West Ashton, Trowbridge

Construction and Environmental Management Plan: Biodiversity

Prepared by:
The Environmental Dimension Partnership Ltd

On behalf of:
Persimmon Homes (Wessex) Ltd

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(edp7866_d003b 12 November 2025 GYo/ERo)

Section 1
Introduction, Context and Purpose

INTRODUCTION, CONTEXT, PURPOSE

1.1 This Construction and Environment Management Plan (CEMP): Biodiversity has been prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of Persimmon Homes (Wessex) Ltd (hereafter referred to as 'the Developer') in relation to a multi-phase mixed use development at West Ashton, Trowbridge (hereafter referred to as 'the Site'). This document sets out a range of ecology mitigation measures to be implemented prior to and during each phase of construction, including the advanced mitigation phase.

1.2 Given the scale of development and range of ecological sensitivities present, this CEMP: Biodiversity is intended to provide an overarching framework to follow in order to ensure no damage or harm occurs to retained habitats and protected and notable wildlife species during any phase of the development. The requirement for protected species licences, monitoring and compliance checks, is provided.

1.3 This document has been prepared to provide the necessary information in fulfilment of the ecology mitigation requirements of planning Condition 20 of outline planning permission (Application reference: 15/04736/OUT), as described in detail below. It is intended that this CEMP: Biodiversity be appended, or cross-referenced, with a CEMP prepared by the appointed project engineers to provide impact avoidance and mitigation measures for general construction activities, as required by the remainder of planning Condition 20.

1.4 At this stage, the specific timings of each development phase are undefined, and specific restrictions will need to be refined once detailed designs and timescales are obtained. Subsequent amendments to this document, to inform applications for approval of reserved matters, must be approved in writing by the Local Planning Authority (LPA) of Wiltshire Council. If more appropriate, a phase specific CEMP can be produced but this must follow the broad principles set out in this overarching document and any such documents must be approved by the LPA.

PLANNING CONTEXT

1.5 Outline planning permission, with a resolution to grant planning permission by Wiltshire Council (Application reference: 15/04736/OUT) for mixed use development comprising: residential (up to 2,500 dwellings - Classes C3 and C2); employment (Class E ('Business' only), B2, and B8); two local centres (Classes E, C2, and C3); two primary schools, one secondary school, ecological visitor facility, public open space, landscaping and associated highway works including for the 'Yarnbrook/West Ashton Relief Road' (YWARR) and the access junctions.

1.6 The application was heard at Committee on 29 July 2025 and a resolution to grant planning permission was secured on 02 September 2025, pending numerous formal agreements between parties and a number of planning conditions, of which Condition 20, relating the submission of a CEMP, is one of the requirements.

1.7 This overarching CEMP has been prepared to provide the necessary information relating to the ecological aspects of the development and is intended to contribute to the fulfilment of Condition 20 of the outline planning permission, which states:

"No development shall take place within individual Phases or sub Phases of the development until a site specific Construction Environmental Management Plan, or Plans, (CEMP(s)) for that Phase or sub Phase, or an overarching CEMP for the entire application site, has been submitted to and approved in writing by the local planning authority. The CEMP(s) must demonstrate the adoption and use of the best practicable means to reduce the effects of noise, vibration, dust and site lighting. The plan(s) should include, but not be limited to:

- *Procedures for maintaining good public relations including complaint management, public consultation and liaison;*
- *Arrangements for liaison with the Council's Public Protection Team;*
- *All works and ancillary operations which are audible at the site boundary, or at such other place as may be agreed with the Local Planning Authority, shall be carried out only between the following hours: 08:00 Hours and 18:00 Hours on Mondays to Fridays and 08:00 and 13:00 Hours on Saturdays and; at no time on Sundays and Bank Holidays;*
- *Deliveries to and removal of plant, equipment, machinery and waste from the site must only take place within the period from 07:00 to 19:00 hours, subject to ongoing review;*
- *Mitigation measures as defined in BS 5528: Parts 1 and 2: 2009 Noise and Vibration Control on Construction and Open Sites shall be used to minimise noise disturbance from construction works;*
- *Procedures for emergency deviation of the agreed working hours;*
- *Control measures for dust and other air-borne pollutants;*
- *Measures for controlling the use of site lighting whether required for safe working or for security purposes;*
- *Construction traffic routing details.*
- *Ecology mitigation measures to cover –*
    - *Protection of retained habitats;*
    - *Creation of new habitats including provision of integrated bat and bird features at a ratio of 1 building to 1 integrated feature;*
    - *Management and monitoring of created and retained habitats (until taken over by management company or WWT);*

- *Precautionary working method statements and works to be overseen by an ecologist; monitoring requirements and details of frequency of monitoring, thresholds, remedial measures and timescales for remediation;*

- *Monitoring requirements for habitats, mitigation features and species including details of frequency of monitoring, thresholds, remedial measures and timescales for remediation (to cover amongst other things, establishment/width of hop-overs, habitat structure/composition of woodland in Biss and Green Lane Woods, bat use of underpasses);*

- *Testing and adjusting lighting, in accordance with monitoring results';*

- *Compliance procedures.*

And with particular regard to the Yarnbrook & West Ashton Relief Road the following specific ecology mitigation information –

- *Long and cross sections for each underpass based on site surveyed; measurements showing the relative positions of hedgerows, existing ground levels, earthworks and underpass;*

- *The timetable of works required to complete the culvert works having regard to seasonal ecological and planting constraints;*

- *The programme of construction works to demonstrate how the ecological constraints of the culverts works have been fully integrated into the project programme (i.e. Gantt chart) and how it affects the critical path.*

- *A protocol for constructing underpasses and hop-overs including exact timescales, demonstrating removal of as little hedgerow as possible, erection of 4m high bat fencing and establishing new planting.*

The approved CEMP(s) shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details.

A report prepared by the Ecological Clerk of Works certifying that the required ecology mitigation and/or compensation measures identified in the CEMP(s) have been completed to their satisfaction, and detailing the results of site supervision and any necessary remedial works undertaken or required, shall be submitted to the Local Planning Authority for approval within 3 months of the date of substantial completion of the development or at the end of the first planting season following this, whichever is the sooner. Any approved remedial works shall then be carried out under the strict supervision of a professional ecologist following that approval.

REASON: In the interests of the amenities of surrounding occupiers and of wildlife during the construction of the development."

PHASING OF DEVELOPMENT

1.8 The development is to be built across multiple construction phases, as per the Phasing Plan included as **Appendix EDP 1**. There will be four separate residential phases, each with associated public open space (POS), as well as an advanced ecological mitigation phase (to be implemented prior to any construction taking place). In addition, employment land and the YWARR will also come forward during Phase 2 of the development.

1.9 The spatial extent of the advanced ecological mitigation is illustrated in **Appendix EDP 2**. Whilst there is no construction relating to the creation and establishment of the advanced mitigation, control measures are required to ensure legal compliance as significant ground disturbance, including the use of heavy machinery/plant, will be required to facilitate ground preparation and landscaping during the creation of new habitats. In the absence of any mitigation, such works pose a risk of damage to retained habitats and harm to protected species, particularly those within Biss Wood and the River Biss to the immediate east of the Site. Biss Wood supports bat populations associated with the nearby Bath and Bradford on Avon Bats Special Area of Conservation (SAC) and the River Biss riparian corridor supports resting places for water vole (*Arvicola amphibius*) and otter (*Lutra lutra*).

1.10 The detailed program and timings of construction works for each development phase is not yet known. However, the Phasing Plan sets out that all Advanced Ecological Mitigation must be carried out prior to construction. The River Biss Corridor enhancement and the 'further ecology mitigation' (as described below) must be completed prior to the first 150 occupations (see **Appendix EDP 1**). Broadly this phased development includes the following works:

- Advanced mitigation – to include the 100m width buffer to Biss Wood; impenetrable buffer zone between the employment land and the east of West Ashton Road housing land; an attenuation basin creating a barrier to pedestrian access between the Green Lane Nature Park Extension and the east of West Ashton Road residential area; and a new impenetrable hedgerow alongside West Ashton Road to the south-west of Biss Wood (see **Appendix EDP 2**);

- Further Ecology Mitigation – to include a new 3km circular pedestrian footpath route; scheme for Biss River corridor; scheme for enhanced planting between Green Lane Nature Park and River Biss; and Green Lane Nature Park extension (see **Appendix EDP 2**);

- Phase 1 – to include construction of up to 350 residential dwellings; a secondary school; an early learning site; Local Equipped Area for Play (LEAP); visitor centre; River Biss corridor improvements and ecological mitigation areas as described in the point above;

- Phase 2 – to include construction of up to 375 dwellings; a primary school; secondary school; YWARR; West Ashton Road improvements and roundabout accesses; vehicular connection to Drynham Lane and prohibition of driving order; and four sports pitches and changing rooms;

- Phase 3 – to include construction of up to 725 residential dwellings; a primary school; new access to employment land off West Ashton Road; off-site footpath improvements; LEAPs; and destination play areas. This phase will also include the marketing of the employment land; and

- Phase 4 - to include construction of up to 750 residential dwellings; LEAPs; and allotments.

1.11 Specific ecological mitigation relating to the YWARR is provided in **Appendix EDP 4**.

Section 2
Scope, Roles and Responsibilities

SCOPE

2.1 This CEMP will extend throughout the enabling/pre-construction and construction phases of the proposed development and will be reviewed annually, or as required when new development phases come forward, by the developer and appointed project ecologist until completion of development works.

2.2 The CEMP addresses all habitats and features of ecological value to be affected by the enabling/pre-construction and construction phases of the development works, including all features of ecological interest to be retained and/or incorporated within the scheme.

2.3 Specific measures relating to the protection of retained habitats and habitats considered suitable for wildlife, are discussed to ensure that the above are not subject to significant adverse effects as a result of the development.

2.4 This CEMP incorporates pertinent baseline information and recommendations presented within the following documents:

- Environmental Statement (ES) Chapter 6: Ecology and Nature Conservation (Volume 1) and associated appendices, submitted in support of the outline planning application (P23-1007);
- Environmental Statement Appendix 6.1a Baseline Ecological Appraisal (February 2024 1878-06 BaseEcoAp dv2 /CN/SC/LB);
- Green Lane Woodland Complex Management Plan (Aspect Ecology, 2021); and
- Detailed designs relating to connectivity measures (bridges, hop overs and underpasses), produced by Stantec (drawing references are listed in **Appendix EDP 4**).

RESPONSIBILITY FOR IMPLEMENTING THE CEMP: BIODIVERSITY

2.5 At the time of writing, it is anticipated that the parties listed below will be responsible for implementing the CEMP.

The Developer

2.6 The Developer will be responsible for appointing the Principal Contractor and an Ecological Clerk of Works (ECoW) to ensure compliance with law and policy. The Developer or their Principal Contractor will be responsible for:

- Compliance with legal consents relating to nature conservation;
- Compliance with planning conditions relating to nature conservation;

- Appointing a suitably experienced ecologist to act as an ECoW;
- Compliance with instructions and guidance provided by the ECoW;
- Installation of physical protection measures during construction;
- Implementation of sensitive working practices during construction; and
- Regular inspection and maintenance of physical protection measures and monitoring of working practices during construction.

Contact Details

Persimmon Wessex
Verona House
Tetbury Hill
Malmesbury
SN16 9JR

Barratt Homes
Barratt House
710 Waterside Drive
Aztec West
Almondsbury
Bristol
BS32 4UD

Ecological Clerk of Works

2.7 Depending on the phase of the development, and nature of any supervised works, the ECoW will need to perform different functions and be suitably qualified to undertake specific tasks. At times, the ECoW may need specific expertise in surveying for otter and water vole, dormouse (*Muscardinus avellanarius*), great crested newts (*Triturus cristatus*) and bats, and possess relevant survey licences or be the Named Ecologist or an Accredited Agent on any specific mitigation licences which have been issued by Natural England.

2.8 The appointed ECoW will be responsible for provision of training and information about the importance of 'Ecological Protection Zones' (EPZ) to all relevant personnel on-site and will have a regular presence across the Site.

2.9 The roles and responsibilities of the ECoW are further discussed in **Section 4**.

Contact Details

2.10 At the time of writing, it is assumed that the ECoW will be:

The Environmental Dimension Partnership Ltd
Quarry Barn
Elkstone Studios
Cirencester
GL53 9PQ

Section 3
Ecological Interest Features

BASELINE ECOLOGY SURVEYS

3.1 The Site covers approximately 177 hectares (ha) and is located to the east of Trowbridge in Wiltshire and predominantly comprises agricultural fields under arable or pastoral production. The Site supports habitats of higher ecological value namely hedgerow networks and tree groups, which provide linear and connective habitats to the wider landscape and also the River Biss, which runs through the Site and provides a high value and multifunctional ecological resource.

3.2 The Site supports a range of ecologically valuable habitats and protected and notable species including the following:

- Habitats – River Biss and riparian corridor; scattered trees; hedgerows; woodland; and other watercourses of local importance;
- Biss Wood Local Wildlife Site (LWS) and Wiltshire Wildlife Trust Reserve (WWTR) – Immediately adjacent to the east of the Site, an ancient woodland which supports Bechstein's bats (*Myotis bechsteinii*) and dormouse. The woodland is one of a range of small woodland blocks in the locality which are functionally linked with the Bath and Bradford on Avon Bats SAC. This Site is under consideration for statutory designation at a national level;
- Biss Meadows Country Park LWS – Immediately adjacent to the north-east boundary of the Site, separated by the River Biss, which supports species-rich fen, grassland and scrub;
- Green Lane Wood and Meadow and Smith's Well Wood LWS and WWTR – Immediately adjacent to the north-east boundary of the Site, separated by the River Biss, an ancient woodland;
- Badgers (*Meles meles*)– Suitable sett building, foraging and commuting habitat is present across the Site;
- Bats (foraging/commuting habitat) – An assemblage of regional to national importance including the Annex II species Bechstein's, barbastelle (*Barbastella barbastellus*), greater horseshoe (*Rhinolophus ferrumequinum*) and lesser horseshoe (*Rhinolophus hipposideros*) bats which utilise linear habitats as valuable commuting and foraging resources. Habitats of elevated value to these species include the River Biss corridor, which is an important drinking resource, hedgerows, tree lines, other waterbodies and the edges of off-site woodland (Biss Wood). Key Bechstein's flight lines largely relate to the River Biss corridor, to the north and east of Biss Wood and in the south-eastern part of the Site;
- Bats (Roosting) – A variety of standard trees in hedgerow networks, lines of trees and riparian trees offering bat roosting opportunities in proximity to known bat roosts

associated with Biss Wood to the east. Historic Bechstein's night roosts are present in trees within the Site boundary;

- Birds – A typical farmland bird assemblage with common and widespread bird species predominantly using boundary habitats such as hedgerows, trees and field margins. The declining farmland species skylark (*Alauda arvensis*) is present at low densities;

- Water Vole – Latrines, feeding remains and burrows and potential footprints were recorded within the northern most section of the River Biss;

- Otter – The River Biss corridor provides opportunities for otter to use habitats as a place of rest. Feeding remains, spraints, and footprints have been recorded, and historic surveys also identified a couch along the River Biss. Numerous potential resting places are present within exposed root systems along the banks of the river;

- Dormouse – Nests were confirmed within hedgerows across the Site and provide connectivity with woodland habitat off-site also known to support dormouse;

- Great crested newt – Large areas of the Site offer limited terrestrial opportunities to this species; however, suitable terrestrial habitat does exist and there is a medium meta-population in ponds associated with the White Horse Business Park, off-site to the west. Surveys of ponds located within the Site, or beyond the red line boundary but not associated with the business park, returned negative environmental DNA (eDNA) results;

- Reptiles – Slow worm (*Anguis* fragilis) and grass snake (*Natrix helvetica*) are present across the Site, in low numbers. Habitats, particularly those related to the River Biss riparian corridor, hedgerow networks and field margins provide good opportunities for basking, refuge and dispersal;

- Invertebrates – Available habitats are expected to support a limited range of common species;

- Notable mammals – Habitats across the Site provide suitable habitat to a range of other mammal species including Priority Species hedgehog (*Erinaceus europaeus*), brown hare (*Lepus europaeus*), harvest mouse (*Micromys minutus*) and water shrew (*Neomys fodiens*); and

- Invasive Plants – The Schedule 9 species Himalayan balsam (*Impatiens glandulifera)*, also known as Indian balsam, is present along the watercourse margins within the Site.

3.3 The above ecological baseline is taken from the suite of surveys undertaken by Aspect Ecology in 2023 (report reference: 1878-06 BaseEcoAp dv2 /CN/SC/LB)..

BATH AND BRADFORD ON AVON BATS SAC

3.4 The masterplan for the Site was developed in conjunction with extensive negotiations with Natural England, Wiltshire Wildlife Trust (WWT) and the LPA given the presence of a significant breeding population of Bechstein's bats, functionally linked to the Bath and

Bradford on Avon Bats SAC to the immediate east of the Site. The masterplan was prepared such that the favourable conservation status of the population would be safeguarded in the long term, and the green infrastructure across the Site has been developed to maximise connectivity and carefully integrate retained habitats of value to foraging/commuting bats with newly created habitat designed to be multifunctional.

3.5 The masterplan is such that hedgerow breaches and the loss of trees is minimised as far as possible and, where unavoidable, hop-overs along with the construction of underpasses beneath the YWARR will enable bats to move through the landscape freely.

3.6 Advanced mitigation for the Site has been designed to contribute to the conservation objectives for the Bath and Bradford on Avon Bats SAC (refer to **Appendix EDP 2** for the location and nature of advanced mitigation). The specific design and long-term management of advanced planting is such that the identified population of Bechstein's bats in Biss Wood will be maintained through safeguarding existing habitats and enhancing the structure and function of new habitats. The mitigation planting and inclusion of a dedicated lesser horseshoe hibernaculum will also encourage roosting by horseshoe bats with both greater horseshoe and lesser horseshoe bats using the Site for commuting and foraging.

3.7 Further mitigation measures will be implemented within relevant residential phases and during the construction of the YWARR. This CEMP will include some of the requirements which relate to the monitoring of construction related mitigation given the importance of the Site for Annex II bats and the phased nature of the development. Monitoring covered by the ECoW within this CEMP is described further in **Section 4**.

3.8 This CEMP does not include any monitoring which would determine whether construction has resulted in negative effects on the conservation status of the bat population associated with the Bath and Bradford on Avon Bats SAC. Monitoring to determine the size and distribution of the local bat population, and any reporting which describes any potentially adverse effects to the competent authority in terms of their Habitats Regulation Assessment obligations is not covered in this document. The requirement for a separate monitoring regime is described further in **Section 4**.

RISK ASSESSMENT OF POTENTIALLY DAMAGING CONSTRUCTION ACTIVITIES

3.9 A summary of the important ecological features relevant to the Site are presented in **Table EDP 3.1**, with potential risks/hazards to each feature during the advanced mitigation and construction phase identified. This risk assessment has been undertaken in respect of the survey findings used to support the outline planning application.

Table EDP 3.1: Risk Assessment of Potentially Damaging Construction Activities

Feature (Habitat or Species)	Current Status on the Site	Relevant Areas of the Site	Potentially Damaging Activities
Biss Wood LWS/WWTR	Habitat of Principal Importance. Ancient woodland supporting breeding Bechstein's bats, functionally linked with the Bath and Bradford on Avon Bats SAC. The woodland is of value to a range of commuting/foraging bats including both greater and lesser horseshoe bats, which are Annex II species. The woodland also supports a range of other protected wildlife, including dormouse.	Situated immediately adjacent to the north-eastern boundary of the Site, north of West Ashton Road. The western and southern boundaries of Biss Wood are adjacent to an area of advanced mitigation: 100m buffer between Biss Wood and the employment land. Employment land is proposed 100m west of Biss Wood.	Habitat degradation resulting from pollution including dust deposition, hydrological effects and nitrates arising from construction. Damage of retained habitat, particularly compaction of Root Protection Zones of ancient trees, during construction works relating to advanced mitigation, including planting and the creation and faunal enhancements such as the lesser horseshoe bat hibernaculum and butterfly banks. Potential impacts on protected species using this habitat are discussed later in this table.
Biss Meadows Country Park LWS	Habitat of Principal Importance. Species-rich fen, grassland and scrub.	Situated immediately adjacent to the north west boundary of the Site, on the opposite side of the River Biss. The southern boundary of the LWS is adjacent to an area of advanced mitigation.	Habitat degradation resulting from construction of crossing points, pollution through surface water run-off, dust deposition and noise disturbance during construction. Potential impacts on protected species using this habitat are discussed later in this table.
Green Lane Wood & Meadows and Smith's Well Wood LWS /WWTR	Habitat of Principal Importance.	Situated immediately north east of the Site, on the opposite side of the River Biss. The south west boundary of the LWS is adjacent to an area of advanced mitigation.	Habitat degradation resulting from dust deposition and noise disturbance during construction. Potential impacts on protected species using this habitat are discussed later in this table.
River Biss and riparian corridor	Habitat of Principal Importance. Originating in Sailsbury Plain and flows through the Site to the Bristol River Avon. As well as a habitat of value in its own right it also supports a variety of protected species and is a favoured commuting route used by Bechstein's bats and is anticipated to be an important drinking resource. The river is also used by water vole and otter.	Situated to the south of West Ashton Road and bisecting the Site in a north-west to south-east orientation. All residential phases with construction activities in proximity to the River Biss, including off-site footpath improvements and the construction of the YWARR, which will result in three river crossings.	Direst loss of habitat to facilitate river crossings. Habitat degradation and damage of retained habitat during construction works from physical damage from machinery movements, damage to trees through compaction, compound area placement, arable reversion and work associated with enhancement of retained habitats, lighting and noise during construction activities. Topsoil stripping and movement could result in degradation of the watercourses and ditches through pollution, siltation and dust deposition into surface water run-off, and construction of road bridges may result in increased siltation. Potential impacts on protected species using this habitat are discussed later in this table.
Hedgerows	All hedgerows are Habitats of Principal Importance and an important green infrastructure resource. Hedgerow networks on site are used by dormouse, a range of breeding birds, and a diverse assemblage of commuting bats, including Annex II species. The hedgerows provide a place of refuge to a variety of wildlife, including offering favourable terrestrial habitat to great crested newt within range of any breeding ponds.	All hedgerows. Hedgerow breaches are proposed to accommodate roads, footpaths/cycleways and the construction of the YWARR.	Direct loss of hedgerows. Habitat degradation and damage of retained habitat during construction works from machinery movements, damage to trees through compaction, compound area placement, encroachment/compaction, pollution including dust deposition.
Breeding Birds (including skylark)	Assumed presence between the months of March – August inclusive, including ground nesting skylark. All nesting birds and their nests are protected under UK law.	Arable (ground nesting), hedgerows, scrub, trees, riparian habitat/banks and woodland.	Risk of direct harm/injury to breeding birds, eggs and young, as well as potential for damage/destruction of bird nests during ground works and vegetation clearance. Direct habitat loss used for breeding and shelter during vegetation clearance. Habitat degradation and damage to retained tree and hedgerow habitats from vegetation clearance, machinery movements, compound area placement and dust generation. Disturbance impacts from noise and lighting during construction when road crossings are built, and visual disturbance to nesting birds in close proximity to the construction.

Feature (Habitat or Species)	Current Status on the Site	Relevant Areas of the Site	Potentially Damaging Activities
Badgers	Badgers are legally protected under UK law. No confirmed setts but ample sett buildings opportunities and evidence of commuting/foraging badgers across the Site. Badgers can create new setts is a short period of time.	Hedgerows, scattered scrub, woodland, field margins, riparian corridor, ditches.	Risk of direct harm/injury during vegetation/site clearance or construction activities (e.g. machinery movements, excavations). Loss of suitable foraging habitat. Indirect disturbance (light spill and noise) during vegetation clearance and construction activities. Damage or disturbance of new unrecorded setts (if present) by construction machinery/activities (e.g. machinery movements or piling causing sett collapse). Animals trapped in uncovered excavations.
Bats - Roosting	Bats are legally protected under UK law. Numerous trees with high bat roost suitability and trees along the River Biss corridor historically used occasionally as a night roosts by Bechstein's bats. Additional known Bechstein's night roost associated with Park Farm in the south-west of the Site.	Biss Wood. Trees with suitability to support roosting bats. Trees confirmed as bat roosts.	Tree removals to facilitate construction has the potential to result in loss of roosting feature and/or disturbance, injury/mortality to roosting bats, if present. Disturbance through lighting and construction noise of potential bat roosts. Some tree removals / pollarding is anticipated along the River Biss corridor to achieve the mosaic of habitats required. Such works or any other significant arboriculture works undertaken, could damage or destroy bat roosts and/or cause disturbance, injury/mortality to roosting bats, if present.
Bats – Foraging and commuting	Habitats within the site used for foraging/commuting by a diverse assemblage of bats. River Biss corridor of particular value to lesser horseshoe, greater horseshoe and barbastelle bats and anticipated to be a primary drinking resource in the locality.	Biss Wood, hedgerows and tree lines, River Biss riparian corridor, railway embankment, habitats flanking the A350 to the west as well as grassland and scattered scrub to a lesser extent. The majority of bat roosts identified via radio-tracking are to the south and east of the YWARR, regular commuting and crossings of the YWARR is expected in order to reach the River Biss as a primary drinking resource.	Loss of foraging and commuting habitat during vegetation clearance, although the majority of suitable habitat will be retained, there will be a temporary loss of available habitat for foraging and commuting bats Habitat degradation and damage of commuting and foraging habitat during construction and landscaping works adjacent to retained habitats and trees. Indirect disturbance (light spill and noise) during construction activities, including piling, construction, compound installation, machinery movements and construction phase lighting, as well as dust deposition
Otters and Water Vole	The River Biss is used by otter to commute, forage and potentially rest with numerous areas of suitable habitat, particularly within exposed root systems, however, no evidence of breeding has been confirmed. Water vole use the watercourse with latrines, feeding remains, burrows and feeding remains recorded.	River Biss, associated tributaries and ditch networks.	Risk of direct harm/injury during vegetation clearance and construction activities, namely potential for vehicle collisions, construction of river crossings, enhancements of existing riparian habitats and potential trapping of individuals in excavations. Disturbance resulting from construction activities (noise/vibration i.e. through piling, material storage, machinery movements, lighting etc.). Habitat degradation and damage of retained habitat during construction works from machinery movements, compound area placement, pollution, siltation and dust generation.
Great Crested Newt and other amphibians	Potential for presence in terrestrial phase where there is suitable habitat for foraging, sheltering and dispersal. The closest off-site pond supporting great crested newt is Pond 20 approximately 20m from the boundary in a wooded copse.	All terrestrial habitat within up to 500m of Pond 20, particularly hedgerow, scrub, unmanaged field margins and railway embankment habitat. Ponds in the Site are of value to a range of common amphibians.	Risk of direct harm/injury during vegetation clearance, earthworks, site clearance and construction activities (piling, material storage, machinery movement etc.). Direct loss of suitable terrestrial habitat. Direct loss of suitable aquatic habitat (not currently used by great crested newts). Habitat degradation and damage of retained habitat and off-site ponds during construction works from machinery movements, compound area placement, pollution, and dust generation. Risk of direct harm/injury should great crested newts or amphibians fall into drainage systems and become trapped.
Reptiles	Small populations of slow worm and grass snake use the site for foraging, sheltering, and dispersal.	Grassland, riparian corridor, woodland edge, field margins, hedgerows, scrub, ditch networks and waterbodies.	Risk of direct harm/injury during vegetation clearance, earthworks, site clearance and construction activities (piling, material storage, machinery movement etc.). Direct loss of suitable habitat. Habitat degradation and damage of retained habitat during construction works from machinery movements, compound area placement, pollution, and dust generation.

Feature (Habitat or Species)	Current Status on the Site	Relevant Areas of the Site	Potentially Damaging Activities
Dormouse	Present within Biss Wood and hedgerow networks across the site.	All hedgerow networks, scrub and woodland edge.	Risk of direct harm/injury/mortality during vegetation clearance, site clearance and construction activities (piling, material storage, machinery movement etc.). Including both active and hibernating individuals depending on the time of year works take place. Direct loss of suitable habitat, permanently and temporarily, for commuting, foraging, breeding and dispersal. Habitat degradation and damage of retained habitat during construction works from machinery movements, compound area placement, pollution, and dust generation.
Mammals of Principal Importance	The site provides suitable habitat to a range of Species of Principal Importance including brown hare, hedgehog, harvest mouse and water shrew.	Arable fields, longer sward grassland, woodland edges, riparian corridor, hedgerows and scrub.	Risk of direct harm/injury during vegetation clearance, site clearance and construction activities (piling, material storage, machinery movement, excavations etc). Direct loss of suitable habitat occupied by mammals.
Invasive Plant Species	Himalayan balsam present along the margins of the River Biss, within the Site.	Riparian habitat.	Risk of causing the spread of a Schedule 9 Invasive species through movements of soil contaminated with seeds of the species or other construction work within areas where the species is present. Establishment of the species in new areas could result in causing an offence under legislation.

Section 4
Construction Method Statement

4.1 The measures set out within this section aim to ensure the appropriate protection/installation, maintenance and management of all ecological features prior to and during construction, including the advanced mitigation phase. All timings of work should be conducted in line with the 'Timetable of Works' provided in **Section 5**; however, species specific licensing requirements may require separate agreed timescales.

4.2 General measures relating to site supervision and habitat protection are provided, along with detailed species-specific measures relating to the protection of those ecologically important features described in **Section 3**, which will ensure that these habitats and species are not subject to significant adverse effects as a result of the proposed works.

4.3 This CEMP describes general methodologies relating to the avoidance of pollution. This document must be read in conjunction with a separate CEMP addressing specific measures relating to drainage, hydrology effects etc., which will be developed by specialists to discharge Condition 20. In combination, these documents will ensure the protection of all ecologically important features.

PRE-CONSTRUCTION/ENABLING WORKS PHASE

Ecological Clerk of Works

4.4 The appointed ECoW will be responsible for the provision of information to the Principal Contractor, Site Management Team and relevant sub-contractors prior to commencement of works (as required) on all relevant ecological receptors and constraints associated with each phase or sub-phase of the development, including all species-specific control measures to be adhered to during the construction phase.

4.5 The ECoW will also be responsible for:

- Assisting the Principal Contractor and Site Management Team to be compliant with nature conservation legislation and policy and be clear on what ecological interest features could be affected and what measures are needed to ensure compliance, which may be to obtain a derogation licence for particular species in advance of works;
- Delivering the necessary 'toolbox talks' to make all relevant personnel aware of the various restrictions and ecological sensitives affected in each development phase;
- Working with relevant contractors to ensure compliance with the methods in this report where necessary in relation to protected and notable species, habitats and protection measures EPZs;
- Supervising vegetation clearance in locations where sensitive habitats and protected species may occur;

- Undertaking any necessary pre-commencement surveys, as discussed in further detail in **Section 4** and advising on the need for further surveys and/or licences to proceed lawfully with the works;

- Conducting hand searching, capture and relocation of animals from working areas (as required), where such animals do not need a derogation licence to be handled or moved; and

- Communication with and reporting to the LPA (as required) to evidence that pre-construction/construction activities have been implemented in accordance with the CEMP and/or any deviations from the CEMP have been undertaken with the approval of the LPA.

Monitoring Covered by the ECoW

4.6 Monitoring forms a vital part of each construction phase to ensure the recommended mitigation is delivered as intended, but also to ensure it is effective and any potential issues, that may trigger an adverse effect on protected or notable wildlife species and habitats, can be remediated. To be effective and provide meaningful results, the ECoW will be responsible for ensuring the relevant monitoring is undertaken over a timescale and frequency that allows for the detection of any changes and gives rise to the ability to react and adjust should performance of mitigation and compensation be ineffective.

4.7 The ECoW will monitoring the following:

- Retention and protection of habitats in accordance with the CEMP;

- Specified stand-off widths and vegetative buffers in accordance with detailed designs;

- Inspection and sign-off of faunal enhancements such as bird nest boxes, bat roosting features. reptile and newt hibernaculum, butterfly banks etc. in accordance with approved Landscape and Ecological Management Plans (LEMP);

- The creation, establishment, and ongoing management of new habitats, in accordance with approved LEMPs; and

- Compliance with any species-specific licensing obligations.

4.8 Bath and Bradford on Avon Bats SACs outlined, in the Shadow Habitats Regulations Assessment (sHRA) (Reference: 1878 - sHRA 2024 dv4 TS/AB/LB) and ES Chapter, there is a requirement to monitor potential negative impacts on the local bat population and how this relates to the conservation objectives of the Bath and Bradford on Avon Bats SAC. However, any monitoring and subsequent reporting of any potentially adverse effects to the competent authority in terms of their Habitats Regulation Assessment obligations is not covered with this CEMP. Details of monitoring will be set out within a Mitigation Monitoring Implementation and Review Plan, that will outline an effective monitoring strategy, and funds secured via Section 106 agreement must be undertaken in addition to the monitoring described above.

4.9 Post-construction, WWT have been appointed by the Developer as responsible for undertaking a robust monitoring regime. Such monitoring will include using automated detector surveys, radio-tracking and trapping methods to capture bats near their roosting locations i.e. Biss Wood and other woodlands in the locality is anticipated. This will determine whether Bechstein's bats are continuing to commute along existing flight lines, once severed by infrastructure. Monitoring must be consistently delivered to generate negative, positive or stable trends that can be identified and clearly reported. Additional crossing point surveys, to establish if the number of bats using commuting routes has declined substantially and to confirm that at least 90% of bats are crossing the structure safely i.e. either above or below the road is also likely to be required.

4.10 The viability, or need, for any remedial actions flagged following such monitoring will need to be agreed with the LPA and finances secured, as required to address any genuine threat to the local population which in turn will undermine the conservation objectives for the SAC.

4.11 Monitoring of the above components will ensure delivery, and success of a range of mitigation measures designed to avoid adverse effects on the SAC as well as ensure the Site meets its objectives in respect of overall biodiversity value.

Further Documentation and Plans

4.12 The Principal Contractor, Site Management Team and relevant sub-contractors must be suitably informed by visual representations of the risks presented by construction activities as well as other documents prepared by specialists. Such plans/documents will be produced at the reserved matters stage and should be unformed by the most recent survey findings from Aspect Ecology (2023 findings) as well as any additional pre-commencement survey results as described later in this document.

4.13 The preparation of the following documents/plans will be required to inform reserved matters and to determine the requirement for adjustments to this CEMP or the production of a separate, phase specific CEMP. Detailed plans/documents must include:

- Tree Protection Plan and Arboricultural Method Statement (AMS) to ensure advanced mitigation and the creation of/enhancement of habitats in proximity to retained hedgerows, trees and woodland can be delivered without detriment to root protection areas (RPA);

- Ecological Protection Zone (EPZ) Plan to clearly depict all areas where protective fencing or restrictions to working practices will apply;

- Detailed design plans presenting the location of all agreed mitigation such as connectivity measures (hop overs for dormouse), otter holt/shelters, bat boxes etc. Such mitigation is likely to be similar to that shown on the indicative ecological enhancement plan in **Appendix EDP 3** but could be subject to change once detailed design and updated survey findings are obtained[1];

[1] Any changes that deviate from Appendix EDP 3 and Figure 6.23a of the ES should be fully justified and approved by Wiltshire Council's ecology team in liaison with Natural England

- Detailed lighting designs covering construction as well as operational lighting;
- A sensitive drainage strategy, to demonstrate where the location and frequency of wildlife friendly kerbs and/or underpasses is required within 500m of the known great crested newt population. Once a detailed drainage strategy is available, the ECoW can check that any agreed mitigation has been incorporated as specified; and
- LEMPs supporting detailed soft landscaping plans, monitoring regime and faunal enhancements.

4.14 The above drawings and reports are vital for ensuring all relevant ecological features are acknowledged prior to commencement of development in any phase or sub-phase. The EPZ plan will be informed by pre-commencement site checks and updated surveys, if required, as discussed below.

Pre-commencement Site Check and Updated Surveys

4.15 Prior to commencement of all pre-construction works, the relevant footprint where works are proposed shall be checked by a suitably qualified ecologist to ensure there has been no significant material changes to the existing ecological interest of the Site.

4.16 In particular, the pre-commencement site check will include:

- A general walkover to confirm the habitat distribution and management is largely unchanged from the previous surveys;
- An update badger survey to determine the current activity level to include the construction footprint and a 30m buffer from the construction footprint;
- Assessment of all trees proposed for removal and/or within 20m of construction activities to determine their current suitability to support roosting bats and any requirement for further presence/absence surveys, which can be undertaken between May and September inclusive;
- Search for invasive plants, particularly Himalayan balsam along the River Biss corridor; and
- For any works affecting the River Biss, or tributaries further updated survey of the River Biss, its tributaries or ditch networks to establish current use by otter and water vole will be required for all phases/sub-phases, which result in direct impacts to the watercourse and/or where mitigation/enhancement measures affect habitats falling within 10m of the bank. Surveys will be focussed where impacts are anticipated, including c.150m up and down stream to gather sufficient information to inform any licence applications that may be required and to rule out the presence of breeding otter which are highly sensitive to noise disturbance. For water voles, two survey visits should be undertaken in most cases, one in the first half of the active season (mid-April-June) and the second between July and September (inclusive). Checks of otter resting places are usually undertaken at the same time the survey for water vole is undertaken.

4.17 There may also be a requirement to undertake some additional, and proportionate, updated survey effort if required to inform protected species licenses such as eDNA surveys of ponds within the Site and up to 250m from the Site boundary, to confirm continued absence of great crested newts. The requirement for these would be determined by the ECoW and would be based on the age of the survey data, whether undertaking further assessment would alter previously agreed mitigation and the licensing approach for the Site (refer to Pre-commencement Protected Species Licence requirements below).

4.18 Where additional mitigation and/or precautionary working methods are required, this document will be updated accordingly, or a phase specific CEMP produced separately. Any changes to this CEMP, or phase specific CEMPs produced separately must be approved by the LPA.

Pre-commencement Protected Species Licence Requirements

4.19 Where works will directly impact protected species, appropriate licences will need to be granted from Natural England prior to commencement and any approved mitigation delivered prior to works commencing.

4.20 Once secured, a copy of any licence and accompanying method statement must be provided by the licensee or accredited agent to the applicant and their appointed contractors working on the Site and kept on file. Any appointed contractors will be briefed by the licensee or accredited agent in relation to the protection afforded to the relevant protected species, and the purpose and scope of the licence.

Great Crested Newt

4.21 There are two licensing options available for this site, the first being entry to Natural England's district level licensing (DLL) scheme, the second being the traditional route to obtain a derogation licence from Natural England. The most appropriate licensing route should be considered carefully prior to commencement for all land anticipated to support great crested newt. This would typically be land up to 500m distant from breeding ponds but given the nature of land >250m distant which is intensive arable land, it may be possible to reduce this radius if the likelihood of encountering a great crested newt is deemed highly improbable. Land up to 500m from the confirmed great crested newt population is shown on **Plan EDP 1**.

Dormouse

4.22 Overall, the Site will result in an increase of suitable dormouse habitat in the long-term with significant amounts of mitigation agreed including the 100m woodland buffer, country park, dormouse river crossings and hop-overs to improve connectivity as well as defensible planting to deter access by domestic pets.

4.23 However, the proposed development will result in the loss of suitable dormouse habitat and increased levels of disturbance (including lighting, vehicular movement and noise) during the construction phase. A dormouse licence from Natural England is required to avoid any offence from occurring where hedgerow breaches are unavoidable.

4.24 Works, such as off-site footpath improvements, may fall below a threshold which would trigger the requirement for a dormouse licence, however, the scope of these works must be interrogated fully to determine whether precautionary approaches are acceptable.

Roosting Bats

4.25 Should a bat roost be identified during the course of updated pre-commencement surveys, and its retention is not possible, a licence to permit the destruction of the bat roost will need to be secured from Natural England.

Badger

4.26 If badger setts are discovered during the pre-commencement survey and sett closure is deemed necessary, a licence from Natural England must be secured. Sett closure is restricted to between the months July and November.

Otter

4.27 An EPS licence may be required if an otter resting place is identified between 30 and 50m of works affecting the River Biss or a natal holt identified within 150m of river crossings and works cannot be adjusted to avoid direct impacts or significant disturbance from occurring. The most recent surveys in 2023 did not identify a resting place or holt, so the requirement for licence will depend on the outcomes of the pre-commencement survey and nature of works proposed.

Water Vole

4.28 A licence to displace or trap water vole is likely to be required on the presumption that river crossings will result in the destruction of, and disturbance to, water voles and their burrows. The results of the updated pre-commencement survey, as described above, will be used to inform a water vole mitigation strategy and subsequent licence application to Natural England. The nature of the mitigation strategy will depend on the survey results and extent of bankside impacts. Displacement activities including vegetation clearance and excavation of bankside habitat will be restricted to the spring displacement window (15 February to 15 April) in accordance with a licence granted by Natural England; however, in some cases autumn works may be permitted.

Invasive Plant Species

4.29 Where Himalayan balsam is present along the River Biss corridor, a Himalayan balsam eradication strategy must be produced in advance of any works to prevent the disturbance and accidental spread of this species from occurring. This plant species is listed under Schedule 9 of The *Wildlife and Countryside Act* 1981 (as amended) and may not be introduced to or caused to spread in the wild.

4.30 Generally, an eradication program will involve the manual control of the species by hand pulling plants before flowers appear, typically between June and October.

4.31 In the event other invasive species are present, a similar approach to ensure they are not allowed to spread in the wild would be required.

Toolbox Talks

4.32 All construction personnel will be fully briefed on the features of ecological importance to be retained within the Site and protected during construction works, as detailed in **Section 3**.

4.33 Prior to the commencement of pre-construction and construction phases, 'toolbox talks' will be provided by the ECoW to the Principal Contractor appointed by the Developer, and all relevant sub-contractors and site personnel, to ensure that the identification and protection of protected species and their habitats is fully understood and appropriate, and that agreed mitigation is implemented. This will include the frequency of any compliance checks and the nature of any monitoring.

4.34 Any new contractors or site-based staff arriving on the Site will need to be fully inducted on ecological matters by way of a toolbox talk, which is to be repeated as necessary throughout construction (by the Developer, Principal Contractor or ECoW, as appropriate) to ensure that all personnel on-site are fully aware of all ecological considerations and protection measures.

Ecological Protection Zones

4.35 Protective fencing will be securely installed in accordance with *BS 5837:2012 Trees in Relation to Design, Demolition and Construction* around retained trees, hedgerows and off-site woodland as specified by an arboriculturist. This fencing will comprise the EPZs, which will incorporate the full Root Protection Area (RPA) of the feature to be retained to prevent damage and/or incursion by construction vehicles or personnel.

4.36 Additional EPZs will be set out and be of a sufficient size to protect other ecological features e.g. 30m from any identified badger sett to avoid damage/disturbance from heavy machinery.

4.37 The area of land within the RPA of retained trees, hedgerow and woodland will be treated as an EPZ, with all construction activities, including incursion from construction vehicles and storage of materials, excluded.

4.38 Once created, areas of advanced mitigation and land specifically dedicated to green space mitigation e.g. River Biss corridor and country park extensions, will also be treated as an EPZ with no construction activities permitted.

4.39 No works (other than planting), including the storage of materials, will be carried out within areas of protective fencing. The digging of trenches and pits adjacent to areas of protective fencing for new tree and scrub planting will be carried out by hand only, following best practice and any specifications set out in a detailed AMS.

4.40 Protective fencing will be securely installed to create EPZs where construction activities are restricted to ensure the protection of retained habitats. As described in **Section 3** detailed phase specific plans showing the location of EPZs must be produced at reserved matters stage. These will take into account any changes as a result of updated survey findings and/or the detailed design.

4.41 In order to ensure compliance with the EPZ, the protective fencing will be marked with all-weather signage, warning site users that accessing or undertaking construction activities within the area demarcated by the protective fencing is prohibited.

4.42 All protective fencing/barriers should include either specific badger gates or suitably sized gaps that would also allow badgers and other mammals to access and egress the retained habitats on-site and prevent them being trapped within the construction area. Such fencing is the responsibility of the Principal Contractor and will be installed in accordance with best practice guidance and maintained throughout the duration of the construction phase, until construction completion.

4.43 Regular checks of the protective fencing will be undertaken by the Site Manager to ensure that it remains intact and fit-for-purpose, and to ensure contractor compliance with the EPZ requirements. This should be undertaken on a weekly basis.

4.44 Checks of EPZs will be undertaken by the ECoW on a monthly basis to ensure damage or removal of any fencing has not occurred and to generally have a regular ecological presence across the relevant construction areas relating to the Site.

Sensitive Site Clearance

4.45 Any vegetation clearance works need to adhere to the species-specific measures detailed below. Where the presence of protected or notable species is probable, timing restrictions and specific methodologies to minimise risk of harm will be required.

4.46 Any vegetation clearance must only take place once all relevant updated ecological surveys are undertaken and, if relevant, appropriate mitigation strategies and licences issued by Natural England are secured.

4.47 Suitable receptor habitat e.g. for reptiles and amphibians, must be identified ahead of vegetation removal works commencing, to avoid individual animals being moved into an area which is then subject to further works/disturbance.

4.48 Any pruning of trees and hedgerows required will be undertaken in accordance with good horticultural and arboricultural practice, with thinning, trimming and shaping of specimens undertaken as appropriate for the species, location, season and stage of growth.

4.49 Any spoil, rubble, brash and/or debris collected as a result of the construction works will be removed from site or stockpiled away from the vegetated boundaries, unless deemed suitable by the ecologist to be used for the creation of new hibernacula or refugia in retained habitat.

4.50 Any animals found, such as common amphibians and reptiles, when undertaking clearance of site habitats (such as hedgerows, trees, grassland and scrub), will be moved in a suitable container and released in suitable retained habitats outside of the construction footprint.

4.51 The below habitat measures suggest the most appropriate vegetation clearance methodologies for habitats across the Site, however, it is important to refer to the individual species restrictions for further information, as well as any detailed mitigation strategies which are later devised e.g. for dormouse and great crested newts.

Arable Habitat

4.52 Following the final crop harvest ahead of advanced mitigation works or construction commencing, areas of arable land must be maintained as short as possible (at a height of less than 50mm) through frequent mowing, or as bare ground through frequent disturbance, to deter ground nesting birds, such as skylark, and other wildlife from entering into the construction area. All arisings from any vegetation clearance should be taken away from the vicinity of the development footprint no later than the day after vegetation clearance.

Grassland

4.53 Areas of grassland within the Site, including field margins which are within the construction footprint, must be maintained as short as possible – at a height of less than 50mm through frequent mowing, or as bare ground through frequent disturbance, to deter ground nesting birds and other wildlife such as common reptiles from entering the construction area. All arisings from any vegetation clearance should be taken away from the vicinity of the development footprint no later than the day after vegetation clearance.

4.54 The initial cut of grassland needs to be undertaken during the months of September to February (inclusive). These areas of grassland will first need to be checked by an ecologist to ensure no reptile or amphibian refuge or hibernation features are present. If there is a risk that hibernating reptiles or amphibians are present, then these features will need to be left intact and dismantled when reptiles or amphibians are active which is generally between March and October (inclusive).

Hedgerow and Scrub

4.55 Where habitat suitable to support dormouse is present, namely hedgerow and scrub, a European Protected Species Mitigation License (EPSML) must be obtained through the submission of a detailed method statement to Natural England. This is described in more detail in relation to dormouse below.

Tall Ruderal and Trees

Stage 1: Above-ground Clearance (over 150mm)

4.56 All vegetation suitable for nesting birds should be reduced down to a height of no less than 150mm using chainsaws, hand-held strimmer or a brush cutter between September and February (inclusive). This cut should be undertaken in a direction towards retained habitats, i.e. towards boundary features, so as to allow for any wildlife present to disperse safely towards this resource.

4.57 If an active bird's nest is discovered, then works within a minimum of 5m of the nest should cease until it has been confirmed by the ECoW that the nest is no longer active. The exact dimensions of the buffer zone will be determined by the ecologist and depend on the level of disturbance, bird species present and life stage of young.

4.58 If a roosting bat or bat roost is discovered then work will stop immediately, and the ECoW/Natural England consulted regarding the appropriate course of action to ensure legal compliance, including obtaining a derogation licence where necessary.

Stage 2: Clearance of Vegetation Less than 100mm

4.59 Prior to any vegetation removal commencing, an appropriate receptor area will be identified by the ECoW for any reptiles, amphibians or small mammals encountered during the clearance, to avoid individuals being moved to an area that could be subject to further disturbance.

4.60 Any vegetation less than approximately 100mm (including roots or below ground vegetation) will be removed under supervision during the reptile and amphibian active season (March-October).

4.61 Any suitable refugia identified during clearance works will be subject to a finger-tip search by a suitably experienced ecologist with any species identified relocated to areas of retained vegetation. Thereafter, refugia will be dismantled by hand. Any natural refugia such as brash and log piles will be relocated to areas of retained habitat.

4.62 In the event any reptiles are identified during the phased clearance, individuals will be captured by the ECoW and immediately released into retained habitat adjacent.

4.63 Should any great crested newts be found (unless land is covered by a licence from natural England) then work will halt immediately, and the ECoW/Natural England consulted regarding the appropriate course of action to ensure legal compliance, including obtaining a licence where necessary.

Single Phase Clearance

4.64 If the two-phase clearance described above is not possible within small discrete areas, then an ecologist can undertake a check to confirm if any nesting birds are present (if clearance of suitable vegetation is required during March to August) or confirm that there are no potential refuge or hibernation sites (if clearance of vegetation below 150mm is required during November to February).

4.65 If an active bird's nest is discovered, then works within a minimum of 5m of the nest should cease until it has been confirmed by a suitably experienced ecologist that the nest is no longer active. The exact dimensions of the buffer zone will be determined by the ecologist and depend on the level of disturbance, bird species present and life stage of young.

4.66 If there is a risk that hibernating reptiles or amphibians are present, then these features will need to be dismantled between March and October (inclusive).

Arisings

4.67 Cut material/material arising from vegetation clearance should either be removed from site or retained on-site in a suitable manner, as follows.

- Material to be removed from the Site should be disposed of at an appropriate disposal facility on the same working day, to prevent cut material/brash being left for extended periods of time creating potential refugia for animals; and

- The strategic placement of brash/log piles created by arisings can be undertaken but must be under advice and the discretion of the ECoW.

4.68 Once the Site is cleared, any vegetation should be maintained as short as possible (at a height of less than 50mm) through frequent mowing, cutting or as bare ground through frequent disturbance, to deter ground nesting birds and other wildlife from entering into the construction site.

4.69 The ECoW will be able to conclude during monthly site visits if cleared habitats are being maintained as recommended above in order to keep the working footprint clear of protected species constraints. If habitats are allowed to re-establish further manipulation will be required.

Pollution Prevention

4.70 Appropriate pollution control measures will be employed, with reference to available guidance including the Environment Agencies Guidance for Pollution Prevention documents (GPP), to ensure that detrimental impacts to the woodland, river corridor and wider landscape as a result of surface run-off, spillage and pollution arising throughout the construction phase are avoided.

4.71 Measures to prevent pollution incidents will follow the recommendations set out in the Environment Agency's PPGs. It will be the responsibility of the Principal Contractor to ensure that any site contractors are aware of the measures to be implemented to prevent and deal with any pollution incidents.

4.72 The storage of any construction materials and/or waste will be situated away from areas fenced for their ecological sensitivity, including retained woodland, advance mitigation areas and the river. All machinery not in use will be stored within the main site compound or within the relevant phase of development. Any refuelling of machinery will be undertaken at designated fuel stations which will be located within or adjacent to the compound.

4.73 To protect watercourses and on-site ditches from potential pollution incidents, best practice methodologies in relation to construction activities in proximity to watercourses should be adhered to. In summary, fuelling of machinery or equipment will be undertaken in designated areas, located a minimum of 10m from the river and ditches with water present. Furthermore, use of herbicides in proximity to watercourses should be avoided unless used with the appropriate permissions from the Environment Agency.

4.74 Where feasible, the boundary of any construction area should be adequately protected by secure perimeter fencing with a padlocked front gate to reduce the potential incidents attributed to vandalism and theft. In addition, emergency out of hours contact numbers should be clearly displayed at the Site entrance.

4.75 It will be the responsibility of the Principal Contractor to ensure that:

- All fuel and chemical storage are sited on an impervious base within a secured impervious bund;
- Refuelling of mobile vehicles is undertaken in a designated area, on an impermeable surface and away from any drains or watercourses;

- Diesel pumps or similar equipment are placed on drip trays to collect any minor spillages; and

- Drip trays are checked at least weekly, and any accumulated oil removed for disposal.

4.76 It will be the responsibility of the Principal Contractor to ensure that all plant washing facilities used are securely constructed with no overflow and the effluent is contained for proper treatment and disposal. The Site Contractor will also be responsible for ensuring that all site roads are regularly brushed or scraped and kept free from dust and mud deposits. In dry weather, dust suppression measures will be used.

4.77 The storage of any construction materials and/or waste will be situated away from areas fenced for their ecological sensitivity including retained hedgerows, woodland, trees, scrub and riparian habitats.

4.78 Specific restrictions in relation to hydrological impacts must be developed by a specialist.

Noise and Dust

4.79 Specific measures to minimise and restrict the generation of noise and dust during construction must be designed by a specialist.

4.80 Night working is not permitted.

4.81 Where relevant, Gantt charts must be produced to demonstrate how certain activities, expected to generate significant noise and/or dust will be restricted as far as possible to avoid impacts to sensitive receptors such as breeding bats. The 'Timetable of Works', provided in **Section 5**, provides some further information on sensitive windows to avoid for impacts relating to roosting bats. Specific ecological mitigation relating to the YWARR is provided in **Appendix EDP 4**.

4.82 The Principal Contractor will be responsible for ensuring that all site roads are regularly brushed or scraped and kept free from dust and mud deposits. In dry weather, dust suppression measures will be used.

4.83 To avoid potential impacts of noise on protected and notable species, most notably nesting birds, otter, water vole, badgers and roosting bats, additional protection measures, beyond those EPZs already defined, may need to be introduced. Additional EPZs, to avoid the risk of noise causing a disturbance impact may be required and this would be dictated by the findings of pre-commencement surveys or as a consequence of compliance/monitoring checks. Protective measures will involve placing a buffer around the receptor within which no works with high noise levels will be undertaken until the ECoW has advised on the best course of action.

4.84 The radius of the protective buffer and the duration imposed will be dependent on the species present and nature of the noise generating work. With regard to nesting birds, for the majority a protective buffer could be in place for up to 30 days (on the assumption of a 'new' nest with recently laid eggs), however for other species a protective buffer may need

to stay in place until a licence from Natural England is secured to permit the works in a lawful manner.

Lighting

Construction Lighting

4.85 All identified key flight lines and habitats must be maintained as 'intrinsically dark' during construction. All Lighting Zone E1 habitats (refer to **Appendix EDP 5**) must have strict restrictions during the construction phase to ensure commuting and foraging habitat, of value to Bechstein's bats as well as other protected wildlife, can use these habitats throughout any construction phase. Given the sensitive nature of the Site, a detailed lighting design, showing all temporary lighting associated with construction must be produced. This will ensure agreed lighting is heavily restricted and controlled during construction works.

4.86 Dark zones have been developed along key and secondary flight lines, including known crossing points to maintain connectivity through and around the Site. Lighting zones, where artificial lighting will be avoided or significantly reduced/modified to minimise impact has been agreed and this includes any temporary lighting required for construction. Dark zones are indicated on the bat flight lines and lighting plan presented in **Appendix EDP 5**. Dark habitat cross sections are also provided in the same appendix.

4.87 Artificial lighting during construction is expected to be restricted to isolated locations in any given phase with a relative short duration of use, with numerous alternative dark zones available for commuting/foraging. However, unrestricted lighting can be extremely detrimental to the behaviour of wildlife and much of this can be avoided through the careful siting of compounds, storage/car parking areas which will require some degree of security lighting, away from key flight lines and retained habitats.

4.88 The use of artificial lighting is to be limited to the essential minimum throughout the site to facilitate safe areas to undertake construction related work. Any necessary lighting must consider position, duration, type of light source, spectra and level of lighting in accordance with Bats and Artificial Lighting at Night Guidance Note 08/23 (BCT).

4.89 Lighting must be directed to where it is needed with a view of minimising vertical and horizontal light spill onto habitats which are favoured by commuting bats. Any lighting to be used must avoid upward pointing lights, with the spread of light being kept near to, or below the horizontal plane i.e. directed to where the light is required with no vertical or horizontal spill onto nearby habitats.

4.90 Night working is not permitted at any time during the construction phase. All lighting will be switched off outside working hours to allow some dark periods for bats, and other wildlife.

Lighting of the Yarnbrook/West Ashton Relief Road

4.91 Any permitted lighting and subsequent monitoring requirements are discussed in **Appendix EDP 4**.

Operational Lighting

4.92 Detailed designs should be prepared with recognition of recently published Bats and Artificial Lighting at Night Guidance Note 08/23 (Bat Conservation Trust) to ensure intrinsically dark areas are created through design and be developed in conjunction with the bat flight lines and lighting plan presented in **Appendix EDP 5**.

Monitoring of Lighting During Construction

4.93 A specialist must be appointed to attend site and test lux levels/provide guidance to ensure temporary construction lighting has been installed in accordance with detailed designs, and retained habitats/dark corridors are not lit beyond those lighting levels agreed (**Appendix EDP 5**).

4.94 The ECoW will not be responsible for monitoring lighting but will be vigilant for any unauthorised lighting, which would be reported to the Principal Contractor. Lighting reports, to ensure compliance with agreed construction lighting, will be produced by a lighting specialist. Monitoring reports will need to be submitted to the LPA. Advanced mitigation and new habitats

4.95 Extensive advanced mitigation planting will take place prior to construction commencing.

4.96 Further ecological mitigation areas, and areas of open green space will be created in each residential phase. Once created, these habitats must be managed and maintained in accordance with a LEMP specific to those habitats and any faunal enhancements included when detailed designs come forward.

4.97 The location of agreed faunal enhancements associated with the advanced mitigation are provided in the LEMP for advanced mitigation (refer to **Appendices EDP 2** to **11**). Additional faunal enhancements across the Site are included in the CEMP in **Appendix EDP 3**. These enhancements include the provision of: barn owl boxes; insect boxes; bird boxes; hedgehog nest boxes/domes; otter holt and shelters; hop-overs; underpasses; skylark plots; bat boxes for summer and winter use; hibernacula; and dormouse nest boxes. Whilst creation of these faunal enhancements will be covered within a LEMP, they are included in the CEMP for awareness as the construction of mitigation such as an otter holt or hibernacula will affect habitats that require consideration and approved methods of working as described in this CEMP[2].

4.98 It is the responsibility of the Principal Contractor to ensure that obligations of any approved LEMP are delivered in conjunction with an approved CEMP as this will ensure compliance with Planning Condition 20 which requires the "*management and monitoring of created and retained habitats (until taken over by management company or WWT)*".

4.99 Sensitive timings for some of the advanced mitigation works required as discussed in the **Section 5** under the bat heading.

[2] Enhancements described in this CEMP could be subject to change at the reserved matters stage to discharge Condition 29. Any changes that deviate from details presented in the ES and supporting documents must be fully justified and approved by Wiltshire Council's ecology team in liaison with Natural England.

Monitoring

4.100 The ECoW will be responsible for monitoring new habitats in accordance with an approved LEMP and will continue this role until the ownership of advanced mitigation (and other mitigation land such as the country park and its extensions) is passed on to the LPA who are expected to nominate WWT to manage/maintain and monitor the land for wildlife conservation use in perpetuity. WWT already undertake extensive monitoring of local woodland blocks as set out in the Green Lane Woodland Complex Management Plan and this document also includes Biss Wood, immediately adjacent to the Site and the 100m buffer which is to be planted in advance of any construction taking place.

4.101 The monitoring described in Section 7 of the LEMP for advanced mitigation (edp7866_r002, 2023) must be undertaken in parallel to any ongoing construction works i.e. annual monitoring of new habitats by a suitably qualified ecologist until the land is handed over to the LPA and managed by WWT in the long-term. In addition, once created, additional mitigation areas must also be subject to a similar monitoring regime once a LEMP has been produced. This is expected to include ongoing monitoring to ensure successful establishment and annual inspections in the first five years. Future LEMPs will also set out the necessary monitoring requirements for faunal enhancements, and such checks can be undertaken by the ECoW.

4.102 A Section 106 agreement will secure the long-term management of mitigation habitats, including any requirement to monitor the mitigation measures in terms of their effectiveness at maintaining the required structure and function of habitats which will sustain the population of Bechstein's bats associated with the SAC. It is important to determine whether the advanced mitigation habitats have successfully established and define trigger points at which further mitigation and/or remediation may be required meaning there will be an overlap between the obligations of the ECoW in fulfilling this CEMP and any separate monitoring obligations secured by Section 106 agreement.

4.103 The following 'Outline Monitoring Review and Framework' describes the proposed scope and methods to inform the detailed mitigation and monitoring implementation plan:

Bat Monitoring Survey Approach

4.104 The focus of the monitoring surveys will be the YWARR, which is the most sensitive location affected by the proposals, to assess relevant bat activity levels post-development against existing baseline data.

4.105 Monitoring results will be reported back to the LPA. Monitoring and review will be achieved through a range of measures, which may include:

- Monitoring of overall bat activity levels within identified bat flight lines for a direct comparison of activity levels pre- and post-construction;
- Monitoring of activity around, and use of, hop-overs and underpasses along roads and river bridges by different bat species;
- Monitoring of Biss Wood pre-, during and post-construction;

- Monitoring of stretches of the road, post-construction, where underpasses are not present to provide a direct comparison in bat activity; and

- A Monitoring Implementation and Review Plan, to be agreed with the LPA and secured through a planning condition.

Timescales

4.106 Monitoring should include pre-construction, construction and post-construction periods, to produce comparable results and site-specific detailed information on performance of mitigation and compensation to feedback into the ongoing management, as well as to inform any future mitigation.

4.107 The following monitoring periods are proposed:

- Pre-construction – A suite of surveys to be undertaken in the season prior to construction to update the baseline position;

- Construction period monitoring - monitoring bat activity levels in addition to the ECoW's monitoring responsibilities outlined above; and

- Post-construction monitoring – to assess the success of mitigation and compensation measures to measure bat activity levels at crossing points of the YWARR. This will include:

    - Monitoring population levels of Bechstein's bat through bat box checks;

    - Visitor and access monitoring for Green Lane Nature Park Extension, Visitor Facility, Biss Wood and Green Lane Wood using a questionnaire for new residents;

    - Habitat monitoring for Green Lane Wood and Biss Wood; and

    - Monitoring the use of YWARR underpasses through the development of a monitoring framework. To include monitoring sections of the YWARR away from underpasses to obtain data which can be compared.

4.108 The monitoring framework for the YWARR would be coordinated by an appointed ecologist or an appointed body with suitable ecological expertise to collate and interpret the results.

4.109 The agreed monitoring requirements will be set out within a Monitoring Implementation and Review Plan, to be agreed and secured through a planning condition.

4.110 Different bodies/consultancies will be responsible for the delivery of agreed monitoring and any monitoring actions prior to or during development would be coordinated by the developer. The developer can appoint the ECoW to cover the entire project (i.e. single project manager responsible for ecology) providing other bodies/consultancies share their data as required in order to report back to the LPA and sufficient information is provided in order to interpret findings against the conservation objectives of the SAC.

4.111 The Green Lane Woodland Complex Management Plan sets out monitoring requirements for Biss Wood and the 100m buffer to Biss Wood and to secure monitoring will be set out in a Section 106 agreement. WWT will need to determine the habitat baseline and develop a habitat inventory and baseline mapping with a view of using this baseline data to inform later monitoring of Biss Wood, the 100m buffer and other woodland blocks set out in the Green Lane Woodland Complex Management Plan. This baseline will determine the effectiveness of mitigation at the Site. WWT will undertake monitoring annually during construction and then in years 1, 3, 5 and 10 post-construction. The monitoring regime will include:

- Habitat monitoring;
- Bat box checks;
- Checks of known day roosts in Biss Wood;
- Production of a monitoring report; and
- Meeting with relevant members of the advisory group to determine any remedial actions necessary (within four months of the report being produced).

4.112 Refer to the Green Lane Woodland Complex Management Plan for complete details of the monitoring obligations.

4.113 WWT will also be responsible for monitoring the Green Lane Nature Park Extension, once created and any artificial habitat boxes will form part of the overall monitoring regime described above.

Section 5
Species Specific Protection Measures

BREEDING BIRDS

Legal Protection

5.1 All wild birds, their nests and eggs are protected under Section 1 of the *Wildlife and Countryside Act* 1981 (as amended). This makes it an offence to:

- Intentionally kill, injure or take any wild bird;
- Take, damage or destroy the nest of any wild bird while it is in use or being built;
- Take, damage or destroy the egg of any wild bird; or
- To have in one's possession or control any wild bird (dead or alive) or egg or any part of a wild bird or egg.

5.2 Construction activities could cause direct harm by clearing habitats actively used by nesting birds or causing significant noise disturbance that results in nest abandonment.

Protective Fencing/EPZs

5.3 A suitably qualified engineer must attend site prior to commencement and mark out all vegetation which is to be retained. Marking out must also be overseen by the ECoW to ensure EPZs are accurately measured. EPZs must be set out to ensure construction does not result in the removal of any vegetation planned for retention which is likely to be of value to nesting birds.

Working Practices

5.4 All site clearance will need to be undertaken in accordance with the sections above. This will ensure compliance with the legal protection afforded to nesting birds.

5.5 Once vegetation is removed it should be prevented from growing back i.e. don't allow vegetation to establish on spoil mounds or allow grassland to grow long/scrub to become dense. This will minimise the risk of encountering nesting birds during construction.

5.6 Where vegetation clearance outside of the breeding bird season is not possible (for example, to ensure compliance with a great crested newt and/or dormouse licence), or this constraint proves not to be practical in terms of the proposed construction timetable, vegetation will be checked for the presence of active bird nests by a suitably experienced Ecologist (or ECoW) immediately prior to the commencement of clearance works. If a bird's nest is discovered, then works within a minimum of 5m of the nest should cease until it has been confirmed by the ECoW that the nest is no longer active.

5.7 The exact dimensions of the buffer zone will be determined by the ecologist/ECoW and depend on the level of disturbance, bird species present and life stage of young. If ground

nesting birds are found within the arable field habitat, a greater buffer may be required at the discretion of the ECoW.

Pre-commencement Survey and Monitoring

5.8 If works are scheduled to begin within the breeding bird season, a walk over survey of the construction footprint must be undertaken by the ECoW to ensure the area is free from nesting birds or impose restrictions via EPZs should nesting be identified.

5.9 A visit every month, to ensure compliance with this CEMP will be undertaken to ensure EPZs are intact. This visit will identify any areas where further ongoing habitat manipulation is necessary to deter bird nesting, or if other measures are required.

5.10 The ECoW must have sight of any approved LEMPs which will include detailed landscaping designs inclusive of faunal enhancements to establish whether specifically selected artificial units have been installed correctly. The ECoW will report on any damage/deterioration or loss during an annual inspection.

5.11 The ECoW will be responsible for ensuring skylark plots, once created, are suitably fenced to minimise disturbance impacts and to ensure any management/maintenance as described in an accepted LEMP is undertaken appropriately (until such responsibility is passed on to WWT). The indicative location of skylark lots is provided in **Appendix EDP 6**.

BATS

Legal Protection

5.12 All species of British bat are listed as European Protected Species (EPS) on Schedule 2 of the *Conservation of Habitats and Species Regulations* 2017 (as amended) (referred to as the 'Habitats Regulations'). This affords strict protection to bats and their roosts, and makes it an offence to:

- Deliberately capture, injure or kill a wild animal of an EPS;
- Deliberately disturb wild animals of an EPS wherever they are occurring, in particular, any disturbance which is likely to impair their ability to survive, to breed or reproduce, to significantly affect the local distribution or abundance of the species to which they belong, or in the case of hibernating or migratory species, to hibernate or migrate; or
- Damage or destroy a breeding site or resting place of a wild animal of an EPS.

5.13 Additional protection for bats is also afforded under the *Wildlife and Countryside Act* 1981 (as amended), making it an offence to intentionally or recklessly disturb bats whilst they are occupying a structure or place which is used for shelter or protection, or to obstruct access to this structure or place. In addition, soprano pipistrelle (*Pipistrellus pygmaeus*), brown long-eared bat (*Plecotus auritus*), greater horseshoe bat, barbastelle bat, Bechstein's bat, noctule (*Nyctalus noctula*), and lesser horseshoe bat are also listed as Priority Species.

Licensing

5.14 A licence is required in order to carry out any works that involve the damage, destruction or disturbance of a bat roost.

5.15 In the event bats, or evidence of bat roosting activity is found during pre-commencement surveys, works must be suspended until a licence is issued by Natural England.

5.16 Trees are inherently difficult to survey for roosting bats due to the transient way in which they are used. If a tree is still considered to have potential to support bats following presence/absence surveys, then further tree-specific survey and mitigation measures will still be required such as soft felling techniques and/or climbing to inspect the tree prior to felling. No works can be undertaken on these trees until an Ecologist has advised how best to proceed.

5.17 Soft felling involves sectioning the tree without cutting directly through any potential roost features and gently lowering the cut sections to the ground, then leaving *in-situ* for 24 hours before removing or chipping. All operations are to be undertaken under the direct supervision of a bat licensed ecologist.

Protective Fencing/EPZs

5.18 A suitably qualified engineer must attend site prior to commencement and mark out all vegetation which is to be retained. Marking out must also be overseen by the ECoW to ensure EPZs are accurately measured. EPZs must be set out to ensure construction does not result in the removal of any vegetation planned for retention which is likely to be of value to commuting/foraging and potentially roosting bats.

5.19 Trees which have features suitable for roosting bats are present across the Site, however, the majority of trees located within the Site are to be retained through design and buffered by a network of green infrastructure corridors and adjacent off-site woodland will be retained and buffered as part of the proposals. Subject to the protection of retained trees during construction, through their inclusion in EPZs and the implementation of the sensitive lighting and noise strategies, no impact is considered likely.

5.20 Any historic bat roosts in trees within the Site boundary and retained through design will be protected by an EPZ which will extend 20m from the tree to avoid possible impacts relating to noise.

5.21 Any trees proposed for removal must be temporarily protected by EPZs until presence/absence surveys have ruled out the likely presence of a bat roost and the agreed protocol for their safe removal is undertaken.

5.22 In addition, where commuting routes are severed, such as where sections of hedgerow are lost temporarily, fencing will be used to bridge the gap and maintain a continuous navigational feature during works

Timings

5.23 Disturbance from noise will be minimised by the adoption of good working practices and restricted hours of workings as well as noise reducing measures i.e. type of plant used.

5.24 The advanced mitigation is intended to function as a buffer to construction noise in later construction phases and no specific restrictions to construction is imposed because of this. However, should new bat roosts be identified within the working footprint as part of pre-commencement survey, timing restrictions to some works may apply and this will depend on the nature of the bat roost and the works proposed nearby.

5.25 During the creation of faunal enhancements within the 100m Buffer to Biss Wood, construction of the lesser horseshoe hibernacula should be timed when bats are not breeding or hibernating in the adjacent woodland. The window for construction should be timed in either autumn (September/October) or spring (March/April).

5.26 In accordance with an AMS, it is anticipated that much habitat creation within the advanced mitigation areas will be delivered by hand, however, any machinery used must never be left idling near the edge of Biss Wood.

5.27 Specific timings relating to the creation of the underpasses and/or hop overs relating to the YWARR are discussed in **Appendix EDP 4**.

Lighting

5.28 As discussed in **Section 4**, a sensitive lighting strategy must be developed at the reserved matters stage and adopted fully during construction. This lighting strategy must include the requirement for temporary lighting during construction as retained habitats, and those not yet removed, are expected to be used by commuting/foraging bats and a continuous and valuable resource during each phase of the development.

5.29 The use of artificial lighting is to be limited to the essential minimum throughout the Site, and any lighting to be used should avoid upward pointing lights, with the spread of light being kept near to or below the horizontal.

5.30 Any illuminated site compounds will be sited away from all features of ecological interest described in this document i.e. those with defined EPZs.

Monitoring

5.31 The requirement to monitor lighting during construction is described in **Section 4**.

5.32 A visit every month, to ensure compliance with this CEMP will be undertaken by the ECoW to ensure EPZs are intact.

5.33 All EPZ fencing is the responsibility of the Principal Contractor and will be installed in accordance with best practice guidance and maintained throughout the duration of the construction phase.

5.34 At the time of writing, the location, number and specification for bat boxes is not yet determined across the Site. The locations and specifications for bat boxes in Biss and Green Lane Woods (off-site) as well as other mitigation and green infrastructure areas are show indicatively in **Appendix EDP 3**. Once detailed designs have captured the need for and location/specification of bat boxes the ECoW will be responsible for ensuring they are installed appropriately and in accordance with any agreed LEMP and subject to visual assessment to ensure they are not subject to removal/vandalism and can advise on the requirement to replace units.

5.35 The Lesser horseshoe hibernacula to be constructed with the 100m buffer to Biss Wood will need to be inspected and approved by a licensed bat ecologist in accordance with the LEMP for advanced mitigation (report reference: edp7866_r002, 2023 and **Appendix EDP 7**). The ECoW can undertake external inspections after this mitigation has been signed off by a specialist to ensure any issues relating to vandalism are reported and addressed promptly.

5.36 Kent bat boxes are to be installed on the Ecological Visitor Centre to the north of West Ashton Road (drawing reference: edp7866_d002 and included as **Appendix EDP 8**.) In accordance with an approved LEMP, the ECoW can also undertake visual assessments to ensure these are not subject to removal/vandalism and can advise on the requirement to replace units.

5.37 The ECoW must have sight of any additionally approved LEMPs, which will include detailed landscaping designs inclusive of faunal enhancements in order to establish whether specifically selected artificial units have been installed correctly.

5.38 The ECoW will also undertake post construction site safeguard and monitoring checks to ensure planting is delivered in accordance with agreed LEMPs and to ensure establishment of habitats designed to provide commuting and foraging resources to bats.

OTTER

Legal Protection

5.39 Otter is an EPS receiving strict protection under the Habitats Regulations as summarised above in respect of bats. Additional protection is also afforded to this species under the *Wildlife and Countryside Act* 1981 (as amended) as summarised above in respect of bats. This species is also listed as a Priority Species.

Pre-commencement Survey and Licensing

5.40 The recommended pre-commencement survey will confirm the location of any places of rest used by otter, including 150m up and down stream of river crossings. The survey findings will determine the requirement for a licence to proceed with some or all of the bridge crossings or whether precautionary working practices continue to be acceptable.

Protective Fencing/EPZs

5.41 A suitably qualified engineer must mark out the location of the working room required for the bridges to ensure EPZs can be set out around retained habitats. Marking out must also

be overseen by the ECoW to ensure EPZs are accurately measured. The road bridges are designed to retain the riverbank and associated vegetation on either side of the river channel, and it will be important to protect this habitat to allow otter to use the riparian corridor during construction.

5.42 The majority of the suitable habitat for otter will be retained and protected within the EPZs and are outside of the construction footprint and any unnecessary damage of retained habitat outside the construction footprint will therefore be avoided.

Working Practices

5.43 Storage of materials, vehicles and machinery should be within a designated site compound and at least 10m from the River Biss.

5.44 Night working is not permitted.

5.45 Mitigation works relating to the enhancement of the River Biss corridor will only be undertaken using methodologies which will avoid the direct or indirect impacts to otter resting places.

5.46 As part of detailed design, otter holts and shelters will be created along the River Biss as shown on the indicative ecological enhancement plan in **Appendix EDP 3**. Otter holts and shelters will be constructed along sections of the watercourse where they will remain undisturbed (**Appendix EPD 8**). It is vital the siting of this mitigation has regard for the findings of the pre-commencement surveys for both otter and water vole to ensure the locations are selected will avoids damage/destruction of any identified places of rest.

General Construction Measure

5.47 Any excavations/trenches will be sealed flush at ground level overnight to prevent access or formed with a gently sloping side to help any trapped otter (or other animals) to escape.

5.48 Alternatively, a sturdy plank of wood can be installed at an angle to create a gently sloping ramp to allow animals to escape.

5.49 Excavations must be visually checked by the Principal Contractor (their nominated person), prior to being filled in, to ensure otter (or other animals) are absent.

5.50 Large open pipework with an outside diameter of greater than 120mm should likewise be covered to prevent animals becoming trapped.

5.51 Construction sites and storage compounds will be fenced off overnight so that otter cannot gain access and injure themselves.

5.52 Should any otter or other protected species be present/suspected present, then work must cease at that location immediately and a suitably experienced Ecologist contacted immediately for advice on how to proceed.

Temporary Lighting

5.53 Temporary lighting measures specified for bats will ensure otter are also able to utilise riparian habitats for commuting, foraging and resting during construction without detriment.

Monitoring

5.54 A visit every month, to ensure compliance with this CEMP will be undertaken by the ECoW to ensure EPZs are intact.

5.55 All EPZ fencing is the responsibility of the Principal Contractor and will be installed in accordance with best practice guidance and maintained throughout the duration of the construction phase.

5.56 The ECoW must have sight of any approved LEMPs, which will include detailed landscaping designs inclusive of faunal enhancements including otter holts and shelters to establish whether they have been installed as agreed. An example of an artificial otter holt and shelter is included in **Appendix EDP 8**.

WATER VOLE

Legal Protection

5.57 Water vole and their burrows receive protection under Schedule 5 of the *Wildlife and Countryside Act* 1981 (as amended). This makes it an offence to:

- Intentionally kill, injure or take (capture) a water vole;
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place that a water vole uses for shelter or protection; and
- Intentionally or recklessly disturb water voles while they are in a place of shelter or protection.

5.58 Water vole is also listed as a Priority Species.

Pre-commencement Survey and Licensing

5.59 Water Vole is a highly mobile species that readily take up occupancy in new burrows. The pre-commencement water vole survey will check the banks of the River Biss for the presence of Water Vole burrows and map their distribution and territories.

5.60 Depending on the location of active burrows, water voles may be killed/injured and habitat which is occupied by this species may be damaged and/or destroyed or even obstructed by the works. If these impacts cannot be avoided, a licence will be needed. Given the design of the bridges is such that the majority of bankside habitat will be retained it is anticipated that only small areas of bank may be affected by bridge construction or other works such as the creation of drainage swales and displacement methods are likely to be acceptable.

5.61 Water Vole displacement requires the manipulation of bankside habitat and removal of marginal vegetation between 15 February and 15 April inclusive. In some situations, this can also be undertaken between 15 September and 30 October inclusive. The cut habitat must be left for between 5 and 10 consecutive days before a destructive search of burrows is carried out.

5.62 The mitigation strategy developed as part of the licence application to Natural England will stipulate all timing restrictions and permitted methodologies, including the requirement to undertake habitat creation, restoration or enhancement and monitoring.

Protective Fencing

5.63 A suitably qualified engineer must mark out the location of the working room required for the bridges to ensure EPZs can be set out around retained habitats. Marking out must also be overseen by the ECoW to ensure EPZs are accurately measured. The road bridges are designed to retain the riverbank and associated vegetation on either side of the river channel, and it will be important to protect this habitat to allow water voles to use the riparian corridor during construction and to avoid damage or disturbance to any active burrows that may be present.

5.64 The majority of the suitable habitat for water vole will be retained and protected within the EPZs and are outside of the construction footprint and any unnecessary damage of retained habitat outside the construction footprint will therefore be avoided.

Working Practices

5.65 Mitigation works relating to the enhancement of the River Biss corridor will only be permitted once it is confirmed such works will not result in direct or indirect impacts to water vole resting places.

5.66 Should pre-commencement surveys identify an absence of water vole burrows where bridge crossings are proposed, the manipulation of the banks of the River Biss to deter water vole creating new burrows during construction is recommended. The discovery of water vole burrows at a late stage is likely to cause significant delays to the construction program. Cutting of bankside vegetation, compacting the banks and removing marginal vegetation at the location of bridge crossings would deter water vole from creating burrows at these locations. Habitat manipulation would need to be ongoing during bridge construction to ensure it is an effective deterrent.

Monitoring

5.67 A visit every month, to ensure compliance with this CEMP will be undertaken by the ECoW to ensure EPZs are intact and if habitat manipulation to deter water vole is being undertaken, the effectiveness of this will also be reviewed.

5.68 All EPZ fencing is the responsibility of the Principal Contractor and will be installed in accordance with best practice guidance and maintained throughout the duration of the construction phase.

5.69 As described above, additional monitoring is likely to form part of any licence obtained for water voles.

5.70 whether they have been installed as agreed.

DORMOUSE

Legal Protection

5.71 Hazel dormouse is an EPS receiving strict protection under the Habitats Regulations as summarised above in respect of bats. Additional protection is also afforded to this species under the *Wildlife and Countryside Act* 1981 (as amended) as summarised above in respect of bats. This species is also listed as a priority species.

Protective Fencing and EPZs

5.72 The majority of suitable dormouse habitat namely hedgerow, tree lines and scrub are to be retained and protected within an EPZ. This will prevent potential damage or disturbance as a result of encroachment or unauthorised works close to retained habitats.

Licensing

5.73 Removal of hedgerow is necessary to facilitate new access including roads, footpaths/cycle tracks and bridges which will result in the loss of suitable dormouse habitat. Such losses have the potential, in the absence of mitigation, to kill, injure, and/or disturb dormice that may be present.

5.74 A dormouse method statement must be prepared in advance of construction and submitted to Natural England to secure a dormouse licence, which will be required for development works affecting dormouse habitat. The method statement must be prepared as part of any reserved matters applications and be based on detailed designs. The method statement will clearly describe:

- Timescales for the clearance of habitat occupied by dormouse;
- Clearance works requiring an ECoW to be present; and
- Details of habitat creation, management and long-term monitoring obligations.

5.75 Depending on the construction timetable either single stage clearance or two stage vegetation clearance methodology would be employed as described in **Section 4**. The timings for both methodologies aims to avoid the main dormouse breeding season (considered to be between mid-June and August inclusive) and hibernation period (considered to be between November and March inclusive). The timings are also appropriate for the avoidance of impacts on other protected wildlife such as reptiles and nesting birds.

Protective Fencing and EPZs

5.76 Protective fencing will be securely installed around the RPA of all retained trees and hedgerows prior to the commencement of the construction phase.

5.77 The area of land within the RPA of retained trees and hedgerows will be treated as an EPZ, with all construction activities including incursion from construction vehicles and storage of materials excluded.

5.78 No works (other than planting), including the storage of materials, will be carried out immediately adjacent to areas of protective fencing. The digging of trenches and pits adjacent to areas of protective fencing for new tree and scrub planting will be carried out by hand only, following best practice and with sight of an AMS.

Working Practices

5.79 The advanced mitigation areas are located in proximity to habitats known to support dormouse e.g. Biss Wood and surrounding hedge networks. Advanced planting may affect localised areas of overgrown vegetation such as scrub or tussocky grassland. These works are unlikely to trigger the requirement for a licence from Natural England but will require precautionary approaches and direct supervision by an ECoW to ensure nests are absent within any affected, suitable, vegetation.

5.80 A precautionary approach can only be advised following the pre-commencement site walkover to ensure these works are below a threshold which would trigger a requirement for a dormouse licence.

Temporary Lighting

Temporary lighting specified for bats will ensure dormouse are also able to utilise habitats for commuting, foraging and dispersal during construction without detriment.

Monitoring

5.81 A visit every month, to ensure compliance with this CEMP will be undertaken by the ECoW to ensure EPZs are intact.

5.82 All EPZ fencing is the responsibility of the Principal Contractor and will be installed in accordance with best practice guidance and maintained throughout the duration of the construction phase.

5.83 The ECoW must have sight of any approved LEMPs, which will include detailed landscaping designs inclusive of faunal enhancements including dormouse nest boxes to establish whether they have been installed as agreed. In addition, it will be necessary to ensure any locations for 'hop-overs' to maintain connectivity for dormouse is delivered and becomes established to achieve the desired result in accordance with an approved LEMP. An example of a dormouse 'hop-over' and indicative locations for dormouse mitigation is included in **Appendix EDP 9**.

BADGERS (AND OTHER MAMMALS)

Legal Protection

5.84 Badgers and their setts are protected under the *Protection of Badgers Act* 1992, which makes it an offence (inter-alia) to:

- Wilfully kill, injure, take, or cruelly ill-treat a badger;
- Damage or interfere with a sett, by doing one of the following things;
- Damage a badger sett or any part of it;
- Destroy a badger sett;
- Obstruct access to, or any entrance of, a badger sett;
- Cause a dog to enter a badger sett; or
- Disturb a badger when it is occupying a sett.

5.85 The 1992 Act defines a badger sett as "*any structure or place which displays signs indicating current use by a badger*".

5.86 The protection afforded to badgers is primarily due to animal welfare issues and history of persecution rather than concerns over their unfavourable nature conservation status.

Protective Fencing/EPZs

5.87 Should badgers create setts within 30m of construction (including habitat creation/enhancement works in advanced and other mitigation areas), construction works could result in damage or destruction of sett tunnels or chambers, and/or disturbance to individual badgers. If a pre-commencement survey confirms the presence of active badger setts appropriate mitigation will be required, which will initially require an EPZ to be set up around a 30m buffer from the sett(s) to prohibit any construction activity or the use of heavy machinery within this area, until a species-specific method statement outlining sensitive working practices is developed or the sett is closed under a Natural England Licence.

5.88 Depending on the proximity of the new sett to the construction footprint and nature of works, a licence to either permanently or temporarily close any impacted setts until construction activities are completed in that area may be required.

5.89 Much suitable sett building habitat (woodland/field margins/scrub/hedgerow/ditches etc) will be retained and buffered from the development within an EPZ, however, there is still a risk that badger setts could be present in construction areas, including those where works relate solely to habitat creation as this can itself be invasive and require heavy plant.

Pre-commencement Survey and Licensing

5.90 A pre-construction badger check must be undertaken by the ECoW within three months prior to works commencing in any given phase of work to ensure that badgers have not subsequently moved within the Site and created any new setts. If sett closure is deemed necessary, the badger sett would be cordoned off within an EPZ as described above until the badger mitigation licence from Natural England is secured and the sett is closed (either temporarily or permanently).

5.91 Sett closure is restricted to between the months of July and November.

Working Practices

5.92 To prevent any harm or disturbance to badgers and other mammals in the surrounding area, the general construction measures outlined in relation to otter are to be implemented during the course of pre-construction and construction works phases.

Monitoring

5.93 A visit every month, to ensure compliance with this CEMP will be undertaken by the ECoW to ensure EPZs are intact. Badgers can excavate new setts in a short period of time. These regular checks will identify any new or suspected setts that may require further assessment, EPZs or licensing measures.

5.94 All EPZ fencing is the responsibility of the Principal Contractor and will be installed in accordance with best practice guidance and maintained throughout the duration of the construction phase.

OTHER NOTABLE/PROTECTED MAMMAL SPECIES

5.95 Clearance of arable habitat should take place following the final crop harvest anticipated to be September/October and maintained as short as possible until construction as described in the **Section 4**. This will avoid brown hare being attracted to the construction footprint during their breeding season which extends between February and September.

5.96 European hedgehogs have the potential to be present within the Site, with habitats present that provide a foraging resource, suitable refugia/hibernacula and connectivity to the wider landscape, facilitating dispersal of this species. Clearance of suitable habitats (grassland, hedgerows, scrub, tall ruderal) will be undertaken in accordance with those measures detailed above to avoid harm/injury to notable/protected species that may be present. This will include the careful dismantling of any suitable refugia by hand.

5.97 To prevent any harm or disturbance to mammals in the surrounding area, the general construction measures outlined in relation to otter are to be implemented during the course of pre-construction and construction works phases.

5.98 The ECoW must have sight of any approved LEMPs which will include detailed landscaping designs inclusive of faunal enhancements such as hedgehog domes and/or hedgehog

highways, in order to establish whether specifically selected artificial units have been installed correctly.

GREAT CRESTED NEWTS

Legal Protection

5.99 Great crested newt is an EPS receiving strict protection under the Habitats Regulations as summarised above in respect of bats. Additional protection is also afforded to this species under the *Wildlife and Countryside Act* 1981 (as amended) as summarised above in respect of bats. This species is also listed as a Priority Species.

Protective Fencing/EPZs

5.100 Retained ponds, both on and immediately adjacent to the Site must be protected by an EPZ to ensure aquatic habitats, capable of supporting great crested newts, are not damaged or destroyed in error.

Licensing

5.101 The closest pond which supports great crested newts is Pond 22, approximately 20m from the Site and situated in the south-western part associated with the Phase 3 and Phase 4 residential phases. See **Appendix EDP 10** for the location of the identified great crested newt population, which is largely associated with White Horse Business Park, to the west of the railway line. **Plan EDP 1** also shows terrestrial habitats extending up to 500m from Pond 22 to demonstrate the maximum extent of land which may need to be covered by licensing measures.

5.102 On the assumption the distribution of great crested newts does not change, and any relevant updated survey verifies this, a licence to permit the destruction of terrestrial habitat used by great crested newts will not be required for the majority of the construction phase.

5.103 Updated survey in 2023 identified a similar distribution of great created newts when compared with the original surveys. Recent eDNA surveys, undertaken of ponds within the Site and beyond its boundaries where great crested newts were not previously recorded also returned negative results.

5.104 Currently the great crested newt population is restricted to terrestrial habitats up to 500m of Pond 22 (the other ponds being further from the Site boundary than this pond). Whilst no aquatic habitats supporting great crested newts are to be lost, the loss of suitable terrestrial habitats is unavoidable as nearby land is allocated as a combination of Phase 3 residential housing and some areas of public open space (see **Plan EDP 1**). It is likely that the habitats of value to great crested newts only extend up to 250m from Pond 22 as this species rarely migrates further than this and given the unfavourable nature of habitats between 250m and 500m from Pond 22, it is unlikely that this species would be encountered or affected by the loss of intensively managed arable land beyond 250m.

5.105 Until the licensing approach is agreed and a mitigation strategy devised, any construction within 500m of Pond 22 must either be carried out under the relevant licence issued for the

Site or following precautionary measures. The latter being where it is concluded that the risk of encountering great crested newts is so low that licensing is not warranted. This is likely to be habitats between 250m and 500m from Pond 22 and where aquatic habitats, which do not support great crested newts are affected by construction.

Pre-commencement Survey and Pond Removal

5.106 Any ponds requiring removal must be subject to updated eDNA survey to confirm continued absence of great crested newts should survey data be deemed out-of-date (generally over two years in age). Upon receipt of a negative result the following precautionary approach to pond removal is advised to avoid harm coming to any amphibians that may use the waterbody:

- In advance of the drain down, a suitable receptor site, including a pond and suitable terrestrial habitat must be identified for the relocation of fish, amphibians and other wildlife;

- Sensitive drain down under the supervision of a licensed ecologist or accredited agent. The methodology will include the slow drain down of pond water using a pump fitted with fine mesh. During the draining down of water from the basin hand nets will be used to remove any amphibians, and hand searching through plants will be undertaken when the basin has been dewatered. Hand searching of sediments is not to be undertaken as it is considered a health and safety risk, and impractical when draining down heavy clay silts;

- Sensitive drain-down must be timed when amphibians are least likely to be present in the waterbody i.e. from late September and have regard to the presence of terrestrial habitat which may be used by hibernating amphibians and/or common reptiles; and

- Depending on the timescales for pond removal and subsequent construction, ring fencing around the decommissioned pond may be necessary to ensure the pond does not fill up with water and be accessed by amphibians before works take place.

5.107 Should great crested newts be confirmed in any ponds within the Site, the mitigation approach will need to be reconsidered.

Working Practices Under Precautionary Methods

5.108 Land which carries a low risk of encountering great crested newts will be cleared under a precautionary methodology e.g. land not covered by a derogation licence from Natural England but within a 500m radius of a pond known to support great crested newts. Beyond 500m of any confirmed great crested newt pond, and on the assumption continued absence is proven within on-site ponds through updated eDNA survey methods, no specific precautionary measures are needed for great crested newts as the sensitive clearance methodologies and associated timings described for common reptiles below will ensure that significant impacts to amphibians can be avoided during site clearance activities. Terrestrial habitat used by great crested newts is largely similar to that used by common reptiles and sensitive vegetation clearance as described above, which will be subject to direct supervision by an ECoW which would identify any unexpected great crested newts.

5.109 Should any great crested newts be found then work will halt immediately, and an ecologist/Natural England consulted regarding the appropriate course of action to ensure legal compliance, including obtaining a derogation licence where necessary.

5.110 Standard pollution prevention measures employed during the construction phase as well as damping down of dust sources and management of drainage will avoid adverse effects on great crested newt habitats as a result of suspended silt or contaminated surface run-off.

Monitoring

5.111 Monitoring will likely be an obligation of any derogation licence issued by Natural England and must be delivered in accordance with the licence in the timeframes specified.

5.112 A sensitive drainage strategy must be developed with respect to land within 500m of the know great crested newt population. Once a detailed drainage strategy is available, the ECoW can check that any agreed mitigation e.g. ACO wildlife kerbs and/or underpasses have been incorporated as specified. An example of the likely mitigation to be incorporated through design is shown in **Appendix EDP 11**.

5.113 A visit every month, to ensure compliance with this CEMP will be undertaken by the ECoW to ensure EPZs are intact.

5.114 All EPZ fencing is the responsibility of the Principal Contractor and will be installed in accordance with best practice guidance and maintained throughout the duration of the construction phase.

5.115 The ECoW must have sight of any approved LEMPs, which will include detailed landscaping designs in order to establish whether specifically designed aquatic habitat is establishing in accordance with it i.e., permanently holding water and that any faunal enhancements such as hibernacula are installed as agreed.

REPTILES

Legal Protection

5.116 All species of common reptile, namely common lizard (*Zootoca vivipara*), slow worm, grass snake and adder (*Vipera berus*), receive at least limited protection from harm under the *Wildlife and Countryside Act* 1981 (as amended), making it an offence to cause intentional killing and injuring of these species. In addition, these species are also listed as Priority Species.

Protective Fencing and EPZs

5.117 The majority of the suitable habitat for reptiles will be retained and protected within the EPZs and are outside of the construction footprint and any unnecessary damage of retained habitat outside the construction footprint will therefore be avoided.

Sensitive Vegetation Clearance and Reptile Displacement

5.118 All suitable vegetation will be subject to sensitive vegetation clearance and habitat manipulation as described above. This will encourage the natural movement of reptiles away from this working area and then maintain cleared habitats as unsuitable for use by common reptiles.

5.119 Sensitive clearance includes any land earmarked for advanced mitigation or public open space as the creation of habitats can cause harm to wildlife residing in existing habitats.

5.120 The reptile displacement will be completed in suitable weather conditions (ambient air temperature above 10°C, sunny, little to no cloud cover, and no rain) to ensure that reptiles are active. The displacement will be supervised by the appointed ECoW, following the methodology described below:

- Displacement can only be undertaken where suitable retained and contiguous reptile habitat occurs, to ensure displaced animals can readily disperse into suitable areas;
- An initial cut of the vegetation will be undertaken using hand-held machinery (e.g. strimmers/brush cutters) to reduce the vegetation height down to a minimum of 150mm above ground, with clearance undertaken directionally towards retained habitat, and thereby displacing individuals towards retained habitat;
- All arisings will be raked by hand and removed from the construction footprint;
- A second directional cut will be undertaken a minimum of 24hrs later, with vegetation cut to 50mm/ground level with reptiles being encouraged in the direction of retained or off-site suitable habitat;
- All arisings following the second cut will be raked by hand and removed from the footprint of the fencing line; and
- A final cut to ground level will effectively ensure the footprint of the fencing line supports no grassland habitat suitable for widespread reptiles.

Monitoring

5.121 A visit every month, to ensure compliance with this CEMP will be undertaken by the ECoW to ensure EPZs are intact.

5.122 All EPZ fencing is the responsibility of the Principal Contractor and will be installed in accordance with best practice guidance and maintained throughout the duration of the construction phase.

5.123 The ECoW must have sight of any approved LEMPs, which will include detailed landscaping designs inclusive of faunal enhancements such as log piles and hibernacula in order to establish.

Section 6
Timetable of Works, Reporting and Conclusions

TIMETABLE OF WORKS

6.1 **Table EDP 6.1** provides a summary timetable for the optimal timings to undertake tasks in relation to the development. It is not possible to determine all possible timings at this stage and if required, derogation licenses from Natural England will dictate the timeline for certain aspects of works.

REPORTING

6.2 The ECoW will be responsible for the production of compliance reports, which must be submitted to the LPA to confirm the wildlife interests of the site are maintained during construction. The frequency of these reports will be dependent on the phasing/sub-phasing and completion of substantial elements of work and will detail items such as the results of compliance checks; any supervised works; changes to the ecology baseline that require licenses or adjusted methodologies; signing off faunal enhancements and habitat monitoring.

6.3 Monitoring documents are likely to produced, on an annual or biannual basis which will be determined once a program of works in each phase is set out.

Image EDP 6.1: Optimal Timings to Undertake Tasks Anticipated in Relation to the Development*

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Clearance of Grassland, Scrub/Tall Ruderal and Arable habitat suitable for nesting birds, (reduction of vegetation height down to no shorter than 100–150mm).												
Initial cut of grassland.												
Clearance of areas suitable for reptile or amphibians (any vegetation below 150mm).												
Installation of EPZ Fencing.												
Pond removal.												
If required: Manual removal of Himalayan balsam (remove before flowers are produced between June and October).												
If required: Badger works on receipt of a Natural England Badger Licence.												
If required: Water Vole displacement on receipt of Natural England licence.		Displacement window 15 February–15 April							Displacement window 15 September–30 October			

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Construction of lesser horseshoe hibernaculum in 100m buffer to Biss Wood. Any other noise generating construction to deliver advanced mitigation should also honour this window.												
Eastern section of YWARR – prioritise construction in winter when bat activity is reduced.												

*Orange = optimum time. White = sub-optimal timing

Once clear, all vegetation should be maintained as short as possible (a maximum of 50mm should be aimed for), preferably as bare ground and subject to regular disturbance.

CONCLUSION

6.4 The provisions outlined in this overarching CEMP: Biodiversity provide a robust framework for the future detailed protection of key ecological resources associated with the proposed development.

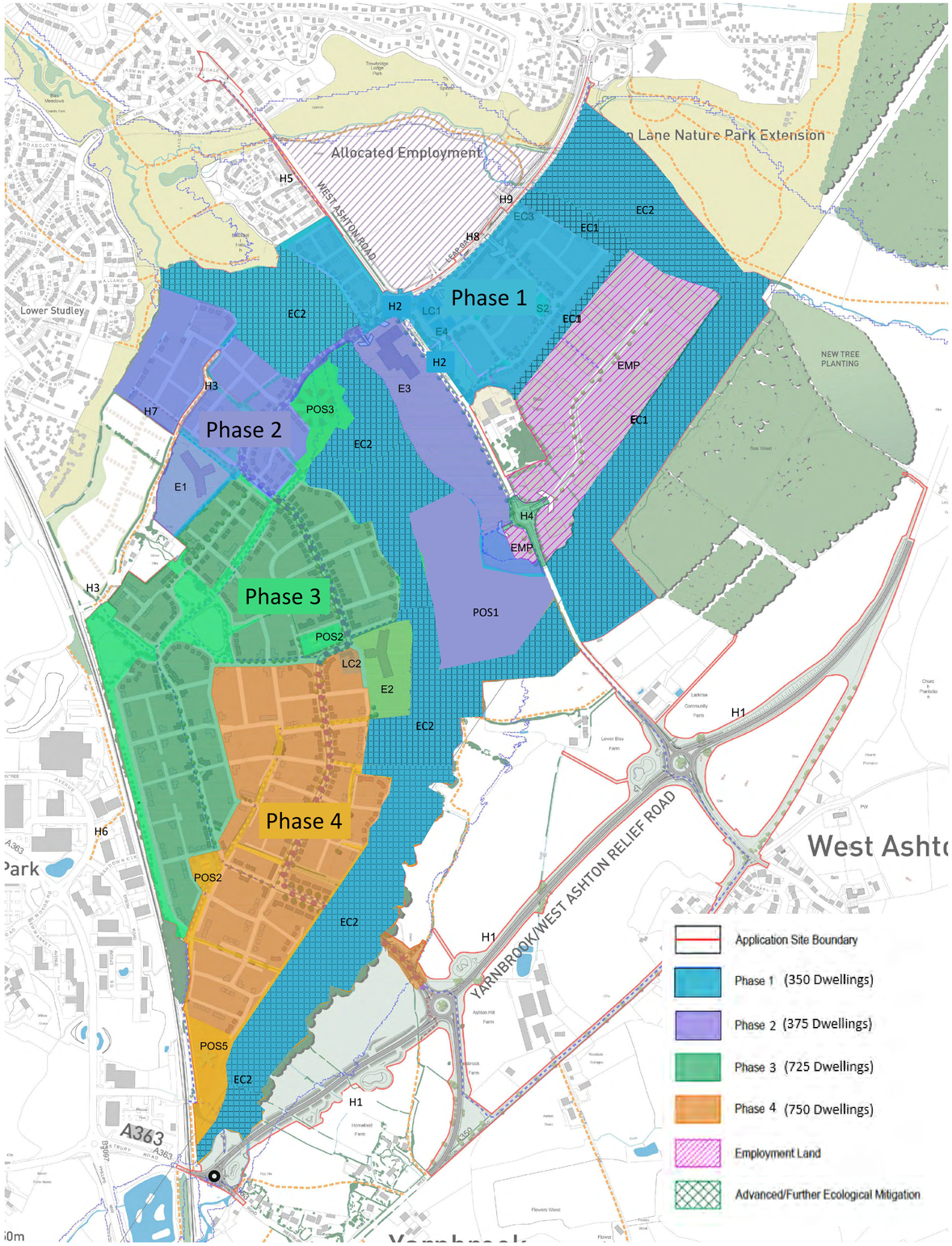
6.5 This document includes sufficient detail to describe which pre-commencement surveys, reports and plans are essential in delivering development with full regard to ecology and the monitoring requirements to ensure compliance with this document. Provided that the measures set out in this CEMP: Biodiversity are fully implemented or form the basis of any future phase or sub-phase specific CEMP, the relevant ecological features present within the Site will be adequately protected in accordance with legal and planning policy requirements.

Appendix EDP 1
Phasing Plan

Ashton Park, Trowbridge

Phasing Plan

Rev F 08.07.2025



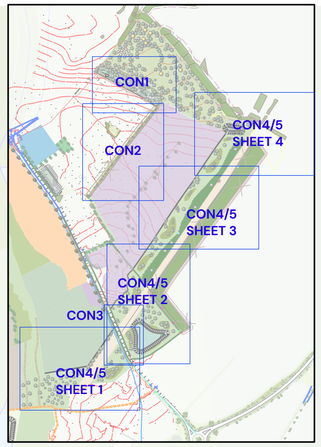
Land Use / Facility		Area	Phase 1 Approx 350 Dwellings	Phase 2 Approx 375 Dwellings (725 Dwellings)	Phase 3 Approx 725 Dwellings (1450 Dwellings)	Phase 4 Approx 750 Dwellings (2200 Dwellings)
Education						
E1	Serviced site for 2fe Primary School inclusive of 30 Early Years places	1.80ha		By 400 Occupations		
E2	Serviced Site for 1fe Primary School inclusive of 30 Early Years places	1.80ha			By 1200 Occupations	
E3	Serviced site for Secondary School inclusive of 0.3ha Early Year Site	5.24ha	Serve notice to transfer land for Secondary School by 300 Occupations	By 400 Occupations		
E4	Serviced site for Early Years	0.3ha	By 50 Occupations			
Highways and Transport						
H1	YWARR East & YWARR West			The earlier of 5 years from 1st occupation or before 1000 dwellings		
H2	West Ashton Road aleterations (fourth arm off Leap Gate Roundabout and access to land east of West Asthon Road)		By 75% Occupations within Phase			
H3	Vehicular Connection to Drynham Lane and prohibition of driving order			By 75% Occupations within		
H4	Provision of a four arm roundabout to access the Land east and west of West Ashton Road				By 1250 Occupations	
H5	West Asthon Road Footway enahncements and Toucan Crossing		By 75% Occupations within Phase			
H6	Off-site footpath Enhancements				By 75% Occupations within Phase	
H7	Road Connection to within 1m of the boundary of third party land				By 75% Occupations within Phase	
H8	Vehicular accesses served from Leapgate		Pre-occupation			
H9	LEAP Gate footpath/cycleway		By 75% Occupations within Phase			
Local Centre						
LC1	Local Centre 1	1ha	Marketed within phase			
LC2	Local Centre 2	0.2ha			Marketed within phase	
Public Open Space						
POS1	4 x Sports Pitch and Changing Facilities	6.35ha		By 1000 Occupations		
POS2	3 x LEAPs	0.04ha	Open space within Phase to be delivered by 75% of Dwelling Occupations within respective Phase		Open space within Phase to be delivered by 75% of Dwelling Occupations within respective Phase	Open space within Phase to be delivered by 75% of Dwelling Occupations within respective Phase
POS3	Destination Play Areas	0.12ha			Open space within Phase to be delivered by 75% of Dwelling Occupations within respective Phase	
POS5	Allotments	0.9ha				Open space within Phase to be delivered by 75% of Dwelling Occupations within respective Phase
Ecological Mitigation						
EC1	Advanced Ecological Mitigation		Prior to commencement			
EC2	River Biss Corridor		Prior 150 Occupations			
EC3	Visitor Centre		By 300 Occupations			
Employment Land						
EMP	Marketing of Employment Land	13.58ha			By 1250 Occupations	
Bus Strategy						
BS1	Bus Strategy Phase 1		By 51 Occupations			
BS2	Bus Strategy Phase 2			By 51 Occupations south of West Ashton Road		

Appendix EDP 2
Detailed Planting Plan

KEY

- Existing trees to be retained to BS5837
- Existing hedgerow to be retained and maintained to a minimum height of 2.5m strengthened with infill planting where required
- Proposed tree planting
- Proposed native shrub planting
- Proposed thorny scrub planting
- Proposed woodland and scrub planting to benefit bats and dormouse
- Proposed native hedgerow planting
- Proposed marginal planting
- 1.5m high post and wire fence
- 1.5m high post and rail fence
- FG 3m field gate entrance to Biss Wood
- NB Noticeboard at entrance to Biss Wood
  - The board is to be metal in construction and to include the following information:
  - Information on the space
  - Name and telephone number of the operator of the facility with an invitation to report any incident or damage
- Proposed long meadow grassland e.g Emorsgate EM4
- Proposed tusocky grassland e.g Emorsgate EM10
- Proposed wetland wildflower grassland e.g Emorsgate EM8
- Attenuation pond with areas of permanently wet
- River Biss
- Footpath/Cyclepath
- Existing Public Right of Way
- Existing overhead power lines

LOCATION PLAN



2no.Tilia cordata
1no. Acer campestre
2no.Populus alba
2no.Betula pendula
1no. Betula pendula
3no.Tilia cordata
3no.Acer campestre
3no.Betula pendula
2no.Populus alba
3no.Tilia cordata
1no. Malus sylvestris

Native hedgerow planting
1066no.Crataegus monogyna
400no.Eunonymus europaeus
400no.Ilex aquifolium
533no. Prunus spinosa
266no.Rosa canina

2no. Carpinus betulus
1no.Betula pendula
2no. Betula pendula
1no.Tilia cordata
3no.Populus alba
2no.Acer campestre
3no.Malus sylvestris
1no.Malus sylvestris
1no.Betula pendula
6no.Alnus gluitinosa
1no.Acer campestre
1no.Malus sylvestris
1no. Carpinus betulus
1no.Quercus robur
1no.Acer campestre
3no. Populs alba
1no.Tilia cordata
3no.Tilia cordata
4no.Populus alba
1no.Acer campestre
3no.Betula pendula
1no.Quercus robur
1no.Betula pendula
3no.Carpinus betulus
1no.Quercus robur
1no.Malus sylvestris

1no.Prunus avium
3no.Populus alba
1no.Quercus robur

Native shrub mix
408no. Corylus avellana
204no. Crataegus monogyna
204no. Eunonymus europaeus
204no. Ilex aquifolium
204no.Prunus domestica
204no.Prunus spinosa
204no. Rosa canina
204no. Viburnum lantana
204no. Viburnum opulus

0 50m

N

Revisions:
First Issue- 09/12/2022 ASK
A- (24/04/2024 ASK) Revised to add additional hedgerow (Sht1 only)
B- (21/05/2024 ASK) Revised to client comment (Sheet 2 and 4 only)

Detailed Planting Plans (Sheet 1 of 4)

West Ashton - Trowbridge CON4/5 Biss Wood Buffer

Client: Persimmon

DRWG No: P22-2219_EN_002

REV: B Sheet No:1 Drawn by : ASK

Date: 21/05/2024 Approved by: ASK

Scale: 1:500 @A1

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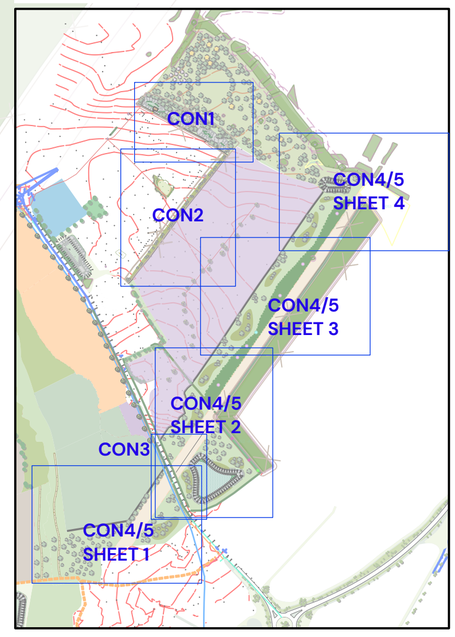
KEY

- Existing trees to be retained to BS5837
- Existing hedgerow to be retained and maintained to a minimum height of 2.5m strengthened with infill planting where required
- Proposed tree planting
- Proposed native shrub planting
- Proposed thorny scrub planting
- Proposed woodland and scrub planting to benefit bats and dormouse
- Proposed native hedgerow planting
- Proposed marginal planting
- 1.5m high post and wire fence
- 1.5m high post and rail fence
- FG — 3m field gate entrance to Biss Wood
- NB — Noticeboard at entrance to Biss Wood
  - The board is to be metal in construction and to include the following information:
  - Information on the space
  - Name and telephone number of the operator of the facility with an invitation to report any incident or damage
- Proposed long meadow grassland e.g Emorsgate EM4
- Proposed tusocky grassland e.g Emorsgate EM10
- Proposed wetland wildflower grassland e.g Emorsgate EM8
- Attenuation pond with areas of permanently wet
- River Biss
- Footpath/Cyclepath
- Existing Public Right of Way
- Existing overhead power lines

Ecological Enhancements

- Butterfly bank
- Hibernacula for reptiles and amphibians
- Habitat pile for reptiles, amphibians and invertebrates
- Hibernaculum for Lesser Horseshoe Bats
- Barn owl box on tree or pole if no suitable trees

LOCATION PLAN



Native shrub mix
274no. Corylus avellana
137no. Crataegus monogyna
137no. Eunonymus europaeus
137no. Ilex aquifolium
137no.Prunus domestica
137no.Prunus spinosa
137no. Rosa canina
137no. Viburnum lantana
137no. Viburnum opulus

3no.Tilia cordata

2no.Populus alba

Native hedgerow planting
597no.Crataegus monogyna
224no.Eunonymus europaeus
224no.Ilex aquifolium
298no. Prunus spinosa
149no.Rosa canina

3no. Betula pendula

Infill Planting mix
Ilex aquifolium (25%)
Ligustrum vulgare (25%)
Rosa canina (25%)
Sambucus nigra (25%)

1no. Quercus robur
3no.Prunus avium
1no. Quercus robur
1no.Acer campestre
1no. Carpinus betulus
2no.Quercus robur
3no. Sorbus aria
1no.Carpinus betulus
2no. Tilia cordata

Native shrub mix
461no. Corylus avellana
231no. Crataegus monogyna
231no. Eunonymus europaeus
231no. Ilex aquifolium
231no.Prunus domestica
231no.Prunus spinosa
231no. Rosa canina
231no. Viburnum lantana
231no. Viburnum opulus

2no.Acer campestre
1no. Betula pendula
1no. Acer campestre
3no. Tilia cordata
1no.Populus alba
1no.Betula pendula
3no.Quercus robur
1no. Betula pendula
3no.Populus alba
1no. Betula pendula
1no. Quercus robur

Supplementary planting mix
189no. Cornus sanguinea
189no. Crataegus monogyna
95no. Ilex aquifolium
95no. Ligustrum vulgare
95no.Prunus spinosa
189no. Rosa canina
95no. Sambucus nigra

Native marginal planting mix
63no. Iris pseudacus
104no. Juncus effusus
63no. Mentha aquatica

1no. Alnus glutinosa

Native shrub mix
200no. Corylus avellana
100no. Crataegus monogyna
100no. Eunonymus europaeus
100no. Ilex aquifolium
100no.Prunus domestica
100no.Prunus spinosa
100no. Rosa canina
100no. Viburnum lantana
100no. Viburnum opulus

Native shrub mix
70no. Corylus avellana
35no. Crataegus monogyna
35no. Eunonymus europaeus
35no. Ilex aquifolium
35no.Prunus domestica
35no.Prunus spinosa
35no. Rosa canina
35no. Viburnum lantana
35no. Viburnum opulus

Native marginal planting mix
239no. Iris pseudacorus
299no. Juncus effusus
179no. Mentha aquatica

3no. Carpinus betulus

Refer to CON3 for details

1no. Populus alba
1no. Alnus glutinosa

Native marginal planting mix
285no. Alisma plantago aquatica
158no. Caltha palustris
63no. Carex pendula
95no. Veronica beccabunga

FG

Infill Planting mix
Ilex aquifolium (25%)
Ligustrum vulgare (25%)
Rosa canina (25%)
Sambucus nigra (25%)

Native shrub mix
143no. Corylus avellana
72no. Crataegus monogyna
72no. Eunonymus europaeus
72no. Ilex aquifolium
72no.Prunus domestica
72no.Prunus spinosa
72no. Rosa canina
72no. Viburnum lantana
72no. Viburnum opulus

Native shrub mix
62no. Corylus avellana
31no. Crataegus monogyna
31no. Eunonymus europaeus
31no. Ilex aquifolium
31no.Prunus domestica
31no.Prunus spinosa
31no. Rosa canina
31no. Viburnum lantana
31no. Viburnum opulus

0 50m

N

Revisions:
First Issue- 09/12/2022 ASK
A- (21/05/2024 ASK) Revised to client comment (Sheet 2 and 4 only)

Detailed Planting Plans (Sheet 2 of 4)

West Ashton - Trowbridge CON4/5 Biss Wood Buffer

Client: Persimmon

DRWG No: P22-2219_EN_002

REV: A Sheet No:2 Drawn by : ASK

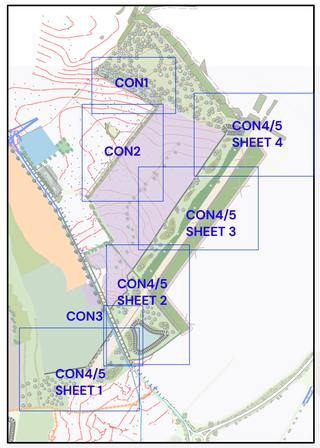
Date: 21/05/2024 Approved by: ASK

Scale: 1:500 @A1

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LOCATION PLAN



3no.Malus sylvestris
1no.Carpinus betulus
1no.Acer campestre
1no.Carpinus betulus
3no. Betula pendula

Native shrub mix
137no. Corylus avellana
69no. Crataegus monogyna
69no. Eunonymus europaeus
69no. Ilex aquifolium
69no.Prunus domestica
69no.Prunus spinosa
69no. Rosa canina
69no. Viburnum lantana
69no. Viburnum opulus

4no.Tilia cordata

Native shrub mix
387no. Corylus avellana
193no. Crataegus monogyna
193no. Eunonymus europaeus
193no. Ilex aquifolium
193no.Prunus domestica
193no.Prunus spinosa
193no. Rosa canina
193no. Viburnum lantana
193no. Viburnum opulus

1no.Acer campestre
2no.Tilia cordata
3no. Betula pendula
1no.Quercus robur
1no.Carpinus betulus
2no.Acer campestre
3no.Tilia cordata
1no. Carpinus betulus
1no.Prunus avium
2no.Carpinus betulus

Pylon

High Voltage Overhead Electricity Lines

Thorny scrub planting mix
582no. Cornus sanguinea
582no. Crataegus monogyna
291no. Ilex aquifolium
291no. Ligustrum vulgare
291no.Prunus spinosa
591no. Rosa canina
291no. Sambucus nigra

1no.Carpinus betulus

KEY

- Existing trees to be retained to BS5837
- Existing hedgerow to be retained and maintained to a minimum height of 2.5m strengthened with infill planting where required
- Proposed tree planting
- Proposed native shrub planting
- Proposed thorny scrub planting
- Proposed woodland and scrub planting to benefit bats and dormouse
- Proposed native hedgerow planting
- Proposed marginal planting
- 1.5m high post and wire fence
- 1.5m high post and rail fence
- FG — 3m field gate entrance to Biss Wood
- NB — Noticeboard at entrance to Biss Wood
  - The board is to be metal in construction and to include the following information:
  - Information on the space
  - Name and telephone number of the operator of the facility with an invitation to report any incident or damage
- Proposed long meadow grassland e.g Emorsgate EM4
- Proposed tusocky grassland e.g Emorsgate EM10
- Proposed wetland wildflower grassland e.g Emorsgate EM8
- Attenuation pond with areas of permanently wet
- River Biss
- Footpath/Cyclepath
- Existing Public Right of Way
- Existing overhead power lines

Ecological Enhancements

- Butterfly bank
- Hibernacula for reptiles and amphibians
- Habitat pile for reptiles, amphibians and invertebrates
- Hibernaculum for Lesser Horseshoe Bats
- Barn owl box on tree or pole if no suitable trees

0 50m

N

Revisions:
First Issue- 09/12/2022 ASK
A - (21/05/2024 ASK) Revised to client comment (Sheet 2 and 4 only)

Detailed Planting Plans (Sheet 3 of 4)

West Ashton - Trowbridge CON4/5 Biss Wood Buffer

Client: Persimmon

DRWG No: P22-2219_EN_002

REV: A Sheet No: 3 Drawn by : ASK

Date: 21/05/2024 Approved by: ASK

Scale: 1:500 @A1

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NATIVE TREE PLANTING

Species	Form	Girth (cm)	Height cm	Clear stem (cm)	Root condition
Acer Campestre	EHS	14-16	300-350	Min 200	85L
Betula pendula	EHS	14-16	300-350	175-200	85L
Carpinus betulus	EHS	14-16	250-300	175-200	85L
Malus sylvestris	EHS	14-16	250-300	175-200	85L
Populus alba	EHS	14-16	300-350	175-200	85L
Prunus avium	EHS	14-16	300-350	175-200	85L
Quercus robur	EHS	14-16	350-425	175-200	85L
Tilia cordata	EHS	14-16	300-350	175-200	85L

THORNY SCRUB PLANTING MIX
To be planted 1/m²

Species	Mix %	Height cm	Form	Age	Root condition
Cornus sanguinea	20%	60-80	Branched	1+1	BR
Crataegus monogyna	20%	60-80	Branched	1+1	BR
Ilex aquifolium	10%	60-80	Branched	-	BR
Ligustrum vulgare	10%	40-60	Branched	0/2	2L
Prunus spinosa	10%	40-60	Branched	1+1	2L
Rosa canina	20%	40-60	Branched	1+1	BR
Sambucus nigra	10%	60-80	Branched	1+1	BR

NATIVE SHRUB MIX

Species	Mix %	Height cm	Form	Age	Root condition
Corylus avellana	20%	80-100	Branched	1+2	B
Crataegus monogyna	10%	80-100	Branched	1+1	B
Eunonymus europaeus	10%	60-80	Branched	1+2	B
Ilex aquifolium	10%	60-80	Leader with laterals	-	3L
Prunus domestica	10%	60-80	Branched	1+1	B
Prunus spinosa	10%	60-80	Branched	1+1	B
Rosa canina	10%	60-80	Branched	1+1	B
Viburnum lantana	10%	60-80	Branched	1+2	B
Viburnum opulus	10%	60-80	Branched	1+2	B

TUSSOCK GRASS MIX
Emorsgate EG10 has been devised to create areas of tussocky grassland that, once established, require little or no maintenance. Mixture to be sown at a rate of 5g/m2.

Grasses		
2.5	Alopecurus pratensis	Meadow Foxtail (w)
25	Cynosurus cristatus	Crested Dogstail
20	Dactylis glomerata	Cocksfoot (w)
2.5	Deschampsia cespitosa	Tufted Hair-grass (w)
25	Festuca rubra	Strong-creeping Red-fescue
2.5	Holcus lanatus	Yorkshire Fog
12.5	Schedonorus arundinaceus - (Festuca arundinacea)	Tall Fescue (w)
10	Schedonorus pratensis - (Festuca pratensis)	Meadow Fescue (w)
100		

LONG MEADOW MIX FOR CLAY SOILS
Mixture to be sown at a rate of 4g/m2.

%	Latin Name	Common Name
Wildflowers		
1.2	Achillea millefolium	Yarrow
0.2	Agrimonia eupatoria	Agrimony
0.1	Betonica officinalis	Betony
3.0	Centaurea nigra	Common Knapweed
0.4	Daucus carota	Wild Carrot
1.5	Galium verum	Meadowseet
0.3	Filipendula ulmaria	Lady's Bedstraw
1.5	Galium'verum	Meadow Carne's-bill
0.4	Geranium pratense	Meadow Vechling
0.5	Lathyrus pratensis	Oxeye Daisy
1.0	Leucantemum vulgare	Birdsfoot Trefoil
0.2	Lotus corniculatus	Musk Mallow
2.5	Malva moschata	Ribwort Plantain
4.1	Plantago lanceolata	Cowslip
0.2	Primula veris	Meadow Buttercup
1.6	Ranuculus acris	Yellow Rattle
0.2	Rumex acetosa	Common Sorrel
0.1	Silaum silaus	Pepper Saxifrage
1.0	Silene flos-cuculis	Ragged Robbin
19.7		
Grasses		
1.0	Agrostis capillaris	Common Bent
2.0	Anthoxanthum odoratum	Sweet Vernal-grass
2.0	Briza media	Quaking Grass
64.0	Cynosurus cristatus	Crested Dogstail
10	Festuca rubra	Red Fescue
1.0	Trisetum flavescens	Yellow Oat-grass
80		

NATIVE HEDGEROW
To be planted in triple staggered row 0.6m offset, with 9 plants per linear meter

Species	Mix %	Height cm	Form	Age	Root condition
Crataegus monogyna	40%	60-80	Branched	1+1	B
Eunonymus europaeus	15%	60-80	Branched	1+2	B
Ilex aquifolium	15%	60-80	Leader with Laterals	-	3L
Prunus spinosa	20%	60-80	Branched	1+1	B
Rosa canina	10%	60-80	Branched	1+1	B

NATIVE MARGINAL PLANTING MIX

Species	Mix %	Type	Root condition	Density per m2
Alisma-Plantago-aquatica	20%	Marginal	50cc min	9
Caltha palustris	20%	Submerged	1L	5
Carex pendula	5%	Tall emergent	1L	2
Iris pseudacorus	5%	Marginal	1L	4
Juncus effusus	10%	Tall emergent	2L	5
Mentha aquatica	5%	Submerged	1L	3
Veronica beccabunga	5%	Marginal	2L	3

NATIVE WOODLAND & SHRUB MIX
To be planted at 1m centres

Species	Mix %	Girth (cm)	Height (cm)	Form	Age	Root Condition
Alnus glutinosa	15	-	100-125	Transplant	1+1	B
Corylus avellana	15	-	60-80	Branched	1+2	B
Corylus avellana (s)	5	6-8	230-300	Standard	5+	B
Crataegus monogyna	20	-	60-80	Branched	1+1	B
Ilex aquifolium	10	-	60-80	Leader with laterals	-	3L
Quercus robur	10	-	100-125	Transplant	1+2	B
Salix caprea	15	-	60-80	Branched	1+2	B
Sorbus aucuparia	10	-	100-125	Transplant	1+1	B

Note: mixes to be planted in an evenly spaced but irregular pattern (i.e. no grids or lines) in single species groups with approximately 5-9 plants per group.

MEADOW MIXTURE FOR WETLANDS
Mixture to be sown at a rate of 4g/m2.

%	Latin Name	Common Name
Wildflowers		
0.5	Achillea millefolium	Yarrow
0.2	Achillea ptarmica	Sneezewort
1	Betonica officinalis	Betony
2.5	Centaurea nigra	Common Knapweed
2	Filipendula ulmaria	Meadowsweet
1.5	Galium verum	Lady's Bedstraw
0.4	Geum rivale	Water avens
0.6	Leucanthemum vulgare	Oxeye Daisy
0.8	Lotus penduncultatus	Greater Birdsfoot Trefoil
1	Plantago lanceolata	Ribwort Plantain
0.2	Primula veris	Cowslip
1.5	Prunella vulgaris	Selfheal
2.5	Ranunculus acris	Meadow Buttercup
1.5	Rhinanthus minor	Yellow Rattle
1.5	Rumex acetosa	Common Sorrel
1	Sanguisorba officinalis	Great Burnet
0.2	Silene flos-cuculi	Ragged Robin
0.6	Succisa pratensis	Devil's-bit Scabious
0.5	Vicia cracca	Tufted Vetch
20		
Grasses		
10	Agrostis capillaris	Common Bent
2	Alopecurus pratensis	Meadow Foxtail
2	Anthoxanthum odoratum	Sweet Vernal-grass
1	Briza media	Quaking Grass
32	Cynosurus cristatus	Crested Dogstail
1	Deschampsia cespitosa	Tufted Hair-grass
24	Festuca rubra	Slender-creeping Red-fescue
1	Hordeum secalinum	Meadow Barley
7	Schedonorus pratensis	Meadow Fescue
80		



KEY

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- Existing hedgerow to be retained and maintained to a minimum height of 2.5m strengthened with infill planting where required
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- NB Noticeboard at entrance to Biss Wood
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  - Information on the space
  - Name and telephone number of the operator of the facility with an invitation to report any incident or damage
- Proposed long meadow grassland e.g Emorsgate EM4
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- Butterfly bank
- Hibernacula for reptiles and amphibians
- Habitat pile for reptiles, amphibians and invertebrates
- Hibernaculum for Lesser Horseshoe Bats
- Barn owl box on tree or pole if no suitable trees

LOCATION PLAN

0 50m

Revisions:
First Issue- 09/12/2022 ASK
A- (21/05/2024 ASK) Revised to client comment - additional fencing around SUDS Basin) Sheet 2 and 4 only

Detailed Planting Plans (Sheet 4 of 4)

West Ashton - Trowbridge CON4/5 Biss Wood Buffer

Client: Persimmon

DRWG No: P22-2219_EN_002

REV: A Sheet No: 4 Drawn by : ASK

Date: 21/05/2024 Approved by: ASK

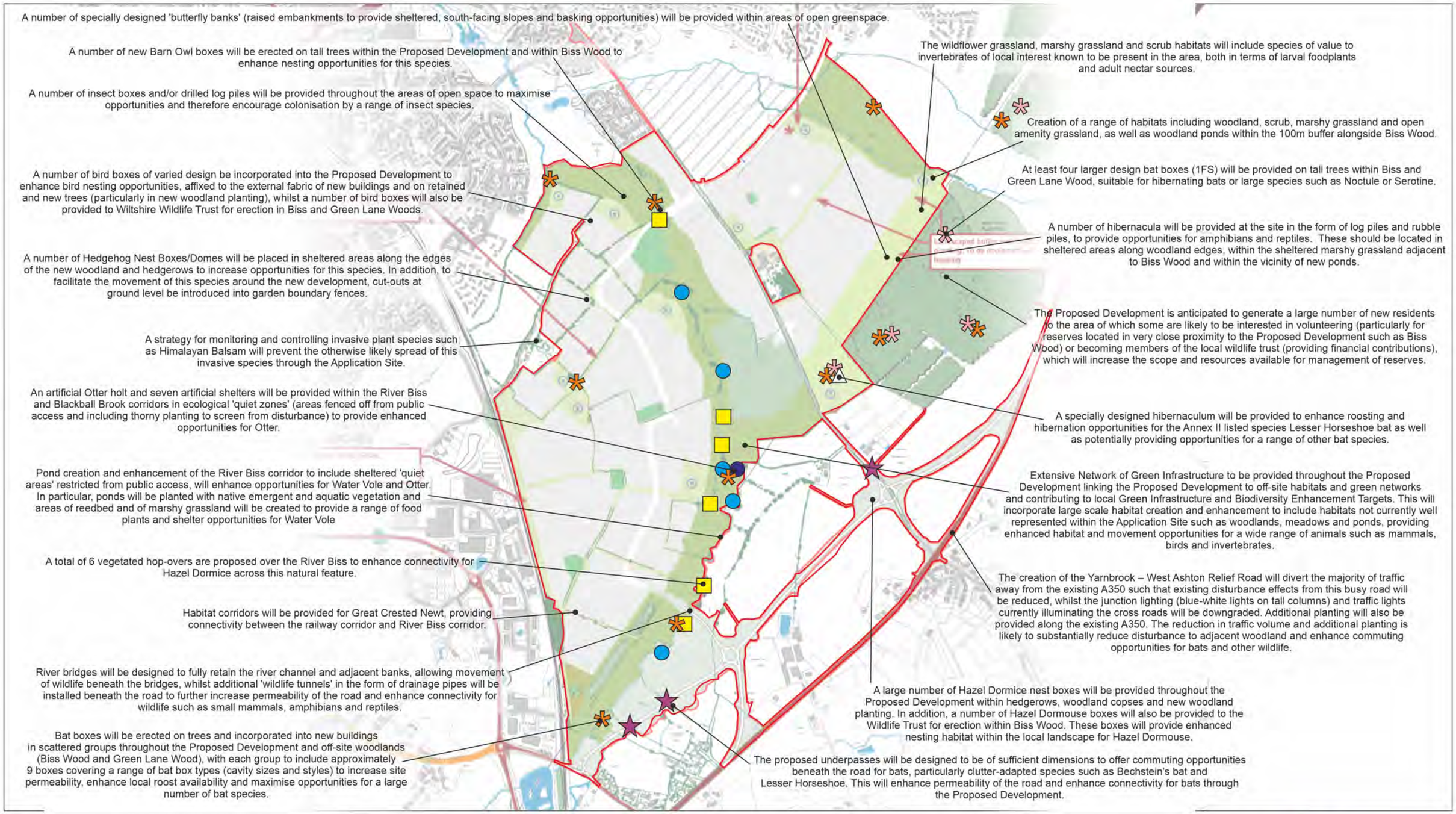
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Appendix EDP 3[3]
Indicative Ecological Enhancements

[3] Enhancements provided in this CEMP could be subject to change at reserved matters stages to discharge Condition 29. Any changes that deviate from details presented in the ES and supporting documents must be fully justified and approved by Wiltshire Council's ecology team in liaison with Natural England).



KEY:

- SITE BOUNDARY
- MAJOR OPEN SPACE & NATURE PARK EXTENSION
- INFORMAL RECREATION/LANDSCAPING
- WOODLAND
- TREES
- RIVER BISS
- PROPOSED UNDERPASS (ADDITIONAL TO 'MITIGATION' UNDERPASSES ALONG BECHSTEIN'S FLIGHT-LINES)
- LESSER HORSESHOE HIBERNACULUM*
- GROUP OF BAT BOXES*
- BAT HIBERNATION BOX*
- DORMOUSE RIVER CROSSING*
- OTTER HOLT*
- OTTER SHELTERS*

* Locations of proposed faunal enhancements are indicative only

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Ashton Park, Trowbridge — PROJECT
Ecological Enhancements — TITLE
1878/Figure 6.23a — DRAWING NO.
B — REV
February 2024 — DATE

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Appendix EDP 4
YWARR – Specific Ecological Mitigation Information

A4.1 To fulfil planning condition 20 the following specific ecological mitigation is required with regard to the Yarnbrook and West Ashton Relief Road (YWARR):

- "*Long and cross sections for each underpass based on site surveyed; measurements showing the relative positions of hedgerows, existing ground levels, earthworks and underpass;*
- *The timetable of works required to complete the culvert works having regard to seasonal ecological and planting constraints;*
- *The programme of construction works to demonstrate how the ecological constraints of the culverts works have been fully integrated into the project programme (i.e. Gantt chart) and how it affects the critical path.*
- *A protocol for constructing underpasses and hop-overs including exact timescales, demonstrating removal of as little hedgerow as possible, erection of 4m high bat fencing and establishing new planting.*"

CONNECTIVITY MEASURES

A4.2 The agreed location for connectivity measures, of which 7 are underpasses are indicated in **Appendix EDP 12**. Vegetative links/'hop overs' are indicated on **Appendix EDP 13** where dense planting will be planted to give 'instant' height. In addition, these connectivity measures/crossing points are designed to ensure the YWARR is fully permeable to Bechstein's bats.

A4.3 Detailed designs, including both long and cross sections have also been developed and are included in **Appendix EDP 13**. The designs have been developed in accordance with recommendations set out in the ES Chapter.

Ecological Protection Zones

A4.4 Habitats affected by construction must follow all requirements set out in the main body of this CEMP. The EPZs will protect retained habitats and will ensure any removal of hedgerow network is minimised to that working room required to create the underpass or bridge.

A4.5 A suitably qualified engineer must mark out the location of all underpasses in advance of construction to ensure that they are situated centrally on the route of the existing flanking hedgerow. This will be checked by the ECoW to ensure there will be an uninterrupted route from the hedgerow to the underpass.

A4.6 A suitably qualified engineer must mark out the location of the working room required for the bridges to ensure EPZs can be set out around retained habitats. Marking out must also be overseen by the ECoW to ensure EPZs are accurately measured. The road bridges are

designed to retain the riverbank and associated vegetation on either side of the river channel, and it will be important to protect this habitat to allow bats to continue to fly at existing heights and below the new bridges.

Management of Hedgerows at Underpasses

A4.7 The hedgerows on either side of each underpass will be reduced in height, taking into account other protected species constraints described in the main body of the report) to reduce the height at which Bechstein's bats currently fly so that they will enter the underpass without having to make any significant adjustments to their flight. The height of the hedges will be assessed by the ECoW prior to commencement and the reduction in height will be advised accordingly and taking into account the specific design of each underpass.

Management of Hedgerows at Hop Overs

A4.8 During construction, and before it is possible to plant any vegetation, 2m high acoustic fencing will be installed as shown on detailed plans in **Appendix EDP 12**. Existing hedgerows leading up to the hop over will be allowed to grow tall to encourage bats to fly at height and continue to fly above the fence at height as well.

A4.9 To fully address the wording in condition 20, the inclusion of 4m high fencing will need to be presented on finalised design plans.

Lighting

A4.10 A specific lighting scheme has already been designed for the proposed YWARR. The YWARR will be unilluminated, except at a proposed roundabouts/one of the three bridges proposed (Bridge 3/Roundabout 3). Light spill will be below 1lux where possible through careful selection of column positions and minimising column heights. In addition. Lighting power will reduce to 75% from 20:00 to 23:00 and to 50% from 23:00 to 06:00 to further minimise light-spill during these times when bats are most active.

LEMP

A4.11 A detailed LEMP must be produced, similar to that produced for the advanced mitigation planting to ensure the specified planting is delivered and becomes appropriately established. This document will also set out the long-term management of this habitat to maximise connectivity and directional aids to the hop overs and underpasses to minimise the risk of road related mortality. Monitoring must be specified as well as the requirement for remedial measures and timescales for remediation.

A4.12 At full maturity, hop-overs will comprise trees of a minimum height of 5-6m on either side of the road which will reduce the width of the gap created by the road itself and flanking commuting habitat. The planting of extra heavy standard trees must be captured in a LEMP designed for the YWARR, as well as other dense planting which will fill out the hop over feature and maximise the extent of green coverage leading up to the road (refer to **Appendix EDP 13**).

A4.13 The planting of rowan, field maple, bird and wild cherry as well as alder and oak are considered the most appropriate species to select when creating the landscape elements of the hop overs. Species, size and density must be specified on detailed landscape plans.

A4.14 It is the responsibility of the Principal Contractor to ensure that obligations of any approved LEMP are delivered in conjunction with an approved CEMP as this will ensure compliance with Planning Condition 22 and specific obligations relating to the YWARR.

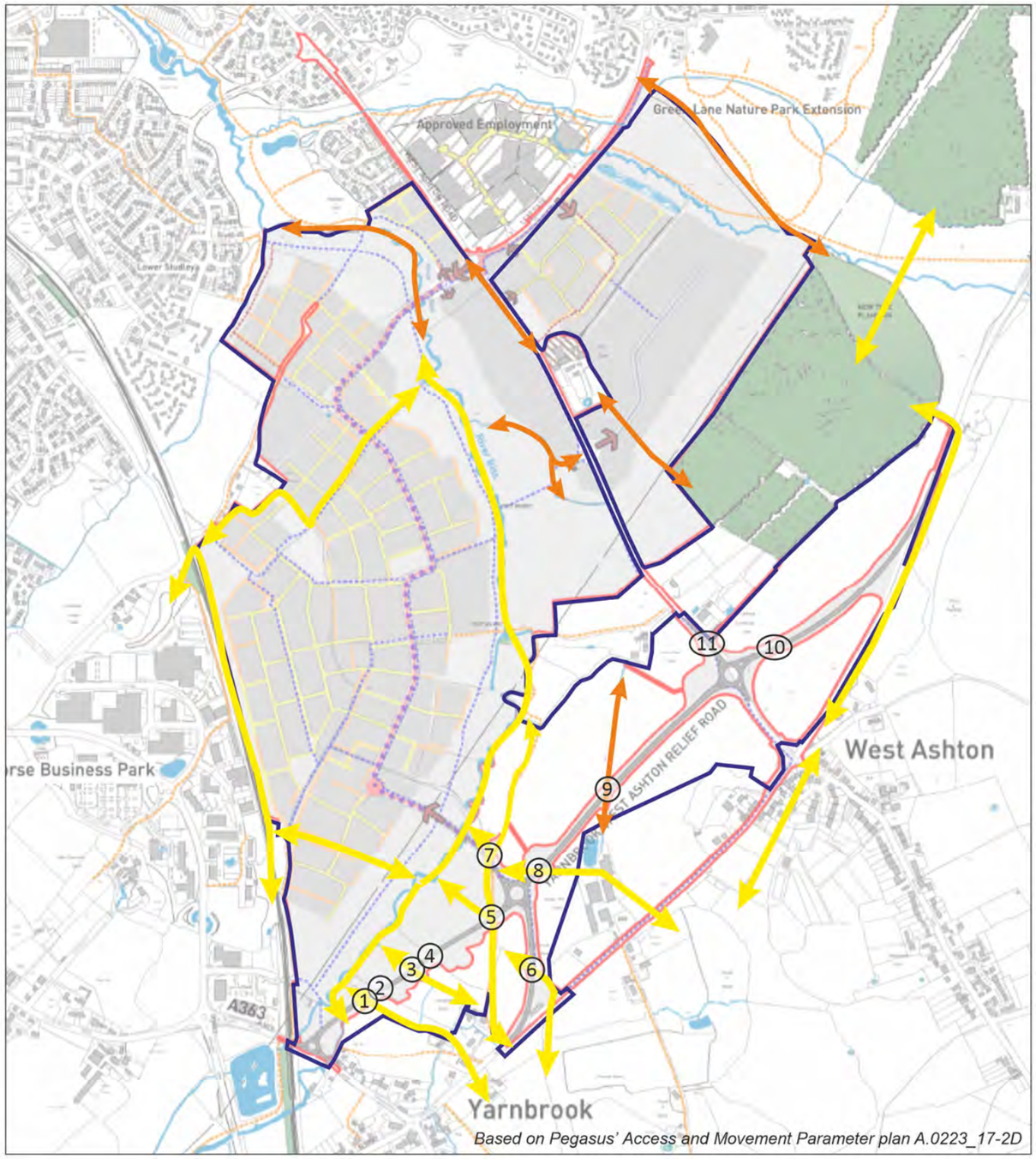
A4.15 The ECoW will also be responsible for reporting on compliance to the LPA in accordance with Planning Condition 22.

Timescales

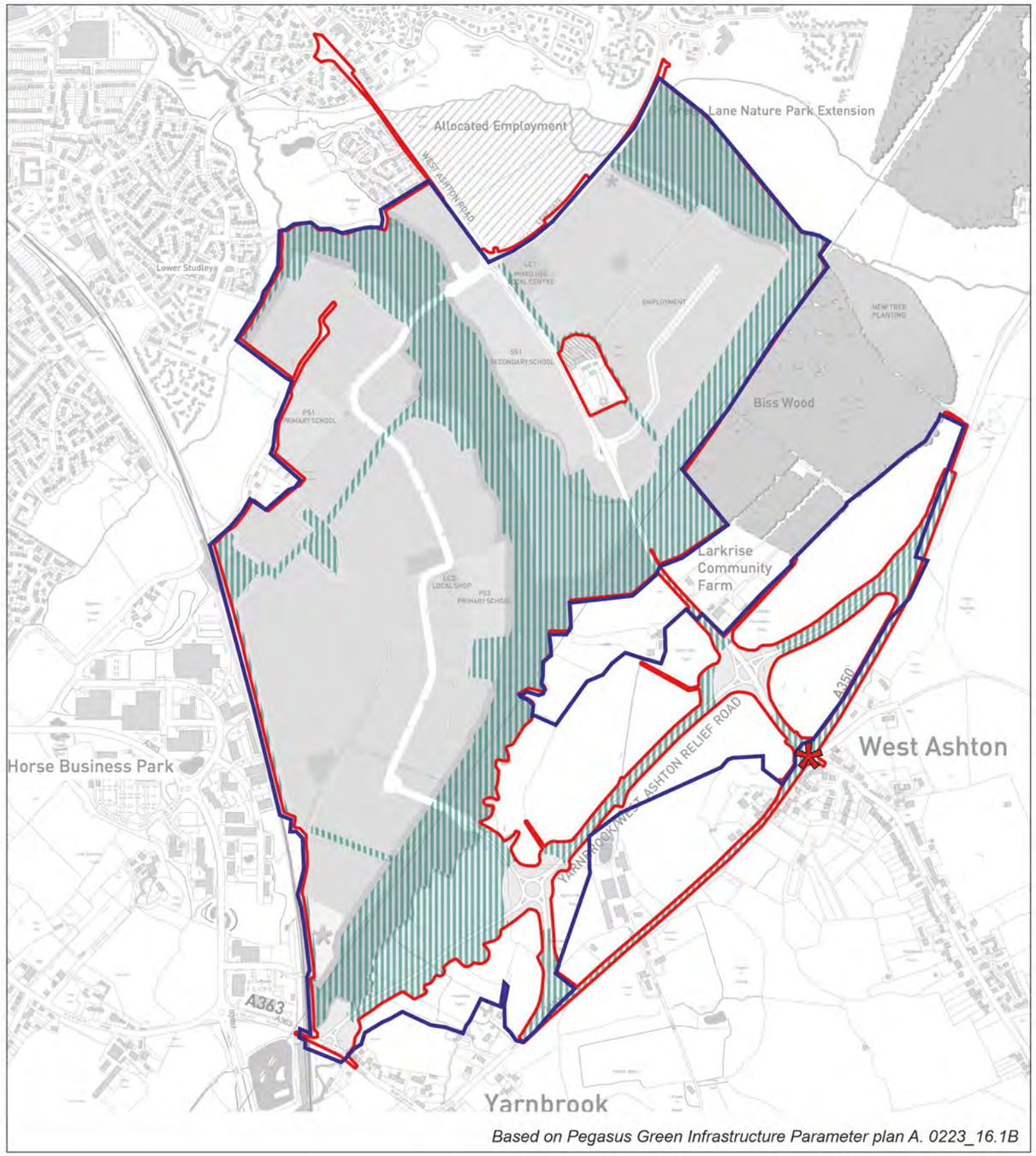
A4.16 Underpasses must be programmed for creation at an early point in the construction of the YWARR. A Gantt chart should be produced to show when each connectivity feature will be constructed. The permeability of the new road should be prioritised to enable bats to move freely through the YWARR and have access to the remainder of the Site.

A4.17 Some or all of the underpasses should be constructed during the winter period, typically between November and February, when bat activity is markedly reduced. This will limit the duration in which connectivity is disrupted.

Appendix EDP 5
Bat Flight Lines and Lighting Plan and Dark Habitat Cross Sections



Based on Pegasus' Access and Movement Parameter plan A.0223_17-2D



Based on Pegasus Green Infrastructure Parameter plan A. 0223_16.1B

KEY:

- Site Boundary
- Study Area Boundary
- Bechstein's Bat Flight Lines*
- Other Bat Species Flight Lines
- (1) Crossing Point Reference Number
- Demotion of Junction and Removal of Lighting
- Dark corridor subject to light levels not exceeding 0.2 lux on the horizontal plane and 0.4 lux on the vertical plane

** The flightlines shown in this plan represent routes within or immediately adjacent to the Site recorded to be used by radio-tracked Bechstein's bats. Additional flightlines and foraging areas were recorded off-site which are not shown on this plan.*

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Ashton Park, Trowbridge — PROJECT
Bat Flight Lines and Lighting — TITLE

1878/Figure 6.4a — DRAWING NO.
C — REV.
February 2024 — DATE

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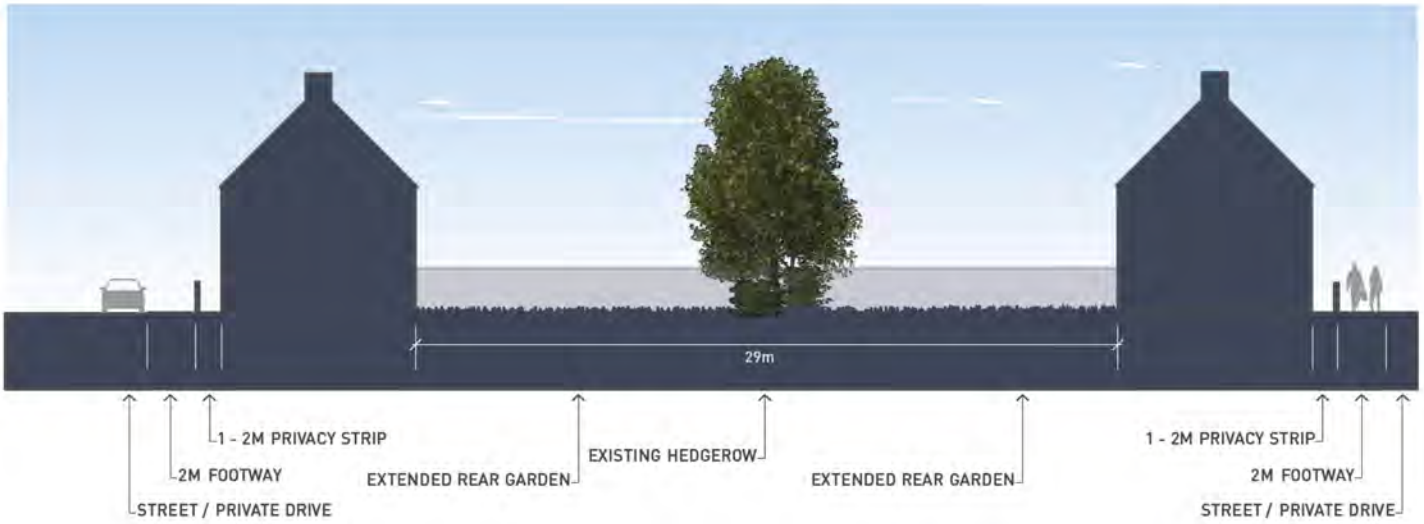


Image 1 - Lighting treatment, zone E1 (Primary dark bat habitat corridor), within public open space of minimum 16.5m width.

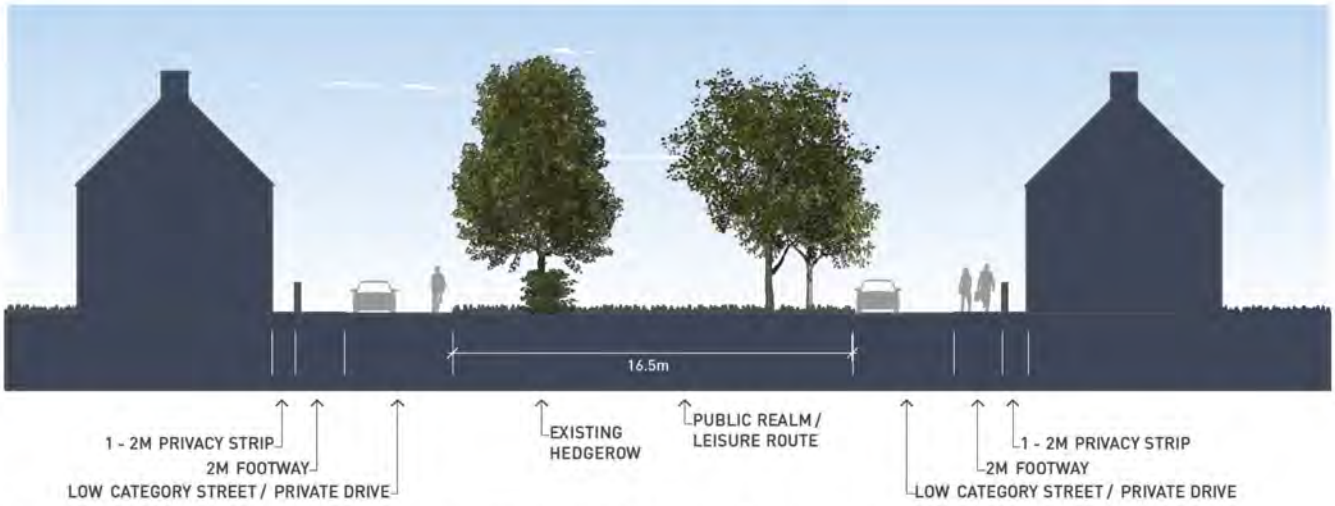


Image 2 - Lighting treatment, zone E2 (Secondary dark bat habitat corridor)

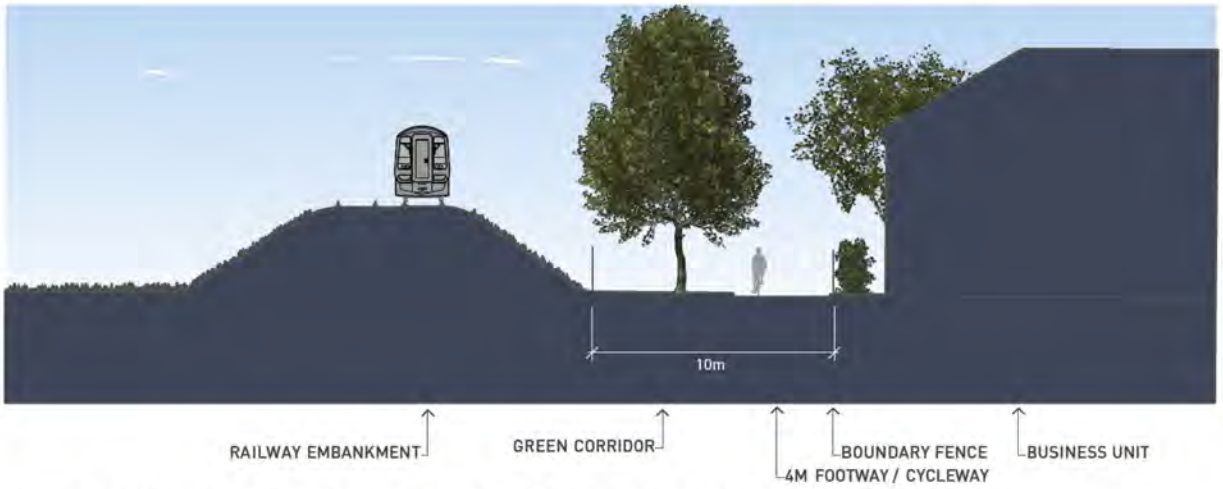


Image 3 - New wooded dark bat habitat corridor linkage along Wessex mainline railway.

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Appendix EDP 6
Indicative Skylark Plots



KEY:

- FENCED SKYLARK HABITAT ENCLOSURES (25 SQM)
- ASHTON PARK APPLICATION AREA
- PROPOSED RESIDENTIAL AND STREET PATTERN
- PROPOSED EMPLOYMENT
- PROPOSED LOCAL CENTRE
- PROPOSED SECONDARY SCHOOL SITE
- PROPOSED PRIMARY SCHOOL
- MAIN STREETS
- PROPOSED YARNBROOK/WEST ASHTON RELIEF ROAD
- PROPOSED VEHICLE ACCESS POINT
- FOOT / CYCLEWAY / EMERGENCY ACCESS
- FORMAL SPORTS PITCHES
- 100M ECOLOGICAL BUFFER
- INFORMAL RECREATION/LANDSCAPING
- MAJOR OPEN SPACE AND COUNTRY PARK EXTENSION
- EXISTING TREES AND HEDGES
- CHILDRENS PLAY AREAS
- DESTINATION PLAY AREA INCORPORATING NEAP & LEAP
- ECOLOGICAL VISITORS FACILITY
- POTENTIAL ALLOTMENTS
- TOUCAN CROSSING
- PROPOSED TREE PLANTING
- EXISTING PUBLIC RIGHT OF WAY
- PRIMARY FOOTPATHS
- PRIMARY ON AND OFF STREET FOOT/CYCLE ROUTE
- PROPOSED BUS ROUTE
- FLOOD ATTENUATION AREA

BASED ON PEGASUS' "INDICATIVE MASTERPLAN" A.0223_77 Rev Q

Ashton Park, Trowbridge	PROJECT
Skylark Plots	TITLE
1878/Figure 6.22	DRAWING NO.
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February 2024	DATE

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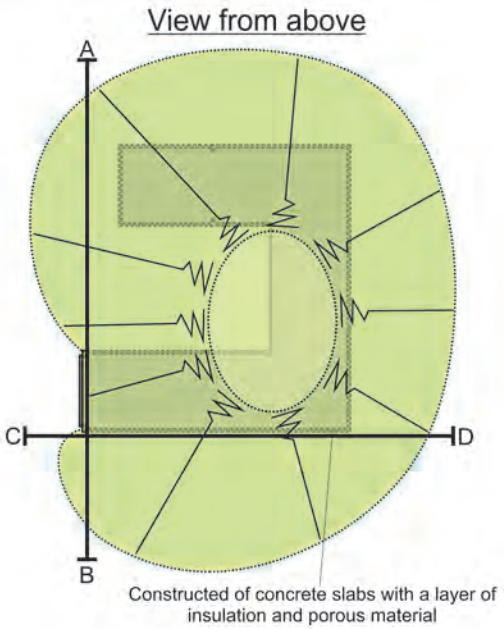
Appendix EDP 7
Lesser Horseshoe Hibernaculum Specification

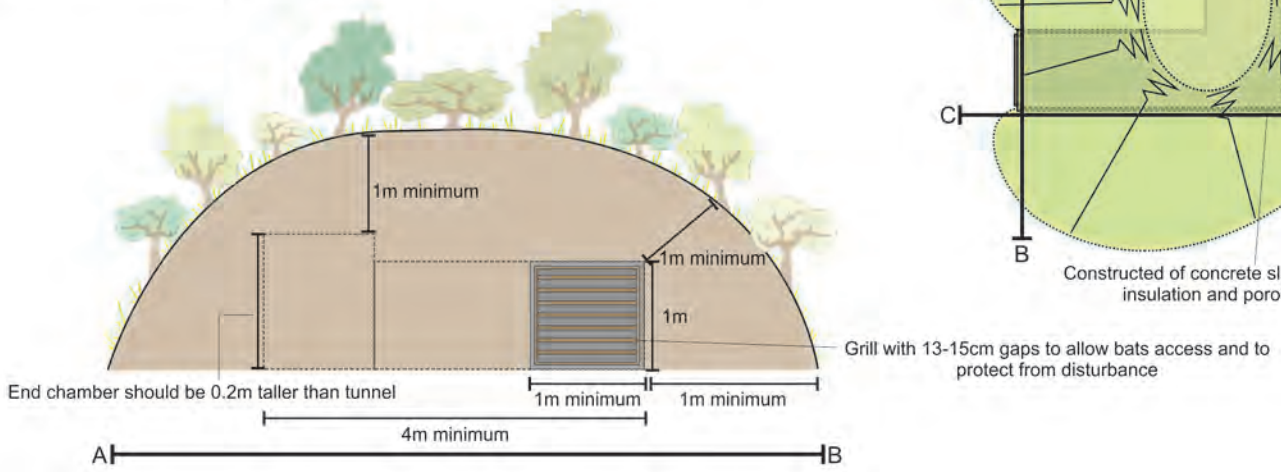
Lesser Horseshoe Hibernaculum

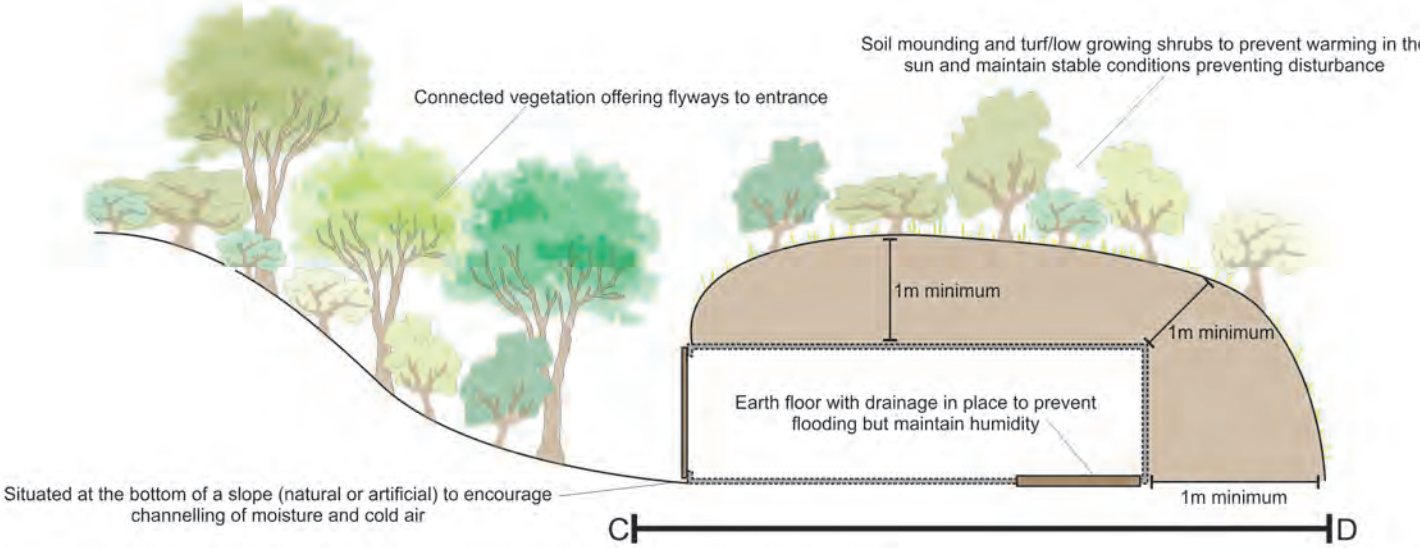
Lesser Horseshoe Bat *Rhinolophus hipposideros* is one of the smallest British bat species, which roosts by hanging upside down in open voids. Like other bat species, Lesser Horseshoe Bat requires cool, stable and humid conditions to hibernate during winter months such that it is typically recorded hibernating in caves and mines underground.

In order to offer suitable hibernation opportunities for this and other bat species, an artificial hibernaculum should therefore ideally be:

- Stable temperature of 6-7°C and close to 100% humidty;
- Connected to suitable foraging habitat such as woodlands or ponds by vegetated flightlines;
- Prevented from disturbance (achieved by grills over the entrance and siting underground); and should
- Provide a variety of perching opportunities at different heights and sufficient flight space.







Based on recommendations within Schofield 2008 Lesser Horseshoe Conservation Handbook.

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Lesser Horseshoe Hibernaculum Specifications

TITLE

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Appendix EDP 8
Otter Holt and Shelter Specification

Otter Holt & Shelters

Otter holts are structures used by Otters for breeding and raising young, whilst Otter shelters provide resting and sheltering opportunities for Otters away from the main holt.

- Otter holts and shelters should be surrounded by fenced secluded areas of suitable habitat (e.g. alongside sections of watercourses offering foraging opportunities) where they will remain undisturbed.
- The holt should be sited above the winter flood level. Shelters should be provided at varied levels with some above winter flood height.
- Durable materials should be used to ensure longevity.

Otter Holt

Example Otter Holt (Filcris) - http://www.filcris.co.uk/products/product-details/otterholt



Otter holt assembled and installed before lid is attached.

- The holt has both a front and rear entrance hole and an internal chamber 600mm x 600mm. While this may appear small, research has confirmed that female otters prefer a confined space in which to rear their young.

- The holt should be constructed above ground level on top of a free-draining surface (e.g. gravel).

- The top is crenelated to improve ventilation, so the holt can be partially buried and the top covered in turves or brash. Alternatively the holt can be completely buried, but ensure that ventilation is added.

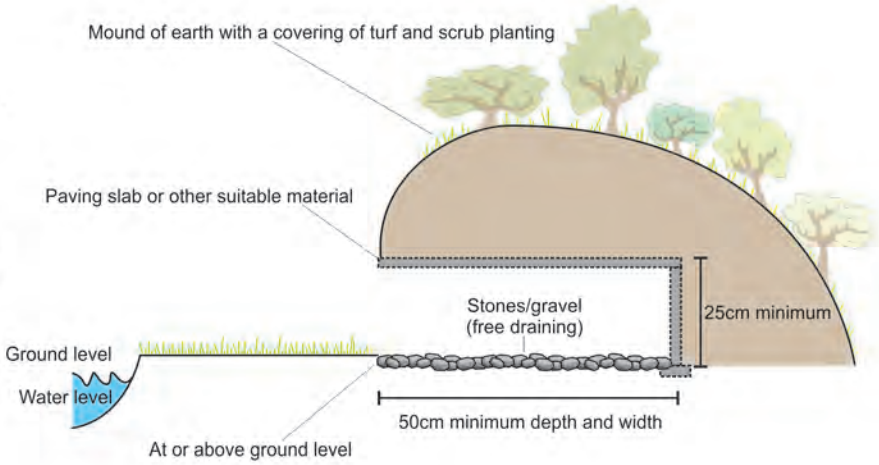
- Rough concrete pipes provide good grip for access tunnels (minimum 24cm).



Finished otter holt buried beneath turves and brash.

Otter Shelter

A simple artificial shelter can be made using log piles, rough stones, breezeblocks or paving stones to provide an enclosed space which is dry and hidden. This structure can be partially buried or covered with turf to incorporate it into a more natural setting. It can be sunk into the ground if a drain is fitted so that it does not flood.



Photographs taken from www.filcris.co.uk/case-studies/surrve-wildlife -trust-otter-holt

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Otter Holt & Shelter Specifications

TITLE

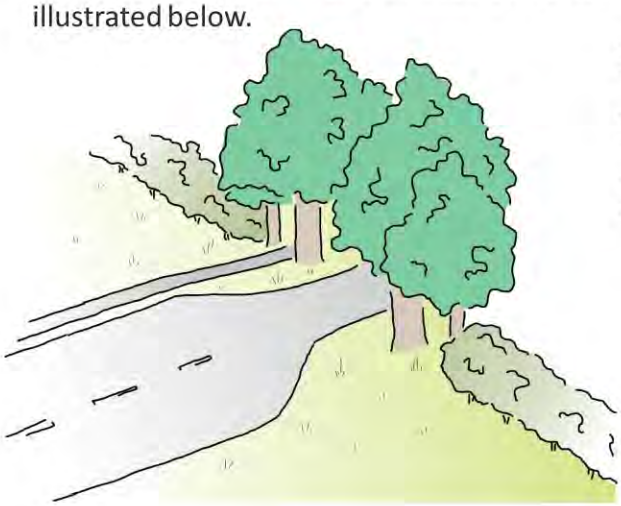
Appendix EDP 9
Ecological Connectivity – Dormouse 'Hop-overs' and Indicative Dormouse Mitigation

Ecological Connectivity

Dormouse 'Hop-overs'

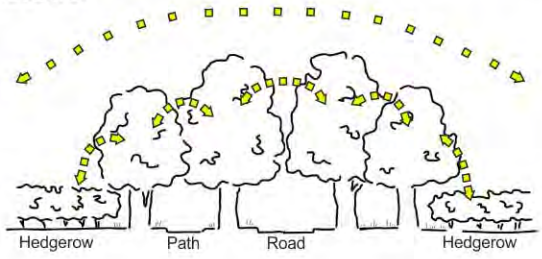
Dormouse are arboreal mammals and as such they favour continuous wooded vegetation cover for movement between habitat areas (such as hedgerows or wooded strips). The creation of gaps within such vegetation features for new road access has the potential to cause fragmentation and isolation of Dormouse populations by disrupting dispersal routes. As such, it is proposed that these road crossings (where required) are designed to reduce loss of habitat connectivity through the provision of Dormice 'hop-overs', with the aim of maintaining continuous canopy cover across the road crossing. These features will also benefit other species which require continuous wooded habitat links, such as bats.

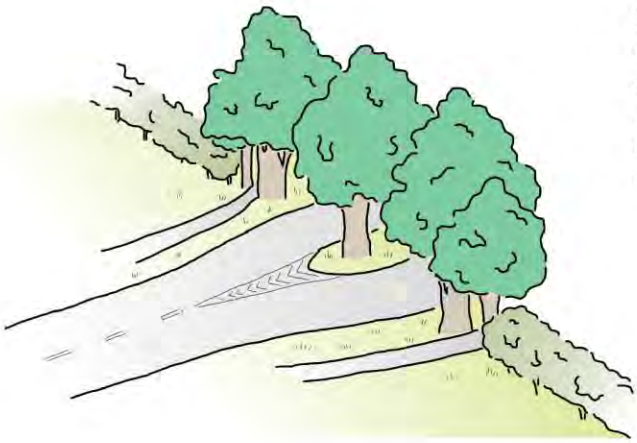
The key design objective for a 'hop-over' is to narrow the span of the road as far as possible such that a continuous canopy can be provided across the carriageway. Large standard trees can be retained or planted either side of the carriageway to provide a canopy height sufficient for vehicles to pass underneath (approx. 4m), whilst allowing the canopy to meet overhead forming connectivity for Dormice across the gap. Hop-overs should be unlit and connected to established wildlife corridors. There are two broad designs, as illustrated below.



Single hop-over over road

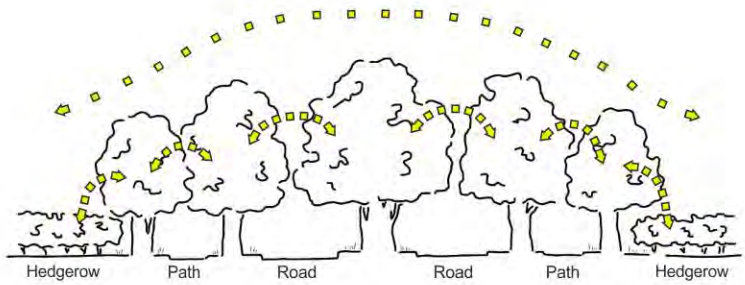
The road narrows as much as possible at the crossing point (to a single carriageway if feasible), with pedestrian access restricted to one side of the road if feasible. This design minimises the width of the vegetation corridor that is affected by the works and can be incorporated as a traffic calming measure.



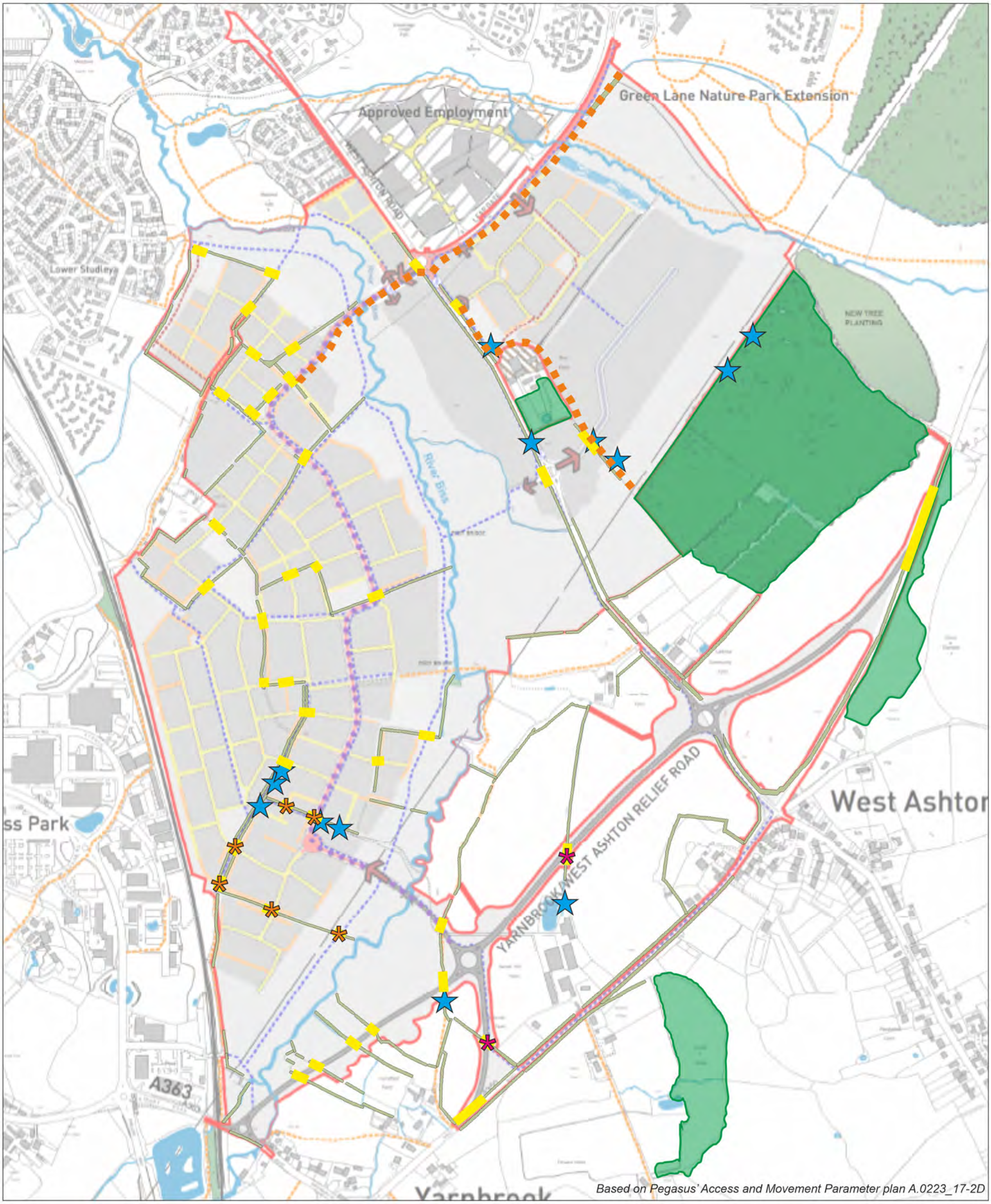


Multiple hop-overs with split carriageway

Alternatively, the road could split into two separate carriageways at the crossing point and a central vegetated island used to maintain connectivity. This design allows a hop-over to be established more rapidly than over a standard 2-way road. A footpath can be provided on both sides of the carriageway, but these may need to be split from the road to reduce the width and ensure a continuous canopy.



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Background Key:

- Dormouse Nest Recorded
- High Quality Habitat Blocks
- New Severance of Habitat
- Hedgerow

MITIGATION KEY:

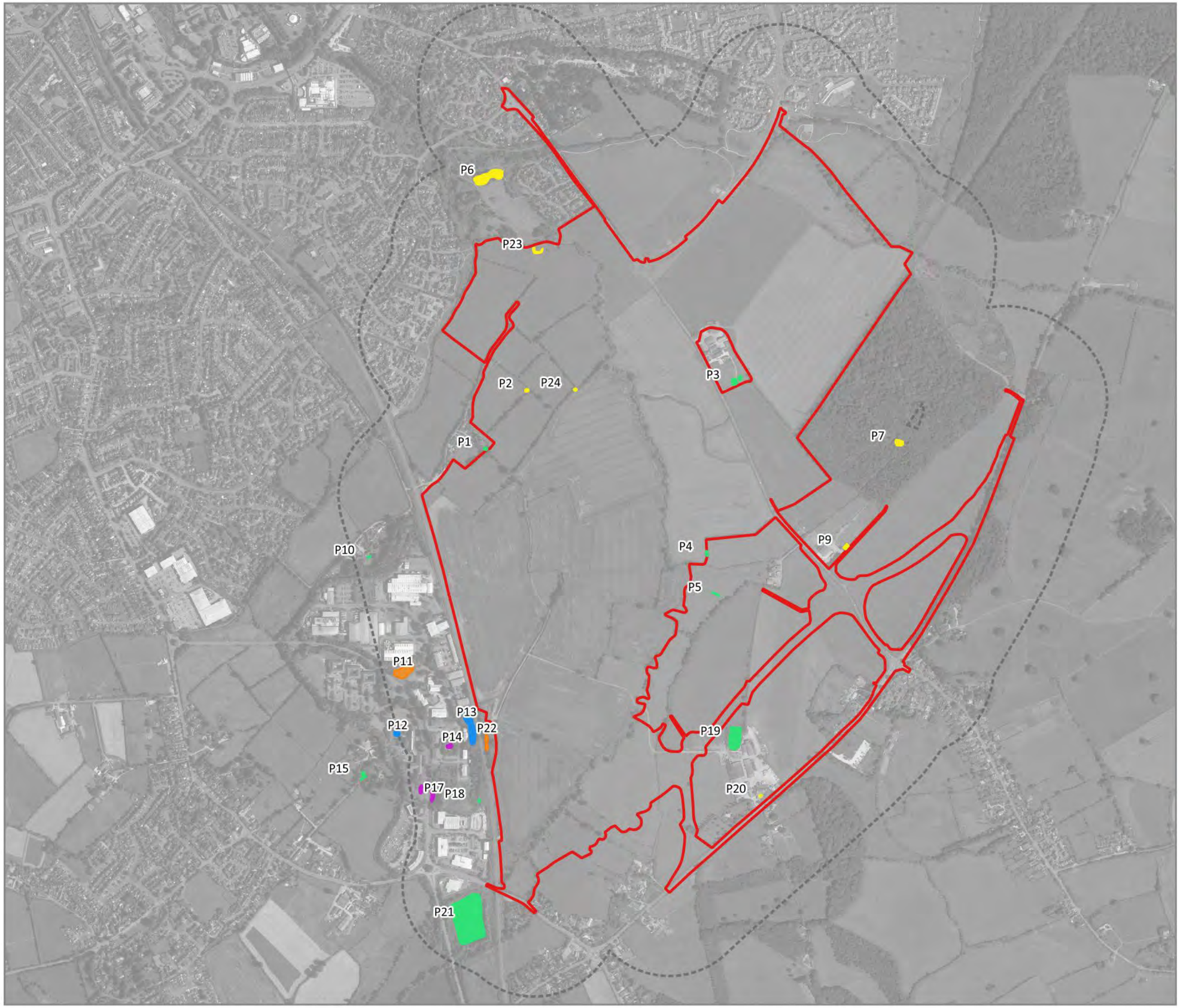
- Hop over
- Bat hop over - designed for bat species but will also enhance connectivity for dormouse
- New linear habitat link enhancement, diverse food plants and structural cover / connection

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Noral Way - Banbury - Oxfordshire - OX16 2AF
01295 276066 - info@aspect-ecology.com - www.aspect-ecology.com

Ashton Park, East Trowbridge	PROJECT
Indicative Dormouse Mitigation	TITLE
1878/Figure 6.20a	DRAWING NO.
C	REV.
February 2024	DATE

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Appendix EDP 10
Great Crested Newt Survey Results



Key:

- Site Boundary
- 250m Site Buffer
- Population Surveys - Medium Population
- Population Surveys - Small Population
- Population Surveys - No Newts Found
- eDNA Survey - Negative Result
- Pond – No Access Granted / No Longer Present

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Ashton Park, Trowbridge	PROJECT
Great Crested Newt Survey Results	TITLE
1878/ECO8	DRAWING NO.
A/CN	REV
February 2024	DATE

P:\Project\Aspect Ecology Projects\ECO 1850\ECO 1878\Graphics\QGIS\1878_ECO8.qgz

Map data ©2024 Google. Aspect Ecology Ltd, West Court, Hardwick Business Park, Noral Way, Banbury, Oxfordshire, OX16 2AF.

Appendix EDP 11
Example of Wildlife Friendly Kerb for Amphibians

ACO Wildlife Kerb

Amphibians naturally proceed along any vertical barrier they meet. In a road situation, this is a kerb line where it meets the road surface. When they encounter a gully pot where there is no gap between it and the vertical kerb face, they often fall in.

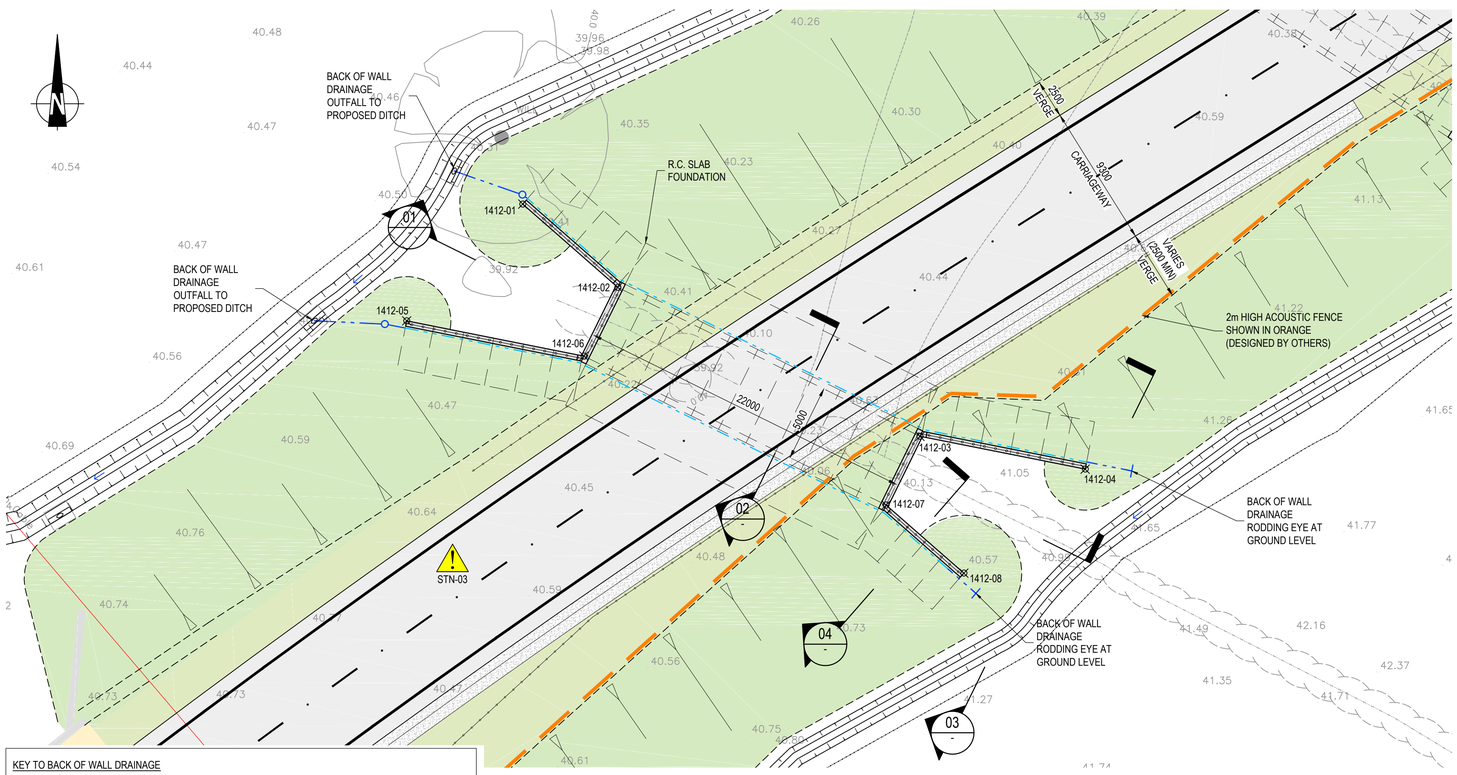
ACO Wildlife Kerb is designed to counter this problem by providing a 'bypass pocket' set into the kerb. When installed it is positioned so that the gully is in the middle of the Wildlife Kerb. Then when an amphibian arrives at the 'bypass pocket' it naturally moves into the kerb and safely passes the gully.



Available from www.aco-technologies.com.

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Appendix EDP 12
Bat Underpass and General Arrangement

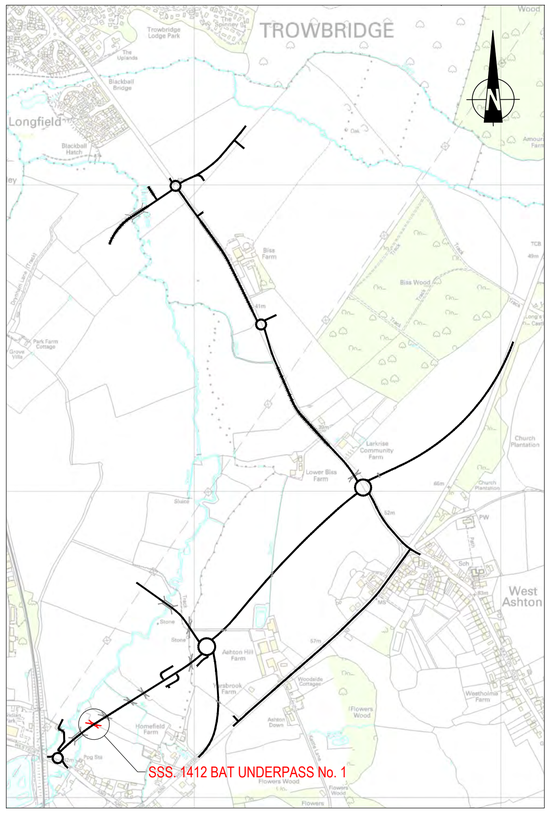


PLAN
1:200

KEY TO BACK OF WALL DRAINAGE

ID 150mm PERFORATED PIPE, SEE BACK OF WALL DRAINAGE SECTION FOR DETAILS

ID 150mm NON-PERFORATED PIPES AND BENDS TO BE LAID ON BEDDING TYPE Z IN ACCORDANCE WITH HCD F1 STANDARD DETAIL



LOCATION PLAN

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0100.3 FOR TYPICAL DETAILS REFER TO DRAWING No. 45196-STN-SSS-1412-DR-CB-0111.

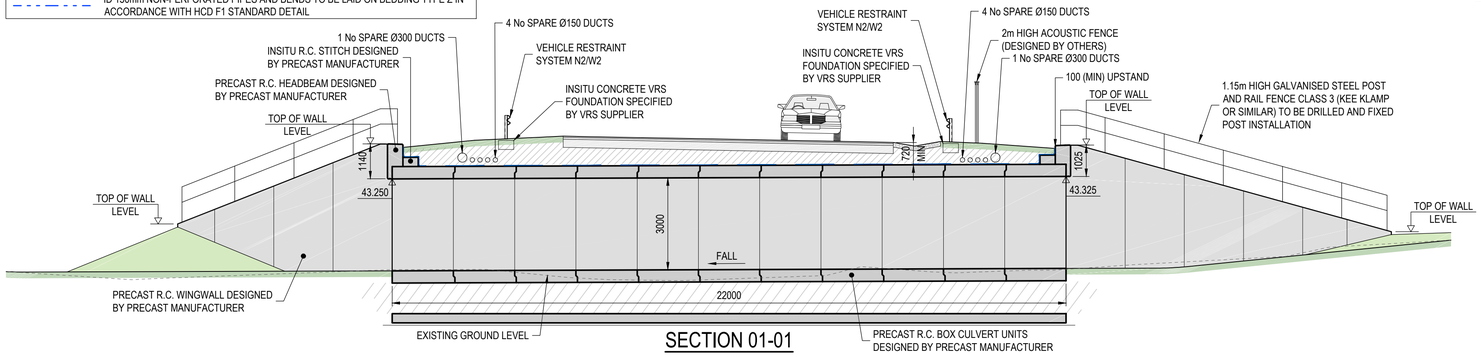
CDM, HEALTH, SAFETY AND ENVIRONMENTAL NOTES

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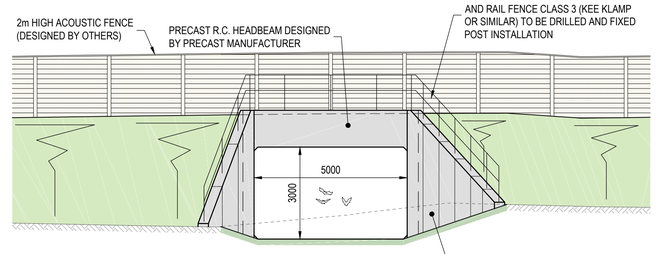
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STN-02	CONSTRUCTION VEHICLES MAY WISH TO TRAFFIC OVER BOX CULVERT BEFORE ROAD OPENS. CONTRACTOR TO REFER TO PRECAST DESIGNER FOR ALLOWABLE LOADS.	C
STN-03	EXISTING SERVICES TO BE DIVERTED.	C
STN-04	GROUNDWATER IS EXPECTED TO BE CLOSE TO EXISTING GROUND LEVEL.	C, D

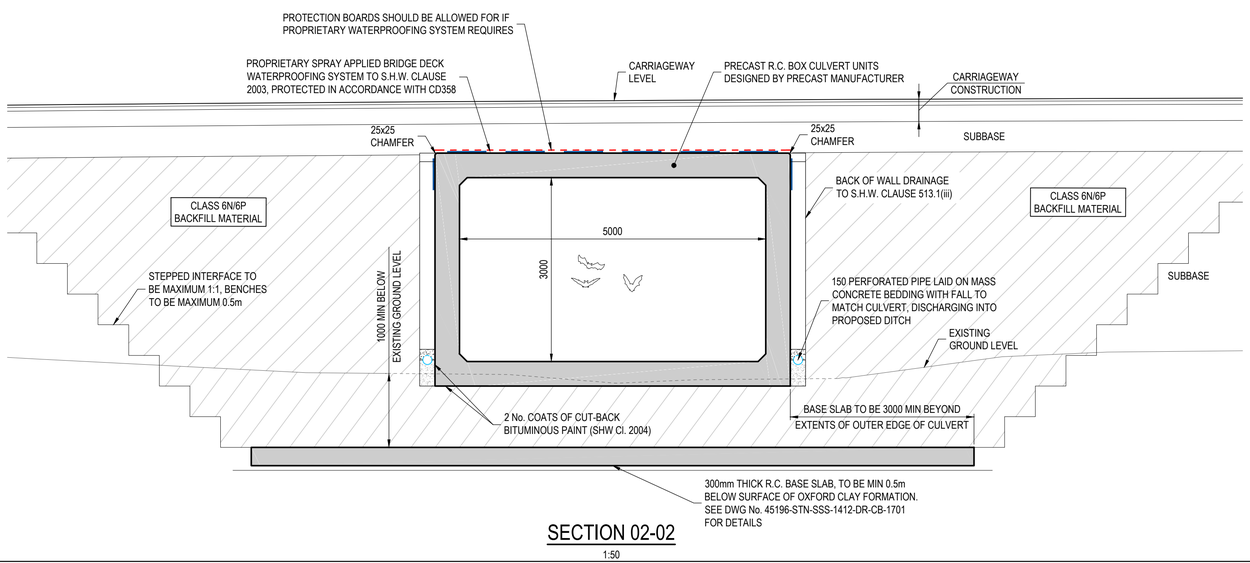


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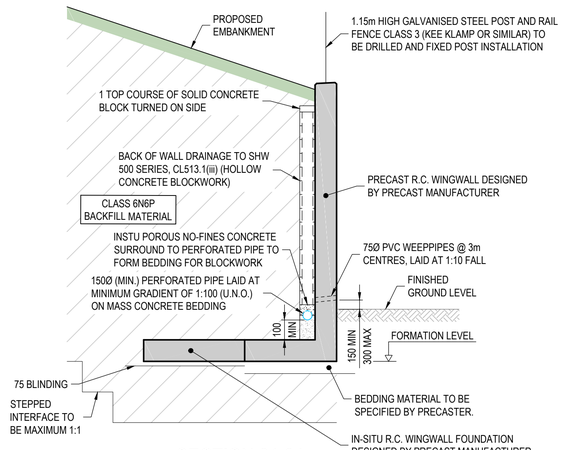
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1412-03	386682.897	155236.852	44.350
1412-04	386693.689	155234.708	42.705
1412-05	386649.381	155244.388	41.430
1412-06	386660.955	155242.090	44.390
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ELEVATION 03-03
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SECTION 02-02
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SECTION 04-04
1:50

Mark	Revision	Date	Drawn	Chkd	Appd
C01	FOR CONSTRUCTION ISSUE	28/03/22	CRD	JAS	PC

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Drawing Issue Status

CONSTRUCTION

YARNBROOK AND WEST ASHTON RELIEF ROAD AREA 1A
BAT UNDERPASS 1. STRUCTURE No. 1412 GENERAL ARRANGEMENT

Client ASHTON PARK TROWBRIDGE LTD AND PERSIMMON HOMES LTD

Date of 1st Issue	Designed	Drawn
03.03.2020	GG	CRD
A1 Scale	Checked	Approved
As Indicated	JWS	JWS

Drawing Number: 45196-STN-SSS-1412-DR-CB-0101

Revision: C01

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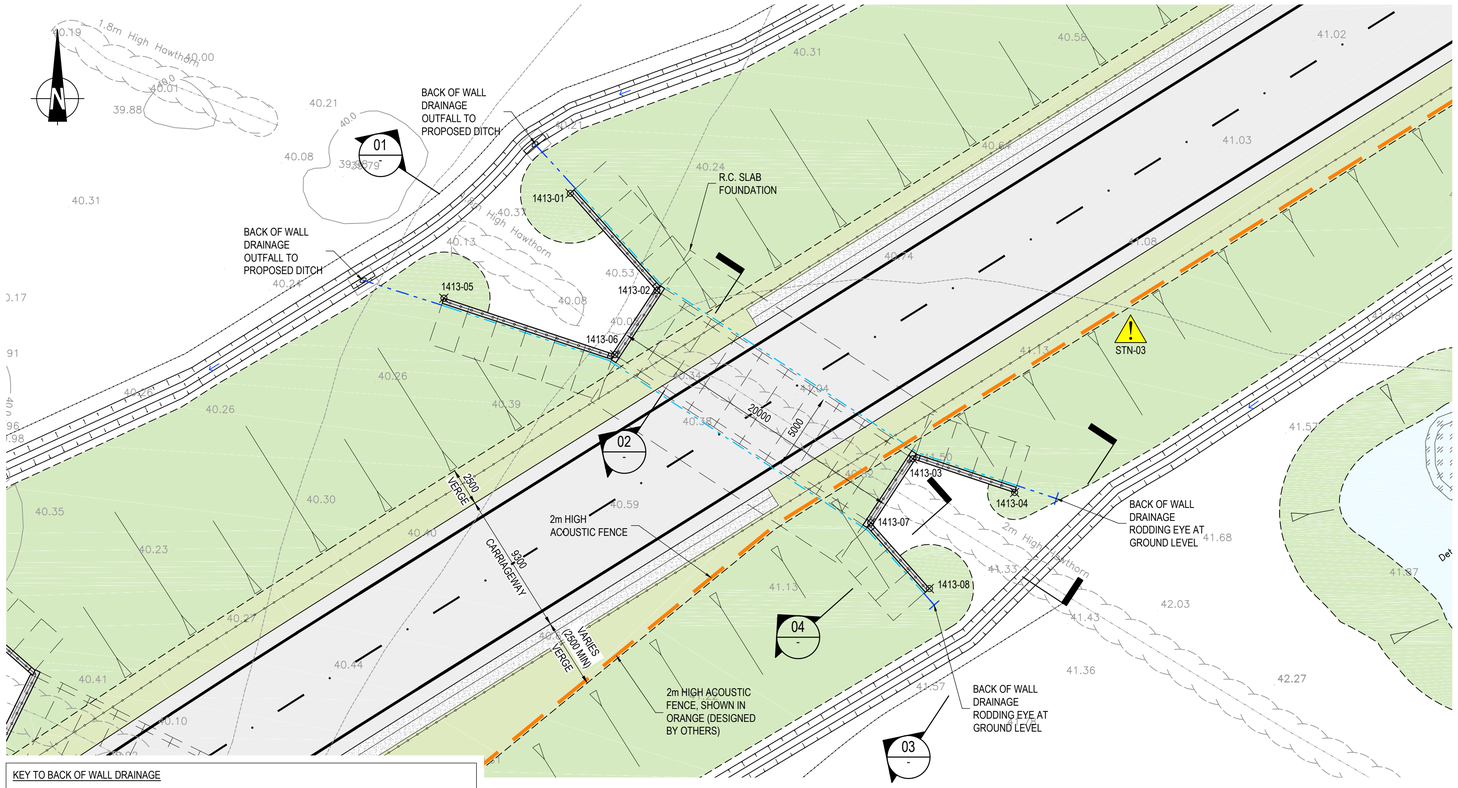
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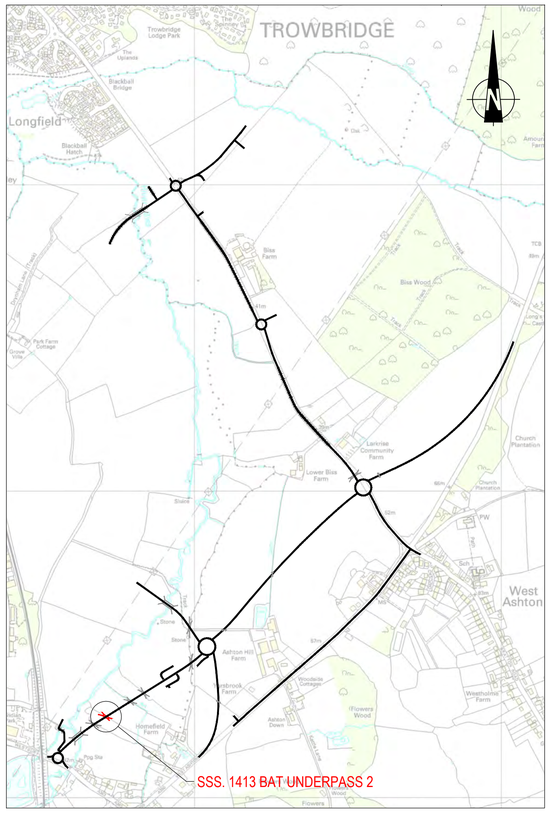
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ID 150mm NON-PERFORATED PIPES AND BENDS TO BE LAID ON BEDDING TYPE Z IN ACCORDANCE WITH HCD F1 STANDARD DETAIL



LOCATION PLAN

NOTES

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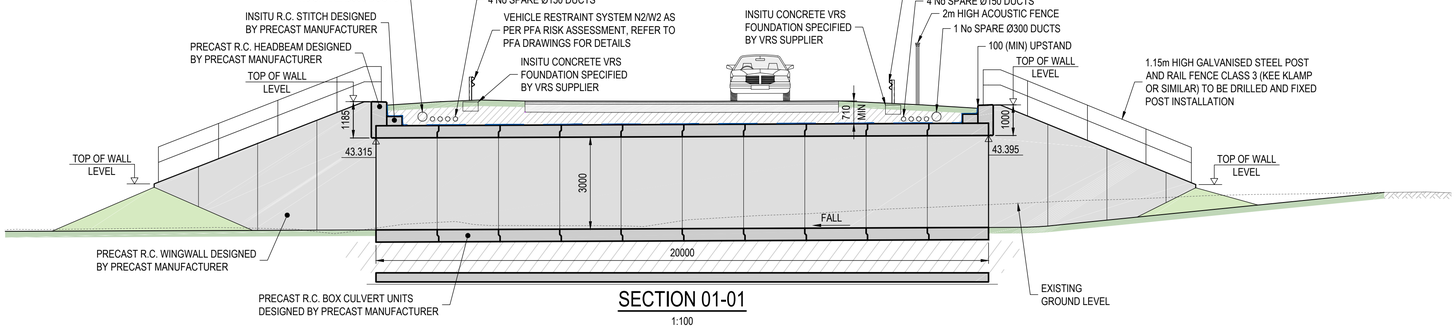
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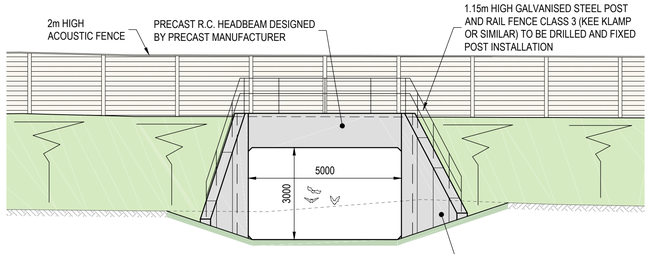
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STN-02	CONSTRUCTION VEHICLES MAY WISH TO TRAFFIC OVER PRECAST BOX CULVERT BEFORE ROAD OPENS. CONTRACTOR TO REFER TO DESIGNER FOR ALLOWABLE LOADS.	C
STN-03	EXISTING SERVICES TO BE DIVERTED.	C
STN-04	GROUNDWATER IS EXPECTED TO BE CLOSE TO EXISTING GROUND LEVEL.	C, D



SECTION 01-01

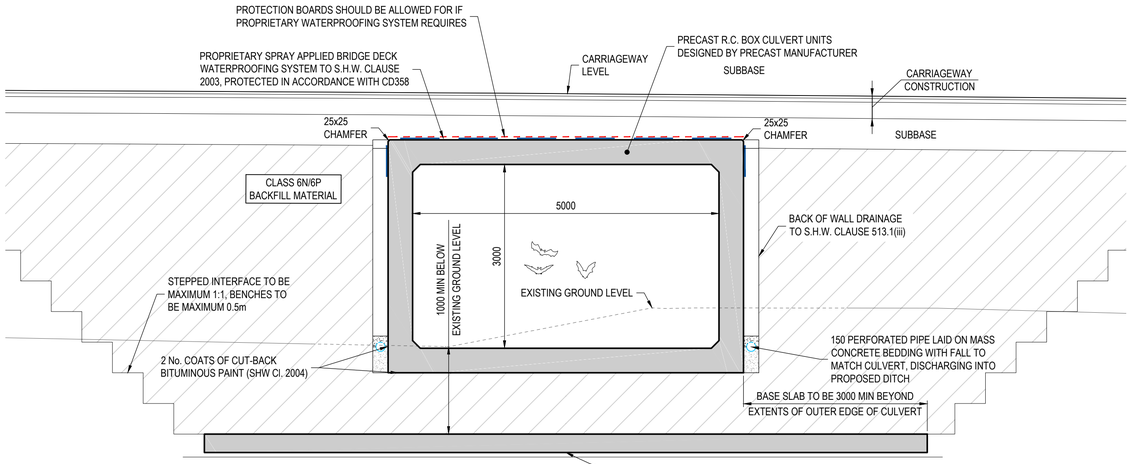
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1413-03	386720.635	155260.706	44.395
1413-04	386727.282	155258.509	42.460
1413-05	386690.016	155271.191	41.370
1413-06	386701.173	155267.504	44.500
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1413-08	386721.717	155252.234	42.455



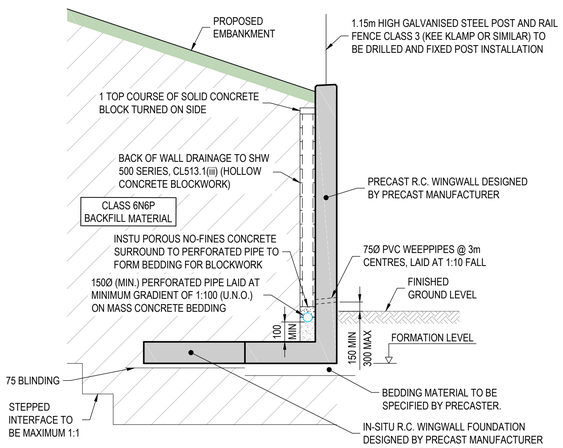
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SECTION 02-02

1:50



SECTION 04-04

1:50

Mark	Revision	Date	Drawn	Chkd	Appd
C01	FOR CONSTRUCTION ISSUE	28/03/22	CRD	JAS	PC

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CONSTRUCTION

YARNBROOK AND WEST ASHTON RELIEF ROAD AREA 1A
BAT UNDERPASS 2. STRUCTURE No. 1413 GENERAL ARRANGEMENT

Client ASHTON PARK TROWBRIDGE LTD AND PERSIMMON HOMES LTD

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A1 Scale	Checked	Approved
As Indicated	JWS	JWS

Drawing Number 45196-STN-SSS-1413-DR-CB-0101 Revision C01

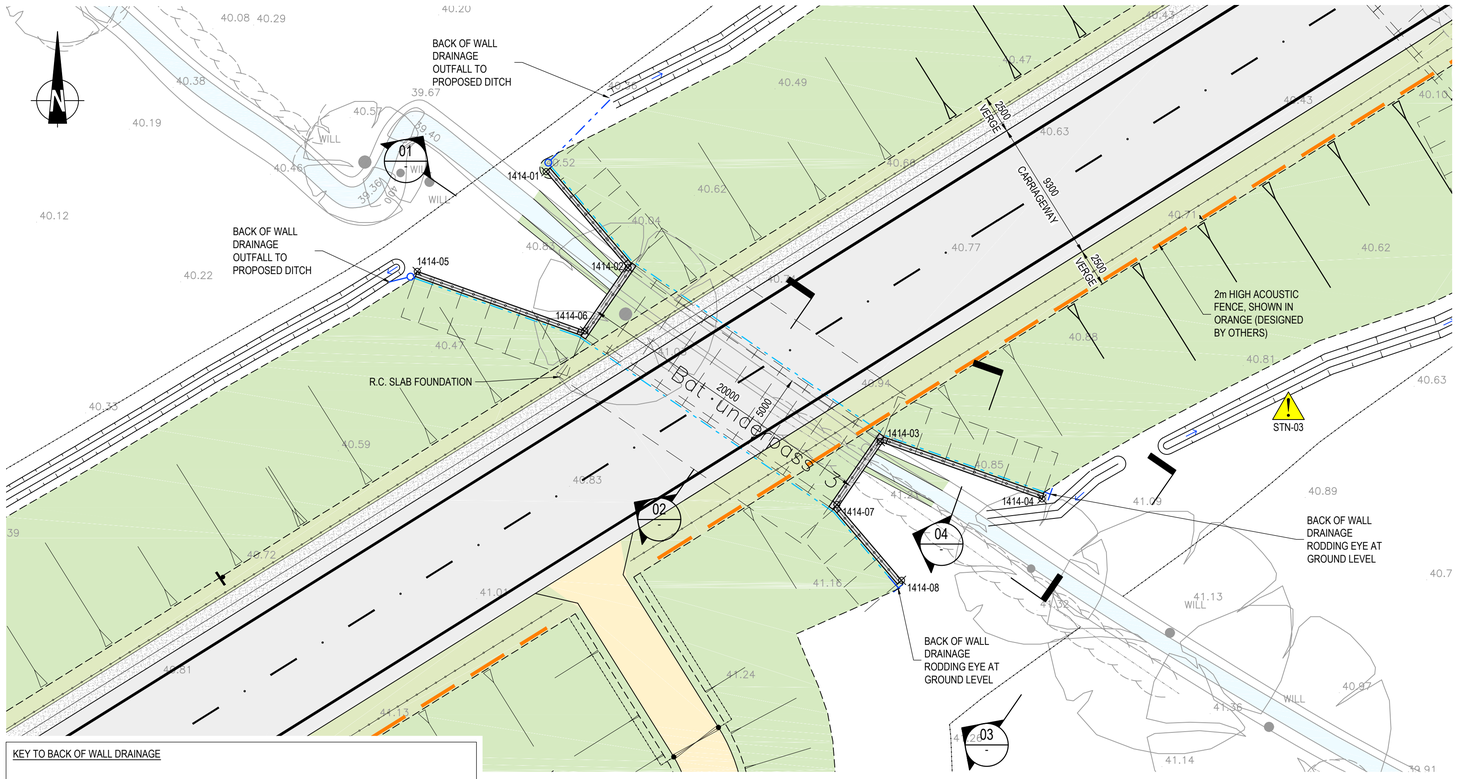
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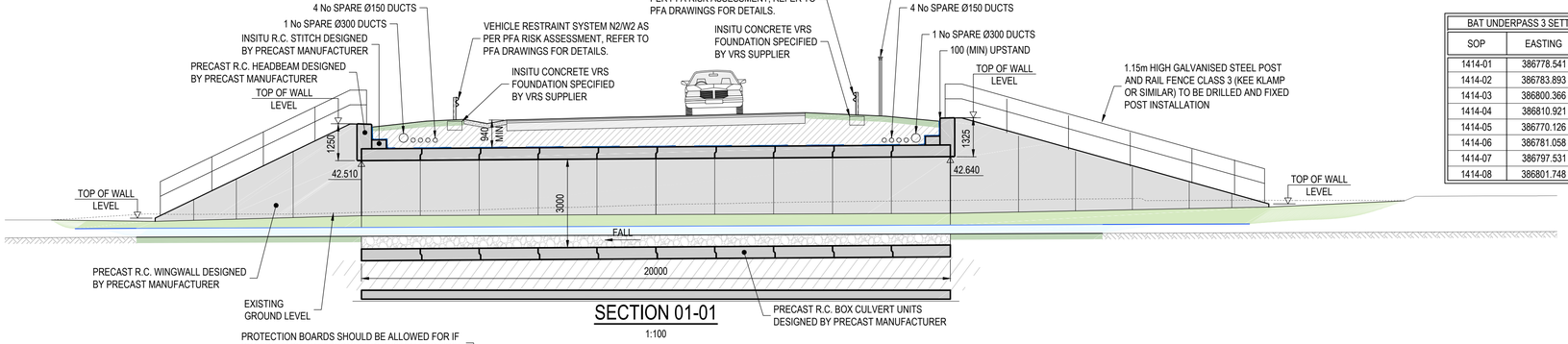
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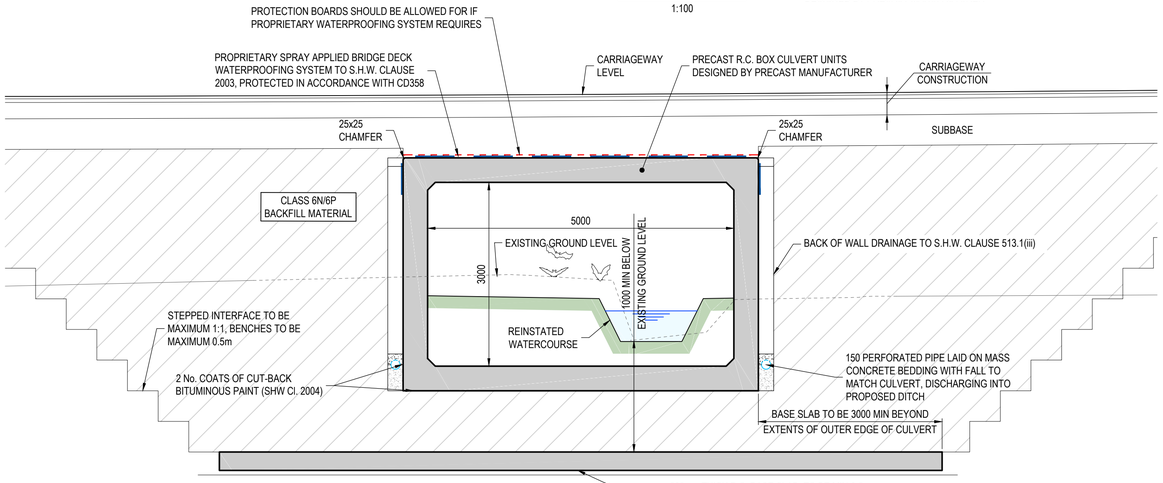
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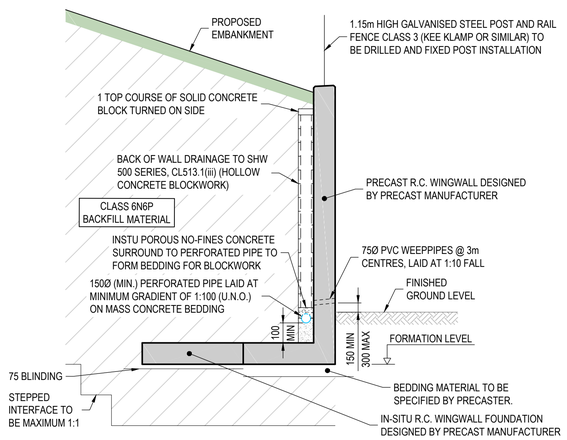
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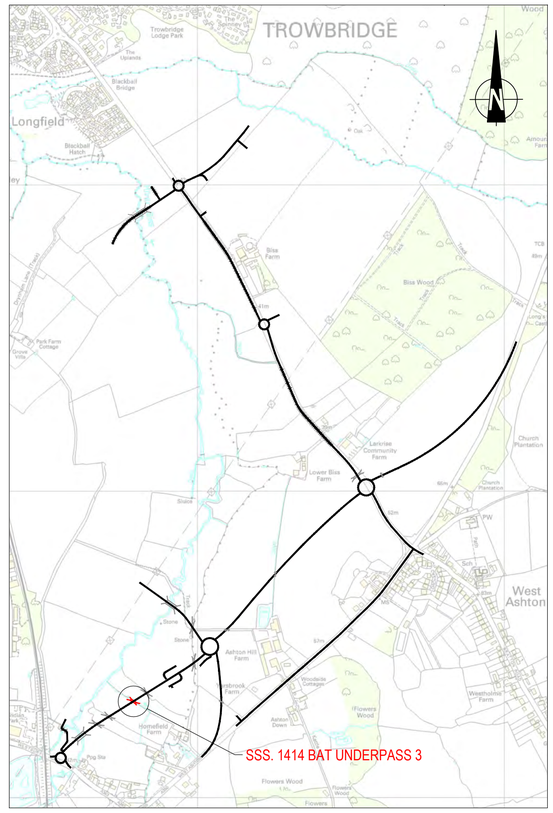
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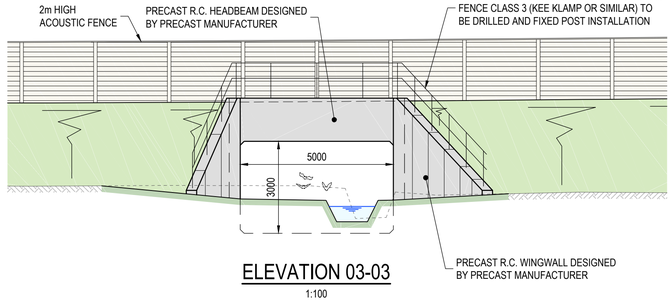


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LOCATION PLAN

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SOP	EASTING	NORTHING	TOP OF WALL LEVEL
1414-01	386778.541	155328.037	40.750
1414-02	386783.893	155321.759	43.760
1414-03	386800.366	155310.418	43.965
1414-04	386810.921	155306.670	41.025
1414-05	386770.126	155321.522	40.630
1414-06	386781.058	155317.641	43.760
1414-07	386797.531	155306.299	43.965
1414-08	386801.748	155301.353	41.425



ELEVATION 03-03
1:100

NOTES

0100.1 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL DRAWINGS LISTED ON DRAWING No. 45196-STN-SSS-1412-DR-CB-0100 AND ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.

0100.2 FOR GENERAL NOTES, REFER TO DRAWING No. 45196-STN-SSS-1412-DR-CB-0110.

0100.3 FOR TYPICAL DETAILS , REFER TO DRAWING No. 45196-STN-SSS-1412-DR-CB-0111.

CDM, HEALTH, SAFETY AND ENVIRONMENTAL NOTES

⚠ DENOTES THE LOCATION OF RISK. FOR MORE INFORMATION REFER TO RISK REFERENCE AND DESCRIPTION

IN ADDITION TO THE HAZARDS AND THE RISKS NORMALLY ASSOCIATED WITH THE FORM OF CONSTRUCTION DESCRIBED ON THE DRAWINGS, THE FOLLOWING RESIDUAL RISKS SHOULD BE CONSIDERED

P - DETAILED DESIGN, C - CONSTRUCTION, S - IN SERVICE / MAINTENANCE, D - DECOMMISSIONING / DEMOLITION

RISK REF.	RISK DESCRIPTION	RISK PHASE
STN-01	LIFTING, HANDLING AND TRANSPORTATION OF PRECAST ELEMENTS BY VARIOUS METHODS.	C
STN-02	CONSTRUCTION VEHICLES MAY WISH TO TRAFFIC OVER PRECAST BOX CULVERT BEFORE ROAD OPENS. CONTRACTOR TO REFER TO DESIGNER FOR ALLOWABLE LOADS.	C
STN-03	EXISTING SERVICES TO BE DIVERTED.	C
STN-04	GROUNDWATER IS EXPECTED TO BE CLOSE TO EXISTING GROUND LEVEL.	C, D

Mark	Revision	Date	Drawn	Chkd	Appd
C01	FOR CONSTRUCTION ISSUE	28/03/22	CRD	JAS	PC

SCALING NOTE: Do not scale this drawing - any errors or omissions shall be reported to Stantec without delay.

UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status

CONSTRUCTION

YARNBROOK AND WEST ASHTON RELIEF ROAD AREA 1A
BAT UNDERPASS 3. STRUCTURE No. 1414 GENERAL ARRANGEMENT

Client ASHTON PARK TROWBRIDGE LTD AND PERSIMMON HOMES LTD

Date of 1st Issue	Designed	Drawn
03.03.2020	GG	CRD
A1 Scale	Checked	Approved
As Indicated	JWS	JWS

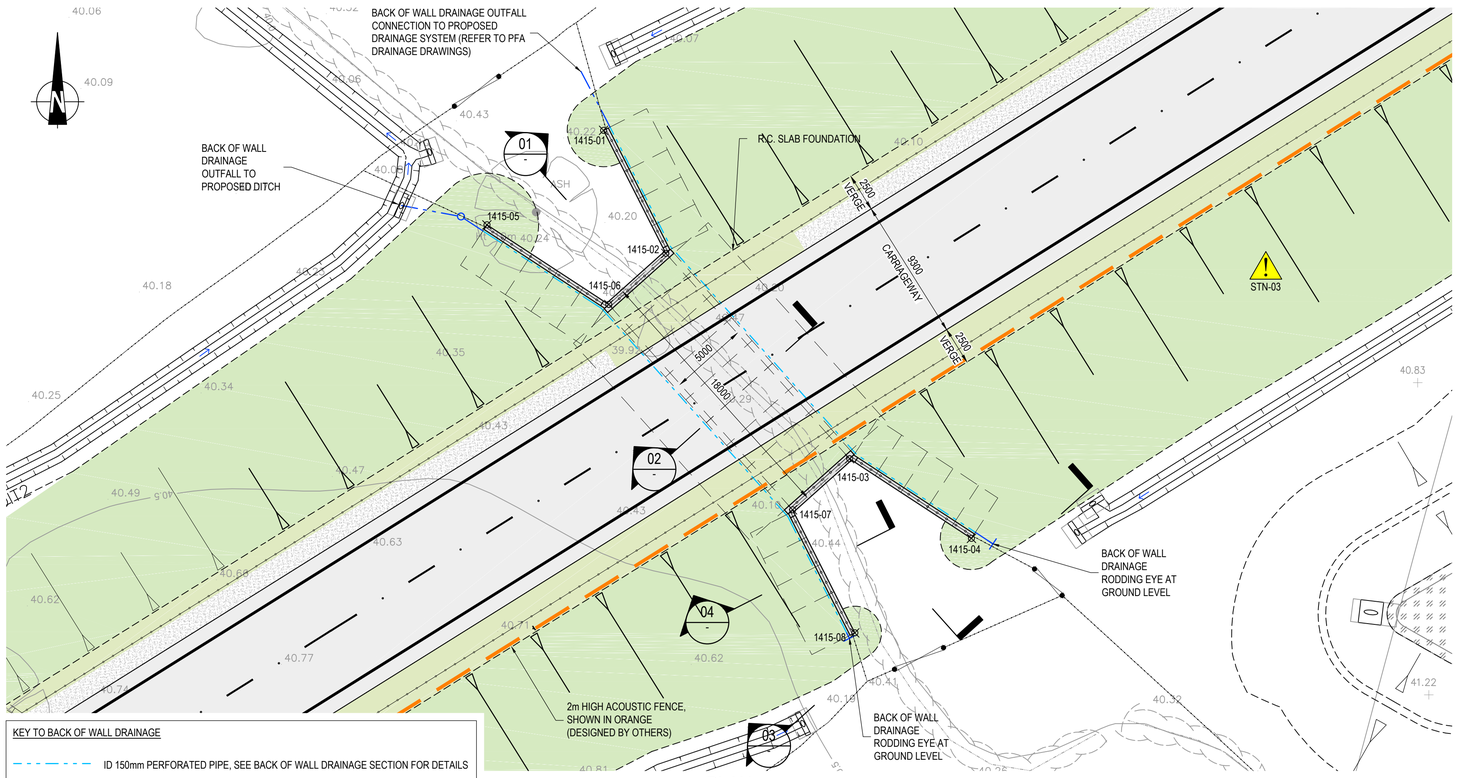
Drawing Number 45196-STN-SSS-1414-DR-CB-0101 Revision C01

Stantec

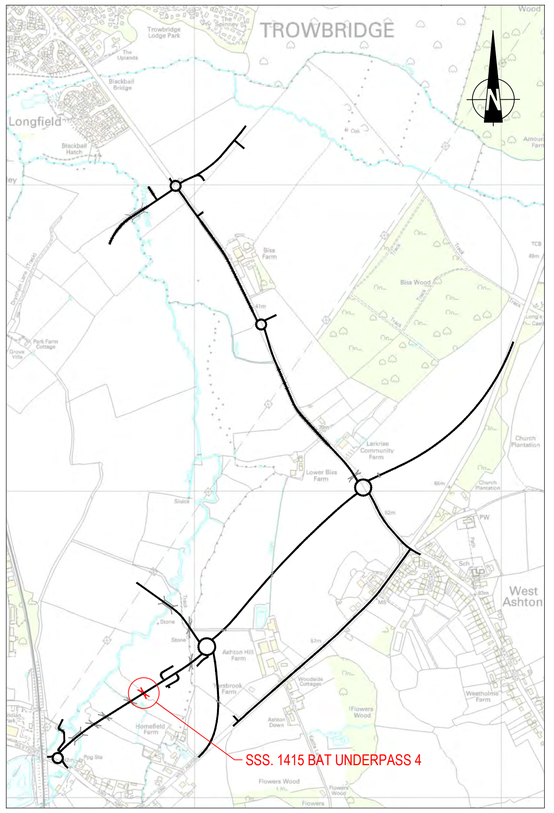
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PLAN
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LOCATION PLAN

NOTES

0100.1 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL DRAWINGS LISTED ON DRAWING No. 45196-STN-SSS-1412-DR-CB-0100 AND ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.

0100.2 FOR GENERAL NOTES, REFER TO DRAWING No. 45196-STN-SSS-1412-DR-CB-0110.

0100.3 FOR TYPICAL DETAILS , REFER TO DRAWING No. 45196-STN-SSS-1412-DR-CB-0111.

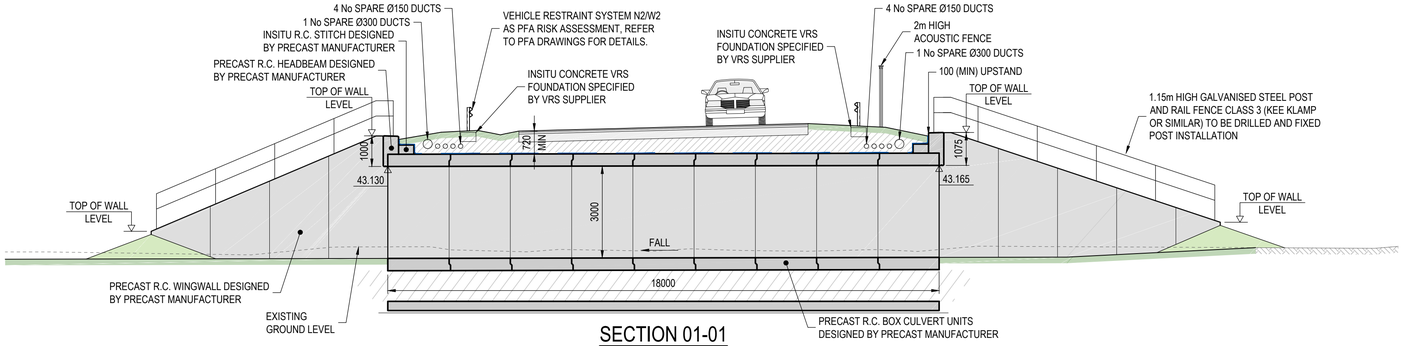
CDM, HEALTH, SAFETY AND ENVIRONMENTAL NOTES

⚠ DENOTES THE LOCATION OF RISK. FOR MORE INFORMATION REFER TO RISK REFERENCE AND DESCRIPTION

IN ADDITION TO THE HAZARDS AND THE RISKS NORMALLY ASSOCIATED WITH THE FORM OF CONSTRUCTION DESCRIBED ON THE DRAWINGS, THE FOLLOWING RESIDUAL RISKS SHOULD BE CONSIDERED

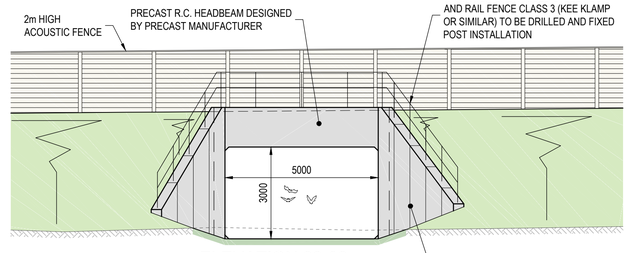
P - DETAILED DESIGN, C - CONSTRUCTION, S - IN SERVICE / MAINTENANCE, D - DECOMMISSIONING / DEMOLITION

RISK REF.	RISK DESCRIPTION	RISK PHASE
STN-01	LIFTING, HANDLING AND TRANSPORTATION OF PRECAST ELEMENTS BY VARIOUS METHODS.	C
STN-02	CONSTRUCTION VEHICLES MAY WISH TO TRAFFIC OVER PRECAST BOX CULVERT BEFORE ROAD OPENS. CONTRACTOR TO REFER TO DESIGNER FOR ALLOWABLE LOADS.	C
STN-03	EXISTING SERVICES TO BE DIVERTED.	C
STN-04	GROUNDWATER IS EXPECTED TO BE CLOSE TO EXISTING GROUND LEVEL.	C, D

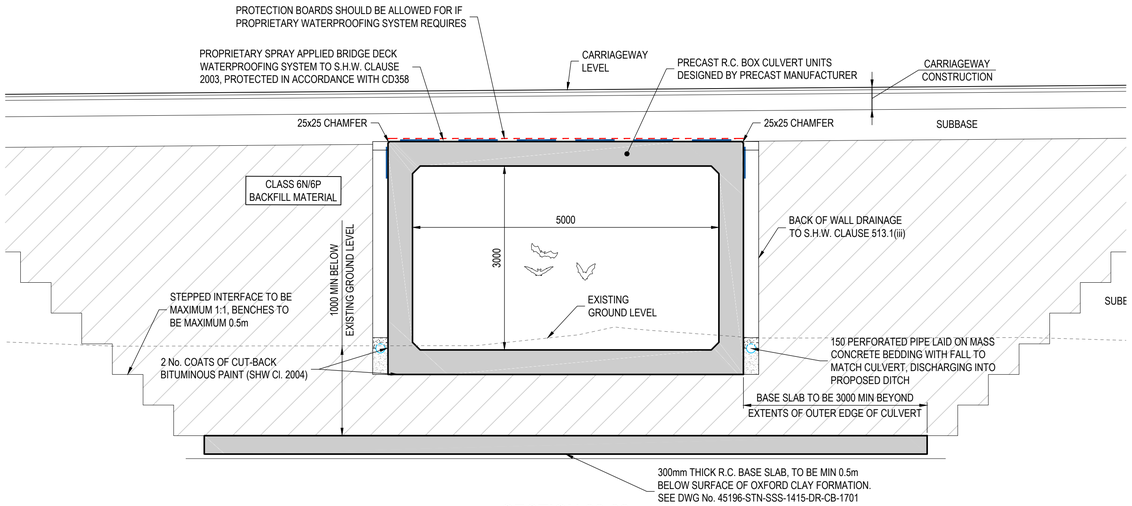


SECTION 01-01
1:100

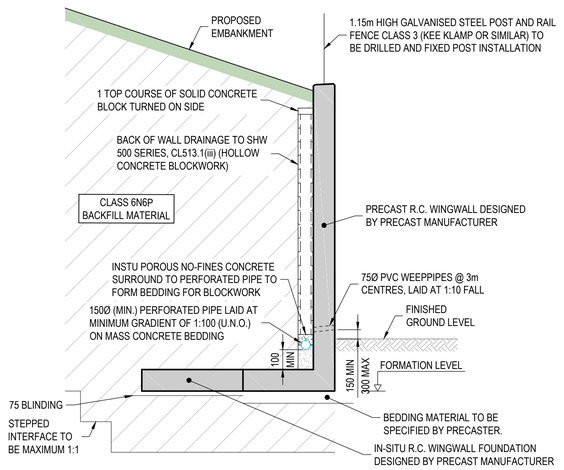
BAT UNDERPASS 4 SETTING OUT POINT CO-ORDINATES			
SOP	EASTING	NORTHING	TOP OF WALL LEVEL
1415-01	386825.849	155357.535	41.015
1415-02	386829.912	155349.505	44.130
1415-03	386841.919	155336.094	44.240
1415-04	386849.872	155330.898	41.310
1415-05	386818.234	155351.366	41.135
1415-06	386826.187	155346.170	44.130
1415-07	386838.194	155332.759	44.240
1415-08	386842.257	155324.729	41.125



ELEVATION 03-03
1:100



SECTION 02-02
1:50



SECTION 04-04
1:50

Mark	Revision	Date	Drawn	Chkd	Appd
C01	FOR CONSTRUCTION ISSUE	28/03/22	CRD	JAS	PC

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Drawing Issue Status
CONSTRUCTION

YARNBROOK AND WEST ASHTON RELIEF ROAD AREA 1B
BAT UNDERPASS 4. STRUCTURE No. 1415 GENERAL ARRANGEMENT

Client ASHTON PARK TROWBRIDGE LTD AND PERSIMMON HOMES LTD

Date of 1st Issue	Designed	Drawn
09.12.2019	GG	CRD
A1 Scale	Checked	Approved
As Indicated	JWS	JWS
Drawing Number		Revision
45196-STN-SSS-1415-DR-CB-0101		C01

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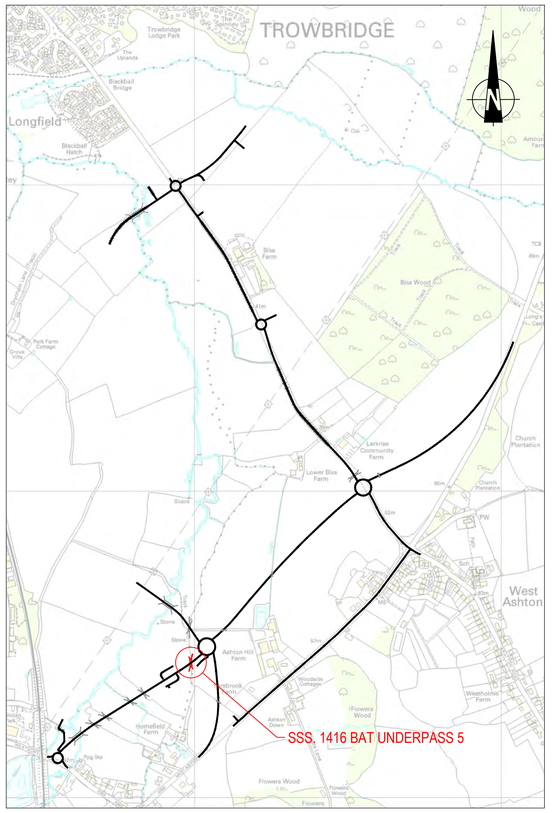
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PLAN
1:200



LOCATION PLAN

NOTES

0100.1 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL DRAWINGS LISTED ON DRAWING No. 45196-STN-SSS-1412-DR-CB-0100 AND ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.

0100.2 FOR GENERAL NOTES, REFER TO DRAWING No. 45196-STN-SSS-1412-DR-CB-0110.

0100.3 FOR TYPICAL DETAILS , REFER TO DRAWING No. 45196-STN-SSS-1412-DR-CB-0111.

BAT UNDERPASS 5 SETTING OUT POINT CO-ORDINATES			
SOP	EASTING	NORTHING	TOP OF WALL LEVEL
1416-01	386992.011	155465.743	44.140
1416-02	386989.866	155455.465	46.240
1416-03	386991.380	155428.507	46.500
1416-04	386994.036	155420.433	43.135
1416-05	386982.999	155460.884	43.920
1416-06	386984.874	155455.185	46.240
1416-07	386986.388	155428.227	46.500
1416-08	386984.038	155416.970	43.690

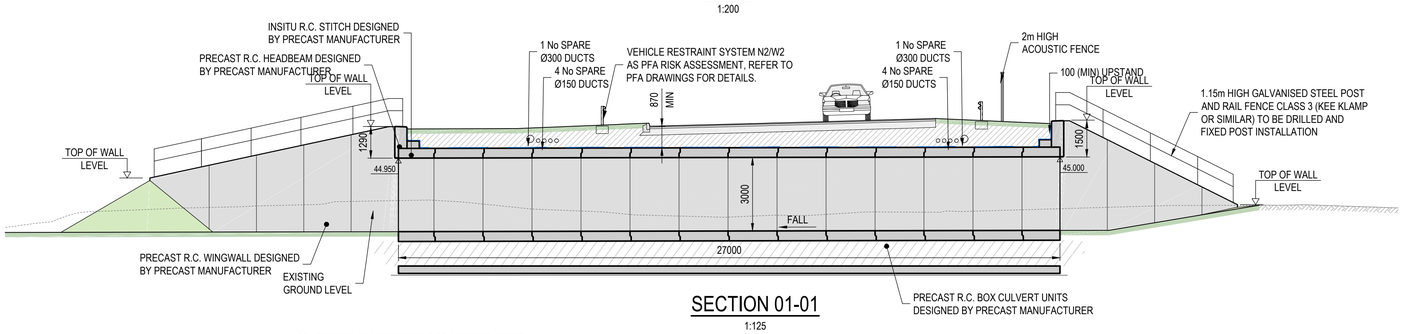
CDM, HEALTH, SAFETY AND ENVIRONMENTAL NOTES

⚠	DENOTES THE LOCATION OF RISK. FOR MORE INFORMATION REFER TO RISK REFERENCE AND DESCRIPTION

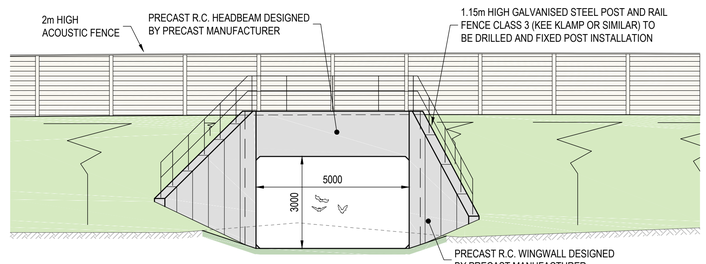
IN ADDITION TO THE HAZARDS AND THE RISKS NORMALLY ASSOCIATED WITH THE FORM OF CONSTRUCTION DESCRIBED ON THE DRAWINGS, THE FOLLOWING RESIDUAL RISKS SHOULD BE CONSIDERED

P - DETAILED DESIGN, C - CONSTRUCTION, S - IN SERVICE / MAINTENANCE, D - DECOMMISSIONING / DEMOLITION

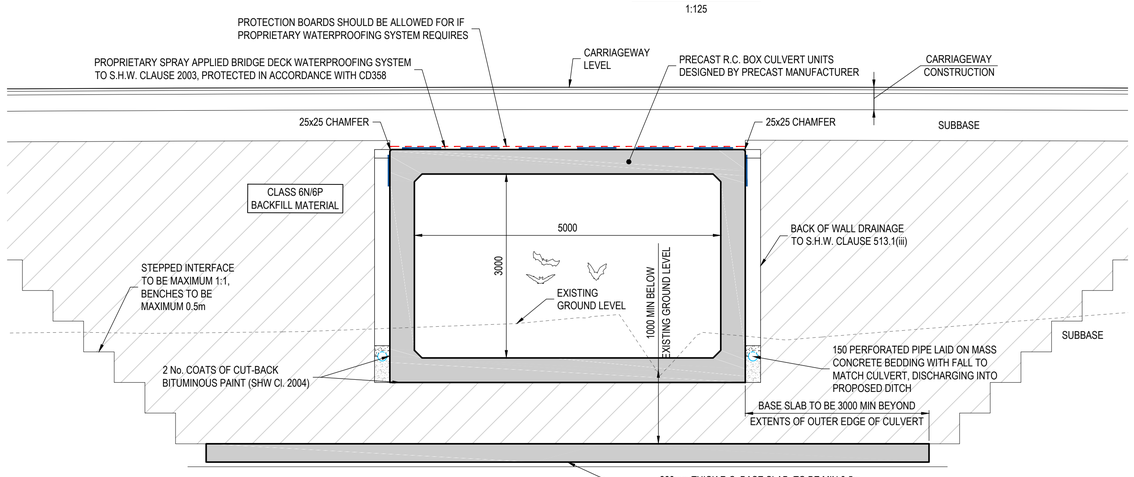
RISK REF.	RISK DESCRIPTION	RISK PHASE
STN-01	LIFTING, HANDLING AND TRANSPORTATION OF PRECAST ELEMENTS BY VARIOUS METHODS.	C
STN-02	CONSTRUCTION VEHICLES MAY WISH TO TRAFFIC OVER PRECAST BOX CULVERT BEFORE ROAD OPENS. CONTRACTOR TO REFER TO DESIGNER FOR ALLOWABLE LOADS.	C
STN-03	EXISTING SERVICES TO BE DIVERTED.	C
STN-04	GROUNDWATER IS EXPECTED TO BE CLOSE TO EXISTING GROUND LEVEL.	C, D



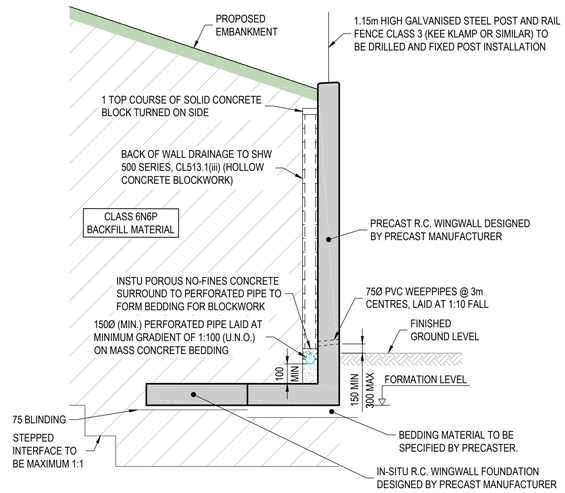
SECTION 01-01
1:125



ELEVATION 03-03
1:100



SECTION 02-02
1:50



SECTION 04-04
1:50

Mark	Revision	Date	Drawn	Chkd	Appd
C01	FOR CONSTRUCTION ISSUE	28/03/22	CRD	JAS	PC

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Drawing Issue Status
CONSTRUCTION

YARNBROOK AND WEST ASHTON RELIEF ROAD AREA 1B
BAT UNDERPASS 5. STRUCTURE No. 1416 GENERAL ARRANGEMENT

Client ASHTON PARK TROWBRIDGE LTD AND PERSIMMON HOMES LTD

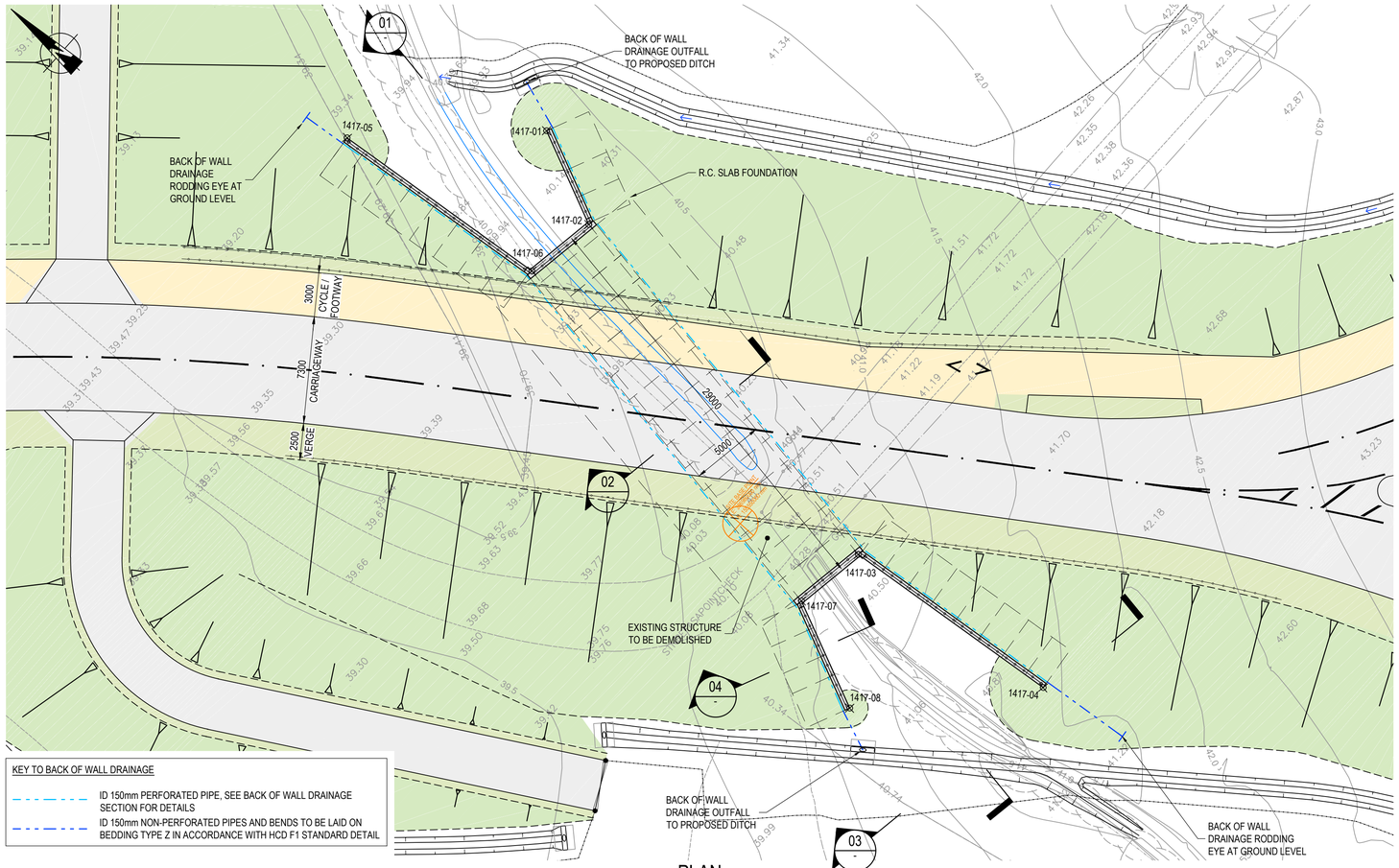
Date of 1st Issue	Designed	Drawn
09.12.2019	GG	CRD
A1 Scale	Checked	Approved
As Indicated	JWS	JWS
Drawing Number		Revision
45196-STN-SSS-1416-DR-CB-0101		C01

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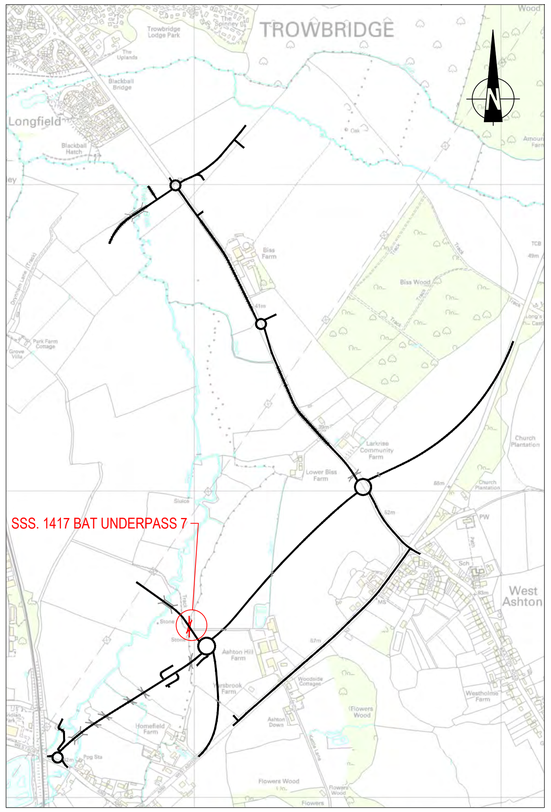


KEY TO BACK OF WALL DRAINAGE

- ID 150mm PERFORATED PIPE, SEE BACK OF WALL DRAINAGE SECTION FOR DETAILS
- ID 150mm NON-PERFORATED PIPES AND BENDS TO BE LAID ON BEDDING TYPE Z IN ACCORDANCE WITH HCD F1 STANDARD DETAIL

PLAN

1:200



LOCATION PLAN

NOTES

0100.1 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL DRAWINGS LISTED ON DRAWING No. 45196-STN-SSS-1412-DR-CB-0100 AND ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.

0100.2 FOR GENERAL NOTES, REFER TO DRAWING No. 45196-STN-SSS-1412-DR-CB-0110.

0100.3 FOR TYPICAL DETAILS , REFER TO DRAWING No. 45196-STN-SSS-1412-DR-CB-0111.

BAT UNDERPASS 7 SETTING OUT POINT CO-ORDINATES

SOP	EASTING	NORTHING	TOP OF WALL LEVEL
1417-01	386991.133	155577.666	41.520
1417-02	386988.294	155571.267	44.385
1417-03	386983.794	155542.619	44.870
1417-04	386985.435	155527.206	42.615
1417-05	386981.714	155587.456	41.230
1417-06	386983.354	155572.043	44.385
1417-07	386978.855	155543.394	44.870
1417-08	386975.611	155536.082	41.180

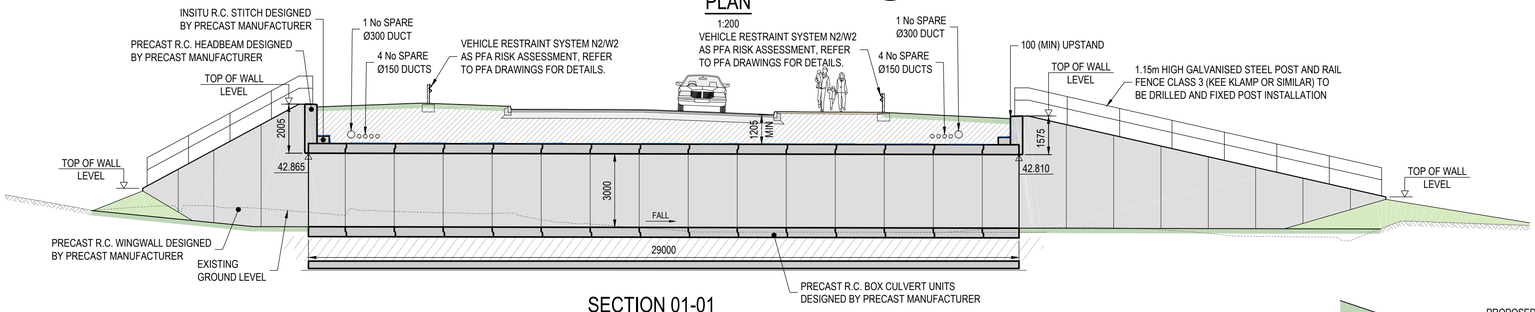
CDM, HEALTH, SAFETY AND ENVIRONMENTAL NOTES

DENOTES THE LOCATION OF RISK. FOR MORE INFORMATION REFER TO RISK REFERENCE AND DESCRIPTION

IN ADDITION TO THE HAZARDS AND THE RISKS NORMALLY ASSOCIATED WITH THE FORM OF CONSTRUCTION DESCRIBED ON THE DRAWINGS, THE FOLLOWING RESIDUAL RISKS SHOULD BE CONSIDERED

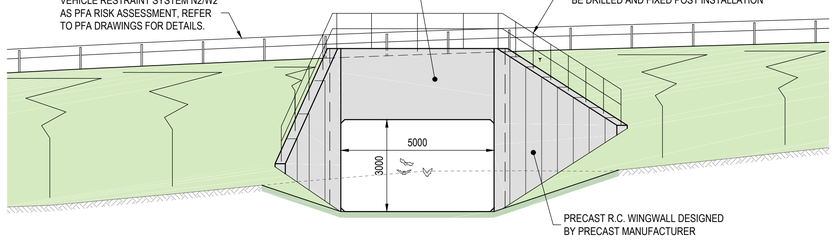
P - DETAILED DESIGN, C - CONSTRUCTION, S - IN SERVICE / MAINTENANCE, D - DECOMMISSIONING / DEMOLITION

RISK REF.	RISK DESCRIPTION	RISK PHASE
STN-01	LIFTING, HANDLING AND TRANSPORTATION OF PRECAST ELEMENTS BY VARIOUS METHODS.	C
STN-02	CONSTRUCTION VEHICLES MAY WISH TO TRAFFIC OVER PRECAST BOX CULVERT BEFORE ROAD OPENS. CONTRACTOR TO REFER TO DESIGNER FOR ALLOWABLE LOADS.	C
STN-03	EXISTING SERVICES TO BE DIVERTED.	C
STN-04	GROUNDWATER IS EXPECTED TO BE CLOSE TO EXISTING GROUND LEVEL.	C, D



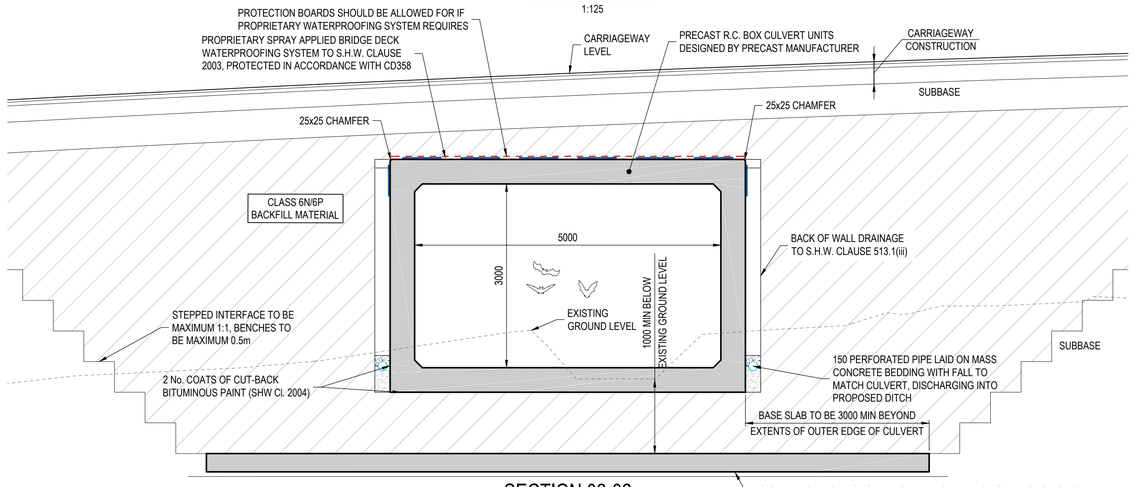
SECTION 01-01

1:125



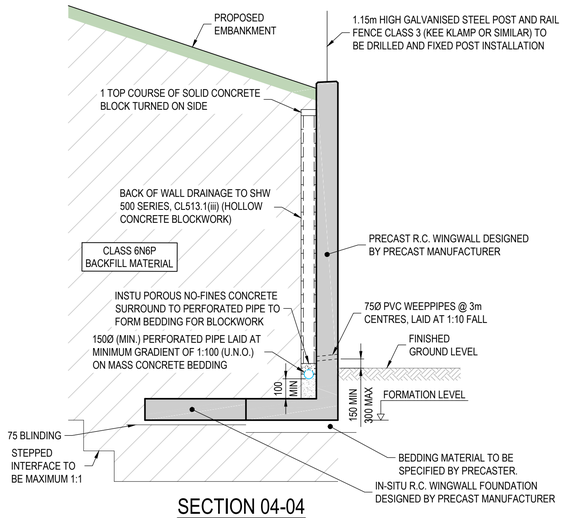
ELEVATION 03-03

1:100



SECTION 02-02

1:50



SECTION 04-04

1:50

Mark	Revision	Date	Drawn	Chkd	Appd
C01	FOR CONSTRUCTION ISSUE	28/03/22	CRD	JAS	PC

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Drawing Issue Status

CONSTRUCTION

YARNBROOK AND WEST ASHTON RELIEF ROAD AREA 1B
BAT UNDERPASS 7. STRUCTURE No. 1417 GENERAL ARRANGEMENT

Client: ASHTON PARK TROWBRIDGE LTD AND PERSIMMON HOMES LTD

Date of 1st Issue	Designed	Drawn
03.03.2020	GG	CRD
A1 Scale	Checked	Approved
As Indicated	JWS	JWS

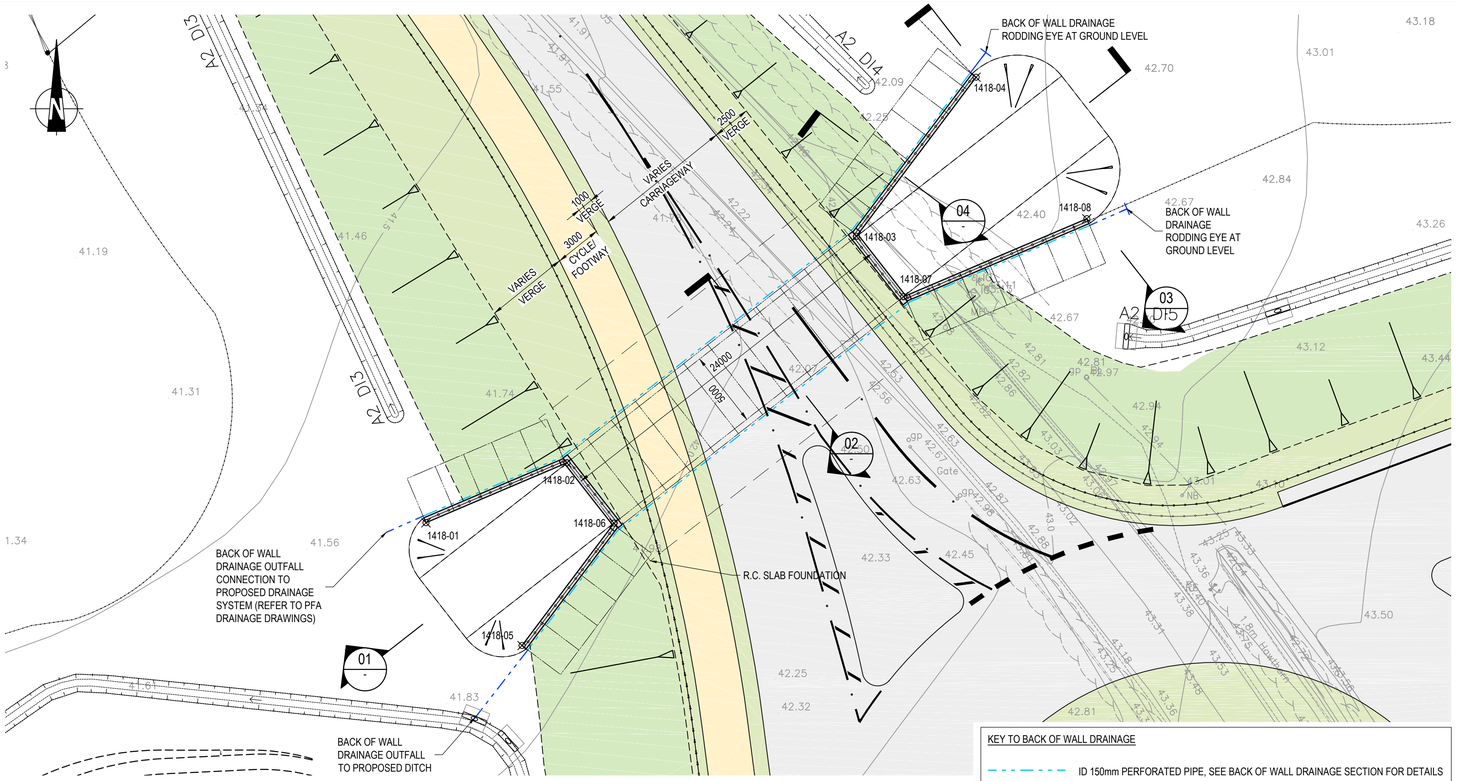
Drawing Number: 45196-STN-SSS-1417-DR-CB-0101 Revision: C01

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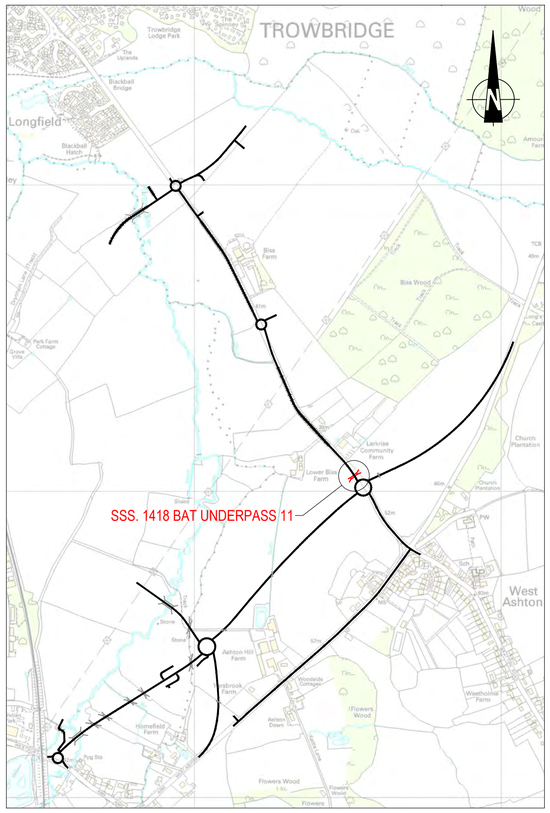
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PLAN
1:200

KEY TO BACK OF WALL DRAINAGE

- ID 150mm PERFORATED PIPE, SEE BACK OF WALL DRAINAGE SECTION FOR DETAILS
- ID 150mm NON-PERFORATED PIPES AND BENDS TO BE LAID ON BEDDING TYPE Z IN ACCORDANCE WITH HCD F1 STANDARD DETAIL



LOCATION PLAN

NOTES

0100.1 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL DRAWINGS LISTED ON DRAWING No. 45196-STN-SSS-1412-DR-CB-0100 AND ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.

0100.2 FOR GENERAL NOTES, REFER TO DRAWING No. 45196-STN-SSS-1412-DR-CB-0110.

0100.3 FOR TYPICAL DETAILS , REFER TO DRAWING No. 45196-STN-SSS-1412-DR-CB-0111.

BAT UNDERPASS 11 SETTING OUT POINT CO-ORDINATES

SOP	EASTING	NORTHING	TOP OF WALL LEVEL
1418-01	387499.216	156040.141	41.810
1418-02	387508.418	156044.055	44.840
1418-03	387527.321	156058.842	44.760
1418-04	387535.138	156069.230	42.440
1418-05	387505.486	156032.126	42.005
1418-06	387511.499	156040.116	44.840
1418-07	387530.402	156054.904	44.760
1418-08	387542.365	156059.991	42.650

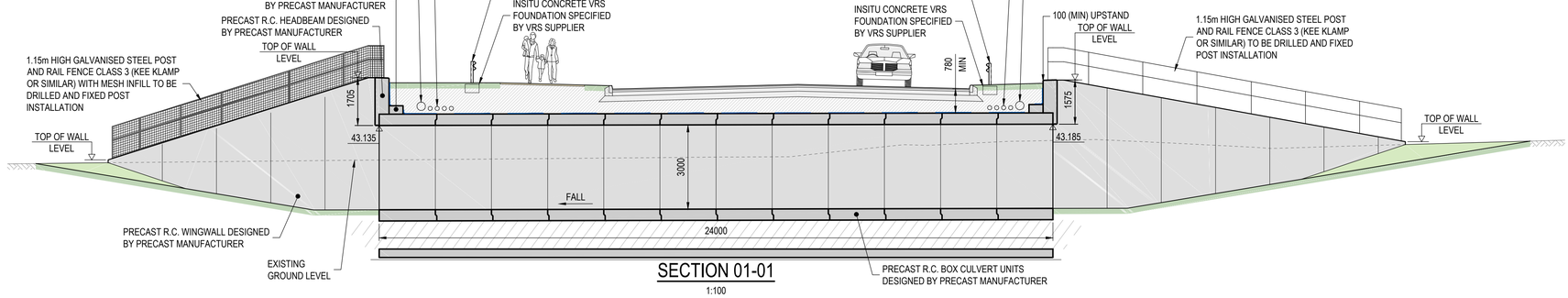
CDM, HEALTH, SAFETY AND ENVIRONMENTAL NOTES

⚠ DENOTES THE LOCATION OF RISK. FOR MORE INFORMATION REFER TO RISK REFERENCE AND DESCRIPTION

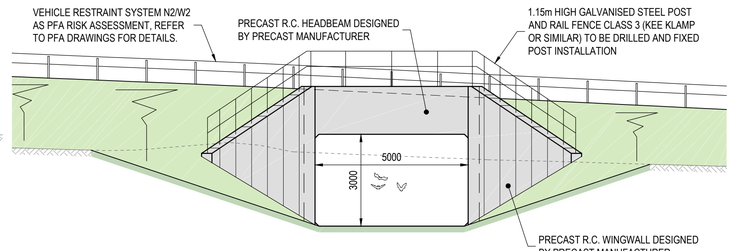
IN ADDITION TO THE HAZARDS AND THE RISKS NORMALLY ASSOCIATED WITH THE FORM OF CONSTRUCTION DESCRIBED ON THE DRAWINGS, THE FOLLOWING RESIDUAL RISKS SHOULD BE CONSIDERED

P - DETAILED DESIGN, C - CONSTRUCTION, S - IN SERVICE / MAINTENANCE, D - DECOMMISSIONING / DEMOLITION

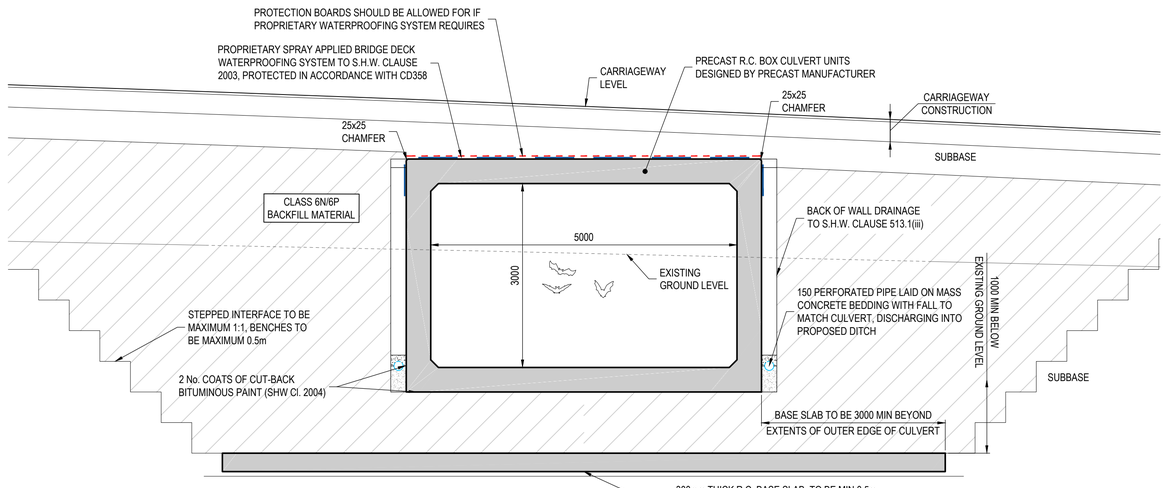
RISK REF.	RISK DESCRIPTION	RISK PHASE
STN-01	LIFTING, HANDLING AND TRANSPORTATION OF PRECAST ELEMENTS BY VARIOUS METHODS.	C
STN-02	CONSTRUCTION VEHICLES MAY WISH TO TRAFFIC OVER PRECAST BOX CULVERT BEFORE ROAD OPENS. CONTRACTOR TO REFER TO DESIGNER FOR ALLOWABLE LOADS.	C
STN-03	EXISTING SERVICES TO BE DIVERTED.	C
STN-04	GROUNDWATER IS EXPECTED TO BE CLOSE TO EXISTING GROUND LEVEL.	C, D



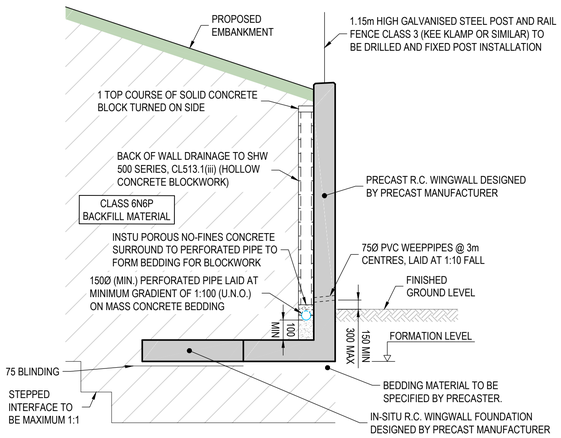
SECTION 01-01
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ELEVATION 03-03
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SECTION 02-02
1:50



SECTION 04-04
1:50

Mark	Revision	Date	Drawn	Chkd	Appd
C01	FOR CONSTRUCTION ISSUE	28/03/22	CRD	JAS	PC

SCALING NOTE: Do not scale this drawing - any errors or omissions shall be reported to Stantec without delay.
UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status

CONSTRUCTION

YARNBROOK AND WEST ASHTON RELIEF ROAD AREA 2
BAT UNDERPASS 11 STRUCTURE No. 1418 GENERAL ARRANGEMENT

Client ASHTON PARK TROWBRIDGE LTD AND PERSIMMON HOMES LTD

Date of 1st Issue	Designed	Drawn
03.03.2020	GG	CRD
A1 Scale	Checked	Approved
As Indicated	JWS	JWS

Drawing Number: 45196-STN-SSS-1418-DR-CB-0101
Revision: C01

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READING
Tel: 01189 500 761

Appendix EDP 13
YWARR Detailed Planting Plan
(Vegetative Screening/Hop over Locations)

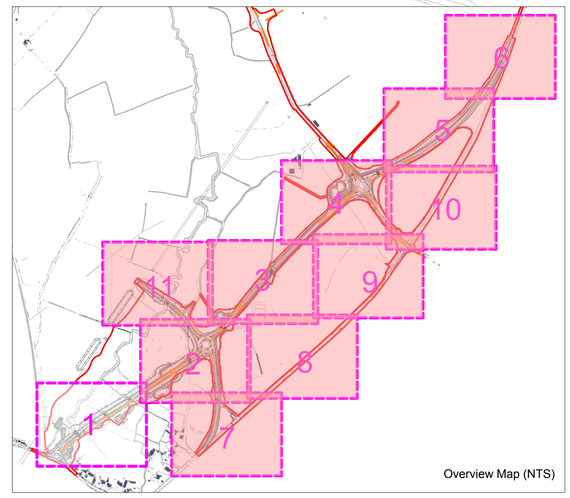
FOR CONTINUATION SEE P19-2913_02 SHEET 2

1no. Fagus sylvatica (s)
2no. Acer campestre (s)
1no. Quercus robur (s)
Bridge 4
2no. Fagus sylvatica
3no. Carpinus betula (s)
Bridge 3
2no. Quercus palustris (s)
2no. Acer campestre (s)
1no. Acer campestre (s)
1no. Quercus robur (s)
3no. Sorbus aucuparia (s)
2no. Fagus sylvatica
2no. Sorbus aucuparia (s)
Native Shrub Mix 476 sq m
Native Shrub Mix 331 sq m
2no. Populus tremula (s)
4no. Acer campestre (s)
1no. Quercus palustris
Bridge 2
2no. Sorbus aucuparia (s)
2no. Acer campestre (s)
Native Woodland Planting Mix 214 sq m
Native Shrub Mix 239 sq m
3no. Salix alba (s)
3no. Alnus glutinosa (s)
Native Shrub Mix 181 sq m
3no. Sorbus aucuparia (s)
2no. Acer campestre
Native Shrub Mix 242 sq m
4no. Acer campestre (s)
Native Woodland Planting Mix 127 sq m
Native Shrub Mix 104 sq m
3no. Populus tremula (s)
1no. Acer campestre
Bridge 1
1no. Alnus glutinosa (s)
1no. Populus tremula
Native Shrub Mix 735 sq m
2no. Alnus glutinosa (s)
1no. Quercus robur
2no. Alnus glutinosa (s)
1no. Populus tremula
3no. Quercus robur (s)
Native Shrub Mix 191 sq m
2no. Salix alba (s)
1no. Betula pendula (s)
IPCHAN1-3
IPCHAN2-3
IPCHAN1-2
1no. Betula ermanii
2no. betula nigra
Native Shrub Mix 356 sq m
2no. Betula pendula (s)
2no. Acer campestre
IPCHAN2-4
IPCHAN1-4
IPCHAN2-5
IPCHAN3-1

KEY

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- GENERAL PURPOSE MEADOW GRASSLAND

NOTE: REFER TO DRAWING P19-2913_2 SHEET 12 FOR DETAILED PLANTING SCHEDULE. DRAWING TO BE READ IN CONJUNCTION WITH MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS VOLUME 1 SPECIFICATION FOR HIGHWAY WORKS SERIES 3000 (05/01) LANDSCAPE AND ECOLOGY



Overview Map (NTS)

0 50m

N

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Detailed Planting Plan

Yarnbrook and West Ashton Relief Road

Client: Persimmon Homes Ltd and CEREP III

DRWG No: P19-2913_02 Sheet No:1/12 REV: D

Drawn by : IHW Approved by: NHA

Date: 04/02/2021

Scale: 1:500 @ A1

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FOR CONTINUATION SEE P19-2913_02 SHEET 11

FOR CONTINUATION SEE P19-2913_02 SHEET 3

FOR CONTINUATION SEE P19-2913_02 SHEET 1

FOR CONTINUATION SEE P19-2913_02 SHEET 7

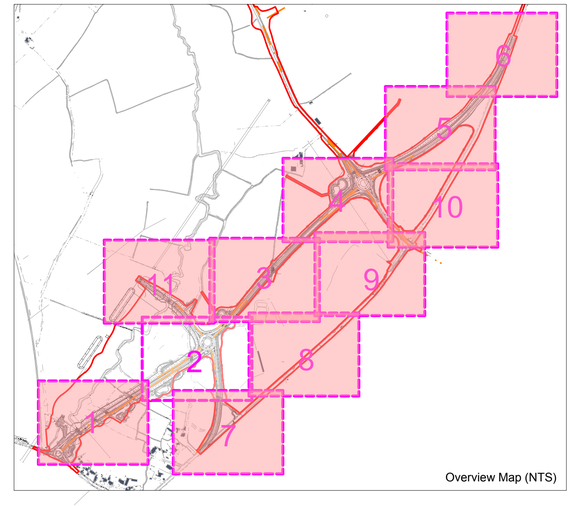
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3no. Acer campestre (s)
4no. Betula pendula (s)
Native Shrub Mix 1062 sq m
2no. Betula pendula (s)
3no. Acer campestre (s)
1no. Betula pendula (s)
3no. Acer campestre (s)
1no. Betula pendula (s)
Native Shrub Mix 289 sq m
1no. Betula ermanii
1no. Quercus palustris
Native Shrub Mix 296 sq m
3no. betula nigra
3no. Alnus glutinosa (s)
Native Shrub Mix 62 sq m
Native Shrub Mix 191 sq m
2no. Quercus robur (s)
3no. Acer campestre (s)
Native Shrub Mix 427 sq m
5no. Acer campestre (s)
2no. Populus tremula (s)
Native Shrub Mix 949 sq m
1no. Quercus robur (s)
1no. Acer campestre (s)
2no. Quercus robur (s)
2no. Alnus glutinosa (s)
Native Shrub Mix 134 sq m
1no. Populus tremula (s)
1no. Pinus nigra (s)
3no. Betula nigra (s)
Native Shrub Mix 327 sq m
1no. Carpinus betula (s)
1no. Carpinus betula (s)
Native Shrub Mix 85 sq m
2no. Fagus sylvatica
Native Shrub Mix 47 sq m
Native Shrub Mix 139 sq m
3no. Acer campestre (s)
2no. betula nigra (s)
Native Shrub Mix 123 sq m
3no. Alnus glutinosa (s)
4no. betula pendula (s)
Native Shrub Mix 47 sq m
Native Shrub Mix 139 sq m
Native Shrub Mix 278 sq m
2no. Acer campestre
2no. Populus tremula (s)
Native Shrub Mix 37 sq m
3no. Salix alba (s)
2no. Acer Campestre (s)
4no. Populus tremula (s)
4no. Alnus glutinosa (s)
1no. Acer campestre (s)
3no. Quercus robur
2no. Sorbus aucuparia (s)
Native Shrub Mix 353 sq m
1no. Alnus glutinosa
2no. Sorbus aucuparia (s)
1no. Quercus palustris
2no. Acer campestre (s)
1no. Fagus sylvatica (s)
1no. Acer campestre (s)
3no. Sorbus aucuparia (s)
1no. Populus tremula (s)
1no. Betula pendula (s)
3no. Carpinus betulus (s)
Native Shrub Mix 379 sq m
4no. Acer campestre (s)
1no. Fagus sylvatica

Detention Basin 3

KEY

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NOTE: REFER TO DRAWING P19-2913_2 SHEET 12 FOR DETAILED PLANTING SCHEDULE. DRAWING TO BE READ IN CONJUNCTION WITH MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS VOLUME 1 SPECIFICATION FOR HIGHWAY WORKS SERIES 3000 (05/01) LANDSCAPE AND ECOLOGY



Overview Map (NTS)

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Detailed Planting Plan

Yarnbrook and West Ashton Relief Road

Client: Persimmon Homes Ltd and CEREP III

DRWG No: P19-2913_02 Sheet No:2/12 REV: D

Drawn by : IHW Approved by: NHA

Date: 04/02/2021

Scale: 1:500 @ A1

0 50m

N

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0 50m

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Detailed Planting Plan

Yarnbrook and West Ashton Relief Road

Client: Persimmon Homes Ltd and CEREP III

DRWG No: P19-2913_02 Sheet No:3/12 REV: D

Drawn by : IHW Approved by: NHA

Date: 04/02/2021

Scale: 1:500 @ A1

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Detailed Planting Plan

Yarnbrook and West Ashton Relief Road

Client: Persimmon Homes Ltd and CEREP III

DRWG No: P19-2913_02 Sheet No:4/12 REV: D

Drawn by : IHW Approved by: NHA

Date: 04/02/2021

Scale: 1:500 @ A1

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FOR CONTINUATION SEE P19-2913_02 SHEET 6

2no. Alnus glutinosa
3no. Acer campestre (s)
3no. sorbus aucuparia (s)
Native Shrub Mix
210 sq m
4no. Populus tremula (s)
Native Shrub Mix
634 sq m
3no. Sorbus aucuparia (s)
1no. Alnus glutinosa (s)
2no. Alnus glutinosa
3no. Acer campestre (s)
1no. Quercus robur (s)
2no. Acer campestre (s)
Native Shrub Mix
696 sq m
Native Shrub Mix
629 sq m
1no. Quercus robur
2no. Populus tremula (s)
4no. Sorbus aucuparia (s)
3no. Alnus glutinosa (s)
5no. Betula pendula (s)
1no. Quercus robur (s)
1no. Quercus robur (s)
1no. Quercus robur (s)
Native Shrub Mix
557 sq m
1no. Alnus glutinosa (s)
2no. Acer campestre (s)
5no. Fagus sylvatica (s)
2no. Betula pendula (s)
1no. Fagus sylvatica (s)
Native Shrub Mix
164 sq m
3no. Betula pendula (s)
ndula (s)

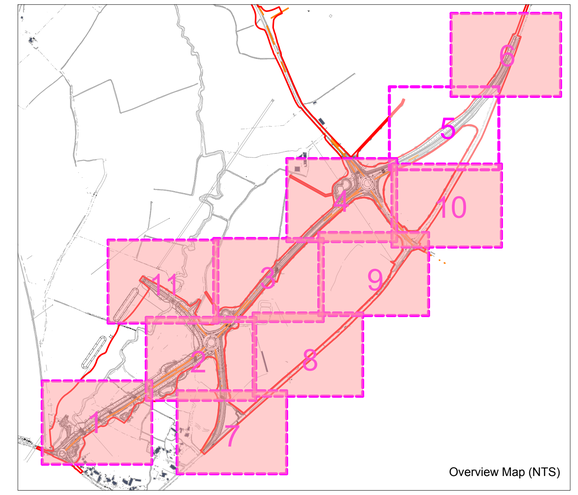
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FOR CONTINUATION SEE P19-2913_02 SHEET 10

KEY

- SITE BOUNDARY
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Detailed Planting Plan

Yarnbrook and West Ashton Relief Road

Client: Persimmon Homes Ltd and CEREP III

DRWG No: P19-2913_02 Sheet No:5/12 REV: D

Drawn by : IHW Approved by: NHA

Date: 04/02/2021

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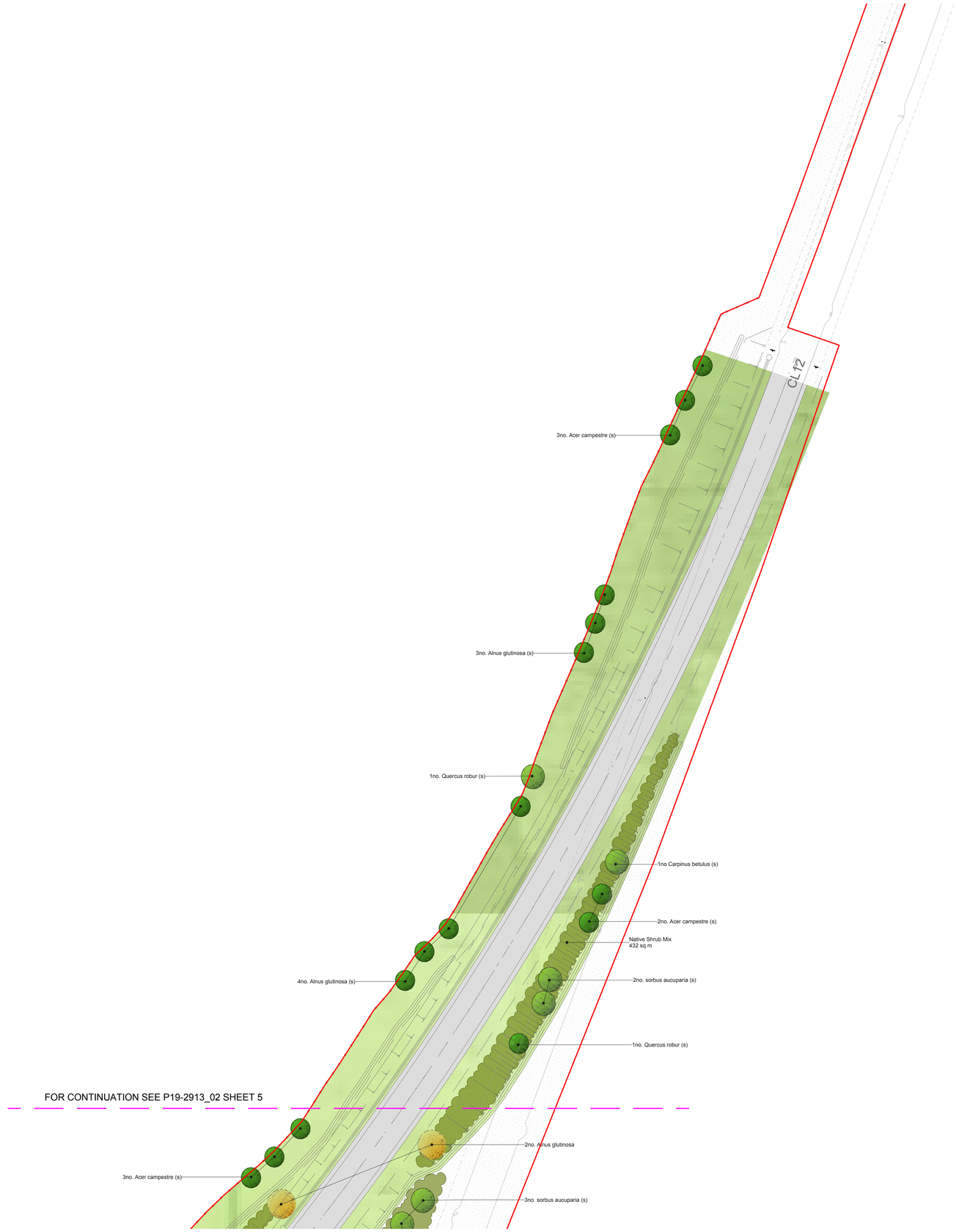
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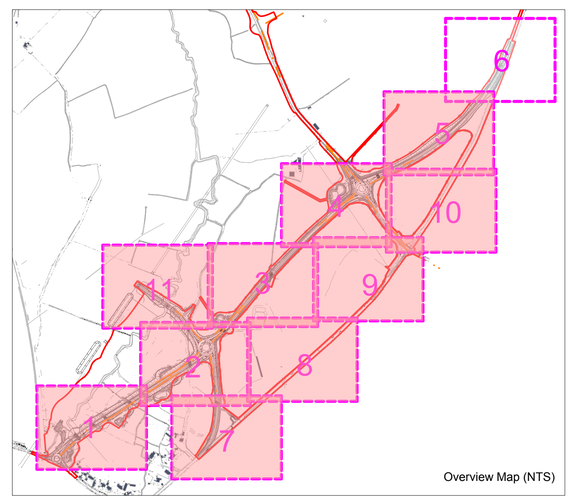
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0 50m

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Detailed Planting Plan

Yarnbrook and West Ashton Relief Road

Client: Persimmon Homes Ltd and CEREP III

DRWG No: P19-2913_02 Sheet No:6/12 REV: D

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1no. Betula pendula (s)

3no. Carpinus betulus (s)

Native Shrub Mix
379 sq m

4no. Acer campestre (s)

1no. Fagus sylvatica

FOR CONTINUATION SEE P19-2913_02 SHEET 2

1no. Acer campestre
2no. Fagus sylvatica

Native Woodland Planting Mix
1545 sq m

1no. Acer campestre
1no. Fagus sylvatica
1no. Betula pendula

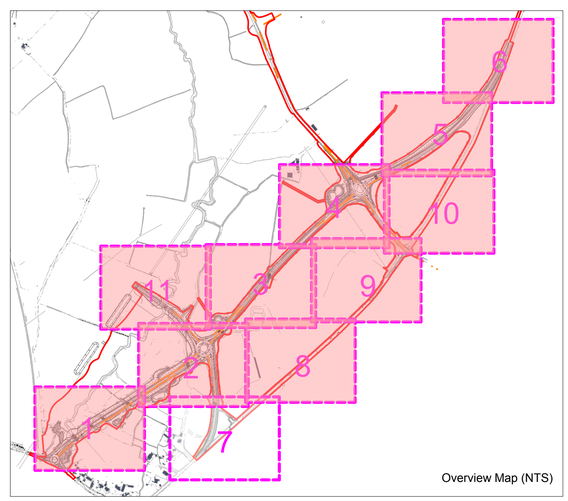
FOR CONTINUATION SEE P19-2913_02 SHEET 8

5no. Acer campestre 'Streetwise'

KEY

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Overview Map (NTS)

0 50m

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Detailed Planting Plan

Yarnbrook and West Ashton Relief Road

Client: Persimmon Homes Ltd and CEREP III

DRWG No: P19-2913_02 Sheet No:7/12 REV: D

Drawn by : IHW Approved by: NHA

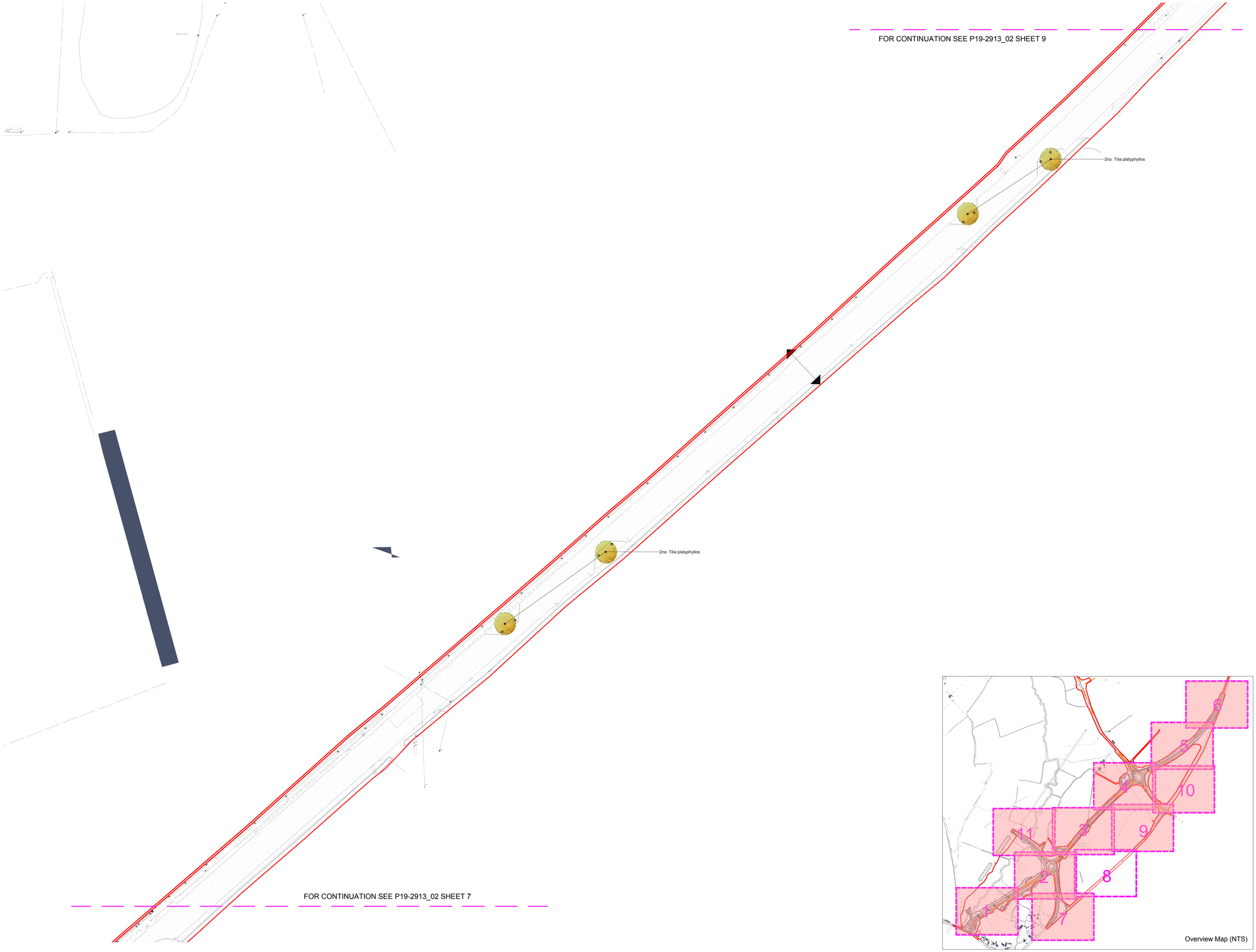
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- GENERAL PURPOSE MEADOW GRASSLAND

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0 50m

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Detailed Planting Plan

Yarnbrook and West Ashton Relief Road

Client: Persimmon Homes Ltd and CEREP III

DRWG No: P19-2913_02 Sheet No:8/12 REV: D

Drawn by : IHW Approved by: NHA

Date: 04/02/2021

Scale: 1:500 @ A1

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FOR CONTINUATION SEE P19-2913_02 SHEET 10



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- NATIVE WOODLAND PLANTING MIX
- NATIVE SHRUB PLANTING
- WETLAND WILDFLOWER MEADOW GRASSLAND
- GENERAL PURPOSE MEADOW GRASSLAND

NOTE: REFER TO DRAWING P19-2913_2 SHEET 12 FOR DETAILED PLANTING SCHEDULE. DRAWING TO BE READ IN CONJUNCTION WITH MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS VOLUME 1 SPECIFICATION FOR HIGHWAY WORKS SERIES 3000 (05/01) LANDSCAPE AND ECOLOGY

FOR CONTINUATION SEE P19-2913_02 SHEET 8

0 50m

N

Revisions:
First Issue- 13/12/2019 JS
A- (28/10/2020 IHW) Updated in response to technical review comments made on landscape proposals dated 17th Sept 2020
B- (30/11/2020 IHW) Hedges removed following council comment
C- (02/02/2021 IHW) Hedges added to West Ashton Road junction
D- (04/02/2021 IHW) Hedges amended to bat underpasses

Detailed Planting Plan

Yarnbrook and West Ashton Relief Road

Client: Persimmon Homes Ltd and CEREP III

DRWG No: P19-2913_02 Sheet No:9/12 REV: D

Drawn by : IHW Approved by: NHA

Date: 04/02/2021

Scale: 1:500 @ A1

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ercus robur (s)

rbus aucuparia (s)

tula pendula

Acer campestre (s)

1no. sorbus aucuparia (s)

Native Hedgerow Planting
210 lin m

FOR CONTINUATION SEE P19-2913_02 SHEET 4

3no. Betula pendula (s)

1no. Populus tremula (s)

Native Woodland Planting Mix
662 sq m

FOR CONTINUATION SEE P19-2913_02 SHEET 9

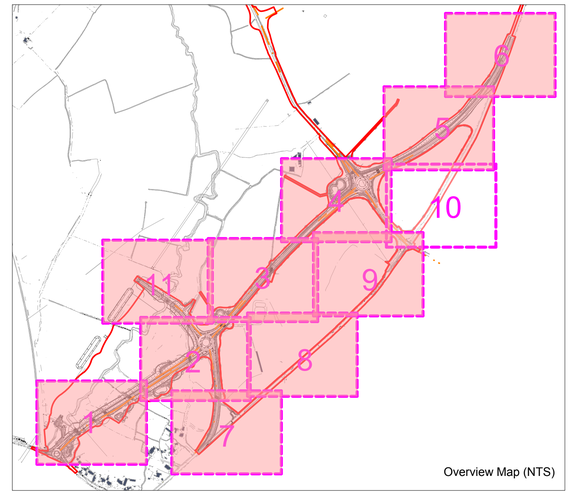
Native Woodland Planting Mix
1481 sq m

FOR CONTINUATION SEE P19-2913_02 SHEET 5

KEY

- SITE BOUNDARY
- PROPOSED TREE PLANTING
  - EXTRA HEAVY STANDARDS TO KEY JUNCTIONS/STREETS
- PROPOSED TREE PLANTING
  - SELECTED STANDARD TREES
- NATIVE WOODLAND PLANTING MIX
- NATIVE SHRUB PLANTING
- WETLAND WILDFLOWER MEADOW GRASSLAND
- GENERAL PURPOSE MEADOW GRASSLAND

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0 50m

N

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Yarnbrook and West Ashton Relief Road

Client: Persimmon Homes Ltd and CEREP III

DRWG No: P19-2913_02 Sheet No:10/12 REV: D

Drawn by : IHW Approved by: NHA

Date: 04/02/2021

Scale: 1:500 @ A1

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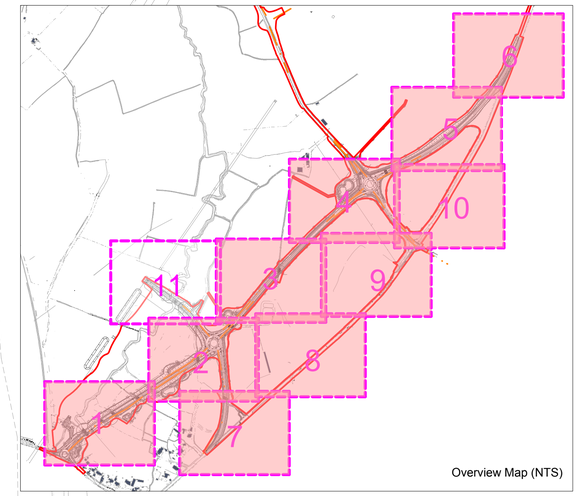
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KEY

- SITE BOUNDARY
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Overview Map (NTS)

Swale L

6no. Tilia platyphyllos

1no. Tilia platyphyllos (s)

Native Shrub Mix
660 sq m

1no. Alnus glutinosa (s)

3no. Populus tremula (s)

Native Coppice Planting
569 sq m

5no. Populus tremula (s)

1no. Betula pendula (s)

FOR CONTINUATION SEE P19-2913_02 SHEET 2

Native Shrub Mix
658 sq m

3no. Acer campestre (s)

4no. Betula pendula (s)

Native Shrub Mix
1062 sq m

2no. Betula pendula (s)

FOR CONTINUATION SEE P19-2913_02 SHEET 3

1no. Betula pendula (s)

Native Shrub Mix
278 sq m

2no. Acer campestre

2no. Populus tremula (s)

Native Shrub Mix
37 sq m

3no. Salix alba (s)

0 50m

N

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Detailed Planting Plan

Yarnbrook and West Ashton Relief Road

Client: Persimmon Homes Ltd and CEREP III

DRWG No: P19-2913_02Sheet No:11/12 REV: D

Drawn by : IHW Approved by: IHW

Date: 04/02/2021

Scale: 1:500 @ A1

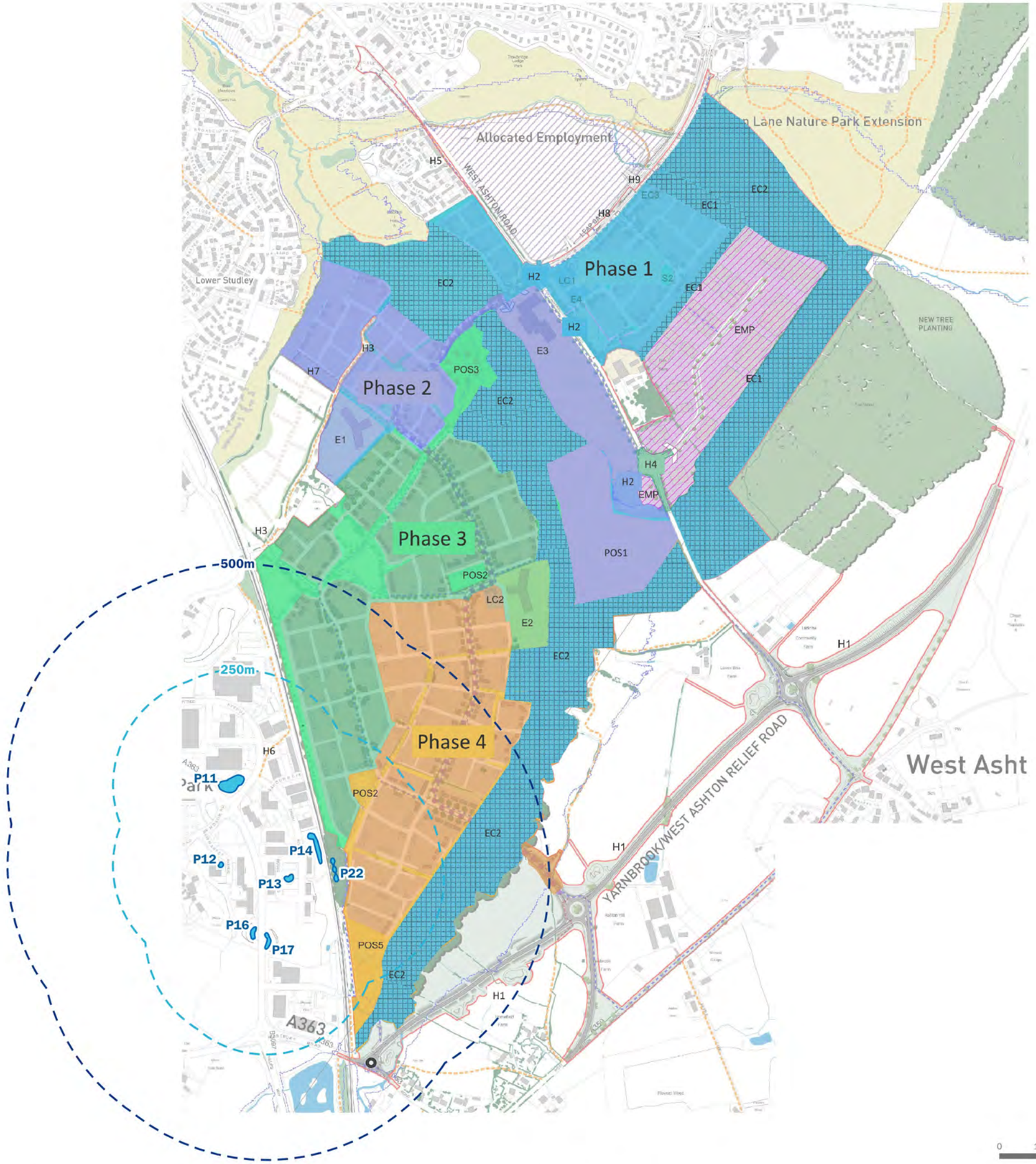
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Plans

Plan EDP 1: Habitats within 500m of Confirmed Great Crested Newt Ponds Requiring Licensing or Precautionary Measures
(edp7866_d003b 12 November 2025 GYo/ERo)



N

Pond with Confirmed Great Crested Newt (GCN)

250m Buffer from Ponds

500m Buffer from Ponds

Pre-commencement surveys of on-site ponds may be required at reserved matters. The 2023 surveys retuned negative eDNA results in all on-site ponds confirming a restricted distribution of great crested newts. Updated survey will be required to ensure the distribution of great crested newts has not increased on the site and to inform licensing and/or precautionary methods.

0 100 200 300 400 500 m

client

Persimmon Homes (Wessex) Ltd

project title

West Ashton, Trowbridge

drawing title

Habitats within 500m of Confirmed Great Crested Newt Ponds Requiring Licensing or Precautionary Measures

date	**12 NOVEMBER 2025**	drawn by	**GYo**
drawing number	**edp7866_d003b**	checked	**ERo**
scale	**1:10,000 @ A3**	QA	**DJo**

the environmental dimension partnership

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CARDIFF
02921 671900

CHELTENHAM
01242 903110

CIRENCESTER
01285 740427

info@edp-uk.co.uk
www.edp-uk.co.uk

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