Harworth Group

## Dearne Valley Parkway, Rockingham, Barnsley- Phases 2 and 3

# Construction and Environmental Management Plan

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## CONTENTS

1.0 INTRODUCTION ..... 3

2.0 ROLES AND RESPONSIBILITIES ..... 5

3.0 ECOLOGICAL FEATURES, RISK ASSESSMENT AND RELEVANT LEGISLATION ..... 6

4.0 STAGE 1 – PRE-COMMENCEMENT ..... 10

5.0 STAGE 2 – CONSTRUCTION ..... 14

## TABLES

Table 1: Assessment of Risk to Habitats

Table 2: Assessment of Risk to Fauna

## FIGURES

Figure 1a: Precautionary Working Areas – Existing Site

Figure 1b: Precautionary Working Areas – Proposed Development

## APPENDICES

APPENDIX A: Tree Protection and Removal Plans; The Environment Partnership

# 1.0 INTRODUCTION

1.1 The following report has been prepared by FPCR Environment and Design Ltd on behalf of the Harworth Group regarding land at Rockingham, Barnsley. The Site benefits from a hybrid planning permission (ref: 2019/1573) for a) outline proposals with all matters reserved apart from access and b) full details of associated earthworks and creation of access including anew roundabout.

1.2 This report has been prepared in order to enable the full or part discharge as relevant of the following conditions:

*Condition 4:*

*No development or other operations being undertaken on site shall take place until tree protection is erected in accordance with the method statements in the approved Arboricultural Impact Assessment V2 dated Feb 2020 by The Environment Partnership. Thereafter the development shall be implemented in accordance with the approved documents.*

*Reason: To ensure the continued wellbeing of the trees in the interests of the amenity of the locality.*

*Condition 5:*

*No vegetation clearance shall take place between the months of March and August inclusive unless nesting birds have been shown to be absent by a suitably qualified ecologist in accordance with written details to be submitted and approved by the Local Planning Authority.*

*Reason: In the interests of biodiversity and in accordance with Local Plan Policy POLL1 Pollution Control and Protection.*

*Condition 7*

*Prior to commencement of development any areas proposed for works within 60 m of Pond 1 and Pond 2 shall be subject to a 'finger-tip' search for all amphibian species by a qualified ecologist immediately prior to works commencing and outside of the hibernating season (typically November - February inclusive). Vegetation shall thereafter be removed within 24hrs of the search and measures taken to avoid creation of new habitat. In the event that Great Crested Newts are found works shall immediately cease and advice sought from the LPA ecologist.*

*Reason: In the interests of protected species in accordance with Local Plan Policy BIO1*

*Condition 8*

*Prior to commencement of development Herras fencing (or similar suitable protective fencing shall be installed around all ponds and surrounding terrestrial habitat and shall remain in place for the duration of works. No machinery / plant or construction material shall be stored within fenced area.*

*Reason: To avoid potential harm to GCN and their habitat through pollution in accordance with Local Plan policy BIO1 and POLL1.*

*Condition 9*

*Prior to commencement of construction, a Construction and Environment Management Plan shall be submitted to and approved in writing by the Local Planning Authority as specified in the Ecological Appraisal by FPCR at para 5.2(page 13) of Appendix 7 of Vol 3 of the Environmental Statement to protect nearby Shortwood and Haygreen Local Wildlife Site during construction operations. Thereafter the development shall proceed in accordance with the approved plan.*

*Reason: To ensure that the LWS is not affected during construction, including through habitat degradation arising from dust deposition, accidental damage or pollution incidents and in accordance with Poll1 and BIO1.*

For reference, Paragraph 5.2 of Appendix 7 of ES Vol 3 states that:

*Short Wood and Hay Green LWS lies 25m north of the site, at its closest. The subject site supports no ancient or mature woodland for which this non-statutory site is designated and no direct habitat loss is proposed. Mitigation will need to be put in place to ensure that the LWS is not affected during construction, including through habitat degradation arising from dust deposition, accidental damage or pollution incidents. Mitigation will be put in place through the adherence to current industry best practice recommendations and guidance during site works, implemented via a Construction and Environmental Management Plan (CEMP) to protect biodiversity interests.*

1.3 It is noted that the LWS boundary in fact lies c40m from the Site's red line boundary at its closest as indicated on Figures 1a-1b.

## Site Location & Context

1.4 The subject site is a former colliery located adjacent to the west of Shortwood Business Park in Barnsley, South Yorkshire (central grid ref: SE 3563 0103) and includes parcels of land to the north and south of the A6195 dual carriageway, Dearne Valley Parkway. Recent development associated with earlier phases of the development lie to the west of the northern parcel. The existing residential development of Birdwell is situated to the north-west and to the south the more extensive residential area of Hoyland. Junction 36 of the M1 Motorway lies less than 600m to the west. The surrounding land use is largely arable and pasture with an area of broad-leaved semi-natural woodland to the north, forming part of the Short Wood and Hay Green Local Wildlife Site (LWS).

1.5 Short Wood and Hay Green Local Wildlife Site (LWS) is located less than 50m to the north of site and is designated for ancient woodland habitat; with six ancient woodland indicator species present. Three ponds, water courses and neutral grasslands also occur within the LWS.

1.6 Two ponds lie partially within or adjacent to the Site. Although surveys in 2014 and 2013 indicated a very small population of great crested newts, all subsequent surveys have indicated this species to be absent, although other amphibians occur.

1.7 Scrub and wooded areas provide potential nesting habitat for a range of local bird species and grassland provides some low suitability for ground nesting species. Habitats provide limited suitability for other protected species and none have been recorded.

## Development Proposals

1.8 Proposals are for a business park development comprising warehousing with associated parking, lorry compounds and access infrastructure, with landscaping and green infrastructure, including attenuation facilities.

## Objectives of CEMP

1.9 The objective of this CEMP is to minimise any potential risks to the ecological interest features of the Site and adjoining habitats including Short Wood and Hay Green LWS which is situated in close

proximity to the site. It also details measures, including general good practice, for protecting habitats and fauna which may be present.

1.10 This document outlines the recommended working practices to be carried out prior to, and during development to ensure that the identified features are not affected during construction. It also outlines current industry best practice and guidance which will be adhered to, to protect the biodiversity interests.

1.11 The CEMP will be reviewed jointly by the Principal Contractor and Ecological Clerk of Works (ECoW), every six months until completion of all construction and landscaping works, to ensure that it remains suitable and that environmental commitments are being met. Any significant changes to the CEMP will be submitted to the Local Authority for review prior to the relevant construction activity commencing.

## 2.0 ROLES AND RESPONSIBILITIES

**Ecological Clerk of Works (ECoW)**

2.1 FPCR Environment and Design Ltd. have been appointed by the Harworth Group to provide a suitably qualified and experienced ecologist who will act as the ECoW to supervise the undertaking of works associated with this CEMP, where required. The ECoW , or other supervising ecologist will be determined before the commencement of works and their name and contact details kept in the site office at all times. The main point of contact at FPCR will be James Hutchison who can be contacted on 01509 672772. Any future change to this will be notified to the client and site management as necessary.

2.2 As part of the works associated with establishing the site the ECoW will provide tool-box talks as necessary and relevant for all non-ecological personnel for appropriate training and information.

2.3 Further duties of the ECoW include, (i) acting as the Developer's/Principal Contractor's main point of contact in relation to environmental issues and (ii) liaison officer with relevant statutory bodies as necessary.

**Principal Contactor**

2.4 For the pre-commencement and construction phases of the scheme, the Principal Contractor, appointed by the Harworth Group, will be responsible for the protection, creation and initial establishment of the areas of green space within the site, in addition to construction areas as indicated on relevant construction and landscape working plans held by the Contractor for the purposes of their work. In conjunction with having overarching responsibility for the ecological measures as detailed within this report the Principal Contractor will ensure that all appropriate site protection measures as detailed in the following sections are implemented in order to ensure no inadvertent effect upon ecological features.

2.5 All works at all stages are the responsibility of the Principal Contractor who will:

- Appoint as necessary, and liaise with the ECoW;
- Ensure that practical arrangements are in place to comply with the CEMP;
- Arrange ecological surveys and monitoring as required during construction;

- Oversee the agreed programme of habitat and species protection as described in this document;
- Ensure that protective fencing and other site protection measures as described below are implemented and adequately maintained throughout all construction stages;
- Contribute to communication on environmental matters with stakeholders and statutory bodies, as required;
- Keep records to demonstrate implementation of and compliance with the CEMP;
- Ensure that an appropriately qualified/experienced ecologist undertakes the required on-site surveys, supervision etc. in the event that the ECoW cannot attend site and works cannot be delayed;
- Monitor the ecological and environmental performance of any sub-contractors and provide correction or direction as necessary;
- Ensure site staff are given environmental awareness/protected species identification training by the ECoW, as necessary;
- Ensure that ecological survey reports, CEMP and contact details for the ECoW are available at the site offices at all times;
- Ensure that any required corrective ecological actions are taken in line with the relevant procedures as directed by the ECoW;
- Co-ordinate and undertake periodic reviews of the CEMP with the ECoW;

2.6 The Principal Contractor shall be responsible for ensuring an appropriate ECoW is present on-site as required to ensure the measures as recommended within this CEMP (and any other relevant ecological documents) are followed.

## 3.0 ECOLOGICAL FEATURES, RISK ASSESSMENT AND RELEVANT LEGISLATION

3.1 Table 1 below considers the ecological habitat features at the Site which are sensitive to construction activities and identifies the potential risk to them as a result of construction works. Measures required to manage these risks are discussed in the appropriate section below

**Table 1- Assessment of Risk to Habitats**

| Ecological Feature | Relevant Legislation/ Policy | Assessment of Risk |
|---|---|---|
| Short Wood and Hay Green LWS (ancient woodland, semi-natural broadleaved woodland, running water, standing water (pond), grassland and hedges) | Non-statutory designated sites do not receive statutory protection, however, do receive policy protection as 'local sites' as reflected in the National Planning Policy Framework (NPPF).<br><br>The NPPF prohibits developments that damages ancient woodland apart from in exceptional circumstances or where a compensation strategy is in place.<br><br>Ponds and Hedgerows (comprising over 80% native species) are recognised as Habitats of Principal Importance (HPI) under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006<br><br>Ancient woodland, broadleaved woodland, ponds and hedgerows are also all priority habitats within the Barnsley Local Biodiversity Action Plan (LBAP).<br><br>Local policy Poll1 and Bio1 | No works will directly affect the LWS, such as through habitat loss. There is a risk indirect effects to the LWS arising during construction activities as a result of:<br><br>Damage to habitats associated with the LWS as a result of pollution from dust and run off during construction activities/ the incorrect storage of materials /accidental spillages, particularly in the north of the Site.<br><br>Risks occur throughout the year. Precautionary measures will be implemented. |
| Retained and new habitats on and adjacent to Site including trees | Local policy Bio1 | All retained habitats adjacent to the working areas and any newly created habitats at the time of construction have the potential to be damaged through direct disturbance and indirect disturbance such as through pollution and habitat degradation.<br>Risks occur throughout the year. Precautionary measures will be implemented |

## Fauna

3.2 Table 2 below considers the notable and protected species which are known to be, or are potentially present within the LWS, which could be affected by development activities.

**Table 2: Assessment of Risk to Fauna within the LWS**

| Species | Relevant Legislation/ Policy | Assessment of Risk |
|---|---|---|
| Great crested newts (GCN)<br><br>Other amphibians | GCN and their places of rest and shelter are listed on the Conservation of Habitats and Species Regulations 2017 making it illegal to deliberately disturb any such animal or damage / destroy a breeding site or roosting place of any such animal.<br>GCN are also afforded full legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is illegal to recklessly or intentionally kill, injure or take a a GCN or recklessly or intentionally damage or obstruct access to or destroy any place of shelter or protection or disturb any animal whilst they are occupying such a place of shelter or protection.<br>GCN and Common toad are considered a Species of Principal Importance (SPI) under the NERC Act (2006). GCN are listed on the local Biodiversity Action Plan | A very small population of GCN was recorded in both ponds to the east of the Site in either 2013 or 2014. Subsequent GCN surveys have not recorded this species. GCN have not been recorded within any other pond within 500m of the Site.<br>Works are not anticipated to directly affect either pond. Clearance of habitats adjoining the ponds which provide suitable GCN terrestrial habitat will occur. Toads have been recorded using these habitats.<br><br>There is a risk of indirect effects to the ponds and surrounding habitats arising during construction activities as a result of pollution, contamination etc during construction activities.<br><br>Risks can occur throughout the year, including during the hibernation season. Precautionary measures will be implemented. |
| Bats | Bats and their roosts are listed on the Conservation of Habitats and Species Regulations 2017 making it illegal to deliberately disturb any such animal or damage / destroy a breeding site or roosting place of any such animal.<br>Bats are also afforded full legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is illegal to recklessly or intentionally kill, injure or take a species of bat or recklessly or intentionally damage or obstruct access to or destroy any place of shelter or protection or disturb any animal whilst they are occupying such a place of shelter or protection. | There is a risk during construction activities of:<br><br>Disturbance to any roosting or foraging bats using suitable off-site habitats and retained linear features for foraging and commuting through the use of inappropriate lighting in the north of the Site.<br><br>Risk occur low during the active bat season (April – October). Precautionary measures will be applied. |

| Species | Relevant Legislation/ Policy | Assessment of Risk |
|---|---|---|
| | Some bat species are considered to be Species of Principal Importance (SPI) under the NERC Act (2006).<br><br>All bat species present within Barnsley are priority species within the Local Biodiversity Action Plan | |
| Birds | All breeding birds including, nests, eggs and fledgling young are protected under the Wildlife and Countryside Act 1981 (as amended) | Damage and disturbance to nesting birds, nests and dependent young could occur during clearance of suitable habitats Disturbance to nesting birds in retained or adjoined nesting habitats.<br><br>Risks occur during the nesting season March- August inclusive. Precautionary measures will be implanted. |
| Badgers | Badgers and their setts are protected under the Protection of Badgers Act 1992 | No setts are currently known within on Site or within 30m of the Site. No evidence of badgers recorded on Site, but are in wider area, some habitats on Site have suitability.<br>Risks can occur all year. Where works are to be undertaken within 30m of suitable habitat, a pre-commencement check may be required to ensure no setts have been created in the interim. General precautionary measures will be applied. |

## 4.0 STAGE 1 – PRE-COMMENCEMENT

4.1 The following details the necessary avoidance and mitigation measures that will be implemented prior to commencement of site clearance and construction.

### Biodiversity Protection Zones

4.2 Biodiversity Protection Zones are areas of retained land which include habitats that may be at risk from damage, or habitats which have been identified to be of importance to faunal species which may be harmed or disturbed by construction activities. Biodiversity Protection Zones (BPZ)/protective buffers at this Site include and are as indicated on Figure 1a-b attached:

- a 60m buffer zone around the two ponds (on and off-site),
- a 50m buffer from the LWS
- all retained and newly created habitats on Site
- other off-site habitats outside of the Site boundary

4.3 All on -site workers will be made aware of the BPZ/buffers and instructed to take care when working alongside or within these.

4.4 Works within the 60m buffer zone around the ponds and 50m buffer from the LWS will subject to precautionary measures as set out below.

4.5 No works, other than those approved as part of the consented works, such as for haul routes etc will be permitted beyond any boundary and protective fencing as set out below.

### Habitats

#### Protective fencing

4.6 Prior to works at the Site commencing Site boundary fencing, such as heras fencing or similar, will be installed surrounding the Site, creating a barrier between the Site/construction area and the off-site BPZ/buffers, including Short Wood and Hay Green LWS.

4.7 Protective barriers such as heras, or similar, will be installed around all retained habitats, specifically:

- Areas detailed by the Arboricultural Method Statement within the approved Arboricultural Impact Assessment (Ref: 7890.001 V2; Feb 2020). Tree Removal and Protection Plans have been provided by TEP and are provided at Appendix A of this CEMP. Any deviation must be in accordance with BS5837:2012 and subject to the advice of an arboriculturist. Within the buffer zone behind the protective fencing the following is to be adhered to:
    - no soil stripping, excavations or any vegetation clearance is to take place;
    - no site workers or vehicles are permitted; and
    - no machinery or materials are to be stored.
- Ditches and waterbodies – fencing will be erected at the edge of the working area as indicated by approved construction plans along retained ditches and waterbodies to protect the integrity of these features and minimise any risk of accidental pollution events. Fencing must be at a

minimum of 5m, unless approved works dictate otherwise for localised areas. The following apply to the exclusion zone:

- works or the storage of materials will not take place within this zone;
- the maintenance of this zone will be ensured through the use of bankside fencing; and
- where appropriate, best practice measures will be implemented to ensure works adhere to Environment Agency Guidelines (refer Section 5: Construction - General Measures for all retained and new habitats, below)

- Grassland associated to the pond east of the new attenuation facility, and any other areas of retained grassland - installation of protective fencing to demarcate the areas of retained grassland within the Site at the edge of the agreed working area as indicated by approved construction plans. Within these retained areas behind the protective fencing the following is to be adhered to:
  - no soil stripping, excavations or any vegetation clearance is to take place;
  - no site workers or vehicles are permitted; and
  - no machinery or materials are to be stored.

4.8 Protective fencing for should be erected as necessary for any ecological features for any off-site works such as along haul roads etc. Fencing should take into consideration the location of any Public Rights of Way and be positioned accordingly.

4.9 Any fencing to be erected within the 60m buffer zone should be undertaken in conjunction with the ECoW, as precautionary measures may be required.

**Targeted Clearance Areas**

4.10 Vegetation removal carried out along retained habitat edges as identified in the tree protection methodology documents D7890.015 and D7890.016 (Appendix A) must be conducted under a watching brief. Individual trees for removal and retention will be identified within a defined swathe along the final woodland edge.

## Fauna

4.11 The following precautionary measures will be adopted to avoid any potential for harm to protected and notable species at the Site prior to works commencing.

**General Good Practice Measures**

- Where possible material will be stored centrally within the site within a fenced compound and will not be stored at the edge or near to the boundary with the LWS and away from other retained habitats including ditches and ponds;
- Materials should be raised from the ground by storing on pallets to prevent fauna using these for shelter.
- Suitable habitats on Site or within 30m of the working areas will be checked for the presence of active badger setts prior to works. Unless works can be undertaken in an appropriate manner without disturbance to the sett as advised by the ecologist at the time, a licence will be required

to legitimise the works. Licences are only available between July and November inclusive. Advice would be provided as necessary. Works more than 30m from any active sett can be undertaken without constraint, as long as a safe habitat corridor is maintained to unaffected suitable habitats in the wider area.

**Nesting birds**

4.12 The following provides the recommended methodology to be followed with respect to clearance of vegetation on Site. Minor adjustments to this may be made during clearance as appropriate based on the judgement of the ECoW, where site specific conditions require.

4.13 Wherever possible ground and woody vegetation will be cleared between October and February inclusive to avoid constraints from nesting birds, in line with any constraints from the potential presence of amphibians, including GCN, as indicated below.

4.14 For all areas outside the 60m protection buffer for amphibians, clearance of all vegetation between may be undertaken without constraint.

Clearance outside the nesting season

4.15 Where clearance falls within the 60m buffer as indicated on the attached plan, constraints from the presence of amphibians exist, which may be using suitable habitats within these areas for hibernation over winter. The below methodology is to be followed for any tree/scrub removal over winter:

- Canopies may be cleared, without any breaking of ground or disturbance of potential hibernacula in these areas between approximately November and February inclusive, weather dependent where overnight temperatures are consistently below 5ºC.
- Canopies will be cleared to no less than 150mm above ground, with all root-balls and ground remaining intact.
- All arisings must be removed from site or into areas unsuitable for amphibians including GCN to avoid the creation of hibernacula within this zone.
- No ground breaking may occur and no tracked machinery used across suitable habitat within the 60m zone over winter.

Clearance during the nesting season

4.16 Where vegetation cannot be cleared outside of the bird nesting season, the EcOW will check all suitable nesting habitat for the presence of active nests prior to removal as follows between March and August inclusive. The following applies to all areas outside of the 60m buffer zone:

- The surveyor will methodically walk all grassland areas to be cleared to check for ground nests, along the length of any hedgerow to be removed, across discreet areas of scrub habitat and the linear edges of plantation areas, recording any breeding bird evidence, e.g. carrying nest material or food, territorial singing, display etc. Habitats will then be watched from a distance (using binoculars) for 30 minute periods to determine whether any birds are accessing it. Finally, a thorough hand-search of the suitable woody nesting areas will be undertaken to locate any active nests.

- Where scrub/plantation areas are too dense or too large to adequately monitor for bird activity from the leading edge, survey and removal will be undertaken incrementally with peripheral areas surveyed as above, followed immediately by careful clearance of the checked area, under the supervision of the ecologist. This process will then be repeated as necessary to enable internal areas to be surveyed satisfactorily to ensure the absence of nesting birds.
- Once the ecologist has determined that the areas are free of constraints then they must be cleared within 24hours. Arisings should be removed from site, chipped or mulched within 24 - 48 hours as large piles of arisings provide potential nesting habitat for some bird species and will require checking for the presence of nesting birds prior to removal if left for longer

4.17 If an active nest is recorded then an appropriate buffer will be determined by the supervising ecologist within which no works can occur until the ecologist has revisited and confirmed that the nest is no longer active. The ecologist will determine approximately how long before the nest should be re-checked based on judgement and experience. A suitable protective fence/barrier will be erected around the nest within which no incursion should occur. Works may proceed outside of this.

4.18 All active nests will be marked on a plan and dated, a copy of which will be retained by the Principal Contractor to ensure all personnel are aware of nest location.

**Amphibians including Great crested newts**

4.19 All areas within the 60m buffer zone will be checked for the presence of amphibian species prior to any works by the ECoW, including vegetation in accordance with the below.

4.20 Clearance will be undertaken outside the amphibian hibernating season (typically November – February inclusive, when temperature's are unsuitable)

4.21 All vegetation to be removed within the 60m buffer will be checked for the presence of amphibians and GCN by the ECoW as follows:

- Area to be walked slowly to ensure amphibians are not present, with particular attention paid to suitable refugia/sheltering habitats.
- Potential refugia, such as grass tussocks, log/brash piles and debris, areas of heavy leaf litter will be checked by hand search.
- Woody vegetation to be removed will be checked for the presence of nesting birds and canopies may be removed as above.
- Rootballs/tussocks will be carefully pulled and refugia piles dismantled under the supervision of the ecologist to check for sheltering amphibians including GCN.
- All arisings must be removed from the 60m working zone that day, as they could create potential refugia which will subsequently require checking.
- Checked areas should be cleared on the day of checking as amphibians can be nocturnal and further checks would be required if left uncleared overnight.
- In the event that an amphibian, excluding GCN, is recorded during these searches, they may be transported to a place of shelter within suitable retained and unaffected habitats. Transportation should be in a suitable lidded receptacle, with airholes and including a few leaves within.

- In the event that a GCN is found during clearance works will cease and further advice provided by the ECoW.
- Once the ECoW has confirmed all constraints have been removed, construction works may occur.

4.22 Where works are anticipated to occur within the 60m buffer zone during the hibernation season, these areas may be cleared prior to winter following the above methodology to provide unsuitable GCN habitat which may then be worked as necessary over winter. Ground should be cleared back and maintained as bare ground, with no grass tussocks/debris or other potential sheltering habitat remaining.

## 5.0 STAGE 2 – CONSTRUCTION

5.1 A copy of this CEMP will be held at the site office for reference.

5.2 The Principal Contractor will monitor the ecological issues during the course of site clearance and construction.

5.3 Throughout construction all workers should work with due care and attention with respect to the potential presence of fauna and protected species on site. Any observations of protected species must be reported immediately to the Principal Contractor, who will contact the ECoW for further advice.

5.4 Weekly checks of the fencing demarcating the Site/Biodiversity Protection Zones and Root Protection Areas will be made by the Principal Contractor and this will ensure:

- The integrity and correct positioning of protective fencing
- Repairs are made to the fencing as necessary

### Habitats

5.5 The potential for impacts during construction activities on the LWS and other retained habitats adjacent to all working areas will be minimised through the ongoing maintenance of protective fencing as described above and the following methods.

5.6 Fencing will be located so that it prevents any inadvertent damage to the LWS, retained or created habitats throughout the construction, particularly in locations where vegetation is to be removed or during works adjoining and in proximity to retained habitats.

**General measures for all retained and new habitats**

5.7 No temporary storage of materials, construction of unapproved haul routes, or site machinery will be sited within the retained habitats of the BPZ outside of the Site boundary and within the protective buffer zones indicated on Figure 1 and unnecessary or informal access to these areas by construction site personnel would be prevented.

5.8 Good practice in line with Guidance for Pollution Prevention[1] should be followed at all times. Materials and fuel should all be stored away from the LWS area. Methods to avoid accidental pollution or contamination of retained habitats on or off Site, including from surface runoff includes but is not limited to the following:

- Any environmentally hazardous material will be kept in dedicated stores, and storage tanks should have appropriate bunding to prevent run-off into retained habitats.
- Fuel stored on site will be stored in double bunded fuel tanks. Spill kits will be readily available if required.
- There should be no uncontrolled run-off of water or mud from the Site
- Once hard surfaces are constructed in the form of roads, silt run-off preventative measures in the form of metal plates secured to gulley frames with terram are to be utilised throughout the construction period
- During works machinery will not be refuelled within 30m of the retained habitats to prevent spillage.
- All machinery will be regularly checked for oil leaks or similar, which, if found, must be prevented from entering the retained habitats either through immediate repair of the machinery or through use of a drip tray/spill kit or similar.
- Any spillages (e.g. diesel) should be cleaned up immediately. Efforts will be made to stop a spill at the source. If the primary container or secondary containment have been breached or failed for any reason, the spill will try to be contained where it's happening. This will reduce the quantity of material released, reducing the amount of spilt material that can cause pollution
- If it is not possible to stop the spill at source, significant attempts will be made to stop it as close to the source as possible. If possible, the spilling material will be safely moved into another container to limit the size of the spill. Use of a suitable container and pump may be required
- In the event of a spillage on site, the material should be contained (using an absorbent material such as sand or soil or commercially available booms). Sorbents will be used to soak up a spill and stop it spreading on hard surfaces. Using sorbents generates waste and this method will only be used on small spills, or where a spill has been contained to stop any further spread. All used sorbents will be disposed of at an accredited site for disposal

5.9 On their completion, any new ditches or attenuation facilities created and which lead into retained habitats will incorporate a 5m buffer alongside/surrounding to minimise the potential for accidental pollution during construction. The following will apply:

- Works and storage of materials will not take place within this zone
- The maintenance of this zone will be ensured through the use of appropriate bankside fencing to prevent ingress.
- Where appropriate best practice measures as outlined above will be implemented to ensure works adhere to current guidance.

[1] Guidance for Pollution Prevention (GPP) [Online] Accessed 22.10.19 Available at: http://www.netregs.org.uk/environmental-topics/pollution-prevention-guidelines-ppgs-and-replacement-series/guidance-for-pollution-prevention-gpps-full-list/

### Hedgerows and Trees

5.10 It is the responsibility of the Principal Contractor to ensure that fencing is maintained, remains in the correct location and is fit for purpose protecting the root protection areas as stipulated on the Tree Removal and Protection Plans.

5.11 The Principal Contractor will monitor the fencing and buffer zones to ensure that there have been no vehicle incursions and no materials are being stored within the Biodiversity Protection Zones.

### Short Wood and Hay Green LWS

5.12 A small area of the Site lies within 50m of the LWS as indicated on Figure 1. Wherever possible, works will be planned to minimise dust generating activities within 50m of the LWS. Where this is unavoidable the following precautions should be considered, as relevant:

- Consider the use of temporary solid screening, such as hard-boarding erected along the Site boundary fencing, where activities within 50m of the LWS are anticipated to create significant levels of dust for extended periods to help reduce dust transference outside the Site onto the LWS habitats
- Fencing to be kept clean using wet methods
- Stock piles of materials likely to generate dust will be maintained away from the area, or covered, seeded or fenced with solid fencing to stock pile height
- Haul routes will avoid the area and be located at least 50m from the LWS and will include a speed limit suitable for surfaced or unsurfaced roads in accordance with best practice.
- Wheel washing and damping down of surfaces will be undertaken during dry periods to suppress dust within 50m of the LWS
- Open loads which may create dust will be covered within 50m of the LWS
- Avoidance of bonfires and burning of materials within 50m
- An adequate water supply for dust suppression will be made available, including mobile water bowser.

## Fauna

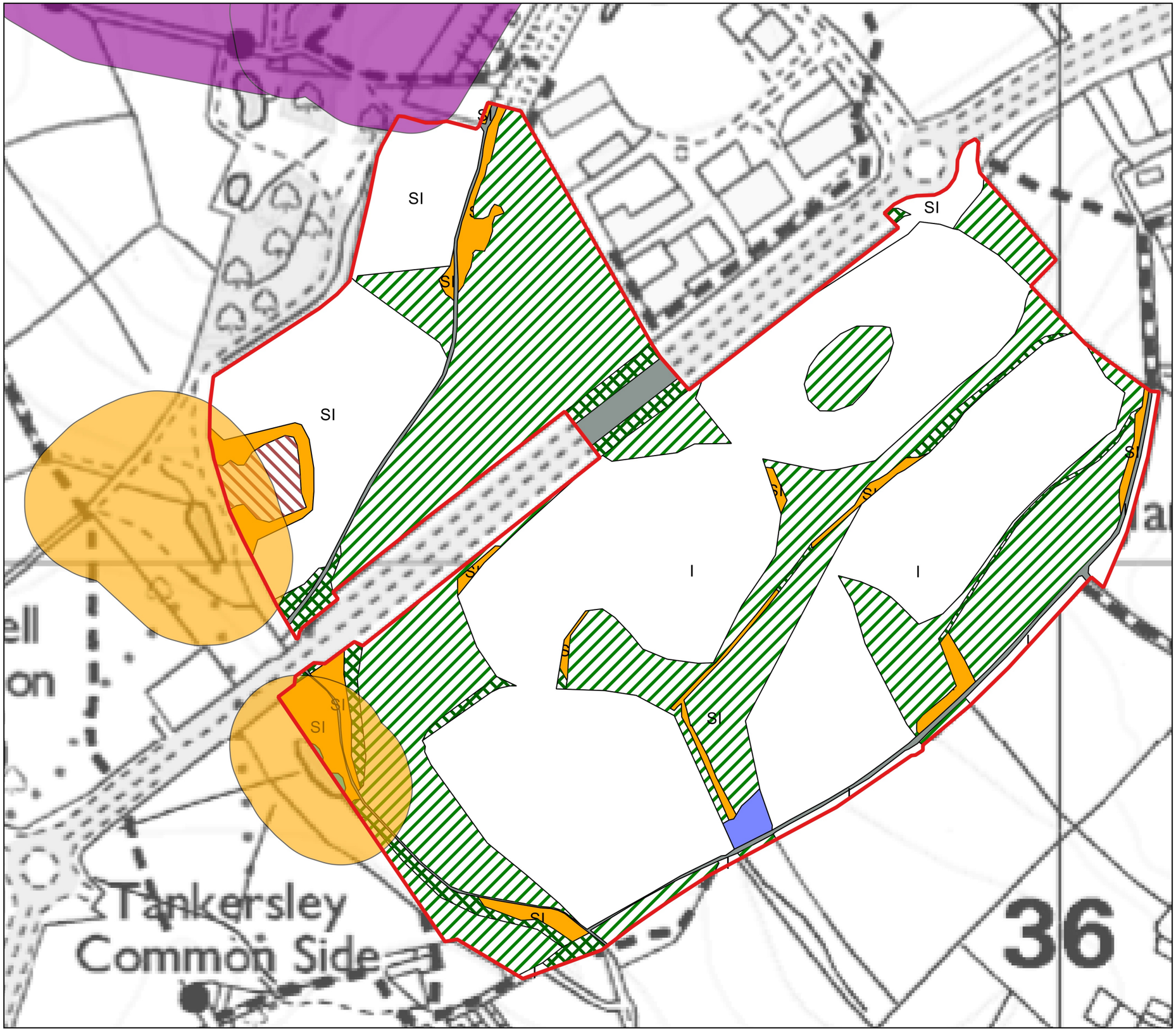
### General Good Practice Measures

5.13 The following precautionary measures will be adopted to avoid any potential for harm to habitats or protected species:

- Where possible material will be stored within a fenced compound away from the edge of the Site near the boundary with retained habitats, including the ponds to the east of the Site;
- Where stored onsite, materials should be raised on pallets (excluding excavated materials or materials stored on areas of cut and fill);
- All excavations left overnight should be left with one sloping end to allow any animals that may fall in to escape;
- All excavations left open overnight or longer should be checked for animals prior to the continuation of works or infilling.

- Works during the active bat season (April – October inclusive) adjacent to retained linear edge habitats on or off-site should be carried out during daylight hours wherever possible, however where this is not possible due to particular programming requirements, lighting should be directional and avoid light spill onto these habitats to prevent adversely affecting foraging and commuting habitats utilised by bats. All lighting must be turned off when construction Site is not active.

5.14 In the event that any protected species, including GCN or badgers are discovered during construction, works should cease and the Principal Contractor is to contact the ECoW immediately for further advice.




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## Key

- Red Line
- Amphibian 60m Buffer Zone
- LWS 50m Buffer Zone

### Habitats

- Broadleaved woodland - plantation
- Built Environment: Buildings/hardstanding
- I — Improved grassland
- SI — Neutral grassland - semi-improved
- Wet Woodland
- Other tall herb and fern - ruderal
- SI — Poor semi-improved grassland
- Scrub
- Standing water

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0 50 100 150 200 m

client
Harworth Estates

project
Rockingham Business Park, Barnsley

drawing title
Precautionary Working Area Plan Exisiting Site

scale @ A3
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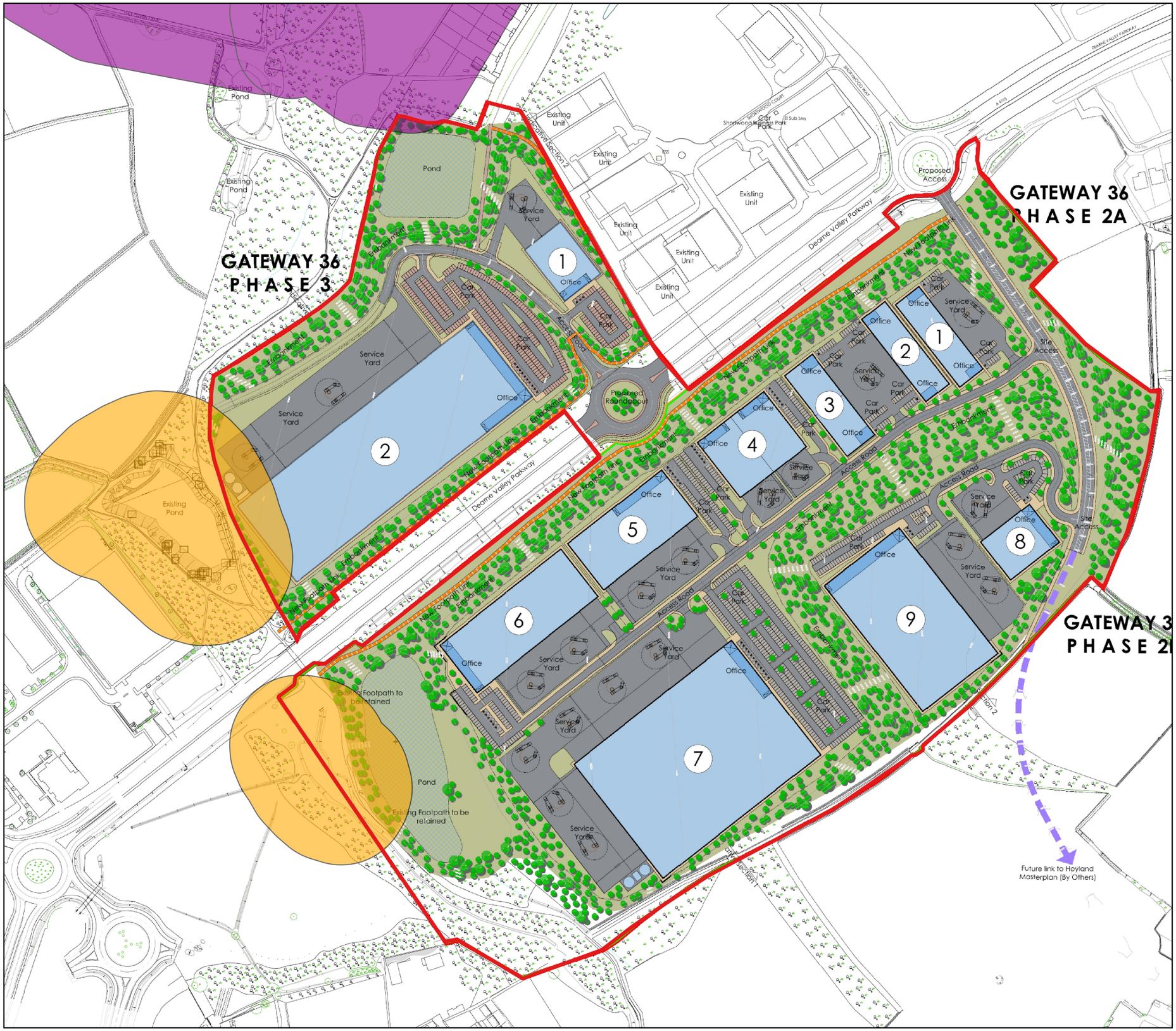
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JDH

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**Figure 1a**

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client
Harworth Estates

project
Rockingham Business Park, Barnsley

drawing title
Precautionary Working Area Plan Construction

scale @ A3
1:3500

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JDH

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**Figure 1b**

rev
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