# North East Lincolnshire Tree Strategy

Part Five -Development & Our Green Infrastructure Guidelines

June 2023



Working in partnership







## North East Lincolnshire Tree Strategy Part Five Development & Our Green Infrastructure Guidelines

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# **1.0 Introduction**

These guidelines are intended as a supplementary note to accompany part one of the Tree Strategy. They provide guidance on how future developments should be designed to reflect a sites' local context; create new, attractive, and sustainable places for all to enjoy with landscaping and tree planting which enhance North East Lincolnshire's rich biodiversity value. Planning applications, masterplans and designs for developments which accompany planning applications will need to demonstrate how the principles contained in the Tree Strategy and this document have been incorporated in their design. By following the principles of the Tree Strategy and this document, will also contribute to achieving the council's ambitions to become net-zero carbon by 2030 and towards the aims to increase tree canopy cover across North East Lincolnshire.

#### 1.1 Green infrastructure network corridors and opportunity areas

Green infrastructure (GI) is a network of multi-functional green and undeveloped land, both urban and rural in nature, which supports the activity, health and wellbeing of local people and wildlife. New developments should maintain, protect, enhance and extend the GI network across North East Lincolnshire. Development proposals that contribute to an attractive and connected environment, including creating and enhancing green corridors that link urban areas to countryside will be supported.

GI within developments will normally comprise of natural green areas with multifunctional purposes and include landscaping; tree planting, public open space (POS), biodiversity measures and sustainable urban drainage schemes (SuDS). The need for developments to address gaps in the GI network that currently limit wildlife movement or recreational access by people is a key priority. These enhancement measures can be provided by both physical and visual connection through features such as tree-lined routes, as well as by enhancing access to nature by improving the public rights of way network. The way in which developments seek to address gaps in the GI network and enhance its function will need to be clearly illustrated through an application's accompanying design and access statement and landscape masterplan.

Four steps are required to ensure well-designed landscaping is achieved in developments:

- 1) Assessment of site, surroundings, and existing features.
- 2) Development of a landscape strategy and site wide masterplan based on the analysis and evaluation.
- 3) Detailed landscape design.
- 4) Detailed long-term maintenance regime.

A site wide landscape strategy for the development will need to demonstrate how GI will be used to provide multifunctional benefit for the occupants of the development and connect to the wider GI network and surrounding area. This analysis will need to take account of potential cumulative impacts of any consented or proposed developments near to the site and area wide masterplan or development frameworks.



A landscape strategy will need to demonstrate how the proposed design has taken the opportunity to enhance the quality and character of the area, as well as providing multifunctional environmental benefits, including:

- · Linking and enhancing GI network corridors.
- Incorporating landscape features to create SuDS to reduce or mitigate run-off, flood risk and improve water quality flowing from the site.
- Providing opportunities for a variety of activities and encouraging social interaction to promote health and wellbeing, social inclusion and places that feel safe, secure, and attractive to use for all.
- Acting to mitigate environmental impacts arising from development, such as introducing tree and hedgerow planting to reduce wind speeds close to tall buildings, improving air quality close to busy roads or introducing green walls and other features to reduce the impact of solar gain or an urban heat island (UHI) in an area.

#### 1.2 Detailed landscape design

A detailed landscape design will be required to be submitted as part of the detailed planning application and will provide the final level of detail which will reflect the site wide landscape strategy. It must be in accordance with any previously approved plans and confirm when and how the agreed landscape features will be provided. It will also include details of any protection or special measures required to protect existing landscape features.

All elements of the landscape must be specified to the appropriate British Standard for:

- Proposed planting (including trees, shrubs, climbers, wildflowers and amenity grass) including supply size, planting density, planting season and root stock.
- Tree pits, which should be fully detailed and include available root volume.
- Top-soil depths and volumes, including importing, storage and cultivation.
- Watering maintenance regime.



- Hard surfacing, in terms of type, location, construction details.
- Proposed and existing site levels plus gradients where appropriate.
- Street furniture and lighting column location and specification and associated ducting routes.
- Sustainable drainage features, details inlets/outlet design, side slopes and planting.
- Arboricultural works to trees and landscape features on or close to the site in accordance with the agreed arboricultural impact assessment (AIA) and arboricultural method statement (AMS).
- Initial maintenance and defects liability period (generally minimum of 5 years) and long-term maintenance to be covered by a Landscape Management Plan for areas of public open space (POS).

#### 1.3 Landscape Management Plan

If the development is granted permission, then the measures shown on the site wide landscape plan will be required to be implemented in accordance with an approved phasing plan and secured by means of planning conditions. This normally requires the landscape works to be implemented prior to first occupation of the development or such other timescale as agreed by the council. All landscape planting will then need to be maintained for a minimum of five years. The council will endeavour to carry out annual inspection of landscape planting associated with new developments to ensure it is maintained in accordance with the approved landscape plans.

North East Lincolnshire Council will not take responsibility for the management and maintenance of any newly created shared public spaces and individual landscape features outside of any adopted public highway boundaries. There must be a clear commitment to a long-term high standard of site management for all new public spaces and features through a long-term site management plan. The site wide landscape management plan will secure the long-term management and maintenance of the development for the lifespan of the development. It may also be used to secure biodiversity net gains required to be secured as part of a development.



The management plan will cover all SuDS areas, buffer planting, woodland planting, green roofs, green walls, trees, public realm spaces including both hard and soft landscaping and will need to include:

- A detailed maintenance schedule and methodology for all individual components and its inspection regime.
- Details of cleaning, maintenance and repairs of the open space areas including graffiti; stain and spillage removal; leaf and snow clearing; cleaning and repair of hard landscaped areas; maintenance of lighting, signage, street furniture and weed control.
- Maintenance of open space and soft landscaping areas including weeding, watering, fertiliser application, replacement of failures, trimming and pruning of trees and shrubs, grass cutting and maintenance of water features. All soft landscaping works should be maintained in accordance with the latest versions of BS 8545:2014 Trees: from nursery to independence in the landscape Recommendations and BS 4428:1989 Code of practice for general landscape operations (excluding hard surfaces). Any trees or plants which die or become diseased are to be replaced in the first available planting season (usually from November through to March) with others of similar size and species, and any grassland/wildflowers that fails to establish will be re-established.
- Details of an annual report to cover above matters and to identify the parties responsible for maintenance and their contact details.

#### 1.4 Trees, woodlands and hedgerows

This section identifies the information required to assess the impacts and effects of any development on trees, woodland, and hedgerows. It includes guidance on how existing trees and hedgerows should be retained and integrated into new developments and considerations that should inform new tree planting.

It is essential that trees and hedgerows are considered from the very beginning of the development planning process. Early engagement of a professional arboriculturist will help to identify those trees that should be retained and those which should be removed to achieve sustainable tree stock. The design will need to integrate trees, to avoid conflicting with their current and future growth. During the construction phase, retained trees and hedgerows will need to be protected to prevent accidental damage. Long-term management plans will be required to ensure that their value is retained for future generations.

#### 1.5 Site survey requirements

Where there are trees within and directly adjacent to a development site, a tree and hedgerow survey will be required to be carried out by a suitably qualified arboriculturist.

To ensure that development proposals take full account of trees, hedgerows and woodlands, a tree and hedgerow survey will need to be undertaken in accordance with BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations, or the latest version, as part of the initial site investigations. This survey should record all trees with a stem diameter of 150mm or greater at 1.5m above ground level along with an accurate location. The survey must include all trees within the site, as well as trees within influencing distance to the site. The survey should also include existing landscape features such as ditches, buildings and other structures, boundary features and means of enclosure, trenching scars near to trees, and overhead and underground utility apparatus, including drainage runs with manhole and invert levels. An accurately measured topographical survey should be undertaken showing all the relevant features.

Where trees are growing in groups or woodlands, it may be more appropriate to record these as single entities, mapping their outer crown spread and recording their age range, overall height and species mix in accordance with BS 5837 or the latest version. If a development is proposed within or on the edge of groups or woodlands, it will be necessary to record trees that might be affected as individuals. A similar method to surveying trees should be applied to hedgerows. Hedgerow surveys should include those within and around the site. Their position should be recorded, along with details of species composition, condition, height, width, and approximate age.

It may also be necessary to survey trees or hedgerows on adjacent land. If these cannot be accessed for measuring, an estimate should be made. Drawings must clearly state where estimates have been made. Any recommended work to trees shall be identified during the tree survey, considering the proposed use of the site. The tree survey will form the basis of a tree constraints plan (TCP) and clearly demonstrate the below-ground constraints, i.e. root protection area (RPA) associated with each tree, group, woodland or hedgerow. The tree constraints plan is a design tool to help inform feasibility studies and design options.

#### 1.6 Trees and development

Trees and landscape features to be retained and planted as part of a development must be given sufficient space to develop. Space is required both above the ground, for future canopy growth without the need for overly burdensome pruning works, and below the ground, for root development and to prevent future conflict with people, structures or utilities. This will be informed by a site-specific Arboricultural Impact Assessment (AIA).

Development layouts will be required to be accompanied by an AIA which demonstrates how the design ensures all retained trees and new trees, woodlands and hedgerows are able to grow and mature in the space provided, both above and below ground. Trees and hedgerows will be protected for the duration of any demolition and construction work.

Developments should be planned to avoid any encroachment into a tree's root protection area (RPA). The default position should be that structures and hard surfaces are located outside the RPA of trees to be retained. Only where there is unavoidable conflict, and the developer has demonstrated that all other options have been exhausted, will the use of engineered design solutions and tree-tolerant methods of working be considered. These will have low impact within the RPA, such as no-dig permeable surfacing or placement of low impact foundations. Full justification will be required for any works within a RPA, and each case will be considered on an individual basis, weighing the importance of the tree(s) against the likelihood of tolerating the encroachment.

If trees are being removed or if there is development within the RPA of trees it will be necessary to provide an AIA. An AIA will evaluate the direct and indirect effects of the proposed design and where necessary recommend mitigation. Where trees are being removed, as a consequence of development, the AIA must include a Tree Retention and Removal Plan (TRRP). A scale plan of the final design layout, no less than 1:200 scale, should clearly show those trees being retained and those trees being removed.

Where the AIA identifies encroachment into a tree root protection area, working method statements and design drawings will be required with the application, to enable the council to fully appreciate how the trees can be protected.

Trees can be easily damaged during demolition and construction operations so it is necessary to prepare a tree protection scheme to demonstrate how the risk of damage will be minimised. A tree protection scheme will usually involve the preparation of an Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP). This precautionary approach towards tree protection will demonstrate that the operations can be undertaken with minimal risk of adverse impact on trees to be retained.

The AMS will include any pre-development tree works that may be required to facilitate the development of the site. Once a final design layout for the development has been agreed, an arboriculturist should review the relationship of the development to the trees and should prepare a schedule of tree works listing all the trees that require work (by number), accompanied by a plan showing where each tree is located.

The schedule of works should include:

- Trees for removal to enable development.
- Remedial tree works, including those required to establish acceptable levels of risk and management in the context of the proposed land use.
- Access facilitation pruning.
- Pre-emptive root pruning.

The schedule of works should be accompanied by a detailed specification prepared in accordance with BS 3998:2010 Tree work – Recommendations, or the latest version.



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