

Green Infrastructure Statement

for Land at Moss Villa

Chapel Lane
Bronington
Wrexham
SY13 3HR

(SJ48518.37626)

By Churton Ecology
(Mr. R.G. Thorne BA [Hons] MRSB and Dr A.K. Thorne MCIEEM | Contact 01743718270)
Commissioned by Berrys
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1 Introduction

Churton Ecology was instructed by Berrys to prepare a Green Infrastructure Statement to support a planning application for the Development of Land at Moss Villa, Chapel Lane, Bronington, Whitchurch, Wrexham SY13 3HR (SJ48518.37626).

This statement is designed to be read in conjunction with 'EcIA – V2, Moss Villa (BRYs)' prepared by Churton Ecology in August 2024 and the landscaping plan developed by Berrys (SA48179_BRY_XX_SK_A_06_D_Proposed Sketch Site Layout_240802). Tree and hedgerow references below relate to the landscaping plan.

2 Existing green infrastructure

The site comprises two buildings and some areas of associated hardstanding. The site also supports a neglected garden area and lightly vegetated access track each comprising a mixture of rank neutral grassland (False Oat-grass, Common Bent, Creeping Bent, Cock's-foot, Red Fescue, Perennial Rye-grass, Yorkshire Fog, Sweet Vernal-grass, Soft Rush, White Clover, Creeping Buttercup, Germander Speedwell, Dandelion sp., Common Vetch, Greater Plantain and Ribwort Plantain) and tall ruderal vegetation (Nettle, Bramble, Common Ragwort, Broadleaved Willowherb, American Willowherb, Hoary Willowherb, Rosebay Willowherb, Great Willowherb, Prickly Sow-thistle and Broadleaved Dock).

The north-west boundary and the west half of the north-east boundary currently support stock fencing. The north-west boundary also supports one mature Hawthorn shrub in poor condition (arborist comment) and this will be removed to accommodate the proposal. The east half of the north-east boundary supports a tall, patchy hedgerow comprising Privet, Buddleia, Holly and Forsythia. One mature Apple tree is also present within the north-east hedgerow (T29) and a second flanks the driveway to the north-west (T30). Additional trees are present at T31 and T28.

The south-west boundary supports a trimmed hedgerow (H4) dominated by Holly with some Hawthorn, Privet and Bridewort. The south-east boundary supports a tall, undermanaged hedgerow (G27) dominated by Hazel with some Holly, Hawthorn, Oak and Downey Birch.

Rank neutral grassland and tall ruderal vegetation provide shelter, nectar and foodplants for various common invertebrates as well as foraging and nesting opportunities for small mammals, common amphibians and reptiles. These are not rare or priority habitats; however, they are still considered to have some (site level) biodiversity value.

3 Green infrastructure to be modified or lost

The 'stepwise approach' has been applied throughout the design stage. Changes to the landscaping scheme have also been made in reaction to the original proposals and will now include the retention of all of the trees and hedgerows. Both Buddleia and Bridewort can become invasive in the right type of habitats; however, these do not appear to be spreading in the context of this site and represent a negligible risk to the integrity of the SSSI/SAC. As a consequence neither species requires eradication.

Small areas of rank neutral grassland and tall ruderal vegetation will be permanently lost (within the built/hardscaping land parcels) and this is considered to be unavoidable. A large part of the existing garden will also be modified from rank neutral grassland/tall ruderal vegetation to regularly mown amenity grassland and the site (which has been neglected for only three years) already has a long history of this type of management intervention (N.B. the turf will be retained). One mature Hawthorn shrub in poor condition (arborist comment) will also be removed from the north-west boundary to accommodate the proposal - this is also considered to be unavoidable.

3 Green infrastructure to be created

An area of rank neutral grassland/tall ruderal vegetation (to the south of the dwelling) will be stripped and tilled and the area re-seeded with a bespoke wildflower seed mix. Due to the proximity of the SSSI/SAC, all grassland species will be strictly selected and locally sourced and will be appropriate to the site's geographical location and geological/soil chemistry characteristics (most likely neutral to base poor). The grassland area will be managed by stimming once annually in mid-August and all cuttings will be removed after one week of drying out (this will allow for seeds to fall into the underlying sward). This will mimic a hay meadow approach to grassland management and the removal of cuttings will help to reduce soil fertility over subsequent years.

To mitigate the loss of the one Hawthorn shrub a single Oak tree will be planted in approximately the same location. Ideally this should be propagated from fallen acorns recovered from under the Oak trees flanking the shared access track to the north.

Two new native hedgerow sections will be planted along the north-west and north-east boundaries. A list of species has been provided below and will include two Alder Buckthorn shrubs (the food-plant of the Brimstone butterfly which is a feature of the SSSI). These will be allowed to attain a shrub like structure by the avoidance of pruning.

Native shrub species for hedgerow planting	
Taxon	Common name
<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn
<i>Euonymus europaeus</i>	Spindle
<i>Viburnum opulus</i>	Guelder Rose
<i>Acer campestre</i>	Field Maple
<i>Cornus sanguinea</i>	Dogwood
<i>Rosa canina</i>	Dog Rose
<i>Frangula alnus</i>	Alder Buckthorn

Hawthorn will comprise 60% of the planting stock. The remaining 40% will comprise an even or varied mix of interplanting using the other species listed above.

All planting must be carried out within the recognised planting season (November to March) and plants will be of strict local origin/provenance due to the site's sensitive location. Whips will be set out in a double staggered row using a total of 5 plants per linear metre, with rows set 225mm apart. All newly planted stock must be fully protected from rabbit damage by the use of tree/shrub guards.

In the second or third year new hedging plants will be hand trimmed to an even height of approximately 750mm to encourage side shoots and the development of a sound hedgebase. For the following two to three years, the leaders will be allowed to grow unhindered and the sides trimmed only if necessary. After the first 5 years, mechanical hedge trimming can commence or the hedge could be allowed to grow up until tall enough to be laid/pleached (approximately 10 years).

It is recommended that each hedgerow section is subsequently cut once every two years to a height of 2 to 2.5m (to allow some fruiting), with cuts carried out in the late winter months. Some Field Maple (as well as Alder Buckthorn) could be allowed to grow into trees since these do not attain a great height.