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Dear Sir / Madam

**NSIP Reference Name / Code: WW010003 Cambridge Waste Water Treatment Plant Relocation Project Development Consent Order**

**Title: Natural England's comments in respect of Anglian Water Services Limited WW010003 Cambridge Waste Water Treatment Plant Relocation Project Development Consent Order**

**Examining authority's submission deadline: 19 July 2023**

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

For any further advice on this consultation please contact the case officer Catherine Duerden via email at [catherine.duerden@naturalengland.org.uk](mailto:catherine.duerden@naturalengland.org.uk) and copy to [consultations@naturalengland.org.uk](mailto:consultations@naturalengland.org.uk).

Yours faithfully

Janet Nuttall

West Anglia Sustainable Development Casework Manager

## Natural England's Relevant Representations

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## 1. Part I: Summary and Conclusions of Natural England's advice

### Summary of Natural England's Advice

The main issue raised by this application is the lack of information and/or mitigation and monitoring measures that we require in order for us to make an evaluation of the recreational pressure impact of the proposal on Stow-cum-Quy Fen SSSI in accordance with our statutory remit. We would like to see the project deliver a more strategic contribution towards the Cambridge Nature Network to enhance the natural environment and improve its resilience to development pressures. We believe the scope of the LERMP should be extended to cover the entire project area and for this to include ecological mitigation, enhancement (including BNG) and management across the wider project area. Natural England requires further information or clarification on hydrology matters for a number of nationally designated sites. We would like to see further information on best and most versatile soils. We have provided Letters of No Impediment (LONI) following our review of the draft licence applications for water vole and bats and will issue a LONI in relation to badgers subject to a 'satisfactory' review of the draft licence application. We have provided some advisory notes on Biodiversity Net Gain.

Natural England is optimistic that outstanding matters can be resolved with the Applicant through ongoing discussions and / or written representations. We will only make oral representations at an issue specific hearing or open floor hearing where significant matters remain outstanding following further engagement with the Applicant and subject to Natural England's available capacity.

- 1.1.1. Natural England's advice in these relevant representations is based on information submitted by Anglian Water Services Limited (AWSL) in support of its application for a Development Consent Order ('DCO') in relation to Cambridge Waste Water Treatment Plant Relocation Project (*the project*).

- 1.1.2. Part I of these representations summarises what Natural England considers the main issues<sup>1</sup> to be in relation to the DCO application, and indicate the principal submissions that it wishes to make at this point. Natural England will develop these points further as appropriate during the examination process. It may have further or additional points to make, particularly if further information about the project becomes available.
- 1.1.3. Our comments are set out against the following sub-headings which represent our key areas of remit:
- Internationally designated sites
  - Nationally designated sites
  - Protected species
  - Biodiversity net gain
  - Soils and best and most versatile agricultural land
  - Ancient woodland and ancient/veteran trees
  - Other valuable and sensitive habitats and species, landscapes and access routes
- 1.1.4. Our comments are flagged as red, amber or green:
- Red are those where there are fundamental concerns which it may not be possible to overcome in their current form.
  - Amber are those where further information is required to determine the effects of the project and allow the Examining Authority to properly undertake its task and or advise that further information is required on mitigation/compensation proposals in order to provide a sufficient degree of confidence as to their efficacy.
  - Green are those which have been successfully resolved (subject always to the appropriate requirements being adequately secured)
- 1.1.5. The Proposed Development comprises the relocation of the Cambridge Waste Water Treatment Plant (WWTP) from its existing site to a new location to enable delivery of Greater Cambridge Shared Planning's North East Cambridge Area Action Plan (AAP). The AAP will create around 8,350 homes and 15,000 jobs over the next 20 years.
- 1.1.6. Natural England is broadly supportive of the proposed development of a low carbon waste water treatment facility that will help to mitigate wider climate impacts and make a positive contribution towards enhancing the natural environment and people's access to the countryside and enjoyment of nature. We welcome the proposal to establish new habitats for wildlife, including delivery of a minimum 20% biodiversity net gain and creation of an improved landscape and access connectivity. Natural England's main concerns with the project are the effects of the proposed access enhancements on the surrounding countryside, including Stow-cum-Quy Fen SSSI, particularly in combination with Local Plan development, including the North East Cambridge development that this Scheme will enable. This matter requires further consideration through the Environmental Statement and the Landscape, Ecology and Recreational Management Plan (LERMP).

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<sup>1</sup> PINS NSIP Advice Note 11 Annex C sets out Natural England's role in infrastructure planning.  
[https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/10/PINS-Advice-Note-11\\_AnnexC\\_20150928.pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/10/PINS-Advice-Note-11_AnnexC_20150928.pdf)

- 1.1.7. Natural England has been working closely with AWSL to provide advice on the project since June 2020. The Applicant has engaged with Natural England in a series of meetings and Biodiversity Technical Working Groups and in one to one meetings on specific issues since August 2020.
- 1.1.8. AWSL shared a draft template Statement of Common Ground (SoCG) (Version 1) with Natural England in May 2023. The SoCG represents the position between Anglian Water and Natural England at May 2023 (covering the pre-application stage of the process). At this stage we have not provided substantive comments on the draft SoCG; however, we will update this in due course to reflect our comments in these representations. We understand that the SoCG will continue to be reviewed and progressed through acceptance and examination stages as well as any actions arising from the Issue Specific Hearings on the draft DCO. A Statement of Commonality on specific points between SoCG's will be updated and submitted to the Examining Panel during the examination to reflect additional agreement achieved.
- 1.1.9. Part I of these representations provides an overview of the issues and a summary of Natural England's advice. Section 2 identifies the natural features relevant to this application. Section 3 summarises Natural England's overall view of the application and the main issues which it considers need to be addressed by the Secretary of State.
- 1.1.10. Part II of these representations sets out all the significant issues which remain outstanding, and which Natural England advises should be addressed by AWSL and the Examining Authority as part of the examination process in order to ensure that the project can properly be consented. These are primarily issues on which further information would be required in order to allow the Examining Authority properly to undertake its task or where further work is required to determine the effects of the project and/or to flesh out mitigation proposals to provide a sufficient degree of confidence as to their efficacy.
- 1.1.11. Natural England will continue discussions with AWSL to seek to resolve these concerns and agree outstanding matters in a statement of common ground. Failing satisfactory agreement, Natural England advises that the matters set out in section 4 will require consideration by the Examining Authority as part of the examination process.
- 1.1.12. The Examining Authority may wish to ensure that the matters set out in these relevant representations are addressed as part of the Examining Authority's first set of questions to ensure the provision of information early in the examination process.

## **2. The natural features potentially affected by this application**

### **2.1. Internationally designated sites**

- 2.1.1. Our position regarding impacts on internationally designated sites is summarised below. Further detail on our reasoning for this is given against each impact pathway within Part II.
- 2.1.2. Natural England is satisfied that **green** issues are unlikely to result in adverse effects on the integrity (AEoI) of the following internationally designated sites, subject always to the

appropriate mitigation/compensation as outlined in the application documents being secured adequately.

- The Wash and North Norfolk Coast Special Area of Conservation (SAC)
- The Wash SPA
- The Wash Ramsar site
- Ouse Washes SAC
- Ouse Washes Special Protection Area (SPA)
- Ouse Washes Ramsar site
- Devil's Dyke SAC
- Eversden and Wimpole Woods SAC
- Wicken Fen Ramsar site
- Fenland SAC (Wicken Fen component)

2.1.3. The issues that we had previously raised have now been addressed, so we have classed this section as **green**.

2.1.4. Please note that the above is subject to confirmation from the Environment Agency that they are satisfied with the HRA conclusions with regard to the water-dependent internationally designated sites.

## **2.2. Nationally designated sites**

2.2.1. Natural England's position regarding nationally designated sites is summarised below. Further detail on our reasoning for this is given against each impact pathway in Part II.

2.2.2. Nineteen nationally designated statutory sites and 13 Local Nature Reserves (LNRs) are present within the 10km study area. Natural England is satisfied that four nationally designated statutory sites, notified only for their geological interest, are not considered further due to a lack of pathways for impact. The 15 nationally designated statutory sites, notified for their biodiversity features, are:

- Stow-cum-Quy Site of Special Scientific Interest (SSSI);
- Wilbraham Fen SSSI;
- Great Wilbraham Common SSSI;
- Cherry Hinton Pit SSSI;
- Dernford Fen SSSI;
- Fulbourn Fen SSSI;
- Roman Road SSSI;
- Gog Magog Golf Course SSSI;
- Fleam Dyke SSSI;
- Madingley Wood SSSI;
- Wicken Fen SSSI;
- Devil's Dyke SSSI;
- Newmarket Heath SSSI;
- Cam Washes SSSI;
- Upware North Pit SSSI.

- 2.2.3. Natural England is satisfied that the proposed project will not have any adverse effect on the notified features of any of these sites, with the exception of Stow-cum-Quy Fen SSSI, Wilbraham Fen SSSI and the Cam Washes SSSI.
- 2.2.4. We are satisfied with the ES Biodiversity Chapter conclusion of no significant adverse effect with regard to air quality impacts on Stow-cum-Quy Fen SSSI.
- 2.2.5. Natural England is not satisfied that sufficient evidence has been provided and/or mitigation identified, through ES Chapter 8: Biodiversity, Chapter 21: Cumulative Effects and the Landscape, Ecology and Recreational Management Plan (LERMP) to rule out significant adverse effects on Stow-cum-Quy Fen SSSI through the proposed access enhancements. In the absence of rigorous survey evidence to inform a robust assessment of recreational pressure impacts on the SSSI, a post-construction monitoring programme and adaptive landscape management approach, progressed through a wider partnership arrangement, could provide acceptable mitigation. However, details will need to be provided and secured through the LERMP. This issue has been identified as 'amber'.
- 2.2.6. Natural England advises that monitoring of the water quality of the Black Ditch, which is hydrologically connected to Stow-cum-Quy Fen SSSI, should be carried out in addition to water level monitoring. This should be undertaken throughout the operation of the plant in addition to the construction phase. This has been classed as 'amber'.
- 2.2.7. We request that a more detailed monitoring and mitigation strategy and detailed CEMP be submitted, prior to DCO approval. This should include the requirement to act upon any findings of the water quality and water level monitoring within the River Cam, Stow-cum-Quy SSSI and Black Ditch, throughout the construction and operation phases of the project. This has been given 'amber' status.
- 2.2.8. We wish to see operational phase groundwater quality monitoring for the wider scheme so that any impacts to designated sites, such as Stow-cum-Quy Fen SSSI, can be identified and appropriate mitigation measures implemented. This has been classed as 'amber'.
- 2.2.9. Wilbraham Fen SSSI should be included in the the groundwater monitoring and mitigation strategy. This has been classed as 'amber'.
- 2.2.10. Natural England seeks clarification on impacts through flood level increases to downstream ecological receptors including the Cam Washes SSSI. This has been classed as 'amber'.
- 2.2.11. Confirmation should be provided that the replacement WWTP will not place additional demand on highly stressed water resources. This has been classed as 'amber'.

## **2.3. Protected species**

- 2.3.1. Natural England's position regarding European protected species is summarised below. Further detail on our reasoning for this is given in part II.

- 2.3.2. Draft licence applications and mitigation strategies for bats, water vole and badger have been submitted to Natural England. Letters of no Impediment (LONIs) have been provided subject to amendments to the Method Statements for water vole and bats prior to formal submission of the licence applications. This has therefore been identified as **'amber'**.
- 2.3.3. Natural England is in the process of reviewing the draft badger licence application and will issue a LONI pending a 'satisfactory' review of the draft licence application. This has provisionally been given **'amber'** status until Natural England's wildlife licencing team have provided their comments.
- 2.3.4. Species mitigation and management for the entire scheme, including the tunnel, pipeline and final effluent outfall elements, should be set out in the LERMP. This has been classed as **'amber'**.
- 2.3.5. Confirmation should be provided that species mitigation, including for water voles, will be managed for the operational duration of the project. This should be secured through the LERMP. This has been classed as **'amber'**.
- 2.3.6. Despite these amber issues, Natural England has no significant concerns in relation to protected species subject to implementation of mitigation measures being secured through the relevant DCO requirements.
- 2.3.7. We defer to the Local Planning Authority for more detailed protected species comments.

## **2.4. Biodiversity Net Gain**

- 2.4.1. Natural England's position regarding provision of biodiversity net gain is summarised below. Further detail on our reasoning for this is given in Part II.
- 2.4.2. We note the Applicant's submission of a BNG Assessment Report and advise that a copy of the BNG Metric calculation should also be provided. This has been classed as **'green'**.
- 2.4.3. Natural England would defer to the Local Planning Authority for further BNG comments, as the responsible body for Biodiversity Net Gain.
- 2.4.4. Natural England would like to have early sight of the proposals that indicate how 20% BNG river units will be achieved. This has been classed as **'green'**.

## **2.5. Soils and best and most versatile agricultural land**

- 2.5.1. Natural England's position regarding soils and the best and most versatile agricultural land is summarised below. Further detail on our reasoning for this is given in Part II.
- 2.5.2. Many of the detailed comments provided in Natural England's response to the S42 consultation appear not to have been addressed through the relevant submission documents including ES Chapter 6 Agricultural Land and Soils and Appendix 6.3 Outline Soil Management Plan. There is very little information on soil re-use with regard to quantity and restoration profiles hence it is

not possible to be confident that the excavated soils will be re-used on site, and re-used appropriately. Also, in the absence of a detailed ALC survey for the land subject to temporary disturbance (i.e. the pipeline route), it is not possible for the applicant to set out appropriate soil management or restoration criteria, therefore the Applicant is unable to demonstrate the temporary disturbance will not result in the degradation of land quality. This is particularly important given that there are mapped peat soils present. This matter is classed as 'amber'.

## **2.6. Ancient woodland and ancient/veteran trees**

2.6.1. Natural England's position regarding ancient woodland and ancient/veteran trees is summarised below. Further detail on our reasoning for this is given in Part II.

2.6.2. Natural England has no further comments to make in relation to this matter, so it is classed as 'green'.

## **2.7. Other valuable and sensitive habitats and species, landscapes and access routes**

2.7.1. Natural England's position regarding County Wildlife Sites, the wider landscape and access routes is summarised below. Further detail on our reasoning for this is given in Part II.

2.7.2. We support the LERMP landscape design proposals to create a range of new ecological habitats which aim to deliver a minimum of 20% biodiversity net gain (BNG) on the site of the proposed WWTP. We also welcome proposals to improve recreational opportunities and connectivity subject to appropriate consideration and mitigation of visitor pressures within highly sensitive areas such as Stow-cum-Quy Fen SSSI. Our advice is that this further consideration should be given to this issue, and mitigation to address adverse impacts, through the ES and the LERMP. These documents should take a more robust and strategic approach to assessing, monitoring and mitigating the effects of access enhancements in the context of the wider Local Nature Recovery Strategy / Cambridge Nature Network and highly sensitive sites such as Stow-cum-Quy Fen SSSI. The LERMP should present a more ambitious approach including a commitment to the delivery of more strategic enhancements for the local nature recovery network to strengthen the resilience of the natural environment and to absorb and mitigate recreational pressure impacts.

2.7.3. We wish to see more significant environmental enhancements in the surrounding landscape, particularly within the Wicken Fen Vision Area, which would help to alleviate the 'amber' recreational pressure issues identified in the 'Nationally designated sites' section of our response (in addition to the required monitoring and management strategy). Through the LERMP the Applicant should provide a commitment to explore how it can make a proportionate contribution towards this in partnership with other relevant developers and natural environment stakeholders. This is regarded as an 'amber' issue. We have provided further comments on this matter under Nationally Designated Sites.

2.7.4. The scope of the LERMP is limited to the immediate area around the Proposed WWTP. Natural England's view is that ecological mitigation, enhancement (including BNG) and management for the entire scheme, including the tunnel, pipeline and final effluent outfall elements, should be set out in the LERMP.



- 2.7.5. It is not clear that ecological mitigation, including habitat creation for water voles, will be managed for the operational duration of the project. Confirmation on this should be detailed and secured through the LERMP.
- 2.7.6. Early sight of the Management and Monitoring Plan for the outfall should be provided to show details of species mitigation, invasive species control measures and any proposals for any embedded natural finish and to indicate how 20% BNG river units will be achieved.
- 2.7.7. These issues have been classed as 'amber'.
- 2.7.8. With reference to County Wildlife Sites and wider priority habitats and species, we ask that representations from the local Wildlife Trust and Local Planning Authority ecologists are taken into account. We also ask that representations from the Environment Agency are taken into account for any water-dependant priority habitats and species that might be affected. This has provisionally been classed as 'green' subject to their comments.

**3. Natural England's overall conclusions** The main issue raised by this application is the lack of information and/or mitigation and monitoring measures that we require in order for us to make an evaluation of the recreational pressure impact of the proposal on Stow-cum-Quy Fen SSSI in accordance with our statutory remit. We would like to see the project deliver a more strategic contribution towards the Cambridge Nature Network to enhance the natural environment and improve its resilience to development pressures. We believe the scope of the LERMP should be extended to cover the entire project area and for this to include ecological mitigation, enhancement (including BNG) and management across the wider project area. Natural England requires further information or clarification on hydrology matters for a number of nationally designated sites. We would like to see further information on best and most versatile soils. We have provided Letters of No Impediment (LONI) following our review of the draft licence applications for water vole and bats and will issue a LONI in relation to badgers subject to a 'satisfactory' review of the draft licence application. We have provided some advisory notes on Biodiversity Net Gain.

- 3.1.2. Natural England believes that outstanding matters could be resolved with the Applicant through ongoing discussions and / or written representations. We will only make oral representations at an issue specific hearing or open floor hearing where significant matters remain outstanding following further engagement with the Applicant and subject to Natural England's available capacity.

## Natural England's Relevant Representations

- 4. Part II: Natural England's detailed advice** Part II of these representations expands upon the detail of all the significant issues ('red' and 'amber' issues) which, in our view remain outstanding and includes our advice on pathways to their resolution where possible. Part II also shows 'green' issues where a resolution has been reached and subject always to the appropriate requirements being adequately secured.
- 4.1.2. Natural England's headline points are that on the basis of the information submitted:
- 4.1.3. Natural England is satisfied that it can be excluded beyond reasonable scientific doubt that the project would not have an adverse effect on the integrity of internationally designated sites. Subject to confirmation by the Environment Agency that they are also satisfied.
- 4.1.4. Natural England advises that, if approved, the project must be subject to all necessary and appropriate requirements which ensure that unacceptable environmental impacts either do not occur or are sufficiently mitigated.
- 4.1.5. Natural England will continue engaging with the applicant to seek to resolve outstanding concerns throughout the examination. Natural England advises that the matters indicated as 'red' and 'amber' will require consideration by the Examining Authority during the examination.
- 4.1.6. Natural England's headline points are that on the basis of the information submitted:
- i. Natural England is not satisfied, on the basis of the information currently provided, that the project is not likely to damage features of interest of Stow-cum-Quy Fen SSSI.
  - ii. There are a number of outstanding soils issues relating to Best and Most Versatile (BMV) land which need to be addressed.
  - iii. Additional 'amber' issues are summarised in Table 1 (starting on page 26).

## **4.2. Internationally designated sites**

4.2.1. Our position regarding impacts on internationally designated sites is detailed below. Further detail on our reasoning for this is given against each impact pathway.

4.2.2. Natural England is satisfied that the below issues are unlikely to result in adverse effects on the integrity (AEol) of the following internationally designated sites, subject always to the appropriate mitigation/compensation as outlined in the application documents being secured adequately.

- The Wash and North Norfolk Coast Special Area of Conservation (SAC)
- The Wash Special Protection Area (SPA)
- The Wash Ramsar site
- Ouse Washes SAC
- Ouse Washes SPA
- Ouse Washes Ramsar site
- Wicken Fen Ramsar site
- Fenland SAC (Wicken Fen component)
- Devil's Dyke SAC
- Eversden and Wimpole Woods SAC.

### Devil's Dyke SAC

4.2.3. Natural England is satisfied with the no adverse effect on integrity conclusions of Appendix 8.16 Habitats Regulations Assessment Report (HRA) with regard to air quality effects on Devil's Dyke Special Area of Conservation (SAC). This concludes that there are no significant construction (traffic emissions) or operational (combined energy plant and traffic emissions) air quality effects on the SAC and further mitigation measures are not required.

### The Wash SAC, SPA and Ramsar and North Norfolk Coast SAC and the Ouse Washes SAC, SPA

4.2.4. We are also satisfied with the HRA conclusion of no adverse effect on the integrity of the The Wash SAC, SPA and Ramsar and North Norfolk Coast SAC and the Ouse Washes SAC, SPA and Ramsar site, including through biological disturbance, spread of invasive species, physical damage and contamination (deterioration of water quality, increased sedimentation, pollution events and changes to hydrology), subject to the implementation of the following proposed mitigation measures:

- *Physical measures will be implemented to prevent suspended solids and silt from reaching these sites. Measures to avoid disturbance to the River Cam have been proposed by using horizontal directional drilling and pipe-jacking.*
- *Boreholes will be constructed as permanent installations, sealed thoroughly to allow groundwater testing and avoid surface water contamination.*
- *The Construction Code of Practice (CoCP) will be followed to avoid the spread of invasive species.*

4.2.5. The above reflects Natural England's advice in response to the Applicant's consultation on the Habitats Regulations Assessment (HRA) and Appropriate Assessment (AA) (9 January 2023, ref. 414527).

#### Wicken Fen Ramsar / Fenland SAC

4.2.6. Natural England noted that these sites had been excluded from the HRA Appropriate Assessment, the HRA Screening report having scoped in these sites due to hydrological connectivity. We raised this matter with the Applicant in an email (30 June 2023) and in a subsequent meeting on 13 July 2023 we were advised that an incorrect version of the HRA had been submitted. The Applicant provided Natural England with a copy of the 'correct' version of the HRA Screening Report on 14 July 2023. This version of the HRA Screening Report includes some numbering, formatting and omitted text/reference errors and text that appears to relate to other projects / plans.

4.2.7. Notwithstanding the above, we have used the HRA Screening Report issued to Natural England on 14 July, for our review of the Applicant's assessment of effects on Wicken Fen Ramsar / Fenland SAC. This version of the HRA Screening Report concludes no likely significant effect for these sites on the basis that no hydrological impact is expected. Table 3-2 states:

*The Cambridge Water Cycle Strategy 2011 (add reference)[sic] states that analysis of hydrology indicates that Wicken Fen is topographically higher than the Cam and drains via Wicken Lode then Burwell Lode towards it. As the Cam does not feed it, there are no associated risks, which could arise from additional sewage effluent discharge at Cambridge irrespective of any changes in effluent flow or quality from that site and no ecological impact is expected to occur. Therefore, Wicken Fen Ramsar site and Fenland SAC will not be considered further within this Stage 1 screening assessment and will not progress to Stage 2: AA.*

4.2.8. Natural England is satisfied with the HRA Screening 'no likely significant effect' conclusion for Wicken Fen Ramsar / Fenland SAC subject to agreement from the Environment Agency on this matter.

#### Eversden and Wimpole Woods SAC

4.2.9. Natural England is satisfied with the evidence presented in Appendix 8.15 Habitats Regulations Assessment Screening Report (HRA Screening Report) to rule out any likely significant effect through the project on the barbastelle bat qualifying feature of Eversden and

Wimpole Woods SAC. The evidence includes the >14km distance between the SAC and the project site, lack of barbastelle bat roosts and lack of significant suitable barbastelle bat habitat within the project area. The 'no likely significant effect' conclusion is reinforced by the project proposal to retain habitats where bats have been recorded, thus avoiding impact on bat commuting / foraging habitat.

#### Other comments

- 4.2.10. Natural England notes that the Ouse Washes SPA, SAC, and Ramsar site are not referenced in the submission HRA Screening Report despite their consideration through the HRA Appropriate Assessment. However, we are satisfied that these sites are included in the 'correct' version of the HRA Scening Report issued to Natural England on 14 July 2023.
- 4.2.11. Natural England's advice above is subject to the Environment Agency's agreement with the HRA conclusions in relation to water-dependent internationally designated sites, particularly the Ouse Washes SPA, SAC and Ramsar site and Wicken Fen Ramsar site / Fenland SAC.

### **4.3. Nationally designated sites**

- 4.3.1. Natural England's position regarding nationally designated sites is detailed below.
- 4.3.2. Nineteen nationally designated statutory sites and 13 Local Nature Reserves (LNRs) are present within the 10km study area. Natural England is satisfied that four nationally designated statutory sites, notified only for their geological interest, are not considered further due to a lack of pathways for impact. The 15 nationally designated statutory sites, notified for their biodiversity features, are:
- Stow-cum-Quy Site of Special Scientific Interest (SSSI);
  - Wilbraham Fen SSSI;
  - Great Wilbraham Common SSSI;
  - Cherry Hinton Pit SSSI;
  - Dernford Fen SSSI;
  - Fulbourn Fen SSSI;
  - Roman Road SSSI;
  - Gog Magog Golf Course SSSI;
  - Fleam Dyke SSSI;
  - Madingley Wood SSSI;
  - Wicken Fen SSSI;
  - Devil's Dyke SSSI;

- Newmarket Heath SSSI;
- Cam Washes SSSI;
- Upware North Pit SSSI.

4.3.3. Natural England is satisfied that the proposed project will not have any adverse effect on the notified features of any of these sites, with the exception of Stow-cum-Quy Fen SSSI, Wilbraham Fen SSSI and the Cam Washes SSSI for the reasons stated in Section 4 and Table 4.1 of the ES Chapter 8: Biodiversity.

4.3.4. The effects of the project on Stow-cum-Quy Fen SSSI are considered further within section 4 of the ES Biodiversity Chapter and our comments on this are provided below.

### **Stow-cum-Quy Fen SSSI – Construction phase**

#### Hydrology

4.3.5. Temporary water quality / pollution impacts to the SSSI, through the project construction phase are assessed in Chapter 8: Biodiversity. The ES recognises that whilst there is no active hydrological connectivity between Black Ditch and Quy Water there is an active hydrological connection between Black Ditch and Stow-cum-Quy Fen SSSI. The assessment is based on the proposed implementation of best practice construction measures, detailed in Table 2-6 of Chapter 20: Water Resources and secured through CoCP Part A and Part B, to minimise the risk of runoff reaching ditches and watercourses, which may increase silt load. With implementation of these measures the risk of surface water runoff during construction having any significant effect on the designated site is considered to be low. Impact on the SSSI is predicted to be of local spatial extent, short term duration, and intermittent nature. With the CoCP control measures that would be in place, secured via DCO Requirement 8, the magnitude is considered to be negligible. With no secondary mitigation measures proposed in relation to temporary impacts on Stow-cum-Quy Fen SSSI the residual effect is assessed as slight adverse but not significant. Natural England is satisfied with this conclusion on the basis that delivery of control measures within the CoCP are secured through DCO Requirement 8.

4.3.6. ES Chapter 20: Water Resources considers the extent of impact on groundwater levels in the Grey Chalk with respect to dewatering during construction of the terminal pumping station shaft (TPS). With reference to the analysis undertaken (presented in Appendix 20.4 Dewatering/Pump Test Technical Note) it is assessed that there should be a negligible impact on groundwater levels at the sites as a result of the dewatering. Section 4.1.110 refers to Section 3.1 (Current baseline), acknowledging that Black Ditch discharges along and within the boundary of Stow-cum-Quy Fen SSSI and that the assessment for Black Ditch indicates that, in the worst case of very low flows, the

temporary impact resulting from dewatering during construction of the TPS shaft on flows and water levels in Black Ditch would be minor adverse. With higher flows in the ditch at the time of dewatering, the overall flow regime should not be affected. Natural England is satisfied with this conclusion on the basis that water level modelling will be carried out as referenced in CoCP Part B, secured through DCO Requirement 8.

4.3.7. We advise that monitoring of the water quality in the Black Ditch, which is hydrologically connected to Stow-cum-Quy Fen SSSI, should be undertaken in addition to the water level monitoring that is mentioned in the CoCP Part B.

4.3.8. Submission of a more detailed monitoring and mitigation strategy and detailed CEMP is required, prior to DCO approval. This should include the requirement to act upon any findings of the water quality and water level monitoring within the River Cam, Stow-cum-Quy SSSI and Black Ditch, throughout the construction and operation phases of the project.

#### Air quality

4.3.9. Temporary air quality impacts on Stow-cum-Quy Fen SSSI, primarily through dust generation from construction traffic, is assessed as negligible. Combined with a high sensitivity receptor and negligible impact, it would result in a slight adverse effect, which is not significant. This assessment is based on the proposed implementation of best practice measures during construction to limit airborne pollutants on sensitive habitats, detailed in the CoCP Part A and Part B. With no secondary mitigation measures proposed in relation to temporary air quality impacts on Stow-cum-Quy Fen SSSI the residual effect is slight adverse but not significant. Natural England is satisfied with this conclusion on the basis that delivery of air quality control measures within the CoCP are secured through DCO Requirement 8.

### **Stow-cum-Quy Fen SSSI – Operational phase**

#### Hydrology

4.3.10. Natural England would like to see operational phase groundwater quality monitoring for the wider scheme so that any unacceptable pollution impacts e.g. leakages from infrastructure, on designated sites such as Stow-cum-Quy Fen SSSI, can be identified and appropriate mitigation measures implemented.

#### Air quality

4.3.11. The dispersion model results (Appendix 7.2) indicate that nitrogen deposition, sulphur oxides (SO<sub>x</sub>) deposition and acid deposition upon Stow-cum-Quy SSSI, associated with the Combined Heat and Power (CHP) component within the proposed plant, are predicted to be

negligible. Air quality impacts through traffic emissions are also considered to be negligible. Based on this, and the high sensitivity of the SSSI, Natural England is satisfied with the conclusion that residual air quality effects are slight adverse but not significant.

#### Recreational pressure

- 4.3.12. In response to the S42 consultation Natural England advised that public access enhancements incorporated within the proposed development, including a new 'formalised' bridleway connection within the Public Rights of Way (PRoW), could lead to an increase in PRoW user numbers - originating from existing residential areas, the WWTP visitor facility and nearby new housing development including Cambridge East and North East Cambridge. This could give rise to an increase in visitor footfall and further recreational pressures within Stow-cum-Quy Fen SSSI. Whilst Natural England supports and encourages access improvement measures to enhance people's access to and enjoyment of the natural environment, our s42 response agreed with the statement in the Applicant's PEIR that proposals to improve public access should avoid impacts to the SSSI.
- 4.3.13. Through pre-application discussions the Applicant has indicated a desire to address this matter, to avoid impacts to the SSSI, through a collaborative approach with relevant developers and natural environment stakeholders, noting that new residential developments will generate the greater proportion of new users of the enhanced PRoW, with a significantly smaller number likely to stem from the new WWTP visitor facility. A collective effort with key partners would explore opportunities for strategic landscape scale enhancements to improve the resilience of the local natural environment including more sensitive sites such as Stow-cum-Quy Fen SSSI. It would ensure that all relevant development would make a proportionate contribution towards delivering the strategic environmental enhancements set out in the Cambridge Nature Network (incorporating part of the National Trust's Wicken Fen Vision Area) and the Strategic Green Infrastructure Initiatives of the emerging Greater Cambridge Local Plan, providing benefits for wildlife, people and climate change and buffering and mitigating visitor impacts at sites including the SSSI. Natural England indicated its support for the project to adopt such an approach, as a potential mitigation and environmental enhancement strategy, subject to this being appropriately detailed in the LERMP and secured through a DCO requirement. In particular, Natural England would expect a collaborative approach to identify, drive forward and implement projects to deliver strategic environmental enhancements to benefit people and nature and to mitigate the effects of the relevant developments. Alternatively, Natural England advised that robust visitor survey evidence would be required to underpin a rigorous assessment of recreational pressure impacts through the ES, to demonstrate that the proposed access enhancements will not have any adverse recreational pressure effect on the SSSI through an increase in PRoW user numbers.
- 4.3.14. ES Chapter 8: Biodiversity references user counts undertaken to inform the baseline assessment of the recreational pressure impacts of the project and the proposed access enhancements. This survey data (presented and discussed in Appendix 19.3: Transport Assessment) is extremely limited, with a handful of surveys undertaken across just four days in July/August 2022. In Natural England's opinion this level of



survey effort, to inform potential effects on a nationally designated site, is inadequate; it does not provide sufficiently robust and representative data to inform the evidence baseline for an assessment of potential impacts, through increased PRoW use, on Stow-cum-Quy Fen SSSI.

4.3.15. The ES assesses the recreational impacts of the project on Stow-cum-Quy Fen SSSI as slight adverse (not significant) due to a combination of a high sensitivity receptor and negligible impact. The negligible impact assessment is made on the basis that:

- the landscape masterplan proposes to 'formalise access' to land surrounding the project;
- it does not provide any additional access points or parking;
- it includes some improvements to the bridleway to the east of the proposed WWTP but does not provide a direct connection to the Stow-cum-Quy SSSI, and it will not offer access for vehicles;
- user counts within the landscape masterplan area and at selected locations in proximity to the Proposed Development would be repeated annually for operational years 1-5 to detect changes in recreational user behaviour. The outcomes will be used to adaptively manage the landscape masterplan area.

4.3.16. Natural England acknowledges the above mitigating factors; however, we view the 'formalisation' of the bridleway link as a new additional section of public access that will provide a missing link in the existing PRoW network, creating a circular route in the 'Honey Hill' area between the WWTP and the SSSI, from which other public footpaths extend into the wider countryside. At the northern end of this circular route the public footpaths provide a short walk (~200m) into the SSSI. The new bridleway will facilitate better access on foot, cycle and horseback around the circular route. In Natural England's view it seems highly unlikely that this will not draw more users to the PRoW, including a small proportion directly from the new WWTP visitor facility, but also from the surrounding existing residential areas and the emerging major new housing developments such as Waterbeach New Town in the north and the Cambridge East and North East Cambridge developments to the south and south west respectively. The new developments will house tens of thousands of new residents who will be able to readily connect into the Honey Hill PRoW network via the Fens Rivers Way and other public paths and via Low Fens Drove respectively. We believe the combined effects of the project's visitor facility and PRoW enhancements, with nearby major housing development, will greatly increase PRoW user numbers and visitors to Stow-cum-Quy Fen SSSI and the wider Cambridge Nature Network including the National Trust's Wicken Fen Vision. We therefore disagree with the slight adverse (not significant) conclusion of ES Chapter 21: Cumulative Effects with regard to Stow-cum-Quy Fen SSSI.

4.3.17. In the absence of a commitment to a strategic partnership approach, secured through the LERMP, a bespoke Visitor Survey, Recreational Pressure Assessment and Management Strategy, undertaken by recreational management specialists, should have been prepared to inform the ES and the LERMP, as discussed at the pre-application stages.

4.3.18. Notwithstanding the above, we note that ES Chapter 8: Biodiversity states:

*The Applicant intends to monitor use of the landscaped area and use the acquired data to adaptively manage the area. It intends to continue to work in partnership with parties that have a local interest in biodiversity including user pressure on ecological features of interest.*

4.3.19. This is detailed further in ES Chapter 11: Community:

*These data [the CWWTP user monitoring surveys] should be used to inform long term discussions with Quy Fen Trust/NT/ WT & LPA Ecology Officers in relation to adaptive management that may be required in relation to the impacts of recreational user pressure to existing local resources used for recreation. Changes to management activities would be delivered through an amended LERMP.*

4.3.20. Whilst ES Chapter 8: Biodiversity does not provide a robust assessment of recreational pressure impacts on the SSSI, a post-construction monitoring programme and adaptive landscape management approach, progressed through a wider partnership arrangement, could provide (a degree of) acceptable mitigation. However, baseline and post-construction survey evidence, assessment and a management strategy should be co-ordinated by an expert in visitor management. Appropriate level / quality of data will need to be collated to help identify any changes in user numbers associated with the PRow enhancements, any adverse effects this might be having on the SSSI, and suitable mitigation and management measures to address these. Due to the complexity of the in combination effects between the project and other major development, we believe this should be developed through a wider partnership approach with other relevant developers and natural environment stakeholders.

4.3.21. In order to secure delivery of an appropriate environmental monitoring and management strategy for the project, alongside a proportionate contribution towards development of the Cambridge Nature Network, of which the Applicant is a key partner, Natural England would wish to see a detailed commitment incorporated within the LERMP, and thus secured through DCO requirement 11, along the following lines:

*The Applicant will prepare a detailed access monitoring and management strategy co-ordinated by a recreational management specialist, for agreement with relevant parties including NE, NT, WT and LPA ecology officers, to monitor changes in use of the PRow, including visitors to the SSSI, and to identify any management or enhancement measures that may be required to minimise recreational pressure effects on more sensitive areas, particularly Stow-cum-Quy Fen SSSI. The Applicant will continue to work in partnership with parties to identify opportunities for landscape scale enhancements and improved environmental resilience and delivery of projects that will contribute to the aspirations and objectives of the Cambridge Nature Network. As a key partner of the Cambridge*

*Nature Network, the Applicant is committed to playing a key role in contributing to the identification and implementation of projects to develop the Network in order to benefit nature and people and to mitigate the recreational pressure effects of development.*

4.3.22. The LERMP actively promotes and enhances access to the SSSI indicating that:

*'the project's paths will be connected to the wider network of public rights of way, and a new bridleway will improve access to Quy Fen and Anglesey Abbey'.*

4.3.23. Natural England supports the proposed access and connectivity enhancements; however, we believe these pose a significant risk to the SSSI unless access improvements and recreational pressure are addressed through a collaborative and strategic approach as discussed above, and detailed through the ES and LERMP.

4.3.24. Whilst the need for monitoring the frequency of visits made to the SSSI is not directly related to the development of the subject of this NSIP, the formalisation of the bridleway link creates a connection/pathway between the SSSI and a large catchment of residents (both existing and planned for in substantial housing developments) which does not currently exist. Accordingly, requiring the developer to address the consequences of such increased visitor pressure is necessary and reasonable.

#### **Cam Washes SSSI – operational phase**

4.3.25. ES Chapter 8: Biodiversity does not appear to identify impacts to designated sites through increase in flood levels. We would welcome confirmation on this following our discussions with the Environment Agency. Additionally, the Flood Risk Assessment (FRA) included in Appendix 20.1 of the Environmental Statement has not assessed the increases in downstream flood levels identified through hydraulic modelling in the Fluvial Model Report (ES Appendix 20.6). In view of this Natural England seeks clarification on this matter, particularly with regard to potential impacts on downstream ecological receptors including the Cam Washes SSSI.

#### **Wilbraham Fen SSSI – operational phase**

4.3.26. We note that ES Chapter 20: Water Resources indicates the potential for impacts on water levels at Wilbraham Fen SSSI during the de-watering phase. Natural England advises that this groundwater-dependent site is included in the groundwater monitoring and mitigation strategy.

#### **General comment – operational phase**

4.3.27. As a replacement facility we assume that the new WWTP will place no additional demand on water resources. We would welcome confirmation on this given the project's location in an area of extreme water stress, with evidence suggesting that groundwater abstraction is already having an adverse impact on the water environment including water-dependent designated sites.

#### **De-commissioning phase**

4.3.28. ES Chapter 8: Biodiversity does not identify specific risks to ecology including nationally designated sites through the project decommissioning phase. Natural England is satisfied that management of decommissioning activities, including application of measures within the outline Decommissioning Plan (Appendix 2.5 App Doc Ref 5.4.2.5) and the CoCP Part A, Section 4.4 (Construction Environment Management Plan), will collectively secure and deliver appropriate mitigation of the decommissioning activities.

#### **4.4. Protected species**

4.4.1. Natural England's position regarding European protected species is detailed below.

4.4.2. Draft licence applications and mitigation strategies for bats, water vole and badger have been submitted to Natural England.

4.4.3. We have provided LONIs for water vole and bats, but require amendments to the Method Statements prior to formal submission of the licence applications.

#### Water Voles

4.4.4. The following issues need to be addressed within the method statement and associated documents before the formal submission of the water vole licence application:

- i. Named ecologist information not supplied. A named ecologist is a professional ecological consultant who has the relevant skills, knowledge and experience of working with water voles.
- ii. It is currently unclear if the named ecologist has visited the site. To be addressed in formal application.
- iii. In section 5.2.3 details of what will occur if water voles are found during destructive search should be included.
- iv. As a result in changes in legislation brought about by Environment Act 2021, water vole licensing, the application now needs to be submitted under the new purpose of 'reasons of overriding public interest' using new forms which have been published on Gov.uk. <https://www.gov.uk/government/publications/water-voles-apply-for-a-mitigation-licence-a11>
- v. In addition, a Reasoned Statement is now mandatory for water vole applications that are submitted for the purpose of Reasons of Overriding Public Interest.
- vi. A figure titled: 'Locations and habitats where all capture and exclusion activities will be undertaken'. This should be a dated plan sent as separate document (i.e. not imbedded in the method statement)  
This plan must:
  - show capture sites and clearance of water vole habitat
  - indicate which areas will be subject to the different methodologies

- include direction of displacement with arrows where applicable
- show the location of any water vole fencing or bunds
- vii. A figure titled: 'Specifications for mitigation or compensation. This should be a dated plan sent as separate document (i.e. not imbedded in the method statement)  
This plan must:
  - show all habitat creation, restoration or enhancement for water voles
  - clearly identify the location of release sites for captured water voles, where applicable
  - the design and dimensions for any mammal ledges under culverts, bridges or other linking structures
  - for development schemes, include the final development layout.If the scheme is large or complicated it may be necessary to submit more than one figure

### Bats

4.4.5. The bat method statement requires the following queries to be addressed before the formal submission of the licence application:

- i. There were multiple emergence/re-entry surveys carried out and it was noted that some trees did have medium hibernation potential. Justification should be provided to explain why no hibernation surveys were carried out as part of the survey effort in the next draft of the method statement.
- ii. In section C5 it was mentioned that Tree 22 was felled before surveys could be carried out. In the next draft of the method statement further details should be provided, such as how this occurred and if there were any impacts on bats in the area.
- iii. In the next draft of the method statement further information should be provided regarding the duration of disturbance which will affect tree P041-T004 and the level of disturbance, as it could not be fully surveyed and may contain roosts. Also, if disturbance will occur and be longer in duration, appropriate mitigation should be included.
- iv. Further details should be included on lighting arrangements, such as height, direction, angles and intensity, especially regarding the car park lighting, and ensure these meet the guidelines. Also include if this lighting would have any impact on roosts in the area.
- v. Section D4 should be amended as only day roosts are addressed and information provided in section C suggests the potential for hibernation roosts.
- vi. Ensure Bat Conservation Trust guidelines are met regarding mitigation and compensation with the number of bat boxes provided for roosts destroyed or disturbed, including hibernation roosts.

### Badgers

4.4.6. Natural England is in the process of reviewing the draft badger licence application and will issue a LONI once outstanding matters, if any, have been addressed.

#### Other protected species matters

- 4.4.7. The scope of the LERMP is limited to the immediate area around the Proposed WWTP. Natural England's view is that ecological mitigation, enhancement (including BNG) and management for the entire scheme, including the tunnel, pipeline and final effluent outfall elements, should be set out in the LERMP.
- 4.4.8. It is not clear that ecological mitigation, including for water voles, will be managed for the operational duration of the project. Confirmation should be provided that species mitigation, including for water voles, will be managed for the operational duration of the project. This should be secured through the LERMP.
- 4.4.9. Despite these 'amber' issues, Natural England has no significant concerns in relation to protected species subject to implementation of mitigation measures being secured through the relevant DCO requirements.
- 4.4.10. We defer to the Local Planning Authority for more detailed protected species comments and advice on matters including the detailed Lighting Strategy.

#### **4.5. Biodiversity Net Gain**

- 4.5.1. Natural England's position regarding provision of Biodiversity Net Gain (BNG) is detailed below.
- 4.5.2. As BNG is pre-mandatory, we are not able to require specific measures and would defer to the Local Planning Authority as the responsible body for Biodiversity Net Gain.
- 4.5.3. We note the Applicant's submission of a BNG Assessment Report and advise that a copy of the BNG Metric calculation should also be provided.
- 4.5.4. We welcome that the Applicant has used Defra Biodiversity Metric 3.0 and that the proposal will deliver 52.53% net gain in habitat units, 89.12% net gain in hedgerow units and is committed to deliver at least 20% net gain in river units potentially through off-site opportunities.
- 4.5.5. Natural England would like to have early sight of the proposals that indicate how 20% BNG river units will be achieved.

## **4.6. Soils and best and most versatile agricultural land**

- 4.6.1. Having reviewed Chapter 6 and Appendices 6.1 and 6.3, our detailed comments are as follows.
- 4.6.2. As stated in our S42 / PEIR response, the ALC survey was only undertaken on the maximum area of land permanently required for the construction, operation and maintenance of the proposed WWTP and landscape masterplan, however the survey did not extend to the Transfer Zone and the Waterbeach zone.
- 4.6.3. Natural England advises that for all areas of agricultural land subject to temporary and permanent loss, in which Post-1988 ALC survey information is not available, an ALC survey should be undertaken. The ALC surveys will identify the ALC grade, which can then be used to contribute to the masterplanning, so as to demonstrate the potential impacts on BMV agricultural land were minimised as far as practicable, as per the NPS EN-1, NPPF; and local planning policies. Furthermore, the ALC surveys can provide the necessary soil information to inform the detailed, site-specific Soil Management Plan, including identifying the appropriate mitigation measures needed, which can then be reported in the ES.
- 4.6.4. ALC survey is of particular importance given the characteristic peat soils within the Waterbeach Pipeline route. A soil survey is necessary to accurately identify the extent and boundary of peat or peaty soils for the baseline. This would enable the development design to be suitably optimised to minimise the potential impacts on these important peat soils, which may be unstable and unsuitable for development. There is no consideration regarding the soil handling and mitigation measures potentially required for peaty and peat soils.
- 4.6.5. We would expect to see a detailed ALC survey for the full Study Area to be presented in the ES along with a simple area breakdown, in a single table, for each of the individual components (including the land associated with construction of the Waterbeach pipeline, final effluent transfer and the areas required for launch and recovering shafts for transfer pipeline installation). For example, total agricultural area impacted temporarily and permanently (split by scheme component and by ALC grade), and total BMV agricultural area permanently and temporarily required for the development.
- 4.6.6. The LERMP does not set out the proposed soil profiles for the landscaping and earth bunds, nor does it set out the required soil resource to create the proposed landscaping. The LERMP should be amended to address this and a soil balance should be provided to demonstrate that the full soil resource can be re-used on site. This should be split by soil type and proposed end-use.
- 4.6.7. Natural England's further detailed comments are provided in Appendix 1.

#### **4.7. Ancient woodland and ancient/veteran trees**

- 4.7.1. Natural England's position regarding ancient woodland and ancient/veteran trees is detailed below.
- 4.7.2. ES Chapter 8: Biodiversity indicates that there is no ancient woodland with 200m of the scheme order limits. Two veteran pedunculate oak trees were identified within the land temporarily required for the construction of the northern section of the Waterbeach pipeline to Low Fen Drove Way east of Horningsea Road; there is no indication in the ES that these trees will be impacted by the project.
- 4.7.3. Natural England therefore has no further comments to make in relation to this matter.

#### **4.8. Other valuable and sensitive habitats and species, landscapes and access routes**

- 4.8.1. Natural England's position regarding County Wildlife Sites, the wider landscape, and access routes is detailed below.

##### County Wildlife Sites and Priority habitats & species

- 4.8.2. ES Chapter 8: Biodiversity assesses construction impacts on County Wildlife Sites (CWS) as neutral or slight adverse (not significant) with the implementation of design measures and secondary mitigation measures. Operational impacts are assessed as slight beneficial or slight adverse (not significant) with the implementation of design measures and secondary mitigation measures.
- 4.8.3. Priority habitats and species are of particular importance for nature conservation and are included in the England Biodiversity List published under section 41 of the Natural Environment and Rural Communities Act 2006. There may be impacts on priority habitats and species, including deciduous woodland, species-rich hedgerow, floodplain grazing marsh and river and pond aquatic habitats and farmland birds (corn bunting, skylark, yellowhammer, yellow wagtail), bats, otter, water vole and certain terrestrial invertebrates.
- 4.8.4. We note that the geographical focus of the LERMP is on the immediate area around the Proposed WWTP. The landscape, recreational and biodiversity contexts of the tunnel, pipeline, the final effluent outfall elements of the project, and their potential environmental effects and mitigation, are outlined in the ES and not addressed through the LERMP. Natural England's view is that ecological mitigation, enhancement (including BNG) and management for the entire scheme should be set out in the LERMP.



- 4.8.5. We understand that the Management and Monitoring Plan for the outfall will be presented at the Requirement stage. Natural England's preference would be to have early sight of this document and proposals for any embedded natural finish, water vole mitigation and habitat enhancements, measures to control invasive species, and to indicate how 20% BNG river units will be achieved.
- 4.8.6. We ask that representations from the local Wildlife Trust and Local Planning Authority ecologists are taken into account with regard to these aspects, and that representations from the Environment Agency are taken into account for any water-dependant priority habitats and species that might be affected.

#### Wider landscape and access

- 4.8.7. We support the LERMP landscape design proposals to create a range of new ecological habitats, including a mosaic of grassland types, woodland, hedgerows, and tree planting which aim to deliver a minimum of 20% biodiversity net gain (BNG) on the site of the proposed WWTP. Whilst this will make a small contribution towards development of the Cambridge Nature Network we believe a project of this scale, located within the Cambridge Greenbelt, should deliver more strategic enhancements for the local nature recovery network. This would help to strengthen the resilience of the natural environment and mitigate against the recreational pressures associated with the project in combination with new residential development.
- 4.8.8. The LERMP also seeks to improve recreational opportunities and connectivity. It actively promotes and enhances access to the SSSI indicating that:
- 'the project's paths will be connected to the wider network of public rights of way, and a new bridleway will improve access to Quy Fen and Anglesey Abbey'.*
- 4.8.9. Natural England generally supports the proposed access enhancements and the benefits this will deliver by connecting people with nature and improved heath and wellbeing. However, these proposals potentially pose a significant risk to Stow-cum-Quy Fen SSSI unless access improvements and recreational pressure are addressed through a collaborative and strategic approach as discussed above. We strongly advocate a robust and strategic approach to assessing, monitoring, mitigating and managing the potentially negative effects of the proposed access enhancements through the ES and the LERMP. This should be considered in the context of the wider Cambridge Nature Network and highly sensitive sites such as Stow-cum-Quy Fen SSSI. Please refer to our detailed comments on this matter under Nationally Designated Sites.

Natural England's Relevant Representations, Part II, Table 1

Table 1: Natural England's detailed advice						
NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	NE commentary and advice on: <ul style="list-style-type: none"> <li>Further details about the project in order to enable assessment</li> <li>Further evidence or assessment work required</li> </ul>	NE comment on mechanism for securing resolution – e.g. mitigation/compensation	<ul style="list-style-type: none"> <li>Matters that must be secured in the DCO (with DCO/DML or omission ref as applicable).</li> </ul>	Risk Red/Amber/Green
1.	<b>International designated sites</b>		Issues raised previously by Natural England have been addressed through the submission HRA Report and the updated HRA Screening Report provided by the Applicant on 14/7/2023. No actions are required, subject to confirmation that the Environment Agency is in agreement with the HRA conclusions.	Formal submission of the updated HRA Screening Report.		Green
2.	<b>National designated sites (biodiversity &amp; geodiversity)</b>	O	a) Details of a post-construction monitoring programme and adaptive landscape management approach, progressed through a wider partnership arrangement, to mitigate recreational pressure impacts on Stow-cum-Quy Fen SSSI, will need to be provided and secured through the LERMP.	LERMP strengthened wording.  Natural England would be willing to commence discussion with the Applicant, around potential solutions to this matter, as soon as possible.		Amber

C/O	b) Monitoring of the water quality of the Black Ditch, which is hydrologically connected to Stow-cum-Quy Fen SSSI, should be undertaken in addition to the water level monitoring referenced in the CoCP Part B. This should be undertaken throughout the operation of the plant as well as during construction.	Secured through CoCP.  We expect that this matter can be addressed through a hydrology focused meeting with the Applicant scheduled for 22 August 2023.	See Table 2 below, under DCO Requirement 10	Amber
C/O	c) Submission of a more detailed monitoring and mitigation strategy and detailed CEMP, prior to DCO approval. This should include the requirement to act upon any findings of the water quality and water level monitoring within the River Cam, Stow-cum-Quy SSSI and Black Ditch, throughout the construction and operation phases of the project.	Detailed water monitoring and mitigation strategy, secured through the CEMP or other plan.  We expect that this matter can be addressed through a hydrology focused meeting with the Applicant scheduled for 22 August 2023.	See Table 2 below, under DCO Requirement 16	Amber
O	d) We wish to see operational phase groundwater quality monitoring for the wider scheme so that any impacts to designated sites, such as Stow-cum-Quy Fen SSSI, can be identified and appropriate mitigation measures implemented.	Detailed water monitoring and mitigation strategy, including in operational phase.  We expect that this matter can be addressed through a hydrology focused meeting with the Applicant scheduled for 22 August 2023.		Amber

		C/O	e) Wilbraham Fen SSSI should be included in the the groundwater monitoring and mitigation strategy.	Detailed water monitoring and mitigation strategy, including in operational phase.  We expect that this matter can be addressed through a hydrology focused meeting with the Applicant scheduled for 22 August 2023.		Amber
		C/O	f) Clarification required on impacts to downstream ecological receptors, including the Cam Washes SSSI, associated with flood level increases.	Clarification required.  We expect that this matter can be addressed through a hydrology focused meeting with the Applicant scheduled for 22 August 2023.		Amber
		C/O	g) Confirmation should be provided that the replacement WWTP will not place additional demand on highly stressed water resources.	Confirmation required.  We expect that this matter can be addressed through a hydrology focused meeting with the Applicant scheduled for 22 August 2023.		Amber
3.	<b>Protected Species</b>	C/O	a) Natural England has provided LONIs for water vole and bats but require amendments to the method statements before the licence applications are formally submitted.	Water vole licence application amendments prior to formal submission.  Amendment of the bats licence application prior to formal submission.		Amber

				Potential Lighting Strategy amendments, subject to LPA advice.		
		C/O	b) Natural England is in the process of reviewing the draft badger licence application and will issue a LONI once outstanding matters, if any, have been addressed.	TBC, subject to Natural England wildlife licencing team's future comments.		Amber
		C/O	c) Species mitigation and management for the entire scheme, including the tunnel, pipeline and final effluent outfall elements, should be set out in the LERMP.	Expansion of the LERMP.		Amber
		C/O	d) Confirmation should be provided that species mitigation, including for water voles, will be managed for the operational duration of the project. This should be secured through the LERMP.	Addition to the LERMP.		Amber
4.	<b>Biodiversity Net Gain (BNG)</b>		a) We advise that a copy of the BNG Metric calculation should be provided, in addition to the BNG Assessment Report. Natural England defer to the Local Planning Authority, as the responsible body for Biodiversity Net Gain, for any further comment.	Submission of BNG Metric calculation.		Green
			b) Natural England would like to have early sight of the proposals that	Submission of the relevant documents to Natural England.		Green

			indicate how 20% BNG river units will be achieved.			
5.	<b>Soils and Best and Most Versatile Agricultural Land</b>	C	a) A detailed ALC survey for the full Study Area should be presented in the ES and the Applicant should provide simple area breakdowns in a single table for each of the individual components. This is particularly important given the characteristic peat soils within the Waterbeach Pipeline route.	Expansion of detailed ALC survey, reported in the ES.		Amber
		C	b) The LERMP should show proposed soil profiles, and a soil balance should be provided to demonstrate that the full soil resource can be re-used on site. This should be split by soil type and proposed end-use.	Additions to the LERMP.		Amber
		C	c) Additional points raised in Appendix 1 should be addressed. Most of these comments were provided in our S42 response, but have not been dealt with in the submitted documents.	Various – see Appendix 1.		Amber
6.	<b>Ancient Woodland and Ancient/Veteran Trees</b>		No action required.			Green

7.	<b>Other valuable and sensitive habitats and species, landscapes and access routes</b>	O	a) As indicated in section 2 of this table, we wish to see a robust and strategic approach to assessing, monitoring, mitigating and managing the potentially negative effects of the proposed access enhancements through the ES and the LERMP. This should be considered in the context of the wider Cambridge Nature Network and highly sensitive sites such as Stow-cum-Quy Fen SSSI.	LERMP expansion.  Natural England would be willing to commence discussion with the Applicant, around potential solutions to this matter, as soon as possible.		Amber
		C/O	b) In addition to comments in section 3 of this table, our advice is that ecological mitigation, enhancement (including BNG) and management for the entire scheme should be set out in the LERMP;	LERMP expansion.		Amber
		C/O	c) Natural England's preference would be to have early sight of the Management and Monitoring Plan for the outfall, the updated LERMP, and proposals for any embedded natural finish, water vole mitigation and habitat enhancements, measures to control invasive species and to indicate how 20% BNG river units will be achieved;	Submission of the stated documents to Natural England.		Amber
		O	d) The project should deliver more strategic enhancements for the local nature recovery network,	LERMP expansion.		Amber

			proportionate to its scale and location within the Cambridge green belt and the Cambridge Nature Network;	Natural England would be willing to commence discussion with the Applicant, around potential solutions to this matter, as soon as possible.		
		C/O	e) Stronger commitment for the applicant to engage in a partnership approach with relevant parties, including the developers of housing which this NSIP would enable, to address 2a, 7a and 7d of this table and any other issues that subsequently arise.	LERMP expansion with stronger, clearer commitments to partnership working.  Natural England would be willing to commence discussion with the Applicant, around potential solutions to this matter, as soon as possible.		Amber
		C/O	f) We ask that representations from the local Wildlife Trust and Environment Agency are taken into account in relation to the aspects mentioned above in section 4.8.			Green



## Natural England's Relevant Representations

### 5. PART III: Natural England's detailed comments on the Development Consent Order (DCO) and associated documents

Natural England's Relevant Representations, Part III, Table 2

Page	DCO/DML or omission ref	Natural England's comments	Risk (Red/Amber/Green)
50	DCO Requirement 7 Detailed Design	Natural England welcome this essential requirement.	Green
50	DCO Requirement 8 Code of Construction Practice	Natural England welcome this essential requirement.	Green
50	DCO Requirement 9 Construction Environmental Management Plans	Natural England welcome this essential requirement.	Green
51	DCO Requirement 10 Outfall	Natural England welcome this essential requirement. We advise that requirement 10(1) should also include the requirement for approval by the Environment Agency and Natural England, in addition to the relevant planning authority, or for the relevant planning authority to consult with these bodies prior to approval.	Amber

52	DCO Requirement 11 Landscape, Ecology and Recreation Management Plan	Natural England welcome this essential requirement. We advise that requirement 11(1) should also include the requirement for approval by Natural England, in addition to the relevant planning authority, or for the relevant planning authority to consult with Natural England prior to approval.	Amber
53	DCO Requirement 14 Construction lighting	Natural England welcome this essential requirement.	Green
53	DCO Requirement 15 Drainage	Natural England welcome this essential requirement.	Green
53	DCO Requirement 16 Contamination risk	Natural England welcome this essential requirement. We advise that the contamination of water should also be reported, investigated, and remediated if necessary, not just land-based contamination.	Amber

## **Appendices**

- 1. Natural England's detailed comments on Soils and Agricultural Land Quality**

## Appendix 1: Natural England's detailed comments on Soils and Agricultural Land Quality

Based on the information provided with the Cambridge Waste Water Treatment Plant Relocation Project application, it is unclear as to the precise area of the full development site and the subsequent ALC grades. It is not clear as to whether the areas subject to land use change for landscaping will be restored to agricultural use following decommissioning. It is not set out in the Environmental Statement (ES) the area of land subject to temporary land take (e.g the Transfer Zone and the Waterbeach zone).

The land subject to permanent development and landscaping has been subject to a detailed ALC survey. It is acknowledged that the unsurveyed agricultural land is subject to temporary disturbance as a result of pipeline installation. This loss of BMV land can be considered temporary if it is returned to its former agricultural grade following construction.

Natural England would advise that for all areas of agricultural land subject to temporary and permanent loss, in which Post-1988 ALC survey information is not available, an ALC survey should be undertaken. The ALC surveys will identify the ALC grade, which can then be used to contribute to the masterplanning, so as to demonstrate the potential impacts on BMV agricultural land were minimised as far as practicable, as per the NPS EN-1, NPPF; and local planning policies.

Furthermore, the ALC surveys can provide the necessary soil information to inform the detailed, site-specific Soil Management Plan, including identifying the appropriate mitigation measures needed, which can then be reported in the ES.

As such, we would expect to see a detailed ALC survey for the full Study Area to be presented in the ES and that the Applicant provide simple area breakdowns in a single table for each of the individual components (including the land associated with construction of the Waterbeach pipeline, final effluent transfer and the areas required for launch and recovering shafts for transfer pipeline installation). For example, total agricultural area impacted temporarily and permanently (split by scheme component and by ALC grade), and total BMV agricultural area permanently and temporarily required for the development.

The Landscape, Ecological and Recreational Management Plan does not set out the proposed soil profiles for the landscaping and earth bunds, nor does it set out the required soil resource to create the proposed landscaping. A soil balance should be provided to demonstrate that the full soil resource can be re-used on site. This should be split by soil type and proposed end-use.

In order to both retain the long term potential of this land and to safeguard all soil resources as part of the overall sustainability of the whole development, it is important that the soil is able to retain as many of its many important functions and services (ecosystem services) as possible. This can be achieved through careful soil management and appropriate, beneficial soil re-use, with consideration of how adverse impacts on soils and their functions can be avoided or minimised.

Sustainable soil management should aim to minimise risks to the ecosystem services which soils provide, through appropriate site design. Defra has published a [Construction Code of Practice for the Sustainable Use of Soils on Construction Sites](#) which may be helpful when setting planning conditions for development sites. It provides advice on the use and protection of soil in construction projects, including the movement and management of soil resources, which we strongly recommend is followed.

The British Society of Soil Science has published the Guidance Note [Benefitting from Soil Management in Development and Construction](#) which sets out measures for the protection of soils within the planning system and the development of individual sites, which we also recommend is followed.

We advise that if the development proceeds, the developer uses an appropriately experienced soil specialist to advise on, and supervise, soil handling, including identifying when soils are dry enough to be handled and how to make the best use of the different soils on site. All soils should only be handled in a dry and friable condition, and it is expected that soil handling will be confined to the drier summer period to minimise risk of soil damage. Soil handling methods should normally be as specified as in the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (including accompanying Toolbox Talks).

Having reviewed Chapter 6 and Appendices 6.1 and 6.3, we have the following detailed comments:

Section/ Chapter	Comment
<b>Cambridge Waste Water Treatment Plant Relocation Project</b>	
<b>Chapter 6. Agricultural Land and Soils</b>	
<b>1 Introduction</b> <b>Pg 9, bullet 6</b>	The British Standards pertain to the import or export of soil, and do not apply to site won soil resources.
<b>1 Introduction</b> <b>Pg 9, bullet 7</b>	The HS2 Environmental Impact method is not the standard approach for determining environmental impacts on agricultural land (Section 2.2.21). The methodology presented in 'A New Perspective on Land and Soil in Environmental Impact Assessment (IEMA 2022)' (as derived from the ICE (2019) EIA Handbook) should be employed, as has been for determining the potential impact on the soil resource (Section 2.2.5)
<b>2.3 Study Area</b>	<p>As stated in the comments provided for the PEIR, the ALC survey was only undertaken on the maximum area of land permanently required for the construction, operation and maintenance of the proposed WWTP and landscape masterplan, however the survey did not extend to the Transfer Zone and the Waterbeach zone.</p> <p>This is made even more important due to the mapped Midelney and Adventurers' 1 soil associations within the Waterbeach Pipeline route, which are characteristic peat soils.</p> <p>A soil survey is necessary to accurately identify the extent and boundary of these peat or peaty soils for the baseline. This would enable the development design to be suitably optimised to minimise the potential impacts on these peat soils, which may be unstable and unsuitable for development</p>

<b>Section 4.2.4</b>	It is inappropriate to determine the sensitivity of the ALC grade based on the local prevalence of BMV. The ALC system is a national system, therefore the significance should be determined in the national context.
<b>Section 4 / Table 5-1</b>	Natural England broadly agree with the significance of impact assigned to agricultural land and soils, despite inappropriate EIA methodology for agricultural land take.
<b>Section 4</b>	Natural England welcome the re-use of all soil resource on site, however it is not clear as to the soil balance and the quantities of soil proposed for re-use in the bund and landscaping.
	There is no consideration regarding the soil handling and mitigation measures potentially required for peaty and peat soils.
<b>Table 2-13</b>	<p>The potential impact of the development on the Waterbeach pipeline should be scoped in, as incorrect soil handling may result in the degradation of land quality and soil damage.</p> <p>A detailed ALC survey should be undertaken along the pipeline route to inform the EIA, soil handling requirements; and restoration criteria.</p> <p>A detailed ALC survey across the full site was requested in the PEIR.</p>

**Cambridge Waste Water Treatment Plant Relocation Project**

**Appendix 6.1 - Agricultural Land Classification**

	<p>Comments provided in March 2022 on the ALC Survey remain relevant and are repeated below (updated comments as of July 2023 in italics):</p> <p>The ALC survey undertaken was in accordance with the MAFF (1988) Guidelines.</p> <p>Having reviewed the ALC survey approach and methodologies, we have the following concerns:</p> <ul style="list-style-type: none"> <li>i) It is not clear whether suitably qualified and experienced individuals have undertaken the survey work (<i>Natural England note this has now been provided in the ES Chapter (Chapter 6)</i>)</li> <li>ii) The ALC surveys do not cover the whole project area</li> </ul>
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	<ul style="list-style-type: none"> <li>iii) Two soil pits were excavated, however three soil types were identified. A soil pit should be undertaken ideally in each observed soil type to accurately observe soil structure and stone content</li> <li>iv) Details of the structure for each soil type as identified through a soil pit should be included, as currently, there is no pit specific information on the structure shape, size and development.</li> <li>v) Presence/absence of gleying and SPL not presented</li> <li>vi) The stone content for each auger is needed to confirm droughtiness calculations for each point.</li> </ul> <p><i>Table 3: The soil thickness and volumes are presented on a per field basis, with a total soil resource of 902,400 m<sup>3</sup>. This method does not identify where soil types may vary within fields. Furthermore, this volume is not consistent with the total site-won material volume identified in Table 2-12 (Chapter 6), which states 167,000 m<sup>3</sup> of soil would be derived from the land for the proposed WWTP and landscape masterplan.</i></p> <p><i>Clarification is required to set out the soil balance, broken down by each soil type and the proposed re-use.</i></p>
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**Cambridge Waste Water Treatment Plant Relocation Project**

**Appendix 6.3 Outline Soil Management Plan**

	<p>A detailed soil survey should be undertaken across all land subject to disturbance to inform the soil types, soil handling methodologies and restoration criteria.</p>
	<p>Clear distinction is needed throughout the SMP between the land under permanent development, landscaping and land temporarily disturbed as a result of the pipeline installation – including proposed soil profile characteristics; and the land under temporary disturbance which will be restored to pre-development ALC grades.</p> <p>Landscaping and restoration soil profile criteria should be included.</p> <p>There needs to be a clear distinction between the soils being stockpiled in areas undergoing temporary development and will be restored to baseline conditions; and the soils being used for landscaping (and soils being used for the bund).</p>

	<p>Soil nutrient levels and the soil balance should be presented for each soil type intended to be handled, or each soil type within a field, where appropriate.</p> <p>The SMP should include the restoration criteria for all land to be returned to agricultural use, including the ALC grade and soil properties.</p> <p>Consideration is required regarding the soil handling and mitigation measures potentially required for the peat and buried peat soils.</p> <p>For the area of permanent development, the SMP should demonstrate the sustainable, beneficial soil re-use of potential surplus soil resources.</p> <p>Plans of the detailed ALC grades should be produced to inform restoration and allow confirmation that the current baseline across the Site has been restored.</p> <p>A soil balance should be prepared to identify the potential surplus of different soil types across the Site and identify opportunities for the sustainable re-use of this resource on site.</p>
	<p>Natural England welcome that the soil resources would be re-used on site. However, this is not clearly reflected in the Landscape, Ecological and Recreational Management Plan.</p> <p>Volumes of soil resource to be re-used should be provided, split into soil type and restoration area, which is reflected in the Landscape, Ecological and Recreational Management Plan.</p> <p>Clarification should be provided in the SMP on the extent of soil movement, storage and reuse across the site during construction and operation.</p>



	<p>Figure 5.1 makes reference to the MAFF (2000) Best practice. This has been superseded by the Institute of Quarrying Good Practice Guide for Handling Soils in Mineral Workings (2021)</p> <p>For restoration to high agricultural quality, the best practice for soil handling is using the excavator-dump truck combination in conjunction with the sequential 'strip' method (Sheets A – D), Institute for Quarrying 2021 <a href="https://www.quarrying.org">Soils Guidance (quarrying.org)</a>. This is essential on land to be restored to agricultural use following temporary disturbance (i.e. under the pipelines).</p> <p>To avoid risk of soil damage and compaction, bulldozers (as currently proposed in the SMP) should not normally be employed for soil stripping or replacement for soils being restored. Reference should be made to Sheet K where low ground pressure bulldozers are to be used during topsoil replacement.</p> <p>Soil depths should be informed by the pre-construction ALC survey and checked by the Site soil Scientist.</p> <p>The main objective for the reinstatement of agricultural land is to restore the land to its original (pre-development) agricultural quality, as determined by ALC grade and soil characteristics obtained during the pre-construction survey. This is primarily achieved by ensuring that the full soil profile is reinstated in the correct sequence of horizons to the right depths, and in a state where good soil profile drainage and plant root development are achieved; and by ensuring that the reinstatement works cause minimum damage to soil structure.</p>
<p><b>5.3.21</b></p>	<p>Topsoil stockpiles should be no higher than 3 m as per the Defra Construction Code. The Subsoil can be stored no higher than 5 m.</p>
<p><b>A.2</b></p>	<p>The Operations Checklists are welcomed, however a 'stop' mechanism should be employed if the criteria are not hit, i.e. where a box gets a red cross, the works must not proceed until the box can be checked off. Cross referencing to the SMP or guidance would be useful here, particularly with regards to 'has the appropriate equipment been selected'</p> <p>3. Topsoil stripping – has topsoil stripping depth '<i>and location</i>' been defined...</p> <p>7. Sourcing and importing soil – Will this occur on this site?</p>

	<p>8. Topsoil manufacture– Will this occur on this site?</p> <p>9. Soil Aftercare. Need to confirm the ALC Grade has been suitably restored, where applicable, with reference to pre-construction ALC survey results.</p>
<p><b>ES Vol 3 Book of Figures Agricultural Land and Soils</b></p>	
	<p><b>Figures 6.5 and 6.6:</b> Subsoil nutrient map: Mg and P; and Figures 6.8 and 6.9 Topsoil nutrient map: Mg and P. However extractable potassium ranges displayed in extraction method box</p> <p>Are Figures 6.1 and 6.15 replicates?</p>