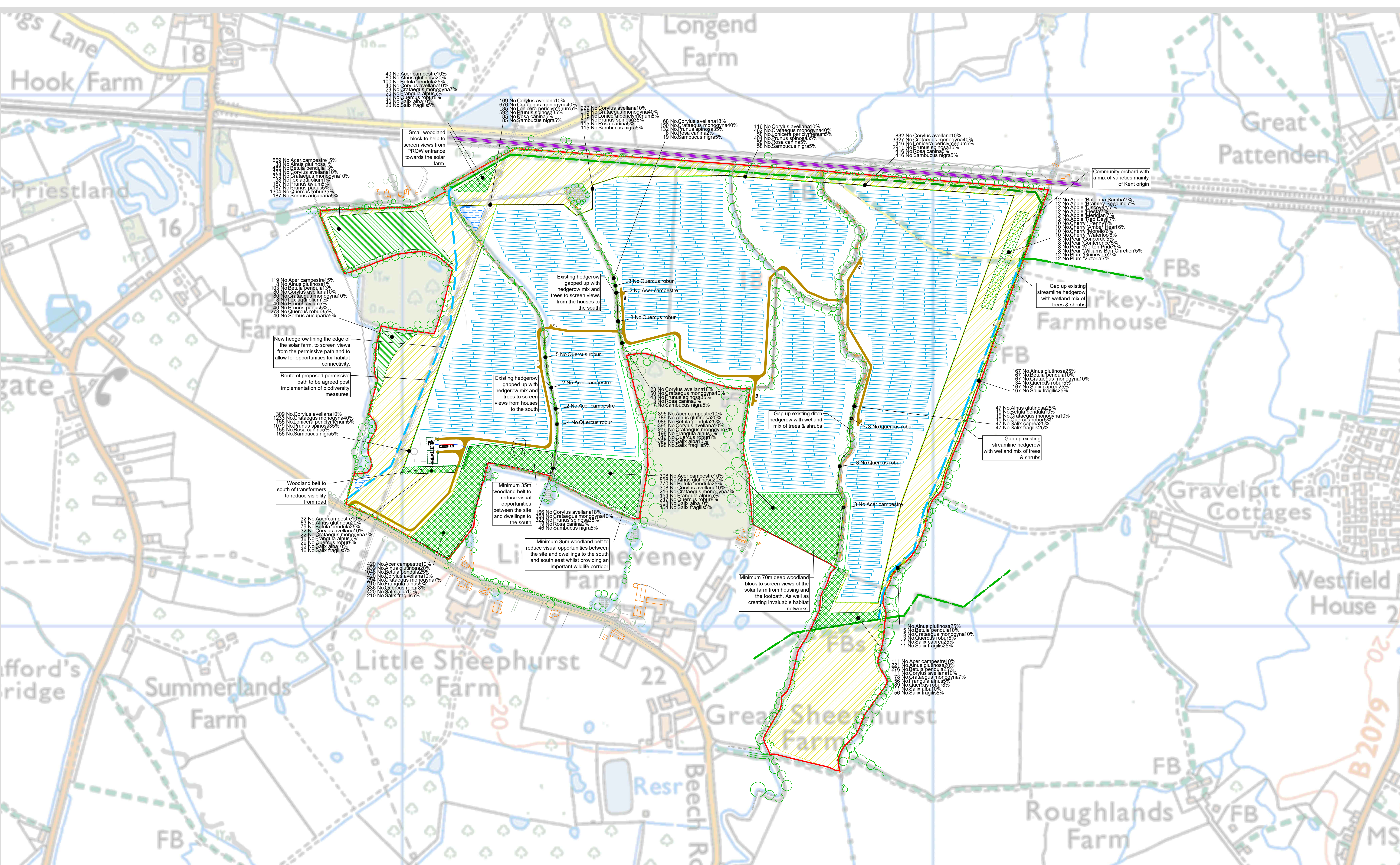




LEGEND

- Emorsgate Wildflower grassland EM3 Special General Purpose Meadow Mix
- Proposed Mitigation Woodland
- Proposed Biodiversity Woodland
- Proposed Community Orchard
- Heavy standard trees
- Proposed Native Hedgerow
- Gapping up of riverside vegetation
- Gapping up of internal hedgerows
- Solar panels - area beneath to receive ryegrass/clover mix, Permanent Grass from Cotswold Grass Seeds
- Proposed ponds

Specification

Decomposition:

All soft landscaped areas that have received vehicle movement to be decomposed to a depth of:
- 650mm-1000mm depth to shrub and tree planted areas
Decompect in the form of mechanical means of ripping in two directions

Standard and Orchard Tree Planting: Tree pits to be at a minimum 150mm greater in width and depth than the diameter of the rootball. Bottom of pit to be rippes/broken up to a depth of 250mm to facilitate drainage prior to being backfilled with site won topsoil/tree ameliorant mix (part Topgrow Planting Compost by Melcourt to 4 parts topsoil).

Trees to be secured with 100mm diameter pressure treated softwood stakes (driven into the ground diagonally so as to not damage the rootball) and adjustable rubber tie. Stakes to protrude no more than 750mm above ground level in order to encourage sideways movement of trees to ensure adequate root development. 1m diameter, 75mm deep layer of weathered woodchip collar to be placed around the trees to keep weed free.

Where possible plant heavy standard trees as close to existing hedgerow as possible without damaging existing roots as well as within new hedgerow.

Native Shrubs/Tree mix: Ground decompacked as above. Transplants to be notch planted in same species groups of 5 to 11 at 2m centres. Transplants are to be protected against rabbits / wind with 750mm high Tubex 12D 3Y Degradable Shelters with 72mm diameter. To be installed in accordance with suppliers recommendations. Available from Fiberweb Geosynthetics Ltd, Blackwater Trading Estate, The Causeway, Malden, CB9 6GS. t: 01623 874201.

Native Hedgerows: Ground to be thoroughly decompacked as above. Transplants to be planted in trenches in double staggered row at 7 plants per linear metre in 750mm strip covered with 75mm deep layer of weathered woodchip mulch. Transplants to be protected against wind and rabbit damage as per native shrub/tree mix. Hedgerows to be maintained at a height of 2-3m biannually, to achieve overall width of 0.75-1m.

Wildflower Seeding:

Seeded areas: Ground decompacked as above.
Preparation of all seeded areas:
Top 100mm of existing topsoil to be reduced to fine flth with particle size of maximum 10mm with chain harrow if required. Remove all stones and clay balls > 50mm and remove any deleterious material. Contours to be smooth and flowing with no ridges or hollows. Final cultivation to create a fine, firm tilth with good crumb structure. Rake to true even surface, and lightly firm but not compact.
Wildflower seed mix - Special General Purpose Meadow Mixture, Emorsgate EM3 sow 50kg/ha

Solar Panel grassland - Perennial Ryegrass/Clover mix, Permanent Grass from Cotswold Seeds

Watering: All newly planted material to be thoroughly saturated after planting and well watered in the first twelve months, during any prolonged period (5+ days) of dry weather. Transplants and whips to receive a minimum of 20litres each.
Heavy standard trees to receive a minimum of 20litres each.
Grassed areas to be watered without displacement of seed until thoroughly saturated.

Establishment:

Trees/shrubs:
Maintain a weed free area around each tree and shrub, minimum diameter 1m or the surface of the original planting pit.
Reforming of trees and shrubs by treading around the base, after strong winds, frost heave and other disturbances.

Hedges:
First spring after planting trim all lateral branches by 50% (except for Holly). Lightly trim every 2nd or third year allowing hedge to increase in size each time until desired height is achieved. Trim biannually to achieve 3m height and 1m depth.
Hedgerows to be maintained at a height of 2-3m biannually, to achieve overall width of 0.75-1m.

Seeded areas:

First cut to be undertaken when grass reaches 100mm high and is dry. Height of first cut 50mm. If Autumn sown avoid cutting in spring and early summer.
Remove Dock and nettle.

Ongoing Maintenance:

Native shrub/screening areas: 300mm diameter circles around each transplant are to be kept weed free with mulching or hand dig where possible. Herbicide spraying to be kept to a minimum. After 12 months the bark mulch is to be topped up in order to maintain a minimum depth of 50mm.
At end of each twelve month period, all trees and shrubs to be reformed as necessary, and all plant losses replaced by a tree or shrub of similar specification.

Hedges: To be managed biannually at a height of 3m, and a depth of 1m, in rectangular form, once in May and once in Autumn. Arisings to be removed. Rotation every 3 years of j of hedges to be uncult in Autumn to allow for winter food crops for birds.
Wildflower meadow to be cut late summer (August) (not corn bunting mix) when a period of dry weather is expected, arisings to be left, binned and baled as appropriate. An additional cut can be undertaken in early spring if required. All arisings to be removed.

Sheep grazing of fenced solar panel area to manage the grassland to base of panels. Rotational grazing on a monthly basis to achieve good sward, with periods of fallow. Grazing to cease in winter months.

Watering to continue for first 5 years or until plants are established. Beyond 5 years should there be a period of prolonged drought, trees, shrubs and hedgerows to be watered to avoid significant losses.
Any plant failures within the first 5 years to be replaced of the same size and specification and to be managed as per the first 5 years. Reason for failure to be noted and rectified for future plant success.

Native Internal Field Hedgerow - Gapping up						
Species name	Common name	% Mix	Height	Rootzone	Spec	Total Number
Corylus avellana	Hazel	18	60-90	BR	1+1 branched	257
Crataegus monogyna	Hawthorn	40	60-90	BR	1+1 branched	548
Prunus spinosa	Blackthorn	35	60-90	BR	1+1 branched	487
Rosa canina	Dog rose	2	60-90	BR	1+1 branched	40
Sambucus nigra	Elder	5	60-90	BR	1+1 branched	72
Native River/Ditch Boundary Hedgerow - Gapping up						
Species name	Common name	% Mix	Height	Rootzone	Spec	Total Number
Alnus glutinosa	Alder	25	60-90	BR	1+1 branched	235
Betula pendula	Silver Birch	30	60-90	BR	1+1 branched	91
Crataegus monogyna	Hawthorn	10	60-90	BR	1+1 branched	91
Quercus robur	English Oak	5	60-90	BR	1+1 branched	47
Rosa canina	Dog rose	25	60-90	BR	1+1 branched	235
Salix fragilis	Crack Willow	25	60-90	BR	1+1 branched	235
Native Fence Boundary Hedgerow						
Species name	Common name	% Mix	Height	Rootzone	Spec	Total Number
Corylus avellana	Hazel	10	60-90	BR	1+1 branched	1053
Crataegus monogyna	Hawthorn	40	60-90	BR	1+1 branched	6618
Juniperus communis	Horizontal	5	60-90	BR	1+1 branched	829
Prunus spinosa	Blackthorn	35	60-90	BR	1+1 branched	5787
Rosa canina	Dog rose	5	60-90	BR	1+1 branched	829
Sambucus nigra	Elder	5	60-90	BR	1+1 branched	829
All plants to be notch planted and protected with biodegradable rabbit guard						

Mitigation Native Tree & Shrub Planting						
Species name	Common name	% Mix	Height	Rootzone	Spec	Total Number
Acer campestre	Field maple	10	80-100	BR	1+1 branched	1306
Alnus glutinosa	Alder	20	80-100	BR	1+1 branched	2608
Betula pendula	Silver birch	25	80-100	BR	1+1 branched	1009
Corylus avellana	Hazel	10	80-100	BR	1+1 branched	1306
Crataegus monogyna	Hawthorn	7	80-100	BR	1+1 branched	914
Fraxinus alnus	Alder Buckthorn	5	80-100	BR	1+1 branched	614
Quercus robur	English Oak	8	80-100	BR	1+1 branched	1046
Salix alba	White willow	10	80-100	BR	1+1 branched	1306
Salix fragilis	Crack Willow	5	80-100	BR	1+1 branched	614
Biodiversity Native Tree & Shrub Planting						
Species name	Common name	% Mix	Height	Rootzone	Spec	Total Number
Acer campestre	Field maple	15	80-100	BR	1+1 branched	678
Alnus glutinosa	Alder	1	80-100	BR	1+1 branched	2m centres
Betula pendula	Silver birch	1	80-100	BR	1+1 branched	2m centres
Corylus avellana	Hazel	10	80-100	BR	1+1 branched	2m centres
Crataegus monogyna	Hawthorn	10	80-100	BR	1+1 branched	2m centres
Ilex aquifolium	Holly	1	60-90	3L pot	Leader with laterals	2m centres
Prunus avium	Wild cherry	5	80-100	BR	1+1 branched	2m centres
Prunus padus	Bird cherry	5	80-100	BR	1+1 branched	2m centres
Quercus robur	English Oak	35	80-100	BR	1+1 branched	1382
Sorbus aucuparia	Mountain ash	5	80-100	BR	1+1 branched	2m centres
All trees and shrubs to be notch planted and protected with biodegradable rabbit guard						

Specimen Trees			
Species Name	Common Name	Specification	Rootzone Number
Acer campestre	Field Maple	3.0-3.1m, 10-12 Select Standard	RS 9
Quercus robur	English Oak	3.0-3.1m, 10-12 Select Standard	RS 21
Planted in locations identified. Staked with biodegradable rabbit guards to each tree.			
Orchard Trees			
Species Name	Common Name	Specification	Rootzone Number
Apple Ballerina Samba	Apple	MM106, Feathered 2m	C/NB 12
Apple Bramley Seedling	Apple	MM106, Feathered 2m	C/NB 12
Apple Discovery	Apple	MM106, Feathered 2m	C/NB 12
Apple Fiesta	Apple	MM106, Feathered 2m	C/NB 12
Apple Meridian	Apple	MM106, Feathered 2m	C/NB 12
Apple Red Devil	Apple	MM106, Feathered 2m	C/NB 12
Cherry Penny	Cherry	Coil Rootstock, 2m	C/NB 10
Cherry Amber Heart	Cherry	Coil Rootstock, 2m	C/NB 10
Cherry Morelo	Cherry	Coil Rootstock, 2m	C/NB 10
Cherry Waterloo	Cherry	Coil Rootstock, 2m	C/NB 10
Pear Conference	Pear	Quince A, 2m	C/NB 8
Pear Meriton Pride	Pear	Quince A, 2m	C/NB 8
Pear Williams Bon Christien	Pear	Quince A, 2m	C/NB 8
Plum Quverve	Darsson	St Julien, 2m	C/NB 12
Plum Victoria	Victoria Plum	St Julien, 2m	C/NB 12
Planted in 5m grid Centre locations identified. Staked with biodegradable rabbit guards to each tree.			

Client: Statkraft UK

Project: Sheepwash Solar Energy Farm, Marden

Drawing Title: Proposed Mitigation, Landscape & Ecology enhancements - Appeal Site

Date: Feb 2022 Scale: 1:2500 Drawing No: AW0143-PL-002

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