

LANDSCAPE ECOLOGY HERITAGE MASTERPLANNING ARBORICULTURE EXPERT WITNESS

Parc Llangewydd, Land at West Bridgend Ecology Briefing Note: Laleston Meadows SINC edp3980_r007

1. Introduction

- 1.1 This Ecology Briefing Note has been prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of Llanmoor Development Co Ltd (hereafter referred to as 'the Client'), in relation to Parc Llangewydd, Land at West Bridgend (hereafter referred to as 'the Study Site'). More specifically, this Ecology Briefing Note provides additional survey information in respect of the current condition and botanical interest of Laleston Meadows Site of Importance for Nature Conservation (SINC) which overlaps with the boundaries of the Study Site.
- 1.2 EDP is an independent environmental planning consultancy with offices in Cirencester, Cardiff, Cheltenham and Shrewsbury. The practice provides advice to private and public sector clients throughout the UK in the fields of landscape, ecology, archaeology, cultural heritage, arboriculture, rights of way and master planning. Details of the practice can be obtained at our website www.edp-uk.co.uk.

Background and Scope

- 1.3 The purpose of this assessment is to identify the Study Site's 'in principle' suitability for development, and thus inform its potential for inclusion as a candidate site for allocation within the emerging Local Development Plan for Bridgend County Borough Council (BCBC). A Proposed Masterplan Framework for the Study Site is provided at **Appendix EDP 1**.
- 1.4 A desk study and Extended Phase 1 Habitat survey of the Study Site was initially undertaken on 25 February 2020 to identify key ecological constraints and opportunities to future development. The results of initial desk and field-based investigations were provided within an Ecology Briefing Note, prepared by EDP (report reference: edp3980_r003a); the Phase 1 Plan for the Study Site is provided at **Appendix EDP 2**.
- 1.5 The northern extents of the Study Site encompass four fields which together are designated as a Site of Importance for Nature Conservation (SINC), known as Laleston Meadows SINC. As such, further detailed assessment in respect of habitats associated with the SINC is required to inform a final masterplan design.
- 1.6 This report therefore provides the results of further survey effort to assess the botanical value of land associated with Laleston Meadows SINC (hereafter referred to as the 'Survey Area'), to determine whether it currently meets the qualifying criteria for SINC status. This report also seeks to identify opportunities for its future management and enhancement in respect of visual amenity, recreation and biodiversity.



Site Context

1.7 The Study Site is centred approximately at Ordnance Survey Grid Reference (OSGR) SS 88083 80215, immediately west of the settlement of Bryntirion in Bridgend. Located on the edge of existing development, the wider landscape to the north and west is dominated by agricultural land, comprising predominately grazing pasture subdivided by native hedgerows and woodland units. The Study Site is located approximately 1.5km to the south of the M4 motorway.

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- 1.8 The Study Site itself comprises several field parcels predominantly grazed by sheep, sub-divided by mature tree lines and native hedgerows reinforced in places with post and wire fencing due to their occasionally defunct nature.
- 1.9 With respect to the Survey Area, comprising Laleston Meadows SINC, this comprises four distinct grassland areas divided by variable quantities of scrub and broadleaved woodland. Apparently managed as two separate units (divided by a post and wire fence), the Survey Area is bordered by post and wire fencing of varying levels of quality. The northern boundary of the Survey Area is within the public highway of Llangewydd Road, whilst unmetalled tracks form the eastern and western boundaries of the Survey Area.

2. Methodology

Detailed Botanical Survey

- 2.1 A botanical survey of the Survey Area was undertaken on 19 May 2020 to assess its botanical value and to determine whether it currently meets the qualifying criteria for SINC status.
- 2.2 The survey adopted the DAFOR methodology¹ whereby all vascular plant species (and bryophytes where identifiable) were identified to the following abundance levels: D = Dominant; A = Abundant; F = Frequent; O = Occasional; and R = Rare. Where a species had a particularly localised status within a field it was noted with the prefix L (e.g. rare in the wider field but locally occasional = R/LO).
- 2.3 The botanical values of the habitats recorded were assessed against the criteria set out for habitat types within the Guidelines for the Selection of Wildlife Sites in South Wales by The South Wales Wildlife Sites Partnership (Gwent Wildlife Trust, 2004); this document is hereafter referred to as the GSWSSW.
- 2.4 The survey was conducted by Phil Quinn MCIEEM –an ecologist specialising in botanical survey who has had over thirty years' experience of botanical survey in the UK, primarily in western England and south Wales.

¹ DAFOR botanical survey technique – whereby occurrence of a species is noted to be <u>D</u>ominant, <u>A</u>bundant, <u>F</u>requent, <u>O</u>ccasional, or <u>R</u>are



Limitations

2.5 The timing of this survey was optimal with regard to recording the plants of open ground and grassland habitats.

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2.6 The survey was limited to recording plant species present in both vegetative and floristic forms at the time of survey. The lack of any species record from this report cannot be taken to automatically infer species' absence from the Survey Area.

3. Results

3.1 The Survey Area supports two predominant habitats: marshy grassland and broadleaved woodland. Several ponds are also present within and adjacent to the Survey Area, whilst some scrub forms an interface between the woodland and grassland fields. The marshy grassland is present as four distinct blocks, comprising fields F4/F5 and F7-F9 of the wider Study Site. For the purpose of this report, woodland habitat (incorporating mature scrub and out-grown hedgerows) is hereafter referred to here as W1-W5. The distribution of different habitat types within and adjacent to the Study Site and Survey Area is illustrated Appendix EDP 2 and further described below. The detailed results of the botanical survey are provided at Appendix EDP 3 and Appendix EDP 4.

Marshy Grassland

- 3.2 **Field F9**: The easternmost of the fields comprising the Study Area, this is a rectangular area supporting a small quantity of scrub at its southern extent. The field comprises a well-managed, purple moor-grass (*Molinia caerulea*) dominated sward, but with this species not forming the dense tussocks typically found where such swards are under-grazed. Sweet vernal-grass (*Anthoxanthum odoratum*), Yorkshire fog (*Holcus lanatus*), rough meadow-grass (*Poa trivialis*) and red fescue (*Festuca rubra*) are also prominent grasses here. Rushes are common but not dominant; hard rush (*Juncus effusus*) is the most frequent rush species recorded here.
- 3.3 Meadowsweet (*Filipendula ulmaria*) and purple loosestrife (*Lythrum salicaria*) are very common and prominent herbs, along with tormentil (*Potentilla erecta*), tufted vetch (*Vicia cracca*), and greater bird's-foot trefoil (*Lotus uliginosus*) also recorded. In the northern half of the field there is a notable abundance of devil's-bit scabious (*Succisa pratensis*) along with much black knapweed (*Centaurea nigra*) and occasional betony (*Stachys officinalis*). Sedges are abundant, in particular oval sedge (*Carex leporine*), carnation sedge (*Carex panicea*), glaucous sedge (*Carex flacca*) and remote sedge (*Carex remota*). Zig-zag clover (*Trifolium medium*) is occasional in the south of the field.
- 3.4 More generally this field is somewhat more base-rich than is typical for swards dominated by purple moor-grass.



3.5 *Field F8:* Approximately half the size of field **F9**, this bears many similarities to its eastern neighbour with regard to sward texture and species composition. This field is slightly less species-rich than Field **F9** but is still of high botanical value. Cutting of scrub had taken place across the south-western edge of the field several weeks prior to the survey, with large boughs of scrub left *in situ*. Himalayan balsam (*Impatiens glandulifera*) is very common on the edge of the scrub habitat in the south of the field.

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- 3.6 **Field F7**: This field is long and narrow, and rectangular in shape, located within the centre of the Survey Area. This field forms part of the same grazing unit as fields **F8** and **F9** and has much in common with them with regards to structure and species composition. Although still of high botanical value it is slightly less diverse and herb rich than Field **F8**. Much scrub clearance has recently taken place along the southern margin of the field; a notable amount of the arisings have been burnt within the field on species-rich areas of turf: nevertheless, this has not diminished the field's botanical value.
- 3.7 **Field F4/F5**: Situated in the far west of the Survey Area this field complex comprises three distinct units, likely comprising three separate fields in the past. Boundary features between them have now almost entirely gone. Only a broken line of semi-mature English oak (*Quercus robur*) remains for one of these boundaries.
- 3.8 The southernmost of the three units has the appearance of wood pasture, where in places there is a diffuse boundary with open scrub woodland. Meadowsweet is abundant/locally dominant here and there is also much hard rush, fleabane (*Pulicaria dysenterica*), silverweed (*Potentilla anserine*) and meadow vetchling (*Lathyrus pratensis*). Sharp-flowered rush (*Juncus acutiflorus*) is locally abundant in the damper areas along with water mint (*Mentha aquatica*) which is locally frequent.
- 3.9 The middle unit has much purple moor-grass in the north, together with an abundance of greater bird's-foot trefoil (*Lotus uliginosus*) and much tormentil in association. The remainder of the sward supports much Yorkshire fog and silverweed and is relatively species-poor.
- 3.10 The northernmost of the three units is the most species-poor area of grassland within the Survey Area, supporting an abundance of hairy sedge (*Carex hirta*) and much meadow foxtail (*Alopecurus pratensis*), with occasional purple moor-grass and soft rush.
- 3.11 The species composition of this westernmost field suggests a history of horse-grazing.

Broadleaved Woodland (and Scrub)

3.12 All woodland habitat within the Survey Area comprises broadleaved woodland of relatively recent secondary origin. The canopy is dominated by English oak. In places the understorey has much mature and dense hybrid willow (*Salix x reichardtii*) but is otherwise typically rather sparse, with a largely species-poor field layer which is generally mostly absent. Some parts of the woodland encompass old hedgerows that have not been managed for many decades and have lost their



structure, now comprising a residual sparse line of trees and shrubs upon old hedge banks, with much scrub invasion into adjacent grassland areas.

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- 3.13 **Woodland W1**: Situated on the eastern edge of the Survey Area, and to the east of Field **F9** this is a relatively dense area of secondary broadleaved woodland which has developed from an old hedgerow. This relict hedgerow, directly abutting the eastern edge of Field **F9** (and separated from it by a post-and-wire fence), has many mature English oak with hazel (*Corylus avellana*), hawthorn (*Crataegus monogyna*) and blackthorn (*Prunus spinosa*), the more common shrubs. The majority of this belt of scrub woodland comprises the above species along with ash (*Fraxinus excelsior*), goat willow (*Salix caprea*) and some garden privet (*Ligustrum ovalifolium*). The field layer is dominated by ivy (*Hedera helix*) but dog's mercury (*Mercurialis perennis*) is locally abundant. Herb benet (*Geum urbanum*), cow parsley (*Anthriscus Sylvestris*) and enchanter's nightshade (*Circaea lutetiana*) are also locally common.
- 3.14 **Woodland W2**: This occupies a small depression, possibly a disused quarry or pit. There are occasional large English oak and ash here, but the understorey is notably thin with hazel and hawthorn being the predominant species. Bramble (*Rubus fruticosus* agg). is present but uncommon. The field layer is very poor and mostly lacking, although several large clumps of nettle (*Urtica dioica*) are present. In the north-western corner of this woodland a large quantity of hybrid willow is present and has encroached onto the southern edge of Field **F8**; Himalayan balsam is very common in the understorey here. Some of this scrub has recently been cut back.
- 3.15 **Woodland W3**: Comprising neglected mature hedgerows along the eastern and western sides of Field **F8** there are several large mature English oaks along with quantities of hybrid oak, young ash, hazel and hawthorn. There is some common dog violet (*Viola riviniana*) and creeping jenny (*Lysimachia nummularia*) but generally the field layer is poor and grassy (east side) or poor with Himalayan balsam (west side).
- 3.16 **Woodland W4**: Comprising a narrow area of broadleaved woodland running along and parallel to the northern boundary of Field **F7** this is a relict hedge bank, with a roadside ditch, and a post and wire fence separating the bank from the ditch. Many mature English oak standards are present here. There is a very scattered understorey here of hawthorn, ash, hazel and bramble; the field layer on the bank is notably diverse, containing goldliocks buttercup (*Ranunculus auricomus*), bitter vetchling (*Lathyrus montanus*), bluebell (*Hyacinthoides non-scripta*), common dog violet, and primrose (*Primula vulgaris*). The secondary woodland outgrowth south of the hedge bank has a species-poor ground flora.
- 3.17 **Woodland W5**: The largest woodland block on this site, **W5**, has an origin in several interconnecting old hedge banks that are located within it. On these hedge banks mature English oaks are prominent features and there is also occasional semi-mature ash. Ash, hawthorn, blackthorn, hazel, elder (Sambucus nigra), holly (*llex aquifolium*), dogwood (*Cornus sanguineus*) and bramble are the main species in the rather scattered understorey.



3.18 On the old hedge banks there are occasional patches of bluebell, dog's mercury, common dog violet and greater stitchwort (*Stellaria holostea*) along with some wood speedwell (*Veronica montana*) and goldilocks buttercup. Elsewhere the woodland floor alternates between extensive areas of bare ground/leaf litter and small damp glades where nettle, opposite-leaved golden saxifrage (*Chrysosplenium oppositifiolium*), remote sedge, ground ivy (*Glechoma hederacea*), water mint, marsh bedstraw, common grass species, Himalayan balsam, lady fern (*Athyrium felix-femina*) and bittersweet (*Solanum dulcamara*) are present in varying quantity.

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Habitat Overview and Assessment against SINC Criteria

- 3.19 The five habitat types present within the Survey Area, which are listed within the GSWSSW, and a description of qualifying criteria for designation as a SINC, are provided below:
 - H1 Woodland: Qualifying woodland habitat as identified within Table 1 of the GSWSSW includes "semi-natural woodlands, of whatever size, which support an assemblage of ancient woodland indicator species". However, no numerical threshold for determining how many species would allow a woodland to qualify for SINC status is offered in the GSWSSW. Instead, a "significant assemblage" of species from Table 1 is suggested as the determinant for SINC status and based on local knowledge of what construes "significant". Woodland W1 and W5 within the Survey Area supports the most indicator species, as listed in Table 1 of the GSWSSW (refer to Appendix EDP 4). Despite being not especially speciesrich, and of recent secondary origin, it is considered that they have sufficient botanical interest to be considered as qualifying woodlands in their own right with regards to their status as a SINC. Woodlands **W3** and **W4** are notably poorer and their inclusion within the SINC on botanical determinants alone is less definite. However, they are situated between other qualifying features of the SINC, such that these areas are considered of some importance of maintaining the overall integrity of the habitat. In contrast, W2 is not considered of sufficient botanical richness to qualify as SINC and is, furthermore, of limited value in maintaining the overall integrity of Laleston Meadows SINC;
 - H2 Scrub: The scrub situated on the margins of the woodland and grassland elements of the SINC does not qualify for retention within the SINC on its own right, as it is neither "structurally diverse and species-rich mixed" nor does it comprise "significant stands of gorse". The scrub is, furthermore, of limited extent. Located between woodland and grassland habitat of botanical interest, however, scrub habitat is of value in maintaining connectivity across the SINC. Nevertheless, management of this habitat is warranted to prevent its encroachment across areas of species-rich grassland; and



H7 Marshy Grassland: Within the Survey Area, marshy grassland most readily approximates to the purple moor-grass – tormentil mire and the sharp/soft-flowered rush-marsh bedstraw rush-pasture community (M25 and M23 in the National Vegetation Classification respectively). Each field (F4/F5 and F7-9) supports 12 or more species from Table 5 of the marshy grassland assessment table in the GSWSSW. As such this habitat satisfies the SINC designation requirements whereby a minimum of twelve species from Table 2 are needed (refer to Appendix EDP 3 for species list).

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3.20 An assessment also considered additional criteria for designation of a SINC in respect of the Survey Area's '*naturalness/typicalness*' and '*diversity*.' The Survey Area as a whole is considered a typical example of both old marshy grassland (unimproved, species-rich, not degraded, and traditionally managed) and semi-natural woodland; and natural with regard to the habitats and plant communities having formed here with only the minimum of human involvement limited to the historic formation of hedgerows, and maintenance of traditional grazing regimes. Marshy grassland habitat further supports relatively high diversity with natural gradations between grassland, scrub and woodland habitats.

4. Summary and Recommendations

- 4.1 To assess the botanical interest of Laleston Meadows SINC and thus inform a masterplan design for its residential development, a DAFOR level botanical survey of Laleston Meadows SINC, was undertaken on 19 May 2019 by a suitably qualified botanist. Within the red line boundary of the proposed development site, the SINC encompasses four distinct grassland areas divided by scrub, broadleaved woodland and relict hedgerows.
- 4.2 All woodland identified within the survey area is broadleaved and of relatively recent secondary origin. Woodland habitat is not considered to be especially species-rich, although woodland within the north-west corner (W5) of the Survey Area and woodland delineating the eastern boundary (W1) of the Survey Area, are considered to have sufficient botanical interest to be considered as qualifying woodlands in their own right with regard their SINC designation. Woodland and scrub habitat present across the two central fields within the SINC are, in contrast notably poorer and thus of lower botanical interest, albeit contribute to maintaining the integrity of the SINC.
- 4.3 The four fields within the Survey Area are representative of marshy grassland habitats. All four fields qualify for SINC designation, based on the number of 'qualifying' grassland and forb species identified during survey effort and with reference to *Guidelines for the selection of Wildlife sites in South Wales* (2004). However, the two eastern fields (F8 and F9) are comparatively more species-rich and of high botanical value with occurrences of devil's-bit scabious (*Succisa pratensis*) of potential value to marsh fritillary butterfly (*Euphydryas aurinia*), whilst the north-western field (F4/F5) is relatively species-poor. Field F7 in comparison to the other fields is of moderate botanical diversity. However, recorded scrub encroachment from field boundaries will have had negative impacts upon the integrity of species-rich grassland communities. If not managed, this will likely result in the further loss of the selection of the species of the selection of the selection of the selection of the selection of high botanical communities.



species-rich grassland across the site.

4.4 As discussed within the Ecology Briefing Note prepared by EDP for the wider Study Site (report reference edp3980_r003a), a future planning submission will need to consider the potential for direct and indirect impacts to arise upon sensitive habitats associated with Laleston Meadows SINC, as well as the wider Study Site.

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- 4.5 Inherent within the emerging masterplan, however, is the proposed retention of designated features associated with Laleston Meadows SINC, although some minor loss is anticipated to accommodate creation of a new emergency access into the Study Site from its northern boundary. Such retained features will be further protected from potential harm/damage/disturbance through the sensitive design of built development away from SINC boundaries and inclusion of suitable buffers.
- 4.6 The inclusion of Laleston Meadows SINC within the Study's Site boundary will, however, provide potential for a balanced provision of areas of informal public open space and wildlife zones informed by the results of the detailed botanical assessment. As such, a masterplan proposal will seek to maintain biodiversity across the SINC, particularly the two eastern fields (F8-F9) of greater botanical value, which will predominantly be managed for wildlife and biodiversity (ideally through sensitive grazing) with restricted public access, albeit allowing for the continued use of existing Public Rights of Way (PRoW) across this area.
- 4.7 The two western fields meanwhile provide opportunities for the provision of informal public open space focused across those areas of lower botanical interest, whilst also providing opportunities for the enhancement and sensitive management of habitat features (including scrub control and removal of undesirable species), considered necessary to further enhance and maximise biodiversity as far as possible, whilst ensuring the long term condition of the SINC is maintained in a favourable status.



Appendix EDP 1 LDP Candidate Site Key Drawings, April 2020



PARC LLANGEWYDD LAND AT WEST BRIDGEND

LDP CANDIDATE SITE DRAWINGS BOOKLET

FINAL ISSUE APRIL 2020 | VERSION 01

PARC LLANGEWYDD | LAND AT WEST BRIDGEND

KEY SITE FEATURES & CONSTRAINTS PLAN



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Key Site Features / Constraints:

- Site Boundary 36.85ha [91.06ac] Existing ponds / watercourses Existing field boundaries Existing parallel hedge / track Existing field access Public Right of Way (PROW) connection Public Right of Way Overhead Electricity Cable Site of Important Nature Conservation (SINC) Existing Tree / Hedgerow Adjacent Playground Playing fields Public Open Space / Recreational Facilities Surrounding road network Minor lane - access limited Bus stop adjacent to site Cycle route 2m Lidar Contours High: 83.8m AOD to Low: 51.5m Views / to from Laleston Conservation Area- predominately stone rubble buildings with some buildings now stone washed and rendered Proximity to Laleston Village and Conservation Area Green wedge forms a buffer between Laleston and the site Residential properties back / side on- over looking privacy consideration
 - Proximity to Bryntirion community and recreational facilities /services

PARC LLANGEWYDD | LAND AT WEST BRIDGEND MASTERPLAN FRAMEWORK





PLACEMAKING PRINCIPLES

- Site Boundary 36.85ha [91.06ac]
- Residential High quality, mixed tenure residential community with distinct character areas responding to the site context and creating a sense of place. Variation in built form and density, positively fronting streets and areas of public open space.
- Education- 1.5 form entry Primary School and 45 nursery places, set within 1.6ha green space, incorporating playing fields and SUDS and sensitively integrated within existing hedgerows and tree planting screening views form Laleston.
- Healthy Neighbourhoods A coherent and attractive network of green streets, walking and cycling friendly routes, and open space promoting active travel, health and well being and enhancing biodiversity.
- Indicative bus stop location on Main Street / The Crescent
- Public Right of Way (PROW)- wayfinding system / interpretation.
- 'Laleston Link'- realigned PROW aligned with existing green corridors.
- Formal shared foot and cycle route set within green corridor.
- 'Y Berth' Informal track through existing hedgerow corridor.
- Woodland Area / SINC: Nature Conservation Area / Wetland Habitat / Informal green space for people to experience nature.
- Significant multifunctional network of green spaces, retaining/maintaining/ re-providing hedgerows, trees and SUDS features.
- Public Open Space that may incorporate formal play equipment; natural play and landscape detention basins that provide amenity and biodiversity benefits.
- Wetland habitat / flood out area / SUDS feature.
- Western Linear Park- Naturalised green buffer between the Lane and proposed residential area softening views between the site and Laleston and creating/maintaining wildlife corridors.
- Local Equipped Area of Play (LEAP) and Local Area of Play (LAP).
- Local Area of Play (LAP)
- Local Landscape Area of Play (Softer landscape forms and features).
- Trim Trail Adventure Play Zone
- Trim Trail / Station.
- Potential Emergency Access.

LAND USE



Veodurd/Sttc

DENSITY

Residential: 22.46ha (Circa 850 open market & affordable homes)

Education: 1.6ha (1.5 form entry Primary School, 45 nursery places and formal outdoor sports) Woodland Area / SINC: 7.82ha (Natural/Semi natural area for nature conservation / new wetland habitat / SUDS / informal green space for people to experience nature)

Formal Public Recreation & Open Space:

2.1ha (Children's play space / Informal

amenity space)

Green Infrastructure: 2.87ha (Green Streets, amenity green space) Medium to Higher density: 7.19ha More formal pattern of development. Mix of 2, 2.5 and 3 storey development.

KEY

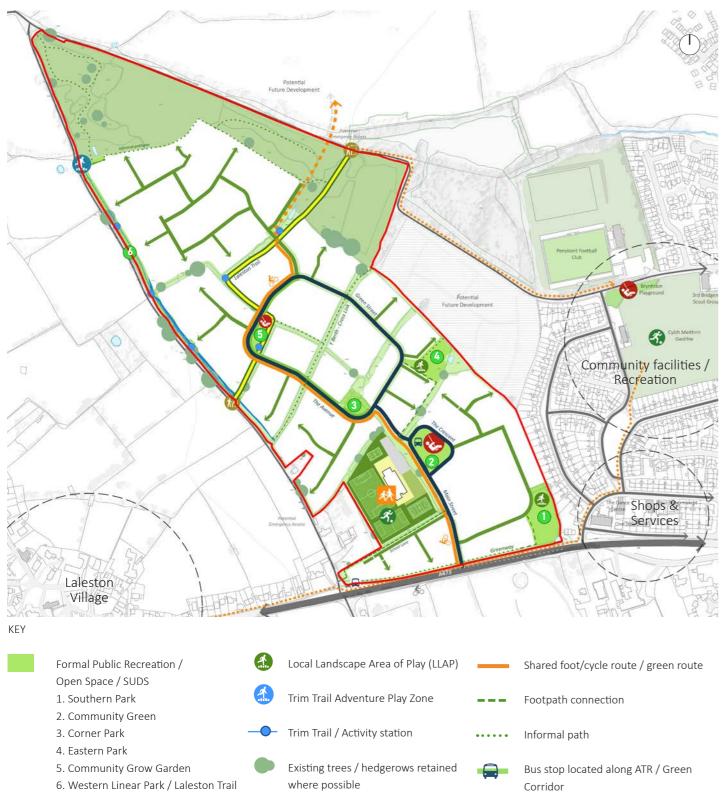
Medium Density:10.5ha Less formal pattern of development. Typically 2 storey development with occasional 2.5 storey/3storey focal building development.





Medium to Lower Density: 4.77ha Informal pattern of development that respects the setting of Laleston/woodland edge to the development. Typically 2 storey development.

GREEN INFRASTRUCTURE



APPROXIMATE OPEN SPACE WALKING DISTANCES



		Local Landscape Area of Play (LLAP)			KEY	
		Local Lanuscape Area of Flay (LLAF)		Shared foot/cycle route / green route	$\langle \rangle$	
		Trim Trail Adventure Play Zone		Footpath connection	\bigcirc	Approx formal open space / play space walking distance
		Trim Trail / Activity station	•••••	Informal path		
on Trail		Existing trees / hedgerows retained where possible		Bus stop located along ATR / Green Corridor	\rightarrow	Approx walking distance (metres from centre of activity zone to dwellings)
	Ĩ.	Primary formal sports provision	-	Primary and Secondary Green Streets / SUDS / Avenue Planting		
		'Laleston Trail' (Bridgend Circular Walk) / re-aligned PROW footpath	\rightarrow	Green Street / SUDS network		

(LEAP and LAP)

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Woodland Area / SINC / SUDS

Formal Equipped Area of Play



STREET HIERARCHY

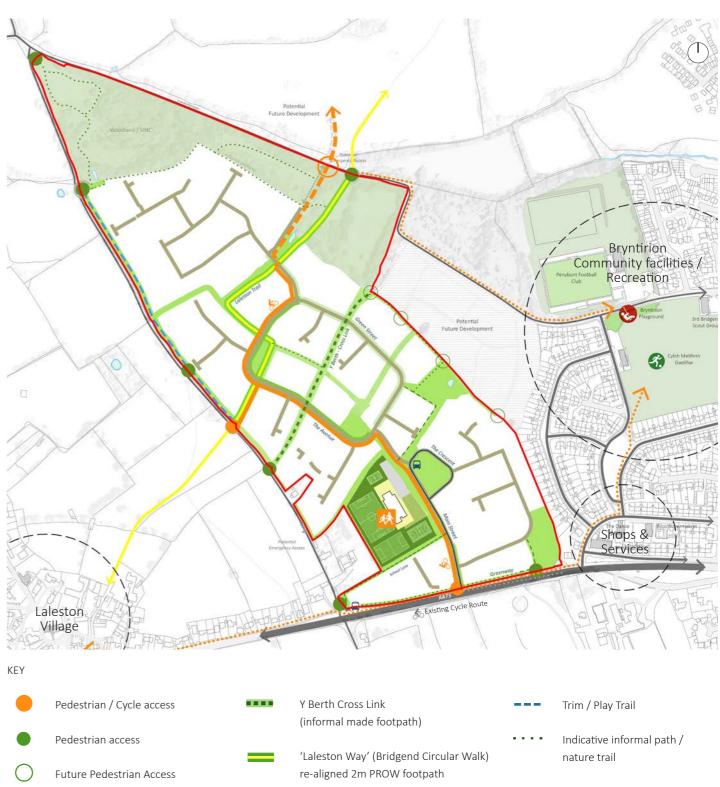


ACTIVE TRAVEL ROUTES

Shared foot/cycle route (3m)

connecting to future development

Potential shared foot/cycle route



Main Street

Site Access (all modes)

Potential emergency access point

Potential future vehicular connection

(Primary street accommodating buses, shared foot/cycle path, swales, street planting)

The Avenue (Primary Street accommodating shared foot/cycle path, swales, street planting)

- The Crescent (Secondary Street accommodating bus loop, swales, street planting)
- Green Street (Secondary Street accommodating swales, street planting, on carriageway cycling)

- Inner Street (Tertiary Street, on carriageway
- cycling)
- Community Street (Shared Street, link to POS / School)
- Lane / Private Drive (Shared Street)
- * Car Parking Strategy: on plot/ on street/within courtyards, unallocated on street visitor parking



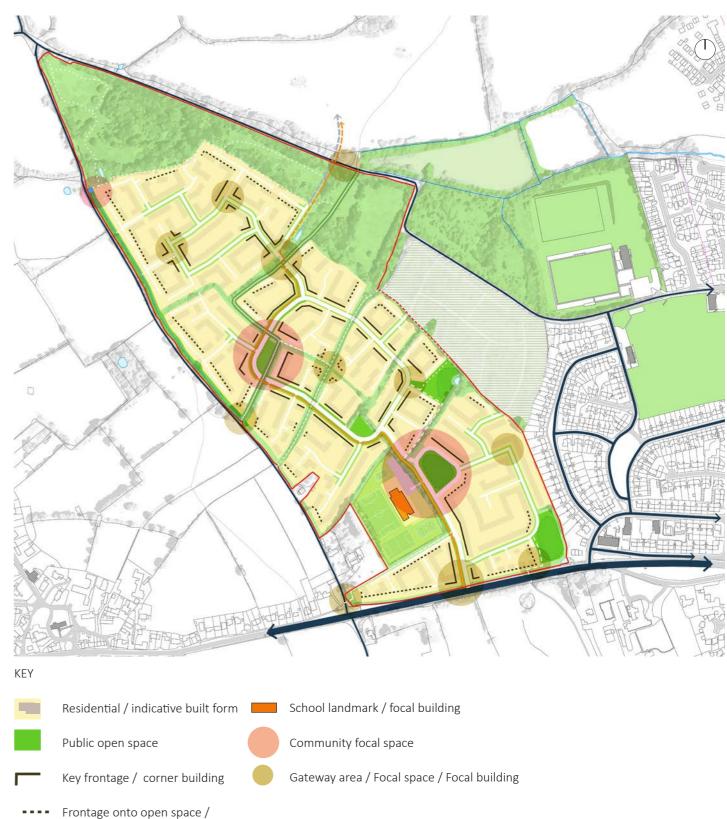
Y Berth Cross Link (informal made footpath)		Trim / Play Trail
'Laleston Way' (Bridgend Circular Walk) re-aligned 2m PROW footpath	••••	Indicative informal path / nature trail
Existing PROW		Connected street network
		Bus Loop (clockwise)
Footpath connection		Bus Stop (indicative only)

CHARACTER & PLACE



BUILT FORM & KEY FRONTAGES

Outward facing edge



- Residential Character:
- Medium density, semi formal character
- structured by retained existing hedgerows, softening of boundary treatments, outward facing, reducing in density along western edge.

- Medium to higher density, more formal
- building line, boundaries, structural
- landscaping / SUDS features.



INDICATIVE PHASING PLAN



KEY

Indicative Development Phase

Phase 1 – Southern Fringe and Community Heart

Phase 2 – The Hedgerows to Y Berth

Phase 3 – The Hedgerows north of Y Berth

Phase 4 – Woodland Edge.



PARC LLANGEWYDD: PUBLIC RECREATION & OPEN SPACE STRATEGY

Community Cross Links

The existing dual hedgerow feature traversing the site will be ratified as an informal walking trail - Y Berth/ The Hedgerows. Openings in the route will ensure a safe, attractive and convenient trail experience.

The existing Public Right of Way through the site will be realigned along retained hedgerows and areas of open space to provide a more naturalistic and accessible connection. The Laleston Trail (PROW) will connect the site to Laleston via the wider Bridgend Circular Route. Opening along the route will provide space for 'natural' play stations forming part of the wider Trim/Play Trail.





Natural Edges

Western Linear Park will provide a natural, soft buffer to the edge of the site bordering Laleston. The existing green hedgerows and trees along the lane will be retained and form the edge of a new natural park. A **Trim/Play trail** could be provided along the length of the linear park with equipped/ natural 'stations' providing opportunity for exercise and imaginative play.

The Woodland to the north/north-east is identified as a SINC, protected because of its nature conservation value, will be celebrated as a multifunctional 'green and blue' asset. Opportunities to create wetland areas in existing glades will extend the habitat and provide space for SUDs. Opportunities to provide controlled access, via an informal trail(s) of crushed stone path/ mown grass, will allow people to enjoy and appreciate nature without harming the sensitive environment. Allocating provision for **allotments** could also be considered.







Community Green and a Grow Garden area will be located along the primary and secondary street network, well served by a designated walking and cycling paths. They will form the main 'civic' spaces to the development. The design of these space will incorporate both active and quiet areas and accommodate a wide range of activities, including formal equipped play areas and SUDS features integrated in a naturalistic way.













Formal Outdoor Sport Provision

Parc Llangewydd Primary School will play a much wider and multi-functional role in the community through addressing both the broad range of educational needs of children and young people during traditional school opening hours and also acting as community-based learning and recreational environments, especially during out-ofschool hours and school holidays. A range of formal active recreational uses will be



Green Streets & Amenity Space

A network of attractively landscaped Green Streets and Spaces provided across the development will accommodate and link the essential green infrastructure for the site. Landscaped SUDS features will be integrated to manage surface water and create an aesthetically pleasing area to travel through. Other 'green elements' including generous gardens, hedges, trees, street trees and planting will provide further amenity space and help increase habitat and biodiversity.

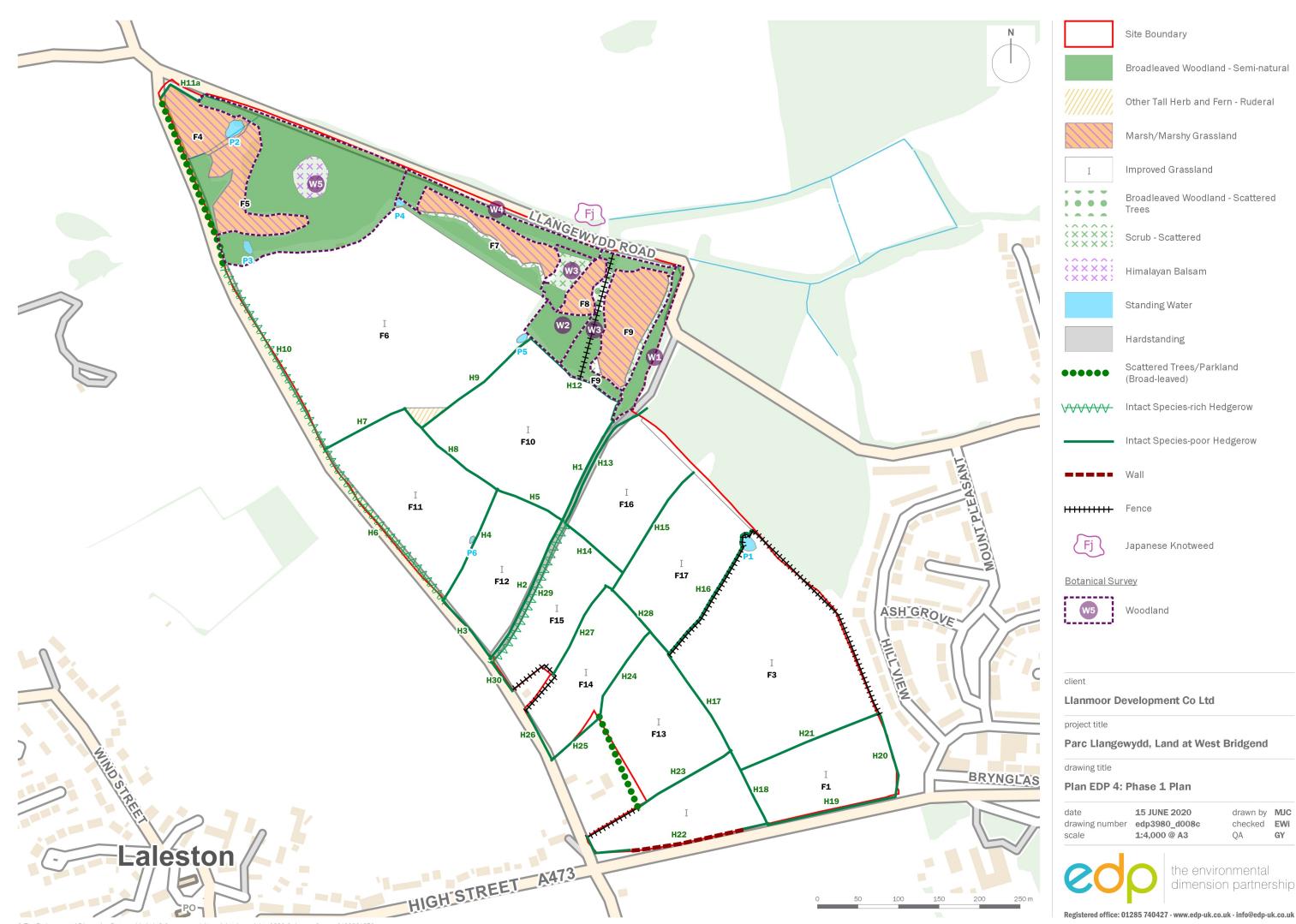
provided on site, such as pitches, green courts and formal trim trails which could be made available to the wider community.

Bryntirion Playing Fields, Penybont Football Club and Cylch Meithrin

Gwdihwed Community Centre are located to the north-east of the development, providing large outdoor areas of space and a play park for the wider community to utilise.



Appendix EDP 2 Phase 1 Plan (edp3980_d008c 15 June 2020 MJC/EWi)



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Appendix EDP 3 Botanical Survey Results: Grassland

A3.1 Species in bold are species listed in Table 5 of the Guidelines for the Selection of Wildlife Sites in South Wales prepared by Gwent Wildlife Trust on behalf of the South Wales Wildlife Partnership (2004).

Common name	Scientific name	DAFOR					
		F9	F8	F7	F4/F5		
Bugle	Ajuga reptans	R	R				
Marsh foxtail	Alopecurus geniculatus			R			
Meadow foxtail	Alopecurus pratensis				0/LF		
Wild angelica	Angelica sylvestris	R					
Sweet vernal grass	Anthoxanthum odoratum	A/LD	А	А	F		
Lady fern	Athyrium felix-femina				R		
Cuckoo pint	Arum maculatum	R					
False wood-brome	Brachypodium sylvaticum	0					
Cuckoo flower	Cardamine pratensis	R	R	0	R		
Glaucous sedge	Carex flacca	0	0				
Hairy sedge	Carex hirta			0	F/LA		
Long-stalked	Carex lepidocarpa	R		R			
yellow sedge							
Oval sedge	Carex leporina	Α	F	0/LF	0/LF		
Common sedge	Carex nigra		R		R		
Carnation sedge	Carex panicea	Α	F	0	0		
Remote sedge	Carex remota	F		0			
Black knapweed	Centaurea nigra	F/LA	0	R	R		
Common mouse-	Cerastium fontanum	R		R	R		
ear							
Creeping thistle	Cirsium arvense	0			0		
Marsh thistle	Cirsium palustre	R	R	0	0		
Crested dog's-tail	Cynosurus cristatus	0	R	0	0/LF		
Cocksfoot	Dactylis glomerata	R	R		0		
Wavy hair-grass	Deschampsia flexuosa	R		R			
Square-stemmed	Epilobium tetragonum	R	R				
willowherb							
Field horsetail	Equisetum arvense	R	R	R			
Marsh horsetail	Equisetum palustre				R		
Red fescue	Festuca rubra	0	R	0	F		
Lesser celandine	Ficaria verna				R		
Meadowsweet	Filipendula ulmaria	A/LD	F	F	F/LA		
Marsh bedstraw	Galium palustre			R	0		
Hogweed	Heracleum sphondylium		R	R			
Yorkshire fog	Holcus lanatus	F	F	F	F		
Common cat's-ear	Hypochaeris radicata				0		

Table EDP A3.1: Plant species recorded within the Survey Area



Common name	Scientific name	DAFOR					
		F9	F8	F7 F4/F5			
Flag iris	Iris pseudacorus	R/LO					
Sharp-flowered	Juncus acutiflorus			0/LA	0/LA		
rush							
Jointed rush	Juncus articulatus	R	R	R	F		
Compact rush	Juncus conglomeratus	0		0/LF	F		
Toad rush	Juncus bufonius	0		R	0		
Soft rush	Juncus effusus	0	R	F			
Hard rush	Juncus inflexus	F/LA	0	F	F		
Meadow vetchling	Lathyrus pratensis	0	0	R	A		
Perennial rye-grass	Lolium perenne	R	R	R			
Bird's-foot trefoil	Lotus corniculatus	0					
Greater bird's-foot	Lotus pedunculatus	F	0	F			
trefoil							
Creeping jenny	Lysimachia nummularia				R		
Purple loosestrife	Lythrum salicaria	Α	Α	Α			
Water mint	Mentha aquatica	R			0		
Purple moor-grass	Molinia caerulea	F/LA	D	D	0/LF		
Red bartsia	Odontites vernus	R					
Ribwort	Plantago lanceolata	F	0	F	0		
Annual meadow-	Poa annua	R	0	0	F		
grass							
Rough meadow-	Poa trivialis	F	F	F	F		
grass							
Silverweed	Potentilla anserina				F		
Tormentil	Potentilla erecta	F/LA	F	0/LA	F		
Creeping cinquefoil	Potentilla reptans	F	R		0		
Cowslip	Primula veris	R					
Bracken	Pteridium aquilinum	0					
Fleabane	Pulicaria dysenterica	0	0	R	F		
Meadow buttercup	Ranunculus acris	R		R	0		
Lesser spearwort	Ranunculus flammula			R			
Creeping buttercup	Ranunculus repens		R/LO	R/LO	0		
Yellowrattle	Rhinanthus minor				R/LO		
Bramble	Rubus fruticosus agg.		R				
Sorrel	Rumex acetosa	R					
Clustered dock	Rumex conglomeratus	R	R		R		
Marsh ragwort	Senecio aquaticus	R		R			
Ragged robin	Silene flos-cuculi				R		
Betony	Stachys officinalis	0					
Lesser stitchwort	Stellaria graminea	1			R		
Bog stitchwort	Stellaria uliginosa		R/LO	0/LF			
Devil's-bit	Succisa pratensis	F/LA	0/LF	R	R		
scabious	-						
Dandelion	Taraxacum officinale agg.	0	R	R	R		
Lesser trefoil	Trifolium dubium	1		R	0		



Common name	Scientific name		DAFOR					
		F9	F8	F7	F4/F5			
Zig-zag clover	Trifolium medium	0						
Red clover	Trifolim pratense	R	R		0			
White clover	Trifolium repens	0/LF	0	R	0/LF			
Nettle	Urtica dioica				0			
Germander	Veronica chamaedrys				R			
speedwell								
Tufted vetch	Vicia cracca	A	0		0			
Thyme-leaved	Veronica serpyllifolia	R	R	0				
speedwell								



Appendix EDP 4 Botanical Survey Results: Woodland and Scrub

A4.1 Species in bold are species listed in Table 1 of the Guidelines for the Selection of Wildlife Sites in South Wales prepared by Gwent Wildlife Trust on behalf of the South Wales Wildlife Partnership (2004).

Common name	Scientific name	DAFOR					
		W1	W2	W3	W4	W5	
Field maple	Acer campestre				0	0	
Three-cornered	Alium triquetrum	R/LF					
leek							
Cow parsley	Anthriscus sylvestris	F	0		0	0	
Cuckoo pint	Arum maculatum	0	R		R	R	
Hartstongue	Asplenium scolopendrium	0				R	
Lady fern	Athyrium felix-femina		R			0	
Wavy bittercress	Cardamine flexuosa					0	
Remote sedge	Carex remota			F	0	F	
Wood sedge	Carex sylvatica	0		R		R	
Opposite-leaved	Chrysosplenium					R/LO	
golden-saxifrage	oppositifolium						
Enchanter's	Circaea lutetiana	0	F			0	
nightshade							
Hazel	Corylus avellana	R	F	F	F	F	
Hawthorn	Crataegus monogyna	F	F	F	F	F	
Montbretia	Crocosmia x crocosmiiflora	R					
Broad buckler fern	Dryopteris dilatata	R			R	0	
Male fern	Dryopteris felix-mas	0		0		F	
Lesser celandine	Ficaria vernus	0	F		R	А	
Ash	Fraxinus excelsior	F	R	0	F	F	
Goosegrass	Galium aparine	F	0	0	0	0	
Marsh bedstraw	Galium palustre					R	
Herb robert	Geranium robertianum	0	R		R	0	
Herb benet	Geum urbanum	F	R	R	R	0/LF	
Ground ivy	Glechoma hederacea	R			R	0/LF	
lvy	Hedera helix	D	0	0/LF	0	F	
Hogweed	Heracleum sphondylium	0					
Hybrid bluebell	Hyacinthoides x massartiana	R					
Bluebell	Hyacinthoides non-scripta	0		R	0/LF	0	
Holly	llex aquifolium	R		R	R	0	
Himalayan balsam	Impatiens glandulifera	0	O/LA			0/LF	
Yellow flag iris	Iris pseudacorus			R			
Spotted archangel	Lamiastrum galeobdolon argentatum	R/LF					
White deadnettle	Lamium album	0					

Table EDP A4.1: Plant species recorded within the Survey Area.



Common name	Scientific name	DAFOR					
		W1	W2	W3	W4	W5	
Bitter vetchling	Lathyrus montanus				R	R	
Garden privet	Ligustrum ovalifolium	R					
Creeping jenny	Lysimachia nummularia			R			
Water mint	Mentha aquatica					R/LO	
Dog's mercury	Mercurialis perennis	F/LA			R	0	
Winter heliotrope	Petasites fragrans	R/LF					
Wood meadow-	Poa nemoralis	R					
grass							
Soft shield fern	Polystichum setiferum	R					
Primrose	Primula vulgaris	R			R	R	
Blackthorn	Prunus spinosa	0	R	0	R	0	
English oak	Quercus robur	F	0	F	F	F	
Goldilocks	Ranunculus auricomus				0	R	
buttercup							
Creeping buttercup	Ranunculus repens	R					
Rose species	Rosa sp.	0					
Bramble	Rubus fruticosus agg.	F	0	F	F	F	
Wood dock	Rumex sanguineus	R	0	R	0	0	
Goat willow	Salix caprea	0				R	
Hybrid willow	Salix x reichardtii		0/LF		R	F	
Red campion	Silene dioica	0			R	R	
Bittersweet	Solanum dulcamara					R	
Greater stitchwort	Stellaria holostea					R	
Bog stitchwort	Stellaria uliginosa					R/LO	
Snowberry	Symphoricarpos sp.	0					
Black bryony	Tamus communis	R			R		
Nettle	Urtica dioica	0	F/LA	R	0	0/LA	
Wood speedwell	Veronica montana		R	R		R	
Guelder rose	Viburnum opulus	R					
Common dog rose	Viola riviniana			F	0	0	