

# Harome Wastewater Treatment Works

Ecological Impact Assessment

Yorkshire Water

November 2023



# Notice

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This document does not purport to provide legal advice.

This document has 41 pages including the cover.

## Document history

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## Client signoff

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# Non-technical Summary

Report purpose	This report describes the ecological baseline and evaluates the nature conservation importance of ecological features present within the zone of influence for the Proposed Scheme. The assessment identifies impacts (both positive and negative) on important ecological features, sets out agreed avoidance and mitigation measures and provides details on the significance of effects for each important ecological feature.
Proposed Scheme	Yorkshire Water propose to install a new Motor Control Centre (MCC) Kiosk within the existing Harome Wastewater Treatment Works, located just outside of Harome, in North Yorkshire. The works form part of a wider package of works, the rest of which is considered under permitted development. Only the installation of the MCC Kiosk is subject to planning permission and considered within this report.
Desk studies and field surveys	This ecological impact assessment includes desk study data gathered on 5 October 2023 and results of an ecological walkover survey undertaken on 20 October 2023.
Ecological features	<p>An 'important' species-rich native hedgerow is located to the north of the Survey Area. A block of priority deciduous woodland habitat is considered to be hydrologically connected to the Survey Area.</p> <p>Whilst the Application Site has limited suitability for protected and priority species, the habitats within the Survey Area were considered suitable to support:</p> <ul style="list-style-type: none"> <li>• badger;</li> <li>• small numbers of foraging and commuting bat species; and</li> <li>• widespread reptile species; and</li> <li>• water vole.</li> </ul> <p>No statutory or non-statutory designated sites for nature conservation were identified within the zone of influence.</p>
Potential impacts and effects	<p>Construction impacts anticipated in association with the Proposed Scheme comprise:</p> <ul style="list-style-type: none"> <li>• Injury or mortality of protected and priority species (reptiles and water vole);</li> <li>• Small scale and localised permanent loss of wildlife habitats (i.e. basking habitat for reptiles); and</li> <li>• Temporary disturbance including noise and vibration to protected and priority species (foraging and commuting bats).</li> </ul> <p>The operational phase of the Proposed Scheme is considered to have no impact on any habitats or protected and priority species.</p>
Avoidance and mitigation measures	<p>Mitigation measures will include:</p> <ul style="list-style-type: none"> <li>• General mitigation measures (as detailed in Section 4.4);</li> <li>• If works are undertaken within the reptile active season, a visual check for reptiles undertaken ahead of the construction works. However, if possible, works will avoid reptile active season;</li> <li>• If the storage of materials is to be necessary within the active reptile season, it is recommended that materials are stored on top of pallets; and</li> <li>• Avoidance of night-time works.</li> </ul>
Significance of residual effects	Considering the small-scale nature of the Proposed Scheme, provided the design and mitigation measures are implemented, no significant residual effects are anticipated as a result of the Proposed Scheme.

## Report Validity

In the event of programme changes then updates to the surveys may be required to ensure the validity of the data, as per Chartered Institute of Ecology and Environmental Management guidance<sup>1</sup>.

<sup>1</sup> Chartered Institute of Ecology and Environmental [CIEEM] (2019) Advice Note on the Lifespan of Ecological Reports and Surveys

# 1. Introduction

## Terms of Reference

- 1.1. AtkinsRéalis was commissioned by Yorkshire Water to undertake an Ecological Impact Assessment (EclA) in connection with a planning application for the installation of a Motor Control Centre (MCC) Kiosk within Harome Wastewater Treatment Works (WwTW) site (hereafter referred to as 'the Proposed Scheme').
- 1.2. The Harome WwTW is located to the east of Harome, North Yorkshire. The land to which the planning application for the MCC Kiosk relates ('the Application Site') comprises a small area where the MCC Kiosk is proposed, located within the WwTW Site, plus the internal access road within the WwTW site, and the access track leading from Common Lane into the WwTW Site. The Application Site is identified by the planning red line boundary shown on Drawing Ref *HAR55 WBK WWT WWT DR Z 0001* in Appendix A. No works are proposed to/on the WwTW's internal access, or the access track leading to the WwTW site.
- 1.3. The purpose of the inclusion of the access road within the red line boundary of the Application Site has been to demonstrate how the proposed MCC Kiosk will be accessed from public highway at Common Lane, which is a requirement of the North Yorkshire Council (NYC).
- 1.4. This report presents the results of the EclA for the Proposed Scheme and considers both terrestrial and aquatic ecological receptors, which includes statutory and non-statutory designated sites for nature conservation, terrestrial and freshwater habitats, and protected and priority species. The assessment has been informed by a desk study and field survey data.
- 1.5. This EclA describes the ecological baseline and evaluates the nature conservation importance of ecological features present within the zone of influence for the Proposed Scheme, characterises the impacts on important ecological features, sets out agreed avoidance, mitigation and compensation measures, and assesses the significance of the residual effects of the Proposed Scheme on the important ecological features.
- 1.6. This EclA has been undertaken with reference to current good practice<sup>2</sup> and forms part of the technical information lodged with the full planning application submission.

## The Application Site

- 1.7. The Application Site is located at Ordnance Survey national grid reference SE 65866 82075, located to the east of Harome, North Yorkshire. The Application Site is shown on Drawing Ref *HAR55 WBK WWT WWT DR Z 0001* in Appendix A.
- 1.8. The Application Site is approximately 802 m<sup>2</sup> in size and comprises:
  - An area of approximately 80 m<sup>2</sup> within the existing Harome WwTW Site (i.e., the proposed location of the MCC Kiosk);
  - The internal access road within the Harome WwTW Site (where no work is proposed); and
  - The access track leading from Common Lane into the Harome WwTW Site (where no work is proposed).
- 1.9. The wider area is dominated by arable land, with the occasional village, farm, caravan park, and woodland block interspersed.

## The Proposed Scheme

- 1.10. 

### The Proposed Scheme
- 1.11. The Proposed Scheme encompasses the installation of a MCC Kiosk within the current Harome WwTW site. The Proposed Scheme is shown on Drawing Ref: *HARR55 WBK WWT WWT DR C 0006*, provided with the planning application submission and included within Appendix A.
- 1.12. The Proposed Scheme will be developed alongside other works within the Harome WwTW site. However, other than the installation of the MCC Kiosk, further works benefit from permitted development rights afforded to Yorkshire Water, by The Town and Country Planning (General Permitted Development) (England) Order 2015. Therefore they are not part of the planning application and, as such, are not included within the scope of this assessment. It is understood that no works will take place to/on the access track/road. Therefore, the proposed works requiring planning permission and which is included within the scope of this assessment includes the

<sup>2</sup>CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine Version 1.1. CIEEM, Winchester.

installation of the MCC Kiosk in the south-east corner of the Harome WwTW Site (as highlighted Appendix A).

- 1.13. It is understood, at this stage, that no de-vegetation works are required to facilitate the installation of the proposed MCC Kiosk. Should the scope of works change to include de-vegetation works, a suitably experienced ecologist will be contacted to discuss the change in the proposed works.

## Scope of Assessment

- 1.14. This report presents ecological information obtained during the following:
- A desk-study undertaken on 5 October 2023; and
  - An ecological walkover survey undertaken on 20 October 2023.

# 2. Methodology

## Desk Study and Consultation

- 2.1. The geographical area for obtaining ecological data through desk studies has been determined using professional judgement. Baseline data has been gathered from a range of sources through data requests and using online resources as outlined below. This included data gathering in relation to statutory and non-statutory designated sites for nature conservation and protected and priority species. The study areas used for the data gathering are detailed in Table 2-1.
- 2.2. The desk study was undertaken on 05/10/2023. For species records collected, only those within 10 years of the data collection date (considered to be ‘recent records’) have been considered within the assessment.
- 2.3. The following online resources were accessed:
- Defra’s Multi-Agency Geographic Information for the Countryside (MAGIC) website<sup>3</sup>; and
  - The Woodland Trust’s Ancient Tree Inventory<sup>4</sup>.
- 2.4. Ordnance Survey maps and the Grid Reference Finder website (<https://gridreferencefinder.com/>) were used to identify the presence of waterbodies within 500 m of the Application Site boundary, in order to establish if the land within and immediately surrounding the Application Site could be used as terrestrial habitat for great crested newt. This species typically uses suitable terrestrial habitat up to 500 m from a breeding pond. However, there is a notable decrease in great crested newt abundance beyond a distance of 250 m from a breeding pond<sup>5</sup>.
- 2.5. Yorkshire Water hold a Service Level Agreement with North and East Yorkshire Ecological Data Centre (NEYEDC), wherein NEYEDC provide them with up-to-date local record centre data, updated every six months. This was most recently updated in April 2023. This data was accessed and utilised to obtain relevant species records and details of non-statutory designated sites for nature conservation.

**Table 2-1 - Data search areas**

Data type	Search area – distance from Proposed Scheme boundary
Protected, priority and notable species	1 km (extended to 2 km for bats)
Statutory designated sites for nature conservation	2 km
Non-statutory designated sites for nature conservation	1 km
Irreplaceable habitats <sup>6</sup> and priority habitats <sup>7</sup>	1 km

<sup>3</sup> Defra. Multi-Agency Geographic Information for the Countryside (MAGIC). Available at: <https://magic.defra.gov.uk/> [Accessed 05/10/2023].

<sup>4</sup> The Woodland Trust. Ancient Tree Inventory. Available at: <https://ati.woodlandtrust.org.uk/> [Accessed: 05/10/2023].

<sup>5</sup> Natural England (2004) An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt (ENRR576). <http://publications.naturalengland.org.uk/publication/134002>.

<sup>6</sup> As defined in the National Planning Policy Framework: “Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen.”

<sup>7</sup> Priority habitats include habitats of principal importance, Annex I habitats, and habitats listed in the Local Biodiversity Action Plan (LBAP).

## Planning Policy Review

- 2.6. A review of national and local planning policy relevant to the Proposed Scheme was undertaken as part of the data gathering. The following policy documents were subject to review:
- Department for Communities and Local Development (2023) National Planning Policy Framework<sup>8</sup>;
  - Mineral and Waste Joint Plan (Adopted 2022)<sup>9</sup>; and
  - Ryedale District Council (2013) The Ryedale Local Plan Strategy<sup>10</sup>.
- 2.7. A summary of relevant planning policy is provided in Appendix AB.

## Ecological Field Surveys

- 2.8. The geographical area for undertaking ecological field surveys has been determined using the current survey guidance, professional judgement and the zones of influence, which have been determined based on the nature of the impacts arising from the Proposed Scheme.
- 2.9. Following the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal<sup>11</sup>, a walkover survey was undertaken, focusing on protected and priority habitats and/or species.

## Surveyor Competencies

- 2.10. All the surveys were led by surveyors who have been assessed<sup>12</sup> to be at least of capable experience following the CIEEM competency framework<sup>13</sup>. The surveyor leading the survey also holds a Level 3 Field Identification Skills Certificate (FISC)<sup>14</sup>.

## Habitat Survey and Extended Ecological Walkover

### Habitat Survey

- 2.11. An ecological walkover survey was undertaken on 20/10/2023. All land within and adjacent to the Application Site, including land up to 50 m from the Application Site boundary (the Survey Area), was surveyed according to CIEEM guidance<sup>2</sup>. Plant names recorded in this survey follow Stace (2010).
- 2.12. Habitats were mapped using the UK Habitat Classification V2.0 (UKHab<sup>15</sup>) system. UKHab is a comprehensive and hierarchical habitat classification system for the UK that has been developed to benefit from recent changes in habitat categorisation, recording and analysis, and is suitable for digitally recording in the field using GIS. It is fully compatible with other major existing classifications, including Priority Habitat types (UKHab Level 4) and Habitats Directive Annex I habitat types (UKHab Level 5) and has been chosen as the classification system for the majority of terrestrial area habitat types used in Natural England's Biodiversity Metric 4.0.
- 2.13. All habitats were recorded to at least Level 3 of the UKHab hierarchy, i.e. broad habitats such as neutral grassland or dense scrub. All habitat features have been digitally mapped, using QGIS, as either polygons, lines or points and assigned to a UKHab Primary Habitat Code.
- 2.14. An assessment of the possible presence of priority habitats (as defined by CIEEM<sup>16</sup>) was also undertaken during the walkover survey.
- 2.15. Target notes (TNs) were used to record specific details on the plant species composition of the habitats, current management and quality. TNs were also used to record features of ecological importance (e.g. ponds, veteran trees, and complex habitat mosaics).

<sup>8</sup> National Planning Policy Framework - Guidance - GOV.UK ([www.gov.uk](http://www.gov.uk))

<sup>9</sup> North Yorkshire County Council, City of York Council and the North York Moors National Park Authority (2022) Mineral and Waste Joint Plan. Available at: <https://www.york.gov.uk/downloads/file/7874/mwjp-minerals-and-waste-joint-plan>

<sup>10</sup> Ryedale Local Plan Strategy ([communityledhomesnyer.org.uk](http://communityledhomesnyer.org.uk))

<sup>11</sup> CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, Second Edition.

<sup>12</sup> Assessment undertaken by Atkins ecological technical leadership team in accordance with CIEEM competency criteria.

<sup>13</sup> <https://www.cieem.net/competency-framework>

<sup>14</sup> Botanical Society of Britain and Ireland (BSBI) Field identification Skills Certificate (FISC).

<sup>15</sup> UK Habitat Classification System. Available at < <https://ukhab.org/>>

<sup>16</sup> CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.2 (updated April 2022). Chartered Institute of Ecology and Environmental Management, Winchester.



## Extended Ecological Walkover

- 2.16. The walkover survey also included a search for evidence of the presence of, and the potential of each habitat to support, priority and protected species as recommended by CIEEM<sup>17</sup>. The species element of the extended ecological walkover survey recorded evidence within the Application Site and the Survey Area.
- 2.17. The survey comprised assessing the suitability of the habitats present for, and recording any evidence of the following species (in line with current guidance):
- Badgers<sup>18</sup>;
  - Bats<sup>19</sup>;
  - Otters<sup>20,21</sup>;
  - Water voles<sup>22</sup>;
  - Breeding, wintering and passage birds<sup>23</sup>;
  - Reptiles<sup>24</sup>;
  - Amphibians (terrestrial and aquatic habitats), including an assessment of aquatic habitat for its suitability to support great crested newts (GCN) using the Habitat Suitability Index (HSI) assessment<sup>25</sup>;
  - White-clawed crayfish<sup>26</sup>;
  - Priority invertebrate species<sup>27</sup>;
  - Priority mammal species<sup>28</sup>; and
  - Priority plants and fungi species<sup>29</sup>.
- 2.18. Evidence of the presence of the following invasive non-native plant species (INNPS) was recorded where:
- Japanese knotweed, giant knotweed, hybrid knotweed<sup>30</sup>, giant hogweed, Himalayan balsam, rhododendron<sup>31</sup>, cotoneaster<sup>32</sup>, rhubarb, Japanese rose and three-cornered garlic. These are listed in Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) and subject to strict legal control.

## Survey Limitations

- 2.19. This section identifies any limitations to the surveys or assessment and provides an explanation as to the effect of these on the assessment.
- 2.20. The northernmost extent of the Survey Area was not accessed during the survey. This area comprised mainly roadside habitat, and habitats north of the road, which were not assessed due to the health and safety risk presented when working by the roadside. This location is highlighted

<sup>17</sup> CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.

<sup>18</sup> Harris S., Cresswell P. and Jefferies D. (1989) Surveying badgers. Mammal Society – No9.

<sup>19</sup> Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London.

<sup>20</sup> Chanin and Smith (2003). Monitoring the otter *Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No 10. Peterborough, English Nature.

<sup>21</sup> Liles G. (2003). Otter Breeding Sites. Conservation and Management. Conserving Natura 2000 Rivers Conservation Techniques Series No. 5. English Nature, Peterborough

<sup>22</sup> Dean, M. et al (2016) The Water Vole Mitigation Handbook. Mammal Society

<sup>23</sup> Bird Survey & Assessment Steering Group. (2022). Bird Survey Guidelines for assessing ecological impacts, v.0.1.7. Available at: <https://birdsurveyguidelines.org>

<sup>24</sup> Froglife (1999) Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife advice sheet 10

<sup>25</sup> Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000) *Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus)* Herpetological Journal 10 (4), 143-155 (2000).

<sup>26</sup> Peay S. (2003) *Monitoring the White-clawed Crayfish Austroptamobius pallipes*. Conserving Nature 2000 Rivers Monitoring Series No. 1. English Nature, Peterborough.

<sup>27</sup> At the present time there is no current survey guidance for priority invertebrates.

<sup>28</sup> At the present time there is no current survey guidance for priority mammals.

<sup>29</sup> At the present time there is no current survey guidance for priority plants and fungi.

<sup>30</sup> Hybrid knotweed species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) include *Fallopia japonica* x *Fallopia sachalinensis*

<sup>31</sup> Although there are approximately 1,200 species of rhododendron, just one species and one of its hybrids are listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended): *Rhododendron ponticum* and *Rhododendron ponticum* x *Rhododendron maximum*.

<sup>32</sup> There are approximately 100 species of cotoneaster found in the UK, but only five are listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended): *Cotoneaster horizontalis*, *Cotoneaster integrifolius*, *Cotoneaster simonsii*, *Cotoneaster bullatus* and *Cotoneaster microphyllus*.

on Figure C.1 in Appendix C. However, given that this area is located outside of the Application Site and over 50 m from the location of the proposed works area (i.e. the Ecological Zone of Influence (EZoI) for most species groups), this is not considered to constitute a significant limitation to the assessment.

- 2.21. The search for waterbodies within 500 m of the Application Site was undertaken by using Ordnance Survey plans and aerial photographs only. These sources may not show all waterbodies within 500 m of the Application Site boundary and, therefore, some waterbodies may not have been identified.
- 2.22. The list of invasive plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) is extensive and these plants are found in a range of different habitats, including aquatic habitats. The UKHab walkover survey checked for the presence of those listed above. Other invasive species may not have been recorded, but due to the nature of the habitats present within the Application Site and the scope of the proposed works, are considered unlikely to cause a significant risk.
- 2.23. Cryptic taxa such as some species of plants, invertebrates and fungi, could not be adequately surveyed at the time of the survey. These groups require specialist survey, and survey windows are generally highly restrictive. However, when taking into account the desk study results, and the nature of the habitats present at the Application Site and in the surrounding landscape, this is not considered to be a significant limitation.
- 2.24. The field survey was undertaken in October, which is a sub-optimal time of year to undertake such surveys as many plant species (including some INNPS) are often not readily identifiable or visible. However, as the habitats on the Application Site are common and widespread, this is not considered to be a significant constraint. Contractors will be briefed on the potential presence of INNPS ahead of commencing works on Site.
- 2.25. Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. The ecological surveys undertaken to support this EclA have not, therefore, produced a complete list of plants and animals and the absence of evidence of any particular species should not be taken as conclusive proof that the species is not present or that it will not be present in the future.
- 2.26. The desk study reviewed the Woodland Trust Ancient Trees inventory, this provides records of veteran trees, but is not an exhaustive list and other veteran trees may be present in the area. The walkover survey aimed to identify such features and as such this is not considered a constraint.
- 2.27. NEYEDC records are not exhaustive, and the absence of records does not necessarily demonstrate the absence of a species. As part of the Yorkshire Water Service Level Agreement, updated records are provided by NEYEDC to Yorkshire Water every six months. The most recent update to the record collection was in April 2023, therefore records submitted between then and the time of writing will not have been included and will not have been considered in this assessment. However, local record centre data up to 12 months old is considered suitable to inform an EclA.
- 2.28. The above limitations have been addressed through taking the precautionary approach within the assessment.

## Nature Conservation Importance

- 2.29. A number of criteria have become accepted as a means of assessing the nature conservation importance of a defined area of land which are set out in A Nature Conservation Review<sup>33</sup> and include diversity, rarity and naturalness.
- 2.30. The nature conservation importance or potential importance of an ecological feature is determined within the following geographic context:
- International (e.g. Special Areas of Conservation, Special Protection Areas, Ramsar sites);
  - National (e.g. Sites of Special Scientific Interest);
  - Regional (e.g. Environment Agency regional biodiversity indicators, important features in Natural England Natural Areas);
  - Metropolitan, County, Vice-County or Other Local Authority-wide Area (e.g. Local Nature Reserves, Sites of Importance for Nature Conservation);
  - Local (undesigned ecological features e.g. old hedges, woodlands, ponds);

<sup>33</sup> Ratcliffe, D. (1977) A Nature Conservation Review. Cambridge University Press.

- The Application Site and its immediate environs (e.g. small pond, marshy grassland); and
  - Negligible (e.g. areas of hardstanding and amenity grassland).
- 2.31. The following documents have been reviewed to assist in the determination of importance:
- Valuing Bats in Ecological Impact Assessment. CIEEM's In Practice – December 2010 issue.<sup>34</sup>
- 2.32. Features that have been identified to be of less than local importance are not considered to be important ecological features and as such have not been considered within the impact assessment. Where mitigation is required for these features for legal reasons this is detailed in Section 4.

## Impact Assessment

- 2.33. The assessment of the potential effects of the Proposed Scheme takes into account both on-site impacts and those that may occur to adjacent and more distant ecological features.
- 2.34. The zone of influence is an area within which ecological features may be subject to biophysical changes as a result of the Proposed Scheme. Throughout the EclA process the zone of influence was regularly reviewed. The zone of influence for the impact assessment is typically the same as the field survey area, as the likely impacts of the Proposed Scheme were considered when establishing the field survey areas. However, this was reviewed during the impact assessment, based on further understanding of the Proposed Scheme impacts and on the results of the desk study, field surveys and consultation. Any changes to the zone of influence are explained in Section 4.
- 2.35. Where impacts have been identified, details are provided within the assessment to characterise these in terms of their extent and magnitude, duration, frequency and timing, and reversibility. Both positive and negative impacts are discussed. Impacts were also characterised in terms of how they occur, i.e. direct, indirect secondary or cumulative. Impacts can be permanent or temporary and can include:
- Direct loss and degradation of wildlife habitats;
  - Fragmentation and isolation of habitats;
  - Mortality and injury to species;
  - Disturbance to species from noise, light or other visual stimuli;
  - Changes to key habitat features; and
  - Changes to the local hydrology, water quality and/or air quality.
- 2.36. For designated sites, effects are considered significant when a project and associated activities is likely to either undermine or support the conservation objectives or condition of the site(s) and its features of interest.
- 2.37. For ecosystems, effects are considered significant when a project and associated activities is likely to result in a change in ecosystem structure and function.
- 2.38. Consideration is given to whether:
- Any processes or key characteristics will be removed or changed;
  - There will be an effect on the nature, extent, structure and function of component habitats;
  - There is an effect on the average population size and viability of component species; and
  - Functions and processes acting outside the formal boundary of a designated site has also been considered, particularly where a site falls within a wider ecosystem e.g. wetland sites.
- 2.39. Some ecosystems can tolerate a degree of minor changes, such as localised or temporary disturbance or changes in physical conditions, without such changes harming their function or importance. For this EclA, ecological effects have been considered in the light of any information available about the capacity of ecosystems to accommodate change. Significant effects have been determined as being either negative or positive.
- 2.40. The conservation importance of undesignated habitats and species within a defined geographical area (International to Local) has been used in this assessment to determine whether the effects of the proposals are likely to be significant:

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<sup>34</sup> CIEEM (2010) *Valuing Bats in Ecological Impact Assessment*. CIEEM's In Practice – December 2010 issue.

- For habitats, conservation status is determined by the sum of the influences acting on the habitat that may affect its extent, structure and functions as well as its distribution and its typical species within a given geographical area; and,
- For species, conservation status is determined by the sum of influences acting on the species concerned that may affect its abundance and distribution within a given geographical area.

- 2.41. When assessing potential effects on conservation importance, the known or likely background trends and variations in status have been taken into account. The level of ecological resilience or likely level of ecological conditions, that would allow the population of a species or area of habitat to continue to exist at a given level or continue to increase along an existing trend or reduce a decreasing trend, has been estimated where appropriate to do so.
- 2.42. The avoidance, mitigation, compensation and/or enhancement measures described within the EclA have been incorporated into the design and operational phasing programme and taken into account in the assessment of the significance of effects. These mitigation measures include those required to achieve the minimum standard of established good practice together with additional measures to further reduce any negative impacts of the Proposed Scheme. The mitigation measures include those required to reduce or avoid the risk of committing legal offences.
- 2.43. If the design changes or the agreed mitigation cannot be implemented the effects will need to be reassessed and further surveys may be required. In this event, the conclusion of this EclA may no longer be valid.
- 2.44. Due to the small-scale, short duration of construction, and localised nature of the Proposed Scheme within habitats which are already subject to regular human disturbance and commercial/ industrial use, a cumulative impact assessment is not considered necessary.
- 2.45. If the design changes or the agreed mitigation cannot be implemented the effects will need to be reassessed and further surveys may be required. In this event, the conclusion of this EclA may no longer be valid.

## Mitigation Hierarchy

- 2.46. The principles of the mitigation hierarchy<sup>35/36</sup> have been adopted and used when considering impacts and subsequent effects on important ecological features within the zone of influence.
- 2.47. The principles of the mitigation hierarchy are that in order of preference impacts on biodiversity should be subject to:
- Avoidance: Seek options that avoid harm to ecological features (for example, by locating on an alternative site);
  - Mitigation: Negative effects should be avoided or minimised through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation;
  - Compensation: Where there are significant residual negative ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures; and
  - Enhancement: Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

<sup>35</sup> Department for Communities and Local Development (2018) National Planning Policy Framework, Paragraph 118. <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

<sup>36</sup> CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine, Paragraph 1.19. CIEEM, Winchester.

## 3. Baseline Conditions and Importance

- 3.1. This section provides details of the ecological baseline relevant to the Proposed Scheme recorded during the desk study and field surveys undertaken to inform this EclA.

### Statutory and Non-Statutory Designated Sites

- 3.2. No statutory designated sites for nature conservation were identified within 2 km of the Application Site.
- 3.3. No non-statutory designated sites for nature conservation were identified within 1 km of the Application Site.

### Irreplaceable Habitats

- 3.4. No irreplaceable habitats<sup>37</sup> were identified within 1 km of the Application Site.

### Ancient & Veteran Trees

- 3.5. No ancient or veteran trees were identified within 1 km of the Application Site.

### Priority Habitats

- 3.6. Ten parcels of priority habitat were identified within 1 km of the Application Site during the desk study, consisting of two parcels of coastal and floodplain grazing marsh, and eight parcels of deciduous woodland.
- 3.7. The closest parcel of priority habitat to the Application Site identified during the desk study was deciduous woodland, located approximately 475 m east of the Application Site. This parcel (in combination with two further smaller parcels) are considered to make up one single larger woodland block. The Harome Moor Drain (which is located immediately adjacent to the Application Site (at the point where the access track meets the WwTW Site) and flows in between two parcels that make up this woodland block. Therefore, it is considered that the woodland block may be hydrologically connected to the Application Site.
- 3.8. Areas of identified coastal and floodplain grazing marsh were sufficiently distant from the Proposed Scheme and are not considered further within this impact assessment.
- 3.9. During the walkover survey, the hedgerow immediately north of the northern boundary fence of the WwTW Site was assessed to be priority habitat species-rich native hedgerow. This hedgerow is located approximately 1 m from the Application Site (at the point where the access track meets the WwTW Site). It should be noted that this priority hedgerow is also considered an 'Important' hedgerow under The Hedgerow Regulations 1997, due to presence of a sufficient number of woody species. Woody species present within this hedgerow comprise hawthorn, holly, elder, dogrose and dogwood.
- 3.10. None of the priority habitats listed above qualify as an Annex 1<sup>38</sup> habitat.
- 3.11. Priority habitats are discussed further within Section 5.

### Habitats

- 3.12. Habitats within the Survey Area are mapped on the extended UKHab survey plan (shown on Figure C.1 in Appendix C) with specific features highlighted by TNs. TN descriptions and photographs are provided in Appendix C.
- 3.13. The Survey Area comprises an active WwTW site and, as such, the habitats predominantly comprise wastewater treatment infrastructure, including buildings, containers, access road, hardstanding/gravel areas and poor-quality waterbodies (lagoons). Other habitats within the Survey Area comprise other neutral grassland, cropland, bramble scrub, mixed scrub, species-rich native hedgerow, other native hedgerow, line of trees (other broadleaved woodland) and a wet ditch (other rivers and streams).
- 3.14. The Application Site itself comprises only developed land; unsealed surface.

<sup>37</sup> As defined in the National Planning Policy Framework: "*Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen.*"

<sup>38</sup> Annex I Habitat Types. Available at: <https://sac.jncc.gov.uk/habitat/>

- 3.15. The Harome Moor Drain is located immediately adjacent to the Application Site and flows underneath the Application Site (at the point where the access track meets the WwTW Site). The Harome Moor Drain is hydrologically connected to the River Riccal, approximately 6 km away.
- 3.16. No major watercourses were identified within 500 m of the Application Site.
- 3.17. Habitats within the wider surroundings comprise primarily cropland and grassland (pasture) which have limited ecological value.
- 3.18. Table 3-1 provides a summary description of each habitat, identifies those habitats which are listed as priority habitats<sup>39</sup>, and provides a nature conservation importance for each habitat. The table also provides details of the area of each habitat within the Application Site and the proportion of the Application Sites this makes up.

**Table 3-1 – Habitat types within 50 m<sup>40</sup> of the Application Site**

Habitat type	Location of Habitat <sup>41</sup>	Area of Habitat/ Distance of Linear Feature <sup>42</sup> within the Survey Area		Importance level	Rationale for valuation
		M <sup>2</sup> / M	% of Application Site		
Urban (Artificial unvegetated, unsealed surface) <b>u1c</b>	Throughout the Application Site. Throughout the WwTW site and access track.	3,585 m <sup>2</sup>	100	Negligible	Widespread habitat of limited ecological value.
Species-rich native hedgerow <b>h2a5</b>	<b>Outside of the Application Site.</b> Along the northern boundary of the WwTW site.	52 m	N/A	Local <b>(Priority habitat)</b>	Contains five woody species and, therefore, meets the criteria for priority and important hedgerow.
Other native hedgerow <b>h2a6</b>	<b>Outside of the Application Site.</b> Along the southern boundary of the WwTW site.	190 m	N/A	Application Site	Contains three woody species and, therefore, does not meet the criteria for priority/important hedgerow. Offers some opportunities for wildlife but relatively common in the wider area.
Line of trees (other broadleaved woodland) <b>w1g, 33</b>	<b>Outside of the Application Site.</b> Along the north- eastern boundary of the WwTW site and adjacent to the Access Track.	168 m	N/A	Application Site	Plantation trees; does not meet criteria for priority hedgerow. Offers some opportunities for wildlife but relatively common in the wider area.
Other neutral grassland <b>g3c</b>	<b>Outside of the Application Site.</b>	10,387 m <sup>2</sup>	N/A	Application Site	Offers some opportunities for wildlife but relatively common in the wider area.

<sup>39</sup> <http://jncc.defra.gov.uk/page-5706>

<sup>40</sup> This is the zone of influence for habitats.

<sup>41</sup> Where habitats are situated outside of the Application Site boundary, the distance and direction is given to the closest point that the habitat from is the Application Site.

<sup>42</sup> The area of habitat is only provided for those habitats that fall within the Application Site.

Habitat type	Location of Habitat <sup>41</sup>	Area of Habitat/ Distance of Linear Feature <sup>42</sup> within the Survey Area		Importance level	Rationale for valuation
		M <sup>2</sup> / M	% of Application Site		
	Various places within the Survey Area, and underneath the hedgerow habitats.				
Bramble scrub <b>h3d</b>	<b>Outside of the Application Site.</b> To the west of the Survey Area.	419 m <sup>2</sup>	N/A	Application Site	Offers some opportunities for wildlife but relatively common in the wider area.
Mixed scrub <b>h3h</b>	<b>Outside of the Application Site.</b> To the north-east of the Survey Area.	1,661 m <sup>2</sup>	N/A	Application Site	Offers some opportunities for wildlife but relatively common in the wider area.
Harome Moor Drain (other rivers and streams) <b>r2b</b>	<b>Outside of the Application Site.</b> Along the northern boundary of the Survey Area.	233 m	N/A	Application Site	Comprises a flowing field drain. Offers some opportunities for wildlife but relatively common in the wider area.
Non-priority pond (Other standing water) <b>r1g, 41</b>	<b>Outside of the Application Site.</b> Scattered throughout the WwTW site.	497 m <sup>2</sup>	N/A	Negligible	Purpose-built WwTW lagoons, rather than natural ponds. Widespread habitat of limited ecological value.
Urban (Buildings) <b>u1b5</b>	<b>Outside of the Application Site.</b> Scattered throughout the WwTW Site.	65 m <sup>2</sup>	N/A	Negligible	Widespread habitat of limited ecological value.
Urban (Other developed land) <b>u1b6</b>	<b>Outside of the Application Site.</b> Throughout the WwTW Site.	1,367 m <sup>2</sup>	N/A	Negligible	Widespread habitat of limited ecological value.
Urban (Sparsely vegetated urban land) <b>u1f</b>	<b>Outside of the Application Site.</b> Throughout the WwTW Site.	1,199 m <sup>2</sup>	N/A	Negligible	Widespread habitat of limited ecological value.

Habitat type	Location of Habitat <sup>41</sup>	Area of Habitat/ Distance of Linear Feature <sup>42</sup> within the Survey Area		Importance level	Rationale for valuation
		M <sup>2</sup> / M	% of Application Site		
<hr/>					

- 3.19. The species-rich native hedgerow (h2a5) habitat is considered to be of Local importance and, therefore, is considered within the impact assessment.
- 3.20. All other habitat features have been identified to be of less than local importance and are not considered to be important ecological features. Therefore, these habitats have not been considered further within the impact assessment.

## Protected and Priority Species

- 3.21. This section provides a summary of the results of the desk study and extended UKHab survey, along with the nature conservation importance for each species or species group.

### Badgers

- 3.22. NEYEDC provided no recent records of badgers within 1 km of the Application Site.
- 3.23. The field survey did not record any evidence of badgers. Habitats within the Survey Area that offered suitability for badgers comprised: native hedgerows, line of trees, mixed scrub, other neutral grassland and arable cropland. These habitats offer suitability for foraging and commuting badgers, and limited sett-building opportunities. However, all suitable habitats for badgers were located outside of the perimeter fencing that encloses the Harome WwTW Site and not within the Application Site boundary. No breaches were recorded within this fencing. The habitats within the Application Site provide negligible suitability for badgers.
- 3.24. Given the level of anthropogenic disturbance encountered within the Application Site, the secure enclosing perimeter fencing that prevents badger access into the main area of the Application Site, and the lack of suitable habitat within the Application Site, it is considered unlikely that badgers would utilise the Application Site. Badgers would be able to access the access track within the Application Site, however, no works are proposed here.
- 3.25. Badgers are considered to be relatively common nationally and locally, and they are not included as a priority species in the UK. Due to the protection afforded to badgers, they are considered within this EclA as a legal constraint.
- 3.26. Badger sett tunnels typically extend up to 20 m from the sett entrance<sup>43</sup>. Vibrations from heavy machinery and excavation of soils within 30 m of a sett entrance may cause the collapse of tunnels. Significant impacts from the proposed works on a sett beyond 30 m from the Application Site are not anticipated. Therefore, the EZoI for this species is 30 m from the Application Site boundary.
- 3.27. Sett-building opportunities (albeit limited) for badgers are present within the line of trees, hedgerows, other neutral grassland and arable habitats within the Survey Area and located within 30 m of the Application Site. However, no badger setts were recorded during the walkover survey.
- 3.28. More suitable habitats are common and widespread in the local area (outside of the Survey Area). If present, badgers are considered to be of importance at the Application Site level only and are, therefore, not considered to be an important ecological feature requiring inclusion in the impact assessment.
- 3.29. Considering the information above, badgers have been scoped out from further assessment and are not discussed further within the report.

### Amphibians

- 3.30. NEYEDC provided no recent records of amphibians within 1 km of the Application Site.

<sup>43</sup> English Nature (2002) *Badgers and development*. Available: [http://www.badgerland.co.uk/help/en\\_badgers\\_development.pdf](http://www.badgerland.co.uk/help/en_badgers_development.pdf)



- 3.31. No European Protected Species Mitigation Licences (EPSML) for GCN were identified within 1 km of the Application Site.
- 3.32. Five waterbodies were identified within the Survey Area. All five of these waterbodies comprised purpose-built lagoons, which are part of the WwTW infrastructure, and were considered to have **poor suitability** for GCN (based upon their Habitat Suitability Score (HSI)<sup>44</sup> score, refer to Table D.1 in Appendix D).
- 3.33. There is good quality terrestrial habitat for amphibians within the Survey Area in the form of other neutral grassland, bramble scrub, mixed scrub and native hedgerows. However, the Application Site itself is of negligible value to amphibians.
- 3.34. GCN typically utilise suitable terrestrial habitat up to 500 m from a breeding waterbody, however, there is a notable decrease in GCN abundance beyond 250 m from a breeding waterbody. No further waterbodies were identified within 500 m of the Application Site.
- 3.35. It should be noted that the ditch within the Survey Area was considered to be unsuitable for GCN due to presence of flowing water; the feature is, therefore, not considered suitable as breeding habitat for GCN.
- 3.36. Even considering the presence of good quality terrestrial habitat, given there are no suitable breeding waterbodies within 500 m of the Application Site, it is considered unlikely (based on likely dispersal distances provided above) that GCN would be found occupying the purpose-built waterbodies identified within the Survey Area. It is considered that there is no suitable breeding habitat present in the Survey Area and, therefore, GCN are considered likely absent from the Application Site.
- 3.37. Considering the information above, amphibians have been scoped out from further assessment and are not discussed further within the report.

## Bats

- 3.38. NEYEDC provided six recent records of bats within 2 km of the Application Site, comprising four common pipistrelles, one brown long-eared bat, and one unspecified Myotis. The closest record was of a common pipistrelle and Myotis, located approximately 755 m to the west of the Application Site.

## Roosting bats

- 3.39. Three buildings located within the Survey Area (within the WwTW Site) were assessed for their bat roosting potential; two of metal construction with a flat roof, and one of brick construction with a flat roof. No potential roosting features were recorded in any of these three buildings. All buildings located within the Survey Area were considered to offer negligible suitability for roosting bats.
- 3.40. Four scattered trees (see TN 1 – 4 in Appendix C) and a line of trees were present within the Survey Area, none of which were considered suitable for roosting bats. All trees located within the Survey Area were considered to offer negligible suitability for roosting bats.
- 3.41. Considering the information above, roosting bats are scoped out from further assessment and are not discussed further within the report.

## Foraging/ Commuting bats

- 3.42. The urban habitat types in the Survey Area that make up the WwTW Site (unsealed surface, sparsely vegetated urban land, sealed surface, and WwTW infrastructure) offer poor suitability for foraging and commuting bats.
- 3.43. The native hedgerows, scrub, line of trees, arable cropland, other neutral grassland and wet ditch (Harome Moor Drain) within the Survey Area (but outside of the WwTW site) were considered to offer moderate suitability for commuting and foraging bats (in line with Bat Conservation Trust guidelines<sup>19</sup> for assessing habitat for bats).
- 3.44. Habitats outside of the Survey Area in the wider area (i.e. arable fields with boundary hedgerows, and the remainder of the Harome Moor Drain) offer high quality foraging and commuting habitat for bats (in line with guidelines<sup>19</sup>).

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<sup>44</sup> ARG UK (2010) Great Crested Newt Habitat Suitability Index May 2010 Available at: <https://www.arguk.org/info-advice/advice-notes/9-great-crested-newt-habitat-suitability-index-arg-advice-note-5/file>

- 3.45. The access track leading into the WwTW site, although comprising unvegetated unsealed surface, is located in between an avenue of trees (line of trees), offering suitability for foraging and commuting bats.
- 3.46. Given the abundance of high-quality foraging habitat outside of the Survey Area, and lower suitability of habitats within the Application Site, it is considered likely that foraging and commuting bats would be more likely to utilise those habitats outside of the Application Site. If present within the Survey Area, bats would likely be present in the habitats outside of the WwTW Site.
- 3.47. It is considered that effects from disturbance (e.g. lighting and noise/vibration) on foraging/commuting features during Proposed Scheme construction are only likely to occur within or immediately adjacent to the Application Site, therefore the EZoI is considered to be the Application Site plus 50 m.
- 3.48. Taking the above into consideration, foraging/commuting bats utilising habitats within the EZoI are considered to be of Local importance<sup>45</sup>. Foraging/commuting bats are considered within the impact assessment and discussed further in Section 5.

## Birds

- 3.49. NEYEDC provided no recent records of birds within 1 km of the Application Site.
- 3.49.1. The habitat comprising the Application Site (urban, unsealed surface) offers no nesting opportunities for birds.
- 3.49.2. The urban habitats within the Survey Area offered limited suitability for breeding birds due to habitats primarily comprising urban unsealed surface and WwTW infrastructure, offering no opportunity for shelter or refuge. However, the native hedgerows, line of trees and dense scrub habitats within the Survey Area offer suitability for common and widespread species of nesting passerine birds.
- 3.49.3. None of the habitats within the Survey Area are considered to offer suitability for Schedule 1 species<sup>46</sup>.
- 3.50. The EZoI for birds is considered to be the Application Site plus 50 m. As habitats within the Application Site and Survey Area are common and widespread and there are limited features available to support nesting birds, importance is at the Application Site level only.
- 3.51. The works will not include clearance of habitats that are of value to nesting birds. Any birds nesting within the scrub, hedgerow, or line of trees habitat within 50 m of the Application Site will be habituated to a level of baseline disturbance associated with an active WwTW site. Therefore, nesting birds are scoped out from further assessment as they have been identified to be of less than local importance and are, therefore, not considered to be an important ecological feature requiring inclusion in the impact assessment.

## Reptiles

- 3.52. NEYEDC provided no recent records of reptiles within 1 km of the Application Site.
- 3.53. The habitat within the Application Site is of low value for reptile species, other than offering limited basking opportunities. However, no south facing embankments that would represent optimal basking habitat are present.
- 3.54. The majority of habitats within the Survey Area (urban unsealed surface, WwTW infrastructure) are of low value for reptile species. The grassland, native hedgerows, line of trees and dense scrub habitats within the Survey Area offers some suitability for foraging reptiles, and offers suitable refugia/hibernacula.
- 3.55. The UK's four widespread reptile species (i.e. adders, grass snakes, slow worms and common lizards) require foraging areas in proximity to basking sites and dense cover. Typical habitats include combinations of woodland edge, hedgerows, scrub, rough grassland, gardens, and embankments, some of which are present in the Survey Area and wider landscape.
- 3.56. Although no desk study records were provided, the Application Site offers limited basking opportunities for widespread reptile species, and is located in proximity to habitat with potential foraging/refuge areas. If reptiles were present within the Application Site, this would be for the purposes of basking or dispersal only, as there is not sufficient cover for hibernation, breeding

<sup>45</sup> CIEEM (2010) *Valuing Bats in Ecological Impact Assessment*. CIEEM's In Practice – December 2010 issue.

<sup>46</sup> Schedule 1 refers to species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended).

and refuge or suitable habitat for foraging. It is possible that reptiles may be present within the wider area, and within the suitable habitats present in the Survey Area.

- 3.57. The EZol for reptiles is considered to be the Application Site plus 50 m.
- 3.58. The works will not include clearance of habitats within which reptiles may be taking refuge. However, reptiles may on occasion pass through the Application Site or use it to bask. Reptiles are considered to be of Local value, are considered within the impact assessment, and are discussed further in Section 5.

### Otters

- 3.59. NEYEDC provided no recent records of otters within 1 km of the Application Site and no signs of otters were identified during the survey.
- 3.60. The Harome Moor Drain is located immediately adjacent to the Application Site and flows underneath it (at the point where the access track meets the WwTW Site). The point at which the Harome Moor Drain meets a major watercourse (i.e. the River Riccal) is over 6 km away. In isolation, the Harome Moor Drain is considered too minor to be suitable for otters, with no suitable opportunities for resting or breeding sites recorded. No other watercourses were identified within 500 m of the Application Site.
- 3.61. The habitats located within the Application Site (urban unsealed surface) are unsuitable for otters. The majority of habitats within the Survey Area (urban unsealed surface, WwTW infrastructure) are of unsuitable terrestrial habitat for otters. The native hedgerows, line of trees and dense scrub habitats (located near to the Harome Moor Drain) within the Survey Area offers some suitability as terrestrial habitat; however, due to the distance (over 6 km) of the Survey Area from the nearest major watercourse it is considered unlikely that otters would utilise these habitats.
- 3.62. Given the limited suitability of the Application Site (and Survey Area) for otters, paired with the lack of records of the species, and large distance from a suitable watercourse, it is considered that otters are likely absent and, therefore, otters have been scoped out of this assessment.

### Water voles

- 3.63. NEYEDC provided no recent records of water voles within 1 km of the Application Site and no signs of water voles were identified during the survey.
- 3.64. The Harome Moor Drain is located immediately adjacent to the Application Site and flows underneath it (at the point where the access track meets the WwTW Site). Only small stretches of this watercourse were visible during the ecological walkover survey. The areas of the watercourse visible were densely vegetated. The water quality within the watercourse was considered to be poor. However, given that the full length of the watercourse within the Survey Area could not be surveyed in detail, it is assumed that this watercourse is suitable to support water voles.
- 3.65. Besides other minor field drains, no other watercourses were identified within 500 m of the Application Site.
- 3.66. The habitats located within the Application Site (urban unsealed surface) are unsuitable for water voles. The majority of habitats within the Survey Area (urban unsealed surface, WwTW infrastructure) provide unsuitable terrestrial habitat for water voles. However, the native hedgerows, line of trees and dense scrub habitats (located near to the Harome Moor Drain) within the Survey Area offers some suitability as terrestrial habitat.
- 3.67. The EZol for water voles is considered to be the Application Site plus 50 m. Given the limited suitability of the Application Site for water voles, it is unlikely that water voles would be present within the Application Site. However, it is possible that water voles may be present within the Survey Area, occupying the Harome Moor Drain.
- 3.68. Given the low suitability of the Harome Moor Drain (where it is located within the Survey Area), and the presence of similar habitat occurring in the wider landscape, the importance of water voles (if present) is considered to be of value at a Local level.
- 3.69. Therefore, water voles are considered in the impact assessment and are discussed further in Section 5.

### White-clawed crayfish

- 3.70. NEYEDC provided no recent records of white-clawed crayfish within 1 km of the Application Site.

- 3.71. White-clawed crayfish are freshwater crustaceans and, therefore, occupy only aquatic habitats. The Harome Moor Drain is located immediately adjacent to the Application Site and flows underneath it (at the point where the access track meets the WwTW Site). No other watercourses were identified within 500 m of the Application Site.
- 3.72. The water quality of the Harome Moor Drain is considered to be poor, given that it appears to act as a field drain, running alongside arable fields and the Harome WwTW Site. The water quality is not considered to be suitable to support white-clawed crayfish.
- 3.73. The habitats located within the Application Site (urban unsealed surface) are unsuitable for white-clawed crayfish.
- 3.74. Given the negligible suitability of the Harome Moor Drain for white-clawed crayfish, paired with the lack of records of the species, and lack of further suitable habitat within the wider landscape, it is considered that white-clawed crayfish are likely absent and, therefore, white-clawed crayfish have been scoped out of this assessment.

### Priority Mammal Species

- 3.75. NEYEDC provided no recent records of priority mammal species within 1 km of the Application Site.
- 3.76. No signs of priority mammal species were identified within the Survey Area during the ecological walkover survey.
- 3.77. The habitat within the Application Site offer negligible suitability for priority mammal species such as hedgehogs or brown hares, with no opportunity for shelter/hibernation or breeding habitat for either species.

#### Hedgehogs

- 3.78. Beyond the Application Site, the Survey Area offers higher suitability habitat for hedgehogs due to the presence of the hedgerow, dense scrub and line of trees, which could provide habitat for foraging, breeding and hibernating.
- 3.79. The presence of the perimeter fencing is considered to prevent access to the WwTW Site by hedgehogs. However, foraging and commuting hedgehogs may use the Application Site (i.e. the access track only) when moving between foraging areas.

#### Brown hares

- 3.80. The grassland and arable habitat within the Survey Area, and in the wider area, is likely to offer suitable habitat for brown hares, a priority species. However, the Application Site itself offers no suitability for brown hares.
- 3.81. The presence of the perimeter fencing is considered to prevent access to the WwTW Site by brown hares. However, brown hares may use the Application Site (i.e. the access track only) when moving between foraging areas.
- 3.82. Considering the low suitability of the Application Site, but the presence of suitable habitats within the Survey Area, the importance of a potentially present population of priority mammals (i.e. hedgehogs or brown hares) is considered to be of value at the Application Site level. Therefore, priority mammals have been scoped out of this impact assessment.

### Priority Invertebrates

- 3.83. NEYEDC provided no recent records of invertebrates within 1 km of the Application Site.
- 3.84. No priority invertebrates were identified during the walkover survey. Habitats within the Survey Area are common and widespread and are considered unlikely to be of value to priority invertebrate species.
- 3.85. Considering the lack of priority invertebrate records, the poor suitability of habitats within the Application Site, and the small-scale nature of the Proposed Scheme, negative impacts on priority invertebrates are not anticipated and they have, therefore, been scoped out of this impact assessment.

### Invasive Non-native Plant Species

- 3.86. NEYEDC provided no recent records of INNPS within 1 km of the Application Site.

- 3.87. No INNPS were recorded within the Application Site or Survey Area during the ecological walkover survey.
- 3.88. INNPS are not important ecological features and are scoped out from further assessment. However, care must be taken to avoid causing INNPS to spread in the wild. Therefore, specific mitigation has been included in Section 4 to comply with relevant legislation.

### Summary of Features of Nature Conservation Importance

- 3.89. Table 3-2 below provides a summary of the features of nature conservation importance which are considered within the impact assessment. The table also provides details of the zone of influence for the features.
- 3.90. The following features that have been valued at less than local are not considered to be important ecological features and as such are not discussed further within this report:
- Line of trees;
  - Other native hedgerow;
  - Other neutral grassland;
  - Urban (Artificial unvegetated; unsealed surface);
  - Urban (buildings);
  - Urban (other developed land);
  - Urban (developed land; sealed surface);
  - Urban (sparsely vegetated urban land);
  - Bramble scrub;
  - Mixed scrub;
  - Non-priority ponds;
  - Harome Moor Drain;
  - Badgers;
  - Priority mammals (hedgehogs and brown hares); and
  - Nesting birds.
- 3.91. The following features that have been valued at less than local are not considered to be important ecological features and as such are not discussed within the impact assessment. However, due to legal considerations, mitigation is required, which is detailed in Section 4. Mitigation has, therefore, been developed for legal reasons for:
- INNPS.
- 3.92. In addition, the following features have also been scoped out of the impact assessment, the rationale for which is discussed in the relevant sections above:
- Amphibians;
  - Roosting bats;
  - Otters; and
  - White-clawed crayfish.

**Table 3-2 - Determination of importance of ecological features and details of their zone of influence**

Ecological Feature	Summary of baseline	Maximum zone of influence <sup>47</sup>	Importance level	Rationale for valuation
Priority habitat – species rich native hedgerow	A species-rich native hedgerow (containing five woody species) is located on the northern border of the Harome WwTW site, approximately 1 m west of the Application Site (at the point where the access track meets the WwTW Site).	50 m	Local	Hedgerow satisfies criteria for priority habitat and important hedgerow.
Priority habitat – deciduous woodland	A block of deciduous woodland is located 475 m east of the Application Site. This woodland is hydrologically connected to the Survey Area by the Harome Moor Drain.	50 m	Local	Woodland is listed on the National Forest Inventory and is a priority habitat.
Bats (foraging and commuting)	There are six recent records of three bat species within 2 km of the Application Site, however, the closest record was approximately 730 m from the Application Site. The Survey Area has potential to support species of commuting and foraging bats. However, the wider area offers higher suitability.	50 m	Local	The assemblage of commuting and foraging bat species within the EZol is considered to be of Local importance in accordance with good practice guidance <sup>19</sup> .
Widespread reptile species	Although no desk study records were provided, the Application Site offers limited basking and dispersal opportunities for widespread reptile species and is located in proximity to habitat with potential foraging/ refuge areas.	50 m	Local	The Survey Area provides suitable habitat for widespread reptile species. The Application Site provides limited basking and dispersal opportunities for reptiles.
Water voles	There are no recent records of water voles within 1 km of the Application Site, however, the Harome Moor Drain (which has suitability to support water voles) is located adjacent to the Application Site and flows underneath it (at the point where the access track	50 m	Local	A small population of water voles could be supported within the Survey Area. However, given the limited suitability of the watercourse, and the presence of similar habitat in the wider area, water

<sup>47</sup> The zone of influence may be different for the construction and operational phases. The maximum zone of influence is given here. Where there are differences between the construction and operational zones of influence these are discussed within the impact assessment.

Ecological Feature	Summary of baseline	Maximum zone of influence <sup>47</sup>	Importance level	Rationale for valuation
	meets the WwTW Site). Therefore, the Survey Area has potential to support water voles.			voles are considered to be of Local importance.

## 4. Design Features and Mitigation Measures

- 4.1. This section details the features that have been incorporated into the design which are of benefit to biodiversity and the mitigation measures which will be implemented during the construction phase to reduce ecological impacts. In developing the mitigation, the mitigation hierarchy has been following, looking to avoid, minimise or restore in the first instance.
- 4.2. Features that have been valued at less than local are not considered to be important ecological features and as such have not been considered within the impact assessment. However, if mitigation is required for these features for legal reasons it is detailed within this section.

### Design Features

- 4.3. The following measures have been incorporated into the Proposed Scheme design:
- The design has avoided habitats that would be considered potentially important ecological features, with the construction being carried out on hardstanding only;
  - No new access tracks or site compounds will be required upon vegetated habitats, as these will occur upon existing hardstanding only; and
  - The design has avoided the need for removal of vegetation.

### General Mitigation Measures

- 4.4. The following general measures will be implemented during the construction phase of the Proposed Scheme:
- Works will adhere to the Guidance for Pollution Prevention (GPPs)<sup>48</sup> and Construction Industry Research and Information Association (CIRIA) C762 Environmental good practice<sup>49</sup>. Adherence to this good practice will primarily involve avoiding spillage of oil/ fuel, and prevention of noise/ light pollution;
  - The current design of the Proposed Scheme will not result in any de-vegetation, direct, or indirect impact on any tree (or tree roots), and therefore will be in line with guidelines provided in BS 5837 Trees in relation to Construction<sup>50</sup>;
  - Any excavations will be filled or covered overnight. If this is not possible, one side of the excavation will be graded so that it provides an escape ramp to prevent any animals becoming entrapped. Pipework and other building material will be securely stored;
  - Should the works involve the storage of materials outside of the Application Site, this will be limited to the urban sealed surface and urban unsealed surface only. If the storage of materials is to be necessary within the active reptile season (considered to be April through to October), it is recommended that materials are stored on top of pallets, in order to prevent the unintentional creation of reptile refugia;
  - Construction work between dusk and dawn (taken to be from 30 minutes before sunset to 30 minutes after sunrise) will be avoided where possible. It is understood that works will not take place at night, however if avoidance is not possible, any lighting required will be

<sup>48</sup> The GPPs provide environmental good practice guidance for the whole UK, and environmental regulatory guidance directly to Northern Ireland, Scotland and Wales only. For businesses in England, regulatory guidance is available from GOV.UK instead.

<sup>49</sup> CIRIA C762 Environmental good practice provides advice on the management of a range of environmental issues that may be encountered on site and presents good practice to reduce the environmental impacts due to construction.

<sup>50</sup> British Standards Institute (2012) BS 5837:2012 Trees in relation to design, demolition, construction.

directed downwards at the construction works and light spill to adjacent habitats (particularly the hedgerows and line of trees) avoided;

- Should any INNPS be encountered during the works (albeit this is unlikely), a specialist invasives contractor will be contacted for advice regarding INNPS management to avoid the spread of INNPS during the works or INNPS removal and appropriate disposal.



## 5. Impact Assessment

- 5.1. This section characterises the impacts and the subsequent effects (both positive and negative) of the Proposed Scheme on the important ecological features within the zone of influence and assesses the significance of the residual effects (both positive and negative) based on the mitigation measures detailed in Section 4. The following potential impacts have been identified.

### Construction Impacts

- 5.2. Construction Impacts anticipated in association with the Proposed Scheme comprise:
- Injury or mortality of protected and priority species (widespread reptile species and water voles);
  - Small scale and localised permanent loss of wildlife habitats (i.e. limited basking and dispersal habitat for reptiles);
  - Potential for pollution events resulting in damage to localised vegetated habitats or nearby watercourses; and
  - Temporary disturbance including noise and vibration to protected and priority species (foraging and commuting bats).

### Operational Impacts

- 5.3. No operational impacts are anticipated in association with the Proposed Scheme. The Application Site comprises part of an existing WwTW and access road. The Proposed Scheme does not involve any significant changes to the operational use of the Application Site or the access road.
- 5.4. Based on the impacts identified above, the EZoI detailed in Section 4 remain unchanged.

### Residual Effects

- 5.5. A summary of the impact assessment, the proposed mitigation, and the residual effects during construction and operation are provided in Table 5-1.
- 5.6. If the design changes or the agreed mitigation cannot be implemented the effects will need to be reassessed and further surveys may be required. In this event, the conclusion of this EclA may no longer be valid.

**Table 5-1 - Summary of construction impacts, avoidance/ mitigation and residual effects**

Important Ecological Feature	Importance level	Impact description	Proposed avoidance/ mitigation	Residual effects (Importance level affected)
Priority habitat – species rich native hedgerow	Local	The construction of the kiosk may result in pollution to nearby vegetated habitats.	Works will adhere to the GPPs and CIRIA C762 Environmental good practice.	No residual effect.
Priority habitat – deciduous woodland	Local	The construction of the kiosk may result in pollution to the watercourse, which in turn may result in pollution to the woodland block.	Works will adhere to the GPPs and CIRIA C762 Environmental good practice.	No residual effect.
Bats (foraging and commuting)	Local	The construction of the kiosk may cause temporary noise, light and vibration disturbance to foraging and commuting bats, if works are undertaken at night.	Night working will be avoided, where possible. If avoidance of night working is not possible, any lighting required will be directed downwards at the construction works and light spill to adjacent habitats (particularly the hedgerows and line of trees) avoided	No residual effect.
Widespread reptile species	Local	The construction of the kiosk will cause the permanent loss of a small area of habitat with limited suitability for basking or dispersing reptiles, however, suitable further basking habitat is present in the wider area. The construction of the kiosk may cause injury or mortality to reptiles, if present within the footprint of the Application Site, in the absence of mitigation.	If the works are to be undertaken outside of the reptile active season, no mitigation for reptiles would be required. If works are to be undertaken within the reptile active season, a visual pre-works check for reptiles will be undertaken ahead of the construction works. Any reptiles present (considered very unlikely) are likely to move away of their own accord, however, if reptiles are present and do not move from the work area an ecologist will be contacted for advice. If the storage of materials is to be necessary within the active reptile season (considered to be April through to October), it is recommended that materials are stored on top of pallets, in order to prevent the unintentional creation of reptile refugia.	No residual effect.
Water voles	Local	The construction of the kiosk may result in pollution to Harome Moor Drain, in the absence of mitigation, which could cause injury or mortality to water vole, if present.	Works will adhere to the GPPs and CIRIA C762 Environmental good practice.	No residual effect.

## 6. Conclusion

- 6.1. This ecological impact assessment was informed by a desk study and ecological walkover survey undertaken during October 2023. It includes an assessment of the impacts of proposed installation of the MCC Kiosk at Harome WwTW. It is understood that, although included within the planning application boundary, no works will be undertaken to the access track included within the Application Site.
- 6.2. An ‘important’ species-rich native hedgerow, a priority habitat, is located within the Survey Area, adjacent to the northern boundary of the WwTW Site.
- 6.3. A block of priority deciduous woodland habitat is considered to be hydrologically connected to the Application Site.
- 6.4. Whilst the Application Site itself has limited suitability for protected and priority species, the habitats within the Survey Area were considered suitable to support:
- badger;
  - small numbers of foraging and commuting bat species; and
  - widespread species of reptiles; and
  - water vole.
- 6.5. Construction impacts anticipated in association with the Proposed Scheme comprise:
- Injury or mortality of protected and priority species (widespread reptile species and water voles);
  - Small scale and localised permanent loss of wildlife habitats (i.e. limited basking and dispersal habitat for widespread reptile species); and
  - Temporary disturbance including noise and vibration to protected and priority species (foraging and commuting bats).
- 6.6. The operational phase of the Proposed Scheme is considered to have no impact on habitats or protected and priority species.
- 6.7. Mitigation measures will include:
- General mitigation measures (as detailed in Section 4.4);
  - If the works are undertaken within the reptile active season then a visual check for reptiles will be undertaken ahead of the construction works. If works avoid the reptile active season, this will not be required; and
  - Avoidance of night-time works.

### Report Validity

- 6.8. In the event of programme changes then updates to the surveys may be required to ensure the validity of the data, as per CIEEM guidance<sup>51</sup>.

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<sup>51</sup> CIEEM (2019) Advice Note on the Lifespan of Ecological Reports and Surveys

# Appendices

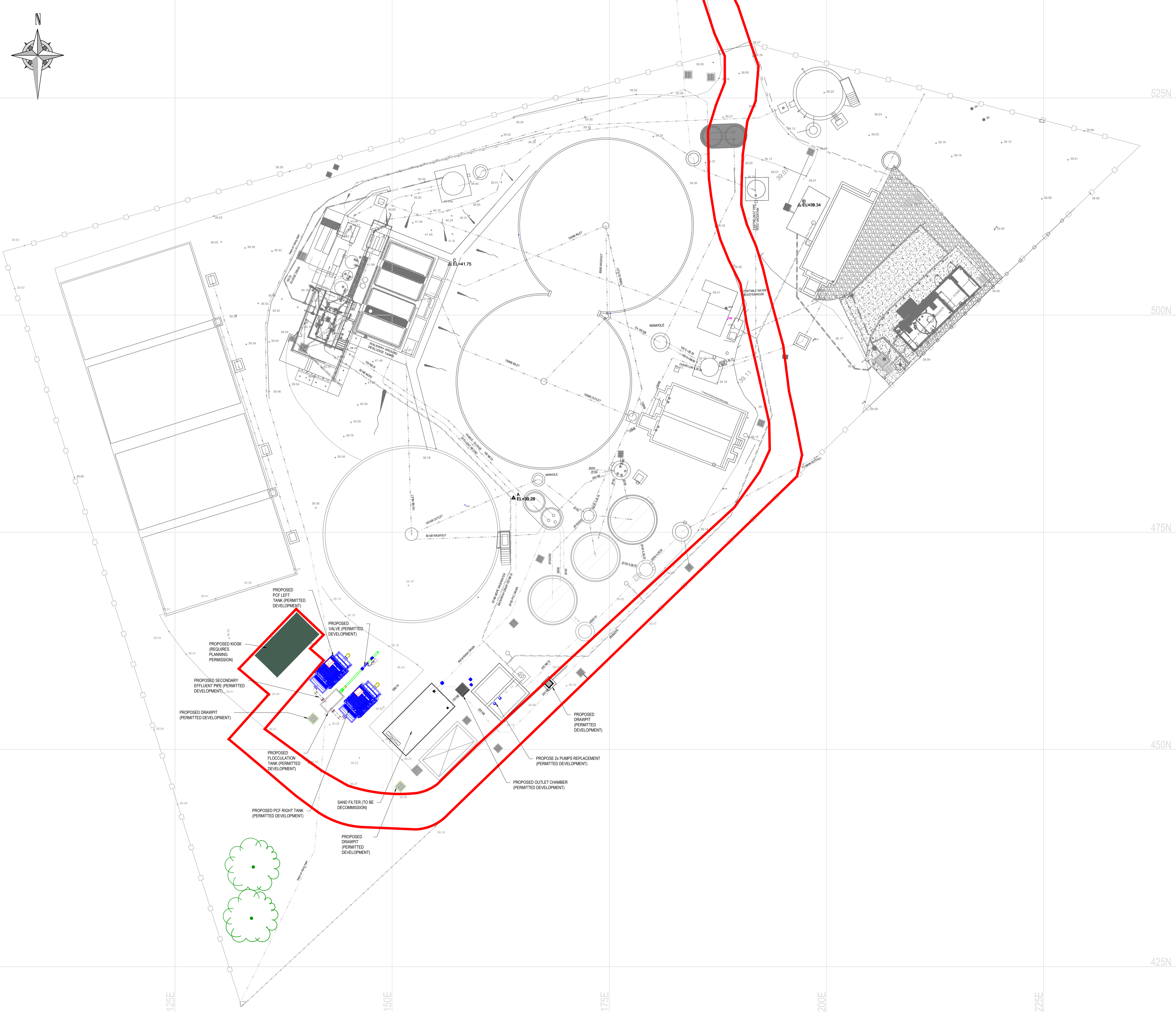
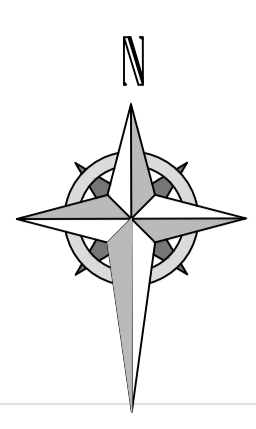


# Appendix A. Site Location Plan and Proposed Scheme Figures

Drawing Ref *HAR55 WBK WWT WWT DR Z 0001* – Site Location Plan

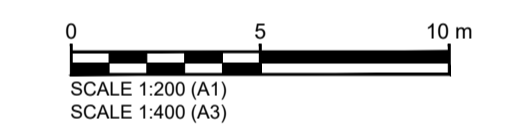
Drawing Ref *HAR55 WBK WWT WWT DR Z 0003* – Site Layout Plan





- NOTES:
1. DO NOT SCALE FROM DRAWING. IF IN DOUBT ASK.
  2. ALL DIMENSIONS IN MILLIMETERS UNLESS STATED OTHERWISE.
  3. ALL LEVEL IN METERS RELATIVE TO ORDANCE DATUM.
  4. ALL DRAWPITS 750x750mm UNLESS OTHERWISE STATED.
  5. ALL DUCT 1500 UNLESS OTHERWISE STATED.
  6. VOLUME OF KIOSK:  
SODIUM HYDROXIDE 68.25m<sup>3</sup>
  7. PROPOSED COLOR OF ALL KIOSK RAL 14 C 39

- LEGEND
- PLANNING APPLICATION SITE BOUNDARY APPROX. AREA 0.08(ha)
  - EXISTING SITE STRUCTURES
  - ACCESS ROAD
  - EXISTING WOOL RAIL FENCE
  - EXISTING SITE BOUNDARY
  - EXISTING WASH WATER
  - EXISTING PIPEWORK



Status Rev.	Description	Drawn	Check	Appr'd	Output Date
SS.P04	LEGEND UPDATED & PIPES LABELED	MS	CM	KF	07/11/2023
SS.P03	BLUE LINE, EXISTING, TELEM & POWER DUCTS REMOVED	MS	CM	KF	06/11/2023
SS.P02	UPDATED AS PER YW COMMENTS	MS	CM	KF	17/10/2023
SS.P01	ISSUED FOR PLANNING PERMISSION	CM	MP	KF	11/10/2023

Originator / Partner / DEM Ref: **WARD & BURKE**

YORKSHIRE WATER ALWAYS CONSIDERS

LIFE SAVING RULES

Client: **Yorkshire Water Services Ltd**  
Western House,  
Western Way,  
Halifax Road,  
Bradford,  
BD6 2SZ

Framework: MINOR MEICA	Work Stream: -
YW Batch ID / Project Code: YW 201894	YW Solution ID: -

Site: **HAROME STW**

OS Grid Reference: SE 65910 82162

Drawing Title: **HAROME STW  
SITE LAYOUT PLAN  
PROPOSED**

Original Design / DEM Reference:	Size: A1	Scale: 1:200
Status Description: <b>ISSUE FOR PLANNING PERMISSION</b>	Status: S5	Revision: P04
Drawing Number: <b>HAR55 WBK WWT WWT DR Z 0003</b>		

# Appendix B. Planning Policy and Consultation Response

## National Planning Policy Framework, 2021

The National Planning Policy Framework (NPPF) sets out the Governments planning policies for England and how these are expected to be applied by Local Authorities within their Local Development Frameworks (LDF). The revised National Planning Policy Framework was published in July 2021.

Chapter 15 of the NPPF 'Conserving and enhancing the natural environment' sets out the requirements to consider biodiversity in planning decisions.

The paragraphs within Chapter 15 are relevant to the Proposed Scheme, the key information from which is detailed below:

Para 174: Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

Para 175: Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework<sup>52</sup>; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

Para 176: Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads<sup>53</sup>. The scale and extent of development within these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.

Para 177: When considering applications for development within National Parks, the Broads and Areas of Outstanding Natural Beauty, permission should be refused for major development<sup>54</sup> other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

- a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;

<sup>52</sup> Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a high quality.

<sup>53</sup> *English National Parks and the Broads: UK Government Vision and Circular 2010* provides further guidance and information about their statutory purposes, management and other matters.

<sup>54</sup> For the purposes of paragraphs 176 and 177, whether a proposal is 'major development' is a matter for the decision maker, taking into account its nature, scale and setting, and whether it could have a significant adverse impact on the purposes for which the area has been designated or defined.



- b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
- c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

Para 178: Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph 176), planning policies and decisions should be consistent with the special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate, unless it is compatible with its special character.

### Habitats and biodiversity

Para 179: To protect and enhance biodiversity and geodiversity, plans should:

- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity<sup>55</sup>; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation<sup>56</sup>; and
- a. promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

Para 180: When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons<sup>57</sup> and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Para 181: The following should be given the same protection as habitats sites:

- a) potential Special Protection Areas and possible Special Areas of Conservation;
- b) listed or proposed Ramsar sites<sup>58</sup>; and
- c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

Para 182: The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

<sup>55</sup> Circular 06/2005 provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

<sup>56</sup> Where areas that are part of the Nature Recovery Network are identified in plans, it may be appropriate to specify the types of development that may be suitable within them.

<sup>57</sup> For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat.

<sup>58</sup> Potential Special Protection Areas, possible Special Areas of Conservation and proposed Ramsar sites are sites on which Government has initiated public consultation on the scientific case for designation as a Special Protection Area, candidate Special Area of Conservation or Ramsar site.

## Local Planning Policy – Ryedale Local Plan Strategy

One relevant local planning policy within the Ryedale Local Plan Strategy was located and is listed below.

### SP14 Biodiversity

Biodiversity in Ryedale will be conserved, restored and enhanced by:

- Co-ordinated and targeted activity by public, private, voluntary and charitable organisations to support the implementation of the Yorkshire and Humber Biodiversity Strategy and Delivery Plan; the Ryedale Biodiversity Action Plan and the Howardian Hills Area of Outstanding Natural Beauty Management Plan
- Providing support and advice to landowners to encourage land management practises that support the objectives, priorities and targets of these plans and strategies
- Minimising the fragmentation of habitats and maximising opportunities for the restoration and enhancement of habitats and improving connectivity between habitats through the management of development and by working in partnership with landowners and land managers
- Maintaining, creating and improving ecological networks and Green Infrastructure routes to assist the resilience of habitats and species in the face of climate change
- Supporting, in principle, proposals for development that aim to conserve or enhance biodiversity and geodiversity through the prevention of loss of habitat or species and the incorporation of beneficial biodiversity features
- Requiring a net gain in biodiversity to be provided as part of new development schemes
- Resisting development proposals that would result in significant loss or harm to biodiversity in Ryedale
- Encouraging the use of native and locally characteristic species in landscaping schemes

Investment in the conservation, restoration and enhancement of biodiversity in Ryedale will be targeted at –

- The landscape-scale projects identified in the Yorkshire and Humber Biodiversity Delivery Plan which are wholly or partially within Ryedale:
  - Howardian Hills Area of Outstanding Natural Beauty and Western North York Moors Belt
  - North York Moors Grassland Fringe
  - Vale of Pickering
  - West Wolds
  - Lower Derwent Valley
  - Yorkshire Peatlands
- The habitats and species identified in the Ryedale Biodiversity Action Plan including those habitats which are particularly distinctive in the following areas:
  - Ancient woodland in the Howardian Hills
  - Species rich grassland, a traditional feature of strip fields around Ryedale’s villages
  - Marsh wetland in the Vale of Pickering
  - Fen meadows in the Howardian Hills
  - Floodplain swamps in the Derwent Floodplain and streamside swamps in the Howardian Hills and Wolds
  - Chalk grassland on the Wolds
  - Acid grassland at the foot of the Wolds; southern edge of the Vale of Pickering and Howardian Hills
  - Limestone grassland in the Howardian Hills
  - Ponds in the Vale of Pickering and at Flaxton
  - Dry wooded valleys along the Fringe of the Moors
  - Wet woodland in the Vales of Pickering and York; the Howardian Hills
  - Wood pasture and Parkland associated with large country houses
  - Heathland remnants in the Howardian Hills and southern Ryedale

In considering proposals for development –

- Proposals which would have an adverse effect on any site or species protected under international or national legislation will be considered in the context of the statutory protection which is afforded to them.
- Proposals for development which would result in loss or significant harm to...
  - Habitats or species included in the Ryedale Biodiversity Action Plan and priority species and habitat in the UK Biodiversity Action Plan
  - Local Sites of Nature Conservation Importance or Sites of Geodiversity Importance
  - Other types of Ancient Woodland and Ancient/Veteran Trees
- ...will only be permitted where it can be demonstrated that there is a need for the development in that location and that the benefit of the development outweighs the loss and harm. Where loss and harm cannot be prevented or adequately mitigated, compensation for the loss/harm will be sought. Applications for planning permission will be refused where significant harm cannot be prevented, adequately mitigated against or compensated for.
- Loss or harm to other nature conservation features should be avoided or mitigated. Compensation will be sought for the loss or damage to other nature conservation features which would result from the development proposed.
- Protected sites, including internationally and nationally protected sites and Sites of Importance for Nature Conservation are identified on the adopted Proposals Map

## Minerals and Waste Joint Plan

One relevant local planning policies within the Minerals and Waste Joint Plan was located and is listed below.

### Policy D07: Biodiversity and geodiversity

1. Proposals will be permitted where it can be demonstrated that, having taken into account any proposed mitigation measures, there will be no unacceptable impacts on biodiversity or geodiversity. The level of protection provided to international, national and locally designated sites are outlined in parts 2) to 8) below.
2. A very high level of protection will be afforded to sites designated at an international level, including SPAs, SACs and RAMSAR sites. Development which would have an unacceptable impact on these sites will not be permitted.
3. Development, whether inside or outside of a SSSI which is likely to have an adverse effect on the notified special interest features of a SSSI or a broader impact on the national network of SSSIs will only be permitted where the benefits of the development at that location clearly outweigh the impact to the SSSI features and the broader SSSI network. The loss or deterioration of irreplaceable habitats including ancient woodland or aged or veteran trees, will only be permitted where both the need for, and the benefits of the development at the proposed location clearly outweigh the impact or loss.
4. Where development would be located within an Impact Risk Zone defined by Natural England for a SPA, SAC, RAMSAR site or SSSI, or at any other location at which it could have an adverse impact on the SPA, SAC, RAMSAR site or SSSI, and the development is of a type identified by Natural England as one which could potentially have an adverse impact on the designated site, proposals should be accompanied by a detailed assessment of the potential impacts and include proposals for mitigation and enhancement where relevant.
5. Locally important sites and assets include:
  - i. Sites of Importance for Nature Conservation (including candidate sites);
  - ii. Local Nature Reserves;
  - iii. Local Geological Sites; and
  - iv. Habitats and species of principal importance or other sites of geological or geomorphological importance.

Development will not be permitted that will result in an unacceptable impact to locally important sites and assets unless it can be demonstrated that:

















- the benefits of development clearly outweigh the nature conservation value or scientific interest of the site and its contribution to wider biodiversity objectives and connectivity; and
  - the proposed mitigation or compensatory measures are equivalent to the value of the site/asset.
6. Through the design of schemes, including any proposed mitigation and or compensation measures, proposals should seek to contribute positively towards the delivery of agreed biodiversity and/or geodiversity objectives, including those set out in agreed local Biodiversity or Geodiversity Action Plans, or in line with agreed priorities of any relevant Local Nature Partnership, with the aim of achieving net gains for biodiversity or geodiversity and supporting the development of resilient ecological networks.
  7. In exceptional circumstances, and where the development site giving rise to the requirement for offsetting is not located within a SPA, SAC, RAMSAR or SSSI, the principle of biodiversity offsetting to fully compensate for any losses will be supported on a site by site basis and as a last resort in accordance with the mitigation hierarchy. These circumstances specifically include where:
    - i. It has been demonstrated that it is not possible to fully avoid or mitigate against adverse impacts; and
    - ii. The provision of compensatory habitat within the site would not be feasible; and
    - iii. The need for and the benefits of the development in the proposed location outweigh the need to protect the site; and
    - iv. Any compensatory gains would be delivered within the minerals or waste planning authority area in which the loss occurred, unless otherwise agreed by the planning authority. Compensatory gains outside of the planning authority area will only be deemed as acceptable where it is clearly demonstrable that the approach will lead to greater biodiversity and/or geodiversity benefits than alternative options within the planning authority area.
  8. Proposals must consider the cumulative impacts as a result of a combination of individual impacts from the same development and/or through combinations of impacts in conjunction with other development. Proposals will only be permitted where it would not give rise to unacceptable cumulative impacts.

# Appendix C. UKHab Plan and Target Notes

Figure C.1 – UKHab Plan



**Legend**

-  Survey Area
-  No Access
-  Fencing
-  h2a5 - species rich native hedgerow
-  h2a6 - other native hedgerow
-  w1g, 33 - line of trees (broadleaved)
-  r2b - other rivers and streams
-  g3c - other neutral grassland
-  c1c - cereal crops
-  u1b5 - buildings
-  u1b6 - other developed land
-  u1c - artificial unvegetated unsealed surface
-  r1g - other standing water
-  h3d - bramble scrub
-  h3h - mixed scrub
-  u1f - sparsely vegetated urban land

Location of the proposed MCC Kiosk.  
Further detail provided in the Site Layout  
Plan (Drawing reference HAR55 WBK  
WWT wWT DR Z 0003)



Atkins Limited ©  
Albany Court  
Monarch Road  
Newcastle Business Park  
Newcastle upon Tyne  
NE4 7YB

Project: Harome WwTW

Client: Yorkshire Water

Title: UKHab Plan

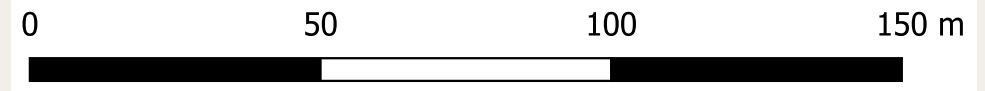
Drawing number: Figure C.1

Original scale 1:1,300

PAGE 1/1

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Date: Nov 2023	Date: Nov 2023	Date: Nov 2023	Date: Nov 2023
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## Target Notes and Photographs

Table C-1 - Target notes and photographs

Target Note	Description	Photograph
<p>TN1</p>	<p>Single young wych elm tree located within the hedgerow, just beyond the southern boundary fence.</p> <p>Approximately 10 m tall, multi-stemmed.</p> <p>Negligible bat roosting potential.</p>	
<p>TN2</p>	<p>Single semi-mature horse chestnut tree, located within scrub habitat, just within the boundary fence.</p> <p>Approximately 6 m tall, multi-stemmed.</p> <p>Negligible bat roost potential.</p>	

Target Note	Description	Photograph
TN3	<p>Single semi-mature goat willow tree, located adjacent to the lagoons, within the boundary fence.</p> <p>Approximately 10 m tall, multi-stemmed.</p> <p>Negligible bat roost potential.</p>	
TN4	<p>Single semi-mature alder tree, located within the northern hedgerow, just beyond the boundary fence.</p> <p>Approximately 6 m tall, multi-stemmed.</p> <p>Negligible bat roost potential.</p>	<p>[No photograph available]</p>



# Appendix D. Great Crested Newt Habitat Suitability Index Assessment Data

Table D-1 - HSI assessment<sup>59</sup> data for waterbodies within the Application Site<sup>60</sup>

SI	Factor	WB1, located at SE 65852 82102	WB2, located at SE 65849 82112	WB3, located at SE 65846 82122	WB4, located at SE 65843 82131	WB5, located at SE 65923 82140
		1	Location	1	1	1
2	Pond Area	0.3	0.3	0.3	0.3	0.2
3	Pond Drying	0.9	0.9	0.9	0.9	0.9
4	Water Quality	0.01	0.01	0.01	0.01	0.01
5	Shade	1	1	1	1	1
6	Fowl Presence	1	1	1	1	1
7	Fish Presence	1	1	1	1	1
8	Pond Density	0.85	0.85	0.85	0.85	0.85
9	Terrestrial Habitat	0.67	0.67	0.67	0.67	0.67
10	Macrophyte Cover	0.3	0.3	0.3	0.3	0.3
		<b>HSI Score</b>				
		<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.46</b>	<b>0.45</b>
		<b>Poor</b>	<b>Poor</b>	<b>Poor</b>	<b>Poor</b>	<b>Poor</b>

<sup>59</sup> ARG UK (2010) Advice Note 5: Great Crested Newt Habitat Suitability Index

<sup>60</sup> No further waterbodies were identified within 500 m of the Application Site.

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