Medworth EfW CHP Facility Order:
SI 2024 No.230

Landscape and Ecology Strategy

(Work Nos. 1,1A, 2A, and 2B, the EfW CHP Facility Site)

(part discharge)

September 2025

Revision: 3.0
Document ref: CP3_R04

We inspire
with energy.

Contents

1. Introduction

1.1 Overview of Authorised Development

1.1.1 Medworth CHP Limited (the Developer) has secured a Development Consent Order (the Order)[1] to construct, operate and maintain an Energy from Waste (EfW) Combined Heat and Power (CHP) Facility on the industrial estate, Algores Way, Wisbech, Cambridgeshire. Together with associated Grid Connection, CHP Connection, Access Improvements, Water Connections, Temporary Construction Compound (TCC), and an acoustic fence, these works are the Authorised Development.

1.1.2 The Authorised Development will recover useful energy in the form of electricity and steam from over half a million tonnes of non-recyclable (residual), non-hazardous municipal, commercial and industrial waste each year. The Authorised Development has a generating capacity of over 50 megawatts and the electricity will be exported to the grid. The Authorised Development also has the capability to export steam and electricity to users on the surrounding industrial estate.

1.2 The Developer

1.2.1 The Developer is a wholly owned subsidiary of MVV Environment Limited (MVV). MVV is part of the MVV Energie AG group of companies. MVV Energie AG is one of Germany's leading energy companies, employing approximately 6,500 people with assets of around €5 billion and annual sales of around €4.1 billion. The Authorised Development represents an investment of over £450m.

1.2.2 The company has over 50 years of experience in constructing, operating, and maintaining EfW CHP facilities in Germany and the UK. MVV Energie's portfolio includes a 700,000 tonnes per annum residual EfW CHP facility in Mannheim, Germany.

1.2.3 MVV's largest operational project in the UK is the Devonport EfW CHP Facility in Plymouth. Since 2015, this modern and efficient facility has been using up to 275,000 tonnes of municipal, commercial and industrial residual waste per year to generate electricity and heat, notably for His Majesty's Naval Base Devonport in Plymouth, and exporting electricity to the grid.

1.2.4 In Dundee, MVV has taken over the existing Baldovie EfW Facility and has developed a new, modern facility alongside the existing facility. Operating in tandem since 2021, they use up to 220,000 tonnes of municipal, commercial and industrial waste each year as fuel for the generation of usable energy.

1.2.5 Biomass is another key focus of MVV's activities in the UK market. The biomass power plant at Ridham Dock, Kent, uses up to 195,000 tonnes of waste and non-recyclable wood per year to generate green electricity and is capable of exporting heat.

[1] Statutory Instrument 2024 No. 230 https://www.legislation.gov.uk/uksi/2024/230/schedule/1/made

1.3 EPC Contractor (Kanadevia Inova)

1.3.1 To construct the EfW CHP Facility (Work Nos. 1, 1A, 2A and 2B) the Developer has appointed Kanadevia Inova (KVI) as the EPC Contractor.

KVI is a global greentech company operating in Waste to Energy (WtE) and Renewable Gas. The company roots are in Switzerland which were established in 1933 as "L. von Roll Aktiengesellschaft", later known as Von Roll Inova. Since 2010 the company has been part of the Hitachi Zosen Corporation which was rebranded in 2024 to Kanadevia Corporation, one of Japan's largest industrial and engineering firms and a longstanding partner and licensee of Von Roll Inova.

KVI have been building and maintaining plants for almost 90 years. KVI draw on their experience as a general EPC contractor to deliver with, and on their clients behalf complex turnkey plants and system solutions for thermal and biological waste to energy recovery, gas upgrading and power to gas. KVI have successfully delivered several EfW plants in the UK and have 5 more under construction.

1.4 The Authorised Development

1.4.1 The Authorised Development comprises the following key components:

- The EfW CHP Facility and Site (Work Nos.1/1A/1B/2A/2B);
- CHP Connection (Work Nos.3/3A/3B);
- Temporary Construction Compound (TCC) (Work No.5);
- Access Improvements (Work Nos.4A/4B);
- Water Connections (Work Nos.6A/6B);
- Grid Connection (Work Nos.7/8/9) and
- Acoustic fence (Work No.10).

1.4.2 A summary description of each Authorised Development element is provided below.

- EfW CHP Facility and Site: A site of approximately 5.3ha located south-west of Wisbech, located within the administrative areas of Fenland District Council and Cambridgeshire County Council. The main buildings of the EfW CHP Facility would be located in the area to the north of the Hundred of Wisbech Internal Drainage Board drain bisecting the site and would house many development elements including the tipping hall, waste bunkers, boiler house, turbine hall, air cooled condenser, air pollution control building, chimneys and administration building. The gatehouse, weighbridges, and laydown maintenance area would be located in the southern section of the EfW CHP Facility Site.
- CHP Connection: The EfW CHP Facility would be designed to allow the export of steam and electricity from the facility to surrounding business users via dedicated pipelines and private wire cables located along the disused March to Wisbech railway. The pipeline and cables would be located on a raised, steel structure.

- TCC: Located adjacent to the EfW CHP Facility Site, the compound would be used to support the construction of the Authorised Development. The compound would be in place for the duration of construction.
- Access Improvements: This includes enhancements on New Bridge Lane, such as road widening and site access modifications, and adjustments to Algores Way, involving the relocation of site access 20 meters to the south. However, following a detailed design review, the improvements to Algores Way are no longer considered to be necessary (refer to the information provided concerning Requirement 2 for further details).
- Water Connections: A new water main connecting the EfW CHP Facility into the local network will run underground from the EfW CHP Facility Site along New Bridge Lane before crossing underneath the A47 to join an existing Anglian Water main. An additional foul sewer connection is required to an existing pumping station operated by Anglian Water located to the northeast of the Algores Way site entrance and into the EfW CHP Facility Site.
- Grid Connection: This comprises a 132kV electrical connection using underground cables. The Grid Connection route begins at the EfW CHP Facility Site and runs underneath New Bridge Lane, before heading north within the verge of the A47 to the Walsoken Substation on Broadend Road. From this point the cable would be connected underground to the Walsoken DNO Substation.
- Acoustic fence: This comprises of a 3m high acoustic fence fronting a residential property at 10 New Bridge Lane, Wisbech.

1.5 Purpose of this document

1.5.1 Schedule 2 of the Order requires the Developer to comply with and/or submit detailed information to implement the Authorised Development. Requirement 4 (Biodiversity and Landscape Mitigation) of Schedule 2 states:

> *"4.—(1) No part of the authorised development may commence until a written landscape and ecology strategy* ***for that part*** [emphasis added] *has been submitted to and approved by the relevant planning authority. The landscape and ecology strategy must be substantially in accordance with the outline landscape and ecology strategy.*
>
> *(2) The landscape and ecology strategy must be implemented as approved under sub-paragraph (1)."*

1.5.2 This Landscape and Ecology Strategy discharges Requirement 4 for Work No.1, 1A, 2A and 2B of the Authorised Development. Specific Landscape and Ecology Strategies have and will continue to be prepared for the other Works Nos. and be submitted prior to the commencement of development of that Work No(s).

1.5.3 To be *"substantially in accordance"* with the **Outline Landscape and Ecology Strategy (Figure 3.14) [REP2-026]** (hereafter referred to as the **Outline LES**) this document reports on how the Developer and KVI developed the outline proposals alongside detailed design updates at the EfW CHP Facility Site to deliver a **Landscape and Ecology Strategy** (hereafter referred to as the **LES**). Where necessary, commentary is provided to explain any updates between the **Outline LES** and **LES**.

1.5.4 A copy of the **Outline LES** and **LES** are provided in **Appendix A** and **Appendix B** respectively.

1.6 Structure of this document

1.6.1 **Section 2:** The Landscape and Ecology Strategy

2. Landscape and Ecology Strategy

2.1 Overview

2.1.1 The purpose of the **Outline LES** was to illustrate the replacement habitats and landscape elements proposed within the EfW CHP Facility Site and assess how these arrangements would contribute to the provision of the Developer's commitment to deliver 10% Biodiversity Net Gain (BNG), provide suitable native species landscaping, ecological mitigation, and biodiversity enhancement.

2.1.2 Since the Order was Made in February 2024, the Developer and KVI, in consultation with the relevant planning authority, Cambridgeshire County Council (CCC), have carried out a detailed design review ('Design Update 01' (DU01)) of Work Nos. 1, 1A, 1B, 2A and 2B. The review confirmed that the proposed design updates are within the scope of the Order, did not introduce any consequential effects to the project mitigation, and would not cause any new or materially different environmental effects.

2.1.3 Based on the agreement secured for DU01, the Developer and KVI refined the detailed design and concluded the architectural treatment of the buildings and structures of Work Nos.1,1A, 2A and 2B (Design Update 02 (DU02)). Consequently, information has been submitted enclosing the DU02 drawings and accompanying review to discharge Requirement 2 of the Order for Work Nos. 1, 1A, 2A and 2B; the EfW CHP Facility Site. These details were approved by the relevant planning authority (CCC) on 15 August 2025.

2.1.4 To incorporate the refinements made to the design of the EfW CHP Facility Site for DU01 and DU02, and to comply with Order Requirement 4, the **Outline LES** is updated, hereafter referred to as the **LES** and provided in **Appendix B** with explanatory text in **Section 2.2**.

2.1.5 The **LES** demonstrates that, in compliance with Requirement 4, the updated strategy remains *"substantially in accordance"* with the **Outline LES**.

2.1.6 Once the **LES** is approved by CCC under Order Requirement 4:

- Pursuant to Order Requirement 5, the Developer will prepare the detailed **Landscape and Ecological Management Plan (LEMP)**. To be submitted prior to the *date of final commissioning* (defined in the Order), the **LEMP** will include details of the design and management objectives, management plans for each habitat type and a creation, management and monitoring timetable; then
- Once the **LEMP** is approved and the **LES** implemented, the Developer will review its actual contribution to the Authorised Development's commitment to deliver a minimum 10% BNG gain and report this, including updated BNG metric calculations, in the BNG Implementation Report; agreed with CCC under Order Requirement 6.

2.2 Summary of the Proposed Changes

2.2.1 As discussed in **Section 2.1**, detailed design refinements (DU01 and DU02) have been made to the EfW CHP Facility Site since the Order was made. This process has been cognisant of the **Outline LES** principles whilst balancing operational requirements and, in some cases, constraints.

2.2.2 While the fundamental principles of the **Outline LES** have been preserved, including proposed habitat types, species mixes and planting densities, modifications have been incorporated within the **LES**. These modifications are substantially in accordance with the **Outline LES**, and the main updates are summarised below.

Updates to the switching compound (ID21) and private wire compound (ID23)

2.2.3 Modifications have been adopted to integrate elements of the switching compound into the private wire switching compound. This approach will preserve the capability to export electricity to the grid, while freeing approximately 300 square meters of land previously designated for the switching compound, east of the gatehouse/weighbridge (see ID21 on **Figure 3.6, ES Chapter 3: Description of the Proposed Development Figures, (Volume 6.3) [APP-049]**), which can now be utilised for enhanced landscaping and biodiversity improvements. It is proposed that this area of land extends the species rich wet grassland that was originally located around the switching compound.

Staff and visitor facilities

2.2.4 Now incorporated into the main EfW CHP Facility building, the standalone administration building (Work No.1B) will not be implemented. The design review (DU01) enabled the brown roof and solar panels to be relocated, however the proposed six climbing plants proposed for the administration building are removed from the **LES** as there are no suitable locations on the operational buildings.

2.2.5 The brown roof will continue to replicate urban mosaic habitat, suitable for a range of plant and invertebrate species.

2.2.6 The land previously proposed to be occupied by the administration building will now accommodate the re-aligned car park with an additional area of species rich neutral grassland and additional native hedgerow and hedgerow trees.

Operational Drainage Strategy

2.2.7 Following detailed design, the surface water attenuation ponds have been refined. Complete details of the surface water management proposals for the EfW CHP Facility Site were submitted pursuant to Order Requirement 8 (**Operational Drainage Strategy**) for Work Nos. 1, 1A, 2A, and 2B, document reference CP3_R08_Operational Drainage Strategy (Revision 2.0), August 2025. The Operational Drainage Strategy was approved by CCC on 8th September 2025.

2.2.8 Consistent with the **Outline LES**, the **LES** includes a rearranged attenuation pond and combined swale with sufficient depth to provide standing water featuring native species-rich bankside and marginal vegetation habitats that are suitable for water

voles. This pond has been increased in area, (see **Table 2.2 (BI07)** for further details), leading to a commensurate increase in land identified as bankside and marginal vegetation with the area of land above and below water changing in relation to the changes in pond depth which will occur over the course of a year.

2.2.9 Whilst the wet woodland is relocated and reduced in size, this is compensated by increasing the amount of native species-rich bankside and marginal vegetation in the proposed swale and pond.

2.3 LES habitat creation and enhancement

2.3.1 As set out within the **Design and Access Statement (Volume 7.5) [APP-096]** the previous approach in terms of landscape design, presented within the **Outline LES** sought to focus upon the principles of maintaining existing vegetation wherever possible, maximising biodiversity and choosing habitats and plant species which are reflective of surrounding habitats and better adapted to climate change.

2.3.2 Several habitat creation and enhancement measures were incorporated into the **Outline LES**. Developed from the **Outline LES, Table 2.1** summarises how these measures have been incorporated into the **LES**.

Table 2.1: LES Habitat creation principles

Ref	Outline LES proposals	LES
HC01	Retention and protection of an area of mature tree line, and new planting of a mix of native and ornamental shrubs.	Prior to the 2025 bird breeding season, tree clearance at the EfW CHP Facility Site was completed. The **LES** reflects those mature poplar trees to be retained and incorporated into the wider landscaping proposals. The planting mix of native and ornamental shrubs is retained.
HC02	Creation of 125m of native species-rich hedgerow with trees.	The proposed native species-rich hedgerow with trees is retained within the **LES**. An additional c.20m of hedge planting is included adjacent to the staff and visitor car park.
HC03	Provision of a sustainable drainage system including a pond of sufficient depth to provide permanent standing water with native species-rich bankside and marginal vegetation, and an overflow basin that would support tree species characteristic of wet woodland.	Updated to accommodate the detailed drainage requirements of the EfW CHP Facility Site, the principles are retained. Whilst the wet woodland is relocated and reduced in size, this is compensated by increasing the amount of native species-rich bankside and marginal vegetation in the proposed swale and pond.

Ref	Outline LES proposals	LES
HC04	Creation of brown roofs that would replicate urban mosaic habitat, suitable for a range of plant and invertebrate species.	Agreed under DU01, Work No.1B, the standalone administration building, will not be implemented. However, an alternative location to deliver a brown roof with a similar footprint was identified and is reflected in the LES. At the request of CCC, **Figure 2.1** provides further details of the mosaic habitats to be created.
HC05	Creation of a green wall on one building, supporting nectar-rich climbing plant species.	Agreed under DU01, Work No.1B, the standalone administration building, will not be implemented, nor (unlike the provision of an alternative brown roof location) was there an requirement to relocate the proposed 6 climbing plants from the **Outline LES**. However, the Developer and KVI reviewed alternative opportunities, but has ruled it out as there are no suitable alternative locations on the operational buildings.
HC06	Provision of a permeable cellular confinement system surface at a large maintenance laydown area (instead of hardstanding) with the intention of supporting a neutral grassland sward, while reducing surface run-off.	The proposals within the maintenance laydown area remain embedded in the **LES**.

2.3.3 In addition to habitat creation, **Table 2.2** presents complementary biodiversity features that were included in the **Outline LES** and to be developed for the **LES** to maximise provisions for the assemblage of target species and how these have translated into the **LES**.

Table 2.2: Biodiversity features included in the LES

Ref	Outline LES proposal	LES
BI01	Bat and bird boxes to be provided within suitable areas of new and retained habitats and at appropriate locations on buildings.	Locations for the bird and bat boxes are included in the **LES**. Agreed under DU01, Work No.1B, the standalone administration building, will not be implemented. Consequently, for operational reasons there are no suitable locations to place nesting boxes on the buildings. At the request of CCC, the number and type of bat and bird boxes has been increased, see the **LES**.

Ref	Outline LES proposal	LES
BI02	Habitat features for sheltering invertebrates including 'bug hotels', decaying log piles, open patches of ground and shallow banks of sand/gravel/rubble, and retained areas of un-cut grassland to provide over-wintering habitat.	Included in the general **LES** proposals and two locations for hibernacula are identified in the **LES**. A further two hibernacula will be located on the brown roof, see **Figure 2.1**.
BI03	Hedgehog hibernation boxes with suitable areas of dense vegetation cover.	Two locations for hedgehog hibernation boxes are identified in the **LES**.
BI04	Creation of refugia and hibernacula for reptiles and amphibians, constructed of materials such as logs, rocks and earth to provide shelter and temperature-stable cavities.	Two locations for hibernacula are identified in the **LES**. A further two hibernacula will be located on the brown roof, see **Figure 2.1**.
BI05	New planting and sowing would maximise the use of native species, which would be of local provenance wherever possible. Where ornamental species are specified (i.e., for low maintenance amenity areas around building and carpark accesses), these would be non-invasive, and would provide sources of nectar, fruit and seeds.	Included in the **LES.**
BI06	Species mixed used throughout the habitat types would be tailored to provide sources of nectar, fruit and seeds; to maximise foraging provision for a broad assemblage of species.	Included in the **LES.**
BI07	Suitable habitat enhancements for water voles to be considered to compensate for the loss of a small portion of suboptimal ditch habitat due to culverting works associated with the development.	Included in the **LES.** The suboptimal ditch replaced by culverting totals approximately 63m in length with a perimeter of 140m and equating to an area of 410m^2, see the table below ID / Existing width (m) / Existing length (m) / Retained (m) / Culverted (m) Ditch 33 / 6.5 / 91 / 28 / 63 Whilst the location and size of the proposed pond and swale have changed between the **Outline LES** and **LES**, this delivers a net increase in potential water vole habitat and

Ref	Outline LES proposal	LES

associated specie rich wet grassland planting; summarised in the table below.

ID	Perimeter (m)	Area (m^2)	Net Change	
			Perimeter (m)	Area (m^2)
Culverted (Ditch 33)	140	410	-	-
Outline LES	115	215	-25	-195
Proposed LES	300	2400	+160	+1990

Additionally, to further improve the suitability of habitat for water voles, coir rolls are incorporated into the **LES**, see **Figure 2.4** for further details.

The **LES** review has also enabled:

- the proposed culverts along ditch No.33, to maintain water vole connectivity via the provision of mammal ledges, see **Figure 2.2**; and
- existing ditch banks that are disturbed during construction activities will be seeded with species rich wet grassland (see **drawing 51007160**) and pre-established biodegradable fibre matting applied to the riparian zone (See **Figure 2.3**) to enhance the habitat for water voles. Further information provided in **Section 2.4 (Ditch bank reinstatement)**.

2.4 Ditch bank reinstatement

2.4.1 The **LES** is extended to include information on the approach the Developer and their EPC Contractor will employ for the reinstatement of retained ditch banks that may require reinstatement following construction activities, in particular, ditch No.33 that bisects the EfW CHP Facility Site.

2.4.2 All existing channels and banks affected by construction activities will be reinstated to mimic baseline conditions as far as practicable to ensure more natural bank forms and in-channel features and morphological diversity.

2.4.3 This will comprise reinstatement of an appropriate vegetation assemblage and structure within the riparian zone along with enhancements to the riparian zone to offset impacts.

2.4.4 Vegetation will be re-established as soon as practicable. If necessary, and where practicable (e.g. where difficulties in planting and establishment of vegetation are likely to occur), additional measures as such biodegradable matting, fixed with wooden stakes will be used to protect soils before vegetation has re-established, particularly on the watercourse banks.

2.4.5 Seeded biodegradable fibre matting will be used to encourage re-vegetation after works on, or near, the banks of each watercourse disturbed by the works to reduce establishment time and to help support bank structure. A suitable seed mix appropriate for the production of a tussocky species-rich sward, containing, for example, *Festuca rubra, commutate*, *Phleum pratense ssp Bertolinii*, and *Cynosurus cristatusa* will be used to mitigate for the loss of habitats suitable to support riparian mammals, See Drawing 51007160 for further details of the species rich wet grassland seed mix.

2.4.6 For marginal vegetation, emergent and submerged vegetation, pre-established biodegradable fibre mats will be placed within the riparian zone. Plant species have been selected to provide cover and food for water voles. Species to include *Carex acutiformis* and *Glyceria maxima*. See **Figure 2.3** for further details of the riparian zone and an illustrative section of the ditch bank planting proposals.

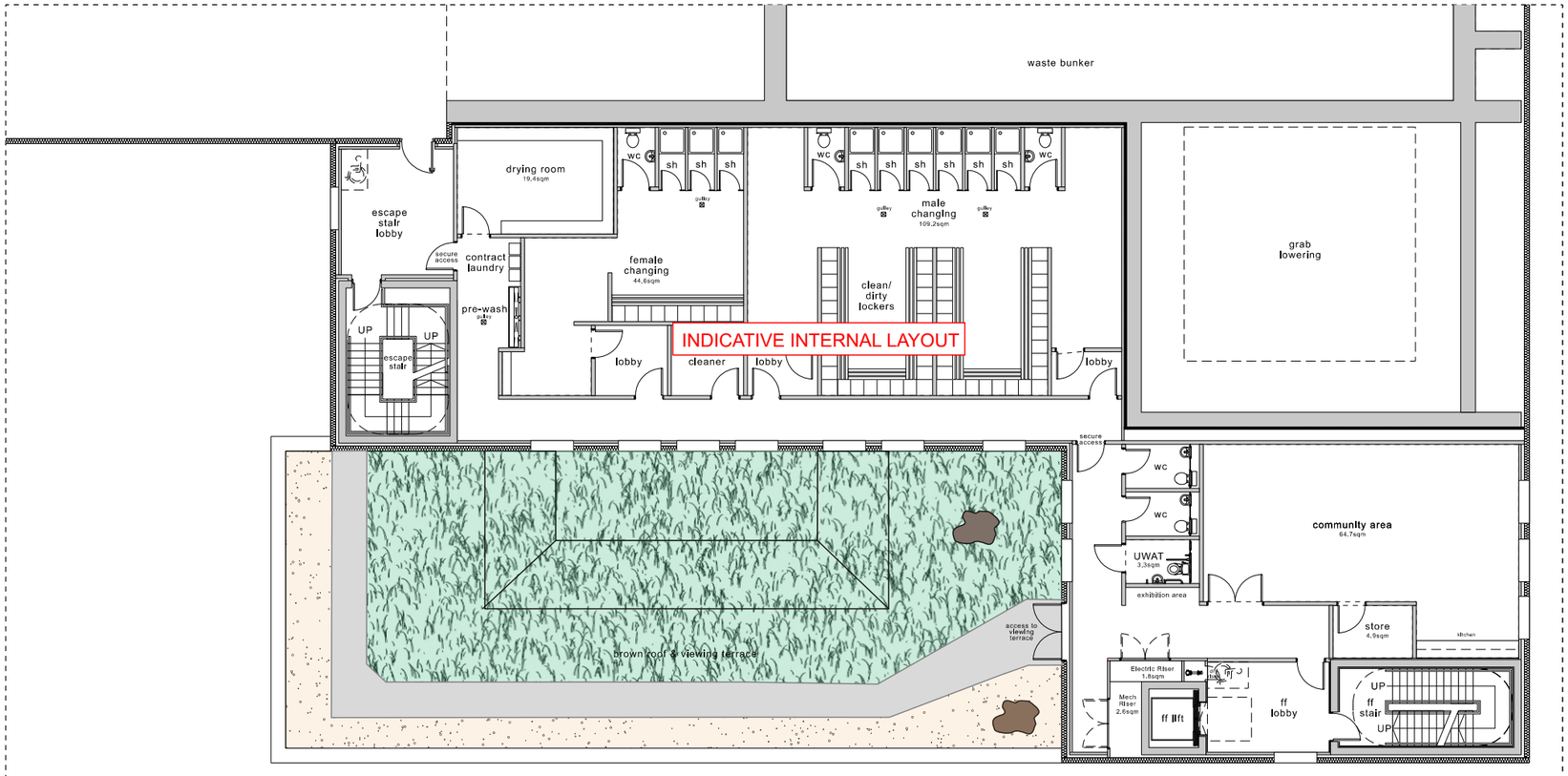
2.4.7 Species that form monospecific stands, such as common reed *Phragmites australis*, are avoided as over time they will become dominant and replace less resilient species.

3. Conclusion

3.1.1 This document provides written details of the updated **LES**, which has been revised to align with the detailed design updates applied to the EfW CHP Facility Site.

3.1.2 The detailed design updates have considered and maintained, where feasible, the core principles of the **Outline LES** and consequently the **LES** is substantially in accordance with it. Water vole habitat has been significantly increased in the proposed pond and swale to compensate for the culverted sections of Ditch No.33. Therefore, the **LES** is deemed sufficient to discharge Requirement 4 for Work Nos. 1,1A,2A and 2B.

3.1.3 In accordance with the Order, prior to the *date of final commissioning,* the Developer will submit the **LEMP** for the written approval of CCC and under the approved BNG Strategy (Requirement 6) provide relevant information, including metric calculations, that the Authorised Development delivers a minimum 10% BNG.



First Floor Plan +11.010 FFL

Bare earth system
- self vegetation strata (onsite soil and rubble)
- filter fleece
- drainage board
- roof waterproofing

Extensive wildflower system
- wildflower growing medium
- filter fleece
- drainage board with geotextile filter
- protection fleece
- roof waterproofing

Species rich biodiverse roof seeding

% Mix	Latin Name	% Mix	Latin Name
0.5	Achillea millefolium	15	Malva moschata
6.5	Anthyllis vulneraria	0.5	Origanum vulgare
12.5	Centaurea nigra	5	Plantago lanceolata
5	Cruciata laevipes	5	Plantago media
0.5	Filipendula vulgaris	10	Poterium sanguisorba - (Sanguisorba minor)
5	Galium album - (Galium mollugo)	0.5	Primula veris
2.5	Galium verum	10	Prunella vulgaris
0.5	Hippocrepis comosa	5	Rhinanthus minor
5	Leucanthemum vulgare	5	Rumex acetosella
1	Lotus corniculatus	5	Silene vulgaris

Key:

Bare earth (self-coloniseation)

Extensive wildflower

Hibernacula

Notes:
- Onsite soils and rubble to be used
- either onsite windfall wood or felled wood from the Developer's BNG Orchard to be used
- wheelchair accessible path (1.2m wide)
- Full details to be provided within the Habitat Management and Monitoring Plan

0 2 4 6 8 10m

Scale at A3: 1:200

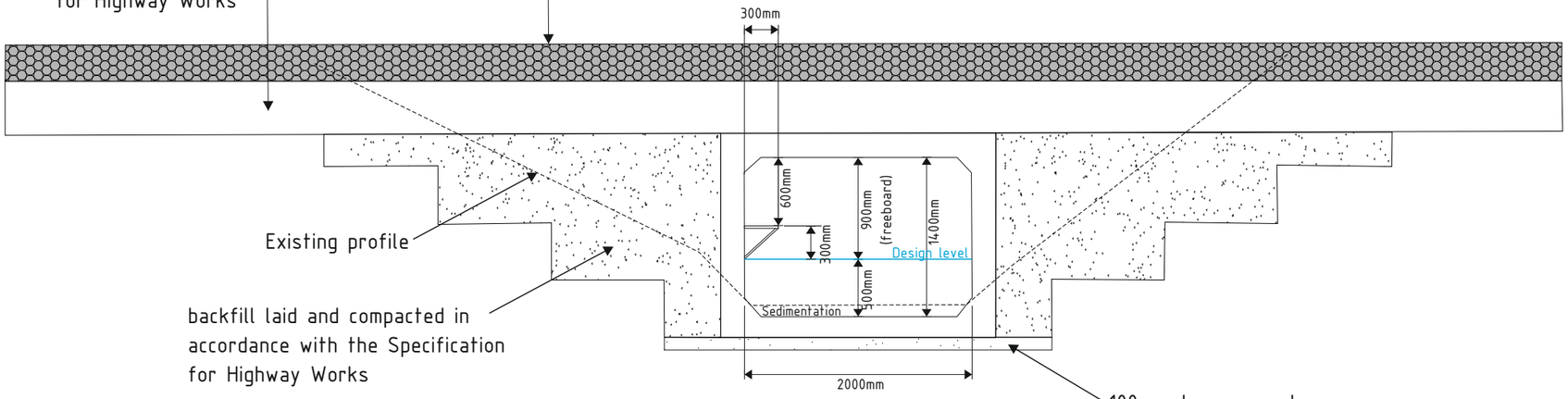
Medworth CHP Limited
Medworth Energy from Waste Combined Heat and Power Facility
Work No.1 Requirement 4 (Biodiversity and Landscape Mitigation

Figure 2.1
Brown roof general arrangements

August 2025 Drawing Ref: CP3_R4_001_REV_1.0

Running surface laid and compacted in accordance with the Specification for Highway Works

Subbase laid and compacted in accordance with the Specification for Highway Works



Existing profile

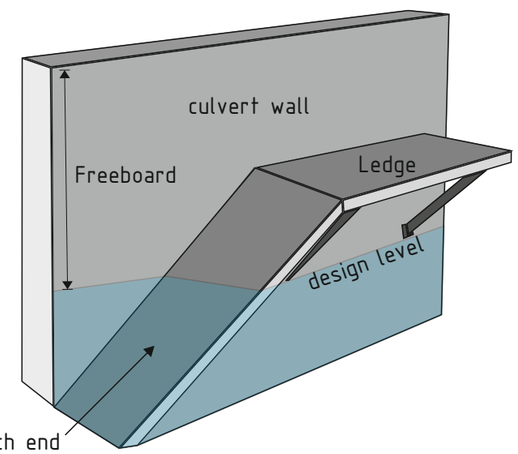
backfill laid and compacted in accordance with the Specification for Highway Works

100mm deep concrete blinding layer

Water vole ledge specification summary:

headroom: 600mm
width: between 150mm and 300mm
freeboard: ~900mm
culvet flow: ~500mm
sedimentation: ~100mm
Ramp: both ends of the culvert

Water vole ledge and ramp (not to scale)



Ramp at each end of the culvert

Notes:

Proposed general arrangements for culvert extension of IDB ditch no. 33. Details subject to detailed design by the EPC Contractor and agreement with the HWIDB

General design parameters:

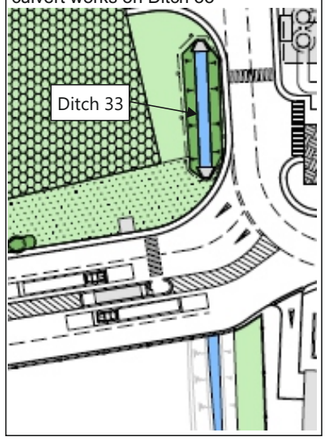
Concrete box culvert with prefabricated concrete headwall and riprap material to prevent bed erosion.

Running surface over culvert to incorporate a trapped gully or simular arrangement to collect surface water and discharge to EfW CHP Facility drainage system.

Minium standard for the extension to or replacement of the culvert to maintain existing flow

Water vole ledge to be provided.

Inset (NTS): Location of proposed culvert works on Ditch 33



0 1 2 3 4 5

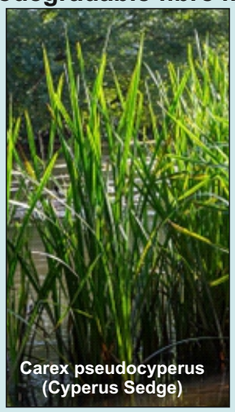
Scale at A3: 1:100

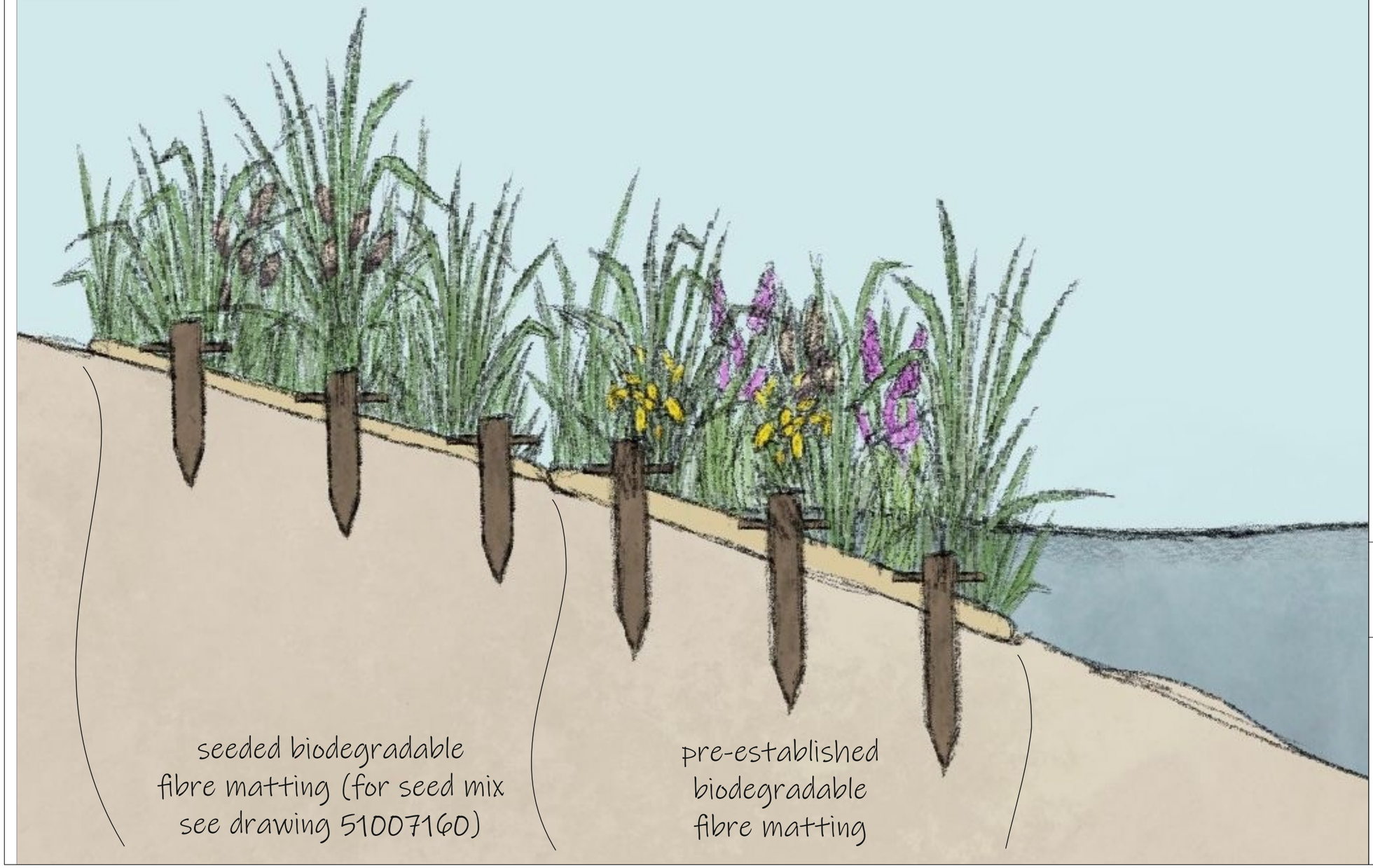
Medworth CHP Limited
Medworth Energy from Waste Combined Heatand Power Facility

Figure 2.2
IDB Culvert General Arrangements (Ditch 33 section)

August 2025 Drawing Ref: CP3_R04_002_REV_1.0

Pre-established biodegradable fibre matting species mix:

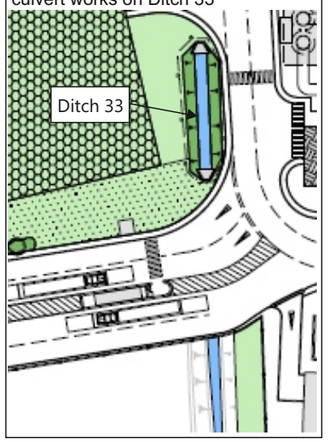




Notes:

Proposed general arrangements for culvert extension of IDB ditch no. 33. Details subject to detailed design by the EPC Contractor and agreement with the HWIDB.

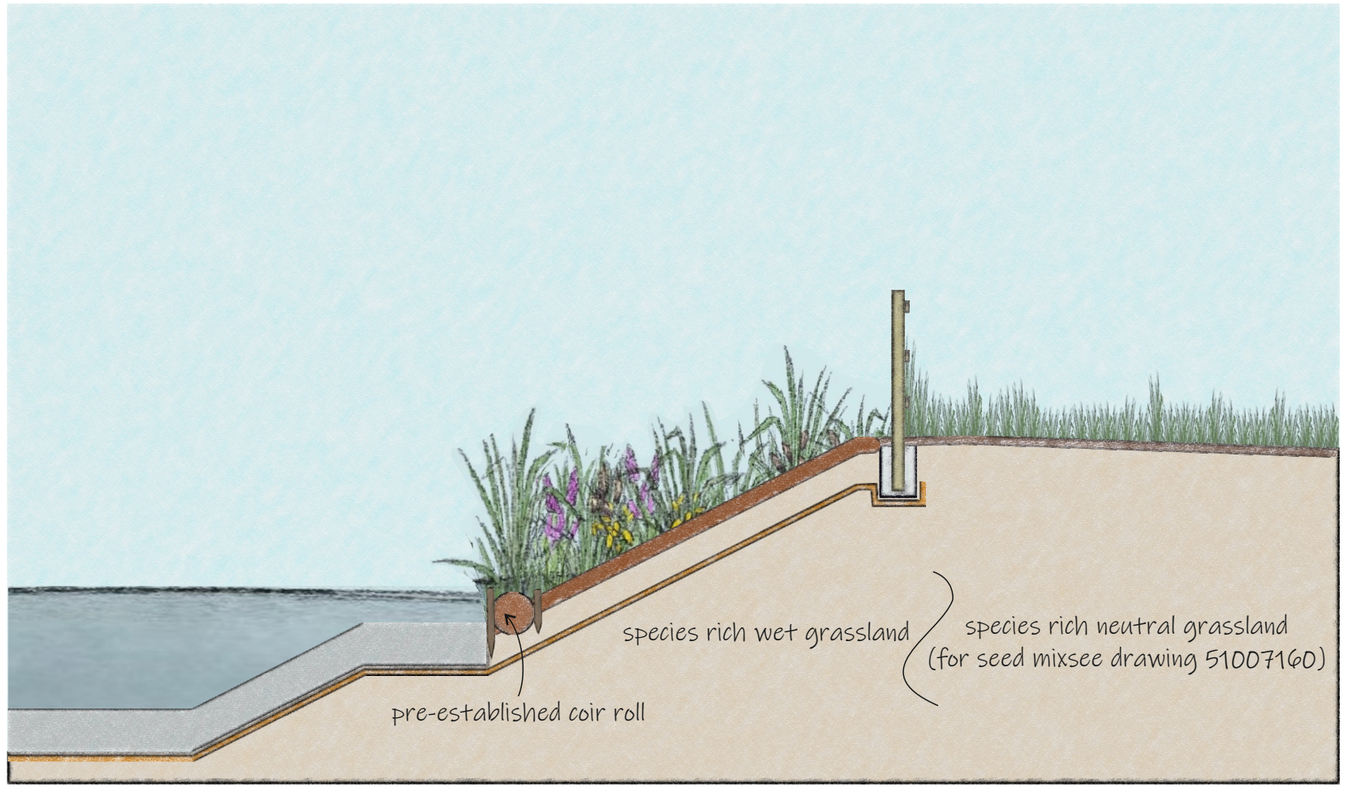
Inset (NTS): Location of proposed culvert works on Ditch 33



Medworth CHP Limited
Medworth Energy from Waste Combined Heatand Power Facility

Figure 2.3
IDB Culvert General Arrangements - riparian zone planting

August 2025 Drawing Ref: CP3_R04_003_REV_2.0



Species rich wet grassland seed mix

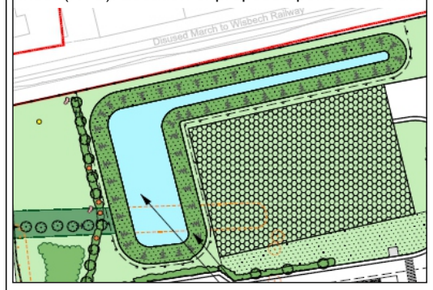
% Mix	Latin Name	% Mix	Latin Name
0.2	Eupatorium cannabinum	1.8	Prunella vulgaris
1.6	Angelica sylvestris	0.6	Achillea ptarmica
0.6	Geum rivale	0.6	Juncus effusus
1.2	Galium mollugo	0.4	Hypericum tetrapterum
1.2	Galium verum	0.8	Lotus uliginosus
1.6	Ranunculus acris	0.6	Vicia cracca
1.4	Silene dioica	3.2	Agrostis stolonifera
0.2	Scrophularia Nodosa	16	Cynosurus cristatus
0.4	Lycopus europaeus	19.2	Festuca rubra, commutata
0.6	Juncus inflexus	16	Festuca rubra, litoralis
2	Iris pseudacorus	2.4	Alopecurus pratensis
0.4	Lythrum salicaria	4	Poa trivalis
1.4	Filipendula ulmaria	6.4	Poa pratensis
0.8	Lychnis flos-cuculi	0.8	Anthoxanthum odoratum
0.8	Succisa pratensis	8	Phleum pratense ssp Bertolinii
0.8	Carex pendula	4	Deschampsia cespitosa

Pre-established biodegradable fibre coir rolls species mix:

Carex acutiformis (Lesser Pond Sedge)
Carex pseudocyperus (Cyperus Sedge)
Glyceria maxima (Sweet Reed Grass)
Iris pseudacorus (Yellow Flag Iris)
Lythrum salicaria (Purple Loosestrife)
Mentha aquatica (Water Mint)
Phalaris arundinacea (Reed Canary Grass)
Schoenoplectus lacustris (Common Club Rush)

Notes:
Proposed general arrangements for pond and swale. Details subject to detailed design by the EP Contractor

Inset (NTS): Location of proposed pond and swale



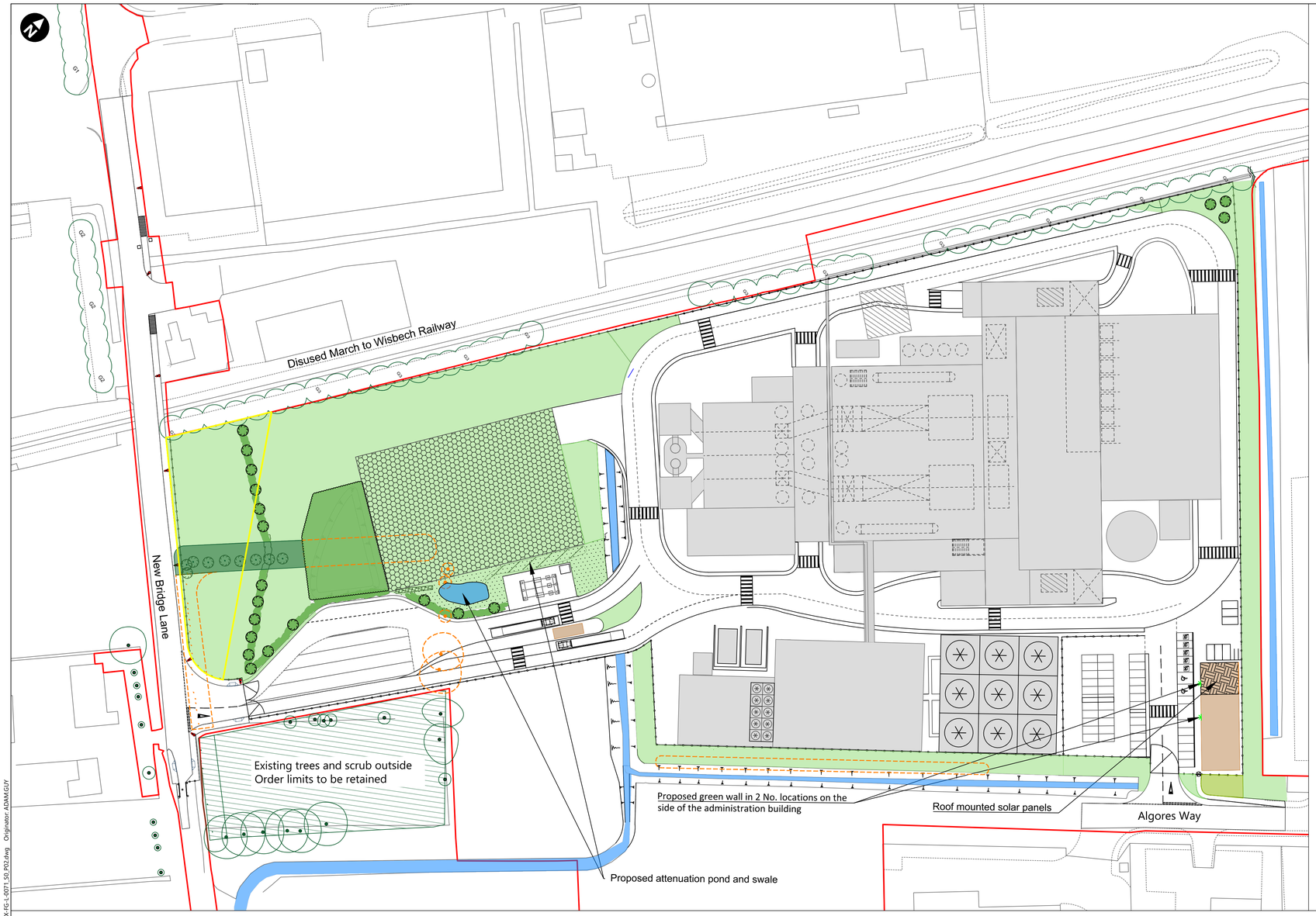
0 1 2 3
Scale at A3: 1:50

Medworth CHP Limited
Medworth Energy from Waste Combined Heatand Power Facility

Figure 2.4
Pond and swale general arrangements

September 2025
Drawing Ref: CP3_R04_004_REV_1.0

Appendix A Outline Landscape and Ecology Strategy (Outline LES)



Species rich wet grassland

% Mix	Latin Name
0.2	*Eupatorium cannabinum*
1.6	*Angelica sylvestris*
0.6	*Geum rivale*
1.2	*Galium mollugo*
1.2	*Galium verum*
1.6	*Ranunculus acris*
1.4	*Silene dioica*
0.2	*Scrophularia Nodosa*
0.4	*Lycopus europaeus*
0.6	*Juncus inflexus*
2	*Iris pseudacorus*
0.4	*Lythrum salicaria*
1.4	*Filipendula ulmaria*
0.8	*Lychnis flos-cuculi*
0.8	*Succisa pratensis*
0.8	*Carex pendula*
1.8	*Prunella vulgaris*
0.6	*Achillea ptarmica*
0.6	*Juncus effusus*
0.4	*Hypericum tetrapterum*
0.8	*Lotus uliginosus*
0.6	*Vicia cracca*
3.2	*Agrostis stolonifera*
16	*Cynosurus cristatus*
19.2	*Festuca rubra, commutata*
16	*Festuca rubra, litoralis*
2.4	*Alopecurus pratensis*
4	*Poa trivalis*
6.4	*Poa pratensis*
0.8	*Anthoxanthum odoratum*
8	*Phleum pratense ssp Bertolinii*
4	*Deschampsia cespitosa*

Species rich neutral grassland

% Mix	Latin Name
0.2	*Agrimonia eupatoria*
1.4	*Borago officinalis*
0.8	*Salvia verbenaca*
0.6	*Trifolium pratense*
0.2	*Trifolium repens*
1.6	*Agrostemma githago*
1.2	*Centaurea cyanus*
1	*Leucanthemum vulgare*
0.6	*Digitalis purpurea*
1.2	*Centaurea nigra*
1	*Centaurea scabiosa*
0.2	*Lythrum salicaria*
0.2	*Origanum vulgare*
0.2	*Geranium pratense*
1	*Malva moschata*
1	*Papaver rhoeas*
0.4	*Lychnis flos-cuculi*
1.4	*Onobrychis viciifolia*
1.4	*Knautia arvensis*
0.6	*Scabiosa columbaria*
0.2	*Dipsacus fullonum*
0.4	*Lotus corniculatus*
0.4	*Anthyllis vulneraria*
0.4	*Echium vulgare*
1	*Achillea millefolium*
1.4	*Rhinanthus minorl*
4	*Agrostis castellana*
20	*Cynosurus cristatus*
16	*Festuca ovina*
24	*Festuca rubra, litoralis*
6.4	*Poa pratensis*
9.6	*Phleum pratense ssp Bertolinii*

Species rich biodiverse roof seeding

% Mix	Latin Name
0.5	*Achillea millefolium*
6.5	*Anthyllis vulneraria*
12.5	*Centaurea nigra*
5	*Cruciata laevipes*
0.5	*Filipendula vulgaris*
5	*Galium album - (Galium mollugo)*
2.5	*Galium verum*
0.5	*Hippocrepis comosa*
5	*Leucanthemum vulgare*
1	*Lotus corniculatus*
15	*Malva moschata*
0.5	*Origanum vulgare*
5	*Plantago lanceolata*
5	*Plantago media*
10	*Poterium sanguisorba - (Sanguisorba minor)*
0.5	*Primula veris*
10	*Prunella vulgaris*
5	*Rhinanthus minor*
5	*Rumex acetosella*
5	*Silene vulgaris*

Key

- Order limits
- Trees/hedgerow to be removed
- Existing woodland/scrub to be retained within Order limits
- Existing scrub and trees outside Order limits to be retained
- Proposed native wet woodland
- Proposed native hedgerow with native trees
- Proposed native shrub
- Proposed species rich neutral grassland
- Proposed species rich wet grassland
- Proposed brown roof
- Permeable cellular confinement system on laydown area with neutral species rich grassland
- Proposed security fenceline
- Existing IDB ditches maintained by others
- Area omitted from biodiversity gain and reserved for potential rail embankment

Native Wet Woodland Species Mix - (Planted at 2m centres)

Species	Height	Specification	Mix
Alnus glutinosa	60-80cm	1+1: Transplant	20%
Betula pubescens	60-80cm	1+1: Transplant	15%
Cornus sanguinea	60-80cm	1+1: Transplant	15%
Crataegus monogyna	60-80cm	1+1: Transplant	15%
Prunus spinosa	60-80cm	Branched, 2 breaks	5%
Rhamnus frangula	60-80cm	1+1: Transplant	10%
Salix caprea	60-80cm	1+1: Transplant	5%
Salix cinerea	60-80cm	1+1: Transplant	5%
Viburnum opulus	60-80cm	1+1: Transplant	10%

Hedgerow trees

Species	Specification	Girth	Height
Acer campestre "Streetwise"	Heavy standard	12-14cm	350-400cm
Sorbus aucuparia 'Cardinal Royal'	Heavy standard	12-14cm	350-400cm
Prunus padus 'Albertii'	Heavy standard	12-14cm	350-400cm

Native Hedgerow Species Mix - (Double staggered row at 6 plants per m)

Species	Height	Specification	Mix
Cornus sanguinea	60-80cm	1+1: Transplant	5%
Corylus avellana	60-80cm	1+1: Transplant	10%
Crataegus monogyna	60-80cm	1+1: Transplant	30%
Euonymus europaeus	60-80cm	1+1: Transplant	10%
Ilex aquifolium	60-80cm	1+1: Transplant	10%
Ligustrum vulgare	60-80cm	1+1: Transplant	5%
Lonicera periclylmenum	60-80cm	1+1: Transplant	5%
Prunus spinosa	60-80cm	Branched, 2 breaks	10%
Rosa canina	60-80cm	1+1: Transplant	5%
Rhamnus frangula	60-80cm	1+1: Transplant	5%
Viburnum opulus	60-80cm	1+1: Transplant	5%

Native Shrub Mix - (Shrubs at 1m centres)

Species	Height	Mix
Corylus avellana	45-60cm	35%
Euonymus europaeus	45-60cm	10%
Ilex aquifolium	30-45cm	20%
Sambucus nigra	40-60cm	5%
Taxus baccatta	40-60cm	10%
Viburnum opulus	45-60cm	20%

Green Wall - climbing plants (3 No. single species group planted per panel)

Species	Height	Container	No.
Jasminum officinale	150-200cm	10L pot	3
Trachelospermum jasminoides	150-200cm	10L pot	3

0 m — 40 m
Scale 1:750 @ A1

Client

Medworth CHP Limited
Medworth Energy from Waste Combined Heat and Power Facility DCO
Environmental Statement
Chapter 3 - Description of the Proposed Development

Figure 3.14
Outline Landscape and Ecology Strategy

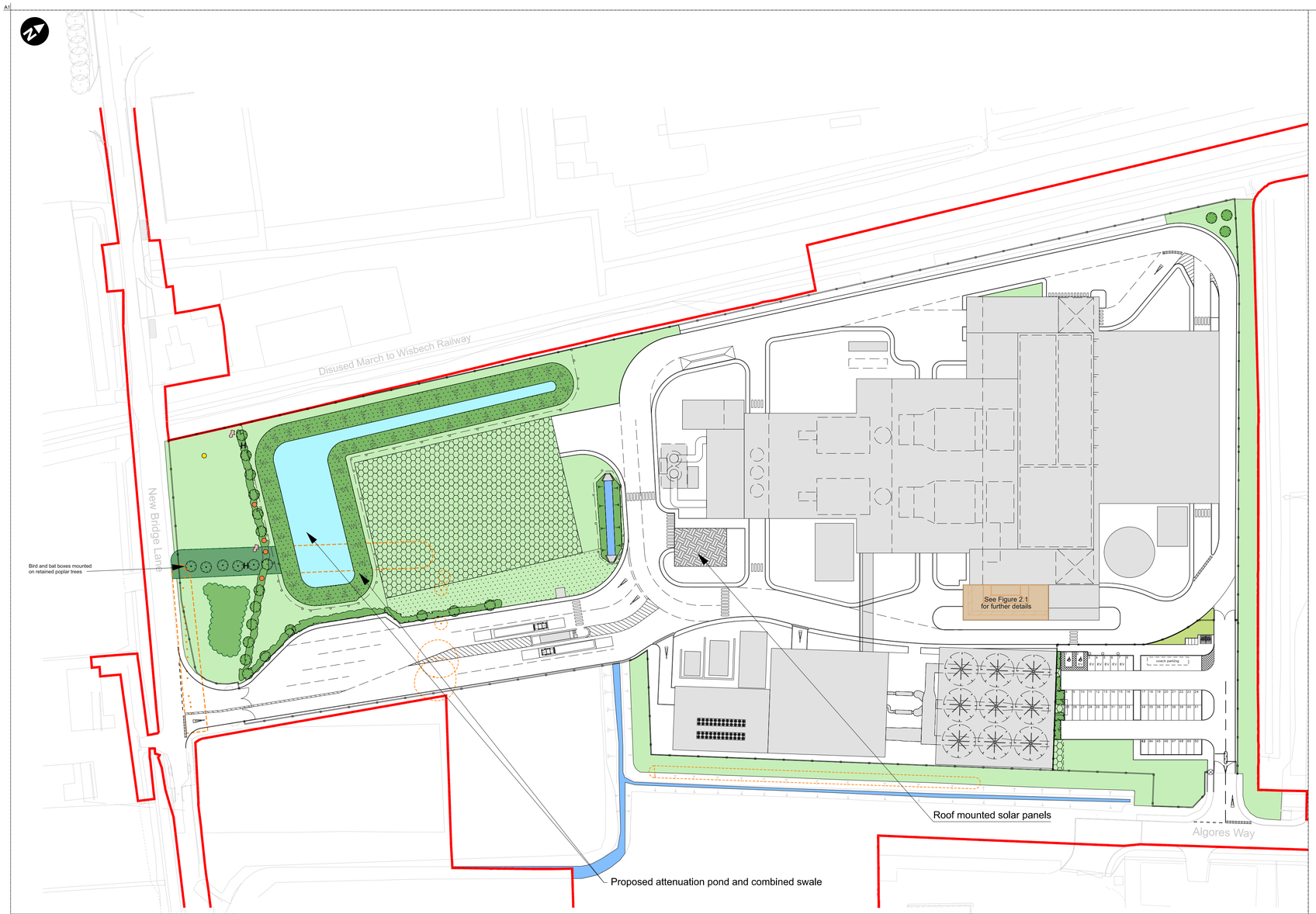
March 2023

wood.

H:\SAL-IS12-SHARED\Projects\41310 Wisbech\Deliver Stage\D Design_Technical\Data\Transport\Access schemes\MVV site plan\41310-WOOD-XX-XX-FG-L-0071_S0_P02.dwg Originator: ADAM.GUY

Appendix B Landscape and Ecology Strategy (LES)

A1



Species rich wet grassland

% Mix	Latin Name
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1.6	Angelica sylvestris
0.6	Geum rivale
1.2	Galium mollugo
1.2	Galium verum
1.6	Ranunculus acris
1.4	Silene dioica
0.2	Scrophularia Nodosa
0.4	Lycopus europaeus
0.6	Juncus inflexus
2	Iris pseudacorus
0.4	Lythrum salicaria
1.4	Filipendula ulmaria
0.8	Lychnis flos-cuculi
0.8	Succisa pratensis
0.8	Carex pendula
1.8	Prunella vulgaris
0.6	Achillea ptarmica
0.6	Juncus effusus
0.4	Hypericum tetrapterum
0.8	Lotus uliginosus
0.6	Vicia cracca
3.2	Agrostis stolonifera
16	Cynosurus cristatus
19.2	Festuca rubra, commutata
16	Festuca rubra, litoralis
2.4	Alopecurus pratensis
4	Poa trivalis
6.4	Poa pratensis
0.8	Anthoxanthum odoratum
8	Phleum pratense ssp Bertolinii
4	Deschampsia cespitosa

Species rich neutral grassland

% Mix	Latin Name
0.2	Agrimonia eupatoria
1.4	Borago officinalis
0.8	Salvia verbenaca
0.6	Trifolium pratense
0.2	Trifolium repens
1.6	Agrostemma githago
1.2	Centaurea cyanus
1	Leucanthemum vulgare
0.6	Digitalis purpurea
1.2	Centaurea nigra
1	Centaurea scabiosa
0.2	Lythrum salicaria
0.2	Origanum vulgare
0.2	Geranium pratense
1	Malva moschata
1	Papaver rhoeas
0.4	Lychnis flos-cuculi
1.4	Onobrychis viciifolia
1.4	Knautia arvensis
0.6	Scabiosa columbaria
0.2	Dipsacus fullonum
0.4	Lotus corniculatus
0.4	Anthyllis vulneraria
0.4	Echium vulgare
1	Achillea millefolium
1.4	Rhinanthus minorl
4	Agrostis castellana
20	Cynosurus cristatus
16	Festuca ovina
24	Festuca rubra, litoralis
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% Mix	Latin Name
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6.5	Anthyllis vulneraria
12.5	Centaurea nigra
5	Cruciata laevipes
0.5	Filipendula vulgaris
5	Galium album - (Galium mollugo)
2.5	Galium verum
0.5	Hippocrepis comosa
5	Leucanthemum vulgare
1	Lotus corniculatus
15	Malva moschata
0.5	Origanum vulgare
5	Plantago lanceolata
5	Plantago media
10	Poterium sanguisorba - (Sanguisorba minor)
0.5	Primula veris
10	Prunella vulgaris
5	Rhinanthus minor
5	Rumex acetosella
5	Silene vulgaris

Key:

- Order limits
- Trees/hedgerow removed Q1 2025
- Existing woodland/scrub to be retained within Order limits
- Proposed native wet woodland
- Proposed native hedgerow with native trees
- Proposed native shrub
- Proposed species rich neutral grassland
- Proposed species rich wet grassland
- Proposed brown roof with visitors viewing area
- Permeable cellular confinement system on laydown area with neutral species rich grassland
- Proposed security fenceline
- Existing IDB ditches
- Hibernacula
- H Hedgehog habitation box
- 5m high pole mounted bat box
- 5m high pole mounted barn owl box

Native Wet Woodland Species Mix - (Planted at 2m centres)

Species	Height	Specification	Mix
Alnus glutinosa	60-80cm	1+1: Transplant	20%
Betula pubescens	60-80cm	1+1: Transplant	15%
Cornus sanguinea	60-80cm	1+1: Transplant	15%
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Native Shrub Mix - (Shrubs at 1m centres)

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Ilex aquifolium	30-45cm	20%
Sambucus nigra	40-60cm	5%
Taxus baccatta	40-60cm	10%
Viburnum opulus	45-60cm	20%

Native Hedgerow Species Mix - (Double staggered row at 6 plants per m)

Species	Height	Specification	Mix
Cornus sanguinea	60-80cm	1+1: Transplant	5%
Corylus avellana	60-80cm	1+1: Transplant	10%
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Rosa canina	60-80cm	1+1: Transplant	5%
Rhamnus frangula	60-80cm	1+1: Transplant	5%
Viburnum opulus	60-80cm	1+1: Transplant	5%

Nesting/ Roosting/ Hibernation Boxes

Species	Requirements	Number
Woodpecker	Nesting box (FSC certified materials). To be mounted on the existing mature poplar trees between 3 to 5m high. To face away from prevail wind i.e. northeast side.	3
'Small birds'	Small bird nesting box (FSC certified materials). To be mounted on the existing mature poplar trees between 3 to 5m high. To face away from prevail wind i.e. northeast side.	4
Pipistrelles and noctules	Twin chamber bat box (FSC certified materials). To be mounted on the existing mature poplar trees at over 3 high. To face south/southeast.	6
	Twin maternity/rooting bat box pole mounted (4m to 6m) (FSC certified materials).	4
Barn owl	5m high pole mounted barn owl box (FSC certified materials). To face northeast.	1
Hedgehog	Hibernating box (FSC certified materials) Sheltered location avoiding direct sunlight and covered with leaf litter for camouflage.	2

Hibernacula

Requirements	Number
Minimum size 3m^2 and 1m high Rubble/stone to be placed at base to aid drainage Material to be a mix of tree fall, rubble, stone and soils (placed to ensure various access locations and sizes) Cover material soils	2

Rev.	Date	Drawn	Checked	Revision
1.0	05.08.25			UPDATED FOR CCC
0.0	30.05.25	TMB	AMG	ISSUED FOR PLANNING

Status	Planning	Discipline	Architectural
Scale	1:750	Job No	16236
Size	A1		© Kanadevia Inova AG

WEEDON architects
Harry's Yard
176-178 Newhall St
Birmingham B3 1SJ
T: 0121 454 4171
www.weedonarchitects.co.uk

This drawing is based on: Wood, June 2022
Figure 3.14
Outline Landscape and Ecology Strategy

0m 40m
Scale 1:750 @A1

Client
Kanadevia INOVA

Doc. Name
LH020-WA-58007160_0.0
Outline Landscape and Ecology Strategy

Project Name
Medworth CHP Limited
Medworth Energy from Waste Combined Heat and Power Facility

Doc. Title
Landscape and Ecology Strategy

Project No.	Document No.	Revision
P-3538	51007160	1.0

Do not scale