

Landscape Scheme

Grass Seeding Specifications and Prescriptions

Final Preparation of Soils: Any consolidated material is to be broken up to 300 mm depth and the top 50 mm of all soil reduced to a tilth suitable for final shaping with a grading blade (particle size 10 mm and below). All undesirable material brought to the surface including stones larger than 50 mm in any dimension, roots, tufts of grass and foreign matter is to be removed off site. Where the Contractor has contaminated the ground with cement slurry, oil, tar or any material harmful to plant life, soil shall be excavated to a depth of 1.0 m and removed off Site. Uncontaminated subsoil and topsoil shall be used for backfilling.

Conventional Sowing: sowing shall be carried out by evenly distributing the seed at a rate of not less than 20 g/m² for side slopes of embankments and cuttings and not less than 15 g/m² elsewhere. Sowing shall be immediately followed by lightly raking the surface of the soil to cover the seeds, by use of a chain harrow or other suitable plant.

Establishment Cuts: The first mowing shall be carried out once the grass has reached a height of 100 mm, the second and any subsequent establishment cuts when it has re-grown to 100 mm.

Wildflower Planting Specifications and Prescriptions

Site Preparation: The aim is to produce a firm weed-free tilth to promote healthy germination. Subsoils often provide weed-free areas with a low nutrient status and are therefore suitable for wild flora planting. It is occasionally necessary to remove the topsoil in areas of high fertility (this can be sold to raise revenue) as these soils tend to promote the growth of more vigorous grasses and pernicious weeds. To remove docks, thistles, nettles and weed grasses; the site should be treated with a systemic herbicide (following the manufacturers instructions) prior to seed bed cultivation.

Sowing: Sowing can take place throughout most of the year, providing a good tilth can be prepared, however the months of March/April and August/September are generally the most suitable.

- Mix seed - regularly mix to ensure even species distribution
- Drill/broadcast - calibrate sowing device
- Rate - 5 g/m² mixtures with grass or 0.5 - 1.0 g/m² pure wild flower mixtures
- Sand - bulk up small seeding rates with 4 parts silica sand to one part seed by weight
- Raking/harrowing - mix seed into soil (depth approx 0.5 cm)
- Ring Roller - use Cambridge roller to firm seed bed

1st Year Maintenance: The requirement in the first year is to control weeds and reduce competition from grasses. Cut the sward to a height of 5cm every two months or when the sward reaches 15cm. Remove all cut material to avoid smothering the sward. Where persistent weeds are a problem, spot treat with herbicide or dig-out.

Future Maintenance: The sward should be well established after the first 12 months and contain a diverse range of species. Cut to 7.5cm during March/April and remove cuttings. The second cut should take place at the end of the flowering season during August/September (the flowering period may alter slightly according to climatic conditions) Remove all cuttings or use as hay. The site may require further cuts in the autumn period to remove untidy growth in an extended growing season.

Tree Planting Specifications and Prescriptions

Tree Planting will be in accordance with: *BS 8545:2014 Trees: from nursery to independence in the landscape - Recommendations*

Preparation of Ground Conditions for Planting Site

- Survey existing soil conditions. The subsoil and topsoil should have good physical structure
- Any compaction of the soil environment should be de-compacted over as larger area of the planting site as possible.
- Where the soil environment is in such a condition that would limit or restrict good tree growth topsoil should be imported into the site and spread and cultivated into the planting site. The top soil specification should be in accordance with BS 3882:2015 Specification for Top Soil
- Each allocated spot for tree planting should be weed free. A minimum of 1m diameter is recommended

Planting Season (when to plant)

- All new tree planting should be carried out during the dormant season. November through to March is the most favourable period for tree planting.
- Planting during hard frosts should be avoided

Plant Storage and Handling following Delivery

- Specification of nursery stock on delivery should be in accordance with the recommendations of BS3936-1: 1992 Specification for Trees and Shrubs
- During periods of storage bare rooted plants should be firmly heeled in to a prepared trench spreading the roots and covering with peat or topsoil.

Tree Pits

- Tree planting pits should be double the width of the root spread or pot size.
- The depth of the tree planting pit should be at least 1.5 times the depth of the roots or pot
- The bottom and sides of the pit should be forked to break up the subsoil
- Excavated soil should be replaced with a suitable growing medium such as topsoil or planting compost

Staking/Support

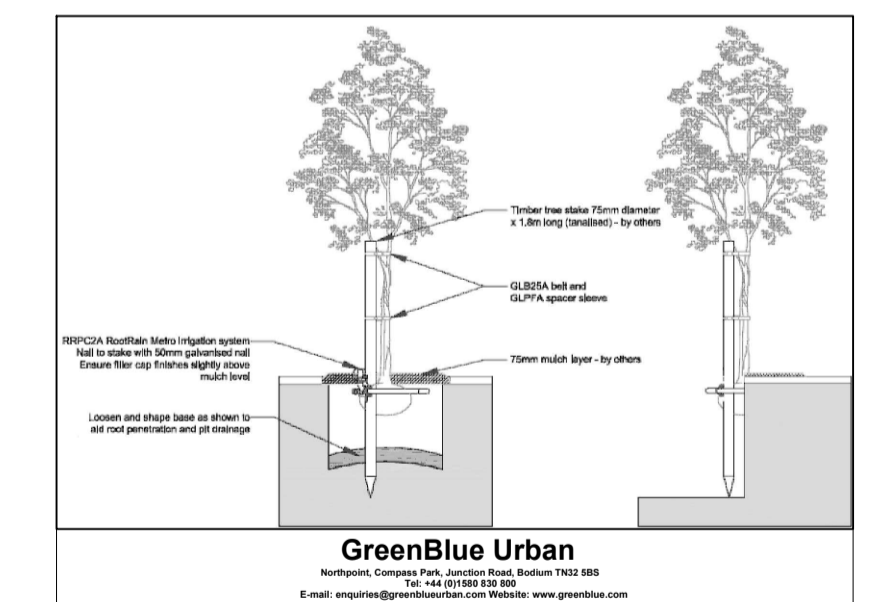
- Standard trees to be staked using 75mm diameter posts, treated to have a useful life expectancy of two years
- Posts to be driven into the ground 300mm below the bottom of the prepared pit windward side of the tree. Larger trees may need two stakes and a tie from each stake to the tree or two stakes a crossbar and a tie. For planting on sloping land a slanting stake on the high side may be required.

Planting

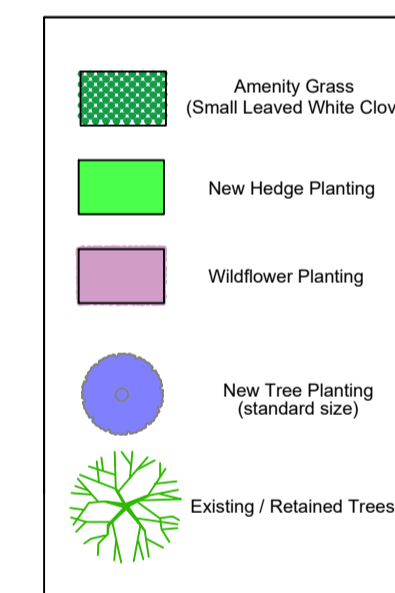
- Trees should be planted at the original root collar depth with allowance made for soil settlement
- Trees should be positioned centrally within the pit, the stem in an upright position.
- The pit should be backfilled with a suitable topsoil/compost, mixed planting medium
- Lightly firm backfill soil to ensure close contact with roots and to ensure roots are held secure within the soil
- Secure each tree to the top of the stake including a rubber spacer between the stake and the tree stem
- Mulching can be used to conserve soil moisture and suppress weed growth. A mulch bed should be spread 150mm beyond the perimeter of the tree pit, settled to a depth of 75mm. Mulch to be used should be free from any contaminants
- Same day as planting water in with 20 litres

Establishment/Aftercare

- Suppress weed growth in an area at least 150mm beyond the perimeter of the tree pit
- Suspected nutrient deficiency should be corrected with the use of a suitable regime of fertilizer
- Prune damaged/diseased branches
- During periods of dry/drought conditions a regime of watering should take place with total wetting of the rooting volume
- Adjust stakes and ties as necessary and especially check tree stability following adverse weather conditions



Key & Planting Specification

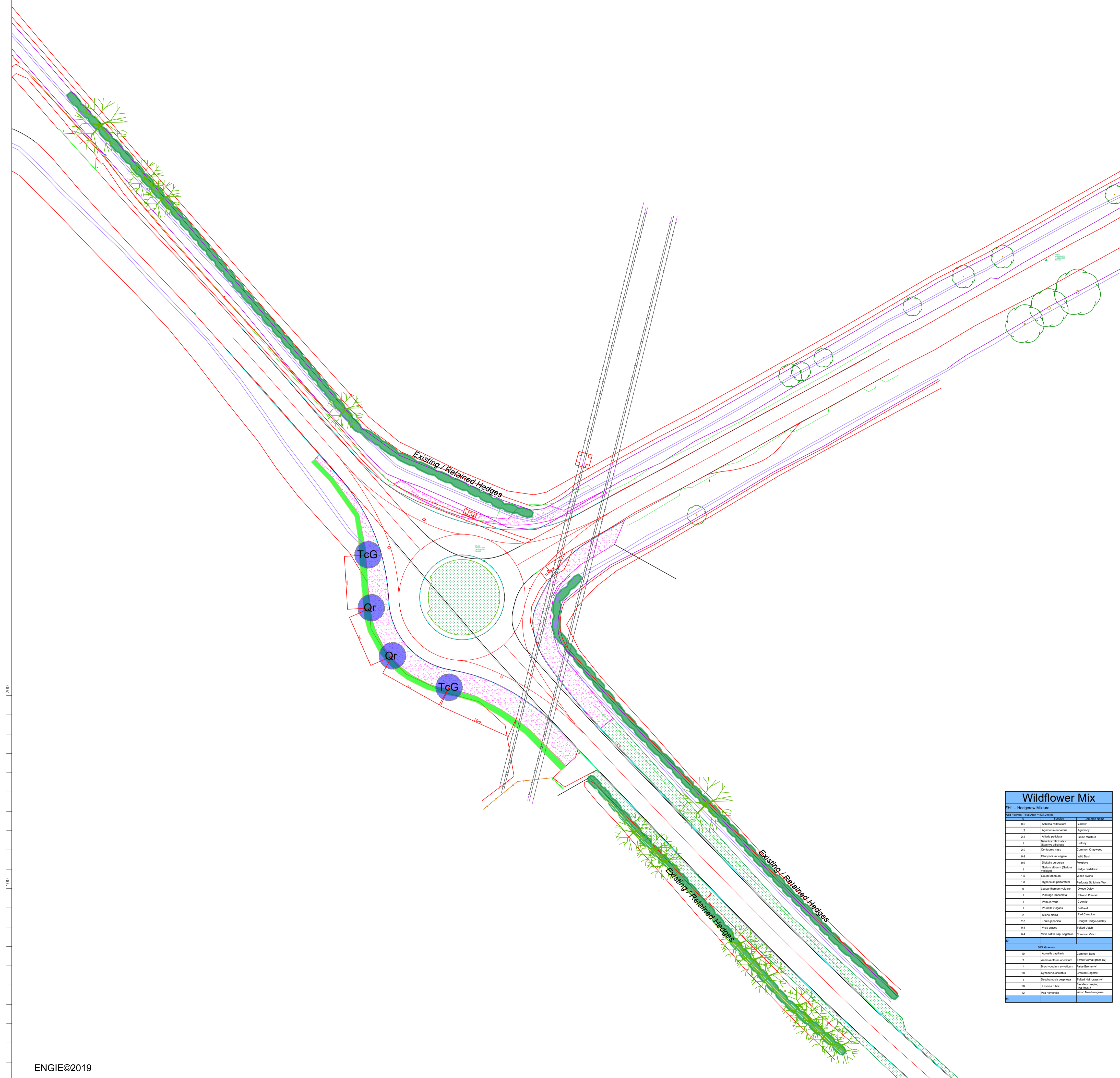


Standard Trees - Tree Species and Sizes					
Tree Code	Tree Species	Botanical Name	Girth 1 (measured above ground level)	Pot Size	Approx Height
Qr	Common Oak	<i>Quercus robur</i>	12 - 14cm	65 - 100 Litre	4 - 5m
TcG	Small Leaved Lime Greenaspire	<i>Tilia cordata</i>	12 - 14cm	65 - 100 Litre	4 - 5m

Amenity Grass - total area: 957.9sq m			
Type	Common Name	Botanical Name	Seeds per Gram
Grassland Perennial	Small Leaved White Clover	<i>Trifolium repens</i>	1400

New Hedgerow Density Mixture (gapping up)					
Common Name	Botanical Name	Density (%)	Stock Type	Size (cm)	Planting Method
Hawthorn	<i>Crataegus monogyna</i>	30%	Bare Root	60-80	6 plants per metre planted in a double staggered row protected by a spiral guard
Blackthorn	<i>Prunus spinosa</i>	30%	Bare Root	60-80	
Hazel	<i>Corylus avellana</i>	20%	Bare Root	60-80	
Dogrose	<i>Rosa canina</i>	10%	Bare Root	60-80	
Holly	<i>Ilex aquifolium</i>	10%	Bare Root	60-80	

Wildflower Mix			
Seed Weight (g)	Species	Common Name	Germination Notes
0.5	<i>Actinotriphylon</i>	Yarrow	
1.2	<i>Agrostis scabra</i>	Agrostis	
2.5	<i>Milium pectinatum</i>	Sheep's Fescue	
1	<i>Stachys recta</i>	Stachys	
2.0	<i>Trifolium repens</i>	Common Clover	
0.4	<i>Strophium vulgare</i>	Wild Basil	
0.8	<i>Digitalis purpurea</i>	Foxglove	
1	<i>Hypericum perforatum</i>	St. John's Wort	
1.5	<i>Scilla maritima</i>	Sea Anemone	
1.0	<i>Hypericum perforatum</i>	St. John's Wort	
0	<i>Asperula cynosuroides</i>	Queen Daisy	
1	<i>Plantago lanceolata</i>	Plantain	
1	<i>Prunella vulgaris</i>	Selfheal	
2	<i>Stemella dioica</i>	Red Campion	
2.0	<i>Trifolium repens</i>	Common Clover	
0.4	<i>Viola tricolor</i>	Field Vetch	
0.4	<i>Vicia sativa ssp. sativa</i>	Common Vetch	



ARBORICULTURAL CONSULTANCY

New Oxford House
George Street
Grimbsby
North East Lincolnshire
DN31 1HB
Tel: 01472 324271

CLIENT	North East Lincolnshire Council		
PROJECT	A18 Road Safety Scheme Scheme 3 - A18 / Waltham Road Junction		
TITLE	Landscape Plan		
DRAWN	AH	CHECKED	APPROVED
DATE	21/11/2019	ORIGINAL SIZE	SCALE
		A1 (594 x 841)	1:500
FILE REF	DRAWING No.	REVISION NO	
AH-ENGIE	LP-01-121119		