Oldlands Farm Phase 3

784-B071527

Biodiversity Enhancement Strategy (BES)

Panattoni UK

February 2025

Document prepared on behalf of Tetra Tech Limited. Registered in England number: 01959704

TETRA TECH

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Date:	28th February 2025	**Checked by:**	John Simper **Principal Ecologist** MCIEEM [redacted]
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APPENDICES

1.0 INTRODUCTION

1.1 BACKGROUND

Tetra Tech Ltd was commissioned by Panattoni UK in January 2025 to prepare a Biodiversity Enhancement Strategy (BES) for Oldlands Farm Phase 3, hereafter referred to as "the site".

This report has been prepared by Senior Ecologist Ben Cooke BSc (Hons) MSc ACIEEM and the conditions pertinent to it are provided in Appendix A.

It should be noted that this report is to be read in conjunction with the Ecological Impact Assessment (EIA) (The Ecology Co-Op, 2022), Construction and Environmental Management Plan (CEMP) (Tetra Tech, 2025a) and the Landscape and Ecology Management Plan (LEMP) (Tetra Tech, 2025b).

The recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

Scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.

1.2 SITE DESCRIPTION

The site is located at Oldlands Farm, Bognor Regis, West Sussex, PO22 9NN. The site comprises an arable field with modified grassland strips partly bounded by hedgerows and scattered trees, with an area of hardstanding to the north-east. The remnants of derelict farm buildings are located to the south-east. The site is bound by a Rolls Royce warehouse, the Oldland's Farm Estate Access Road and Newlands Road to the north; Oldlands Cottage to the east, Almaty Close to the south and Shripney Road (A29) to the west.

The site is centred at the OS Grid Reference: SU 94168 01460 (Figure 1).

1.3 DEVELOPMENT PROPOSALS

The planning permission was granted for the demolition of existing derelict buildings and the construction of a new industrial / warehouse (Use Class B2 / B8) and ancillary offices (Arun District Planning Ref: BE / 150 / 22 / OUT).

1.4 PURPOSE OF REPORT

This BES has been produced to discharge Condition 18 of the Arun District Decision Notice (BE / 150 / 22 / OUT) with reference to existing ecological data for the site (see Section 2.1) and the site landscaping plan (Figures 2 and 3).

Condition 18 states that the report is to include the following:

a) *Purpose and conservation objectives for the proposed enhancement measures;*

b) *Detailed designs or produce descriptions to achieve stated objectives;*
c) *Locations, orientations and heights of proposed enhancement measures by appropriate maps and plans (where relevant);*
d) *Persons responsible for implementing the enhancement measures; and*
e) *Details of initial aftercare and long-term maintenance (where relevant).*

The works shall be implemented in accordance with the approved details and shall be retained in that manner thereafter.

The approved BES shall be adhered to and implemented through the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority.

The aim of the proposed BES is to secure biodiversity enhancement for the site. Therefore, the aims of BES are as follows:

- To detail enhancement measures for habitats (existing) and protected species within the site; and
- Provide a programme and timetable for the implementation of the enhancement works. All measures and works shall be completed in accordance with the approved details and programme.

Additionally, this report is to support the Reserved Matters submission comprising layout, scale, appearing and landscaping matters pursuant to Condition 1 of outline planning permission BE/150/22/OUT for 199,999 sq.f.t. (GIA) of Use Class B2/B8 with ancillary office provision, with associated infrastructure, parking and landscaping.

This report covers all the enhancements to be implemented onsite both during and post-construction. Any works related to the enhancement of existing habitats onsite (including maintenance and monitoring) post-construction are also detailed in the LEMP (Tetra Tech, 2025a).

1.5 RESPONSIBILITIES

A mitigation strategy that will negate or minimise the risk of any potential impacts on habitats and contravention of the relevant legislation that has been outlined within this BES. It is the responsibility of the developer, Panattoni UK, the principal contractor and any associated sub-contractors to carry out the works in a manner which will not contravene the legislation (see Appendix B), will not endanger protected species, and with due care to any other wildlife on site.

1.5.1 Construction Phase

Biodiversity Champion

A Biodiversity Champion will be nominated by the client, from within the grounds maintenance team, to influence site activities during **the operational phase of the project (i.e. for at least 10 years following project handover)** in line with the recommendations of this report. The Biodiversity Champion does not need to be the same individual throughout this time; but the responsibility should be passed on as required to maintain a consistent approach.

The champion does not need to be an ecologist but should be familiar with this report and have sufficient authority and presence on site to influence activities. The Biodiversity Champion nominated following completion of the construction phase may not have regular site presence during the entire operational life of the project; therefore, the role of Biodiversity Champion can be transferred to a new individual as required, for at least the first ten years of the operational life of the project.

During the Operational Phase the role of the Biodiversity Champion is to provide advice to the site management teams on all pertinent ecological issues as highlighted by this BES and to check that the ecological protection and mitigation measures, as specified in this document, are correctly implemented. This is for general ecological oversight of the project, and where complex ecological issues arise, advice should be sought from a suitably qualified ecologist. General responsibilities of the Biodiversity Champion during the Operational Phase are:

- Contacting an ecologist in the event of uncertainties about ecological issues surrounding the development.
- Ensuring that all site contractors / grounds maintenance workers know to report any ecological concerns / issues.
- Check and document that an overview of the site's ecological constraints is included within the ground maintenance staff inductions as appropriate; and
- Supervising and monitoring the management of newly created habitat as set out in this document.

Where additional issues are identified that are not currently covered in this management plan, or where it is considered that revised maintenance regimes are needed to maximise the ecological value of the site, the Biodiversity Champion should contact a suitably qualified ecologist who can make changes to management prescriptions as appropriate.

The Biodiversity Champion will take photographs, make logbook entries of inspections, and produce progress reports as appropriate to evidence that the above responsibilities are being upheld. This monitoring and review process will be carried out as an integral part of this BES.

Contractor

The landscape/ground maintenance contractor responsibilities include the following:

- Providing staff members who are suitably qualified and experienced, and able to carry out the required tasks as per the BES.
- The contractor is responsible for alerting the client should there be any tasks for which they do not have the appropriate resources or capability.
- Ensuring that they have received and understood all appropriate information prior to works commencing on site during the operational phase.
- The contractor is equally responsible for ensuring that they carefully study any updated documents which are produced, ensuring that they are fully understood, and any changes are communicated across the whole team.

- Providing to the client, where appropriate, evidence of compliance with the management plan.
- Alerting the client and/or appointed ecologist to any potential ecological issues arising, and for ceasing any works which may cause ecological disturbance or harm until further notice.
- The contractor will endeavour to monitor the success of the new and retained plants on site and will apply remedial measures where required.
- Carrying out maintenance and monitoring on the ecological features installed on site; and
- The contractor is responsible for reporting back to the client, should any remedial action be required on any ecological features.

Client

The client responsibilities include the following:

- Ensuring that the contractors employed are suitably qualified and experienced to undertake the habitat enhancement works, whilst maintaining the ecological value of the site; and
- Providing to the contractor all information required to allow them to carry out appropriate habitat and landscape management during the construction phase. This includes any updated versions of this BES and other related management plans, which will be circulated as soon as possible after being received.

1.6 KEY CONTACT DETAILS

In the event of ecological queries or assistance being required, please contact:

- Associate Ecologist, Kevin Wood [redacted]
- Senior Ecologist, Ben Cooke [redacted]
- UK Tetra Tech Ecology Team [redacted]

2.0 BASELINE INFORMATION

2.1 PREVIOUS REPORTS

The following reports were reviewed to inform this BES:

- Construction and Environmental Management Plan (CEMP) (Tetra Tech, 2025a).
- Ecological Impact Assessment (EIA) (The Ecology Co-Op, 2022)
- Landscape and Ecology Management Plan (LEMP) (Tetra Tech, 2025b); and
- Soft Landscape Works Maintenance and Management Proposals (BCA Design , 2024)

2.2 DESK STUDY RESULTS

As identified in the EIA there is a single designated sites of conservation value within 2 km:

- The Brooks (Bersted Brooks) LNR (0.2 km west), which is designated for its wider areas of meadow, narrow reedbeds and ditches, permanent and temporary ponds, and an extensive newly planted floodplain woodland.

2.3 HABITATS

The habitat on site comprises of arable land with modified grassland strips partly bounded by hedgerows and scattered trees, with an area of hardstanding to the north-east. For a full Phase 1 Habitat Plan and habitat assessment, please refer to the associated EIA (The Ecology Co-Op, 2022).

2.4 PROTECTED OR NOTABLE SPECIES

Bats

Linear features (trees and hedgerows) on the site were identified as suitable for commuting and foraging bats and were found to support at least eight species of bat but in relatively low numbers. The buildings and trees on site were considered negligible to support roosting bats (The Ecology Co-Op, 2022).

Nesting Birds

The trees and hedgerows on site were considered suitable to support a range of breeding birds typical of arable assemblage habitats (The Ecology Co-Op, 2022).

Reptiles

Boundary habitats present on site including hedgerows and modified grassland, were found to support populations of slow worm *Anguis fragilis*, common lizard *Zootoca vivipara* and grass snake *Natrix helvetica* (The Ecology Co-Op, 2022).

Hedgehogs

The habitats present on site (particularly the boundary habitats) were also considered suitable to support hedgehogs

3.0 MANAGEMENT PRACTICES

Sections 3.1 to 3.4 provide further information and management practices relating to the ecological enhancements proposed within the site. This section should be read in conjunction with Figures 1 - 4 to provide spatial context. A schedule detailing the timings of prescribed management and monitoring practices is provided at the end of each sub-section (where appropriate).

3.1 GRASSLAND

3.1.1 Species-rich Grassland / Wildflower Seeded Areas

Emorsgate Seed Mix EM3 (Special General-Purpose Meadow Mix)[1] is to be sown in areas labelled Species-rich Grassland / Wildflower Seeded Areas (see Figures 2 and 3). This mixture is a varied array of species and is suited for sites where the exact soil conditions are unknown.

Composition of Seed Mix

The grass matrix is dominated by crested dog's-tail *Cynosurus cristatus* and red fescue *Festuca rubra*, with more abundant herbs include common knapweed, musk mallow *Malva moschata*, ribwort plantain *Plantago lanceolata* and salad burnet *Poterium sanguisorba* ssp. *sanguisorba.*

Ground Preparation

The areas will first be made suitable for sowing through repeated cultivation (i.e., ploughing to a depth of 300 mm) during March or August to stimulate and then remove any unwanted vegetation. Then plough or dig to bury the unwanted surface vegetation, harrow or rake to produce a medium tilth, and roll, or tread, to produce a firm surface.

Sowing

The seed mix is to be sown at 4 g per m^2 in Autumn (September - Mid-October) or Spring (Mid-April – June), if there is sufficient warmth and moisture. 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.

Year 1 Management

If the seed mix is sown during the autumn (September – mid-October), it shall be cut on three occasions during the first year in March, May and September.

If the seed mix is sown during the spring (March – mid-April), it shall also be cut on three occasions during the first year. The first cut is to take place six weeks after sowing (if sufficient material present, i.e., well established sward) and then twice more in May and September.

[1] EM3 Special General-Purpose Meadow Mixture - Emorsgate Seeds (wildseed.co.uk)

Cutting of the grassland sward is to a height of 7 cm. The arisings must be removed via raking and composted. Any residual perennial weeds identified after cutting during the first year (such as docks), must be dug out.

Ongoing Management

During the following years, the grassland is to be cut twice a year, in March / April and September / October to a height of 7 cm. The arisings will be left on the grassland floor for 1 - 7 days before being removed, to allow the seed to drop back into the grassland whilst avoiding nutrient enrichment.

Grass should not be cut during wet weather as the machinery may damage the soil structure. The arisings will be left on the grassland floor for a few days before being removed, to allow the seed to drop back into the grassland whilst avoiding nutrient enrichment.

The arisings will be collected carefully via raking to reduce the risk of harm to reptiles as they can use the cuttings for refugee.

In addition, no pesticides or fertilisers are to be applied to the grassland.

Ongoing Monitoring

The colonisation of invasive species and / or competitive weeds within the grassland will be prevented through monitoring (see Appendix C). This will comprise a spot check between April – September on an annual basis post-development. Competitive weeds will be hand pulled as required.

If invasive species continue to be present, additional treatment will be required (a specialist contractor is to be contacted and advice sort regarding the appropriate removal and safe disposal of said species), and the period of monitoring will need to be extended.

Scrub and bracken will be removed if it is encroaching into the grassland habitat to the detriment of the grassland flora. A small amount of scrub and bracken will be tolerated along the margins of the site to provide shelter and bird nesting habitat. It is recommended to be completed during November – February (inclusive), so that works do not conflict with the nesting bird season or the active reptile season.

An optimum baseline for scrub and bracken (< 5 % and < 20 % respectively) will be maintained via annual monitoring. This will be carried out to determine levels of scrub encroachment from the baseline.

Should areas of the grassland require re-seeding (e.g., areas of bare ground) these will be seeded at a density of 4g per m^2 in May or September.

The management practices relating to Species-rich Grassland / Wildflower Seeded Areas are summarised in Table 1.

Table 1: Species-rich Grassland / Wildflower Seeded Areas Management Schedule

Action	Responsible Individual(s)	Timing	Year										
			0	1	2	3	4	5	6	7	8	9	10+
Ground preparation	Landscaping Contractor	March – August											
Sowing	Landscaping Contractor	September – Mid-October (Option 1) **or** March – mid-April (Option 2)											
Year 1 Management – Mowing	Management Company	**Three times in a year** - If Option 1 - March, May and September **or** if Option 2 - Six weeks after sowing, May and September.											
Year 1 Management – Perennial weeds	Management Company	After each cut											
Ongoing Management – Mowing	Management Company	**Twice times a year** - March – April **and** September -October											
Management – Grassland re-seeding	Management Company	May or September											
Ongoing Monitoring - Inspect for Invasive Species and / or Competitive Weeds	Management Company	**As required** – April – September											
Ongoing Monitoring - Scrub and / or Bracken Management	Management Company	**As required** – Ideally November – February											

3.2 PROPOSED THICKET PLANTING

Composition of Planting

Planting will consist of eight native species including;

- Field maple *Acer campestre*
- Hazel *Corylus avellana*
- Hawthorn *Crataegus monogyna*
- Alder buckthorn *Frangula alnus*
- Privet *Ligustrum vulgare*
- Blackthorn *Prunus spinosa*
- Goat willow *Salix caprea*; and
- Gorse *Ulex europeaus*

The composition of each species will range from 5 – 20 % of the total planting mix.

Planting

Species are to be planted in groups of 7 - 15 (of the same species) spaced at centres of 1 m. Each sapling will be protected by bio-degradable tree shelters secured to 25 x 25 mm timber stakes. It is recommended that planting is completed during autumn (September – October) or early spring (March – April).

Where thicket mix planting is to take place adjacent to artificial habitats or structures (e.g., hard surfaces, kerbs or fencing) this is to be positioned 1 m from the edge of these features.

Ongoing Management

Thicket mix planting shall be maintained by the appointed Contractor.

All plants are to be re-firmed annually after frost to ensure they are not leaning, and that the soil level around the plants remains at the same height as they would at nursery level. This is to be completed for the first three years following planting. Watering will also be carried out as required to the ensure successful establishment, also for the first three years after planting.

Any planting which fails will be replaced during the next suitable planting season for that species. An examination of the planting will take place annually each September for the first eight years post-construction.

Management operations will include thinning of the planting to promote growth alongside pruning and coppicing to maintain a healthy and attractive form. Thinning promotes new dense growth thus encouraging a strong, more robust planting in the mid to long term, and also increases air flow within the planting to maintain its good health.

Approximately a third of the thicket will be thinned, pruned and coppiced in Years 5 and 8 following planting. This is to be undertaken during November – February (inclusive) as to not conflict with the active period for protected and notable species.

Ongoing Monitoring

The colonisation of invasive species and competitive weeds within the hedgerow will be prevented through monitoring. This will comprise a spot check between April – September on an annual basis post development.

If invasive species continue to be present, additional treatment will be required (a specialist contractor is to be contacted and advice sort regarding the appropriate removal and safe disposal of said species), and the period of monitoring will need to be extended.

Shelter guards are to be monitored each year from mid-April – late September. The shelter guards are to be refirm / replace as required. This check is to be completed once during the first year after planting, extending to four times a year during Years 2 and 3. This will reduce to twice annually during Years 4 and 5, reducing back down to annually from Year 6 onwards.

Any remnants of the shelter guards will be removed once shrubs have become sufficiently established (estimated Years 4 – 5), unless otherwise already bio-degraded.

The interior of the shelter guards and the area surrounding planting are to be kept clear of competitive weed grow through spot herbicide treatment as required. Monitoring checks for competitive weeds are to be completed four times per year from Years 1 – 4. The checks are to reduce to twice annually from Years 5 – 7 and then annually from Year 8 onwards.

The management practices relating to Proposed Thicket Planting are summarised in Table 2.

Table 2: Proposed Thicket Planting

Action	Responsible Individual(s)	Timing	Year										
			0	1	2	3	4	5	6	7	8	9	10
Planting	Landscaping Contractor	September – October **or** March – April											
Management – Planting re-firmed	Management Company	**As required**											
Management – Watering	Management Company	**As required**											
Management – Replacement planting	Management Company	September											
Management – Pruning a of the third of thicket	Management Company	November – February											
Monitoring - Inspect for Invasive Species and / or Competitive Weeds	Management Company	April – September											
Monitoring – Check of the shelter guards	Management Company	mid-April – late September											
Monitoring – Check of the shelter guards for competitive weeds	Management Company	**As required**											

3.3 PROPOSED INGENIOUS HEDGEROW

Hedgerow Retention

Fencing will be installed prior to construction and will be adequately maintained to ensure no damage to the excluded vegetation.

Composition of Planting

Hedgerow planting (see Figures 2 and Figure 3) will consist of six species. Hawthorn and blackthorn are suitable species for shrub density, and as they are intrinsically thorny, offering dual purpose as a deterrent to human movement. Other species include privet *Ligustrum* sp., field maple *Acer campestre,* dogwood *Cornus sanguinea* and hazel *Coryllus avellana,* with the intention of staggering the flowering season to offer a prolonged nectar source for invertebrates. No single species will comprise more than 50 % of the planting allocation.

Planting

Ensure the ground is suitably prepared prior to planting. Each shrub/tree will be fitted with a shelter guard to prevent early bark damage. Individuals provided as bare root / root-balled these will be planted October - late March. Shrubs / trees will be planted at 450 mm centres in double staggered rows, 500 mm apart.

Ongoing Management

Following construction, the retention fencing surrounding the boundaries of the site will be dismantled.

All plants are to be re-firmed annually after frost to ensure they are not leaning, and that the soil level around the plants remains at the same height as they would at nursery level. This is to be completed for the first five years post-construction. Watering should be carried out as required to the ensure successful establishment.

Any planting which fails will be replaced during the next suitable planting season for that species. An examination of the planting will take place annually each September for the first eight years post-construction.

Pruning to be completed annually (approx. each September), with the sides, tops and ends of the hedgerow to be cut to straight and true lines. Overhanging branches will be allowed to achieve natural form with the exception of lower branches which will be removed to allow access for grass cutting.

Ongoing Monitoring

The colonisation of invasive species and competitive weeds within the hedgerow will be prevented through monitoring (see Appendix C). This will comprise a spot check between April – September on an annual basis post development.

If invasive species continue to be present, additional treatment will be required (a specialist contractor is to be contacted and advice sort regarding the appropriate removal and safe disposal of said species), and the period of monitoring will need to be extended.

Shelter guards are to be monitored each year from mid-April – late September. The shelter guards are to be re-firmed / replaced as required. This check is to be completed once during the first year after planting, extending to four times a year during Years 2 and 3. This will reduce to twice annually during Years 4 and 5, reducing back down to annually from Year 6 onwards.

Shelter guards will be removed once shrubs have become sufficiently established (estimated Years 4 – 5).

The interior of the shelter guards and the area surrounding planting are to be kept clear of competitive weed grow through spot herbicide treatment as required. Monitoring checks for competitive weeds are to be completed four times per year from Years 1 – 4. The checks are to reduce to twice annually from Years 5 – 7 and then annually from Year 8 onwards.

The management practices relating to Proposed Ingenious Hedgerow are summarised in Table 3.

Table 3: Proposed Ingenious Hedgerow Management Schedule

Action	Responsible Individual(s)	Timing	Year										
			0	1	2	3	4	5	6	7	8	9	10
Hedgerow Retention - Installation of and Adherence to Protection Measures	Construction Contractor	As required											
Planting	Landscaping Contractor	October - late March											
Hedgerow Retention - Removal of Protection Measures	Construction Contractor	As required											
Ongoing Management – Re-firm Planting	Landscaping Contractor	As required											
Ongoing Management – Replacement of Failed Planting	Landscaping Contractor	September											
Ongoing Management – Pruning	Landscaping Contractor	September											
Ongoing Monitoring - Inspect for Invasive Species	Landscaping Contractor	**As required** – April – September											
Ongoing Monitoring – Inspect Shelter Guards and Surrounding Area for Competitive Weeds	Landscaping Contractor	**As required** – mid-April – late September **Four times a year** – Years 1 - 4 **Twice times a year** – Years 5 – 7 **Annually** – Year 8 onwards											

3.4 BATS

Four Beaumaris Woodstone Bat Box (or similar) will be installed on the acoustic fencing (a Jakoustic Acoustic Reflective Barrier, or similar performing barrier) proposed onsite. The acoustic fencing is proposed to be 2.75 m in height situated on top of a 3 m earth bund (Ian Sharland Limited , 2024). The proposed locations for these bat boxes are provided in Figure 4.

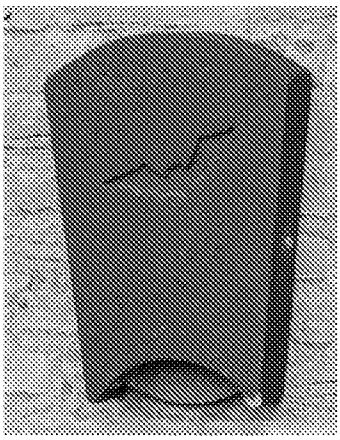
The locations may change dependent on the practicalities of erecting boxes, but the minimum numbers for the site will not change. When placing bat boxes, the following recommendations are considered:

- Boxes shall be installed facing a south-eastern to south-western aspect, away from public areas, in areas of darkness, and towards areas of soft landscaping;
- Boxes shall be installed at least 4 m above ground level to reduce the risk of vandalism and minimise disturbance,
- Entrances should be free of clutter; and
- If possible, the erection of bat boxes should be undertaken during winter months to allow weathering in prior to the active season.

The boxes have an open bottom section enabling them to be maintenance free. However, any damaged boxes should be repaired or replaced as necessary in their original positions. Should the bat boxes require removal for repair / replacement, this should be undertaken by an ecologist with an appropriate Natural England Class 2 bat licence.

Further details regarding the specifications and dimensions of these boxes are provided in Table 4, with a CDM risk assessment is provided in Appendix D.

Table 4. Bat Box Specifications

Type	Description	Specifications
Beaumaris Woodstone Bat Box (Midi) Two required (if above not available or in combination)	A single entrance bat box (base) manufactured from woodcrete.	 Width: 16 cm; Height: 36 cm; Weight: 4.3 kg

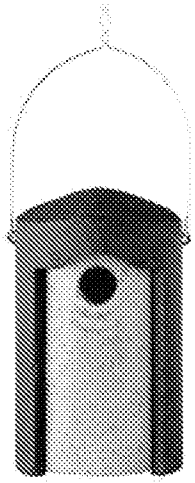
3.5 BIRDS

Boxes must be installed with an easterly aspect, avoiding southern and westerly orientations. Feature locations are shown on Figure 4 and will include:

- **General purpose bird boxes (Schwegler 1B or similar) x 4** - to be installed within the trees and proposed acoustic fencing onsite a minimum of 3–5 m above ground level.

Further details regarding the specifications and dimensions of these boxes are provided in Table 5, with a CDM risk assessment provided in Appendix D.

Table 5: Bird Box Specifications

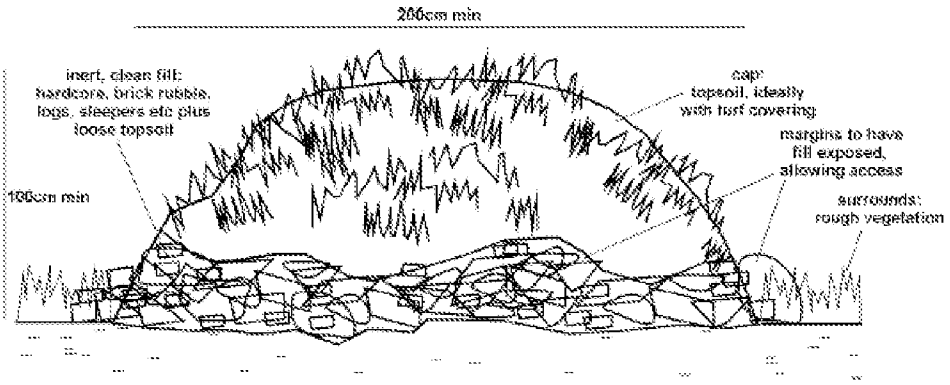
Type	Description	Specifications
General purpose bird boxes (Schwegler 1B or similar) Four required	The nesting boxes should be attractive to smaller birds such as tits, wrens, and tree sparrows.	 Width: 16 cm; Height: 23 cm; Weight: 3.6 kg

3.6 REPTILES

The creation of hibernaculum provides a frost-free, humid condition safe from predation for reptiles to shelter and hibernate.

The design of the hibernaculum is as set out by English Nature (Englsh Nature, 2001) (Plate 1 below) and will include the use of logs and loose topsoil, with a covering of turf. Materials for the hibernaculum a will be sourced in the first instance from the trees onsite (Tree 41, is proposed to undergo pollarding), if this is not possible then materials will have to be acquired off-site. The turf required to top them will be obtained from the area beneath the hibernacula itself.

Plate 1: Cross section of hibernacula (Englsh Nature, 2001)



4.0 MONITORING AND REPORTING

An annual monitoring report would be produced for at least the first five years after project completion. To inform this report, an annual inspection of the site should be undertaken, the results of which would be documented within the monitoring report which should also summarise the management of the site over the preceding year and the measures achieved. This would include the checking of any bird and bat (to be undertaken by a Natural England licenced bat worker) boxes and the hibernaculum.

The report need not be produced by an ecologist, but by someone with sufficient authority and time on site to influence activities that may affect biodiversity as well as monitor the measures that have been put in place. The annual monitoring reports will be sent the LPA ecologist for review

5.0 CONCLUSION

This BES has been produced to discharge Condition 18 of the Arun District Decision Notice (BE / 150 / 22 / OUT) with reference to existing ecological data for the site, as well as supporting the Reserved Matters submission comprising layout, scale, appearing and landscaping matters pursuant to Condition 1 of outline planning permission BE/150/22/OUT for 199,999 sq.f.t. (GIA) of Use Class B2/B8 with ancillary office provision, with associated infrastructure, parking and landscaping.

The information detailed within the BES provides the competent authority with the evidence they need to be able to discharge Condition 18 of the Arun District planning permission (BE / 150 / 22 / OUT).

6.0 REFERENCES

BCA Design . (2024). *Soft Landscape Works Maintenance and Management Proposals - 10 Years, Oldlands Farm Phase 3, Newlands Road, Bognor Regis.*

Englsh Nature. (2001). *Great crested newt, mitigation guidelines.*

Ian Sharland Limited (2024). *Environmental Noise Impact Assessment .*

Tetra Tech. (2025a). *Construction and Ecology Management Plan. Project No. 784-B071527. Written on behalf of Panattoni UK.*

Tetra Tech. (2025b). *Landscape and Ecology Management Plan. Project No. 784-B071527. Written on behalf of Panattoni UK.*

The Ecology Co-Op. (2022). *Ecological Impact Assessment - Land at Oldlands Farm, Bognor Regis .*

FIGURES

Site Location Plan

Oldlands Farm

BDW

Legend

Site boundary

Notes:

Drawn by: Chris.Dawe

Checked by: Ben Cooked

Figure No. 1

Revision No. A

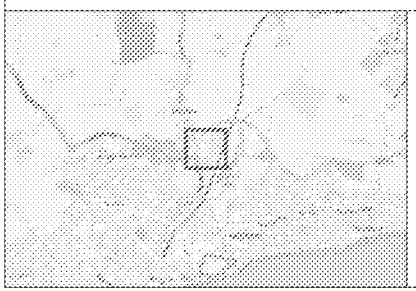
27 February 2025

0 25 50 75 100 Meters

Scale 1:2,500 @A3

British National Grid

NGR: 494218E 101477N



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Registered in England
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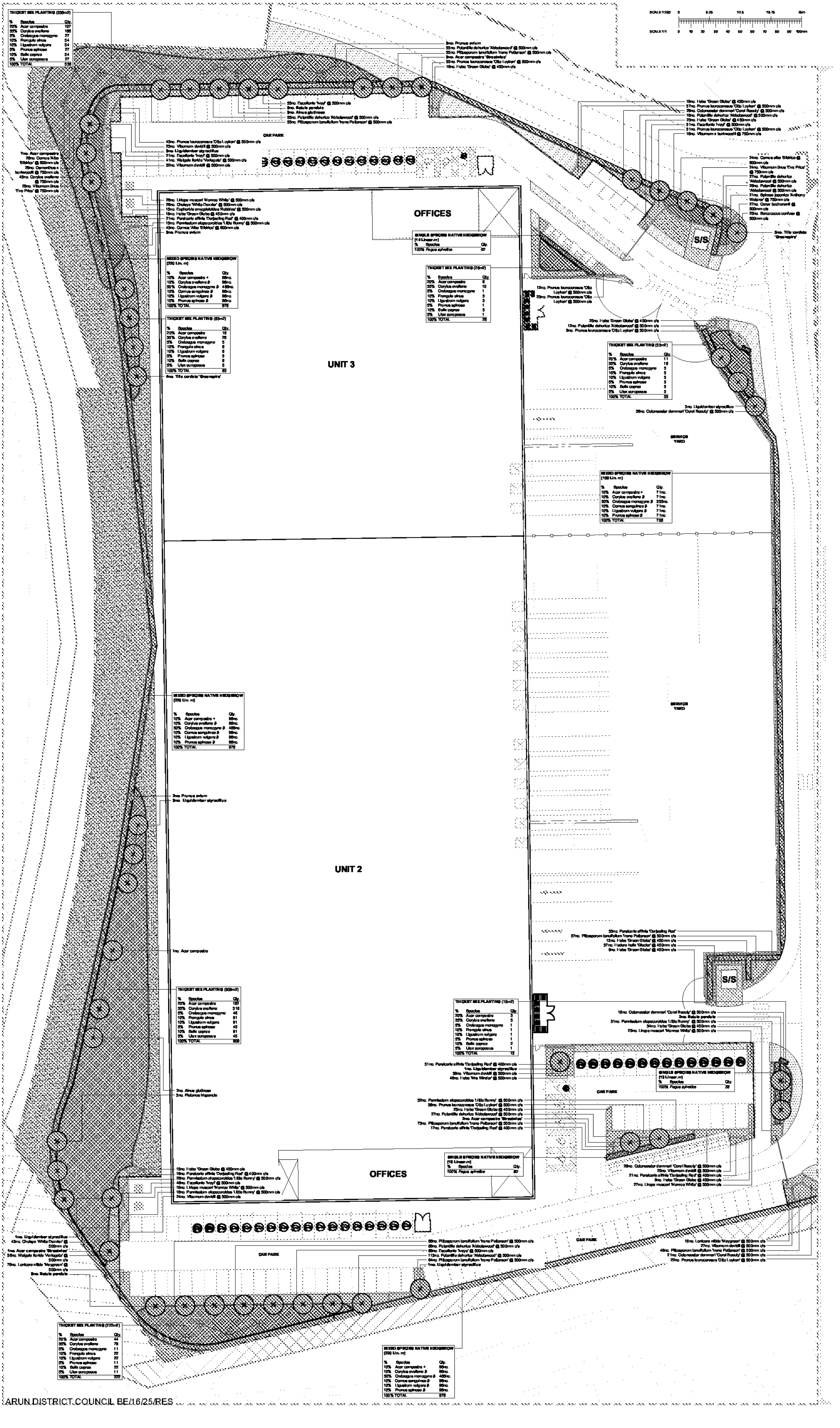
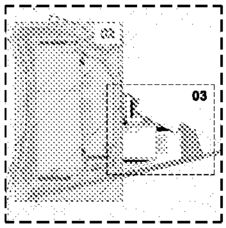


NOTES:
Based on:
- UMC Architects drawing number: 23361-UMC-ZZZZ-SI-M2-A-0601.P01 'Site Layout'
- 243912-BWB-EXT-XX-D-C-0600-[S1-P01] _Finished Levels

NORTH



DRAWING LOCATION PLAN - NTS

REV	DESCRIPTION	BY	CKD	DATE
03	Colour added to plan	MB		12-11-24
02	Updated to suit revised site layout plan	HG	MB	04-11-24
01	Issued for construction	HG	MB	25-10-24

BCA DESIGN
Landscape Architects

CLIENT
PANATTONI

PROJECT
OLDLANDS FARM PHASE 3, NEWLANDS ROAD, BOGNOR REGIS

DRAWING TITLE
DETAILED PLANTING PLAN (Sheet 1 of 2)

CONTRACT NUMBER:	2380/24	DATE:	22/10/24
DRAWING STATUS:	CONSTRUCTION	CAD REFERENCE:	2380-24-02+03
DRAWN BY:	HG	CHECKED BY:	MB
SCALE:	1:250	ORIGINAL SHEET:	A0

PROJECT	ORIGINATOR	VOLUME	LEVEL	TYPE	ROLE	NUMBER	STATUS	REV
XXX	BCA	ELS	XX	DR	L	2380-24-02	C	03

BCA Design
Studio 3, The Court, Holywell Business Park Northfield Road, Southam, Warwickshire CV47 0FS
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ARUN DISTRICT COUNCIL BE/16/25/RES

NOTES:
Based on
- UMC Architects drawing number: 23361-UMC-ZZZZ-SI-M2-A-0601.P01 'Site Layout'
- 243912-BWB-EXT-XX-D-C-0600-[S1-P01] _Finished Levels

NORTH

KEY

EXTRA HEAVY STANDARD TREES
(Tree pit size: 1500x1500x900mm)
18-20cm stem girth
4.5-5.0m height
1.8-2.1m clear stem
Rootballed

Species	
Ac	Acer campestre
AcSW	Acer campestre 'Streetwise'
Ag	Alnus glutinosa
Bp	Betula pendula
Ls	Liquidambar styraciflua
Pe	Prunus avium
Ph	Platanus x hispanica
Sc	Salix caprea
ToGS	Tilia cordata 'Green Spire'

FEATHERED TREES
1.75-2.0m height
2x transplanted
Well furnished with lateral shoots to base
Root wrapped

Species	
Ac	Acer campestre
Ag	Alnus glutinosa
Bp	Betula pendula
Pa	Prunus avium

SPECIMEN SHRUBS
(300mm depth of topsoil)

Species	Supply Size	Pot Size
Amelanchier canadensis	900-1200mm	15L
Mahonia x media 'Winter Sun'	900-1200mm	15L
Viburnum x burkwoodii	900-1200mm	15L

PROPOSED THICKET MIX PLANTING
(300mm depth of topsoil)
Where thicket is planted next to a hard surface/kerb/fence, it should be positioned 1m from the edge.

Transplants planted in groups of 7-15 of the same species on a 1.0m grid.

%	Species	Common Name	Supply Size		
20%	Acer campestre +	Field Maple	600-800mm	1+1	OG
35%	Corylus avellana #	Hazel	600-800mm	1+1	OG
5%	Crataegus monogyna #	Hawthorn	600-800mm	1+1	OG 'B'
10%	Frangula alnus #	Alder buckthorn	600-800mm	1+1	B
10%	Ligustrum vulgare #	Privet	600-800mm	1+1	OG
5%	Prunus spinosa #	Blackthorn	600-800mm	1+1	OG
10%	Salix caprea #	Goat Willow	600-800mm	1+1	OG
5%	Ulex europeaus #	Gorse	600-800mm	1+1	OG

PROPOSED INDIGENOUS HEDGEROW
(300mm depth of topsoil)
Planted at 450mm centres in a double staggered row. Rows to be 500mm apart.

%	Species	Common Name	Size	Age	Root	
10%	Acer campestre +	Field maple	600-800mm	1+1	OG	
10%	Corylus avellana #	Hazel	600-800mm	1+1	OG	
50%	Crataegus monogyna #	Hawthorn	600-800mm	1+1	OG	'B'
10%	Cornus sanguinea #	Dogwood	600-800mm	1+1	OG	
10%	Ligustrum vulgare #	Privet	600-800mm	1+1	OG	
10%	Prunus spinosa #	Blackthorn	600-800mm	1+1	OG	

PROPOSED FORMAL NATIVE HEDGE
(300mm depth of topsoil)
Planted at 450mm centres in a double staggered row. Rows to be 500mm apart.

%	Species	Common Name	Supply Size
100%	Fagus sylvatica #	Beech	1000-1250mm 1+2 B

TALL ORNAMENTAL SHRUB PLANTING
(300mm depth of topsoil + minimum 300mm depth subsoil)
Ultimate plant height is above 1m.

Species	Supply Size	Pot	Spacing
Cornus alba 'Sibirica'	*400-800*	3L	*800mm c/s*
Corylus avellana	*600-800*	3L	*750mm c/s*
Osmanthus x burkwoodii	*600-800*	3L	*750mm c/s*
Viburnum tinus 'Eve Price'	*400-600*	3L	*750mm c/s*
Viburnum x burkwoodii	*600-800*	3L	*750mm c/s*

LOW ORNAMENTAL SHRUB/HERBACEOUS PLANTING
(300mm depth of topsoil + minimum 300mm depth subsoil)
Ultimate plant height is below 1m.

Species	Supply Size	Pot	Spacing
Anemanthele lessoniana	400-800mm	3L	500mm c/s
Cotoneaster dammeri 'Coral Beauty'	400-800mm	3L	500mm c/s
Carex buchananii	400-800mm	3L	500mm c/s
Choisya 'white Dazzler'	300-400mm	3L	500mm c/s
Berginia cordifolia 'Herzfriestal'	150-200mm	2L	450mm c/s
Escallonia 'Iveyi'	300-400mm	3L	500mm c/s
Euphorbia amygdaloides 'Robbiae'	300-400mm	3L	500mm c/s
Hebe 'Green Globe'	200-300mm	2L	450mm c/s
Hebe 'Mrs Winder'	300-400mm	3L	500mm c/s
Heucherella 'Tapestry'	150-200mm	2L	500mm c/s
Lonicera nitida 'Maygreen'	300-400mm	2L	500mm c/s
Pennisetum alopecuroides 'Little Bunny'	300-400mm	3L	500mm c/s
Persicaria affinis 'Darjeeling Red'	150-200mm	2L	450mm c/s
Pittosporum tenuifolium 'Irene Patterson'	400-800mm	3L	500mm c/s
Potentilla dehnnica 'Abbotswood'	300-400mm	3L	500mm c/s
Prunus laurocerasus 'Otto Luyken'	300-400mm	3L	500mm c/s
Rosa 'Max Graf'	300-400mm	3L	450mm c/s
Sarcococca confusa	300-400mm	3L	500mm c/s
Stephenandra incisa 'Crispa'	300-400mm	3L	500mm c/s
Viburnum davidii	200-300mm	2L	500mm c/s
Weigela florida 'Verdavaris'	400-800mm	3L	500mm c/s

GRASS SEEDED AREAS
(150mm depth of topsoil + minimum 150mm depth subsoil)
To be sown with DLF PM 120 'Slowgrowth' or similar approved
Sown at a rate of 35-50g/m²

SPECIES RICH GRASSLAND/WILDFLOWER SEEDED AREAS
(Cultivated subsoil to a depth of 300mm)
To be sown with Emorsgate EM5 or similar approved
Sown at a rate of 04 g/m²

GRAVEL MARGIN/AREAS
Gravel margin to be installed to perimeter of service yard areas, within secure fencelines & around sub stations. Edging boards to be installed between gravel/landscape interfaces to minimise migration of material.

SECURITY FENCE
(To Architects detail)

ACOUSTIC FENCING
(to Engineers detail)

TIMBER KNEE RAIL
(To Architects detail)

COUNTOUR LINES (0.5m)
- Taken from BWB 'Finished Levels Plan'. refer to drawing: 243912-BWB-EXT-XX-D-C-0600-[S1-P01]_Finished Levels for further detail.

SITE BOUNDARY

ARUN DISTRICT COUNCIL BE/162/25/RES

11no. Perelcerie affinis 'Darjeeling Red' @ 450mm c/s
4no. Anemanthele lessoniana @ 500mm c/s
12no. Sercococca confusa @ 500mm c/s
17no. anemanthele lessoniana @ 500mm c/s
19no. Prunus laurocerasus 'Otto Luyken @ 500mm c/s
1no. Liquidamebr styraciflua
49no. Rosa 'Max Graf' @ 450mm c/s
19no. Heucherella 'Tapestry' @ 500mm c/s
17no. Berginia 'Herzfriestall' @ 500mm c/s
53no. Rosa 'Max Graf' @ 450mm c/s
15no. Heucherella 'Tapestry' @ 500mm c/s
13no. Berginia 'Herzfriestall' @ 500mm c/s
17no. Cornus alba 'Sibirica' @ 800mm c/s
44no. Sercococca confusa @ 500mm c/s
33no. Viburunum x burkwoodii @ 750mm c/s
3no. Tilia cordata 'Greenspire'
23no. Carex buchananii @ 500mm c/s
23no. Spiraea japonica 'Anthony Waterer' @ 750mm c/s
24no. Cornus alba 'Sibirica' @ 800mm c/s
47no. Prunus laurocerasus 'Otto Luyken' @ 500mm c/s
41no. Viburnum davidii @ 500mm c/s
1no. Acer campestre 'Streetwise'
39no. Hebe 'Mrs Winder' @ 500mm c/s
16no. Liriope muscari 'Monroe White' @ 500mm c/s
16no. Liriope muscari 'Monroe White' @ 500mm c/s
27no. Hebe 'Mrs Winder' @ 500mm c/s
51no. Viburnum davidii @ 500mm c/s
49no. Hebe 'Mrs Winder' @ 500mm c/s
53no. Potentille dehunica 'Abbotswood' @ 500mm c/s
3no. Betula pendula
35no. Choisya 'White Dazzler' @ 500mm c/s
34no. Pennesetum alopecuroides 'Little Bunny' @ 500mm c/s
25no. Potentille dehunica 'Abbotswood' @ 500mm c/s
39no. Prunus laurocerasus 'Otto Luyken' @ 500mm c/s
21no. Sercococca confusa @ 500mm c/s
22no. Viburnum tinus 'Eve Price' @ 750mm c/s
29no. Lonicera nitida 'Maygreen' @ 500mm c/s
27no. Cornus alba 'Sibirica' @ 800mm c/s
13no. Sercococca confusa @ 500mm c/s
21no. Pittosporum tenuifolium 'Irene Patterson' @ 500mm c/s
CAR PARK
1no. Liquidamebr styraciflua
12no. Cornus sanguinea 'Kelseyii' @ 500mm c/s
7no. Spiraea japonica 'Anthony Waterer' @ 750mm c/s
19no. Viburnum x burkwoodii @ 750mm c/s
OFFICES
15no. Liriope muscari 'Monroe White' @ 500mm c/s
21no. Osmanthus x burkwoodii @ 750mm c/s
19no. Pennesetum alopecuroides 'Little Bunny' @ 500mm c/s
18no. Perelcerie affinis 'Darjeeling Red' @ 450mm c/s
13no. Liriope muscari 'Monroe White' @ 500mm c/s
17no. Sercococca confusa @ 500mm c/s
UNIT 1
1no. Acer campestre
1no. Acer campestre
3no. Prunus avium
1no. Alnus glutinosa
3no. Acer campestre
1no. Salix caprea
3no. Prunus avium
ACOUSTIC FENCING (To Engineers Specification)
5no. Liquidamebr styraciflua

THICKET MIX PLANTING (86m2)

%	Species	Qty.
20%	Acer campestre	17
35%	Corylus avellana	30
5%	Crataegus monogyna	4
10%	Frangula alnus	9
10%	Ligustrum vulgare	9
5%	Prunus spinosa	4
10%	Salix caprea	9
5%	Ulex europeaus	4
100%	TOTAL	86

SINGLE SPECIES NATIVE HEDGEROW
(92 Linear.m)

%	Species	Qty.
100%	*Fagus sylvatica*	*160*

THICKET MIX PLANTING (18m2)

%	Species	Qty.
20%	Acer campestre	4
35%	Corylus avellana	6
5%	Crataegus monogyna	1
10%	Frangula alnus	2
10%	Ligustrum vulgare	2
5%	Prunus spinosa	1
10%	Salix caprea	2
5%	Ulex europeaus	1
100%	TOTAL	19

MIXED SPECIES NATIVE HEDGEROW
(49 Lin. m)

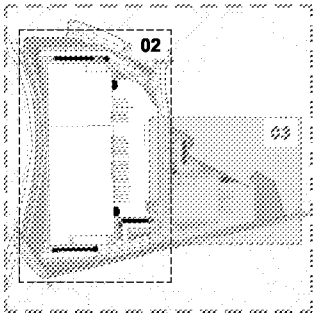
%	Species	Qty.
10%	Acer campestre +	22no.
10%	Corylus avellana #	22no.
50%	Crataegus monogyna #	110no.
10%	Cornus sanguinea #	22no.
10%	Ligustrum vulgare #	22no.
10%	Prunus spinosa #	22no.
100%	TOTAL	220

THICKET MIX PLANTING (1105m2)

%	Species	Qty.
20%	Acer campestre	221
35%	Corylus avellana	398
5%	Crataegus monogyna	55
10%	Frangula alnus	111
10%	Ligustrum vulgare	111
5%	Prunus spinosa	55
10%	Salix caprea	111
5%	Ulex europeaus	55
100%	TOTAL	1105

MIXED SPECIES NATIVE HEDGEROW
(92 Lin. m)

%	Species	Qty.
10%	Acer campestre +	40no.
10%	Corylus avellana #	40no.
50%	Crataegus monogyna #	204no.
10%	Cornus sanguinea #	40no.
10%	Ligustrum vulgare #	40no.
10%	Prunus spinosa #	40no.
100%	TOTAL	404



DRAWING LOCATION PLAN - NTS

REV	DESCRIPTION	BY	CKD	DATE
03	Colour added to plan	MB		12-11-24
02	Updated to suit revised site layout plan	HC	MB	04-11-24
01	Issued for construction	HC	MB	25-10-24

SCALE 1:250 0 6.25 12.5 18.75 25m
SCALE 1:1 0 10 20 30 40 50 60 70 80 90 100mm

BCA DESIGN
Landscape Architects

CLIENT
PANATTONI

PROJECT
OLDLANDS FARM PHASE 3, NEWLANDS ROAD, BOGNOR REGIS

DRAWING TITLE
DETAILED PLANTING PLAN (Sheet 2 of 2)

CONTRACT NUMBER:	2380/24	DATE:	22/10/24
DRAWING STATUS:	CONSTRUCTION	CAD REFERENCE:	2380-24-02+03
DRAWN BY:	HC	CHECKED BY:	MB
SCALE:	1:250	ORIGINAL SHEET:	A0

PROJECT	ORIGINATOR	VOLUME	LEVEL	TYPE	ROLE	NUMBER	STATUS	REV
XXX	BCA	ELS	XX	DR	L	2380-24-03	C	03

BCA Design
Studio 3, The Court, Holywell Business Park Northfield Road, Southam, Warwickshire CV47 0FS
Tel: +44 (0)1926 814031 Email: gen@bca-landscape.com Website: www.bca-landscape.com

Ecological Enhancement Plan

Oldlands Farm

BDW

Legend

- Site boundary
- Tree with general purpose bird box
- General purpose bat box
- Hibernacula

Notes:

Drawn by: dylan.gussman

Checked by: Ben Cooke

Figure No. 4

Revision No. A

05 March 2025

0 10 20 30 40 Meters

Scale = 1:250 @A3

British National Grid

NGR: 494218E 101477N

TETRA TECH

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Tetra Tech Limited.
Registered in England
number: 01959706

APPENDICES

APPENDIX A: REPORT CONDITIONS

APPENDIX B: KEY LEGISLATION

APPENDIX C: INVASIVE SPECIES AND COMPETITIVE WEEDS

APPENDIX D: CDM RISK ASSESSMENT

APPENDIX A: REPORT CONDITIONS

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The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

Tetra Tech reserves the right to share this Report and any related materials, surveys, drawings and/or documents at any time with the relevant Local Ecological Records Centre (LERC), any relevant statutory body or any equivalent organisation as Tetra Tech may reasonably require from time-to-time.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. Tetra Tech accept no liability for issues with performance arising from such factors.

APPENDIX B: KEY LEGISLATION

Habitats Directive

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, or the 'Habitats Directive', is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes.

In the UK, the Habitats Directive is transposed into national law via the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales, via the Conservation (Natural Habitats, &c) Regulations 1994 (as amended) in Scotland, and via the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland.

Wildlife & Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the 'Bern Convention' and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The Act makes it an offence to (with exception to species listed in Schedule 2) intentionally:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use; or
- take or destroy an egg of any wild bird.

Or to intentionally do the following to a wild bird listed in Schedule 1:

- disturbs any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird.

In addition, the Act makes it an offence (subject to exceptions) to:

- intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5;
- interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places; and
- the Act also prohibits certain methods of killing, injuring, or taking wild animals.

Finally, the Act also makes it an offence (subject to exceptions) to: intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant; unless an authorised person, intentionally uproot any wild plant not included in Schedule 8; or sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Following all amendments to the Act, Schedule 5 'Animals which are Protected' contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates. Schedule 8 'Plants which are Protected' of the Act, contains 185 species, including higher plants, bryophytes and fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.

Part 14 of the Act makes unlawful to plant or otherwise cause to grow in the wild any plant which is listed in Part II of Schedule 9.

It is recommended that plant material of these species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.

Environmental Protection Act 1990

The Act imposes a classification of soil and other waste containing viable propagules of invasive non-native plant species as controlled waste. This has been applied to Japanese Knotweed *Reynoutria japonica*, with the result that waste containing this species must be disposed of in accordance with the duty of care set out in section 34 of the Act.

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Part 14 of the Act makes unlawful to plant or otherwise cause to grow in the wild any plant which is listed in Part II of Schedule 9.

- It is recommended that plant material of these species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.

Birds Directive

The EC Directive on the Conservation of Wild Birds (791409/EEC) or 'Birds Directive' was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.

Conservation of Habitats and Species Regulations 2017 (as amended)

Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by Ministers, are then designated as Special Protection Areas (SPAs) within six years. Public bodies must also help preserve, maintain and re-establish habitats for wild birds.

The 2018 amendments mainly related to the impact of the *People Over Wind* decision and some implications arising for neighbourhood plan development and a range of other planning tools including Local Development Orders and Permission in Principle – see here for full details:

https://www.legislation.gov.uk/uksi/2018/1307/note/made

The 2019 amendments related to the EU exit. Most of these changes involved transferring functions from the European Commission to the appropriate authorities in England and Wales. All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant. The obligations of a competent authority in the 2017 Regulations for the protection of sites or species do not change.– see here for full details:

https://www.legislation.gov.uk/ukdsi/2019/9780111176573

The Regulations make it an offence to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, or pick, uproot, destroy, or trade in the plants listed in Schedule 5.

Global IUCN Red List

The International Union for Conservation of Nature (IUCN) Threatened Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe.

The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the categories is complex, and consider several principles.

Local Biodiversity Action Plan (LBAP)

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level) and are usually drawn up by a consortium of local Government organisations and conservation charities.

Some LBAP's may also include Habitat Action Plans (HAP) and/or Species Action Plans (SAP), which are used to guide and inform the local decision making process.

National Planning Framework 4

National Planning Framework 4 (NPF4) is the top tier of planning policy. The Framework provides guidance to local authorities and other agencies on planning policy and the operation of the planning system.

"Policy 1 gives significant weight to the nature crisis to ensure that it is recognised as a priority in all plans and decisions. Policy 4 protects and enhances natural heritage, and this is further supported by Policy 5 on soils and Policy 6 on forests, woodland and trees. Policy 20 also promotes the expansion and connectivity of blue and green infrastructure, whilst Policy 10 recognises the particular sensitivities of coastal areas.

Protection of the natural features of brownfield land is also highlighted in Policy 9, and protection of the green belt in Policy 8 will ensure that biodiversity in these locations is conserved and accessible to communities, bringing nature into the design and layout of our cities, towns, streets and spaces in Policy 14.

Most significantly, Policy 3 plays a critical role in ensuring that development will secure positive effects for biodiversity. It rebalances the planning system in favour of conserving, restoring and enhancing biodiversity and promotes investment in nature-based solutions, benefiting people and nature. The policy ensures that Local Development Plans (LDPs) protect, conserve, restore and enhance biodiversity and promote nature recovery and nature restoration. Proposals will be required to contribute to the enhancement of biodiversity, including by restoring degraded habitats and building and strengthening nature networks. Adverse impacts, including cumulative impacts, of development proposals on the natural environment will be minimised through careful planning and design, taking into account the need to reverse biodiversity loss. Development proposals for national, major or Environmental Impact Assessment (EIA) development will only be supported where it can be demonstrated that the proposal will conserve, restore and enhance biodiversity, including nature networks, so they are in a demonstrably better state than without intervention. Proposals for local development will include appropriate measures to conserve, restore and enhance biodiversity."

See here for full details: https://www.gov.scot/publications/national-planning-framework-4/

Adopted Chichester Local Plan Key Policies 2014-2029

The Chichester District Council, Adopted Chichester Local Plan Key Policies 2014-2029 states in Policy 49 Biodiversity that planning permission for development will only be granted where:

"*…it can be demonstrated that all the following criteria have been met:*

1. *The biodiversity value of the site is safeguarded;*
2. *Demonstrable harm to habitats or species which are protected or which are of importance to biodiversity is avoided or mitigated;*
3. *The proposal has incorporated features that enhance biodiversity as part of good design and sustainable development;*
4. *The proposal protects, manages and enhances the District's network of ecology, biodiversity and geological sites, including the international, national and local designated sites (statutory and non-statutory), priority habitats, wildlife corridors and stepping stones that connect them;*
5. *Any individual or cumulative adverse impacts on sites are avoided;*
6. *The benefits of development outweigh any adverse impact on the biodiversity on the site. Exceptions will only be made where no reasonable alternatives are available; and planning conditions and/or planning obligations may be imposed to mitigate or compensate for the harmful effects of the development."*

Policy 50 relates to development and disturbance of birds in Chichester and Langstone Harbours Special Protection Areas

"It is Natural England's advice that all net increases in residential development within the 5.6km 'Zone of Influence' are likely to have a significant effect on the Chichester and Langstone Harbours SPA either alone or in-combination with other developments and will need to be subject to the provisions of Regulation 61 of the Conservation of Habitats and Species Regulations 2010. In the absence of appropriate avoidance and/or mitigation measures that will enable the planning authority to ascertain that the development would not adversely affect the integrity of the SPA, planning permission will not be granted because the tests for derogations in Regulation 62 are unlikely to be met. Furthermore, such development would not have the benefit of the presumption in favour of sustainable development in the National Planning Policy Framework.

Net increases in residential development, which incorporates appropriate avoidance/mitigation measures, which would avoid any likelihood of a significant effect on the SPA, will not require an 'appropriate assessment'. Appropriate avoidance/mitigation measures will comprise:

a) A contribution in accordance with the joint mitigation strategy outlined in Phase III of the Solent Disturbance and Mitigation Project; or

b) A developer provided package of measures associated with the proposed development designed to avoid any significant effect on the SPA; or

c) A combination of measures in (a) and (b) above.

Avoidance/mitigation measures will need to be phased with development and shall be maintained in perpetuity. All mitigation measures in (a), (b) and (c) above must be agreed to be appropriate by Natural England. They should also have regard to the Chichester Harbour AONB Management Plan. The provisions of this policy do not exclude the possibility that some residential schemes either within or outside the Zone of Influence might require further assessment under the Habitats Regulations. For example, large schemes, schemes proposing bespoke avoidance/mitigation measures, or schemes proposing an alternative approach to the protection of the SPAs. Such schemes will be assessed on their own merits, and subject to advice from Natural England."

APPENDIX C: INVASIVE SPECIES AND COMPETITIVE WEEDS

Non-native Invasive Species Listed under Schedule 9, Part II (W&CA, 1981)

Common Name	Scientific Name
Few-flowered Leek	*Allium paradoxum*
Fanwort	*Cabomba caroliniana*
Hottentot Fig	*Carpobrotus edulis*
Australian Swamp Stonecrop	*Crassula helmsii*
Water Hyacinth	*Eichhornia crassipes*
Shallon	*Gaultheria shallon*
Giant Hogweed	*Heracleum mantegazzianum*
Floating Pennywort	*Hydrocotyle ranunculoides*
Curly Waterweed	*Lagarosiphon major*
Parrot's-feather	*Myriophyllum aquaticum*
Water Lettuce	*Pistia stratiotes*
Japanese Knotweed	*Fallopia japonica*
Giant Knotweed	*Fallopia sachalinensis*
Hybrid Knotweed	*Fallopia japonica x Fallopia sachalinensis*
False-acacia	*Robinia pseudoacacia*
Perfoliate Alexanders	*Smyrnium perfoliatum*
Variegated Yellow Archangel	*Lamiastrum galeobdolon subsp. argentatum*
Yellow Azalea	*Rhododendron luteum*
Himalayan Balsam	*Impatiens glandulifera*
Cotoneaster	*Cotoneaster horizontalis*
Cotoneaster, Entire-leaved	*Cotoneaster integrifolius*
Cotoneaster, Himalayan	*Cotoneaster simonsii*
Cotoneaster, Hollyberry	*Cotoneaster bullatus*
Cotoneaster, Small-leaved	*Cotoneaster microphyllus*
False Virginia Creeper	*Parthenocissus inserta*
Virginia Creeper	*Parthenocissus quinquefolia*
Hottentot Fig	*Carpobrotus edulis*
Three-cornered Garlic	*Allium triquetrum*
Water Hyacinth	*Eichhornia crassipes*
Few-flowered Leek	*Allium paradoxum*
Montbretia	*Crocosmia x crocosmiiflora*

Common Name	Scientific Name
Floating Water Primrose	*Ludwigia peploides*
Water Primrose	*Ludwigia grandiflora*
Water Primrose	*Ludwigia uruguayensis*
Rhododendron	*Rhododendron ponticum*
Rhododendron	*Rhododendron ponticum x Rhododendron maximum*
Giant Rhubarb	*Gunnera tinctoria*
Japanese Rose	*Rosa rugosa*
Giant Salvinia	*Salvinia molesta*
Purple Dewplant	*Disphyma crassifolium*
Fanwort (otherwise known as Carolina Water-Shield)	*Cabomba caroliniana*
Water Lettuce	*Pistia stratiotes*
Parrot's Feather	*Myriophyllum aquaticum*
Floating Pennywort	*Hydrocotyle ranunculoides*
Duck Potato	*Sagittaria latifolia*
Stonecrop, Australian Swamp (otherwise known as New Zealand Pygmyweed)	*Crassula helmsii*
Curly Waterweed	*Lagarosiphon major*
Waterweeds	All species of the genus *Elodea.*

Competitive Weeds

Common Name	Scientific Name
Hedge bindweed	*Calystegia sepium*
Field bindweed	*Convolvulus arvensis*
Green alkanet	*Pentaglottis sempervirens*
Herb bennet	*Geum urbanum*
Couch grass	*Elymus repens*
Ground elder	*Aegopodium podagraria*
Oxalis sp.	*Oxalis sp.*
Lesser celandine	*Ficaria verna*
Enchanter's nightshade	*Circaea lutetiana*
Cleavers	*Galium aparine*
Herb Robert	*Geranium robertianum*
Bittercress sp.	*Cardamine sp.*
Creeping buttercup	*Ranunculus repens*

Common Name	Scientific Name
Nettles	*Urtica dioica*
Creeping thistle	*Cirsium arvense*
Rosebay willowherb	*Chamerion angustifolium*
Common chickweed	*Stellaria media*
Horsetail sp.	*Equisetum sp.*
Annual meadow grass	*Poa annua*
Broad-leaved dock	*Rumex obtusifolius*
Curled dock	*Rumex crispus*

APPENDIX D: CDM RISK ASSESSMENTS

CDM Risk Assessment – Provision of Bird and Bat Boxes

Species	CDM Design Rationale	Hazard Control Mechanism	Residual Risk Level
Birds	Location for instalment	The locations of the bird boxes are detailed in Figure 4. The locations have been selected for ecological reasons to increase the likelihood of nesting birds using the features provided (if possible at a height of at least 3 m with clear airspace access to deter predators and in an area where artificial lighting will not shine directly upon the feature). The locations have however also been selected to avoid potential hazards from ensuring ease of access for any future maintenance (see section below) and ensuring the safety of the public.	Negligible
	Maintenance	The bird boxes do not require annual cleaning. However, should they require replacement or repair over winter due to damage, ladders, towers or MEWPs (or other provision to provide safe access) will be used as required by the contractor's own risk assessment.	Negligible
	Monitoring	Monitoring of the bird boxes will be undertaken for the first five years post-construction.	Negligible
	Manual handling	The weight of the proposed bird boxes within Table 4 range from 7.5 – 3.6 kg. These boxes have been selected to minimise manual handling risks during installation and replacement (if required).	Negligible
Bats	Location for instalment	The locations of the bat boxes are detailed in Figure 4. The locations have been selected for ecological reasons to increase the likelihood of roosting bats utilising the features provided (so at a height of at least 4 m to deter vandalism and theft, located to ensure the features are readily accessible from bat flight paths, as close to green infrastructure as possible and in an area where artificial lighting will not shine directly upon the feature). The locations have however also been selected to avoid potential hazards from ensuring ease of any future maintenance (see section below) and ensuring the safety of the public.	Negligible
	Maintenance	The bat boxes do not require regular maintenance. However, should they require replacement or repair due to damage, ladders, towers, or MEWPs (or other provision to provide safe access) will be used as required by	Negligible

		the contractor's own risk assessment. This should take place over winter and be guided a licenced bat ecologist.	
	Monitoring	Monitoring of the bat boxes will be undertaken for the first five years post-construction.	Negligible
	Manual handling	The weight of the proposed bat boxes within Table 3 range from is 5.6 – 4.3 kg. This has been selected to minimise manual handling risks during installation and replacement (if required).	Negligible