THORNHILL AVENUE, BELPER . Landscape Proposals



Carpinus betulus (Native Hornbeam) Hedge

Proposed Carpinus betulus hedgerow planting shall be established in the locations identified on the approved landscape drawings and planted at a density of 5 plants per linear metre, unless otherwise specified.

Planting areas shall be provided with a minimum 450mm depth of good quality cultivated imported topsoil, suitable for the intended planting use and free from bricks, large stones, rubble, perennial weeds, debris and other deleterious materials detrimental to plant establishment. Imported topsoil shall comply with the requirements of British Standards Institution.

All hedge plants shall be supplied as well-branched, bushy stock to ensure rapid establishment and the formation of a continuous, visually coherent hedge line with minimal gaps.

Planting shall be undertaken in accordance with current good horticultural practice and the recommendations of British Standards Institution and, where applicable, British Standards Institution.

Immediately following planting, all hedge plants shall be lightly trimmed as necessary to ensure a neat appearance, encourage bushy growth and promote successful establishment of a dense and uniform hedge structure.

A 75mm consolidated depth of Melcourt Ornamental Grade Bark Mulch (or approved equivalent) shall be applied to the base of the hedge to a minimum width of 500mm, ensuring mulch is maintained clear of plant stems to prevent collar damage and encourage healthy establishment.

The hedgerow shall thereafter be maintained in a neat formal appearance, with an anticipated maintained height of approximately 900mm, unless otherwise agreed. Regular maintenance pruning shall be undertaken as necessary to promote dense growth, maintain form and preserve overall appearance.



PLANT SCHEDULE								
SPECIES		Girth	Height	Root	Pot Size	Habit	Brnch's	Nos.
TREES								
Ac	Acer campestre	14-16cm	4.0-4.5m	RB	EHStd			5
ACS	Acer campestre 'Streehwise'	14-16cm	4.0-4.5m	RB	EHStd			1
Bp	Betula pendula	14-16cm	4.0-4.5m	RB	EHStd			2
SCR	Sorbus 'Cardinal Royal'	14-16cm	4.0-4.5m	RB	EHStd			2
ORNAMENTAL SHRUBS								
BTA	Berberis frikartii 'Amstelveen'				CG	3LT		32
EE	Escallonia 'Edinensis'				CG	3LT		73
EEG	Euonymous 'Emerald Gaiety'				CG	3LT		12
HSQ	Hebe 'Silver Queen'				CG	3LT		6
Hm	Hypericum x moserianum				CG	3LT		12
LH	Lavandula 'Hidcote'				CG	3LT		22
Ln	Lonicera nitida				CG	3LT		18
MJ	Mahonia japonica				CG	3LT		7
PMV	Prunus 'Mount Vernon'				CG	3LT		70
POL	Prunus 'Otto Luyken				CG	3LT		27
PT	Pyracantha 'Teton'				CG	3LT		222
SAW	Spiraea 'Anthony Waterer'				CG	3LT		17
SP	Spiraea 'Plumtastic'				CG	3LT		6
Vd	Viburnum davidii				CG	3LT		37
VSB	Viburnum tinus 'Spring Bouquet'				CG	3LT		12
HERBACEOUS PLANTS								
BBR	Bergenia 'Bressingham Ruby'				CG	2LT		22
BJF	Brunnera 'Jack Frost'				CG	2LT		25
GBV	Geranium 'Bevans Variety'				CG	2LT		40
Gxc8	Geranium x canta. 'Blokova'				CG	2LT		19
HQS	Heuchera 'Green Spice'				CG	2LT		24
FORMAL HEDGES								
Cb	Carpinus betulus				CG	10LT		455
Pl	Prunus lusitanica				CG	10LT		102

Shade Tolerant Wildflower Seed Mix Where reinstatement is required only.

Description

EW1 is a very good mixture of woodland wild flowers and grasses that will bloom in spring and early summer. Woodland wild flowers require some shade to thrive. So, use this mixture in established woods, or in young woodland, as the canopy begins to close in.

Ground Preparation

Endeavour to select ground that is not highly fertile and does not have a problem with perennial weeds. Clear all unwanted vegetation from the areas to be sown. Cultivation close to established trees and shrubs can be damaging to their root systems so take care not to dig too deep and keep disturbance to the minimum required to expose fresh soil.

Sowing

Seed is best sown in the autumn or early spring. The seed must be surface sown and can be applied by machine or broadcast by hand. To get an even distribution and avoid running out, divide the seed into two or more parts and sow in overlapping sections. Do not incorporate or cover the seed.

Woodland schemes are sown in a wide variety of circumstances with varying degrees of shading and other effects from tree roots. For this reason the results of sowing seed will be quite variable. Establishment of ground cover can be slow and patchy and in deeper shade full ground cover may never reach 100%.

Aftercare

Established woodland that has been under-sown with a woodland mixture requires little management during establishment. In the long-term ground flora will benefit from good tree and coppice management.

Topsoil, Subsoil and General Planting Specification

General Requirements

Prior to planting, all topsoil and subsoil shall be in a condition suitable for cultivation, being moist, friable, free-draining and not waterlogged, excessively dry, frozen or compacted.

Planting and soil preparation works shall only be undertaken during suitable ground and weather conditions and shall not proceed during frost, snow, waterlogged conditions, or excessively windy weather likely to prejudice successful plant establishment.

BS 3882:2015 → Topsoil
BS 8601:2013 → Subsoil
BS 4428:1989 → General landscape operations/planting
BS 3936 → Nursery stock quality
BS 8545:2014 → Tree planting/establishment
BS 5837:2012 → Working near retained trees/RPAs

Subsoil Preparation

Subsoil shall be free from contamination by bricks, concrete, hardcore, rubble, rubbish, deleterious matter or materials that are corrosive, explosive, flammable, hazardous to human or animal life, or otherwise detrimental to plant growth.

Subsoil shall be excavated, graded and placed to the required profiles and finished levels in accordance with the approved landscape proposals.

Where ground conditions are reasonably dry, compacted subsoil shall be loosened to a minimum depth of 300mm to alleviate compaction and improve rooting conditions.

Stones and other obstructions exceeding 50mm d

Topsoil Specification and Storage

Where existing site topsoil is deficient in quality or quantity and imported material is required, all imported topsoil shall comply with the requirements of British Standards Institution and relevant National House Building Council requirements appropriate to the intended planting use.

Topsoil shall be free from contamination by subsoil, construction waste, rubble, perennial weeds, pernicious root systems, or materials harmful to plant growth.

Topsoil shall be stored in stockpiles not exceeding 1 metre in height and, where practicable, 2 metres in width, and protected from contamination, trafficking, erosion and compaction during storage.

Topsoil shall not be handled, spread or cultivated when excessively wet, frozen or otherwise unsuitable,ameter shall be removed from cultivated areas unless otherwise specified.

Weed Control and Soil Cultivation

Where planting beds are affected by excessive weed growth, an appropriate herbicide shall be applied by a suitably competent operative in accordance with the manufacturer's recommendations and current best practice.

A suitable fallow period shall be observed following treatment prior to cultivation and planting operations commencing.

Following spreading, topsoil areas shall be cultivated to an appropriate depth and friable tilth during suitable dry weather conditions in accordance with British Standards Institution.

Finished surfaces shall be left regular, even and free-draining, with levels maintained approximately 25mm above adjacent kerbs and hard surfaces and 50mm above adjoining grass areas, allowing for settlement.

All visible weeds, roots, stones exceeding 30mm diameter, debris and other obstructions shall be removed.

Soil shall not be compacted and shall retain a friable crumb structure suitable for healthy root establishment.

No cultivation or soil disturbance shall take place within the rooting zones of retained trees and shrubs where this may adversely affect retained vegetation, in accordance with British Standards Institution.

Plant Supply and Quality

Container-grown stock may be planted at any time of year subject to suitable soil moisture and weather conditions.

Bare-root trees and shrubs shall be planted during the dormant season, typically between late October and March, unless otherwise agreed.

All trees, shrubs and planting stock shall conform to the approved planting schedule and the National Plant Specification (NPS) and shall comply with the requirements of British Standards Institution. Stock shall be healthy, vigorous, true to species and variety, well balanced and free from pests, diseases, discoloration, desiccation, physiological disorders or physical damage.

Plant Handling and Storage

All plant handling, transportation, storage and establishment shall be undertaken in accordance with current Horticultural Trades Association (HTA) guidance and the recommendations of British Standards Institution.

Plants shall be stored securely and protected from damage arising from site operations, drying winds, frost, overheating, waterlogging or prolonged exposure to adverse weather conditions.

Planting Operations

Planting operations shall be carried out in accordance with British Standards Institution (where applicable to tree planting).

All plants shall be positioned upright, evenly balanced and planted with the best side facing principal viewpoints, unless otherwise specified.

During planting, MycoForce Transplanter (or approved equivalent mycorrhizal inoculant) shall be applied around root systems at the manufacturer's recommended application rate to encourage healthy establishment and long-term plant performance.

Recommended Soil Depths (After Settlement)

Grass Areas: Minimum 100mm topsoil depth

Shrub Planting Areas: Minimum 300–450mm topsoil depth, dependent upon planting specification and species requirements.

Works Cleanliness

Throughout the course of the works and upon completion of planting operations, all adjoining hard surfaces, footways, roads and paved areas shall be kept clean and free from soil, debris, arisings and surplus materials arising from landscape operations.

Upon completion of the works, all planting areas and associated hard surfaces shall be left in a clean, neat and tidy condition, free from litter, spoil, unused materials and any hazards arising from the construction or planting process.

Watering and Establishment

All trees, shrubs, hedgerow plants and other planting stock shall be watered thoroughly immediately following planting to ensure adequate root zone saturation and settlement of soils around the root system without causing disturbance to plants or surrounding soils.

Watering shall continue throughout the first growing season, and thereafter as necessary, dependent upon weather conditions and plant establishment requirements.

During prolonged dry periods, watering frequency shall be increased as necessary to maintain healthy establishment and avoid drought stress.

A minimum of 30 litres of water per tree, per visit, shall be applied during dry periods, unless otherwise specified within the maintenance schedule or adjusted in response to weather conditions and species requirements.

Watering operations shall be undertaken in a manner that avoids soil erosion, root exposure or displacement of mulch materials.

Watering and aftercare shall be undertaken in accordance with the principles of British Standards Institution and British Standards Institution.

Bark Mulch

Unless otherwise specified, all shrub and planting beds shall receive a 75mm consolidated depth of approved Melcourt ornamental grade bark mulch (or approved equivalent) following completion of planting operations.

Mulch shall be spread evenly to suppress weed growth, conserve soil moisture, moderate soil temperature fluctuations and improve overall plant establishment.

Hedgerow planting shall receive a continuous 1 metre wide strip of bark mulch applied to a 75mm consolidated depth along the base of the hedge line.

Individual trees planted within grassed areas shall receive a 600mm diameter mulch circle around the base of each tree, applied to a 75mm consolidated depth.

Mulch shall be maintained clear of stems and trunks, leaving an approximate 50mm gap around the stem base to prevent collar rot, moisture retention against bark and associated plant health issues.

Good Horticultural Practice

All soft landscape works shall be undertaken in accordance with current good horticultural practice, employing suitably skilled operatives and appropriate methods to ensure successful plant establishment, healthy growth and long-term landscape performance.

All planting, soil preparation, cultivation, staking, mulching, watering and aftercare operations shall be undertaken in accordance with the recommendations of British Standards Institution and, where applicable to tree planting, British Standards Institution.
Prior to mulch application, planting areas shall be free from weeds, debris and loose materials.

Planting Compost

All planting composts and soil improvers incorporated within soft landscape works shall be entirely peat-free.

Acceptable proprietary compost products may include those derived from composted green waste, straw, manure, coir, or other sustainable organic sources, provided they are suitable for horticultural use and appropriate to the intended planting type.

Compost products derived principally from wood chips or bark fines shall not be used as planting compost or soil improvers within planting pits or beds due to the potential for nutrient immobilisation and inconsistent performance.

All composts and soil ameliorants shall be mature, free from contamination, invasive weeds, pests, diseases and harmful residues, and shall be incorporated in accordance with manufacturer recommendations and good horticultural practice.

Proposed Native Hedgerow

Proposed native hedgerow planting shall be established in the locations indicated on the approved landscape drawings and planted at a density of 5 plants per linear metre in a double staggered row formation, unless otherwise specified. Hedgerow planting shall be positioned approximately 750mm from adjacent fence boundaries to allow adequate establishment, future maintenance access and healthy growth.

Prior to planting, designated hedge planting areas shall, where necessary, be treated with an appropriate translocated herbicide (e.g. Glyphosate or approved equivalent) to control existing weed growth. Herbicide shall be applied by a suitably qualified operative in accordance with the manufacturer's recommendations and current legislation. Following successful treatment and an appropriate fallow period, the planting area shall be cultivated to a minimum depth of 300mm to create a suitable friable rooting environment.

All visible weeds, perennial root systems, stones, debris and deleterious materials shall be removed prior to planting.

Native hedge planting stock shall comprise bare-root whips, unless otherwise specified within the approved planting schedule. All planting stock delivered to site shall be of proven British provenance, appropriate to the locality and intended ecological objectives. A valid certificate of provenance shall be provided to the Landscape Architect prior to delivery to confirm the origin and provenance of all plant material.

All planting stock shall be healthy, vigorous and free from pests, diseases, desiccation, discoloration or physical damage and shall comply with the requirements of British Standards Institution and current good horticultural practice.

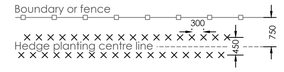
Whips shall be pit planted into prepared ground and planted to the same depth as previously grown within the nursery. Backfill material shall comprise suitable site topsoil mixed with 70 grams of Enmag slow-release fertiliser (or approved equivalent) per planting pit in accordance with the manufacturer's recommendations.

Prior to planting, all root systems shall be dipped in MycoForce Whip Dip (or approved equivalent mycorrhizal treatment) in accordance with supplier recommendations to encourage healthy root establishment and long-term plant performance.

Following planting, soil shall be gently firmed around the root systems to eliminate air pockets and ensure good root-to-soil contact.

All hedge plants shall be fitted with spiral rabbit guards and securely supported using bamboo canes, installed immediately following planting to provide protection from browsing damage and assist establishment.

Typical Hedge Planting Plan (NTS)



Mix	Native Hedge	NH1	NH2	NH3	NH4		Size	Tlls
10%	Acer campestre	10	6	6	4		1+1 80-100 br	29
10%	Corylus avellana	10	6	6	4		1+1 80-100 br	29
60%	Crataegus monogyna	60	38	38	24		1+1 80-100 br	175
10%	Ilex aquifolium	10	6	6	4		60-90 3L	29
5%	Rosa canina	5	3	3	2		1+1 80-100 br	14
5%	Viburnum opulus	5	3	3	2		1+1 80-100 br	14

Prunus lusitanica (Portuguese Laurel) Hedge

Provide a minimum depth of 450mm of good quality imported cultivated topsoil to all ornamental hedge planting areas. Topsoil shall be fertile, friable and free from bricks, stones exceeding 50mm, perennial weeds, roots and other deleterious materials.

Supply well-branched, bushy nursery stock to ensure a continuous, dense hedge upon establishment. Plant hedging in a single row at a density of 3 plants per linear metre.

Immediately following planting, lightly trim all hedging to produce a uniform appearance and encourage vigorous basal growth.

Apply 75mm depth of Melcourt Ornamental Grade Bark Mulch, or other approved equivalent, to a minimum width of 500mm centred on the hedge line. Keep mulch clear of plant stems.

Maintain the hedge in a neat, formal condition and trim as necessary to establish and thereafter retain a finished height of 900mm.

Proposed Areas of Shrub Planting

Proposed ornamental shrub planting shall be established within the areas identified on the approved landscape drawings and planted in accordance with the approved planting schedule, species mix, densities and spacing requirements.

Shrub planting areas shall be provided with a minimum 450mm depth of good quality cultivated topsoil following settlement, suitable for the intended planting use and free from bricks, rubble, large stones, perennial weeds, debris and other deleterious materials detrimental to successful establishment. Where imported topsoil is required, it shall comply with the requirements of British Standards Institution.

Prior to planting, planting areas shall be cultivated to create a friable, free-draining rooting environment, suitable for healthy root establishment. All visible weeds, perennial root systems, stones exceeding 30mm diameter, debris and unsuitable materials shall be removed.

Where necessary, planting beds shall be treated with an appropriate translocated herbicide (e.g. Glyphosate or approved equivalent) prior to cultivation to control existing weed growth, applied by a suitably qualified operative in accordance with the manufacturer's recommendations and current legislation.

All ornamental shrub stock shall conform to the approved planting schedule and be healthy, vigorous, true to species and variety, well balanced and free from pests, diseases, discoloration, desiccation, physiological disorders or physical damage. Plant stock shall comply with the requirements of British Standards Institution and current good horticultural practice.

Shrubs shall be planted at the same depth as grown within the nursery or container, ensuring root collars remain at finished ground level. Planting pits shall be excavated to an appropriate size to accommodate the rootball, with sides lightly broken up and bases loosened to encourage root penetration and drainage.

Backfill material shall comprise suitable topsoil mixed with peat-free planting compost, lightly firmed around the rootball to remove air pockets whilst avoiding excessive compaction. Where specified, a suitable slow-release fertiliser and mycorrhizal treatment may be incorporated in accordance with manufacturer recommendations.

Following planting, all shrub beds shall receive a 75mm consolidated depth of Melcourt Ornamental Grade Bark Mulch (or approved equivalent) to suppress weed growth, retain moisture and improve establishment. Mulch shall be maintained clear of plant stems to prevent collar damage.

Wildflower / Grass Mix



Wildflower Grass Seeding General

Wildflower grass seeding areas shall be established only where soils are of low fertility, suitable for wildflower establishment. Highly fertile topsoils shall be avoided where practicable, with preference given to lower nutrient subsoils or appropriately ameliorated soils to discourage excessive grass competition and encourage floral diversity.

Prior to seeding, all areas shall be inspected to ensure they are substantially free from perennial weeds and invasive species. Where necessary, existing vegetation shall be treated with an appropriate translocated herbicide (e.g. Glyphosate or approved equivalent) applied by a suitably qualified operative in accordance with the manufacturer's recommendations and current legislation. A suitable fallow period shall be allowed prior to cultivation and sowing operations.

Ground preparation shall be undertaken in accordance with current good horticultural practice and the recommendations of British Standards Institution.

Soils shall be cultivated to a minimum depth of 25mm, incorporating all necessary consolidation, rolling, harrowing and raking operations to produce a firm, fine and evenly graded tilth suitable for wildflower seeding.

The prepared seedbed shall be free from excessive unevenness, hollows, depressions, soft areas and compaction to enable the establishment of an evenly graded wildflower grass surface. Finished levels shall be set approximately 25mm above adjoining paving, kerbs and hard surfaces, allowing for settlement, and shall transition smoothly into adjacent grassed areas with free-flowing contours.

Prior to sowing, all weeds, grass sods, stones and debris exceeding 20mm in any dimension, together with roots exceeding 15mm diameter or 200mm in length, shall be removed from the seedbed.

Wildflower seed shall preferably be sown during the autumn or spring, although sowing may be undertaken at other times of year where suitable warmth and soil moisture conditions prevail.

Seed shall be surface sown only and shall not be incorporated into the soil profile or covered following application. Seeding may be undertaken mechanically or by hand broadcasting. To ensure even distribution and avoid inconsistent coverage, seed shall be divided into two or more equal quantities and applied in overlapping passes at right angles where practicable.

Following sowing, seed shall be lightly firmed into the surface by rolling or careful treading to ensure good soil-to-seed contact without burying the seed.

All wildflower seeding operations shall be undertaken in accordance with supplier recommendations and current good horticultural practice to maximise successful germination and long-term establishment.

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KEY & NOTATION

Plot Boundary

Existing Retained Trees and Hedges

Existing trees and hedgerows identified for retention shall be protected and retained throughout the construction and establishment phases in accordance with the approved Arboricultural Method Statement and Tree Protection Plan. No unauthorised cutting, pruning, removal, storage of materials, excavation, soil compaction or other works shall take place within protected areas.

Retained hedgerows shall be maintained and enhanced where appropriate to ensure their continued contribution to landscape character, visual screening, biodiversity and ecological connectivity. Any necessary pruning or management shall be undertaken by suitably qualified personnel and in accordance with relevant arboricultural and ecological requirements.

Proposed Tree Planting

Tree Pit Excavation

Tree pits shall be excavated to a size sufficient to accommodate the rootball or container-grown stock, allowing a minimum clearance of approximately 300mm around the root system to facilitate root establishment.

Prior to planting, the sides of the planting pit shall be lightly scarified and the base loosened to a minimum depth of 150mm to reduce compaction and improve drainage and root penetration.

Excavated pits shall be free from standing water and unsuitable material prior to planting. Any contaminated or poor-quality excavated material shall be removed from site or otherwise dealt with appropriately.

Tree Planting Operations

Trees shall be planted in accordance with the recommendations of British Standards Institution and current good horticultural practice.

Trees shall be planted at the same depth as grown within the nursery, ensuring the root flare remains visible and the stem base is not buried.

Trees shall be positioned upright and centrally within the planting pit, orientated with the best side facing principal viewpoints unless otherwise specified.

Backfilling shall comprise a 50:50 mix of approved good quality topsoil and peat-free compost, thoroughly mixed and placed evenly around the rootball to eliminate voids and minimise air pockets.

Backfill material shall be lightly firmed around the rootball in layers to provide stability whilst avoiding over-compaction.

140 grams of Enmag granular slow-release fertiliser (or approved equivalent) shall be incorporated evenly within the backfill mixture in accordance with the manufacturer's recommendations.

All trees shall receive perforated irrigation/aeration pipes installed around the rootball to facilitate watering and encourage root establishment.

Root Barriers

Where newly planted trees are located within 3 metres of underground services, approved root barrier systems shall be installed to reduce the potential for future root-related conflicts.

Root barriers shall be installed vertically with the upper edge terminating approximately 75mm below finished ground level.

Root barriers shall comprise Greenleaf ReRoot 2000 or other approved equivalent product installed in accordance with the manufacturer's recommendations.

Tree Support Systems (Soft Landscape Areas)

Trees planted within soft landscape areas shall be secured using a double staking system with horizontal crossbar support.

Trees shall be fixed to the crossbar using approved flexible rubber strapping, with a rubber spacer block positioned between the stem and crossbar to prevent abrasion and stem damage.

Stakes shall comprise 60mm diameter pressure-treated softwood stakes, driven firmly into the ground on either side of the rootball and positioned so as not to penetrate or damage the root system.

The tree shall be centrally positioned between the stakes, with the above-ground height of the support system maintained at approximately one-third of the stem height, unless otherwise specified.

Mulching

Following planting, all trees shall receive a 75mm consolidated depth of woodchip or ornamental bark mulch, extending to at least the edge of the planting pit.

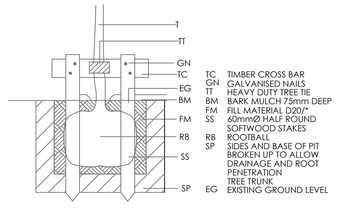
Mulch shall be maintained clear of the stem base to avoid collar rot and moisture retention against the bark.

Tree Aftercare and Establishment

Any necessary formative pruning shall be undertaken following planting in accordance with good arboricultural practice and the recommendations of British Standards Institution.

A planned maintenance and establishment programme shall be implemented and maintained until successful tree establishment has been achieved.

Tree Pit and Staking Detail (NTS)



Revisions		Dwn.	Date
A	1. Updated to rg+p Proposed Site Layout 103-495-RGP-XX-XX-DR-A-PL001-P09	cjn	06.11.26

Scale: 1:200 @ A1

0 1m 10m

Project

Proposed Residential Development THORNHILL AVENUE, BELPER

Drawing

Detailed Landscape Proposals

Status

For Planning

Date

12.09.2026

Dwg. No.	Revision	Drawn	Checked
26.2101.001	A	cjn	cjn

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