north

REDWITHER ROAD

OAK ROAD

Power Station

33.0m

The Oaks

Redwither Brook

Track

Pond

FB

Pumping Station

Clywedog)

AFON CLYWEDOG / RIVER CLYWEDOG

Co Const, P Const & Fp Bdy

see continuation

LANDSCAPE MASTERPLAN

0 10 20 30 40 50 60 70 80 90 100

SCALE 1:1250 (A1)
SCALE 1:2500 (A3)
METRES

The masterplan indicates the proposed removal of scrub and restoration of open mosaic, grass and wildflower habitat that could be gradually achieved over a ten year period.

A phased approach to the habitat restoration would minimise disturbance to local fauna and allow wildlife to relocate as scrub is cleared.

The approach to habitat restoration is detailed in the Landscape and Ecological Management Plan.

Trees of good form and condition that are encountered during the scrub clearance works will be retained where appropriate to provide longevity to the tree population. This will also retain visual and habitat links to the woodland and scrub habitat to the perimeter of the site.

Notes

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2. Centre of site is located at approximately grid reference SJ 38740 49238.
3. Drawing must be reproduced in colour.

Location Plan



Legend

- EXISTING TREES TO BE RETAINED
- EXISTING TREES - ROOT PROTECTION AREA
- EXISTING TREE TO BE REMOVED
- EXISTING AREAS OF SCRUB HABITAT TO BE RETAINED
- EXISTING AREAS OF SCRUB HABITAT TO BE REMOVED
- EXISTING AREAS OF SPECIES RICH GRASSLAND
- EXISTING AREAS OF OPEN MOSAIC HABITAT
- EXISTING WATER FEATURE RETAINED
- EXISTING WATER FEATURE TO BE REMOVED
- PROPOSED UNIT/BUILDING
- PROPOSED NATIVE SPECIES STANDARD DECIDUOUS TREE
- PROPOSED NATIVE SPECIES SHRUB PLANTING
- PROPOSED ORNAMENTAL SHRUB AND HERBACEOUS PLANTING
- PROPOSED NATIVE MIXED SPECIES HEDGING
- PROPOSED NATIVE SPECIES WILDFLOWER AND GRASS MIX
- PROPOSED NATIVE GRASS MIX
- PROPOSED SHORT AMENITY GRASS MIX
- PROPOSED SWALE / ATTENUATION
- PROPOSED RESTORATION OF SPECIES RICH GRASSLAND AND MOSAIC HABITAT
- PROPOSED FOOTPATHS
- PROPOSED BOARDWALK/GRAVEL PATH TO PICNIC AREA
- PROPOSED ELECTRIC GATE/PARKING
- PROPOSED PERIMETER FOOTPATH
- PROPOSED PERMISSIVE FOOTPATH

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Project	THE OAKS, OAK ROAD WREXHAM INDUSTRIAL ESTATE	**Dwg No**	311/LAND/L/104	**Revision**	P02
Title	LANDSCAPE MASTERPLAN PROPOSED SITE AND NATURE RESERVE YEAR FIFTEEN	**Scale**	1:1250 @ A1 / 1:2500 @ A3	**Date**	19/05/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	07/02/2025	PRE-APPLICATION CONSULTATION	MD	XXXX	MD
P02	19/05/2025	PLANNING APPLICATION	MD	XX	MD

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north

See detail drawing 311/LAND/L/106

Redwither Brook

REDWITHER ROAD

Sta

EM2

EM1

A2

EG8

EG1

See detail drawing 311/LAND/L/109

See detail drawing 311/LAND/L/107

See detail drawing 311/LAND/L/108

OAK ROAD

LANDSCAPE MASTERPLAN

0 10 20 30 40 50

SCALE 1:500 (A1)
SCALE 1:1000 (A3)
METRES

Notes

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Legend

- EXISTING TREES TO BE RETAINED
- EXISTING TREES - ROOT PROTECTION AREA
- EXISTING AREAS OF SCRUB HABITAT TO BE RETAINED
- EXISTING AREAS OF SPECIES RICH GRASSLAND
- EXISTING AREAS OF OPEN MOSAIC HABITAT
- EXISTING WATER FEATURE RETAINED
- EXISTING WATER FEATURE TO BE REMOVED
- PROPOSED UNIT/BUILDING
- PROPOSED NATIVE SPECIES STANDARD DECIDUOUS TREE
- PROPOSED NATIVE SPECIES SHRUB PLANTING
- PROPOSED ORNAMENTAL SHRUB AND HERBACEOUS PLANTING
- PROPOSED NATIVE MIXED SPECIES HEDGING
- EM1 / 2 — PROPOSED NATIVE SPECIES WILDFLOWER AND GRASS MIX
- EG1 — PROPOSED NATIVE GRASS MIX
- A2 — PROPOSED SHORT AMENITY GRASS MIX
- EG8 — PROPOSED SWALE / ATTENUATION
- PROPOSED RESTORATION OF SPECIES RICH GRASSLAND AND MOSAIC HABITAT
- PROPOSED FOOTPATHS
- PROPOSED SITE ROADS AND PARKING
- PROPOSED BENCH SEATING

PROPOSED SEEDING FOR GRASS LAWNS, EDGES TO HARD STANDING, FOOTPATHS
Grass seed to grass lawn to be Germinal Amenity A2 Quality lawn mix or equivalent product sown at 500kg/ha or 50g/m2/
General grass mix to swale / attenuation and cut during the summer months
Emorsgate EG8 Meadow Grass Mixture for Wet Soils or equivalent - to swales and attenuation pond
Sown at 50kg/ha 20kg/acre 5g/m2/
General grass areas maintained with differential mowing and cut 3-5 times per year
Emorsgate EG1 General Purpose Meadow Grass Mixture or equivalent
Sown at 50kg/ha 20kg/acre 5g/m2/
Wildflower and Grass Verge along Oak Road
Emorsgate EM1 Basic General Purpose Meadow Mixture or equivalent
Sown at 40kg/ha 16kg/acre 4g/m2/
Meadow within the site
Emorsgate EM2 Standard General Purpose Meadow Mixture or equivalent
Sown at 40kg/ha 16kg/acre 4g/m2/

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Project	THE OAKS, OAK ROAD WREXHAM INDUSTRIAL ESTATE	**Dwg No** 311/LAND/L/105	**Revision** P02
Title	LANDSCAPE PROPOSALS PLAN PLANTING AND SEEDING PLAN	**Scale** 1:500 @ A1 / 1:1000 @ A3	**Date** 19/05/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	07/02/2025	PRE-APPLICATION CONSULTATION	MD	XX	XX
P02	19/05/2025	PLANNING APPLICATION	MD	XX	MD

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north

REDWITHER ROAD

Non-vigorous low maintenance grass mix to rear of fence with scrub kept pruned back

Existing scrub and two mature oak retained

clearance TBC

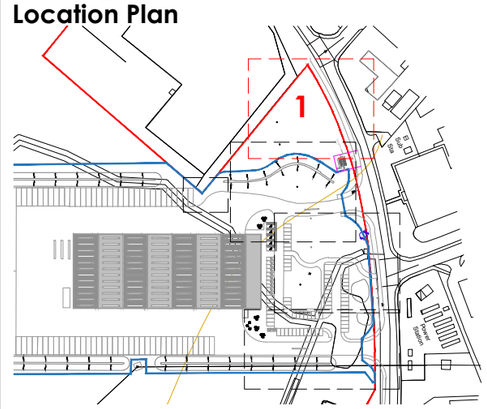
Proposed substation location

see dwg 311/LAND/L/107

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Location Plan



PLANTING PLAN SHEET 1

0 1 2 3 4 5 6 7 8 9 10

SCALE 1:125 (A1)
SCALE 1:250 (A3)
METRES

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Project	THE OAKS, OAK ROAD WREXHAM INDUSTRIAL ESTATE	**Dwg No**	311/LAND/L/106	**Revision**	P02
Title	LANDSCAPE PROPOSALS PLAN PLANTING PLAN SHEET 1	**Scale**	1:125 @ A1 / 1:250 @ A3	**Date**	19/05/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	07/02/2025	PRE-APPLICATION CONSULTATION	MD	XX	XX
P02	19/05/2025	PLANNING APPLICATION	MD	XX	MD

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north

Existing scrub and two mature oak retained

Proposed substation location

Mix EM5

2 Field maple (Acer campestre)

250 Camassia quamash

MIXED NATIVE SPECIES HEDGEROW
65% Hawthorn (Crataegus monogyna)
13% Hazel (Corylus avellana)
9% Field maple (Acer campestre)
7% Elder (Sambucus nigra)
6% Holly (Ilex aquifolium)
Pedunculate oak (Quercus robur)
planted as hedgerow trees

NATIVE SPECIES HEDGEROW 22.7m
100% Field maple (Acer campestre)

5 Cornus 'Midwinter Fire'

BED 1 - MIX B 62.5m²

2 groups of 3 Taxus baccata to form low domes

3 Acer campestre 'William Caldwell'

4 Prunus avium 'Plena'

Mix EM5

PLANTING PLAN SHEET 2

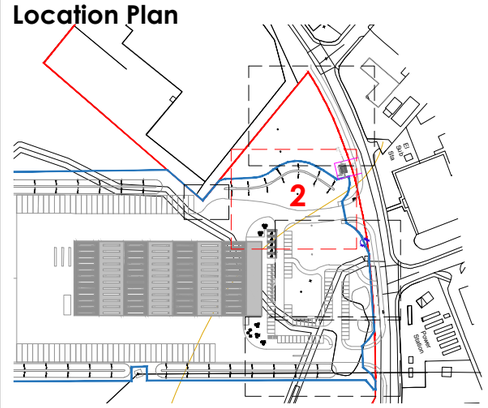
0 1 2 3 4 5 6 7 8 9 10

SCALE 1:125 (A1)
SCALE 1:250 (A3)
METRES

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Location Plan



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Project	THE OAKS, OAK ROAD WREXHAM INDUSTRIAL ESTATE	**Dwg No**	311/LAND/L/107	**Revision**	P02
Title	LANDSCAPE PROPOSALS PLAN PLANTING PLAN SHEET 2	**Scale**	1:125 @ A1 / 1:250 @ A3	**Date**	19/05/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	07/02/2025	PRE-APPLICATION CONSULTATION	MD	XX	XX
P02	19/05/2025	PLANNING APPLICATION	MD	XX	MD

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north

MIXED NATIVE SPECIES HEDGEROW
65% Hawthorn (Crataegus monogyna)
13% Hazel (Corylus avellana)
9% Field maple (Acer campestre)
7% Elder (Sambucus nigra)
6% Holly (Ilex aquifolium)
Pedunculate oak (Quercus robur)
planted as hedgerow trees

250 Narcissus pseudonarcissus

Mix EM2 to verge

500 Crocus tommasinianus

7 Prunus avium 'Plena'

2 Prunus avium 'Plena'

Mix EM5

BED 2 - MIX A 22.8m²

MIXED NATIVE SPECIES HEDGEROW
65% Hawthorn (Crataegus monogyna)
13% Hazel (Corylus avellana)
9% Field maple (Acer campestre)
7% Elder (Sambucus nigra)
6% Holly (Ilex aquifolium)
Pedunculate oak (Quercus robur)
planted as hedgerow trees

Mix EM2 to verge

500 Crocus tommasinianus

4 Pendunculate oak (Quercus robur)

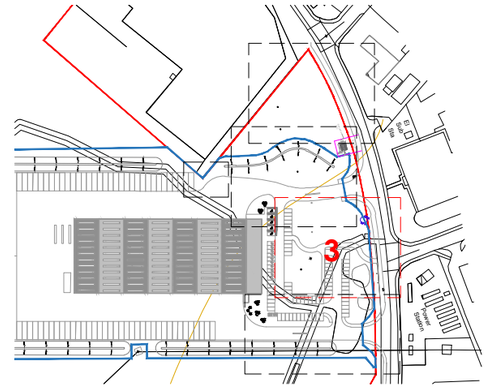
Mix EM5

EV ONLY

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Location Plan



PLANTING PLAN SHEET 3

0 1 2 3 4 5 6 7 8 9 10

SCALE 1:125 (A1)
SCALE 1:250 (A3)
METRES

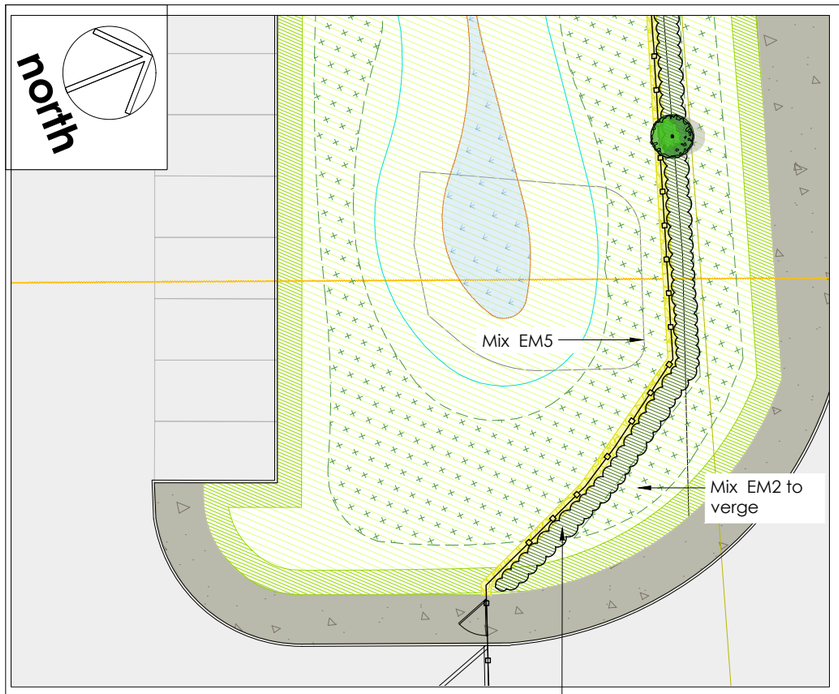
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Project	THE OAKS, OAK ROAD WREXHAM INDUSTRIAL ESTATE	**Dwg No**	311/LAND/L/108
Title	LANDSCAPE PROPOSALS PLAN PLANTING PLAN SHEET 3	**Scale**	1:125 @ A1 / 1:250 @ A3
		Revision	P02
		Date	19/05/2025

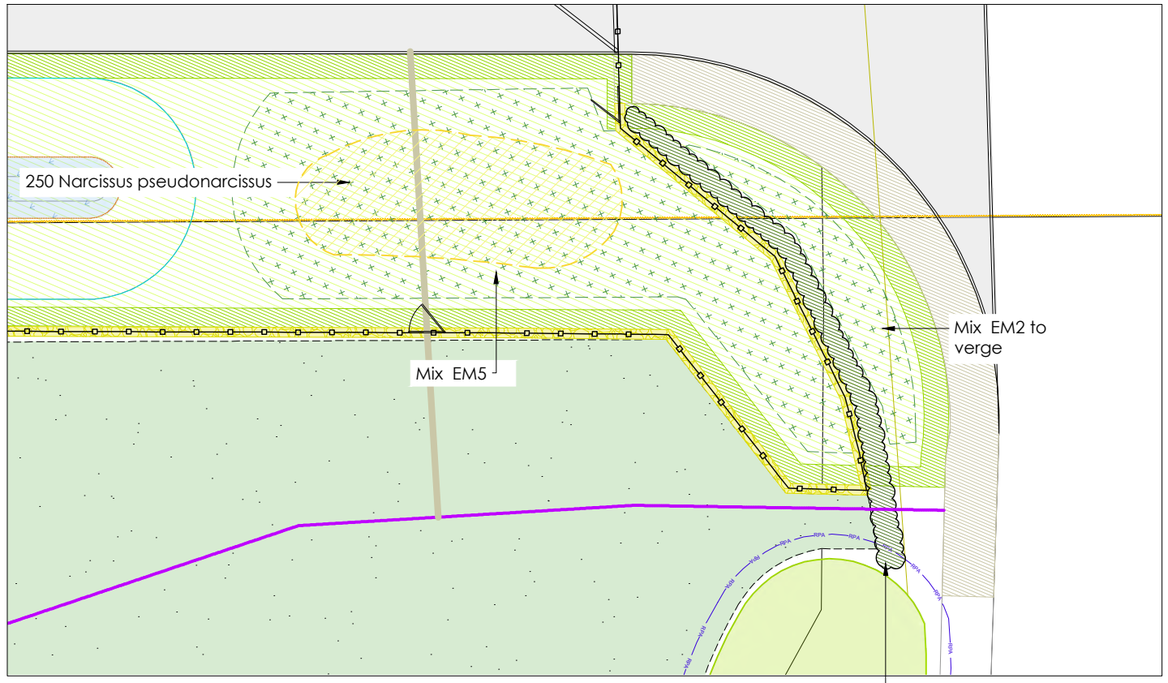
Revision	Date	Details	Drawn	Checked	Reviewed
P01	07/02/2025	PRE-APPLICATION CONSULTATION	MD	XX	XX
P02	19/05/2025	PLANNING APPLICATION	MD	XX	MD

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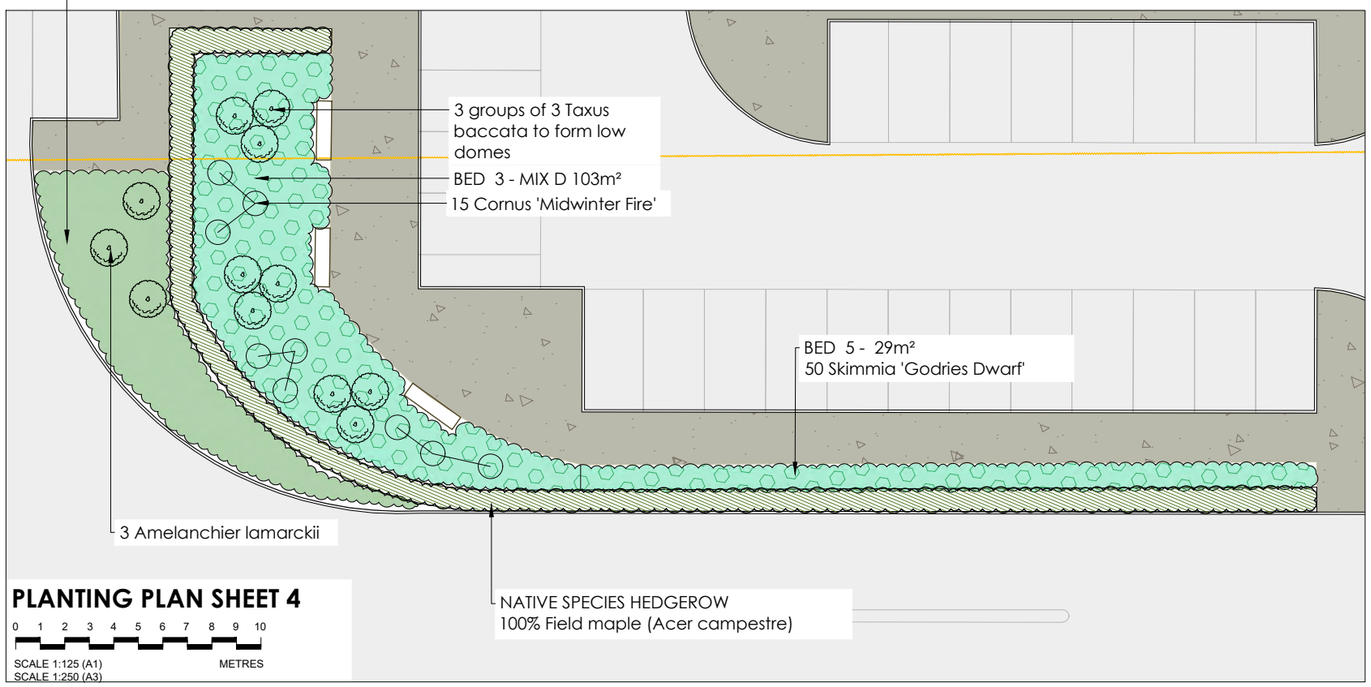


MIXED NATIVE SPECIES HEDGEROW
65% Hawthorn (Crataegus monogyna)
13% Hazel (Corylus avellana)
9% Field maple (Acer campestre)
7% Elder (Sambucus nigra)
6% Holly (Ilex aquifolium)
Pedunculate oak (Quercus robur)
planted as hedgerow trees

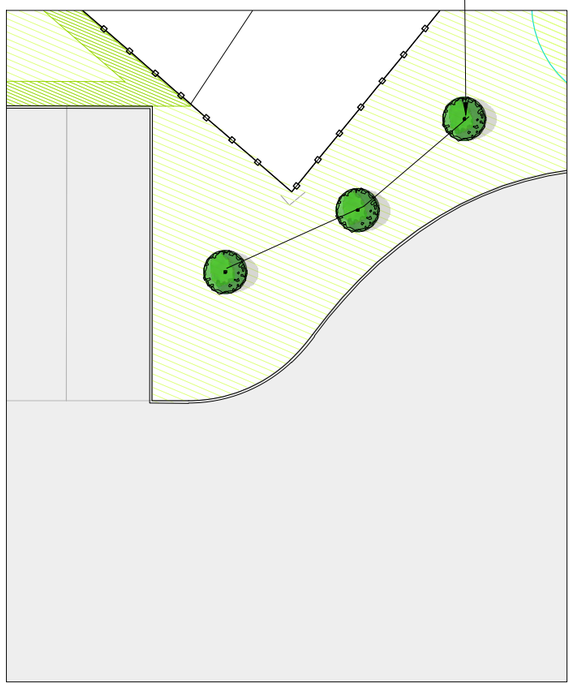


MIXED NATIVE SPECIES HEDGEROW
65% Hawthorn (Crataegus monogyna)
13% Hazel (Corylus avellana)
9% Field maple (Acer campestre)
7% Elder (Sambucus nigra)
6% Holly (Ilex aquifolium)

BED 4 - 55.5m²
50 Skimmia 'Godries Dwarf' to kerb edge
15 Cornus 'Midwinter Fire'
10 Cornus stolonifera 'Flaviramea'



3 Pedunculate oak (Quercus robur)



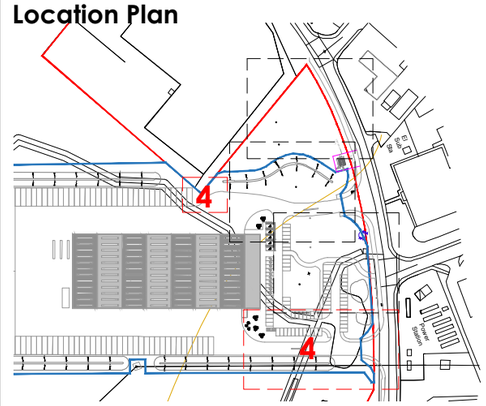
PLANTING PLAN SHEET 4

0 1 2 3 4 5 6 7 8 9 10
SCALE 1:125 (A1)
SCALE 1:250 (A3)
METRES

Notes

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Location Plan



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Project	THE OAKS, OAK ROAD WREXHAM INDUSTRIAL ESTATE	**Dwg No**	311/LAND/L/109	**Revision**	P02
Title	LANDSCAPE PROPOSALS PLAN PLANTING PLAN SHEET 4	**Scale**	1:125 @ A1 / 1:250 @ A3	**Date**	19/05/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	07/02/2025	PRE-APPLICATION CONSULTATION	MD	XX	XX
P02	19/05/2025	PLANNING APPLICATION	MD	XX	MD

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LANDSCAPE DESIGN

The soft landscaping of the site is designed to complement the wider natural habitat of the nature reserve and ecology area incorporating native species wildflower and grassland areas with seasonal bulbs for successional interest. Native species hedgerow planting with hedgerow trees defines the entrance, with additional tree planting within the site, to provide a landscape structure, complement the existing oak population and to enhance visual amenity at the site and frontage along Oak Road.

Planted areas have been designed to create focused areas at the building entrance, along footpath routes and within an employee garden area. The planted areas contain species that can be pruned annually to maintain a neat appearance and form an evergreen structure, with grasses, herbaceous planting and bulbs.

Wildflower and grass areas can be maintained for the benefit of wildlife utilising a differential mowing regime and short lawn areas to maintenance areas, fences, kerbs and hard standing. A short grass lawn is also included in the garden area to the north west corner of the site. Tree planting with mainly native species is proposed in hedgerows, planting beds and wildflower areas, to minimise risk of damage from grass cutting equipment and to maximise the potential rooting extent for establishment and growth. Grass seed mixes to the swales and attenuation ponds will be appropriate for seasonally wet ground conditions and infrequent mowing.

Hard landscape areas are to be permeable surfaces to aid site drainage and allow growth of tree roots. Further details are given in the drainage strategy.

LANDSCAPE SPECFICATION AND IMPLEMENTATION

GENERAL

All planting to comply with BS3936 relevant parts for Nursery Stock

All pre-planting, site preparation, planting and post planting maintenance shall be carried out in accordance with BS4428:1989 Code of Practice for General Landscape Operations

All trees shall be positioned in accordance with BS5837:2012 Trees in Relation to Design, Demolition and Construction and BS 8545:2014 Trees: from nursery to independence in the landscape - Recommendations

The trees are to be located at least 5m from a building, underground or overhead services to allow sufficient room for establishment. Location of new trees to be refined on site.

SCHEDULE OF IMPLEMENTATION

The landscape reinstatement shall be carried out in the first available season after completion of construction

a) Soiling during April - October

b) Turfing during April - September when there is no risk of frost

c) Seeding during April to September when there is no risk of frost

d) Planting of trees and hedge plants during October - March

e) Planting of shrubs, herbaceous plants can be undertaken throughout the year, when weather and ground conditions are suitable.

f) Wildflower seeding late August to end of September.

g) Planting of bulbs November.

GROUND PREPARATION

Topsoil and sub-soil outside the Root Protection Area of trees that are to be retained, that is suitable for re-use in reinstatement, will be stripped before construction and stored on site.

All soiling works will be carried out in accordance with DEFRA Construction Code of Practice for the Sustainable Use of Soils on Construction Sites and British Standards for Topsoil (BS3882:2015) and Subsoil (BS8601:2013) for the stripping, handling, storage and spreading of soils.

At reinstatement:

All litter, debris and stone above 50mm in any dimension, construction debris and any other unwanted material will be removed from future grass seeding and turfing areas. Stones between 50-75mm are acceptable in planting and wildflower areas where they can be buried, do not protrude and can be soiled over. Surplus brick and stone may be retained for creation of hibernacula within the ecology area.

All areas to be planted, to receive 450mm depth soils for tree planting and 450mm depth for shrub herbaceous planting of which the upper 300mm shall be site sourced topsoil or imported topsoil to BS3882:2014 sandy loam class and the lower profile to be site sourced or imported free draining clean inert subsoils to BS8601:2013.

Subsoils to be placed for wildflower areas to form finished ground levels to 150mm deep, a shallow depth of topsoil or sand can be ameliorated into the seed mix to aid spreading of seed.

All areas to be seeded with grass for lawn areas or to receive turf, to receive topsoil to minimum 125mm depth.

PROPOSED SEEDING FOR GRASS LAWNS, EDGES TO HARD STANDING, FOOTPATHS

Grass seed to grass lawn to be Germinal Amenity A2 Quality lawn mix or equivalent product sown at 500kg/ha or 50g/m2/

45.0% CORAIL STRONG CREEPING RED FESCUE (Festuca rubra rubra)

25.0% BORLUNA SLENDER CREEPING RED FESCUE (Festuca rubra litoralis)

25.0% JOANNA CHEWINGS FESCUE (Festuca Rubra Commutata)

5.0% ABERROYAL BROWNTOP BENTGRASS (Agrostis capillaris)

First remove weeds using repeated cultivation. Plough or dig to bury any surface trash, then cultivate the soil with a rotovator, harrow or rake to produce a medium tilth. Ideally after this initial cultivation and levelling leave the ground to settle for several days or weeks. This will allow the soil to settle, after which any unevenness can be corrected. It also gives another opportunity to control any residual weeds which emerge during this time ('stale seedbed technique').

Lightly re-cultivate the surface, pick off any large stones or bricks, then rake and roll (or tread) the soil surface repeatedly in different directions, moving soil if needed to smooth out minor humps and depressions until you have a firm even surface. The final raking and rolling should produce a seed bed with a medium-fine tilth ready for seeding. Do not excessively stonepick as retaining some stone content will aid drainage. Place collected stones around the edge of the attenuation ponds in piles and in the ecology area and form into hibernacula.

Seed is best sown in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture in the soil. Carry out two equal sowings at right angles to each other and diagonally to main axis. Broadcast manually or use seed drill, rake level and roll. Ensure good seed to soil contact.

First Season Management

Once seedling grasses are established, (typically in good growing conditions about three to four weeks after sowing), lightly roll or tread to firm and level the soil around the grass roots ready for the first cut. (Do not roll however if the ground is saturated with water). Allow grass areas to establish to minimum 100mm before initial cut down to 75mm and thereafter cutting height between 15 -75 mm

Thereafter mow the new lawn regularly as needed, progressively reducing the mowing height over its first spring/summer to the desired height.

Management Once Established

Mow lawns regularly as required throughout the growing season (generally March - October).

General grass mix to swale / attenuation and cut during the summer months

Emorsgate EG8 Meadow Grass Mixture for Wet Soils or equivalent - to swales and attenuation pond

Sown at 50kg/ha 20kg/acre 5g/m^2

General grass areas maintained with differential mowing and cut 3-5 times per year

Emorsgate EG1 General Purpose Meadow Grass Mixture or equivalent

Sown at 50kg/ha 20kg/acre 5g/m^2

Wildflower and Grass Verge along Oak Road

Emorsgate EM1 Basic General Purpose Meadow Mixture or equivalent

Sown at 40kg/ha 16kg/acre 4g/m^2

Meadow within the site

Emorsgate EM2 Standard General Purpose Meadow Mixture or equivalent

Sown at 40kg/ha 16kg/acre 4g/m^2

Ground Preparation

To prepare a seed bed first remove weeds using repeated cultivation. Then plough or dig to bury the surface vegetation, harrow or rake to produce a medium tilth, and roll, or tread, to produce a firm surface.

Sowing

Seed is best sown in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture. 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, but firm in with a roll, or by treading, to give good soil/seed contact.

First Year Management

Most of the sown meadow species are perennial and are slow to establish. Soon after sowing there will be a flush of annual weeds, arising from the soil seed bank. These weeds can look unsightly, but they will offer shelter to the sown seedlings, are great for bugs, and they will die before the year is out. So resist cutting the annual weeds until mid to late summer, especially if the mixture contains Yellow Rattle, or has been sown with a nurse of cornfield annuals. Then cut, remove and compost. Early August is a good time. This will reveal the young meadow, which can then be kept short by grazing or mowing through to the end of March of the following year. Dig out any residual perennial weeds such as docks.

Management Once Established

Traditional meadow management based around a main summer hay cut in combination with autumn and possibly spring mowing or grazing.

Meadow grassland is not cut or grazed from spring through to late July/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, petrol strimmer or tractor mower to c 50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site.

Mow or graze the re-growth through to late autumn/winter to c 50mm and again in spring if needed.

PROPOSED PLANTING

Ground Preparation

All areas to be planted to be decompacted to ensure free drainage and soiled to required depths. Where necessary, if existing soils are not suitable, subsoil and topsoil shall be imported to ensure suitable and sufficient soils for plant establishment. screen topsoil should be avoided as this is unlikely to have nutrients and organic matter content.

PROPOSED TREE PLANTING

Prior to planting trees to north east of substation a tree root barrier must be installed to ensure separation between buried utilities and tree roots and to constrain future spread.

Install barrier such as Reroot Flat or Reroot Ribbed to 2mm thickness to 1m depth in accordance with Manufacturers recommendations where planted in the vicinity of buried services.

Excavate planting pits 200mm wider than rootball and to a depth to match the rootball plus 100mm; thoroughly break up sides and base to 250mm depth.

Retain subsoils for backfilling lower section of pit. Allow for laying 100mm depth clean angular gravel 50-75mm size for drainage.

Drive two 75mm dia stakes 150mm into base of pit and cut off 600mm above ground level; plant trees in an upright position. Install cross bar to the rear of the stem and secure tree to the support with hessian webbing to hold tree in upright position.

Backfill with subsoil excavated from the pit to within 300mm of finished ground level and tread in carefully around the roots. Backfill to ground level and to previous planting depth for tree with topsoil excavated from pit and additional imported topsoil as required; insert 4No slow release fertiliser tablets into backfill around roots per pit; backfill with in 150mm layers; completely fill air spaces around roots; backfill to ground level.

Spread medium grade bark mulch to 75mm depth to 1m dia to base of tree.

PROPOSED NATIVE SPECIES HEDGING

Hedge plants to be as per planting schedule.

Hedge to be planted at 5 plants per metre in a double staggered row planted in a trench, 100mm deeper than root zone and to full spread of roots.

Plants to be set to upright position and backfilled with as dug soils with additional imported topsoil as required to make up levels and well heeled in around the collar.

All plants to receive slow release fertiliser at time of planting at 35g per plant and well watered in.

Hedge base to receive bark mulch to 500mm wide after planting.

Plants to be protected with biodegradable guards and supported with cane or softwood stake and tie if damage from rabbits is considered to be an issue during establishment. Hedge to be pruned by degrees to allow gradually thickening out during first years of establishment to a height of 1.5m

PROPOSED ORNAMENTAL SHRUB PLANTING - TO FORM LOW HEDGE

Plants to be planted in pits/holes approx 50-100mm wider and deeper than pot size, backfilled with as dug soils and well watered in after planting.

Plants for ornamental hedge to be planted in a row and pruned by degrees to promote bushy growth and to 1m in height.

Plant species have been chosen to allow regular pruning to maintain views and form soft landscape edges to hard surface areas.

Planting to receive 75mm depth bark mulch on completion of planting.

PROPOSED HERBACEOUS PLANTING

Plants to be planted in pits/holes approx 50-100mm wider and deeper than pot size, backfilled with as dug soils and well watered in after planting.

Plants to be planted in groups of 3-7 of the same species.

Planting to receive 75mm depth bark mulch on completion of planting.

PROPOSED GROUNDCOVER PLANTING

Plants to be planted in pits/holes approx 50-100mm wider and deeper than pot size, backfilled with as dug soils and well watered in after planting.

Planting pits to be staggered to avoid straight lines.

Planting to receive 75mm depth bark mulch on completion of planting.

PROPOSED GROUNDCOVER PLANTING

Plants to be planted in pits/holes approx 50-100mm wider and deeper than pot size, backfilled with as dug soils and well watered in after planting.

Planting pits to be staggered to avoid straight lines.

Planting to receive 75mm depth bark mulch on completion of planting.

BULB PLANTING

Bulbs to be scattered in a random fashion within the areas shown on the planting plans and planted to twice their depth in herbaceous beds and in meadow areas.

750 Camassia quamash

1000 Crocus tommasinianus

500 Narcissus pseudonarcissus

TREE MOUNTED NEST BOXES AND BAT BOXES

Nest boxes and bat boxes are proposed to be installed on mature oak trees to mitigate for loss of trees to the site boundary.

MANAGEMENT AIMS

The site shall be managed as amenity and garden space with the aim to:

1) Maintain and enhance the biodiversity value of the site by having the objective to

a) Protect and maintain retained habitats within the site; and

b) Create a matrix of new complementary habitats including native species planting that are appropriate to the local surroundings.

2) Ensure a balanced approach to amenity use and wildlife benefit by having the objective to

a) Provide a safe and pleasant landscape setting for the new unit that enhances the appearance and character of the site and benefits the well being of employees and visitors; and

b) Create new habitat structures and foraging opportunities for invertebrates, birds, mammals and bats.

3) Monitor the site during establishment to ensure suitable and timely management interventions and plant replacements are undertaken.

Maintenance of soft landscape areas

Existing mature trees are to be regularly inspected for signs of disease, decay or other changes due to natural or man-made changes to the growing environment. An inspection by a qualified arboriculturist is recommended every two years.

Establishing native species standard trees

The establishment maintenance of the soft landscape areas shall allow for formative pruning of trees to promote a balanced crown and, where adjacent to access areas, ensure a head clearance above 2.5m. Pruning to trees should be undertaken in January / February. Tree guards, stakes and accessories should be checked and adjusted to allowed the continued healthy growth and establishment of the tree and removed after five years or when the tree is self-supporting, whichever is the sooner. Post holes should be filled with subsoil or topsoil.

Establishing native species hedgerow

The native hedgerow mix will be of a species rich composition to increase biodiversity value.

Hedgerow trimming and any formative pruning works will be carried out October to February to avoid the bird nesting season and allow flowering and fruiting of plants. Hedgerows will be maintained to encourage thickening growth and to reach the desired height gradually by increasing the cutting height of the hedge by small amounts each year. Incremental height increase is the key to the hedge management cycle, sympathetically allowing a hedgerow to progress slowly through its natural growth cycle without putting it under damaging stress. It also promotes a dense healthy hedgerow. Hedges shall be maintained to ensure sightlines are not impeded.

Proposed amenity grass/lawn

The short grass sward will be a low maintenance fescue mix suitable for regular cutting and hard wearing.

Initial cut to 75mm and thereafter cutting height between 25 -75 mm; disperse arisings evenly across the sward and clear footpath/cycleway after cutting.

During initial establishment of new grassland, it will be mown to a height of 75mm 6-8 weeks after germination or when a satisfactory sward has been established and subsequently to a height of 50-75mm as required, but not more regularly than once every 4 weeks until such a time as a knitted turf is established. Once established, amenity grassland will be cut 10-20 times per year generally between March and October to a height of 25-75mm.

Mowing will be reduced during prolonged dry periods and the mowing height increased to 50-75mm at such times. Similarly in very wet conditions all grass cutting operations will cease until conditions allow for grass cutting resume.

Proposed wildflower and native species grasses

The mixes contain wild flowers and grasses and most of the sown meadow species are perennial and are slow to establish. A flush of annual weeds, arising from the soil seed bank is anticipated soon after sowing. These weeds can look unsightly, but they will offer shelter to the sown seedlings and provide habitat and will die off by the end of the growing season. Annual weeds should not be cut until mid to late summer. Hand weeding can be carried out if desired. The meadow should then be cut in early August, arisings removed and composted. This will reveal the young meadow, which can then be kept short by grazing or mowing through to the end of March of the following year. Dig out any residual perennial weeds such as docks.

Year two onwards, manage as traditional hay meadow
After flowering in July or August take a 'hay cut': cut back with a scythe, petrol strimmer or tractor mower to around 50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site. Mow or graze the re-growth through to late autumn/winter to around 50mm and again in spring if needed.

Proposed ornamental shrub and herbaceous planting

Shrub areas are to be maintained appropriate to the species to allow flowering and prune when the plant is dormant, during November to February, ideally when there is no risk of frost. Cornus can be cut back as a coppiced bole on a 3 to 5 year cycle to maintain bright stems and a manageable form.

The Skimmia can be pruned to form a low hedge once established.

Taxus domes can be formed by degrees by gradual pruning and shaping during establishment, and thereafter pruned in March and September.

Species have been selected to allow regular pruning to allow plants to be kept to a set height once the preferred height is achieved.

Proposed herbaceous, grasses and groundcover planting

These plants should be pruned only lightly in the first two growing seasons to promote establishment and development of seed heads. From year three, if successfully established, grasses and herbaceous planting can be cut back to 10cm in height every March with only light pruning. The planting is designed to be self-supporting.

Generally

Replacement planting will be undertaken where necessary and any grassed areas and meadow that are subject to erosion or damage, are also to be reinstated.

Planting should be maintained by the landscape contractor for a minimum of five years following planting, to ensure any defective planting identified is replaced at the end of each growing season.

Maintenance of the landscape areas shall be undertaken by a competent landscape contractor with experience of establishment of natural habitat areas, particularly wildflower meadows, herbaceous, shrub, hedge and tree planting..

All soft landscape areas are to be maintained in accordance with the recommendations in BS7370-4:1993 Grounds Maintenance. The landscape maintenance of the site is to be carried out to a high standard at all times and in accordance with the schedule and specifications within this management plan and landscape drawings.

The landscape contractor shall ensure that the site is left tidy and safe following all maintenance works. All arisings should be removed from site in accordance with the maintenance schedule.

Maintenance visits shall be programmed to coincide with appropriate weather conditions for carrying out maintenance operations including the mowing of grass and wildflower areas. Grass mowing in excessively wet conditions is prohibited.

The landscape contractor shall only use chemical treatment for treatment of invasive weed species. Any chemical application must be undertaken by trained personnel only with the appropriate NPTC certificates and in accordance with the manufacturer's recommendations. The 'Code of Practice for the Safe Use of Pesticides for Non-agricultural Purposes' will be observed where applicable. The use of any chemicals shall be included within the maintenance visit records as described above.

This Landscape Management Plan should be considered a live document and may be updated following annual reviews.

Proposed tree mounted bird boxes and bat boxes

Nest boxes should be inspected and repaired between end of September to beginning of February outside of the bird nesting season

Proposed tree mounted bat boxes should be inspected and repaired only under the advice of an experienced Ecologist

Notes

1. Dimensions are given in metres and millimetres as stated on the drawing.

HERBACEOUS AND GROUNDCOVER PLANTING			
Mix A		**Bed 2**	
Nepeta faasenii		22.8m^2	
Geranium 'Rozanne' ('Gerwat')		20	
Pennisetum alopecuroides		20	
Verbena bonariensis		30	
Allium atropurpureum		15	
Helenium autumnale 'Salsa'		50	
	Bed 1		**Bed 3**
Mix B	62.5m^2		103m^2
Nepeta faasenii	10		30
Geranium 'Rozanne' ('Gerwat')	10		30
Pennisetum alopecuroides	30		90
Verbena bonariensis	10		30
Allium atropurpureum	50		150
Helenium autumnale 'Salsa'	25		50
Iris sibirica 'Shakeri Prayer'	20		60
Knautia macedonica	20		60
Dechampsia cespitosa 'Golden Dew'	50		150
Perovskia 'Blue Spire'	10		30
Phlomis russeliana	10		30
Salvia 'Caradonna'	10		30

PLANTING	Form	Age Condition/ Number of times Transplanted	Girth cm	Overall or Minimum Height cm	Clear Stem cm	Root Condition	%	QUANTITY
TREES								
Acer campestre	heavy standard	3X	12-14cm girth	350-425	175-200	rootball		**2**
Acer campestre 'William Caldwell'	heavy standard	3X	12-14cm girth	350-425	175-200	rootball		**3**
Prunus avium 'Plena'	heavy standard	3X	12-14cm girth	350-425	175-200	rootball		**9**
Quercus robur	heavy standard	3X	12-14cm girth	350-425	175-200	rootball		**13**
								27
HEDGE - NATIVE SPECIES	**Total length planted at 5 per metre = 124.8m**						%	
Acer campestre	60-80 cm bare root	1+1	transplant			bare root	9	**56**
Corylus avellana	60-80 cm bare root	1+1	transplant			bare root	13	**81**
Crataegus monogyna	60-80 cm bare root	1+1	transplant			bare root	65	**406**
Ilex aquifolium	30-40 cm container grown					container grown	6	**37**
Sambucus nigra	60-80 cm bare root	1+1	transplant			bare root	7	**44**
								624
HEDGE - NATIVE SPECIES	**Total length planted at 5 per metre = 100.4m**						%	
Acer campestre	60-80 cm bare root	1+1	transplant			bare root	100	**500**
SHRUBS								
Taxus baccata	60 cm	7.5litre pot	at 0.4m centres			container grown		**15**
Amelanchier lamarckii	branched with minimum 3 breaks	3litre pot	at 2.5m centres	60-80		container grown		**3**
Cornus 'Midwinter Fire'	bushy	3litre pot	at 1m centres	40-61		container grown		**20**
Skimmia 'Godries Dwarf'	bushy	2litre pot	at 0.5m centres	20-30		container grown		**100**
WILDFLOWER AND GRASS MIX								
EM1	Emorsgate EM1 basic General Purpose Meadow Mixture or equivalent or equivalent @ 4g/m^2							
EM2	Emorsgate EM2 Standard General Purpose Meadow Mixture or equivalent @ 4g/m^2							
BULBS IN MEADOW AREAS	**QUANTITY**							
Camassia quamash	250							
Crocus tommasinianus	1,000							
Narcissus pseudonarcissus	500							

Project	THE OAKS, OAK ROAD WREXHAM INDUSTRIAL ESTATE	**Dwg No** 311/LAND/L/110	**Revision** P02
Title	LANDSCAPE PROPOSALS PLAN PLANTING SCHEDULE AND SPECIFICATION	**Scale**	**Date** 19/05/2025

Revision	Date	Details	Drawn	Checked	Reviewed
P01	07/02/2025	PRE-APPLICATION CONSULTATION	MD	XX	XX
P02	19/05/2025	PLANNING APPLICATION	MD	XX	MD

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