Introduction

Landscape and Nature

Design codes for all developments

Introduction

Nature contributes to the quality of a place, and to people's quality of life, and it is a critical component of well-designed places. Natural features are integrated into well-designed development. They include natural and designed landscapes, high quality public open spaces, street trees, and other trees, grass, planting and water.

Well-designed places:

- integrate existing, and incorporate new natural features into a multifunctional network that supports quality of place, biodiversity and water management, and addresses climate change mitigation and resilience;
- prioritise nature so that diverse ecosystems can flourish to ensure a healthy natural environment that supports and enhances biodiversity;
- provide attractive open spaces in locations that are easy to access, with activities for all to enjoy, such as

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play, food production, recreation and sport, so as to encourage physical activity and promote health, well-being and social inclusion.

Landscape and Nature

Trees

There is a strong desire to increase the quality of the treescape across the Borough.

This will be achieved by valuing and maintaining existing trees and delivering a significant new generation of tree planting.

The importance of trees

This can be assessed at many levels, fundamentally they are the primary ingredient of all landscapes and help to improve streets, boundaries, parks, gardens, suburban edges, fields and woodland.

The value of trees occurs through:

- Structuring the landscape and underpinning a sense of place
- Being a primary biodiversity habitat
- Carbon sequestration
- Shading and cooling

Codes

- Limiting exposure and wind impact
- Reducing water run-off and flooding potential
- Screening, filtering and/or framing views
- Providing a positive sensory contribution and improving mental health
- Creating attractive landscapes which brings about increased land values

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LNL 1 Trees

The applicant must demonstrate that the proposed scheme complies with the 'Tree' best practice guidance set out within this chapter.

The right tree

The right trees should be planted in the right place and in the right way, and maintained correctly.

The following information is provided with the benefit of a longstanding knowledge of the local climate and soil conditions and of how to successfully establish the right type of trees within the Borough.

Wherever there is opportunity for a larger tree species, it should be taken. There will be more opportunity to deliver smaller specimens, but a mix, including a range of sizes is essential for structural and species diversity.

This section gives some key species information and some design parameters for achieving successful tree planting across the range of environments/situations in Trafford.

The information set out is proven and will help to achieve successful tree planting for Trafford. It is not intended to stifle innovation or variety. However, where there is a departure from the information set out herein, this should be justified by a Landscape Architect or Arboriculturalist.

Species selection

There are widely recognised ecological and place–making benefits for planting native species trees within both urban and rural landscapes. Nonetheless, with a changing climate and when considering the response of some trees to planting in highly urbanised environments, suitable, non–native trees will also be welcomed.

Although deciduous trees will form the majority of tree species within planting schemes, it is important to have a mix of both deciduous and evergreen tree species to ensure structural and ecological diversity.

The following table identifies a number of largely native species trees that are considered suitable for the Borough. This is not an exhaustive list and other species will be welcomed. However, they will need to be justified through supporting information. Expert advice should be sought.

The tables that follow provide details of:

- Ultimate size of each tree – (Large, Medium of Small)
- Whether the tree is deciduous or coniferous
- Suitability of the tree for different types of soils

Large Trees

By virtue of ultimate height and/or canopy spread. In a woodland context, they will dominate the upper canopy and in an urban setting they will become the most significant natural features.

Deciduous

Tree (inc. Latin Name)	**Soil Type**		
	Clay	**Loamy**	**Sandy**
English Oak (Quercus robur)	Y	Y	Y
Common Beech (Fagus sylvatica)	N	Y	Y
Common Lime Tree (Tilia x europaea)	Y	Y	Y
Horse Chestnut (Aesculus hippocastanum)	Y	Y	Y
Sweet Chestnut (Castanea sativa)	N	Y	Y
Birch (Betula)	Y	Y	Y
Norway Maple (Acer platanoides)	Y	Y	Y
London Plane (Platanus x hispanica)	Y	Y	Y
Hornbeam (Carpinus betulus)	N	Y	Y
Willow (Salix)	Y	Y	Y

Coniferous

Tree (inc. Latin Name)	Soil Type		
	Clay	Loamy	Sandy
Scots Pine (Pinus sylvestris)	Y	Y	Y
European Larch (Larix decidua)	Y	Y	Y
Austrian Pine (Pinus nigra)	Y	Y	Y
Spruce (Picea)	Y	Y	Y
Western Red Cedar (Thuja plicata)	Y	Y	Y
Cedar (Cedrus libani)	Y	Y	Y

Medium Trees

Trees with a mid-height stature and/or canopy spread. These trees have the ability to give structure in a tight urban landscape and can appear large at the human scale.

Deciduous

Tree (inc. Latin Name)	Soil Type		
	Clay	Loamy	Sandy
Wild Cherry (Prunus avium)	Y	Y	Y
Bird Cherry (Prunus padus)	Y	Y	Y
Field Maple (Acer campestre)	Y	Y	Y
Common Whitebeam (Sorbus aria)	Y	Y	Y

Alders (Alnus)	Y	Y	Y
Callery Pear (Pyrus calleryana ‘Chanticleer’)	Y	Y	Y

Coniferous

Tree (inc. Latin Name)	**Soil Type**		
	Clay	**Loamy**	**Sandy**
Yew (Taxus bacatta)	Y	Y	Y
White Cedar (Thuja occidentalis)	Y	Y	Y

Small Trees

Trees with a smaller height structure and/or canopy spread. These trees can be introduced in tight, urban situations. They may be chosen for their decorative or biodiverse qualities. They are generally the shortest–lived.

Deciduous

Tree (inc. Latin Name)	**Soil Type**		
	Clay	**Loamy**	**Sandy**
Rowan (Sorbus aucuparia)	N	Y	Y
Ornamental Cherries (Prunus)	N	Y	Y
Holly (Ilex aquifolium)	N	Y	Y
Hawthorn (Crataegus)	Y	Y	Y
Apples & Crab Apples (Malus)	N	Y	Y

Hazel (Corylus avellana)	N	Y	Y

Coniferous

Tree (inc. Latin Name)	**Soil Type**		
	Clay	**Loamy**	**Sandy**
Irish Yew (Taxus bacatta ‘Hibernica’)	Y	Y	Y

Street Trees

Trees that would best suit planting within hard areas. The following species are considered appropriate for street tree planting within Trafford due to their form and appearance, their ability to withstand more constrained environments and tolerate pollutants, and which do not tend to cause root damage problems if planted correctly.

The following is not an exhaustive list and the list will vary with time, subject to availability and new species becoming available and suitable.

All require special tree pit and engineering solutions to ensure the best possible ground conditions are achieved and to give the trees the best possible chance of thriving.

Deciduous

Trees (inc. Latin Name)	**Soil Type**		
	Clay	**Loamy**	**Sandy**
Large Trees			

Common Lime (Tilia x europaea)	Y	Y	Y
Small Leafed Lime (Tilia cordata)	Y	Y	Y
Maple (Acer campestre ‘Elegant’)	Y	Y	Y
Platanus x acerifolia / hispanica (London Plane)	Y	Y	Y
Medium Trees			
Pear (Pyrus calleryana ‘Chanticleer’)	Y	Y	Y
Turkish Hazel (Corylus colurna)	N	Y	Y
Broad leaved cockspur (Crataegus prunifolia)	Y	Y	Y
Fastigiate Tulip Tree (Liriodendron tulipifera fastigiata)	Y	Y	Y
Norway Maple ‘columnare’ (Acer platanoides ‘Columnare’)	Y	Y	Y
Small Trees			
Birch (Betula pendula fastigiata ‘Obelisk’)	Y	Y	Y
Upright Hornbeam (Carpinus betulus ‘Frans Fontaine’)	Y	Y	Y
Maidenhair Tree (Ginkgo biloba ‘Princeton Sentry’)	Y	Y	Y
Upright Pin Oak (Quercus palustris ‘Green Pillar’)	Y	Y	Y

Spacing of street trees will naturally vary by size and the effect sought. Nonetheless, as a rule of thumb, each street tree, whether planted in a grass

verge or a generous paved area **should be planted between 12m and 20m apart from the next tree.**

The right place

It is imperative that the right tree is located in the right place, to avoid proximity issues / amenity concerns and to give the right tree the space needed to thrive.

In urban situations, where space is often limited, any opportunity to plant a large tree should be seized. Large species trees best complement large buildings and therefore create an environment where nature can shine.

This Design Code is seeking to achieve the best outcomes, and if foundation adjustments are required to accommodate specific trees, this should be factored into any new-build design process, and should not be at the expense of achieving the best possible tree in a given location.

The category of tree size can be used to assess a suitable minimum planting distance from buildings or significant structures. Note, there will always be a technical solution for accommodating the engineering solutions that come when considering root growth and soil type. When planting near to a building, wall or other structure, root barriers may be required and expert advice should be sought.

Principles

Large Trees can be planted a minimum of 10m from a building or structure.

Medium trees can be planted a minimum of 6m from a building or structure.
Small trees can be planted a minimum of 3m away from a building or structure.

Placed in the right way

Creating the right planting conditions for the right tree in the right place is essential for its successful establishment, its ongoing health, form, and its longevity.

Whilst there are site-specific variations and also bespoke solutions for the successful establishment of new trees, the following information needs to be detailed within the submitted Landscape Layout Plans to demonstrate that the proposed trees can be successfully delivered and will be long-lasting.

The information set out below is specific to planting in open, unobstructed ground. Any trees planted in areas of limited open ground (e.g. verges) or within hardstanding will need bespoke specifications and tree pit details provided by a suitably qualified Landscape specialist.

Principles

- Positive drainage of tree pits is essential – to ensure water can get away and avoid killing the tree.
- Positive irrigation (guaranteed watering/feeding) is required for the first 3 years otherwise trees are likely to die.
- All trees from standard sized trees upwards will require adequate tree staking.

- Safeguarding from animals, vehicles and/or vandalism will be required where necessary.

Size	Girth	Pit Size	Pit Depth
Standard	8–12cm	900 x 900mm	700mm
Extra Heavy	12–18cm	1200 x 1200mm	800mm
Semi Mature	18–25cm	1500 x 1500mm	1000mm
Specimens	25cm+	2000 x 2000mm	1000mm

Planting in hard trafficked areas

For trees to survive, the roots need access to water and oxygen. It is imperative that the ground does not become too compacted as this will starve the tree of these essential elements.

To give trees that are planted in hard areas where their eventual rooting area will be subject to load bearing impacts (e.g. street trees or trees within a car park), the best opportunity to thrive and grow, specialist engineering solutions will be required. This could involve special structural cell–type systems set within larger tree pits below the surface. In such situations, expert advice should be sought early in the design process and appropriate solutions provided.

Wherever possible, the opportunity to introduce sustainable drainage systems (SuDS) as an integral part of urban tree pits should be seized. Such multi-purpose tree pit design solutions are available.

Golden rules of tree planting

- Know the soils and therefore choose the correct trees
- Consider off-site constraints so that the tree can thrive and does not become a nuisance
- Ensure sufficient soil volume is provided for each species
- Think about tree pit design and solutions from the outset
- Make sure that there is adequate drainage
- Make sure there is a local water supply for irrigation
- Allow for good quality care after planting (min. 3 years)
- Know where existing services are from the outset. Proposed services should respect tree locations
- Establish the best conditions in all scenarios to give trees the best possible chance to thrive

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Maintained correctly

Any tree can die if not maintained correctly.

There is a duty of care, the responsibility for which needs to be made clear at the time of planting, to ensure success. Planning conditions will require maintenance and care and/or replacement planting for a minimum period of 15 years following initial planting. Responsibility for this should be established at the outset.

Tree planting does require specialist knowledge and any bespoke solution needs justifying by a suitably qualified landscape specialist through the planning application process.

Principles of successful maintenance

Successful maintenance will involve:

- Watering
- Weeding and mulching around the base
- Checking for security / staking
- Safeguarding from livestock or rabbits, humans (vandalism)

How many trees do I need to provide?

Applicants should seek to maximise the number of trees on a development site. Where spaces allow, applicants should provide a net gain in the number of trees. Trees must be planted in accordance with the guidance set out in this Chapter ensuring that the right tree is planted in the right place, in the right way and maintained correctly.

Where applicants have robustly justified that it is not technically feasible (arboriculturally) to deliver a net gain of on-site tree planting, contributions will be sought to provide off-site tree planting.

What is the minimum size required?

Street trees	**Extra heavy standard**
Public facing trees	**Heavy standard**

Private facing trees	Standard

Rules of tree provision

- Applicants should provide a net increase of three trees per dwellinghouse. Where feasible one tree should be provided to the front of a dwellinghouse and two to the rear.
- Apartments should provide one tree per unit.
- Street trees are subject to a formula of 0.5 no. street trees per new dwelling.

Compliance requirements

All planning applications covered by the Trafford Design Code must be accompanied by sufficient information that details:

- Tree species
- Tree positions and quantum
- Tree sizes and ultimate canopy spread
- Requisite rooting area or volume
- Details of tree pit size – appropriate for species
- Existing and proposed utility and services plan demonstrating relationship with existing and proposed trees
- Planting method statement
- Maintenance regime – defining the how, the who and the what
- Soil type – analysis report following best practice and utilising a spread of samples across a site
- Arboricultural Impact Assessment and Arboricultural Method Statement

Landscape and Nature

Boundaries and Edges

Boundaries and Edges should be considered and designed from the outset.

The Importance of Boundaries and Edges – The role of boundaries and edges cannot be overstated. They are a principal ingredient of shaping a place at all scales and in all situations.

Different established neighbourhoods within the Borough will already have a well–defined hierarchy and structure of boundaries and edges. This can be seen at many different scales and in various situations:

- Garden boundaries with good levels of privacy afforded to rear gardens and defensible space, at least, for front gardens.
- Certain neighbourhoods can be categorised by private gardens with tall enclosures, others may employ a more open format, yet controls exist.
- Unsightly facades benefit from screening by densely planted or solid boundaries.
- Railings can provide security but are more open than walls or solid fences.
- Trees and hedgerows can soften and enliven boundaries.
- The use of Similar Boundary Treatments can characterise a place as can an appropriate mix

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Establishing the Composition & Layout of Boundaries & Edges

Good practice solutions

Establishing hedges

Maintained correctly

The fabric, meshing and composition of the boundaries and edges are of equal importance to the buildings in determining the success of a place. The components of the boundaries and edges define space, screen, protect and can soften and embed all manner of development. Along with structural planting, boundaries and edges can deliver an intimate (human) scale and add vibrancy to even the most built–up and densely arranged urban spaces.

When designing boundaries and edges within an established neighbourhood, these should generally follow inherent patterns. This is not always at the expense of suitable (justified) innovation.

- In new neighbourhoods or development zones, context and the relationship with adjacent land parcels and land uses is important.
- The solution should aspire to deliver the best example of boundary treatment and not the basic solution.
- The larger the development, the more fulsome and large scale the boundary treatments and edges should be.
- In all instances, opportunities to introduce structural planting (trees and hedgerows) should be taken.

LNL 2 Boundaries and Edges

The applicant must demonstrate that the proposed scheme complies with the 'Tree' best practice guidance set out within this chapter.

Golden Rules of Boundaries and Edges

In any situation, the context will determine the appropriate scale, proportion and type of preferred boundary solution.

Where planting trees and hedgerows:

- Know the soils and therefore choose the correct tree and hedgerow
- Ensure that ultimate size, form and appearance of the chosen tree and hedgerow is suitable for the location provided
- Consider off–site constraints so that the tree and hedgerows can thrive and do not become a nuisance
- Make sure that there is adequate drainage
- Make sure there is a local water supply for irrigation
- Allow for good quality care after planting (minimum 3 years)
- Know where existing services are from the outset. Proposed services should respect tree and hedgerow
- Establish the best conditions in all scenarios to give trees and hedgerows the best possible chance to thrive.

Establishing the composition and layout of boundaries and edges

In any new development, whether large or small in scale, it is imperative to design the boundary treatment to meet the needs of the place.

This can be broken down into firstly a functional requirement and then aesthetic considerations can be applied to the layout and form.

Functional considerations

Boundary treatments need to consider the following requirements:

- Privacy – e.g. tall boundaries for private garden areas
- Security/Safety – e.g. school playgrounds or railway lines
- Ownership – e.g. public versus private ownership demarcation
- Screening – e.g. to screen unsightly busy roads
- Wildlife movement – e.g. hedgehog highways (small openings in bases of fences or walls)
- Transition – e.g. urban to rural areas, through buffer planting

Aesthetic considerations

A successful scheme can only be achieved when, firstly, the functional considerations have been determined and then importantly, the appropriate aesthetic considerations should be applied to achieve the optimum solution.

The **golden rules** to be applied to the aesthetic choices:

- **Respond to context** – If a new development is of an infill type, it should respond positively to the best of the established boundary treatments. For new communities, all boundary treatments should elevate the sense of place.
- **Design for the public domain** – All proposed development will need to show how it has prioritised the outward facing relationship within the design of boundaries and edges rather than the inward facing. **The public facing presentation is considered wholly more important than the private facing.** Space should always be afforded to permit a high-quality, uniform and/or planted public-facing boundary to thrive.
- **Use "green" wherever possible** – Hedges, trees, shrub planting and climbers have the ability to enhance stark or hard boundary solutions.
- **Consider management & maintenance responsibilities at the outset** – Boundaries need maintaining. Practical considerations of maintenance must be considered at the design stage and responsibility.

If the functional considerations determine that inappropriate boundary solutions are required, it will be necessary to make design changes to the scheme.

Good practice solutions

Privacy
- Tall walls
- Tall hedges
- Tall fences or railings with hedges

Security (alone)
- Mesh fencing
- Railings

Protection
- Railings
- Low Hedges (sometimes mesh fencing)

Ownership
Providing clarity between neighbour ownership or between public and private domains.

Where ownership needs demarcating, this can be achieved with physical boundaries or, where openness between ownership areas necessitates, through changes in materials at the edges.

Screening

When seeking shelter from visual intrusion, screening solutions should not detract from the public domain.

Planting Solutions – with scale responding to the need:

- Tall belts of trees
- Tall hedges
- The middle layer of vegetation

Transition (between one land use or character to another)
These transition areas tend to have a largess given the scales involved. For example, successful visual transitions from rural to suburban areas tend to include areas of belt or layered planting.

Tall walls, fences and railings (over 1.5m)

- Trees should be provided either in front of or behind the hard boundary treatment.
- Hedges should always be included for tall fences and railings and should be visible from the public facing side of the boundary.

Low walls, fences and railings (below 1.5m)

- Trees are always good in these situations and will be expected to be provided unless justified.
- Planting of hedges or shrubs above/behind a wall, always enhances the boundary.

Establishing hedges

Hedges require similar growing conditions to trees. It is vitally important that the correct conditions are provided. This will require effective consideration of the following:

- Adequate Hedge Trench Size
- Sufficient Soil Volume (in which to grow)
- Soil type/quality
- Positive drainage of hedge trenches is essential – to ensure water can get away and avoid killing the hedgerow
- Positive Irrigation (guaranteed watering/feeding) is required for the first 3 years otherwise trees are likely to die
- Safeguarding from animals, vehicles and/or vandalism will be required where necessary
- All hedges should be planted from root ball stock or container grown, with a minimum pot size of 10 litres.

Maintenance and responsibilities

Hard Elements
Where part of a uniform boundary arrangement, the boundary treatments should be maintained as part of a wider communal management strategy. Details of how these are to be effectively maintained, safeguarded and how the maintenance will be funded for a minimum of 15 years should be provided at the outset.

All rear solid boundaries must retain sufficient openings to allow continued Hedgehog (and other small mammal and amphibian) migration between garden spaces.

Planted Elements
Any public facing hedgerow or tree planting will need to be covered by a private or communal management arrangement, clearly defined in the application submission, to ensure its continued success and contribution to the streetscene.

There is a duty of care, the responsibility for which needs to be made clear at the time of planting boundary hedges and trees, to ensure success. Planning Conditions will require maintenance and care and/or replacement planting for a minimum period of 15 years following initial planting. Responsibility for this should be established at the outset.

Successful maintenance will involve:

- watering
- weeding and mulching around the base
- checking for security/staking
- It may also involve safeguarding from livestock or rabbits

LNL 3 Protecting existing landscape features

The applicant must demonstrate that the proposed scheme complies with the 'Protecting existing landscape features' best practice guidance set out within this chapter.

Existing landscape features should be considered from the outset.

The design and planning stage should be aspirational and practical and must acknowledge the ‘buildability’ of the scheme.

These considerations apply to features within the site and on surrounding land, to ensure that features identified for retention at the design stage will be safeguarded throughout the construction stage.

The entire development process should respect and allow for the successful retention of worthy existing landscape features. This must be clearly set out at the application stage.

Supporting background information

At the outset of the design process, existing landscape features of merit should be identified. This is achieved through a series of baseline technical reports which, where relevant, must be submitted with the planning application.

These reports must be carried out by suitably qualified professionals in their field of work and could include:

- Site/Topographical Survey;
- Arboricultural (Tree and Hedgerow) Survey Reports;
- Archaeological/Heritage Reports;
- Ecological Reports;
- Soil Analysis Reports;

- Ground Condition and Contamination Assessments;
- Drainage Assessment Reports;
- Landscape and Visual Impact Assessment.

It must be demonstrated within the planning submission how the above information has informed the Landscape Strategy for the site. The design process must balance the informed knowledge of the existing landscape features on and around the site with the wider development brief.

A site features protection plan

A site features protection plan must be prepared with any planning application submitted. This plan and associated method statements must take into account the practicalities of the construction stage.

This will include:

- The working/construction zones around buildings.
- Extra space required for basement or deep foundations
- Service and drainage runs
- Site compounds and material storage areas
- Areas and method for stockpiling topsoil for reuse on site
- Tree and hedge root protection area and vulnerable tree canopies.

Landscape and Nature

Drainage and SUDS

A large proportion of Trafford Borough is within a nationally recognised Critical Drainage Area. This means that significant areas are at a direct risk of flooding, whilst other areas have a vital role to play in preventing excess water run-off impacting those more critical areas. Each and every site has its role to play in addressing flood risk.

In an increasingly unpredictable and changing climate, it is imperative that sustainable urban drainage solutions are achieved, wherever possible.

The ultimate positive solution is where the landscape and nature combine to deliver sustainable drainage.

Sustainable Urban Drainage systems (SUDS) have the ability to:

- Hold back water run-off
- Prevent flooding
- Remove or reduce contaminants / pollutants from water on site
- Form an inherent part of an inspiring landscape or urban setting
- Provide habitat as part of the system

Codes

Code

Combining planting with 'natural' drainage solutions

Other Sustainable Drainage Systems

Supporting background information

SUDs proposal plan

LNL 4 Drainage and SuDS

The applicant must demonstrate that the proposed scheme complies with the 'Drainage and Sustainable Drainage Solutions' best practice guidance set out within this chapter.

It is no longer acceptable to simply "get water off site" in the most efficient engineered manner (pipe).

Sustainable drainage solutions (SuDS) components work in a number of ways. They:

- Infiltrate (soak) into the ground
- Convey (flow) into a watercourse
- Provide Storage on site and Attenuate (slow down) the flows of water.

SuDS schemes can use a combination of these processes. Every site has its part to play in mitigating flood risk. The landscape and nature elements of a site should contribute as positively as is possible to achieving this.

Larger sites with greater areas of open space have a significant role to play. For example, the open space system can successfully combine with a SuDs scheme.

Combining planting with 'natural' drainage solutions

There can be an incredibly successful symbiosis between landscape, nature and sustainable drainage systems. Hence, it will be expected that landscape,

nature and SUDs are the first design tools in achieving a successful drainage scheme.

These ‘natural’ drainage solutions can provide all of the identified SUDs benefits. Additional benefits that these can bring to wildlife as well as human-related benefits are also well documented. ‘Natural’ drainage solutions must be considered and incorporated wherever possible within sites. These may include:

- Wetlands
- Planted attenuation basins and ponds
- Planted infiltration ponds
- Planted strips, trenches and swales
- Bioretention areas
- Rain gardens

Other Sustainable Drainage Systems

There is a well-documented hierarchy of sustainable drainage solutions. Wherever possible, ‘natural’ drainage solutions should be introduced into a site's landscape design and network of connected spaces. Where this is not possible, justification is required and other sustainable drainage solutions can be utilised. These can include:

- Rainwater harvesting
- Green roofs (on buildings or structures)
- Permeable surfaces
- Channels or rills
- Engineered soakaways, trenches or basins

- Geo-cellular storage systems
- Inlet, outlet and control systems

Supporting background information

At the outset of the design process, the ground condition, water table and capacity for the entire site to drain in a sustainable manner should be confirmed through an appropriate technical assessment and report.

This preliminary baseline assessment and report must identify:
- How the existing site is drained
- The existing soil type and water infiltration opportunity across the site
- How sustainable drainage solutions can be incorporated within the site
- What sustainable opportunities exist on site to deal with water run-off in a sustainable manner (the “How” and the “Where”).

This baseline report must be submitted with the application and evidence should be presented at the submission stage to demonstrate how this information has fed into the design.

SUDs layout plan

A proposed SuDs layout plan and accompanying statement must be prepared with any planning application submitted. Applications must also be accompanied by a North West SuDS pro-forma, Flood Risk Assessment and Drainage Strategy / Statement as appropriate.

This information will include details of:

How a sequential approach to sustainable drainage on site will be implemented, as follows:

1. ‘Natural’ drainage solutions (most preferred)
2. Other sustainable drainage solutions (good)
3. All other drainage solutions (last resort)

This information should be proportionate to the nature, scale and type of application. It must demonstrate that the proposed SuDs scheme can be achieved, including:

- Indicative levels information
- Requisite drainage capacity
- Storage capacity of SuDs
- Outfall capacity

Landscape and Nature

Biodiversity

Embracing ecology and biodiversity as a core component of the development process has never been more important.

Trafford Council is committed to delivering Borough–wide biodiversity enhancements. This can be achieved on all development sites and at all scales. Safeguarding existing habitat and priority species is fundamental. Delivering ecological enhancements is now a prerequisite.

Every component of a landscape is a potential habitat. However, certain landscape features have a greater capacity to sustain and nurture fauna than others.

HIGHER VALUE		LOWER VALUE
Native oak tree	v	Leyland cypress tree
Mixed native hedgerow	v	Laurel hedgerow
Wildlife pond	v	Ornamental pond
Wildflower meadow	v	Mown lawn
Herbaceous border	v	Rhododendron border
Green roof	v	Asphalt roof
Hedgerows	v	Fences
Insect hotel or bird feeder	v	Nothing

Codes

Code

Supporting background information

An ecological protection and enhancement plan

Wildlife friendly management

LNL 5 Biodiversity

The applicant must demonstrate that the proposed scheme complies with the 'Biodiversity' best practice guidance set out within this chapter.

The Code requires the design process to fully acknowledge the ecological baseline of the site and to demonstrate an understanding of the wider ecological context of the site. The design process must then embrace the successful delivery of long–term ecological enhancement.

This will be achieved through designing the correct landscape and ecological solutions, which will put forward species mixes and the habitats that these will create.

Therefore, the development process must identify:

- A baseline position
- Ecological context
- Opportunities for ecological enhancement
- Proposals
- The resulting benefits
- Long–term management

The degree of information provided will be proportionate to the scale and nature of a development proposal. For single dwellings, the submitted information will be modest in its extent, but still demonstrate how ecological enhancement will be achieved. For larger or more complex schemes, a suitably qualified ecologist must be engaged at the outset of a project.

The solutions will embrace a full range of measures that will be required to inform a well-considered landscape response to the site.

Biodiversity protection and enhancement can be delivered in a multitude of ways and will layer up with other aspects of the Design Code. Biodiversity enhancement can be delivered alongside considerations including:

- Trees and hedgerows
- Boundaries
- Protection of existing landscape features
- SUDs and drainage solutions
- Gardens and small spaces
- Exceptional landscapes
- Management and maintenance

Healthy soils will be a vital component of a healthy landscape and nature.

Supporting background information

At the outset of the design process, a baseline site appraisal of existing habitats, biodiversity value and the presence of protected species should be undertaken by a suitably qualified Ecology professional.

This preliminary baseline assessment and report must establish:

- The habitat types on site (or recently on site)
- Wider ecological networks
- The value (BNG) of the existing site
- The presence of any protected species or habitats suitable for protected species

- Identify opportunities and suggestions for biodiversity enhancement on site and connectivity beyond

This baseline report should inform the design for the site **before work on the design has commenced** to avoid commercial pressures inhibiting a good design approach to a site.

This baseline report must be submitted with the application and evidence should be presented at the application submission stage to demonstrate how this information has fed into the design layout for the proposed development.

Additional report(s) will then also be required to demonstrate how any identified ecological constraints can be safeguarded or mitigated and how opportunities for ecological enhancement have been achieved. Refer to the Trafford Validation Checklist for further validation requirements.

An Ecological Protection and Enhancement Plan

An Ecological Protection and Enhancement Plan must be prepared with any planning application submitted. This plan and associated method statements must also take into account the practicalities of the construction stage.

This will include:

- The protection of existing habitats and protected species
- The composition and detail of the enhancement proposals
- The necessary long–term management requirements to ensure success.

For single dwellings, the submitted information will be modest in its extent, but still demonstrate how ecological enhancement will be achieved (e.g. wildlife–friendly fencing, bird and bat boxes within buildings, tree/shrub/hedge planting and species).

For larger or more complex schemes, this must be a comprehensive suite of proposals, prepared by a suitably qualified Ecology professional to confirm that the site will deliver positively for nature. This should be in plan form with accompanying schedules, method statements and management regimes clearly set out.

Wildlife friendly management

It is expected that management schemes will not require harmful pesticides or herbicides, except where clearly necessary, for example, in the removal of invasive species.

Landscape and Nature

Gardens and Small Spaces

Collectively, gardens and small spaces form a significant percentage of the Borough's green spaces.

All gardens and small spaces contribute to the Borough's landscape and nature

Small spaces can include:

- Gardens
- roof tops
- balconies and terraces
- living walls
- pocket parks
- public squares
- allotments
- car parks
- edges and verges

Codes

Code

Housing and gardens

Rooftops and podiums

Public squares

Submission requirements

LNL 6 Gardens and small spaces

The applicant must demonstrate that the proposed scheme complies with the 'Gardens and small spaces' best practice guidance set out within this chapter.

The most attractive areas of Trafford and the most desirable places to live have a full and abundant landscape. The majority of this landscape is privately managed within gardens and small spaces. All new developments must deliver landscapes of a similar quality to the best landscaped parts of the Borough. This will involve a landscape led approach to the design process that means that a full and robust landscape infrastructure must be delivered.

Landscape rich areas always add value to an individual property or neighbourhood, which will exceed the cost of its implementation.

It is often the case that the quality of landscape infrastructure delivered at the outset determines the status for years to come. For a landscape to thrive, the basic ingredients must come through the development process to allow the future owner or individual to nurture and embellish the quality of the space.

No garden or small space should be ignored. Given their application at the human scale, they contribute uniquely to the vibrancy, life and health of an area. To achieve this, there needs to be a clear focus on the detail.

For the private individual or family, an outdoor or garden space can make the home, and can have a great bearing on the quality of home life. How a garden is designed and implemented is vitally important in defining this.

Good design must consider:

- Levels of privacy and security
- Protection from disturbances
- Aesthetic qualities to deliver beauty and harmony
- Space to enjoy
- Opportunities for planting
- Delivering biodiversity enhancements
- How the space is experienced from the outside

Similarly, for small public spaces, such as verges, pocket parks or allotments the quality of detailing will have a vital role to play in the success of these spaces.

Small spaces can include the planting of new trees, hedges, shrubs, wildflowers, bulb planting, rain gardens, the formation of small ponds, lawns or earth sculpturing, or may contribute to urban art and gatherings.

It is vitally important that the design and development process delivers the best possible landscape and nature framework from the outset.

The Code requires a high quality landscape led approach to design and development, and particularly for gardens and small spaces. There is an expectation to deliver high standards of landscape implementation at the outset.

Housing and gardens

For every residential development involving at least one new dwelling (including a replacement dwelling), the following coding is applicable.

Front gardens or Streets

The front (public–facing) gardens will largely define the streetscene and will require an attractive and robust landscape structure. This will involve the planting of trees, hedges and shrubs at a size that delivers an instant impact.

Applicants should refer to the 'Trees' subchapter for tree planting guidance. Where there is insufficient depth in front gardens to accommodate tree planting, trees should be planted in the street as an alternative.

All new development will require the introduction of new tree planting. In particular, new residential properties (including replacement dwellings) are required to provide the following new planting within front gardens along the street.

All trees must be planted at a minimum of a "Select Standard" size (10–12cm girth) to ensure that it establishes and has sufficient immediate impact to ensure its contribution to the streetscene and its retention.

Trees

Width of Frontage (m)	**Minimum No. of Trees to be planted within Garden Area**
<6	1
6 – 10	2
10+	2+

Rear and side garden areas

Trees

In schemes involving housing with private garden areas, every private garden will be expected to deliver trees within that garden at a minimum "Standard" size (8–10cm girth) and as per the minimum ratios set out below:

Size of Private Garden Area (sqm)	**Minimum No. of Trees to be planted within Garden Area**
<100	1
100–200	2
200+	3

Rooftops and podiums

Rooftops and podium gardens have the ability to deliver meaningful tree, hedge and shrub planting. Every opportunity to deliver meaningful planting in such spaces must be taken.

In order to deliver rooftop planting, a number of things must be factored in from the outset, including:

- Load bearing considerations (trees, soil and watering have a heavy load)
- Roof build up requirements and levels implications for this
- Whether any part of the planting bed will be above or below external rooftop level
- Drainage considerations
- Irrigation capability (Including water supply and bib tap locations)
- How large species are to be delivered to the actual roof top or podium for planting

- How ongoing maintenance (or replacement planting) will be carried out once the scheme has been completed.
- Any legal requirements

Rear and side garden areas

Trees
In schemes involving housing with private garden areas, every private garden will be expected to deliver trees within that garden at a minimum "Standard" size (8–10cm girth) and as per the minimum ratios set out below:

Size of Private Garden Area (sqm)	**Minimum No. of Trees to be planted within Garden Area**
<100	1
100–200	2
200+	3

Public squares

Public squares and public parks of all sizes have an important role to play. All have the ability to deliver some level of planting. Spaces that include tree and other planting are invariably more successful spaces than those without.

Hard spaces can incorporate trees, hedges and/or planters within the space and all opportunities should be taken.

Submission requirements

In circumstances where rooftop or podium planting is being proposed and relied upon, confirmation that the above considerations have been taken into account from the outset must be submitted with the application.

A plan and supporting information must include:
- A roof top or podium deck landscape plan
- Outline technical considerations
- Outline management plan

Confirmation of this should be submitted with the planning application.

Landscape and Nature

Management and maintenance

LNL 7 Management and Maintenance

The applicant must demonstrate that the proposed scheme complies with the 'Management and Maintenance' best practice guidance set out within this chapter.

A successful landscape is a product of good quality implementation and good quality management. Implementation may take weeks or months, but for a landscaping scheme to be successful, it must be managed and maintained forever.

Responsibility for Landscape Management can be with:
- Individuals

- Private Management Companies
- Trafford Council

A lack of clarity at an early stage can lead to indecision or conflict and then ultimately the landscape will suffer.

Establishing maintenance responsibility at the design stage is imperative.

Supporting information

The Code requires a plan and method statement, clearly identifying landscape management and maintenance responsibilities, submitted with the planning application.

Details **required for Validation of a Planning Application**

- A colour coded and keyed plan clearly identifying zonal management areas broken down by who will ultimately be responsible for managing and maintaining each area.

The specific details of the management procedures and maintenance schedules for all landscaped areas will be required by a planning condition attached to the planning permission.

This will include both hard and soft areas within any scheme.