High Impact.</p>	<p>Refer to National Biodiversity Data Centre guidance <i>Be Plant Wise</i>: https://invasives.ie/biosecurity/be-plant-wise/</p>
7		<p>Orchards: Consider the opportunity to plant an orchard of mixed fruit trees and nut trees as part of the landscape and open space provision. As well as providing local healthy food for the residents of the proposed development, orchards are recognised as highly valuable habitat for wildlife, particularly for pollinators.</p>	<p>For information and buying Irish Heritage fruit trees see Irish Seed Savers Association: https://irishseedsavers.ie/</p>

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Design

No.	Requirement	Response	Further Guidance
8	Take advantage of tree and hedgerow planting support schemes	<p>Developers, landowners and land managers should take the opportunity to align their design and management proposals with the range of funding programmes that their project may qualify for and that are aimed at promoting tree/hedge planting and biodiversity.</p> <p>Note that the range of programmes and their eligibility criteria may evolve.</p>	<p>For proposals that may offer opportunities for new woodland consider the Native Tree Area Scheme. There are new forest types under the DAFM (see link to afforestation scheme 2023-2027)</p> <p>https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj-9Oye19y-BAxUgVEEAHSp2BkoQFnoECBUQA-Q&url=https%3A%2F%2Fassets.gov.ie%2F268169%2F042cc66-08de-4818-b27a-409ce8c527f8.pdf&usg=AOv-Vaw2WUPs79XfgLG9a124OB5LX&o-pi=8997844</p> <p>For hedgerow and woodland grants advice contact Teagasc, who will also be able to put you in touch with your local Forestry Advisor:</p> <p>https://www.teagasc.ie/crops/forestry/grants/</p> <p>Landowners and land managers may find the farm forestry booklet Plant the Forest that Suits Your Farm helpful:</p> <p>(https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiyo-8G61tyBAxVJXEEAHsjsDHUQFnoECBY-QAQ&url=https%3A%2F%2Fassets.gov.ie%2F268709%2Fbb1b3853-c6ec-446a-a54a-9a9c062793de.pdf&usg=AOv-Vaw0jpC5Of1AoCB2Wh5whxUX1&o-pi=89978449)</p>

Step 3

Maintenance and Aftercare

No.	Requirement	Response	Further Guidance
9	Aftercare Plan	Successful establishment and continued health of trees and hedgerows rely on quality aftercare and maintenance.	For introductory guidance on best practice in the establishment and aftercare of trees see: https://trees.org.uk/Trees.org.uk/media/Trees-org.uk/Documents/Tree%20Aftercare/YoungTreeEstablishment-Guide-web.pdf
9		Applicants must: Provide an Aftercare Plan for existing retained and newly planted trees and hedgerows. The Aftercare Plan should include detailed prescriptions on the maintenance and management of: <ul style="list-style-type: none"> existing trees and hedgerows as identified in the Arboriculture Survey, and/or <ul style="list-style-type: none"> new tree/hedgerow planting that is appropriate to the plant species and in accordance with landscape and arboriculture industry best practice. 	For detailed guidance on Tree Planting, Pruning, Cabling/Bracing European Standards see: https://www.europeanarboriculturalstandards.eu/
9		The Aftercare Plan should also: <ul style="list-style-type: none"> be tailored to the size and location of the trees, for example trees planted in soft greenfield locations or in paved built development, such as streets, squares or car parks, and set out a programme for: regular watering in the season(s) after planting to ensure establishment. Note: specific additional watering will be required in extensive dry periods; inspection of trees and hedgerows to check for damage to trees and any tree planting supports, guards or fencing; and weeding* of areas over the tree planting pit and topping up of mulch annually. 	For guidance on the planting and sustainable management of hedgerows see: https://hedgerows.ie Note* Hand weeding or heat-based methods for weed control should be used. There is mounting evidence of the damage to insects and other wildlife caused by the use of chemical weedkillers. These should be used as a last resort and only by those qualified in the handling and use of weedkiller. Under no circumstances are chemical weedkillers to be used in the vicinity of waterbodies such as lakes, ponds, streams, rivers or land drainage ditches, nor in the vicinity where people may be foraging, e.g. picking apples in an orchard or blackberries in a hedgerow.

Step 3

Maintenance and Aftercare

No.	Requirement	Response	Further Guidance
9		The Aftercare Plan should include details of the materials used in the planting of the trees with contact details of suppliers to ensure any replacements for damaged items can be readily obtained.	For guidance on alternatives to pesticides see: https://pollinators.ie/councils/alternatives-to-pesticides/
10	Management of trees and hedgerows	Many of County Galway’s trees and hedgerows are situated adjacent to our roads. The responsibility for the management of these trees and hedges rests with the landowner.	Refer to Department of Agriculture Food and the Marine, <i>A Guide for Landowners to Managing Roadside Trees</i> : https://www.gov.ie/pdf/?file=https://assets.gov.ie/200912/a9389fb2-0697-4b0f-bc82-f58d12f5693a.pdf#page=null
10		It is essential to the delivery of the <i>Galway County Council Development Plan 2022-2028</i> , Natural Heritage and Climate Change objectives that these existing trees and hedgerows are managed responsibly as valued green infrastructure assets.	For guidance on how to manage existing hedgerows sustainably see: Teagasc – Hedgerows: https://www.teagasc.ie/environment/biodiversity--countryside/farmland-habitats/hedgerows/
10		Galway County Council requires landowners undertaking assessment and management of trees and hedgerows adjacent to roads to do so in accordance with the National Guidance.	Teagasc webinar resources on understanding hedgerows, planting, management and aftercare: https://www.teagasc.ie/environment/biodiversity--countryside/farmland-habitats/hedgerows/hedge-row-week-/hedgerow-week-2021/ and Networks for Nature: https://www.farmingfornature.ie/wp-content/uploads/2020/08/Irish-Hedgerows-Networks-for-Nature.pdf and Hedgerows Ireland: Implement the Hedge Code https://hedgerows.ie/implement-the-hedge-code/

Step 3

Maintenance and Aftercare

No.	Requirement	Response	Further Guidance
10		There are parts of the county where existing hedgerows and individual trees are badly affected by Ash Dieback (<i>Hymenoscyphus fraxineus</i>). This can lead to pre-emptive unilateral tree and hedgerow removal, which has unintended adverse consequences for our natural and cultural heritage. Galway County Council expects landowners to follow published guidance in the assessment of Ash Dieback on their trees and hedgerows and seek professional advice before removing trees or hedgerows.	<p>Ash Dieback: Refer to this guidance from Teagasc to recognise Ash Dieback, manage affected trees and replace with alternative species:</p> <p>https://www.teagasc.ie/news--events/news/2022/managing-ash-dieback.php</p>

10

Where trees or hedgerows are removed, landowners are encouraged to plant replacement tree/hedgerows as compensation, using the guidance set out in this document. This compensation planting should be used as an opportunity to enhance the biodiversity, amenity and wildlife connectivity of the local green/blue infrastructure (GBI) network in line with the *National Biodiversity Action Plan*, *Galway County Council Heritage and Biodiversity Plan* and *Galway County Council Development Plan* objectives.

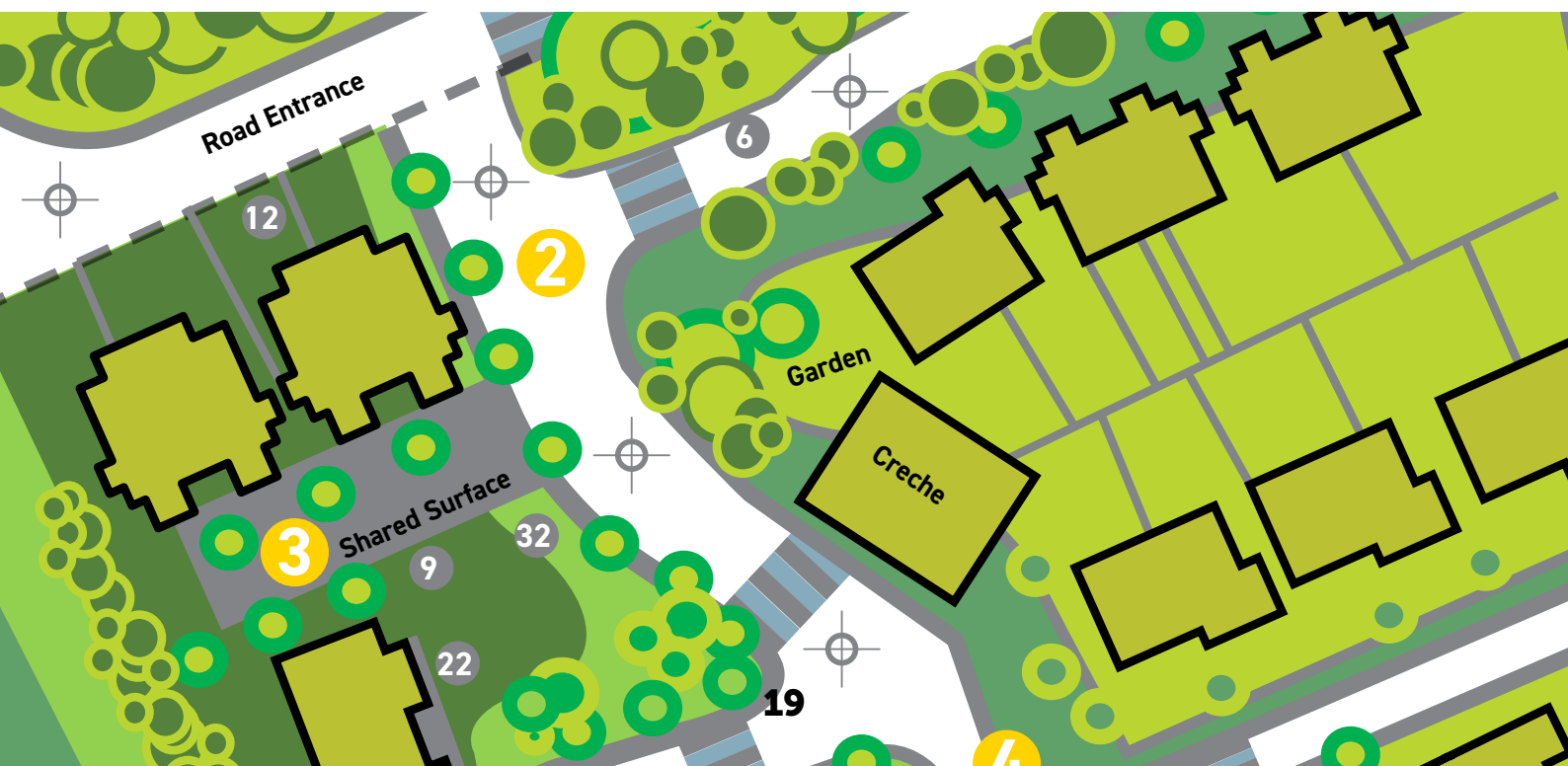
Grants: for guidance on grants for planting trees and hedgerows see:

<https://www.teagasc.ie/crops/forestry/grants/>

and

for GLAS qualifying lands see:

<https://hedging.ie/glas/>



Why are trees & hedgerows important?

County Galway is predominantly rural with the many of our trees growing in the existing hedgerow network across our county. These trees perform vital functions and provide multiple benefits including:

Producing Oxygen and absorbing carbon from the atmosphere, storing the carbon in their trunks, roots and branches.

Supporting nature and biodiversity.

Did you know that a mature oak tree can support up to 284 different insect species, 324 lichens and can survive for 1,000 years.

Protecting against flooding by slowing down the speed at which rainwater reaches the ground and storing water in their roots. Did you know that tree cover reduces surface water run-off by 80% more than an asphalt surface?

Connecting habitats through mixed native hedgerows as a distinctive part of the Irish landscape. Our hedgerows are vital green corridors that support a wide variety of wildlife and connect patches of habitat to create a living network. Did you know that there is some 689,000kms of hedgerows in Ireland, but we are losing between 2,000km to 6,000km of hedgerows per year?

Supporting human physical and mental health by creating more attractive environments that encourage us to get outdoors, exercise, connect with nature and each other. Did you know a recent study has found that trees in built up areas reduce depression in people?

Slowing vehicle speeds by planting street trees as part of traffic calming measures. Did you know that studies have found that the presence of street trees make drivers slow down and increases their awareness of other street users.

Providing food by planting fruit trees and community orchards. Did you know that there are 68 Irish varieties of apple? Traditionally planted and managed orchards are also incredibly valuable hotspots for biodiversity.

Making places more distinctive. Did you know that property values in streets with appropriate and well-maintained street trees are typically higher than the same streets without street trees?

Native Tree Selection Guide

for County Galway

Common Name	Latin Name	Soil Preference	Max Height (meters)	Growth Rate	Biodiversity Value	Attractive Features
Alder, Common	<i>Alnus glutinosa</i>	Grows in a wide variety of conditions, including wet soils	20	Fast	Birds, insects, squirrels, lichens	Cones
Apple, Crab	<i>Malus sylvestris</i>	Thrives in most fertile soils (not acid or wet)	16	Slow	Birds, insects	Flowers, fruit
Aspen	<i>Populus tremula</i>	Prefers damp, neutral soils (not acid)	24	Fast	Insects	Autumn colour
Birch, Downy	<i>Betula pubescens</i>	Grows in a wide variety of soils (prefers acid to neutral)	24	Medium/ Fast	Insects, lichens	Catkins, bark, foliage, autumn colour
Birch, Silver	<i>Betula pendula</i>	Prefers dry soils, acid to neutral	18	Medium/ Fast	Birds, insects, squirrels, lichens, fungi, deadwood	Catkins, bark, foliage, autumn colour
Blackthorn, Sloe*	<i>Prunus spinosa</i>	Grows in a wide variety of soils	4	Medium	Birds, insects	Flowers, berries
Buckthorn	<i>Rhamnus cathartica</i>	Prefers damp, lime-rich soils	5	Medium	Birds, insects	Berries
Cherry, Bird	<i>Prunus padus</i>	Prefers damp soils (acid to neutral)	6	Medium	Birds, insects	Flowers, berries, autumn colour
Elder	<i>Sambucus nigra</i>	Grows in a wide variety of soils (not acid)	6	Fast	Birds, insects	Flowers, berries
Elm, Wych	<i>Ulmus glabra</i>	Prefers fertile free-draining soils	30	Medium	Insects, squirrels, lichens, deadwood	Autumn colour
Guelder Rose	<i>Viburnum opulus</i>	Prefers damp lime-rich soils	4	Medium	Birds, insects	Flowers, berries, autumn colour

* Tolerates exposure

Excerpt from 'Galway's Living Landscapes Part 2: Trees and Woodland' (page 76) by Dr Janice Fuller

Common Name	Latin Name	Soil Preference	Max Height (meters)	Growth Rate	Biodiversity Value	Attractive Features
Hawthorn*	<i>Crataegus monogyna</i>	Grows in a wide variety of soils (not acid)	8	Medium/ Fast	Birds, insects	Flowers, berries
Hazel	<i>Corylus avellana</i>	Grows in a wide variety of soils (not acid)	6	Medium/ Fast	Birds, bats, insects, squirrels, lichens	Catkins, nuts
Holly*	<i>Ilex aquifolium</i>	Grows in a wide variety of soils	15	Slow/ Medium	Birds, insects, lichens	Evergreen, flowers, berries
Oak, Pedunculate	<i>Quercus robur</i>	Prefers well aerated, deep fertile soils. Thrives on heavier soils	30	Medium	Birds, bats, insects, fungi, deadwood	Foliage; autumn colour
Oak, Sessile	<i>Quercus petraea</i>	Prefers well-drained, acidic to neutral soils. Tolerates less rich and lighter soils than Q. robur	30	Medium	Birds, bats, insects, fungi, deadwood	Foliage; autumn colour
Rowan*	<i>Sorbus aucuparia</i>	Grows in a wide variety of soils	10	Fast	Birds, insects, squirrels, lichens	Flowers, berries
Scots Pine*	<i>Pinus sylvestris</i>	Prefers dry, light soils	24	Medium	Birds, insects, lichens	Cones, evergreen
Spindle	<i>Euonymus europaeus</i>	Prefers damp, lime-rich soils	7	Medium	Insects	Autumn colour, berries
Whitebeam, Irish*	<i>Sorbus aria</i>	Prefers neutral to lime-rich soils	15	Medium	Birds, insects	Flowers, berries
Willows*	<i>Salix spp.</i>	Generally prefer damp soils with heavy to medium texture	8	Fast	Birds, insects, lichens, fungi, deadwood	Catkins, autumn colour
Yew	<i>Taxus baccata</i>	Prefers dry, lime-rich soils	15	Slow	Birds	Berries, evergreen

* Tolerates exposure

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<https://tinyurl.com/3nbd8hf9>

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For more information visit:



**SUSTAINABLE
DEVELOPMENT GOALS**

**A well-planned tree planting project plays an important role in
working towards the UN Sustainable Development Goals**



Comhairle Chontae na Gaillimhe
Galway County Council



An Chomhairle Oidhreachta
The Heritage Council