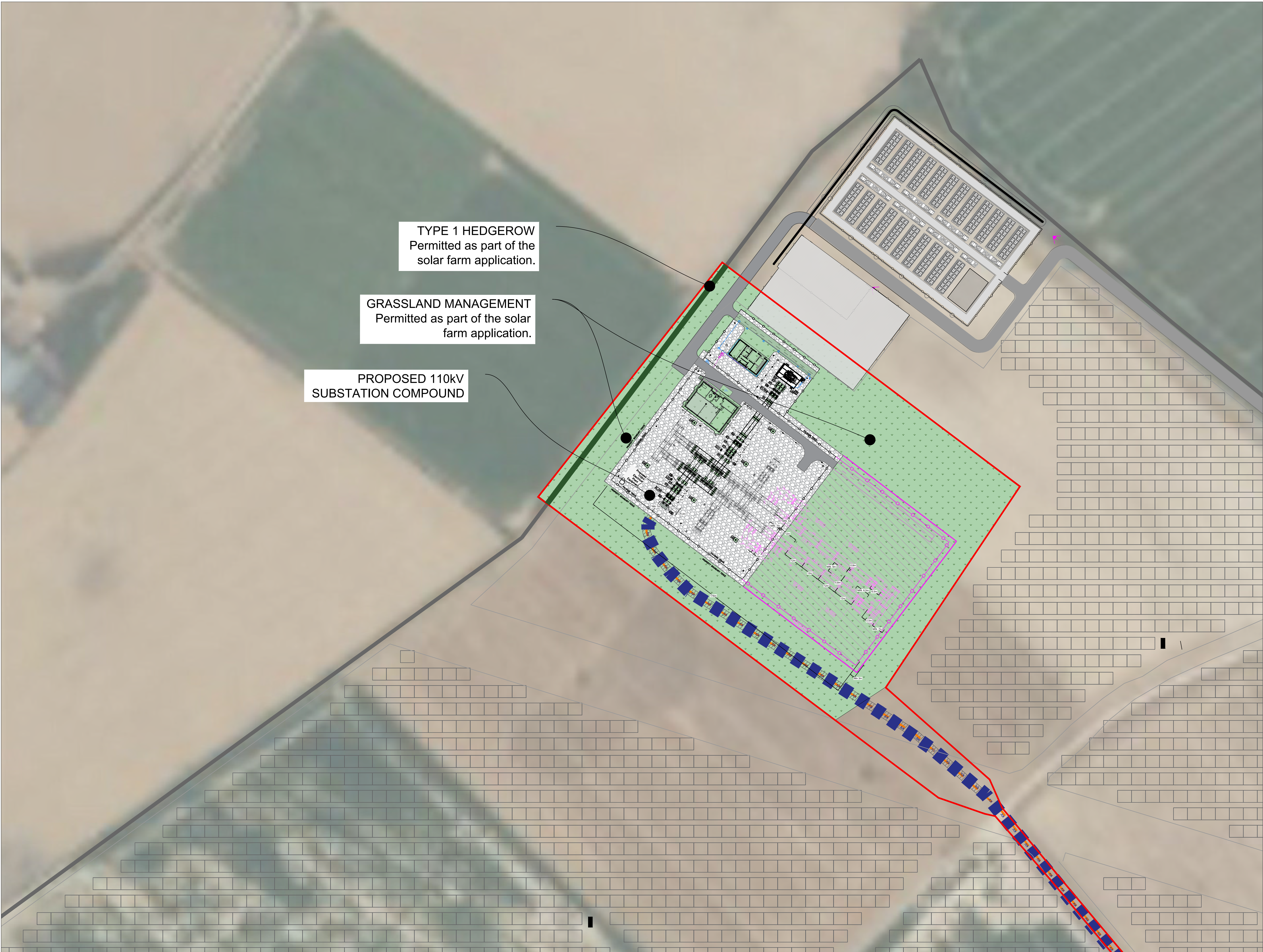


APPENDIX D

APPENDIX D-1



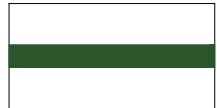
TYPE 1 HEDGEROW
Permitted as part of the
solar farm application.

GRASSLAND MANAGEMENT
Permitted as part of the solar
farm application.

PROPOSED 110kV
SUBSTATION COMPOUND



Legend



HEDGEROW TYPE 1



SITE BOUNDARY



GRASSLAND

Notes

The function of the proposed mitigation planting is primarily for screening, but it will also enhance the ecological corridors that area already present within the surrounding trees lines and hedgerows.

It is imperative to use native Irish species in so far as possible as they are adapted to Irish conditions and therefore more likely to thrive compared to imported stock. Selected species should also represent woodland and hedgerows in the surrounding environs although non-native species are not to be used, unless otherwise agreed with the Planning Authority.

All plants supplied shall be exactly true to name as shown in the plant schedules. Varieties with variegated and/or coloured leaves will not be accepted, and any plant found to be of this type upon leafing-out shall be replaced by the contractor. Bundles of plants shall be marked in conformity with BS3936: Part 1: 1965 and BS3936: part 4: 1966. The nursery supplier shall replace any plants which, on leafing out, are found not to conform to the labels.

Hedgerows

Mitigation screen planting shall consist of a mixture of native hedgerow species that are prevalent in the immediate area. Planting to consist of feathered whips (of various sizes) and advanced nursery stock (where necessary) in staggered rows at a spacing of 600mm.

All native species will be planted as whips, with the primary and secondary structure species to be of a minimum height of 80-100cm and the other shrub species to be of a minimum height of 40-60cm.

Existing and new sections of hedgerow to be planted and bolstered as per diagram LMP1.1 and LMP1.2 and maintained at a height of 3-4m unless otherwise specified.

Field Margins/Grassland Management

Field margins to be planted and/or managed in accordance with the BRIDE project EIP techniques. A minimum width of 2m from the base of the hedgerow is recommended. It will be important to flail these margins every year during the period of September 15th to February 28th. A full management regime in accordance with best practice will be adhered to, ensuring that the species will thrive through natural regeneration. Field margin management techniques and wildflowers have been shown to increase biodiversity on solar farms, with numbers of pollinators clearly benefiting from these food sources and an increased presence of other animals in these margins being evident as well when compared to improved grassland margins managed more intensely.

Species mix to be finalised in conjunction with the project ecologist.

Landscape Figures

Existing Hedgerow Bolstered (Type 1) - 172 linear meters

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Prepared for:
MALONE O'REGAN

Site location:

COUNTY CARLOW

Drawing Title:

LANDSCAPE AND ECOLOGICAL MITIGATION PLAN

Project:

KELLISTOWN 110kV SUBSTATION

Drawn by:

RAH

Checked by:

CD

Drawing Ref:

LD.KLLSTWNSBST 1.0

Scale:

1:1000 @ A1

Date:

MAY 2025

DRAFT

APPENDIX D-2



LEGEND:

- Hedgerow Type 1
- Hedgerow Type 2
- Proposed fence
- Site boundary

NOTES:

The function of the proposed mitigation planting is primarily for screening, but it will also enhance the ecological corridors that are already present within the hedgerows.

Mitigation screen planting shall consist of a mixture of native hedgerow species that are prevalent in the immediate area. Planting to consist of feathered whips (of various sizes) 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.

New sections of hedgerow to consist of a triple staggered row of whips and advanced nursery stock at 600mm spacing.

Proposed hedgerow lengths:

- Hedgerow Type 1 - c. 2863 linear meters
- Hedgerow Type 2 - c. 731 linear meters

All native 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.

Proposed mitigation screen planting to be planted as per diagram LMP1.1-1.2 and maintained at a height of approximately 3-4m unless otherwise specified. Hedgerow type 1 to be planted as necessary for gap filling and bolstering.

Proposed mitigation to be planted in the first growing season prior to commencement of development. Hedgerows should reach full establishment (3-4 meters) within 2-3 years of planting.

Wildflower / Wild grass seeding of local provenance to occupy any residual space between perimeter fence and nearest line of whip planting.

Species mix to be finalised in conjunction with the project ecologist.

All species will be from certified native stock and preferably from an approved supplier of the Green, Low-Carbon, Agri Environment Scheme (GLAS).

*Advanced nursery stock to be provided as Crataegus monogyna (Hawthorn) at 8-10cm girth (c. 3m) bare root standard trees.

NATIVE HEDGEROW SPECIES:

Botanical name	Common name	Size	%
Primary structure;			
Crataegus monogyna	Hawthorn	90-120cm / 8-10cm girth 3m br standard trees	60%
Secondary structure;			
Prunus spinosa	Blackthorn	90-120cm	15%
Ilex aquifolium	Holly	90-120cm	15%
Shrub species structure;			
Viburnum opulus	Guelder Rose	60-90cm	2.5%
Corylus avellana	Hazel	60-90cm	2.5%
Rosa canina	Dog-rose	60-90cm	2.5%
Euonymus europaeus	Spindle	60-90cm	2.5%

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PROJECT:

Grangeford Solar Farm,
County Carlow

CLIENT:

Summit Solar Ltd.

DRAWING:

Landscape Mitigation Plan

SCALE:

1:2500

DATE:

November 2023

DWN BY:

RC

CKD BY:

CD

SHEET SIZE:

A1 (landscape)

DWG No.

LD.GRNGFRD 1.1