

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the type of work detailed on this drawing, note the following:

CONSTRUCTION

MAINTENANCE/CLEANING

DECOMMISSIONING/DEMOLITION

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

Key

- Planning Application Boundary
- N.B. Planting shall not be carried out in this area
- Proposed grass seeding to re-graded profile slopes formed from compacted granular fill with 100mm minimum topsoil and grass seeding as per schedule below. For details of earthworks, refer to Engineers drawings
- Proposed Wildflower
- Proposed Individual Trees (within hedgerow). See schedule opposite
- Proposed Hedgerow
- See schedule opposite
- Proposed Strip Planting
- See schedule opposite
- Area outside of ownership/lease. No proposals in this area

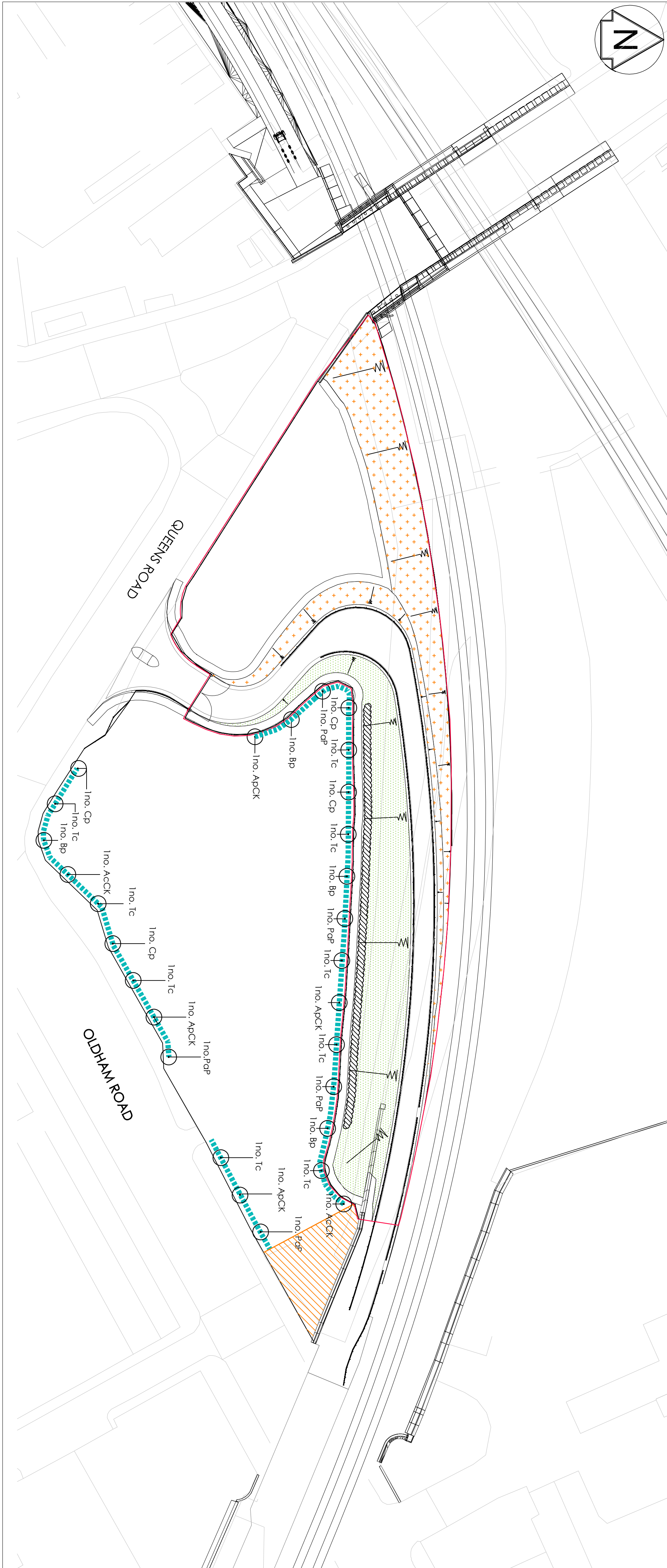
DO NOT SCALE

NOTES

- Do not scale from the drawing.
- This drawing is to be read in conjunction with all relevant Ecological and Environmental Impact Assessment Reports and the following documents: WILSHED, J24/89/1-4 Queens Road
- The drawing is for planning purposes only and not for construction.
- Existing boundary treatments to site extents to be retained in situ.
- Review for conflicts. No tree and shrub planting has been shown in direct line with utilities. The following recommended offsets cannot be notched while providing valuable boundary screening so the design throughout for trees and shrub planting and a root barrier will be installed to all trees and shrub planting.
- Recommended offsets:
 - Gas pipelines - do not plant trees within 10m and shrubs within 5m
 - Water pipelines - do not plant trees or shrubs within 5m.
 - Electricity cables - do not plant trees within 2m and shrubs within 1m.
 - Communication cables - do not plant trees within 5m or shrubs within 1m.
- Overhead transmission lines - do not plant trees within 10m of line Do not plant trees closer than 5m to poles and shrubs closer than 3m.
- All works to be carried out in accordance with latest British Standards and relevant legislation.
- Discrepancies on/d or contradictions between this drawing and information given elsewhere must be reported immediately to the office for clarification before proceeding.
- IMPORTED TOPSOIL**
 - Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work. Standard to BS 3883. Certification: (impalpable) - grade within the parameters of sandy loam
- GRAISING SUBSOIL**
 - General grade to smooth flowing contours to achieve specified loosening. Light and non-cohesive subsoil: when ground conditions are reasonably dry, loosen thoroughly to a depth of 300 mm. Still clay and cohesive subsoils: when ground conditions are reasonably dry, lightly scarify to promote free drainage. Areas of thicker topsoil: excavate locally. Avoid over compaction.
- QUALITY OF SEED FOR ALL GRASSES AREAS**
 - Freshness: Predicted for the current growing season.
- SOWING**
 - Seed: Establish good seed contact with the root zone. Method: (To suit soil type, proposed slope, location and weather conditions during and after sowing).
 - Distribution: (2 equal sowings of right angles to each other and below)
 - Seeding rate - To manufacturers recommendations - as per schedule
- GRASS SOWING SEASON**
 - Grass seed generally: April to June or August to October. Grass areas to have 150mm depth of topsoil throughout
- WILDFLOWER SEED**
 - Product: Embrace Seeds B.V.1 Basic General Purpose Meadow Mixture or similar subject to comment
 - Sowing Rate: 4g/m² To ensure seed bed, remove any weeds using repeated cultivation or an approved herbicide. Rake to produce a medium fine and/or fine seed to produce a firm surface. NOTE: Wildflower to be seeded on subsoil not highly fertile topsoil
 - Seeding: To be carried out in rows or bands to ensure even distribution and avoid turning out clumps the seed into two or more parts and sow in overlapping sections. Do not incorporate or cover the seed but firm in with a roll, or by heading, to give good soil seed contact.
 - Throughout the first year of establishment to a height of 40-60mm, removing cuttings if dense. This will control annual weeds and help maintain balance between faster growing grasses and slower
 - Avoid cutting in the spring and early summer if the mature has been allowed to flower, then in mid-summer cut back and the cut vegetation back, set seed or collapse. This cut will reveal the developing meadow mature and give it the space it needs to develop.
 - Management Once Established:
 - Meadow grassland is not cut from spring through to late May/August to give the sown species an opportunity to flower.
 - After flowering in July or August take a 'hay cut': cut back with a scythe or mower and remove the hay. Leave the hay to dry and shed seed for 1-2 days then remove from site.
 - Mow or graze the re-growth through to late autumn/white to c. 50mm

- TIMES OF YEAR FOR PLANNING**
 - Deciduous trees and shrubs: Late October to late March.
- SHRUB PLANNING HITS**
 - Timing: Excavate (1-12) days (maximum) before planting.
 - Size: 150 mm wider than roots when fully spread and 300 mm deep.
 - Pruning/management: (break up to a depth of 150 mm.
 - Hedgerow Planting: Linear root barrier to be used due to the proposed identification of the site. GreenBlue Urban ReKool 400 or similar subject to comment, installed to manufacturers recommendations.
- PLANTS/TREES GENERAL**
 - All planting to be in accordance with the following British Standards: BS 5837:2012 Trees in relation to design, demolition and construction - recommendations
 - BS 5837:2012 Part 4: Guidance for general landscape operations.
 - BS 5837:2012 Part 4: Guidance for independence in the landscape - recommendations
 - Condition: Materially undamaged, sturdy, healthy and vigorous.
 - Appearance: Of good shape and without elongated shoots. Hardiness: Grown in a suitable environment and hardened off.
 - Free from pests, diseases, discoloration, weeds and physiological disorders. Budded or grafted points: bottom weeds.
 - Root system and condition: balanced with branch system.
 - Standard: (The national Plant Specification). Species: true to name.
 - Origin: provenance. (British provenance)
- MULCHING PLANNING HITS**
 - Material: (Fine grade bark mulch). Purity: free of roots, stones, twigs and weeds, recycled content: 100% (minimum) to BS EN12421.
 - Preparation: Clear all weeds. Water soil thoroughly.
 - Coverage: 75 mm depth.
 - Finished level of mulch: 50 mm below adjacent grassed or paved areas).
- TREE FITS**
 - Size: 75 mm deeper than root system and wide enough to
 - allow roots to spread freely (full spread).
 - Spacing: Grass: Minimum 500 mm and vertical sides with no less than minimum depth throughout.
 - Fit: Bottoms with slightly raised centre. Break up to a depth of 1200 mm).
 - Treatment: [Soil ameliorant worked into pH bottom]. Fit: Sides: Softly. Backfilling material: [Backfill with topsoil + ameliorant compost to slow release fertiliser].
 - Staking position: Close to base on windward side and drive
 - into ground to a depth of 300 mm to bottom of all side planting.
 - Backfilling: consolidate material around stake
 - Height of stakes: Cut to approximately 1200 mm above ground level. [at least two ties] within 25 mm of top of stake.
 - Root barrier to be used with all tree planting. GreenBlue Urban ReKool 1000 or similar subject to comment.

- MANAGEMENT OF INVASIVE SPECIES**
 - Specialist ecological advice to be obtained for the control and management of any invasive species.



PLANTING SCHEDULE

TREES

To be planted within the hedgerow as shown on the drawings

RB: Root ball

	Botanical Name	Common Name	Form	Girth in cm	Overall Height/Spread (cm)	Clear Stem (cm)	Root Condition/Pol Size	Spacing	Total
ACCK	Acer campestre	Crimson King	Standard EH	16-18	400-450	mm 200	RB	As Shown	6
Bp	Betula pendula	Norway Maple	Standard EH	16-18	400-450	mm 200	RB	As Shown	5
Cp	Cotoneaster pumila	Hawthorn	Standard EH	16-18	400-450	mm 200	RB	As Shown	4
PpP	Prunus oxyura	Thorn	Standard EH	16-18	400-450	mm 200	RB	As Shown	6
Tc	Tilia cordata	Small leaved Lime	Standard EH	16-18	400-450	mm 200	RB	As Shown	9

SHRUBS

Cornus Mx - To be planted in swathes of the different species. Groupings to be of varying sizes.

	Botanical Name	Common Name	Spacing/centre	% Mix	Overall Minimum Height in cm	Root Condition: B=Bagged/Bare Root; R=Rootball; C=Container in litres; Ce=Cell Grown	Habit	Planting groups	Total
	Cornus alba 'Aurea'	Golden Tortuosan D	3/m2	25%	60-80	CsL	Branching	3-10	82
	Cornus alba 'Sibirica'	Red Stemmed	3/m2	25%	60-80	CsL	Branching	3-10	82
	Cornus sericea 'Horticomae'	Golden Yellow Twig	3/m2	25%	60-80	CsL	Branching	3-10	82
	Cornus sanguinea	Midwinter Red Dogwood Midwinter	3/m2	25%	60-80	CsL	Branching	3-10	82

HEDGEROW TYPE B - NATIVE BEECH/HORNBEAM HEDGEROW

With individual trees planted within the hedgerow - please refer to tree schedule above

B: Bare Root

	Botanical Name	Common Name	Plants per linear metre	% Mix	Form/Habit	Age /Condition or Number of Times Trans- planted	Overall Minimum Height in cm	Root Condition: B=Bagged/Bare Root; R=Rootball; C=Container in litres; Ce=Cell Grown	Planting groups	TOTAL
	Carpinus betulus	Hornbeam	5	50%	Transplant	1+1	60-80	B	3-15	520
	Fagus sylvatica	Beech	5	50%	Transplant	1+2	60-80	B	3-15	520

GRASS SEED

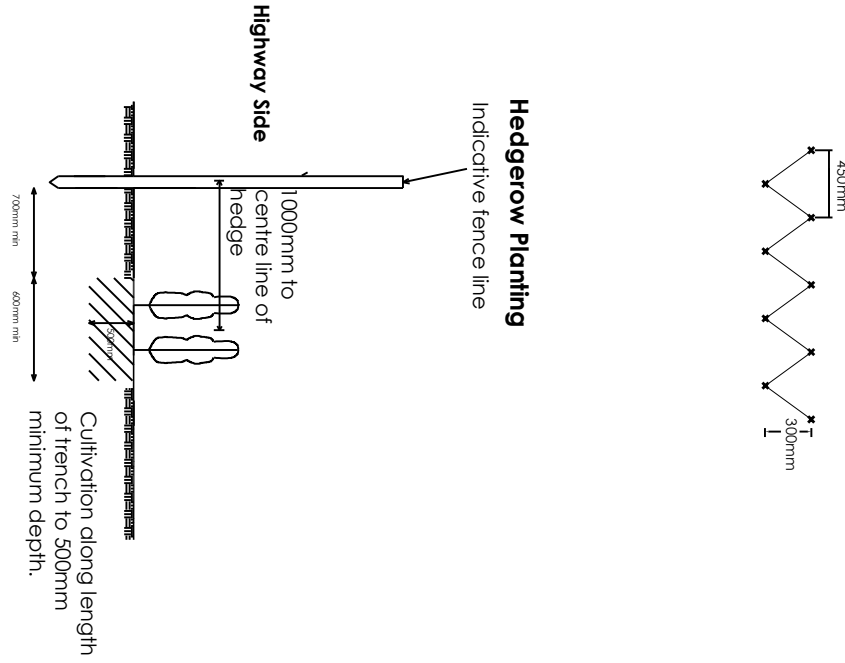
Germinale Seeds A3 Embankments' Mix or similar subject to comment

Sowing Rate - 50g/m²

WILDFLOWER SEED

Embrace Seeds B.V.1 Basic General Purpose Meadow Mixture or similar subject to comment

Sowing rate: 4g/m²



Project Title: Transpennine Route Upgrade W1A Miles Planting Curve Embankment

Drawing Title: Landscape Softworks Plan

Scale: 1:500

Original Size: A1

Drawing Number: 5185387-ATK-XX-DR-L-0001

Revision: P04

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Project Information:

REQ	16/12/20	OWNER TO SPECIFY: T1/A	NC	SW	CS
REQ	20/08/20	FOR INFORMATION	NC	SW	CS
REQ	22/07/20	FOR INFORMATION	NC	SW	CS
REQ	07/05/20	FOR INFORMATION	NC	SW	CS

Drawing Status: FOR INFORMATION

By: Chg

Appr: S2