LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN (LEMP)

For proposed development:

Agricultural Buildings, Washingley Farm, Green End, Great Stukeley, PE28 4AE

Site: 1427 V4

Date:

18

Dec 2024

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1 Design Strategy for ecological enhancement

1.1 The following report is for the landscape and ecological management plan (LEMP) associated with the proposed development of 6 new dwellings at Agricultural Buildings, Washingley Farm, Green End, Great Stukeley, PE28 4AE. Two barns will be retained and integrated within the properties.

1.2 The speciation is accompanied by the soft and hard works plans, and biodiversity enhancement plan at the appendices of this report:

- 1427-01 Washingley Fm soft works plan
- 1427-02 Washingley Fm hard works plan
- 1427-03 Washingley Fm Biodiversity Enhancement works plan

1.3 The LEMP and Biodiversity Enhancement Plan drawing have been prepared in reference to the Update Preliminary Ecological Appraisal Including an Update Great Crested Newt Assessment & Further Bat Surveys (Skilled Ecology Ltd February 2022).

Pre demolition enhancements include:

- Prior to the commencement of development works on the barn (Building 8), bat boxes should be erected on nearby trees.
- The boxes should include 1 x Eco Kent bat box and 1 x Schwegler 1FD (or similar) positioned high (above 4m) on adjacent trees facing a southerly direction.
- Schwegler summer/winter 1WI bat boxes (or similar) installed into the gable ends of two of the houses

Habitat enhancements include:

- The following bat, bird and bee boxes will be installed in the walls new buildings of and on mature trees around the site boundary. This is in addition to bat boxes required for mitigation:
- 4 x Sparrow terrace nesting bricks by Bird Brick House;
- Starling nesting bricks by Bird Brick House;

- Eco Integrated Bat Box;
- 6 x Bee bricks.

To compensate for loss of nesting/roosting habitat, the following bird boxes should be installed

- 3 x general purpose bird box- Schwegler 1B;
- 3 x open fronted bird box- Schwegler 2H;
- 3 x swallow nests- Schwegler 10B;
- 3 x house martin nests- Schwegler 9A;
- 2 x barn owl boxes.

Pre-commencement preparation

Demolition

1.4 The initial stages of the barn demolition works should commence with hand deconstruction of the roof and walls stripping the building under supervision by a bat licensed ecologist. The ecologist should inspect all areas potentially suitable for roosting bats, particularly regarding the roof tiles. If bats are discovered during the supervised works, they should be safely relocated into the installed bat boxes.

Ground works

1.5 Due to possible local Great Crested Newts and reptile populations, groundworks should commence with slow strimming of the ground vegetation within the construction zone in fine and dry weather between April and October. At the same time the site should be hand cleared of debris and rubbish all under ecological supervision by an appropriately experienced and great crested newt licensed ecologist. The strimming should be slow and in two cuts with the first cut to approximately 15cm followed by a second cut to ground level.

1.6 The ponds and hedgerows should be protected from harm and impact during works by heras fencing preventing contractors, machinery or materials from close proximity to the ponds or hedgerow roots.

1.7 All excavations are covered overnight or have a roughly sawn plank placed in them to facilitate escape for any wildlife which may fall in to avoid entrapment by Great Crested Newts, hedgehogs, badgers, all mammals and reptiles.

1.8 Prior to works commencing on site possible refugia has been removed outside of Great Crested Newts and Reptile seasons.

1.9 Ensure boundaries to site are permeable for small ground based mammals to escape construction activities.

Hedgerows and trees

1.10 Works to hedgerows and trees was carried outside of the bird nesting season.

1.11 Apply British Standards Institution (2012), BS 5837:2012, Trees in relation to design, demolition and construction – recommendations to tree protection.

General

1.12 No working in hours of darkness to avoid lighting the site and impact on bat movements and disturbance to nocturnal amphibians and mammals.

1.13 The site should be well drained to prevent attracting wildlife into harm's way

1.14 Apply BS 42020:2013, Biodiversity – Code of Practice for planning and development, to protect waterways from runoff and pollution

Planting area preparation

1.15 Existing ground cover, understorey vegetation, leaf litter and other surface debris shall be removed using hand operated tools only, e.g. chainsaws, brush cutters, rakes etc. Care shall be taken to ensure tools do not cause impact damage to neighbouring tree RPAs, stems or branches.

1.16 A suitable approved systemic herbicide shall be applied 4 weeks prior to cultivation at no more than manufacturer's approved rates by spot treatment to emergent weeds only, taking care to prevent spray drift onto the stems or leaves of trees to be retained.

1.17 If necessary, a second application may be applied at least 2 weeks prior to application

1.18 Within the RPAs of the trees to be retained, there shall be no raising of levels with imported topsoil.

1.19 Ground clearance and excavations should also be undertaken with care in regard to burrowing mammals, rabbits and foxes could be present on site and to inflict unnecessary

suffering such as 'impale burns, crushes, drowns, drags or asphyxiates any wild mammal is an offence within the Wild Mammals Protection Act 1996.

1.20 It is recommended that any vegetation clearance is undertaken outside of the core-bird breeding season (March to August, inclusive) however, as the site also has suitability for reptiles and hedgehog, clearance should be timed to align with their active season (usually April to September); therefore clearance should be undertaken between April and September following a thorough check by the ECoW. Should an active bird nest be found, a 7m buffer zone will be constructed round the nest, once a 2-week period has elapsed, the nest should be checked again for nesting activity.

Sub soil

1.21 Subsoil will be reclaimed from site. If subsoil is not usable it shall meet the following specification:

- Texture 5-50% clay
- PH 6-7.5
- Stones <20%

1.22 To be free from toxic substances, weed seeds, plastic, metals etc. Subsoil shall be spread to a minimum of 250mm below new grass and shrub areas. Tree pits to be constructed as described in section 1.3 'Plant and Planting Specification'. Subsoil to be spread by hand or using a back-acting track vehicle to cause minimum compaction and loss of soil structure. No soil handling shall be undertaken when the soil is wetter than the plastic limit.

Top soil

1.23 Topsoil will be reclaimed from site. If topsoil is not usable imported topsoil shall be general purpose grade as described in Table 2, Topsoil Characteristics of BS 3882 - Specification for topsoil. Soil shall be stored in heaps not exceeding 1.5 metres high. Heaps shall be graded to shed water and avoid ponding, maintained in a weed-free condition and protected from contamination or trespass by heavy machinery.

1.24 Topsoil shall be lightly consolidated in layers not exceeding 150mm using track laying machinery. Works shall not be undertaken in periods of wet weather.

1.25 Topsoil shall be lightly consolidated in layers not exceeding 150mm using track laying machinery. Works shall not be undertaken in periods of wet weather.

1.26 Topsoil shall be laid to the following minimum depths:

- 150mm below new grass areas;
- 300mm beneath new shrub areas.

1.27 Finished levels, after settlement, shall be as follows:

- 25mm above adjacent paving, new grassed areas and non-mulched shrub beds;
- 75mm below adjacent paving and grass for mulched planting beds.

1.28 Tree pits to be back filled with topsoil to BS3882 specification.

2 Existing features to be retained

2.1 Habitats retained within the scheme include:

- Native trees and hedgerow plants where possible;
- Mature trees off site;
- Two ponds to the northeast.

2.2 Likely species populations within or adjacent scheme include:

- Bats using tree and hedge lines;
- Great Crested Newts in nearby ponds and grassland habitats;
- Reptiles;
- Nesting potential for red and amber listed bird species;
- Small mammals may radiate around site.

3 Ecological Enhancement

Planting:

3.1 New trees and hedgerows, with additional infill planting will provide structural diversity for nesting birds and foraging mammals. Use of predominantly native species of local provenance in planting schemes where possible.

3.2 Shrub borders will have nectar producing perennials with structural diversity in deep beds will provide foraging habitats for invertebrates, and birds.

3.3 Wildflora lawns provide wildflower and grass species with nectar which promote insect populations for foraging bats.

3.4 Native species pond margin planting.

Habitat boxes:

3.5 The provision of eight bat boxes on/integral to new buildings and trees will ensure a continued availability of bat roosts in the area.

3.6 The provision of twenty bird boxes on/integral to new buildings and trees will ensure safe nesting opportunities for local bird populations.

3.7 Six bee bricks will be installed integral to new buildings.

Other provision:

3.8 The structure of the ponds on site will be improved to provide better habitat including deepening the centres and grading one side for e\se of access to deeper water.

3.9 Log refugia built with site won timber along the western and northern edge of the site with good connectivity to the Common.

3.10 Hedgehog holes provided at base of close board fence/ solid wall boundary treatments. The gaps should be at least 13cm in diameter and be every 20m along new fencing.

Mulch:

3.11 Hedgerows and trees shall be spread with a medium grade bark mulch to a settled depth of 75mm to reduce water use. Mulch to be free from fines, weeds, disease and contaminants.

4 Planting specification

4.1 The planting shall be carried out in the first planting (seeding) season following completion of the development (between December and March inclusive).

4.2 All plant stock, plant handling and planting to be undertaken in accordance with the following British Standard Specifications and Code of Practice:

- BS 3936:1992 Part 1 Nursery Stock - Specification for trees and shrubs;
- BS 3936:1981 Part 10 Nursery Stock - Specification for ground cover plants;
- BS 4428:1989 - Code of Practice for General Landscaping Operations (excluding hard surfaces);
- BS 8545:2014 Trees from Nursery to Independence in the Landscape;
- The Code of Practice for Plant Handling 2002 (Horticultural Trades Association).

Plant Stock:

4.3 Plant stock to be supplied in accordance with the size and description specified on the plant schedule.

4.4 Plant stock shall be healthy, vigorous, free from pests and diseases and suitably hardened off for the proposed situation of planting, and lifted at a time in accordance with good nursery practice. Stock shall have a well-formed fibrous root system and be free from perennial weeds. The form of trees shall be in accordance with BS 3936: 1992 Part 1 Section 7 - Form of trees.

Plant Handling:

4.5 All plant materials shall be lifted, bundled, labelled, packaged, transported, temporarily stored and planted in accordance with the procedures and methods illustrated in the publication, “Plant Handling” (Horticultural Trades Association) and relevant sections of BS 4043:1989 - Recommendations for transplanting of root-balled trees.

Shrub Planting:

4.6 All bare root stock shall be planted between December and March inclusive. Plants shall be delivered to site in quantities which can be planted the same day. No plant roots shall be allowed to dry out.

4.7 Planting beds to be prepared with permeable membrane, create planting pockets by a cross in the landscape fabric and insert plants

4.8 2L and 3L pot grown shrubs shall be planted in pits 350x350x350mm and back-filled gently with original topsoil combined with 1kg of slow release fertiliser per 300 square metres. (Isobutizidene divrea or sulphur-coated urea or similar approved).

4.9 Plant stock shall be watered in same day with 5 litres per plant.

Hedge planting:

4.10 All bare root stock shall be planted between December and March inclusive. Plants shall be delivered to site in quantities which can be planted the same day. No plant roots shall be allowed to dry out.

4.11 Plant handling as with whip planting: 8 plants per metre, 2 staggered rows as specified on the soft works plan per linear metre. L or T shaped notches, remove weeds, large stones to 50cm x 50cm. Back-filled gently with original topsoil and insert whip and cane support and photo-degradable guards need to be applied.

Tree Planting:

4.12 Pits to be prepared to 800 x 800 x 800mm or 75mm larger than rootball. Sides to be scarified if sides have become compacted during excavation. Excavated material of usable quality to be retained in separated topsoil and subsoil for reuse where possible.

4.13 Trees to be single staked using one stake (50mm diameter), driven into ground 300mm below bottom of pit at 45 degree angle.

4.14 Trees to be centrally located and stem placed in an upright position. Pit to be back-filled with original subsoil and topsoil to match previous levels, or subsoil and topsoil as described in

section 2. Backfill firmly with original top soil, to 50mm above previous ground level to allow for settlement where possible.

4.15 Saw stakes to leave 600mm above soil level. Fix adjustable tree ties to each stake using biodegradable tree ties. Deer protection 120cm spiral tubes.

4.16 Bark mulch 50-100mm deep, 1m diameter.

4.17 Water in same day with 50 litres per tree.

4.18 All works shall be carried out to the minimum standard according to BS 3936:1992 -Nursery stock specification for trees and shrubs and BS 8545:2014 Trees from Nursery to Independence in the Landscape.

4.19 All works shall be carried out to the minimum standard according to BS 3936:1992 -Nursery stock specification for trees and shrubs and BS 8545:2014 Trees from Nursery to Independence in the Landscape.

5 Installation

5.1 An Ecological Clerk of Works will be present to supervise the installation of enhancement features to ensure the correct location, and specification is being installed.

5.2 Thereafter, a specified person at the construction company/developer will ensure the biodiversity provision is maintained on site until handover to management company.

5.3 All dwellings and offices are provided with a copy of this report to ensure biodiversity provision is maintained.

Bat boxes:

5.4 Bat boxes will be installed on new buildings and retained trees. These will be positioned at least 5m above the ground where possible, sheltered from strong winds and exposed to the sun for part of the day (orientated to the south where possible).

5.5 Specifications of recommended box boxes are included in Appendix 3.

Bird boxes:

5.6 Bird boxes will be installed at least 5m from the ground and installed in the shade, on the northeast facing aspect of new buildings and retained trees. Boxes will be situated such that there is a clear flight path to the entrance of the box where possible.

5.7 Specifications of recommended bird boxes are included in Appendix 3.

Bee bricks:

5.8 Integrated within buildings orientated to the north with an open access to gardens spaces, 1m above ground level.

Wild flora lawn:

5.9 Ideally soil is not highly fertile, and no soil improvement should be undertaken. Any vegetation clearance should include removal of arisings and refer to best practice in regard to reptiles and GCN.

5.10 Herbicides could be used on perennial weeds. Good preparation is essential to success so aim to control weeds and produce a good quality seed bed before sowing.

5.11 To prepare a seed bed first remove weeds using repeated cultivation or a herbicide. Harrow or rake to produce a medium tilth, and roll or tread to produce a level firm surface.

5.12 The seed must be surface sown and can be applied by machine or broadcast by hand. To get an even distribution and avoid running out, divide the seed into two or more parts and sow in overlapping sections. Do not incorporate or cover the seed but firm in with a roll, or by treading, to give good soil/seed contact

5.13 First year: The wild flower and grass species in this mix are perennial; they will be slow to germinate and grow and will not usually flower in their first growing season. There will often be a flush of annual weeds from the soil in the first growing season. This annual weed growth is easily controlled by repeated mowing at 40mm to avoid active reptiles and GCN.

5.14 Mow newly sown meadows regularly (every 7 -10 days during growing season) throughout the first year of establishment. Cut to a height of 40-60mm, removing cuttings if dense. This will gradually develop a good sward structure, help maintain balance between faster growing grasses and slower developing wild flowers, and control annual weeds.

5.15 All arisings removed from site.

Log piles/refugia:

5.16 Log piles will be created on rear boundaries. Any logs created during tree works on site should be collected and used to create Log piles. Logs should be kept as large as possible, at least in lengths of 500mm and 100mm diameter. Any small logs should also be added to the piles.

5.17 Log piles should be created by piling large logs into approximately 1m x 1m x 500mm ht piles. Logs should be placed in a shallow pit, approximately 150mm deep. The soil/turf removed to create the pit, should be placed on top of the logs to provide a light cover of soil/turf.

Ponds:

5.18 To enhance the site for general ecology and potentially for great crested newts, the ponds on site should be de-silted in winter. The works should involve using an excavator to remove silt and debris from the bottom of the ponds to deepen the ponds to the centre to no more than

600mm (see Biodiversity enhancement Plan 1427-03). At the same time, it is recommended that the banks be gently graded to form a gradual slope for warm water margins and plant growth. The excavated material should be removed off site to prevent nutrification of the surrounding land.

5.19 The pond enhancement will improve the overall ecological value of the ponds for plants and wildlife such as invertebrates, aquatic vegetation, foraging birds and foraging bats, as well as the locally recorded great crested newt

5.20 Fish should not be added to ponds and there should be no duck provision.

6 Maintenance

6.1 External space shall be maintained by the developer during the time of implementation. Thereafter a landscape management contract based on this LEMP will be agreed by the owner to ensure the management for biodiversity.

6.2 The aims of the biodiversity management plan are to provide the biodiversity benefits, detailed in sections 3 and 4 above. The management plan will need to be updated based upon feedback from the ongoing management, in order to continue to achieve these aims.

6.3 The owners should keep a written record of all actions undertaken in communal areas including maintenance and replacements.

Wildlife friendly planting:

6.4 Maintain good form through trimming outside of flowering periods.

6.5 Remove herbaceous material in spring before new growth.

6.6 Replace, dead dying and diseased stock.

6.7 Top up mulch layer annually.

Bat box:

6.8 Only a licenced bat worker may disturb roosting bats, so do not interfere with the box, unless suitably licenced bat worker present.

Bird box:

6.9 Bird boxes should be checked and cleaned annually, during winter, when not in use by nesting birds (November to January). If birds are making use of the nest box outside of the nesting season, then the box will not be cleaned. Any boxes that are noted to be damaged or missing will be replaced, vegetation obscuring the box entrance will be removed.

Log piles:

6.10 The log piles will be checked annually to ensure the piles are present, and have not excessively rotted down. The log piles should be maintained by replenishing the piles with additional logs, or other vegetation cuttings, as the piles rot down. Any vegetation cuttings, such as hedge or tree cuttings, from the site could also be used to replenish the piles.

Wildflora lawn:

6.11 Grass to be cut throughout the first growing season to maintain a sward of 40mm to create tillering of grasses and make good coverage. To be edged and clippings removed and watered as necessary.

6.12 Second growing season and ongoing mow regularly to 40mm sward for wild flora lawns. To permit flowering, mowing should cease from late June. Resume mowing after 4-8 weeks. Mowing may be suspended earlier in the year to allow cowslips to flower. Remove all arisings from site.

Trees and hedgerows (ecological advice):

6.13 Trees and hedgerow plants should be pruned outside of nesting bird season (March to August inclusive). Hedgerows will be pruned will be once a year on alternate sides, this allows for the development of flowers and fruits, and an increased availability of habitats in the year between pruning.

6.14 Manage hedgerows to ensure shape encourages habitat creation by trimming one side per year and creating an 'A' shape with vegetation down to ground level.

6.15 Remove all plastic protection after three years.

Ponds

6.16 Every five years depths of ponds to be checked, if required the ponds should be de-silted in winter. Ensure graded shelf into eh ponds is maintained for amphibian access.

Attenuation basin

6.17 Manage as with wild flora lawn, allowing perennial native species to colonise, however woody plants to be removed.

7 Planting schedule

7.1 Local provenance plants where possible

Trees - Selected Standard: Native = (n); wildlife friendly = (w); multi-stemmed (MS); container grown (CG)

Name	Girth	Root condition	Habit (Height in 20+ years)	Number
Acer campestre (n)	10-12cm	Bare root	Field Maple - small native tree and hedgerow plant up to 18m	8
Betula pendula (n)	10-12cm	Bare root	Silver birch - native with a light crown and interesting pale bark, up to 20m	4
Carpinus betulus (n)	10-12cm	Bare root	Hornbeam - native tree with good Autumn colour 20m+	3
Malus sylvestris (n)	10-12cm	Bare root	Crab apple - native small crab apple tree up to 12m	8
Pyrus pyraster (n)	10-12cm	Bare root	Wild pear - with white spring flowers and small fruits, up to 7m	3
Salix caprea (n)	10-12cm	Bare rooted	Goat willow - native tree for damp conditions up to 10m, suitable for coppicing	2

Historic Fruit trees : Native = (n); wildlife friendly = (w); multi-stemmed (MS)

Name	Root stock	Root condition	Habit	Number
Prunus 'Cambridge Gage' (w)	St Julien 'A'	Bare root	Gage variety developed in Cambridgeshire in 1927	3
Pyrus 'Swans Egg' (w)	Quince 'A'	Bare root	Pear variety developed in Cambridgeshire pre 1900	2
Malus 'Histon Favorite' (w)	MM106	Bare root	Apple variety developed in Cambridgeshire 1800s	3
Malus 'New Rock Pippin' (w)	MM106	Bare root	Apple variety developed in Cambridgeshire 1821	3

Shrubs and Perennials: Native = (n); wildlife friendly = (w); multi-stemmed (MS)

Name	Pot Size	Height	Habit	Number
Acorus gramineus variegatus (w)	2l	30-40cm	Evergreen perennial with two colour spikes of leaves 50cm	24

Cornus sanguinea (n)	3l	20-40cm	Winter red stems native plant	12
Euonymus fortunei 'Emerald Gaiety' (w)	2l	20-30cm	Variegated green and white evergreen 50 - 100cm	24
Fatsia japonica (w)	3l	30-40cm	Evergreen structural plant up to 1.5m	12
Hebe 'Garden Beauty White' (w)	2l	20-30cm	Blue summer flowers evergreen 50cm	24
Lavendula 'Hidcote' (w)	2l	30-40cm	Evergreen grey foliage with summer spikes of blues flowers 75cm	18
Polystichum aculeatum (n)	2l	30-40cm	Hard shield, evergreen native fern up to 1m	12

Hedge Plants - 8 per linear metre in staggered rows: Native = (n); wildlife friendly = (w); multi-stemmed (MS)

Name	Size	Root condition	Habit	Number
Acer campestre (n)	60cm	Bare rooted	Field maple, deciduous tree coppiced as hedgerow	178
Corylus avellana (n)	60cm	Bare rooted	Hazel, deciduous shrub coppiced as hedgerow	178
Crataegus monogyna (n)	60cm	Bare rooted	Hawthorn, deciduous shrub coppiced as hedgerow	1258
Prunus spinosa (n)	60cm	Bare rooted	Blackthorn, deciduous shrub coppiced as hedgerow	89
Rosa canina (n)	60cm	Bare rooted	Dogrose, deciduous climber coppiced as hedgerow	89

Hedge Plants - 7 per linear metre in staggered rows (formal): Native = (n); wildlife friendly = (w); multi-stemmed (MS)

Name	Size	Root condition	Habit	
Carpinus betulus (n)	60cm	Bare rooted	Hornbeam, deciduous treee trimmed as hedgerow	256

Planting for ponds: Native = (n); wildlife friendly = (w); multi-stemmed (MS)

Name	Size	Root condition	Habit	Number

Carex riparia (n)	20cm	2l pot	Sedge to 1m	21
Juncus inflexus (n)	30cm	2l pot	Rush 50-100cm	21
Iris pseudacorus (n)	30cm	2l pot	Yellow Iris 90-150cm	21
Lythrum salicaria (n)	30cm	2l pot	Purple loosestrife 1.2m purple flowers	21
Calla palustris (n)	10cm	2l pot	Bog arum 15cm white flowers	21
Oenanthe fistulosa (n)	30cm	2l pot	Water dropwort 80cm white flowers	21
Ranunculus flammilla (n)	15cm	2l pot	Greater spearwort 30cm yellow flowers	21
Stachys palustris (n)	30cm	2l pot	Marsh woundwort 30cm yellow flowers	21

APPENDIX 1

Trees - Selected Standard: Native = (n); wildlife friendly = (w); multi-stemmed (MS); container grown (CG)

Name	Girth	Root condition	Habit (Height in 20+ years)	Number
Acer campestre (n)	10-12cm	Bare root	Field Maple - small native tree and hedgerow plant up to 18m	8
Betula pendula (n)	10-12cm	Bare root	Silver birch - native with a light crown and interesting pale bark, up to 20m	4
Carpinus betulus (n)	10-12cm	Bare root	Hornbeam - native tree with good Autumn colour 20m+	3
Malus sylvestris (n)	10-12cm	Bare root	Crab apple - native small crab apple tree up to 12m	8
Pyrus pyraster (n)	10-12cm	Bare root	Wild pear - with white spring flowers and small fruits, up to 7m	3
Salix caprea (n)	10-12cm	Bare rooted	Goat willow - native tree for damp conditions up to 10m, suitable for coppicing	2

Historic Fruit trees : Native = (n); wildlife friendly = (w); multi-stemmed (MS)

Name	Root stock	Root condition	Habit	Number
Prunus 'Cambridge Gage' (w)	St Julien 'A'	Bare root	Gage variety developed in Cambridgeshire in 1927	3
Pyrus 'Swans Egg' (w)	Quince 'A'	Bare root	Pear variety developed in Cambridgeshire pre 1900	2
Malus 'Histon Favorite' (w)	MM106	Bare root	Apple variety developed in Cambridgeshire 1800s	3
Malus 'New Rock Pippin' (w)	MM106	Bare root	Apple variety developed in Cambridgeshire 1821	3

Shrubs and Perennials: Native = (n); wildlife friendly = (w); multi-stemmed (MS)

Name	Pot Size	Height	Habit	Number
Acorus gramineus variegatus (w)	2l	30-40cm	Evergreen perennial with two colour spikes of leaves 50cm	24
Cornus sanguinea (n)	3l	20-40cm	Winter red stems native plant	12
Euonymus fortunei 'Emerald Gaiety' (w)	2l	20-30cm	Variegated green and white evergreen 50 - 100cm	24
Fatsia japonica (w)	3l	30-40cm	Evergreen structural plant up to 1.5m	12
Hebe 'Garden Beauty White' (w)	2l	20-30cm	Blue summer flowers evergreen 50cm	24
Lavendula 'Hidcote' (w)	2l	30-40cm	Evergreen grey foliage with summer spikes of blues flowers 75cm	18
Polystichum aculeatum (n)	2l	30-40cm	Hard shield, evergreen native fern up to 1m	12

Hedge Plants - 8 per linear metre in staggered rows: Native = (n); wildlife friendly = (w); multi-stemmed (MS)

Name	Size	Root condition	Habit	Number
Acer campestre (n)	60cm	Bare rooted	Field maple, deciduous tree coppiced as hedgerow	178
Corylus avellana (n)	60cm	Bare rooted	Hazel, deciduous shrub coppiced as hedgerow	178
Crataegus monogyna (n)	60cm	Bare rooted	Hawthorn, deciduous shrub coppiced as hedgerow	1258
Prunus spinosa (n)	60cm	Bare rooted	Blackthorn, deciduous shrub coppiced as hedgerow	89
Rosa canina (n)	60cm	Bare rooted	Dogrose, deciduous climber coppiced as hedgerow	89

Hedge Plants - 7 per linear metre in staggered rows (formal): Native = (n); wildlife friendly = (w); multi-stemmed (MS)

Name	Size	Root condition	Habit	
Carpinus betulus (n)	60cm	Bare rooted	Hornbeam, deciduous treee trimmed as hedgerow	256

Planting for ponds: Native = (n); wildlife friendly = (w); multi-stemmed (MS)

Name	Size	Root condition	Habit	Number
Carex riparia (n)	20cm	2l pot	Sedge to 1m	21
Juncus inflexus (n)	30cm	2l pot	Rush 50-100cm	21
Iris pseudacorus (n)	30cm	2l pot	Yellow Iris 90-150cm	21
Lythrum salicaria (n)	30cm	2l pot	Purple loosestrife 1.2m purple flowers	21
Calla palustris (n)	10cm	2l pot	Bogarum 15cm white flowers	21
Oenanthe fistulosa (n)	30cm	2l pot	Water dropwort 80cm white flowers	21
Ranunculus flammilla (n)	15cm	2l pot	Greater spearwort 30cm yellow flowers	21
Stachys palustris (n)	30cm	2l pot	Marsh woundwort 30cm yellow flowers	21



The planting shall be carried out in the first planting (seeding) season following completion of the development (between December and March inclusive).

All plant stock, plant handling and planting to be undertaken in accordance with the following British Standard Specifications and Code of Practice:

- BS 3936:1992 Part 1 Nursery Stock - Specification for trees and shrubs;
- BS 3936:1998 Part 10 Nursery Stock - Specification for ground cover plants;
- BS 4428:1989 - Code of Practice for General Landscaping Operations (excluding hard surfaces);
- BS 8545:2014 Trees from Nursery to Independence in the Landscape;
- The Code of Practice for Plant Handling 2002 (Horticultural Trades Association).

LEGEND (SOFT WORKS)

- Retained tree/hedge/shrubs
- Selected standard tree
- Hedging
- Shrubs and perennials
- Marginal pond planting
- Species Rich Lawn - Wild flora lawn mix Emorsgate EL1 (or similar) or Wildflower Turf Species Rich Lawn Turf (WFT-Species-Rich-26), or simialr pre grown turf
- Wildflower and grasses - Meadow mix wetlands Emorsgate EM8 (or similar) for attenuation basin

Notes
Plan to be read in conjunction with the engineer and landscape drawings.

No measurements to be scaled off drawing. Worked from figured dimensions only.

All dimensions shown on drawing are shown in millimetres unless otherwise stated.

All dimensions and levels to be checked on site. Landscape Architect to be notified immediately of any discrepancies prior to the commencement of works.

Skilled Ecology Consultancy Ltd.

Date	Reason for revisions	By
27.11.2024	Show attenuation; respond to LPA comments	JW

Client
Partners in Planning & Architecture

Project:
Agricultural Buildings, Washingley Farm, Green End, Great Stukeley, PE28 4AE

Drawing Title:
Soft works

Scale: 1:200 @ A0 | Date: April 2023

Drawing Number: 1427-01 | Revision Number: E

APPENDIX 2



N

LEGEND (HARD WORKS)

- Dark grey Asphalt
- Marshalls: Permeable Priora block Paving 'Bracken' 100 x 200 x 60mm (or similar), herringbone
  Edging concrete flat top 50 w x 150 d x 940mm l
- Marshalls - Indian sandstone paving; Grey Multi; 560 x 275 x 22mm (or similar)
- Existing wall retained 1.8m (ht) approx.
- Close Board fence -1800mm high, Vertical tongue and groove timber
- Timber vertical tongue and groove gate to match fence, 1800mm height and 800mm width, (check measurements on site)
- Timber post and rail fence 1400mm (3 rails)
- Timber Gate, 1200mm h x 1000w

Notes
Plan to be read in conjunction with the engineer and landscape drawings.

No measurements to be scaled off drawing. Worked from figured dimensions only.

All dimensions shown on drawing are shown in millimetres unless otherwise stated.

All dimensions and levels to be checked on site. Landscape Architect to be notified immediately of any discrepancies prior to the commencement of works.

Skilled Ecology Consultancy Ltd.

Date	Reason for revisions	By
17.12.2024	Change to surface treatments	JW

Client
Partners in Planning & Architecture

Project:
Agricultural Buildings, Washingley Farm, Green End, Great Stukeley, PE28 4AE

Drawing Title:
Hard works

Scale: 1:200 @ A0 | Date: April 2023

Drawing Number: 1427-02 | Revision Number: G

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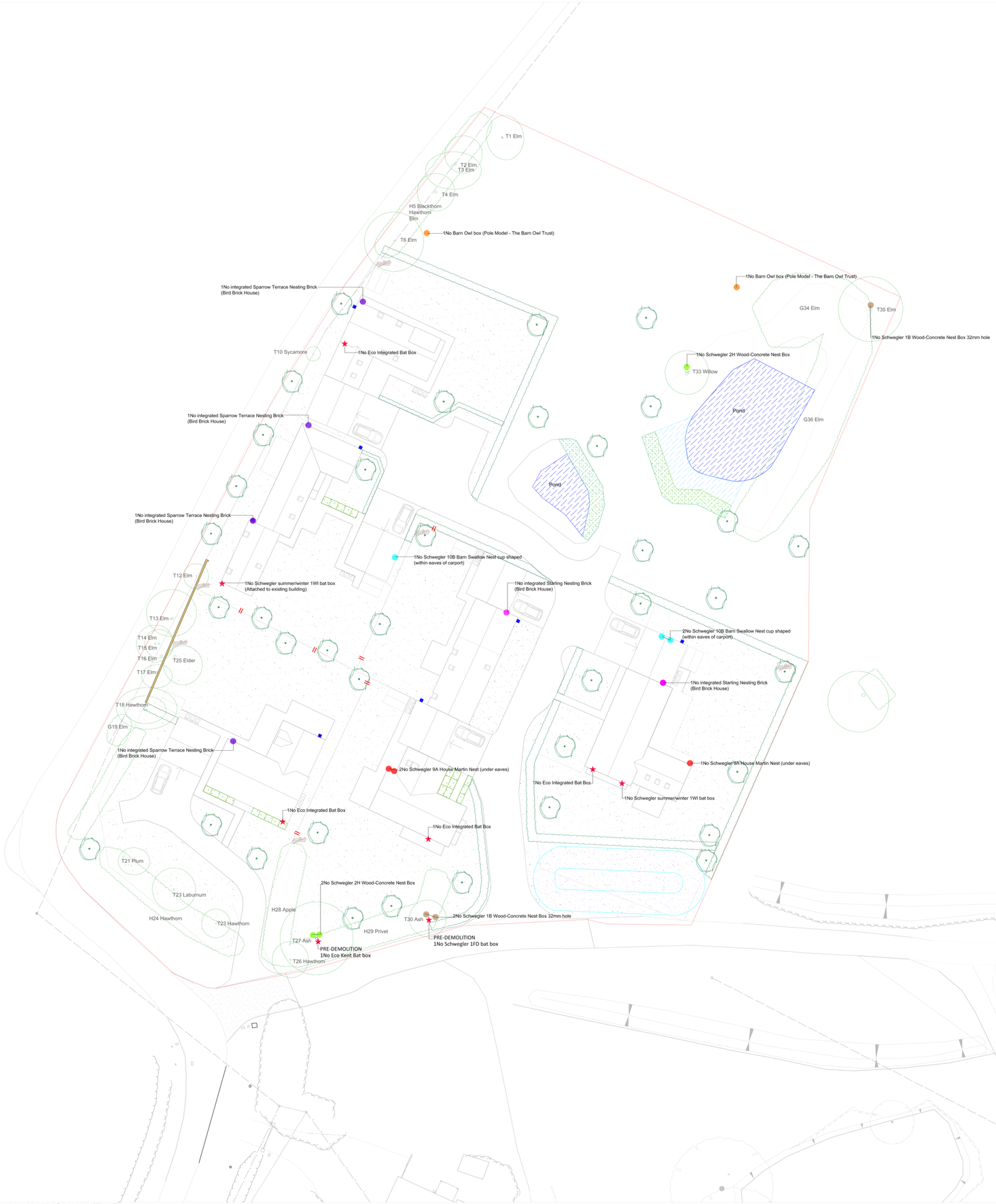
APPENDIX 3



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LEGEND (BIODIVERSITY ENHANCEMENT)

HABITAT ENHANCEMENT

- Retained tree/hedge/shrubs
- New Native species tree
- Wildlife friendly planting
- New native species hedgerow
- Wild flora lawn
- Native species pond edge planting
- Create area of deeper water
- Create shallow shelf into pond
- Log pile refugia - site won timber as hibernacular
- Hedgehog highway, 15 x 15cm hole at fence base to allow passage

HABITAT BOXES

- Bat box - Pre demolition 1No Schwegler 1FD ; 1No Eco Kent mounted southfacing on trees.
  2No Schwegler summer/winter 1WI; 4No Eco Integrated bat boxes, south facing on new buildings
- Bird box - 2No integrated Starling Nesting Brick (Bird Brick House) at 5m above ground level if possible
- Bird box - 4No integrated Sparrow Terrace Nesting Brick (Bird Brick House) at 5m above ground level if possible
- Bird box - 2No Wild Your Garden Barn Owl Box (Pole Model) on 150 x 150mm timber post at 4.5m above ground level (1.5m below ground) with free path through vegetation
- Bird box - 3No Schwegler 10B Barn Swallow Nest cup shaped, at 5m above ground level under eaves of open car port if possible
- Bird box - 3No Schwegler 9A House Martin Nest, at 5m above ground level under eaves if possible
- Bird box - 3No Schwegler 1B Wood-Concrete Nest Box 32mm hole, at 5m above ground level on tree if possible
- Bird box - 3No Schwegler 2H Wood-Concrete Nest Box, at 5m above ground level on tree if possible
- Bee Brick - 6No Green&Blue Ltd; integrated in to new buildings, mounted at 1m height northeast facing

Notes
Plan to be read in conjunction with the engineer and landscape drawings.

No measurements to be scaled off drawing. Worked from figured dimensions only.

All dimensions shown on drawing are shown in millimetres unless otherwise stated.

All dimensions and levels to be checked on site. Landscape Architect to be notified immediately of any discrepancies prior to the commencement of works.

Skilled Ecology Consultancy Ltd.

Date	Reason for revisions	By
27.11.2024	Added attenuation	JW

Client
Partners in Planning & Architecture

Project:
Agricultural Buildings, Washingley Farm, Green End, Great Stukeley, PE28 4AE

Drawing Title:
Biodiversity Enhancement works

Scale: 1:200 @ A0 | Date: April 2023

Drawing Number: 1427-03 | Revision Number: E

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APPENDIX 4

Bat Boxes Product: Bat Winter Roost 1WI Dimensions: 545mm (h) x 345mm (w) x 95mm (d) Pattern: NA Colour/ Finish: grey Supplier: Schwegler (or equal & approved)	
Bat Boxes Product: Bat Box 1FD Dimensions: 160mm (dia) x 360mm (h) Pattern: NA Colour/ Finish: grey Supplier: Schwegler (or equal & approved)	
Bat Boxes Product: Eco Kent Dimensions: 520mm (h) x 230mm (w) x 160mm (d) Pattern: NA Colour/ Finish: timber Supplier: The Nest Box Company (or equal & approved)	

Bat Boxes Product: Integrated Eco Bat box Dimensions: 440mm (h) x 215mm (w) x 105mm (d) Pattern: NA Colour/ Finish: Concrete Supplier: Wildcare (or equal & approved) Position: Orientated to the south if possible	
Bird Boxes Product: 1B General Dimensions: 260mm (h) x 170mm (w) x 180mm (d) Pattern: NA Colour/ Finish: Wood-Concrete Nest Box 32mm hole Supplier: Schwegler (or equal & approved) Position: Orientated to the north if possible	
Bird Boxes Product: 2H Dimensions: 200mm (h) x 150mm (w) x 200mm (d) Pattern: NA Colour/ Finish: Wood-Concrete Nest Box Supplier: Schwegler (or equal & approved) Position: Orientated to the north if possible	

Bird Boxes Product: Starling Nesting Brick Dimensions: Brick dimensions - 48mm entrance hole for starlings Pattern: NA Colour/ Finish: Brick to match build Supplier: Bird Brick House (or equal & approved) Position: Orientated to the north if possible	
Bird Boxes Product: Swift Nesting Brick Dimensions: Brick dimensions – crescent shaped hole Pattern: NA Colour/ Finish: Brick to match build Supplier: Bird Brick House (or equal & approved) Position: Orientated to the north if possible	
Bird Boxes Product: Barn Owl Box Dimensions: 870mm (h) x 570mm (w) x 410mm (d) Pattern: NA Colour/ Finish: timber Supplier: Wild Your Garden (or equal & approved) Position: Orientated to the north if possible	
Bird Boxes Product: Barn Swallow Nest 10B Dimensions: 200mm (h) x 100mm (w) x 140mm (d) Pattern: NA Colour/ Finish: Wood-Concrete Nest Box Supplier: Schwegler (or equal & approved) Position: Orientated to the north if possible	

Bird Boxes Product: Barn House Martin Nest No. 9A 2 nesting bowls Dimensions: 460mm (h) x 110mm (w) x 140mm (d) Pattern: NA Colour/ Finish: Wood-Concrete Nest Box Supplier: Schwegler (or equal & approved) Position: Orientated to the north if possible	
Bee Brick Product: Bee brick Dimensions: 215mm (w) x 105mm (d) x 65mm (h) Pattern: NA Colour/ Finish: Grey Supplier: Green Blue (or equal & approved) Position: Orientated to the north if possible	