

# HyNet North West

REGISTER OF ENVIRONMENTAL  
ACTIONS AND COMMITMENTS (REAC)  
**(TRACKED CHANGE)**

HyNet Carbon Dioxide Pipeline

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## QUALITY CONTROL

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| <b>A</b>                  | September 2022 | Submitted with DCO application                                   | KE/BS         | MT/CL           |
| <b>B</b>                  | March 2023     | Updates made following additional biodiversity surveys completed | KE/RC         | MT              |

# HyNet North West

| Status | Unique ES Ref | Topic        | Action/Commitment/mitigation (Including Monitoring Requirements)  | Objective   | Source Reference   | Organisation / Individual Delivering Measure | Achievement Criteria and Reporting Requirements (Reported on the Requirements Register published on the Applicant's Scheme website) | Project Stage (Design, Pre-Construction, Construction, Operation, Monitoring) | Evidence / Record of Completion (Signature and Date) |
|--------|---------------|--------------|---|---|--|--|---|---|--|
| Update | D-BD-024      | Biodiversity | <p>Bat roosts (excluding maternity or hibernation roosts) have been identified during baseline surveys. <b>Bat roosts identified to date include:</b></p> <ul style="list-style-type: none"> <li>- B97 (single common pipistrelle <i>Pipistrellus pipistrellus</i> day roost);</li> <li>- B113 (single common pipistrelle day roost); and</li> <li>- B133 (Four common pipistrelles and three soprano pipistrelles day roost).</li> </ul> <p>Seventeen tree roosts comprising:</p> <ul style="list-style-type: none"> <li>- T1 (single common pipistrelle potential day roost);</li> <li>- T49 (single soprano pipistrelle day roost);</li> <li>- T70 (single soprano pipistrelle day roost);</li> <li>- T111 (single common pipistrelle and single <i>Myotis</i> sp. day roost);</li> <li>- T159 (single soprano pipistrelle day roost);</li> <li>- T190 (single common pipistrelle day roost);</li> <li>- T200 (single soprano pipistrelle day roost);</li> <li>- T220 (single common pipistrelle day roost);</li> <li>- T234 (single soprano pipistrelle day roost);</li> <li>- T238 (two soprano pipistrelle's day roost);</li> <li>- T283 (single common pipistrelle day roost);</li> </ul> <p>- T325 (potential brown long-eared <i>Plecotus auritus</i> bat day roost along the tree line associated with T325, T326 and T327);</p> <p>- T326 (potential brown long-eared bat day roost along the tree line associated with T325, T326 and T327);</p> <p>- T327 (potential brown long-eared bat day roost along the tree line associated with T325, T326 and T327);</p> <ul style="list-style-type: none"> <li>- T365 (single common pipistrelle day roost);and</li> <li>- T371 (single common pipistrelle day roost).</li> </ul> <p>Where structures and trees were not subjected to a full suite of dusk emergence and dawn re-entry surveys, due to access restrictions, the likely presence of a bat roost was assumed using a precautionary approach. Five structures and 35 trees were precautionarily assessed as a bat roost, comprising:</p> <ul style="list-style-type: none"> <li>-B79, B80, B125, B126, and B127; and</li> </ul> <p>-T4, T11, T13, T16, T17, T18, T25, T26, T27, T28, T34, T36, T37, T165, T230, T265, T349, T376, T377, T419, T422 – T431, and T435, T491, T495, T496 and T499.</p> <p>Where practicable, trees containing roosts will be retained and an exclusion buffer of a minimum of 10 m demarcated around the identified tree to reduce disturbance during construction. The ECoW will assess potential for disturbance in response to the type, duration and extent of works proposed in proximity to known roosts, advising of the need to implement mitigation or else apply for a European Protected Species Licence (EPSL) to facilitate works.</p> <p>A EPSL application will be required where trees with confirmed bat roosts cannot be retained or safeguarded, and roosts will be lost.</p> | To protect the Conservation Status of local bat populations.  | Chapter 9: Biodiversity (D.6.2.9), Volume II of the DCO ES | Construction Contractor                      | Detailed CEMPs approved by the Local Authority Licenses to be granted by NE and NRW   | Pre-Construction / Construction   |  |
| Update | D-BD-025      | Biodiversity | <p>Maternity or hibernation bat roosts identified during baseline and pre-commencement surveys will be retained and an exclusion buffer of a minimum of 30m physically demarcated around any identified tree or structure to safeguard roosts from construction affiliated impacts. Should the ECoW determine that construction works type, duration, extent poses a risk to the integrity of a roost it may be necessary to implement seasonal restrictions on work outwith the recognised maternity or hibernation period for the species identified. Where this is not possible it will be necessary to apply for a EPSL, devising appropriate mitigation to mitigate for loss/disturbance to a roost. <b>Maternity roosts known to date include T321 (noctule <i>Nyctalus noctula</i> maternity roost).</b></p> <p>It is not currently anticipated that any maternity or hibernation roosts will be lost as a result of construction of the DCO Proposed Development</p>  | To avoid adverse impacts on protected species<br>To protect the Conservation Status of local bat populations.                       | Chapter 9: Biodiversity (D.6.2.9), Volume II of the DCO ES | Construction Contractor                      | Detailed CEMPs approved by the Local Authority Licenses to be granted by NE and NRW   | Pre-Construction / Construction   |  |
| Update | D-BD-032      | Biodiversity | <p>Post construction, all hedgerows subject to hedgerow loss to facilitate construction will be reinstated with native species of local provenance in-keeping with the overall species compositions of hedgerows. Reinstatement will comprise a combination planting of whips and standard-sized shrubs. Planting shall be selected in order to match as close as possible, the height of any adjacent retained hedgerow. Hedgerows directly impacted as a result of Newbuild Carbon Dioxide Pipeline construction (i.e. those not impacted as a result of Construction Compounds) will be reinstated within 1 year of impact.</p> <p>Hedgerows identified as <b>Important Foraging and Commuting Routes (Important FCR)</b> 'Excellent' foraging and commuting routes (as detailed within <b>Appendix 9.4: Bat and Hedgerows Survey Report, Volume III</b>) will be planted with whips alongside double the amount of standard-sized shrubs to provide more instant hedgerow structure.</p> <p><b>Important FCRs</b> 'Excellent' hedgerows are classified as those with bat activity levels considered significant for the conservation of the species recorded and that are retained as, or categorisation increased to, 'Excellent' as detailed within <b>Appendix 9.4: Bat and Hedgerows Survey Report, (Volume III)</b>.</p>   | To avoid adverse impacts to protected species and comply with conservation legislation<br>To maintain commuting and foraging routes | Chapter 9: Biodiversity (D.6.2.9), Volume II of the DCO ES | The Applicant / Construction Contractor      | Detailed CEMPs approved by the Local Authority<br>Detailed LEMP approved by the Local Authority                                     | Construction / Post-Construction  |  |
| Update | D-BD-033      | Biodiversity | <p>Following planting of all impacted hedgerows post construction, those hedgerows identified as <b>Important FCRs</b> 'Excellent' (as detailed within <b>Appendix 9.4: Bat and Hedgerows Assessment, Volume III</b>) will be supplemented through the retention of temporary flight lines via the use of artificial (faux) hedgerows (as detailed within D-BD-031) (the design of which to be agreed at detailed design) to maintain linear structure whilst planted sections establish. In addition, such hedgerows will be subject to monitoring through monthly crossing point surveys during the first active bat season following hedgerow reinstatement (period May to September inclusive) to determine use (or otherwise) by target species (for example lesser horseshoe lesser horseshoe <i>Rhinolophus hipposideros</i> and activity levels considered sufficiently high to affect the favourable conservation status of other species (e.g. brown long-eared bat <i>Plecotus auritus</i> and <i>Myotis</i> species).</p> <p>Where absence of use or reduced use when compared with baseline survey results is recorded, additional measures will be considered and introduced, for example, potential planting of larger shrub species to provide greater hedgerow structure. In instances where further planting is required, further crossing points surveys undertaken on a monthly basis across the subsequent active bat season will be carried out. Only once the planted hedgerow section has established to levels akin to the unimpacted hedgerow, as assessed by an appropriately experienced ecologist, can the artificial (faux) hedgerow be removed.</p>  | To avoid adverse impacts to protected species and comply with conservation legislation<br>To maintain commuting and foraging routes | Chapter 9: Biodiversity (D.6.2.9), Volume II of the DCO ES | The Applicant / Construction Contractor      | Detailed CEMPs approved by the Local Authority  | Construction / Post-Construction  |  |

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|--------|---------------|--------------|--|---|--|--|---|---|--|
| Update | D-BD-035      | Biodiversity | <p>At watercourses with confirmed water vole presence (West Central Drain A and B, Hapsford Brook, River Gowy, Thornton Diches 4, 5a, 5b, 6, 7a, 7b and 8, Thornton Main Drain, and Gowy Tributary 2), vegetation clearance will be required as part of displacement method mitigation techniques, under licence as per best practice guidance. In the absence of a second survey visit (due to access restrictions), a precautionary assessment has been applied with presence of water vole assumed. These watercourses comprise East and West Central Drains and Elton Land Ditches, Gale Brook, Stanney Main Drain and Stanney Mill Brook, and Alltami Brook.</p> <p>Vegetation clearance (by strimming or turf stripping) will aim to make habitat unsuitable for water vole and will cover a maximum span of 50 m along each bank from proposed crossing locations where open-cut trenching is required. Vegetation clearance will be completed between February and April inclusive under supervision of a licensed ecologist and will be maintained until such time that works commence to ensure continued discouragement of water vole from proposed crossing locations.</p> <p>Vegetation clearance will only take place following confirmation that nesting birds are absent from the area of works if undertaken during the nesting bird season March to August inclusive.</p> <p>At the commencement of works, banks will be excavated under supervision of the ECoW (or other licensed ecologist) and burrows carefully excavated and destroyed. In the unlikely event water vole are encountered during the excavation process works will cease and consultation sought from NE/NRW.</p> | To avoid adverse impacts to water vole and comply with conservation legislation.                | Chapter 9: Biodiversity (D.6.2.9), Volume II of the DCO ES | Construction Contractor                      | <p>Detailed CEMPs approved by the Local Authority</p> <p>Water Vole Method Statement</p>  | Pre-Construction / Construction   |  |
| Update | D-BD-037      | Biodiversity | <p>Whilst known barn owl roost and nest sites will be avoided and retained where possible, exclusion of barn owls from barn owl boxes and other features may be required under licence. Where this is required, a minimum of 30 days prior to the exclusion works, compensatory barn owl boxes (at a ratio 1:1) will be erected in suitable locations under supervision of an appropriately licensed ecologist, where practicable, within 250 m of the feature/box being excluded to compensate for the temporary loss of roosting and/or nesting sites. Erected boxes will be sited in locations that will not be subject to disturbance or impact by construction under the advice of a barn owl licensed ecologist.</p> <p>The following features are currently known to require exclusion prior to construction commencement:</p> <ul style="list-style-type: none"> <li>•Barn Owl Box - BOB3; and</li> <li>•Tree T465</li> </ul> <p>Where a feature was not subjected to a full suite of vantage point surveys, due to access restrictions, the likely presence of a nest site was assumed using a precautionary approach. This applies to;</p> <ul style="list-style-type: none"> <li>•T471</li> </ul> <p>Following the completion of construction works and the removal of construction compounds, any barn owl features temporarily excluded will be re-opened for use by barn owl.</p>  | To compensate for the temporary loss of barn owl nesting / roosting sites and protect barn owl. | Chapter 9: Biodiversity (D.6.2.9), Volume II of the DCO ES | Construction Contractor                      | <p>Detailed CEMPs approved by the Local Authority</p> <p>Licensing to be obtained from NE and NRW</p>                               | Pre-Construction / Construction   |  |