



#### LEGEND:

- Existing boundary
- Vegetation retained
- Low canopy woodland mix
- Wildgrass seeding mix
- Proposed berm
- Proposed trees
- Open space
- Site boundary
- Land where the applicant has ownership or beneficial interest
- Access road
- Light concrete finish
- Footpath
- Concrete substation access road
- Access track
- Palisade fence
- Property boundary fence

**Notes:**  
The function of the proposed mitigation planting is primarily for screening and softening of the proposed development, but it will also enhance the ecological corridors within the surrounding area.

**Hedgerows**  
Mitigation screen planting shall consist of a mixture of native species that are prevalent in the immediate area. Hedgerow planting to consist of feathered whips (of various sizes) and advanced nursery stock (standard trees) in staggered rows at a spacing of 600mm. 'Under-planting' to consist of a single row of whips to the development side of existing tree lines and hedgerows. 'Inter-planting' to consist of whips at 400mm centres to fill gaps in existing tree lines and hedgerows.

All native hedgerow species will be planted as whips, with the primary and secondary structure species to be of a minimum height of 90cm and the other shrubs species to be of a minimum height of 60cm.

**Low-Canopy Woodland (Screen) Planting Mix**  
Woodland planting mix to comprise of High Canopy Understorey (<10%), Low-canopy: Sub-dominants (25-30%), Understorey and Fringe: High-Shrubs (25-40%) and Understorey and Edge: Lower-Shrubs (15-25%). Planting to be allowed to grow to reach maturity. Trees to be planted at varying distances from 1.5m x 1.5m to 3.0m x 3.0m. Smaller shrubs to be planted at spacing between 900mm and 1500mm centres depending on species.

#### NATIVE HEDGEROW SPECIES:

Botanical name	Common name	Size	%
<i>Primary structure:</i>			
<i>Alnus glutinosa</i>	Alder	90-120cm / 8-10cm girth 3m for standard trees	60%
<i>Secondary structure:</i>			
<i>Prunus spinosa</i>	Blackthorn	90-120cm	15%
<i>Ilex aquifolium</i>	Holly	90-120cm	15%
<i>Shrub species structure:</i>			
<i>Rubus fruticosus</i>	Bramble	60-90cm	2.5%
<i>Corylus avellana</i>	Hazel	60-90cm	2.5%
<i>Rosa canina</i>	Dog-rose	60-90cm	2.5%
<i>Euonymus europaeus</i>	Spindle	60-90cm	2.5%

#### SCREEN PLANTING MIX SPECIES:

Botanical name	Common name	Size	%
<i>High Canopy (dominants):</i>			
<i>Quercus robur</i>	Peduncululate Oak	10-12m (100-120cm girth)	<20%
<i>Pinus sylvestris</i>	Scotts Pine	10-12m (100-120cm girth)	
<i>Low Canopy (Sub-dominants):</i>			
<i>Alnus glutinosa</i>	Alder	10-12m (100-120cm girth)	
<i>Betula pubescens</i>	Downy Birch	10-12m (100-120cm girth)	20-25%
<i>Prunus avium</i>	Wild Cherry	10-12m (100-120cm girth)	
<i>Understorey and Fringe (higher plants):</i>			
<i>Prunus Prunella</i>	Bird Cherry	90-120cm	
<i>Corylus avellana</i>	Hazel	90-120cm	20-40%
<i>Ilex aquifolium</i>	Holly	90-120cm	
<i>Crataegus monogyna</i>	Hawthorn	90-120cm	
<i>Understorey and Edge (lower plants):</i>			
<i>Prunus spinosa</i>	Blackthorn	40-60cm	15-25%
<i>Rosa canina</i>	Dog-rose	40-60cm	
<i>Euonymus europaeus</i>	Spindle	40-60cm	

#### REVISIONS:

No.	Description	Date
1.	Draft issue	20/10/23
2.	Internal review	20/10/23
3.	Redline review	23/10/23
4.	Drawing no. updates	24/10/23
5.	Legend updated & expansion added	29/01/24
6.		

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Site location:  
**Clonmellon  
COUNTY WESTMEATH**

Drawing Title:  
**Substation Landscape Plan**

Project:  
**KNOCKANARRAGH WIND FARM  
Client: Knockanarragh Wind Farm Ltd**

Drawn by: ID  
Checked by: CD

Drawing Ref: **ABP - 314271-22.PL29**

Scale: 1:1000 @ A1  
Date: OCT 2023  
**ISSUED**