260_Twineham Court Farm

Landscape Report

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Project Background Summary

Fern and Pine Design Studio Ltd have been commissioned by Telbridge Properties to produce this landscape report to explain the soft landscape design approach for proposed development of the site of Twineham Court Farm.

This report accompanies the planning application prepared by planning application prepared by Wilbury Planning. The client is proposing to develop the site as an events venue,whilst maintaining the existing Grade II Listed farmhouse and Curtilage Listed Building This document outlines the approach towards designing a sensitive, ecologically driven soft landscape design to support the application, developed in close collaboration with the wider project team; CT Ecology, St Aubyn Tree Consultancy, Phlorum and GTA Civils.

The client owns the land and buildings known as Twineham Court Farm as indicated on the adjacent OS Maps.

For full details of the planning history and proposed development site, refer to the Design and Access Statement produced by G3 Architecture, and the Planning Statement produced by Wilbury Planning.

Site Location (Source: DEFRA MAGIC / Crown Copyright OS Map Data)

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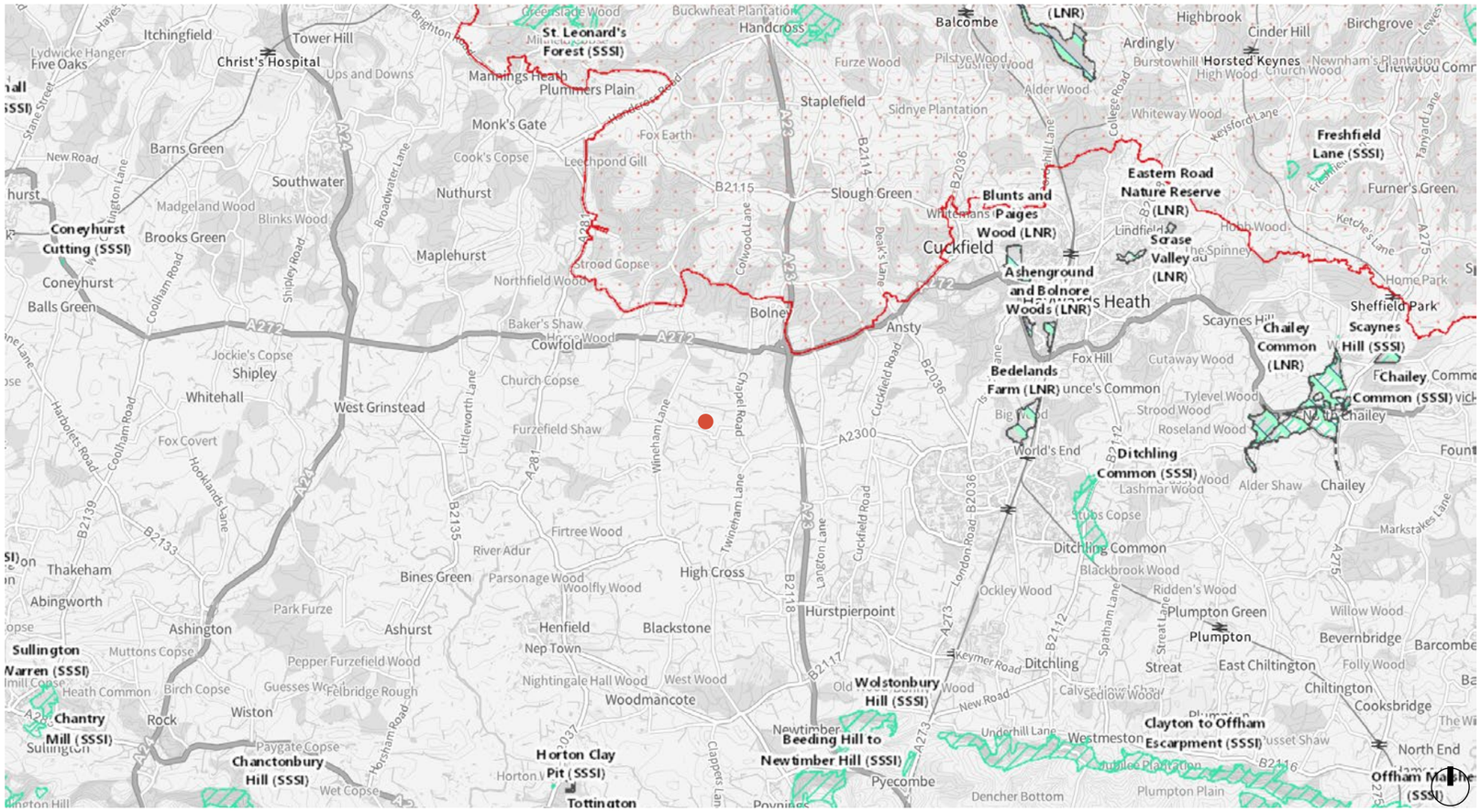
Location and Designations

Twinehamd Court Farm is approximately 5 miles from the town of Burgess Hill, in a largely agricultural area of West Sussex.

The site is situated on the north side of Bob Lane and next to the large National Grid site (west) and the Rampion Wind Farm site (north). There are a number of large pylons visible both on the Twineham Court Farm site and adjoining sites.

Though the border is relatively close, the farm does not lie within the High Weald National Landscape, nor within any SSSI. It does not share close boundaries with any nature reserves.

The existing site features a number of dilapidated farm & agricultural buildings as well as the grade II listed farmhouse. The current landscape is predominantly grassland with areas of boundary hedging and scrub and a number of existing trees. Refer to CT Ecology, St Aubyn Tree Consultancy and Phlorum reports for further info.



Local designations (Source: DEFRA MAGIC / Crown Copyright OS Map Data)

The site

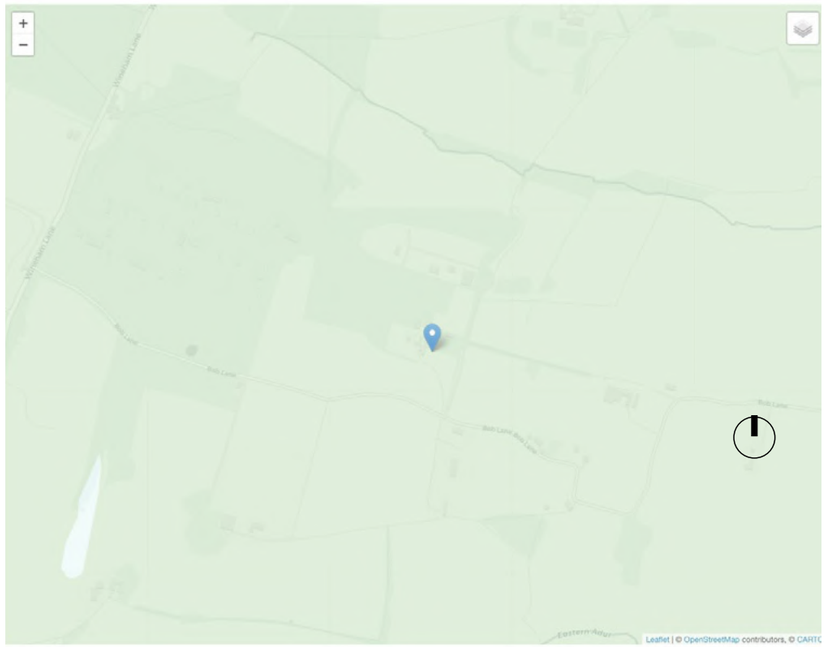
Aerial view of the site

Soils

A desktop study of the soils was carried out using information from Soilscapes. The site and surrounding area consist of slowly permeable, seasonally wet, slightly acidic, but base-rich loamy and clayey soils.

Typically these soils support grassland pastures and woodlands. The poorly draining nature of these soils mean they are particularly vulnerable to waterlogging.

Plants will be chosen in relation to the type and structure of the soil as well as the weather of the local area to ensure minimal intervention and therefore ensure their survival.



Soilscape 18:

Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils

Texture:
Loamy and clayey

Coverage:
England: 19.9%,Wales: 2.4%,England & Wales:17.5%

Drainage:
Impeded drainage

Fertility:
Moderate

Landcover:
Grassland and arable some woodland

Habitats:
Seasonally wet pastures and woodlands

Carbon:
Low

Drains to:
Stream network

Water protection:
Main risks are associated with overland flow from compacted or poached fields. Organic slurry, dirty water, fertiliser, pathogens and fine sediment can all move in suspension or solution with overland flow or drain water

General cropping:
Mostly suited to grass production for dairying or beef; some cereal production often for feed. Timeliness of stocking and fieldwork is important, and wet ground conditions should be avoided at the beginning and end of the growing season to avoid damage to soil structure. Land is tile drained and periodic moling or subsoiling will assist drainage

Soilscape 18: Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils(Source: LandIS Soilscapes)

Architects' Proposals

G3 Architecture have produced proposals for the development.

For further information on the architecture, refer to the separate drawings produced by G3 Architecture.

Artists impression of the proposed development (Source: G3 Architecture)

Conceptual Approach

The carefully considered landscape design proposes to create a sustainable events venue that maximises biodiversity through ecologically sensitive design suited to the conditions of Mid-Sussex.

Functional amenity spaces are concentrated close to buildings and event spaces, with permeable surfaces providing access routes and parking and the masterplan developed by E3 seeks to minimise the visual intrusion of the pylons by maximising opportunities for soft landscape interventions.

The soft landscaping strategy is to enhance the site through layers of native planting styles suited to the open, rural landscape with planting closer to event spaces and main access routes including a more designed, decorative and mixed palette.

The proposals will add native hedges, screening trees and extensive grasslands & meadow planting, complemented by scrub, shrub and pockets of climate-resilient ornamental planting.

A combination of species-rich flowering lawns, open grasslands and wildflower meadows are proposed across the site. New wildlife ponds have been proposed to support a wider range of wildlife and form part of the sustainable drainage strategy.

These measures allow the grounds to positively contribute towards increasing the sites biodiversity and have been designed to be sustainable solutions. The proposals will include permeable surfaces within the development site as well as green infrastructure initiatives to facilitate infiltration of surface water run off.

Plant selections have been prioritised to be native wherever possible, offer a variety of food & shelter sources for local wildlife, and to maximise nectar rich, pollinator friendly plants across the site.

Example images of planting typologies and proposed green infrastructure

Landscape plan

01 Vehicle access to event parking

02 Event car park

03 Pedestrian route to event buildings (pergola walkway)

04 Access route to event buildings and estate office

05 Proposed ponds (part of sustainable drainage strategy)

06 Grade II listed farmhouse (ancillary accommodation)

07 Ancillary accommodation

08 Events venue

09 Estate management

Soft landscape plan

LEGEND

M1; CLOSE MOWN SPECIES RICH GRASSLAND
365m2

M2; LONG MEADOWGRASS / GRASSLAND
6085m2

M3; LONG MEADOWGRASS / WILDFLOWER MEADOW
575m2

S1; WOODLAND SCRUB
958m2

S2; MIXED SCRUB & ORANMENTAL GRASS PLANTING
1740m2

S3; MIXED SHRUB, HERBACEOUS & ORNAMENTAL GRASS PLANITNG
450m2

H1; EVERGREEN HEDGES
110 linear m

W1; MARGINAL PLANTING
600m2

W2; AQAUTIC PLANTING
125m2

RETAINED & ENHANCED GRASSLAND

RETAINED & ENHANCED SCRUB

PROPOSED TREES
60 no.

LANDSCAPE PLANS TO BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANTS PLANS.
REFER TO ARCHITECT PLANS FOR FULL DETAILS OF SITE LAYOUT AND STRUCTURES.

Species rich lawns

Species rich lawns are proposed to increase the site's biodiversity whilst providing hard-wearing lawn areas for amenity use in localised areas close to event buildings.

A fantastic alternative to monoculture lawns, creating a biodiverse haven supporting pollinators through flowers and maximising leaves for larvae. A mix of 80% grasses and 20% native wildflowers. They can be mown just like a traditional lawn and are suitably resilient against every day wear and tear of family life and use.

Bumblebees forage for nectar on lawns where clover and other wildflowers bloom. Short grass lets green woodpeckers hunt for ants and some solitary bees find nesting spots whilst areas left longer creates habitat for grasshoppers and many other invertebrates. Wildflower seed-heads are an invaluable food source for finches.

Example species rich lawns which can be beneficial to lots of wildlife

Grassland

A 100% grass seed mix is proposed to grassland areas to the north of the proposed events buildings, and to the south surrounding the proposed ponds.

This mix includes 12 species of grass that are suitable for damp soils and soils prone to waterlogging and / or flooding. Grasslands are an intrinsic part of a tapestry of habitats proposed on the site forming connections to other species-rich habitats, which allows wildlife to move across the landscape.

Species include:

M2	100% GRASS SEED MIX	
GRASS	ALOPECURUS PRATENSIS	MEADOW FOXTAIL
GRASS	ANTHOXANTHUM ODORATUM	SWEET VERNAL
GRASS	BRIZA MEDIA	QUAKING GRASS
GRASS	COMMON BENT	AGROSTIS CAPILLARIS
GRASS	CYNOSURUS CRISTATUS	CRESTED DOGSTAIL
GRASS	DESCHAMPSIA CESPITOSA	TUFTED HAIRGRASS
GRASS	FESTUCA RUBRA SSP. COMMUTATA	CHEWING'S FESCUE
GRASS	FESTUCA RUBRA SSP. LITORALIS	SLENDER CREEPING RED FESCUE
GRASS	FESTUCA TRACHYPHYLLA	HARD FESCUE
GRASS	HORDEUM SECALINUM	MEADOW BARLEY
GRASS	TRISETUM FLAVESCENS	YELLOW OATGRASS
GRASS	POA PRATENSIS	SMOOTH STALKED MEADOW GRASS

Example species within the 100% grass seed mix

Grassland and wildflower meadow

A Weald-native grass and wildflower seed mix is proposed for meadow areas close to the events buildings.

This 70:30 wildflower;grass mix of Weald Native Origin Seed (WNOS) is a diverse meadow seed mix, sustainably wild harvested from ancient meadows throughout the Weald (in Kent, Sussex and Surrey). Many donor fields are designated sites (SSSI or LWS) and two are Sussex Coronation Meadows. The donor sites are lowland neutral /acidic meadows, and are relatively wet and naturally species rich with large populations of Weald specialties such as Green-winged Orchids, Dyers Greenweed, Pepper Saxifrage, Pignut, Meadow Vetchling and Yellow Rattle.

Example Weald native meadow

Woodland scrub mix 1

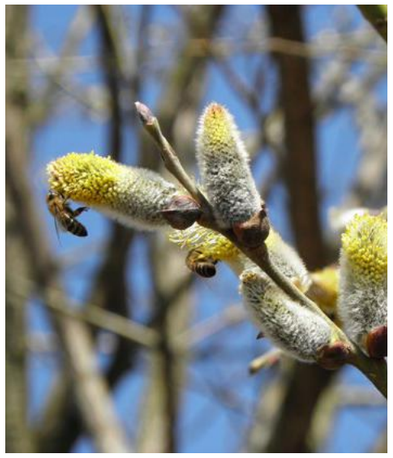
Existing areas of boundary scrub will be retained and new areas of woodland scrub are proposed.

Scrub can provide shelter, soil protection, flood mitigation, and wildlife habitat. Left unmanaged, scrub will develop into woodland therefore these areas will be managed and maintained as an open scrub mosaic with variations in shrub heights and undersown with a 100% grass seed mix.

A mixture of flowering and fruiting shrubs will provide a variety of food sources and shelter for local wildlife.

Potential species include:

ACER CAMPESTRE	FIELD MAPLE
CORNUS SANGUINEA	DOGWOOD
CRATAEGUS MONOGYNA	HAWTHORN
EUONYMUS EUROPAEUS	SPINDLE
ILEX AQUIFOLIUM	HOLLY
PRUNUS SPINOSA	BLACKTHORN
SALIX CAPREA	GOAT WILLOW



GOAT WILLOW *SALIX CAPREA*

SPINDLE *EUONYMUS EUROPAEUS*

BLACKTHORN *PRUNUS SPINOSA*

FIELD MAPLE *ACER CAMPESTRE*

HAWTHORN *CRATAEGUS MONOGYNA*

HOLLY *ILEX AQUIFOLIUM*

DOGWOOD *CORNUS SANGUINEA*

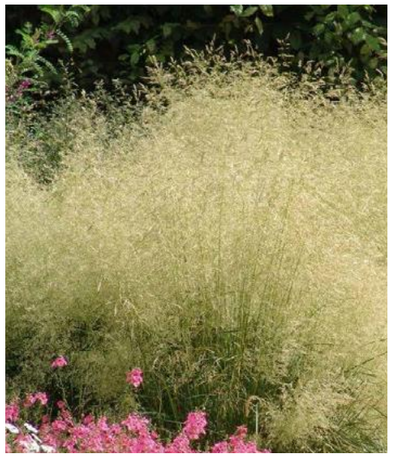
Woodland scrub mix 2

A second scrub mix will be used closer to event buildings which will include ornamental grass species planted between the woody shrub species.

These areas will also be maintained as an open scrub mosaic with variations in shrub heights combined with a designed grass matrix to create an elevated scrub mix whilst still supporting ecological objectives.

Potential species include:

EUONYMUS EUROPAEUS	SPINDLE
DESCHAMPSIA CESPITOSA GOLDTAU	TUFTED HAIR GRASS
SESLERIA AUTUMNALIS	AUTUMN MOOR GRASS
MOLINIA BREEZE	PURPLE MOOR GRASS
CORNUS SANGUINEA MIDWINTER FIRE	DOGWOOD
VIBURNUM DAVIDII	VIBURNUM
LIGUSTRUM VULGARE	WILD PRIVET

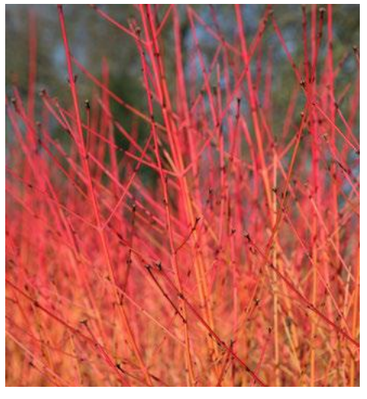


TUFTED HAIR GRASS *DESCHAMPSIA*

SPINDLE *EUONYMUS EUROPAEUS*

PURPLE MOOR GRASS *MOLINA BREEZE*

AUTUMN MOOR GRASS SESLERIA AUTUMNALIS



DOGWOOD *CORNUS SANGUINEA MIDWINTER FIRE*

VIBURNUM *VIBURNUM DAVIDII*

WILD PRIVET *LIGUSTRUM VULGARE*

Shrub, perennial, grass & climber mix

In selected locations, very close to pedestrian access paths and around event buildings, as well as the pergola walkway, a more diverse ornamental planting mix is proposed.

The planting palette will feature natives & exotic plants that together provide:

- A nectar-rich food source.
- Ensure the garden is bee-friendly.
- Be climate resilient to both drought and downpours.
- Be suitable to the soil and local environment.

Promotion and maintenance of local ecology & habitats form part of the decision process for plant selection. Borders will incorporate specific flat-headed flowers for butterflies and other wildlife, and flowering times have been maximised to provide nectar sources throughout the year.

Climbers are being considered as part of the palette of plants which offer opportunities for additional plants & greening of vertical surfaces. Honeysuckles are considered wildlife 'hotel': its nectar-rich, scented flowers attract moths like the impressive Elephant Hawk-moth which are, in turn, preyed upon by bats; new shoots attract blackfly which bring hungry Blue Tits, lacewings and ladybirds; its climbing stems provide nest sites and material for birds, such as Blackbirds and Pied Flycatchers, and small mammals like Dormice; and its juicy red berries are eaten by everyone from Song Thrushes to squirrels.

Examples of the flowering plants proposed as part of the mix

Pond and wetland planting

New ponds have been proposed in the southern section of the site. These are primarily designed as part of the sustainable drainage strategy (refer to GTA Civils) but allow the opportunities to plant native aquatics, marginals and wetland plants as part of ecological enhancements on the site.

The ponds will be deep enough for permanent water storage to support the aquatics and marginals, with surrounding planting to nestle these into the grassland landscape.








Examples aquatics and pond plants





Examples of wetland and surrounding marginals

Tree planting

A selection of native tress have been carefully selected to enhance the landscape and replace trees lost due to development.

A mixture of flowering and fruiting trees will provide a variety of food sources and shelter for local wildlife and species have been chosen primarily to reflect existing species on site, and where close to buildings, to contribute to the aesthetics of the rural events venue.

Potential species include:

QUERCUS ROBUR	ENGLISH OAK
PYRUS PYRASTER	WILD PEAR
ALNUS GLUTINOSA	COMMON ALDER
ACER CAMPESTRE	FIELD MAPLE
BETULA PENDULA	SILVER BIRCH
PRUNUS PADUS	BIRD CHERRY
CRATAEGUS MONOGYNA	HAWTHORN
MALUS ‘RED SENTINEL’	CRAB APPLE

QUERCUS ROBUR ENGLISH OAK

PYRUS PYRASTER WILD PEAR

ALNUS GLUTINOSA COMMON ALDER

ALNUS GLUTINOSA COMMON ALDER

BETULA PENDULA SILVER BIRCH

PRUNUS PADUS BIRD CHERRY

CRATAEGUS MONOGYNA HAWTHORN

MALUS ‘RED SENTINEL’ CRAB APPLE

Tree planting; nuttery

A native Hazel nuttery is proposed in the north-west corner of the site adjacent to existing woodland.

Hazel trees are a valuable resource for wildlife, providing food for insects, birds, squirrels and dormice, as well as a habitat for butterflies. Hazel trees are also used by birds to shelter in. Hazel trees can be coppiced as part of their management plan to help create a better habitat for wildlife, mimicking the actions of beavers. The result is a multi-stemmed shrub, which provides a place for dormice to nest and also lets more light into the woodland. This allows more flowers to grow on the ground, which is good for pollinators.

The nuttery extends into the wider site and will be underplanted with wildflower meadow seed.

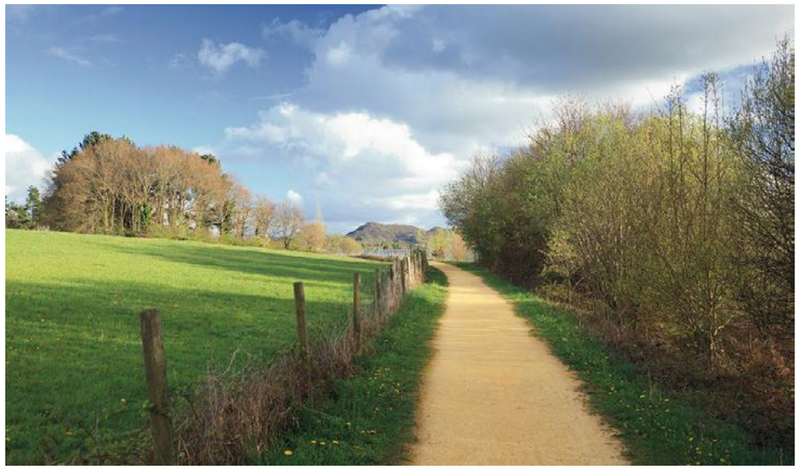
Permeable surfaces & green infrastructure

Permeable surfaces will be maximised across the development site where appropriate and retention ponds installed as part of the drainage strategy.

Permeable gravel paths and access roads will minimise surface water run off and allow water to permeate into the ground below.

Climate-resilient planting will avoid the need to irrigate or for excess watering; plant species chosen to thrive in damp soils and cope with occasional flooding.

For further info on the green infrastructure, refer to GTA Civils.



Examples bound gravel paths

Examples of SUDS ponds with planting