



The Planning Inspectorate
Yr Arolygiaeth Gynllunio

ADRODDIAD ar y GOBLYGIADAU i SAFLEOEDD EWROPEAIDD

Piblinell Carbon Deuocsid Arfaethedig HyNet

Adroddiad gan yr Awdurdod Archwilio a baratowyd gyda
chymorth y Tîm Gwasanaethau Amgylcheddol

Cyfeirnod yr Arolygiaeth Gynllunio: EN070007

01 Awst 2023

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1 CYFLWYNIAD

1.1 Cefndir

1.1.1 Mae Liverpool Bay CCS Ltd (yr Ymgeisydd) wedi gwneud cais i'r Ysgrifennydd Gwladol am Orchymyn Caniatâd Datblygu (DCO) o dan adran 37 Deddf Cynllunio 2008 (PA2008) ar gyfer Piblinell Carbon Deuocsid arfaethedig HyNet (y cais). Mae'r Ysgrifennydd Gwladol wedi penodi Awdurdod Archwilio (ExA) i gynnal archwiliad o'r cais, i adrodd ar ei ganfyddiadau a'i gasgliadau, ac i wneud argymhelliad i'r Ysgrifennydd Gwladol ynglŷn â'r penderfyniad i'w wneud ar y cais.

1.1.2 Yr Ysgrifennydd Gwladol perthnasol yw'r awdurdod cymwys at ddibenion y Gyfarwyddeb Cynefinoedd¹ a'r Rheoliadau Cynefinoedd² ar gyfer ceisiadau a gyflwynir o dan gyfundrefn PA2008. Bydd y canfyddiadau a'r casgliadau ynglŷn â materion cadwraeth natur a adroddir gan yr ExA yn cynorthwyo'r Ysgrifennydd Gwladol i gyflawni ei ddyletswyddau o dan y Rheoliadau Cynefinoedd.

1.1.3 Mae'r Adroddiad hwn ar y Goblygiadau i Safleoedd Ewropeaidd (RIES) yn cofnodi a chyfeirio at y wybodaeth yn ymwneud ag effeithiau posibl ar safleoedd Ewropeaidd³ a ddarparwyd yn y cais DCO ac a gyflwynwyd drwy gydol yr Archwiliad gan yr Ymgeisydd a Phartïon â Buddiant, hyd at Derfyn Amser 6 (D6) yr Archwiliad (4 Gorffennaf 2023). Nid yw'n ddogfen annibynnol a dylid ei darllen ar y cyd â'r dogfennau archwiliad y cyfeirir atynt. Pan gyflwynir cyfeiriadau at ddogfennau mewn cromfachau sgwâr [] yn nhestun yr adroddiad hwn, gellir dod o hyd i'r cyfeiriad hwnnw yn llyfrgell yr Archwiliad a gyhoeddwyd ar y wefan Cynllunio Seilwaith Cenedlaethol trwy'r ddolen ganlynol:

[EN070007-001186-HyNet Carbon Dioxide Pipeline Bilingual Examination Library.pdf \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk/library/pdf/EN070007-001186-HyNet%20Carbon%20Dioxide%20Pipeline%20Bilingual%20Examination%20Library.pdf)

Cyhoeddir y RIES hwn er mwyn sicrhau yr ymgynghorir yn ffurfiol â Phartïon â Buddiant, gan gynnwys y Cyrff Cadwraeth Natur Priodol (ANCB), Natural England (NE) a Cyfoeth Naturiol Cymru (CNC), ynglŷn â materion Rheoliadau Cynefinoedd. Gall yr Ysgrifennydd Gwladol ddibynnu ar y broses hon at ddibenion Rheoliad 63(3) y Rheoliadau Cynefinoedd.

1.1.4 Mae hefyd yn ceisio amlygu a chau unrhyw fylchau yn nealltwriaeth yr ExA o safbwyntiau Partïon â Buddiant ar faterion Rheoliadau Cynefinoedd, mewn perthynas â'r holl safleoedd a nodweddion o ddiddordeb cyn belled ag y bo'n bosibl, er mwyn cefnogi argymhelliad cadarn a thrwyadl i'r Ysgrifennydd Gwladol.

¹ Cyfarwyddeb 92/43/EEC y Cyngor dyddiedig 21 Mai 1992 ar gadwraeth cynefinoedd naturiol ac anifeiliaid a phlanhigion gwylt (fel y'i codeiddiwyd) (y 'Gyfarwyddeb Cynefinoedd').

² Rheoliadau Cadwraeth Cynefinoedd a Rhywogaethau 2017 (y Rheoliadau Cynefinoedd).

³ Mae'r term Safleoedd Ewropeaidd yn y cyd-destun hwn yn cynnwys Safleoedd o Bwysigrwydd Cymunedol (SBCau), Ardaloedd Cadwraeth Arbennig (ACAau) ac ACAau ymgeisiol, Ardaloedd Gwarchodaeth Arbennig (AGAAu), ACAau posibl, darpar AGAAu, safleoedd Ramsar, safleoedd Ramsar arfaethedig, ac unrhyw safleoedd a amlygwyd fel mesurau digolledu ar gyfer effeithiau niweidiol ar unrhyw un o'r uchod. I gael disgrifiad llawn o'r dynodiadau y mae'r Rheoliadau Cynefinoedd yn berthnasol iddynt, a/neu sy'n cael eu cymhwyso fel mater o bolisi'r Llywodraeth, gweler Nodyn Cyngor 10 yr Arolygiaeth Gynllunio (PINS).

1.1.5 Yn dilyn ymgynghoriad, bydd yr ExA yn ystyried yr ymatebion wrth wneud ei argymhelliad i'r Ysgrifennydd Gwladol a byddant ar gael i'r Ysgrifennydd Gwladol ynghyd â'r adroddiad hwn. Ni fydd y RIES yn cael ei ddiwygio yn dilyn ymgynghoriad.

1.2 Dogfennau a ddefnyddiwyd i lywio'r RIES hwn

1.2.1 Mae Adroddiad Asesiad Rheoliadau Cynefinoedd (HRA) (yr HRAR) yr Ymgeisydd yn cynnwys y ddogfen ganlynol:

- Asesiad Rheoliadau Cynefinoedd – Gwybodaeth i Lywio Asesiad Priodol [REP4-243].

1.2.2 Darparwyd HRAR gyda'r cais DCO ('HRAR y cais') [APP-226]. Fe'i diweddarwyd wedi hynny yn ystod yr Archwiliad [CR1-121, REP2-023]. Darparwyd fersiwn erbyn Terfyn Amser 4 [REP4-243] a oedd yr un fath â'r fersiwn a ddarparwyd erbyn Terfyn Amser 2 [REP2-023]. Mae'r holl gyfeiriadau at yr HRAR yn yr adroddiad hwn yn cyfeirio at REP4-243, oni nodir fel arall.

1.2.3 Mae Adran 6.3 Tablau 6.2 – 6.9 yr HRAR yn cynnwys matricesau sgrinio ar gyfer effeithiau'r Datblygiad Arfaethedig ar ei ben ei hun. Ni ddarparwyd matricesau cyfanrwydd.

1.2.4 Yn ogystal â'r HRAR, mae'r RIES yn cyfeirio at sylwadau a gyflwynwyd i'r Archwiliad gan Bartion â Buddiant, dogfennau Gwrandawriad Mater Penodol (ISH), Datganiadau Tir Cyffredin (SoCG) a dogfennau eraill yr Archwiliad fel y bo'n berthnasol. Mae'r holl ddogfennau ar gael yn Llyfrgell yr Archwiliad⁴.

1.2.5 Cyhoeddodd yr ExA gwestiynau ysgrifenedig yn ymwneud â materion HRA yn ystod yr Archwiliad [PD-014, PD-022].

1.3 Ceisiadau i Wneud Newidiadau

1.3.1 Hyd yma, mae'r Ymgeisydd wedi gwneud y ceisiadau i newid canlynol:

- Cais i Wneud Newidiadau 1 (CR1) a gyflwynwyd ar 27 Mawrth 2023 [CR-001 i CR-126] ac a dderbyniwyd gan yr ExA ar 24 Ebrill 2023 [PD-016];
- Cais i Wneud Newidiadau 2 (CR2) [CR2-001 i CR2-021] a gyflwynwyd ar 26 Mai 2023 ac a dderbyniwyd gan yr ExA ar 2 Mehefin 2023 [PD-019]; a
- Cais i Wneud Newidiadau 3 (CR3) [CR3-001 i CR3-019] a gyflwynwyd ar 5 Gorffennaf 2023 ac a dderbyniwyd gan yr ExA ar 12 Gorffennaf 2023 [PD-025].

1.3.2 Roedd CR1 yn cynnwys 18 o newidiadau. Roedd y rhain yn cynnwys adleoli rhai elfennau o'r Datblygiad Arfaethedig; cadw tanc slyri; gwyro

⁴ Mae Llyfrgell yr Archwiliad ar gael yn: <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN070007/EN070007-001186-HyNet%20Carbon%20Dioxide%20Pipeline%20Bilingual%20Examination%20Library.pdf>

troedffyrdd, llwybrau beicio a Hawl Dramwy Gyhoeddus (PRoW); ac ymestyn oriau gwaith adeiladu. Cynigiwyd estyniadau a gostyngiadau i Derfynau'r Gorchymyn mewn amryw leoliadau i ddarparu ar gyfer y newidiadau hyn.

- 1.3.3 Darparwyd HRAR diwygiedig [CR1-121] yn rhan o ddogfennau CR1. Ni amlygwyd unrhyw safleoedd Ewropeaidd ychwanegol. Esboniodd yr HRAR fod posibilrwydd y gallai dau o'r newidiadau newid casgliadau'r HRA:
- Newid PS02b – cadw'r tanc slyri a symud y Biblinell Newydd yn agosach i goetir swyddogaethol gysylltiedig Ardal Cadwraeth Arbennig (ACA) Safleoedd Madfallod Dŵr Glannau Dyfrdwy a Bwcle; a
 - Newid PS03 – adleoli Gosodiad ar Ben y Tir (AGI) Northop Hall, a fyddai'n cyflwyno cysylltiad draenio i Is-afon 1 Nant Gweptra, sydd wedi'i chysylltu'n hydrolegol ag ACA Safleoedd Madfallod Dŵr Glannau Dyfrdwy a Bwcle.
- 1.3.4 Darperir asesiad o effeithiau posibl y newidiadau ar yr hen goetir derw mes di-goes, sy'n nodwedd gymwys o'r ACA, yn nodiadau tystiolaeth (a) (PS02b) a (d) (PS03) i Dabl 6.3 matrices sgrinio'r HRAR. Daethpwyd i'r casgliad na fyddai unrhyw effaith arwyddocaol debygol (LSE) ar yr ACA o ganlyniad i'r newidiadau hyn. Nid oedd unrhyw Barti â Buddiant wedi herio'r casgliad hwn.
- 1.3.5 Esboniwyd hefyd yn yr HRAR ei fod wedi cael ei ddiweddarau i adlewyrchu gwybodaeth ddiwygiedig yn ymwneud â'r fethodoleg adeiladu ar gyfer croesi Afon Dyfrdwy.
- 1.3.6 Roedd CR2 yn cynnwys 2 newid:
- Newid 1 – opsiwn amgen arfaethedig ar gyfer Gwaith Rhif 43, croesfan ffos Nant Alltami, yn cynnwys pont bibell ymgorfforedig; a
 - Newid 2: ychwanegu a dileu lleiniau bach o dir at/o Derfynau'r Gorchymyn yn lleoliad Gwaith Rhif 34 i optimeiddio mynediad adeiladu dros dro.
- 1.3.7 Ni amlygodd yr Ymgeisydd unrhyw newidiadau i'r HRA o ganlyniad i CR2. Nid oedd unrhyw Barti â Buddiant wedi herio hyn.
- 1.3.8 Roedd CR3 yn cynnwys pedwar newid a fyddai'n arwain at ddileu lleiniau o dir o Derfynau'r Gorchymyn a newid i'r Strategaeth Draenio Dŵr Wyneb Amlinellol [CR3-017]. Ni adnabodd yr Ymgeisydd p'un a fyddai unrhyw newidiadau i'r HRA o ganlyniad i CR3. Fodd bynnag, yn ei lythyr clawr D6 [REP6-001], eglurodd, mewn ymateb i'r eglurhad y gofynnwyd amdano ym Mhenderfyniad Gweithdrefnol yr ExA ar CR3 [PD-025], y gallai CR3 arwain at "newidiadau enwol mân" i agosrwydd y safleoedd Ewropeaidd at y Terfynau Gorchymyn a'r pellteroedd a ddyfynnwyd. Roedd o'r farn nad oedd y newidiadau CR3 yn arwain at unrhyw newid i'r asesiad LSE a gynhwysir yn REP4-243 ac felly nad oedd angen diwygio canlyniadau a chasgliadau'r HRA. Byddai'r pellteroedd a nodwyd yn cael eu newid mewn HRAR wedi'i ddiweddarau a gyflwynwyd cyn cau'r Archwiliad.

1.3.9 Manylir ar faterion HRA perthnasol sy'n codi o'r ceisiadau i wneud newidiadau hyn yn Adrannau 2, 3 a 4 y RIES hwn.

1.4 Strwythur y RIES hwn

1.4.1 Mae gweddill yr adroddiad hwn fel a ganlyn:

- Mae **Adran 2** yn rhoi trosolwg o'r safleoedd Ewropeaidd a ystyriwyd yn y cais DCO y gallai'r Datblygiad Arfaethedig effeithio arnynt, ynghyd â chrynodeb o faterion allweddol yr Archwiliad hyd at Derfyn Amser 6.
- Mae **Adran 3** yn amlygu'r safleoedd Ewropeaidd a'r nodweddion cymwys a sgriniwyd gan yr Ymgeisydd ar gyfer LSE posibl, naill ai'n unigol neu ar y cyd â phrosiectau a chynlluniau eraill. Mae'r adran hefyd yn amlygu'r materion sydd wedi dod i'r amlwg yn ystod yr Archwiliad hyd at Derfyn Amser 6.
- Mae **Adran 4** yn amlygu'r safleoedd Ewropeaidd a'r nodweddion cymwys a ystyriwyd o ran effeithiau niweidiol ar gyfanrwydd safle, naill ai'n unigol neu ar y cyd â phrosiectau a chynlluniau eraill. Mae'r adran hefyd yn amlygu'r materion sydd wedi dod i'r amlwg yn ystod yr Archwiliad, gan gynnwys lle mae Partïon â Buddiant wedi herio casgliadau'r Ymgeisydd, hyd at Derfyn Amser 6.
- Mae **Atodiad 1** yn cynnwys tabl sy'n crynhoi dealltwriaeth yr ExA o gasgliadau sgrinio ac effeithiau niweidiol ar adeg cyhoeddi'r RIES hwn.

Cwestiynau'r RIES

1.4.2 Mae'r RIES hwn yn cynnwys cwestiynau sydd wedi'u bwriadu'n bennaf ar gyfer yr Ymgeisydd, NE a CNC, a ddangosir mewn [testun glas, italiq wedi'i danlinellu](#).

1.4.3 Bydd yr ymatebion i'r cwestiynau a ofynnir yn y RIES a sylwadau a dderbynnir arno'n werthfawr iawn i'r ExA er mwyn deall safbwyntiau Partïon â Buddiant ar faterion Rheoliadau Cynefinoedd. Fodd bynnag, pwysleisir y bydd ymatebion i faterion eraill a drafodir yn y RIES yn cael eu croesawu llawn cymaint.

1.4.4 Wrth ymateb i gwestiynau yn Nhablau 3.1 a 4.1, cyfeiriwch at y rhif cyfeirnod yn y golofn gyntaf, os gwelwch yn dda.

1.4.5 Mae sylwadau ar y RIES wedi'u hamserlennu ar gyfer Terfyn Amser 7 (5 Medi 2023).

2 TROSOLWG

2.1 Safleoedd Ewropeaidd a Ystyriwyd

Cyflwyniad

- 2.1.1 Nid yw'r Datblygiad Arfaethedig yn gysylltiedig â rheoli unrhyw safleoedd Ewropeaidd ar gyfer cadwraeth natur, nac yn angenrheidiol ar gyfer hynny.
- 2.1.2 Amlygodd yr Ymgeisydd safleoedd Ewropeaidd o fewn 10km o'r 'Ffin Adeiladu Seilwaith Newydd'⁵.

Safleoedd o fewn Rhwydwaith Safleoedd Cenedlaethol y Deyrnas Unedig

- 2.1.3 Amlygodd HRAR yr Ymgeisydd [APP-226] naw safle Ewropeaidd o fewn Rhwydwaith Safleoedd Cenedlaethol (NSN) y Deyrnas Unedig i'w cynnwys yn yr asesiad. Rhestrir y rhain yn Adran 5 yr HRAR ac maen nhw fel y maent wedi'u manylu yn Nhabl 2.1 isod.
- 2.1.4 Mae'r Datblygiad Arfaethedig wedi'i leoli yng Nghymru a Lloegr, ac felly amlygwyd safleoedd Ewropeaidd yn y ddwy wlad; mae CNC yn gyfrifol am y rhai sydd wedi'u lleoli yng Nghymru ac mae Natural England yn gyfrifol am y rhai sydd wedi'u lleoli yn Lloegr. Rhennir cyfrifoldeb am safleoedd trawsffiniol.

Tabl 2.1: Safleoedd Ewropeaidd a amlygwyd yn HRAR yr Ymgeisydd

Enw'r Safle Ewropeaidd	Gwlad	Pellter o'r Datblygiad Arfaethedig
ACA Afon Dyfrdwy a Llyn Tegid	Cymru a Lloegr	0km (mae'r Datblygiad Arfaethedig yn ei chroesi)
ACA Safleoedd Madfallod Dŵr Glannau Dyfrdwy a Bwcle	Cymru	Yn union gerllaw'r Ffin Adeiladu Seilwaith Newydd
ACA Mynydd Helygain SAC	Cymru	248m
AGA Aber Afon Mersi	Lloegr	0.8km
Safle Ramsar Aber Afon Mersi	Lloegr	0.8km

⁵ Diffinnir hyn ym Mhennod 3 y Datganiad Amgylcheddol [APP-055] fel Terfynau'r Gorchymyn minws Piblinell bresennol Terfynell Cei Connah i'r Parlwr Du (PoA) ('Piblinell Gysylltu'r Fflint â Therfynell PoA'). Mae'r Ffin Adeiladu Seilwaith Newydd yn cynnwys hyd a lled mwyaf yr holl waith adeiladu parhaol a dros dro posibl sy'n ofynnol yn rhan o'r Datblygiad Arfaethedig.

Enw'r Safle Ewropeaidd	Gwlad	Pellter o'r Datblygiad Arfaethedig
ACA Aber Afon Dyfrdwy	Cymru a Lloegr	1km
AGA Aber Afon Dyfrdwy	Cymru a Lloegr	1km
Safle Ramsar Aber Afon Dyfrdwy	Cymru a Lloegr	1km
ACA Coedwigoedd Dyffryn Alun	Cymru	6km

- 2.1.5 Dangosir lleoliadau'r safleoedd hyn mewn perthynas â'r Datblygiad Arfaethedig yn Atodiad A Ffigur 9.1.1, Dalenni 1 a 2 Atodiad 9.1 y Datganiad Amgylcheddol [REP4-091].
- 2.1.6 Amlygodd NE yn REP1-070 fod safleoedd Ewropeaidd ychwanegol o fewn 10km o safle'r cais, gan gynnwys safleoedd Ramsar Cam 1 a Cham 2 Midland Meres and Mosses, ac awgrymodd y gellid mewnosod geiriad yn yr HRAR ynglŷn â'r safleoedd hyn er mwyn eglurder. Fodd bynnag, cadarnhaodd ei fod yn fodlon â'r safleoedd a'r nodweddion a gynhwyswyd yn yr asesiad.
- 2.1.7 Yn ymateb [REP5-025] i Q2.11.1 yn ail rownd yr ExA o gwestiynau ysgrifenedig a cheisiadau am wybodaeth (ExQ2) [PD-022], nododd yr Ymgeisydd fod y ddau safle Ramsar oddeutu 8.6km ac 8.9km, yn ôl eu trefn, i'r dwyrain o'r Datblygiad Arfaethedig ar eu pwynt agosaf, a'u bod wedi'u dynodi ar gyfer eu cynefinoedd a'u casgliadau o flodau. Penderfynodd yr Ymgeisydd eu bod y tu hwnt i barth dylanwad posibl y Datblygiad Arfaethedig a chadarnhaodd nad yw'r cynefinoedd/rhywogaethau cymwys yn bodoli o fewn y Ffin Adeiladu Seilwaith Newydd. Ar y sail hon, ystyriodd nad oedd unrhyw lwybrau effaith posibl a allai arwain at LSE, ond byddai'n diweddarau'r HRAR cyn diwedd yr Archwiliad i gynnwys cyfeiriad at y safleoedd hyn.
- 2.1.8 Cadarnhaodd CNC yn REP1-071 ei fod yn cytuno â'r safleoedd a'r nodweddion a ystyriwyd yn HRA yr Ymgeisydd.
- 2.1.9 Yn ymateb [REP5-025] i ExQ2.11.2 [PD-022], cadarnhaodd yr Ymgeisydd ei fod wedi diwygio pellter ACA Mynydd Helygain o safle'r Datblygiad Arfaethedig o 280m i 248m yn yr HRAR wedi'i ddiweddarau [REP2-023]. O ran AGA a safle Ramsar (ac ACA) Aber Afon Dyfrdwy, dywedodd y byddai'n diwygio'r pellter o safle'r Datblygiad Arfaethedig a nodwyd yn yr HRAR fel 1.2km i 1km mewn HRAR wedi'i ddiweddarau.

Safleoedd nad ydynt yn y Deyrnas Unedig

- 2.1.10 Nid yw'r Ymgeisydd wedi amlygu unrhyw effeithiau posibl ar safleoedd Ewropeaidd yn unrhyw rai o Wladwriaethau'r Ardal Economaidd Ewropeaidd (AEE).

2.2 Llwybrau effeithiau posibl

2.2.1 Rhoddodd Adran 6 yr HRAR fanylion am effeithiau posibl y Datblygiad Arfaethedig, ynghyd â graddau daearyddol posibl yr effeithiau.

2.2.2 Mae'r llwybrau effeithiau posibl a ystyriwyd yn cynnwys:

- colli cynefin yn uniongyrchol ac yn anuniongyrchol (gan gynnwys cynefin swyddogaethol);
- marwoldeb rhywogaethau;
- darnio cynefinoedd a/neu rywogaethau;
- aflonyddu gweledol neu sŵn/dirgryniad;
- effeithiau hydrolegol; ac
- effeithiau ar ansawdd aer (dyddodion llwch).

2.2.3 Asesodd yr HRAR yr effeithiau posibl yn ystod adeiladu a gweithredu a chynnal a chadw; ni asesodd effeithiau yn ystod y cam datgomiynu. Cadarnhaodd y Datganiad Amgylcheddol (ES) [APP-055] fod y biblinell wedi cael ei dylunio i bara am 40 mlynedd a'r seilwaith cysylltiedig am 25 mlynedd. Pan fyddai'n cael ei datgomiynu, byddai'r biblinell yn cael ei llenwi â nitrogen a'i gadael yn y fan a'r lle, a byddai nodweddion ar ben y tir yn cael eu datgysylltu a'u clirio a byddai'r tir yn cael ei adfer i'w gyflwr blaenorol.

2.2.4 Cydnabu'r Ymgeisydd yn REP1-044 fod datgomiynu wedi'i gynnwys yn y DCO drafft (dDCO). Ymdriniodd â datgomiynu yn yr HRAR wedi'i ddiweddarau a ddarparwyd erbyn Terfyn Amser 2 [REP2-023]. Mae'r HRAR yn croesgyfeirio i Adran 3.8 Pennod 3 y Datganiad Amgylcheddol [APP-055], sy'n disgrifio'r ymagwedd arfaethedig at ddatgomiynu.

2.2.5 Roedd yr Ymgeisydd yn disgwyl y byddai'r effeithiau sy'n gysylltiedig â datgomiynu yn debyg i'r effeithiau adeiladu, ac esboniodd yr ystyriwyd bod cyfeiriadau yn yr HRAR at effeithiau adeiladu yr un mor berthnasol i effeithiau datgomiynu.

2.2.6 Mae Tablau A1.1 i A1.9 yn Atodiad 1 y RIES hwn yn manylu ar y llwybrau effeithiau posibl a ystyriwyd yn yr HRAR yn ôl safle Ewropeaidd a nodweddion cymwys.

2.2.7 Yn ystod yr Archwiliad, gofynnodd yr ExA hefyd am wybodaeth ynglŷn ag effeithiau ansawdd aer sy'n deillio o allyriadau cerbydau [PD-022] (gweler Tabl 3.1 yr adroddiad hwn am ragor o fanylion).

2.3 Effeithiau ar y cyd

2.3.1 Mae Adran 6.4 yr HRAR yn manylu ar ymagwedd yr Ymgeisydd at asesu effeithiau ar y cyd. Mae Atodiad B yr HRAR 42 yn rhestru 'Datblygiadau Eraill' i'w hystyried yn yr asesiad ar y cyd. I ddechrau, ystyriwyd bod posibilrwydd y gallai naw o'r Datblygiadau Eraill gyfrannu at LSE ynghyd â'r Datblygiad Arfaethedig; manylir ar y rhain yn Nhabl 6.10 yr HRAR ac fe'u dangosir yn Ffigur 19.1 y Datganiad Amgylcheddol [REP4-234].

- 2.3.2 Amlygodd yr Ymgeisydd, yn ei ymateb [REP1-044] i Q1.11.3 yng nghwestiynau ysgrifenedig a cheisiadau am wybodaeth yr ExA (ExQ1), fod un datblygiad (ID14) wedi cael ei ddileu o'r HRA yn dilyn trafodaethau ag Asiant Cefnffyrdd Gogledd a Chanolbarth Cymru (NMWTRA). Adlewyrchwyd hyn yn yr HRAR wedi'i ddiweddarau [CR1-121]. Yn ogystal, diweddarwyd y rhestr fer o Ddatblygiadau Eraill a gynhwyswyd yn Atodiad 19-1 Tabl 3 (Tabl 1.3 bellach) yn rhan o CR1 [CR1-044]. Byddai'r HRAR yn cael ei ddiweddarau i adlewyrchu'r newidiadau i Dabl 3. Roedd yr Ymgeisydd o'r farn na fyddai'r newidiadau'n cael unrhyw effaith o bwys ar y casgliadau yn yr HRAR.
- 2.3.3 Nododd NE, yn RR-065 a REP1-070, fod yr asesiad ar y cyd yn cynnwys cynlluniau eraill a oedd yn ffurfio rhan o Brosiect Gogledd-orllewin ehangach HyNet ac awgrymodd y dylai'r asesiad barhau i gael ei ddiweddarau wrth i fwy o wybodaeth ddod i'r amlwg. Ymrwymodd yr Ymgeisydd yn REP1-044 i adolygu'r angen i ddiweddarau'r asesiad os bydd gwybodaeth ychwanegol neu newydd yn dod i'r amlwg.
- 2.3.4 Ni amlygodd Partion â Buddiant unrhyw gynlluniau neu brosiectau ychwanegol i'w cynnwys yn yr asesiad ar y cyd.

2.4 Crynodeb o Asesiad yr Ymgeisydd

- 2.4.1 Cyflwynir casgliadau'r Ymgeisydd ynglŷn â sgrinio ac asesu effeithiau ar gyfanrwydd yn Adrannau 6 a 7 yr HRAR.
- 2.4.2 Daeth yr Ymgeisydd i'r casgliad fod posibilrwydd o LSE ar saith safle Ewropeaidd. Aseswyd y safleoedd Ewropeaidd hyn gan yr Ymgeisydd wedi hynny i bennu a allent fod yn destun effaith niweidiol ar gyfanrwydd (AEoI) o ganlyniad i'r Datblygiad Arfaethedig ar ei ben ei hun neu ar y cyd â chynlluniau a phrosiectau eraill, o ystyried eu hamcanion cadwraeth.
- 2.4.3 Daeth yr Ymgeisydd i'r casgliad na fyddai'r Datblygiad Arfaethedig yn arwain at AEoI ar unrhyw safle Ewropeaidd.

2.5 Materion HRA a Ystyriwyd yn ystod yr Archwiliad

- 2.5.1 Hyd yma, mae'r Archwiliad wedi canolbwyntio ar effeithiau ar rywogaethau adar sy'n defnyddio tir swyddogaethol gysylltiedig (FLL).
- 2.5.2 Rhoddir rhagor o fanylion yn Adrannau 3 a 4 yr adroddiad hwn.

3 EFFEITHIAU ARWYDDOCAOL TEBYGOL

3.1 Ymagwedd yr Ymgeisydd

- 3.1.1 Sgriniodd yr Ymgeisydd gyfanswm o naw safle Ewropeaidd y mae'r Deyrnas Unedig yn gyfrifol amdanynt yn ei HRAR.
- 3.1.2 Crynhoir canlyniadau ymarfer sgrinio'r Ymgeisydd yn Adran 6 yr HRAR. Mae Adran 6.3 yn asesu effeithiau'r Datblygiad Arfaethedig ar ei ben ei hun. Mae Tablau 6.2 – 6.9 yr HRAR yn cynnwys matricesau sgrinio ar gyfer y Datblygiad Arfaethedig ar ei ben ei hun ar gyfer yr holl safleoedd Ewropeaidd a aseswyd, heblaw am ACA Coedwigoedd Dyffryn Alun. Mae Adran 6.4 yn crynhoi'r asesiad o effeithiau ar y cyd, y mae manylion llawnach amdano yn Atodiad B yr HRAR. Mae Tabl 6.11 yn Adran 6.5 yn crynhoi'r casgliadau sgrinio. Nid yw'n nodi p'un a yw'r effeithiau rhagfynedig yn deillio o'r Datblygiad Arfaethedig ar ei ben ei hun neu ar y cyd â chynlluniau a phrosiectau eraill.

Arolygon adar sy'n gaeafu

- 3.1.3 Datganodd paragraff 4.2.3 HRAR y cais [APP-226] fod arolygon adar sy'n gaeafu a gynhaliwyd i lywio'r asesiad wedi cael eu cynnal gydag o leiaf un ymweliad y mis rhwng mis Hydref a mis Chwefror, a dau ymweliad y mis rhwng mis Mawrth a mis Medi.
- 3.1.4 Roedd NE [RR-065] o'r farn bod hyn yn ymdrech gyfyngedig i arolygu o ran adar sy'n pasio heibio ac adar sy'n gaeafu, a chynghorodd ddau arolwg y mis rhwng mis Hydref a mis Mawrth ac y dylai arolygon pasio heibio gynnwys ymweliadau wythnosol rhwng mis Medi a mis Tachwedd (neu rhwng mis Mawrth a mis Mai) a chael eu cynnal ar wahanol gyflyrau llanw. Ceisiodd wybodaeth ychwanegol i esbonio'r ymdrech arolygu lai a holodd b'un a oedd gwybodaeth ychwanegol ar gael i alluogi asesiad cadarn o'r effeithiau ar adar sy'n gaeafu. Ailadroddodd NE hyn yn REP1-070.
- 3.1.5 Ymatebodd yr Ymgeisydd [REP1-042] drwy ddweud bod un ymweliad y mis wedi cael ei gynnal rhwng mis Rhagfyr 2020 a mis Chwefror 2021 a bod dau arolwg y mis wedi cael eu cwblhau rhwng mis Mawrth 2021 a mis Mawrth 2022, sy'n wahanol i'r wybodaeth a ddarparwyd yn HRAR y cais. Roedd o'r farn bod yr ymagwedd hon yn gymesur yng nghyd-destun y Datblygiad Arfaethedig a'r gwaith adeiladu tymor byr, dros dro a lleol a gynigir. O ystyried y potensial ar gyfer rhywogaethau cymwys AGA a'i gysylltedd ag AGA Aber Afon Dyfrdwy, amlygodd fod Trawslun 2 (ar hyd Afon Dyfrdwy) wedi cael ei arolygu fwyaf, gydag arolygon a gwblhawyd ar wahanol gyflyrau llanw i sicrhau canlyniadau cynrychioliadol. Roedd yr Ymgeisydd o'r farn bod swm y canlyniadau arolygon maes a gafwyd ar hyd y cyfnod arolygu yn ddigonol i lywio'r HRA a'i gasgliadau. Mae'r SoCG drafft (dSoCG) a gyflwynwyd erbyn Terfyn Amser 4 yn dangos bod NE wedi cytuno â'r mater hwn [REP4-246].

[Cwestiwn: Gofynnir i'r Ymgeisydd ddiweddarau paragraff 4.2.3 yn fersiwn nesaf yr HRAR i adlewyrchu'r wybodaeth am ymweliadau arolygu fel yr amlinellir yn REP1-042.](#)

3.2 Safleoedd y daeth yr Ymgeisydd i'r casgliad na fyddai LSE ar yr holl nodweddion cymwys

- 3.2.1 Daeth yr Ymgeisydd i'r casgliad na fyddai'r Datblygiad Arfaethedig yn debygol o arwain at effeithiau arwyddocaol, naill ai'n unigol neu ar y cyd â chynlluniau neu brosiectau eraill, ar unrhyw un o nodweddion cymwys y safleoedd Ewropeaidd canlynol:
- ACA Coedwigoedd Dyffryn Alun (HRAR Adran 5.1); ac
 - ACA Mynydd Helygain (HRAR Tabl 6.4).
- 3.2.2 Cadarnhaodd CNC ei fod yn cytuno â chasgliad yr Ymgeisydd na fyddai unrhyw LSE mewn perthynas â'r safleoedd Ewropeaidd uchod [REP1-071].
- 3.2.3 Manylir ar y nodweddion cymwys a dealltwriaeth yr ExA o safbwyntiau'r Ymgeisydd a CNC mewn perthynas â'r safleoedd hyn yn Atodiad 1 Tablau A1.1 i A1.2 y RIES hwn.

3.3 Safleoedd y daeth yr Ymgeisydd i'r casgliad y byddai LSE ar rai neu bob un o'r nodweddion cymwys

- 3.3.1 Daeth yr Ymgeisydd i'r casgliad y byddai'r Datblygiad Arfaethedig yn debygol o arwain at effeithiau arwyddocaol, naill ai ar ei ben ei hun neu ar y cyd â chynlluniau neu brosiectau eraill, ar un neu fwy o nodweddion cymwys y saith safle sy'n weddill:
- ACA Afon Dyfrdwy a Llyn Tegid;
 - ACA Safleoedd Madfallod Dŵr Glannau Dyfrdwy a Bwcle;
 - AGA Aber Afon Mersi;
 - Safle Ramsar Aber Afon Mersi;
 - ACA Aber Afon Dyfrdwy;
 - AGA Aber Afon Dyfrdwy; a
 - Safle Ramsar Aber Afon Dyfrdwy.
- 3.3.2 Crynhoir y nodweddion cymwys a'r llwybrau LSE a sgriniwyd gan yr Ymgeisydd yn Nhabl 6.11 yr HRAR ac fe'u nodir yn Atodiad 1 Tablau A1.1 i A1.9 yr adroddiad hwn.
- 3.3.3 Yn ymateb [REP1-070] i ExQ1.11.1 [PD-014], cadarnhaodd NE ei fod yn fodlon ar gasgliadau'r Ymgeisydd mewn perthynas ag ACA Afon Dyfrdwy a Llyn Tegid. Ildiodd i CNC mewn perthynas ag ACA Safleoedd Madfallod Dŵr Glannau Dyfrdwy a Bwcle.
- 3.3.4 Nid oedd NE yn cytuno [REP1-070] â chasgliad sgrinio'r Ymgeisydd o ddim LSE mewn perthynas â'r posibilrwydd o aflonyddwch sŵn ar adar sy'n gaeafu (ar dir swyddogaethol gysylltiedig (FLL)) a oedd yn nodweddion o AGA a safle Ramsar Aber Afon Mersi ac AGA a safle Ramsar Aber Afon Dyfrdwy. Wedi hynny, cynhaliodd yr Ymgeisydd asesiad AEOI ar y llwybr effaith hwn yn yr HRAR wedi'i ddiweddarau a gyflwynwyd erbyn Terfyn Amser 2 [REP2-023].

- 3.3.5 Cadarnhaodd CNC ei fod yn cytuno â chasgliadau'r Ymgeisydd ynglŷn â'r holl safleoedd Ewropeaidd sy'n berthnasol i Gymru [REP1-071].
- 3.3.6 Nid yw'r llwybrau LSE posibl a sgriniwyd gan yr Ymgeisydd wedi cael eu herio gan unrhyw Bartïon â Buddiant. Fodd bynnag, heriwyd penderfyniad yr Ymgeisydd i eithrio rhai llwybrau effaith LSE gan Bartïon â Buddiant a holodd yr ExA ynglŷn â hynny yn ystod yr Archwiliad. Gweler Adran 3.4 y RIES hwn am ragor o fanylion.

3.4 Materion Archwiliad

- 3.4.1 Mae materion a godwyd yn ystod yr Archwiliad hyd yma neu y mae'r ExA yn ceisio eglurhad ohonynt, mewn perthynas ag LSE a hepgorwyd neu na ystyriwyd gan yr Ymgeisydd, yn cael eu crynhoi yn Nhabl 3.1 isod.

Tabl 3.1: Materion a godwyd yn ystod yr Archwiliad hyd yma gan yr ExA a Phartïon â Buddiant mewn perthynas â sgrinio Effeithiau Arwyddocaol Tebygol (LSE) (ar eu pen eu hunain ac ar y cyd) gan yr Ymgeisydd

Rhif Cyfeirnod	Llwybr effaith posibl	Materion Archwiliad
AGA ABER AFON MERSI, SAFLE RAMSAR ABER AFON MERSI, AGA ABER AFON DYFRDWY a SAFLE RAMSAR ABER AFON DYFRDWY		
1	Effeithiau ar dir swyddogaethol gysylltiedig (FLL) – effeithiau aflonyddwch sŵn ar adar sy'n gaeafu	<p>Datganodd paragraff 6.2.9 yr HRAR fod aflonyddwch sŵn yn debygol yn ystod adeiladu. Fodd bynnag, hepgorodd yr Ymgeisydd LSE o ganlyniad i aflonyddwch sŵn ar gyfer yr holl adar sy'n gaeafu.</p> <p>Nododd matricesau sgrinio'r Ymgeisydd y byddai'r Datblygiad Arfaethedig yn croesi Afon Dyfrdwy gan ddefnyddio dulliau croesi di-ffos a dywedodd y byddai'r gwahaniaeth uchder rhwng y cynefin fflat llaid a phyllau allanfa/mynedfa'r groesfan ddi-ffos arfaethedig yn lleihau'r posibilrwydd o aflonyddu. Dywedir bod nifer y rhywogaethau adar cymwys a gofnodwyd mewn mannau eraill ar hyd llwybr y Datblygiad Arfaethedig yn isel. Ni ystyrir aflonyddwch sŵn o weithgareddau adeiladu eraill.</p> <p>Dywedodd NE [RR-065] nad oedd yn cytuno â chasgliadau'r Ymgeisydd ynglŷn ag aflonyddwch sŵn ar adar sy'n gaeafu a cheisiodd fanylion ychwanegol am lefelau sŵn disgwylidiedig. Nid oedd yn cytuno â chyffredinolliad yr Ymgeisydd bod aflonyddu sylweddol yn annhebygol y tu hwnt i bellter o 300m a chynghorodd y dylid ystyried gwaith aflonyddu mawr (gan gynnwys gosod seilbyst a thorri hydrologig). Ailadroddodd NE y pwyntiau hyn yn REP1-070.</p> <p>Rhoddodd yr Ymgeisydd ragor o wybodaeth am lefelau sŵn yn REP1-042 ac yn yr HRAR wedi'i ddiweddarau [REP2-023]. Y lefelau sŵn rhagfynedig 10m oddi wth y technegau gosod di-ffos oedd 82dB. Byddai'r pyllau allanfa a mynedfa wedi'u lleoli o leiaf 16m o lannau'r afon ac ar wahaniaeth uchder o oddeutu 2m, a allai ddarparu rhywfaint o wanhad. Y lefelau sŵn rhagfynedig ar bellter o 16m oedd tua 78dB. Cydnabu'r Ymgeisydd y potensial i'r lefelau sŵn fynd yn fwy na'r trothwyon a allai ysgogi ymateb gan yr adar. Dywedodd y byddai'r gwaith croesfan arfaethedig yn fyrhoedlog ac y byddai unrhyw aflonyddwch am gyfnod dros</p>

Rhif Cyfeirnod	Llwybr effaith posibl	Materion Archwiliad
		<p>dro, a bod digon o gynefin amgen ar gael ar hyd Afon Dyfrdwy i gynnal adar a ddadleolir dros dro. Dyma oedd y sail i'r casgliad gwreiddiol o ddim LSE. Roedd yr Ymgeisydd wedi penderfynu cynnal asesiad AEOI ar y llwybr effaith hwn, ar y sail na ellid diystyru LSE yn ystod adeiladu heb fesurau lliniaru, a rhoddodd yr HRAR a gyflwynwyd erbyn Terfyn Amser 2 ddiweddariad yn unol â hynny.</p> <p>Wrth ymateb i ExQ2.11.3, dywedodd yr Ymgeisydd mai rhywogaethau cymwys AGA/safle Ramsar Aber Afon Mersi ac AGA/safle Ramsar Aber Afon Dyfrdwy yw hwyaid ac adar dŵr yn bennaf, y byddai amgylcheddau morydol a dyfrol yn gynefin swyddogaethol gysylltiedig iddynt [REP5-025]. Fel y manylir yn y matricesau sgrinio perthnasol yn yr HRAR, mae mwyafrif y Ffin Adeiladu Seilwaith Newydd yn cynnwys tir amaeth âr, glaswelltir gwael wedi'i led-wella a glaswelltir wedi'i wella, sy'n gynefinoedd anffafriol ar gyfer y rhywogaethau adar cymwys, ac felly ni ystyrir ei fod yn swyddogaethol gysylltiedig â'r safleoedd Ewropeaidd.</p> <p>O ran sut y cadarnhawyd maint y cynefin swyddogaethol, esboniodd yr Ymgeisydd ei fod wedi ystyried dewisiadau cynefin a chylchoedd oes rhywogaethau cymwys AGA/safle Ramsar Aber Afon Mersi ac AGA/safle Ramsar Aber Afon Dyfrdwy, presenoldeb cynefin sy'n addas i gynnal y rhywogaethau hyn; a chanlyniadau'r arolygon adar sylfaenol a gynhaliwyd i lywio'r asesiad o'r effaith ecolegol (Atodiad 9.8: Adroddiad Adar y Datganiad Amgylcheddol [REP4-112]).</p> <p>O ran y lefelau sŵn y mae'r Ymgeisydd o'r farn y byddent yn arwain at LSE neu AEOI, esboniodd yr Ymgeisydd fod adolygiad o lenyddiaeth wedi amlygu tystiolaeth o aflonyddu ar rydwyr ac adar dŵr ar lefelau sŵn sy'n fwy na 56dB, fel y manylir ym mharagraff 6.2.11 yr HRAR, ac y defnyddiwyd hyn fel y trothwy ar gyfer pennu'r potensial ar gyfer LSE. O ran AEOI, roedd yr Ymgeisydd o'r farn nad oedd yn briodol ystyried trothwy sŵn ar ei ben ei hun a bod nifer o ffactorau eraill yn llywio asesiad o'r fath. Mae'r rhain yn cynnwys nifer yr adar cymwys yr effeithir arnynt; hyd, agosrwydd a maint gofodol yr aflonyddwch sŵn; topograffeg; ac argaeledd adnodd/cynefin amgen i gynnal unrhyw adar a ddadleolir. Roedd yr holl ffactorau hyn wedi llywio'r asesiad a amlinellir yn Adran 7 yr HRAR a'r casgliad na fyddai'r Datblygiad Arfaethedig yn arwain at AEOI ar AGA/safle Ramsar Aber Afon Mersi ac AGA/safle Ramsar Aber Afon Dyfrdwy.</p>

Rhif Cyfeirnod	Llwybr effaith posibl	Materion Archwiliad
		<p>Wrth ymateb i ExQ2.11.4 ynglŷn â ph'un a fyddai unrhyw elfennau 'brawychus' amledd mawr yn cael eu defnyddio yn ystod adeiladu yn agos i'r safleoedd hyn, cadarnhaodd yr Ymgeisydd [REP5-025] nad oedd yn disgwyl y byddai unrhyw ddulliau neu fethodolegau adeiladu y gellid ystyried eu bod yn rhai amledd mawr neu frawychus. Byddai peiriannau ac offer rheolaidd a safonol yn cael eu defnyddio i adeiladu croesfan Afon Dyfrdwy. Ceir rhagor o sylwadau ar y mater hwn yn Nhabl 4.1 yr adroddiad hwn.</p>
2	Aflonyddu – ar y cyd	<p>Ymatebodd yr Ymgeisydd yn REP5-025 i ExQ2.11.6 ynglŷn â pha nodweddion cymwys ac i ba fath o aflonyddwch y mae ei gasgliad ynglŷn â'r potensial ar gyfer LSE sy'n deillio o effeithiau aflonyddu ar y cyd yn berthnasol iddynt. Dywedodd gan fod môr-wenoliaid cyffredin a phibyddion coesgoch yn unig wedi'u cofnodi mewn niferoedd o fwy nag 1% o'r dynodiad AGA/Dalen Wybodaeth Ramsar neu boblogaethau'r Arolwg Adar Gwlyptir (WeBS) (fel y nodir ym mharagraff 4.2.9 yr HRAR), byddai effeithiau aflonyddu ar y cyd yn berthnasol i'r ddwy rywogaeth gymwys hyn yn unig. Byddai aflonyddu'n deillio o weithgareddau adeiladu ac fe allai fod o ganlyniad i olau, sŵn, dirgryniad, a/neu bresenoldeb pobl. Cadarnhaodd yr Ymgeisydd fod yr holl lwybrau aflonyddu hyn wedi cael eu hystyried wrth ddod i gasgliadau'r asesiad ar y cyd.</p>
ACA ABER AFON DYFRDWY		
3	Effeithiau hydrolegol	<p>Mae Adran 6.2 yr HRAR yn nodi y gallai 'ffracio-allan'⁶ yn ystod gwaith drilio cyfeiriadol llorweddol (HDD) ar gyfer y groesfan ddi-ffos ladd rhywogaethau pysgod cymwys, ond mae'n datgan bod hyn yn annhebygol o ddigwydd o ystyried daeareg Afon Dyfrdwy. Mae'r HRAR yn hepgor LSE o effeithiau hydrolegol ar llywod pendoll y môr a llysywod pendoll yr afon yn ACA Aber Afon Dyfrdwy.</p> <p>Gofynnodd NRW [RR-066] i fesurau lliniaru gael eu cynnig i osgoi'r prif amser rhedeg ar gyfer rhywogaethau pysgod allweddol er mwyn sicrhau bod effeithiau o'r fath yn</p>

⁶ Lle mae mwd drilio'n cael ei ryddhau trwy graigwely wedi'i dorri i'r graig a'r tywod amgylchynol ac yn teithio tuag at yr wyneb.

Rhif Cyfeirnod	Llwybr effaith posibl	Materion Archwiliad
		<p>Ileiafsymiol, ac am eglurhad ynglŷn â'r amserlenni ar gyfer croesfannau di-ffos Afon Dyfrdwy.</p> <p>Wrth ymateb [REP5-044] i ExQ2.11.7, dywedodd CNC ei fod o'r farn bod y prif gyfnod mudol ar gyfer llisywod pendoll y môr rhwng mis Ebrill a mis Mehefin yn gyffredinol, gan rybuddio y gall hyn ddibynnu ar dymheredd y dŵr gan fod 12° yn dymheredd sbardun. Amlygodd fod llisywod pendoll yr afon (a nentydd) yn mudo rhwng mis Hydref a mis Mawrth, a bod silio'n digwydd ym mis Ebrill.</p> <p>Esboniodd yr Ymgeisydd [REP1-042] na ddisgwyliwyd i'r groesfan ddi-ffos gymryd mwy na phedair wythnos, fel y nodwyd yn yr HRAR. Fel yr amlinellir yn Adran 6.2 yr HRAR, roedd ymchwiliadau geodechnegol ar bob ochr i Afon Dyfrdwy wedi cael eu cynnal, y mae eu canlyniadau wedi'u cynnwys yn [APP-135]. Byddai'r groesfan yn ddigon dwfn (o leiaf 15m) i olygu y byddai trwch digonol o strata cydlynol caled, athreiddedd isel, ac felly byddai bentonit yn annhebygol o gael ei ffracio allan. Er bod ffracio allan yn annhebygol iawn o ganlyniad i lif llanw cyflym Afon Dyfrdwy, byddai bentonit yn cael ei wasgaru a'i wanhau'n gyflym o fewn y golofn ddŵr, gan ei atal rhag cael ei ddal yn lleol. Felly, roedd yr Ymgeisydd yn ystyried na fyddai LSE ar dderbynyddion, gan gynnwys rhywogaethau pysgod allweddol, o fewn Afon Dyfrdwy ac nad oedd angen i'r gwaith gael ei amseru'n dymhorol.</p> <p>Derbyniodd CNC [REP1-071] gasgliadau'r Ymgeisydd ar risg isel ffracio allan yn ystod y gwaith HDD. Amlygodd hefyd y gellid osgoi'r cyfnodau mudol brig o ganlyniad i'r amserlen 4 wythnos arfaethedig ar gyfer y gwaith.</p> <p>Cadarnhaodd CNC yn ei ymateb [REP5-044] i ExQ2.11.8 ei fod yn cytuno n fyddai LSE ar nodweddion llisywod pendoll y môr a'r afon yr ACA.</p>
ACA AFON DYFRDWY A LLYN TEGID		
4	Effeithiau ar ansawdd aer – ar y cyd	Amlygodd Tabl 6.10 HRAR y cais [APP-226] y potensial i Ddatblygiad Arall 14 gael effeithiau aflonyddu ar y cyd ar rywogaethau pysgod cymwys ACA Afon Dyfrdwy a Llyn Tegid ac effeithiau ar y cyd ar "nodweddion cymwys ACA Afon Dyfrdwy [sic] o ganlyniad i waddodion llwch".

Rhif Cyfeirnod	Llwybr effaith posibl	Materion Archwiliad
		<p>Esboniwyd wedi hynny ym mharagraff 19.9.1 yr Atodiad i'r Datganiad Amgylcheddol ar gyfer CR1 [CR1-124] fod Llywodraeth Cymru wedi cadarnhau na fyddai ID14 yn cael ei adeiladu ar yr un pryd â'r Datblygiad Arfaethedig. Yn unol â hynny, fe'i dilëwyd o'r rhestr o gynlluniau a phrosiectau a gynhwyswyd yn yr asesiad ar y cyd yn yr HRAR wedi'i ddiweddarau HRAR [CR1-121] a ddarparwyd gyda'r dogfennau cais am newid a dderbyniwyd.</p> <p>Amlygwyd y potensial ar gyfer effeithiau llwch ar y cyd hefyd yn Nhabl 6.10 yr HRAR o ran Datblygiad Arall 27. Wrth ymateb i ExQ2.11.9, cadarnhaodd yr Ymgeisydd fod y casgliad ynglŷn ag LSE ar gyfer effeithiau llwch ar y cyd ar ACA Afon Dyfrdwy a Llyn Tegid yn berthnasol i'r holl nodweddion cymwys (cynefinoedd a rhywogaethau) [REP5-025].</p>
	Dyfrgwn – effeithiau ar y cyd	<p>Amlygodd Tabl 6.10 HRAR y cais [APP-226] y potensial i Ddatblygiad Arall 27 gael effeithiau ar y cyd ar ddyfrgwn, ond ni nododd y llwybr effaith posibl yn benodol.</p> <p>Wrth ymateb i ExQ2.11.10, cadarnhaodd yr Ymgeisydd fod ei gasgliad, sef bod potensial ar gyfer LSE ar y cyd ar ddyfrgwn pe byddai'r ddau ddatblygiad yn cael eu hadeiladu ar yr un pryd, yn ymwneud â cholli cynefin (gan gynnwys cynefin swyddogaethol gysylltiedig) a marwoldeb o ganlyniad i gael eu dal mewn gwagleoedd [REP5-025].</p>
5	Dyfrgwn – effeithiau yn unigol ac ar y cyd	<p>Roedd y rhestr o gyrsiau dŵr lle y cofnodwyd arwyddion o ddyfrgwn a gynhwyswyd ym mharagraff 4.4.7 yr HRAR wedi'i ddiweddarau a gyflwynwyd erbyn Terfyn Amser 2 yn cynnwys lleoliadau ychwanegol o fewn ac yn agos i'r Ffin Adeiladu Seilwaith Newydd. Wrth ymateb i ExQ2.11.11, cadarnhaodd yr Ymgeisydd [REP5-025] fod effeithiau posibl ar ddyfrgwn ar hyd yr holl gyrsiau dŵr a arolygwyd, a lle y cofnodwyd arwyddion o ddyfrgwn mewn caeau, wedi cael eu hystyried yn yr HRAR. Roedd arwyddion mewn caeau yn cadarnhau presenoldeb dyfrgwn ar hyd y cyrsiau dŵr hyn ond ni chofnodwyd unrhyw fannau gorffwys. Dywedodd yr Ymgeisydd fod yr asesiad a gyflwynwyd yn nodyn tystiolaeth (b) i'r matrices sgrinio a gynhwyswyd yn Nhabl 6.2 yr HRAR yn ddilys o hyd, a ddaeth i'r casgliad fod potensial ar gyfer LSE ar ddyfrgwn mewn perthynas â cholli cynefin swyddogaethol gysylltiedig ar hyd Nant Gwepa a'r posibilrwydd y gallai dyfrgwn gael eu dal mewn gwagleoedd a grëwyd yn ystod adeiladu.</p>

Rhif Cyfeirnod	Llwybr effaith posibl	Materion Archwiliad
ACA SAFLEOEDD MADFALLOD DŴR GLANNAU DYFRDWY A BWCLE		
6	Effeithiau ar ansawdd aer	<p>Nid yw'r HRAR yn asesu effeithiau ar ansawdd aer o allyriadau cerbydol wrth bedwar gwriad ffordd o fewn 200m o ACA Safleoedd Madfallod Dŵr Glannau Dyfrdwy a Bwcle ar y sail y byddai gwriadau "dros dro ac yn fyrhoedlog" (Adran 6.2 yr HRAR).</p> <p>Wrth ymateb i ExQ2.11.12 ynglŷn ag am ba hyd y byddai'r gwriadau ffyrdd yn parhau a'r symudiadau cerbydau disgwylidig ar hyd y gwriadau hyn, cadarnhaodd yr Ymgeisydd y disgwylidig i'r ffyrdd fod ar gau am bythefnos ar y mwyaf [REP5-025]. Byddai cau Pinfold Lane a Shotton Lane dros dro yn arwain at ddargyfeirio traffig i'r B5125 Holywell Road, sef y llwybr sydd agosaf i'r ACA. Dywedodd yr Ymgeisydd na fyddai hyn yn fwy nag amrywiad dyddiol arferol disgwylidig o ran swm traffig.</p> <p>Cadarnhaodd CNC yn ei ymateb [REP5-044] i ExQ2.11.12 nad oedd o'r farn y byddai newidiadau posibl i ansawdd aer yn deillio o'r gwriadau ffyrdd arfaethedig yn debygol o gael LSE o ran amcanion cadwraeth yr ACA (madfallod dŵr cribog (GCN) a choetir llydanddail).</p>
7	GCN – colli cynefin yn uniongyrchol neu'n anuniongyrchol a/neu farwoldeb; aflonyddu; darnio cynefinoedd/ rhywogaethau	<p>Mae paragraff 4.3.6 yr HRAR yn datgan, o ganlyniad i newidiadau arfaethedig CR1, nad oedd pum corff dŵr ychwanegol a gynhwyswyd wedi bod yn destun asesiad Mynegai Addasrwydd Cynefin (HSI) ar gyfer GCN gan eu bod wedi cael eu hamlygu y tu allan i'r cyfnodau arolygu tymhorol. Gofynnodd ExQ2.11.13 i'r Ymgeisydd gadarnhau'r ymagwedd a ddefnyddiwyd at asesu cyrff dŵr nad oeddent yn destun asesiad HSI, gan gynnwys y pum corff dŵr ychwanegol a gynhwyswyd o ganlyniad i CR1.</p> <p>Ymatebodd yr Ymgeisydd yn REP5-025. Esboniodd, yn Lloegr, y byddai effeithiau ar y cyrff dŵr hyn nad oeddent yn destun asesiad HSI ac a oedd wedi'u lleoli y tu allan i 'barth perygl coch' NE (sy'n cynnwys poblogaethau GCN o bwysigrwydd rhanbarthol, cenedlaethol neu ryngwladol) yn dod o dan Drwydded Lefel Ranbarthol (DLL) (mesur D-BD-044 y REAC [REP6-006]).</p> <p>Cadarnhaodd fod asesiad rhagofalus yn cael ei gymhwyso i gyrff dŵr nad oeddent yn destun asesiad HSI wedi'u lleoli o fewn y parth perygl coch yn Lloegr neu wedi'u lleoli yng Nghymru (oni bai eu bod wedi'u hepgor o ganlyniad i amodau amgylcheddol anaddas ar</p>

Rhif Cyfeirnod	Llwybr effaith posibl	Materion Archwiliad
		<p>adeg yr arolwg neu wedi’u gwahanu oddi wrth y Datblygiad Arfaethedig gan rwystr mawr rhag gwasgaru), a thybir bod GCN yn bresennol.</p> <p>Amlygodd yr Ymgeisydd mai dim ond 80 o’r 222 o gyrff dŵr ar draws yr ardal arolygu (paragraff 4.3.6 yr HRAR) sydd wedi’u lleoli yng Nghymru a dim ond cyfran o’r rhain sydd o fewn ACA Safleoedd Madfallod Dŵr Glannau Dyfrdwy a Bwcle ac ACA Mynydd Helygain neu o fewn tua 500m o’r ACAau (ac felly’n swyddogaethol gysylltiedig ac yn berthnasol i’r HRA). Amlygodd yr Ymgeisydd hefyd fod y pum corff dŵr ychwanegol a gynhwyswyd yn rhan o CR1 wedi’u lleoli ym mhen gogledd-ddwyreiniol y Datblygiad Arfaethedig yn Lloegr ac nad ydynt yn swyddogaethol gysylltiedig â’r naill ACA na’r llall.</p>
8	GCN - arolygon	<p>Nododd CNC yn ei sylw ysgrifenedig a’i ymateb i ExQ1.4.8 [REP1-071] ei fod o’r farn bod yr arolygon GCN wedi cael eu cynnal yn unol â chanllawiau cyhoeddiedig ac yn gymesur, ac felly eu bod yn foddhaol at ddibenion llywio egwyddorion adeiladu a gweithredu’r Datblygiad Arfaethedig. Fodd bynnag, heriodd b’un a oedd yr asesiadau wedi ystyried amodau glawiad isel yn ystod y Gwanwyn 2022 (a allai effeithio ar fridio); a ph’un a ystyriwyd y cynefin chwilota am fwyd ar gyfer GCN o fewn pyllau wedi’u lleoli yn Lloegr, a allai chwilota am fwyd o fewn tir yng Nghymru.</p> <p>Roedd yr Ymgeisydd o’r farn [REP2-038] ei fod wedi ystyried y materion hyn yn briodol yn yr asesiad a thrwy’r mesurau lliniaru a gynhwyswyd yn y Cynllun Rheoli Amgylcheddol Adeiladu Amlinellol (OCEMP) [REP6-008]. Esboniodd mai dim ond saith o’r pyllau lle y cynhaliwyd arolygon presenoldeb/absenoldeb yng Nghymru y cofnodwyd eu bod yn sych yn ystod yr arolygon. O’r rhain, cofnodwyd presenoldeb GCN mewn un yn ystod y pum arolwg cychwynnol; fe’i cofnodwyd yn sych ar y chweched ymweliad arolygu. Roedd yr holl gyrff dŵr y cofnodwyd eu bod yn sych wedi hynny wedi bod yn destun un arolwg llwyddiannus o leiaf, a chofnodwyd eu bod yn sych ar yr ail, y trydydd neu’r pedwerydd ymweliad arolygu. Er hynny, byddai’r mesurau lliniaru arfaethedig a Datganiad Dulliau Gweithio Rhagofalus (PWMS) (fel y’i hamlinellir yn yr OCEMP) i ddiogelu GCN yn ystod adeiladu yn cael eu cymhwyso ar draws y Datblygiad Arfaethedig cyfan. Byddai arolygon cyn-adeiladu’n cael eu cwblhau i lywio gofynion trwyddedu a lliniaru, fel y sicrhair gan dDCO R12 [REP4-008].</p>

Rhif Cyfeirnod	Llwybr effaith posibl	Materion Archwiliad
		<p>Cytunodd yr Ymgeisydd ei bod yn debygol bod cynefin chwilota daearol GCN yn Lloegr yn ymestyn i Gymru ac ystyriodd y byddai'r mesurau lliniaru arfaethedig yn diogelu GCN yn ystod adeiladu.</p> <p>Ceir rhagor o sylwadau ar y mater hwn yn Nhabl 4.1 yr adroddiad hwn.</p>

3.5 Crynodeb o ganlyniadau'r Archwiliad mewn perthynas â sgrinio

- 3.5.1 Daeth yr Ymgeisydd i'r casgliad fod LSE ar saith safle Ewropeaidd y mae'r Deyrnas Unedig yn gyfrifol amdanynt. Aseswyd y safleoedd Ewropeaidd a'r nodweddion cymwys hyn ymhellach gan yr Ymgeisydd i bennu a allent fod yn destun AEOI o'r Datblygiad Arfaethedig, naill ai'n unigol neu ar y cyd â chynlluniau a phrosiectau eraill; gweler Adran 4 yr adroddiad hwn am ragor o fanylion.
- 3.5.2 Cytunodd yr Ymgeisydd yn ystod yr Archwiliad y dylai LSE gael ei sgrinio hefyd ar gyfer effeithiau aflonyddwch sŵn posibl ar adar sy'n gaeafu sy'n defnyddio tir swyddogaethol gysylltiedig (FLL) sy'n gysylltiedig ag AGA a safle Ramsar Aber Afon Mersi ac AGA a safle Ramsar Aber Afon Dyfrdwy. Ystyrir y mater hwn ymhellach yn Adran 4 yr adroddiad hwn.
- 3.5.3 Amlinellir dealltwriaeth yr ExA o safbwyntiau presennol yr Ymgeisydd, NE a CNC mewn perthynas ag LSE yn Atodiad 1 Tablau A1.1 i A1.9 yr adroddiad hwn.

4 EFFEITHIAU NIWEIDIOL AR GYFANRWYDD

4.1 Amcanion Cadwraeth

- 4.1.1 Cynhwyswyd yr amcanion cadwraeth ar gyfer yr holl safleoedd Ewropeaidd yr amlygodd yr Ymgeisydd LSE arnynt ar adeg y cais DCO yn Atodiad A HRAR yr Ymgeisydd. Mae Tabl 5.2 yr HRAR yn manylu ar y bygythiadau hysbys i'r safleoedd hyn a'r pwysau hysbys arnynt.
- 4.1.2 Cadarnhaodd NE [REP1-070] a CNC [REP1-071], wrth ymateb i ExQ1.11.2, eu bod yn fodlon bod yr amcanion cadwraeth ar gyfer y safleoedd Ewropeaidd fel y'u hamlinellir yn Atodiad A yr HRAR yn gywir.
- 4.1.3 Wrth ymateb i ExQ2.11.16 ynglŷn â statws cadwraeth presennol y safleoedd Ewropeaidd y daeth yr HRA i'r casgliad fod LSE arnynt, dywedodd yr Ymgeisydd na wyddys bod y wybodaeth hon ar gael yn gyhoeddus [REP5-025]. Esboniodd fod y wybodaeth am amcanion cadwraeth a gyflwynwyd yn Atodiad A yr HRAR yn dod o'r dogfennau Amcanion Cadwraeth (Lloegr) neu Gynllun Rheoli Craidd (Cymru) ar gyfer pob safle Ewropeaidd.

4.2 Ymagwedd yr Ymgeisydd

- 4.2.1 Aseswyd y safleoedd Ewropeaidd a'r nodweddion cymwys yr amlygwyd LSE arnynt ymhellach gan yr Ymgeisydd i bennu a allent fod yn destun AEOI o'r Datblygiad Arfaethedig, naill ai'n unigol neu ar y cyd. Crynhoir canlyniadau asesiad yr Ymgeisydd o effeithiau ar gyfanrwydd yn Adran 7 yr HRAR.

Mesurau lliniaru

- 4.2.2 Amlygir mesurau lliniaru arfaethedig yn Adran 7 yr HRAR. Cadarnhaodd Adran 7.1 y byddai Cynllun Rheoli Amgylcheddol Adeiladu (CEMP) yn cael ei weithredu yn ystod adeiladu, a fyddai'n cael ei lywio gan y mesurau a fanylir yn y REAC [REP6-006] a'r OCEMP [REP6-008].
- 4.2.3 Manylir ar fesurau lliniaru penodol ychwanegol drwy gydol Adran 7 ac maen nhw'n cynnwys mesurau arfer gorau mewn perthynas ag atal llwch a llygredd, trwyddedau perthnasol ar gyfer rhywogaethau a warchodir, mesurau i atal dyfrgwn rhag cael eu dal, dylunio goleuadau'n briodol, a phlannu coetir cyfnewid. Mae'r mesurau hyn wedi cael eu hystyried yn asesiad yr Ymgeisydd o effeithiau ar gyfanrwydd.
- 4.2.4 Wrth ymateb i ExQ1.11.5 [PD-014], amlygodd yr Ymgeisydd y canllawiau a ddefnyddiodd, sef canllawiau'r Sefydliad Rheoli Ansawdd Aer (IAQM) yn bennaf, i ddatblygu mesurau lliniaru priodol ar gyfer rheoli llwch adeiladu [REP1-044].
- 4.2.5 O ran effeithiau ar y cyd, cadarnhaodd Adran 7.8 yr HRAR fod Datblygiadau Eraill 1a, 19, 21 a 27 yn cynnig eu mesurau lliniaru eu hunain (fel y manylir yn Atodiad B yr HRAR). Nodir bod y Datblygiadau Eraill sy'n

weddill ar y cam cyn-ymgeisio a thbyir y byddent yn sicrhau mesurau lliniaru priodol i osgoi effeithiau niweidiol.

4.3 AEOI o'r Datblygiad Arfaethedig yn unigol neu ar y cyd

- 4.3.1 Cyflwynir asesiad yr Ymgeisydd o effeithiau'r Datblygiad Arfaethedig yn unigol ac ar y cyd â chynlluniau neu brosiectau eraill yn Adrannau 7.2 i 7.7 ac Adran 7.8 (a gefnogir gan Atodiad B) yr HRAR, yn ôl eu trefn. Daeth i'r casgliad na fyddai'r Datblygiad Arfaethedig yn cael effaith niweidiol ar gyfanrwydd unrhyw un o'r safleoedd a'r nodweddion Ewropeaidd a aseswyd.
- 4.3.2 Cadarnhaodd NE [RR-065] ei fod yn fodlon y byddai effeithiau goleuadau'r cam adeiladu yn annhebygol o arwain at AEOI ar AGA Aber Afon Dyfrdwy, safle Ramsar Aber Afon Dyfrdwy, AGA Aber Afon Mersi a safle Ramsar Aber Afon Mersi. Dywedodd yn REP1-070 wrth ymateb i ExQ1.4.15 [PD-014] ei fod yn fodlon bod y mesurau lliniaru arfaethedig ar gyfer aflonyddwch goleuadau yn ddigonol, ond nad oedd yn glir o hyd ynglŷn â mesurau lliniaru ar gyfer aflonyddwch sŵn. Gofynnodd i ystyriaeth ychwanegol gael ei rhoi i amseru gwaith a fyddai'n agos i niferoedd sylweddol o adar AGA a chadarnhau amseriad gwaith yn agos i Afon Dyfrdwy. Cadarnhaodd ei fod yn fodlon â'r mesurau yn yr OCEMP [REP6-008] i gyfyngu ar symudiadau personél o amgylch yr ardaloedd gweithio ac felly osgoi effeithiau aflonyddu ar adar.
- 4.3.3 Cadarnhaodd CNC ei fod yn cytuno â chasgliadau'r Ymgeisydd na fyddai AEOI ar unrhyw safle Ewropeaidd [REP1-071]. Cynghorodd ei fod wedi adolygu'r brig cymedrig 5 mlynedd ar gyfer pibyddion coesgoch a gofnodwyd yn AGA Aber Afon Dyfrdwy ar ddynodiad y safle ac yn ôl y data mwyaf diweddar er mwyn llywio asesiad o gyflwr y pibyddion coesgoch sy'n pasio heibio ac yn gaeafu. Daeth i'r casgliad fod y boblogaeth pibyddion coesgoch mewn cyflwr ffafriol. Yn seiliedig ar hyn a natur yr aflonyddwch fel y'i disgrifiwyd gan yr Ymgeisydd, daeth CNC i'r casgliad fod y Datblygiad Arfaethedig yn annhebygol o gael effaith arwyddocaol ar AGA Aber Afon Dyfrdwy.
- 4.3.4 Wedi hynny, datganodd CNC yn ei ymateb i ExQ2 na allai gytuno eto â dim AEOI ar ACA Safleoedd Madfallod Dŵr Glannau Dyfrdwy a Bwcle [REP5-044].
- 4.3.5 Mae Tabl 4.1 isod yn amlygu lle mae ymagwedd asesu'r Ymgeisydd neu ei gasgliad o ddim AEOI wedi cael eu herio gan Partion â Buddiant yn ystod yr Archwiliad. Mae Tabl 4.1 yn adlewyrchu dealltwriaeth yr ExA o AEOI ar yr adeg adrodd ac yn nodi lle y ceisir eglurhad ynglŷn â safbwyntiau Partion â Buddiant.

Tabl 4.1: Materion a godwyd yn ystod yr Archwiliad hyd yma gan yr ExA a Phartïon â Buddiant mewn perthynas ag asesiad yr Ymgeisydd o effeithiau ar gyfanrwydd (ar eu pen eu hunain ac ar y cyd)

Rhif Cyfeirnod	Llwybr effaith posibl	Manylion y mater	Sylw/ cwestiwn gan yr ExA
AGA ABER AFON MERSI, SAFLE RAMSAR ABER AFON MERSI, AGA ABER AFON DYFRDWY a SAFLE RAMSAR ABER AFON DYFRDWY			
1	Effeithiau ar dir swyddogaethol gysylltiedig (FLL) – effeithiau aflonyddwch sŵn ar adar sy'n gaeafu	<p>Darparodd yr Ymgeisydd wybodaeth am fesurau lliniaru sŵn arfaethedig yn REP1-042 ac yn yr HRAR wedi'i ddiweddarau a gyflwynwyd erbyn Terfyn Amser 2 [REP2-023]. Nododd fod mesurau lliniaru arfaethedig yn cynnwys dulliau sgrinio sŵn dros dro, rhwystrau acwstig a rheolaeth, fel palisiau (fel yr amlinellir ym mesurau D-NV-005 a D-NV-009 y REAC [REP6-006], a sicrheir gan dDCO [REP4-008] R4 (Dyluniad y Cynllun) ac R5 (CEMP). Mae mesur D-NV-009 y REAC, a sicrheir gan dDCO R5, yn nodi y dylai dulliau sgrinio sŵn gyflawni gwanhad 10dB o leiaf, gan arwain at leihau lefel sŵn tua 68dB.</p> <p>Byddai mesurau lliniaru sŵn yn cael eu manylu mewn Cynllun Rheoli Sŵn a Dirgryniad (fel yr amlinellir ym mesur D-NV-001 y REAC), i'w gynnwys yn y CEMP, a sicrheir gan dDCO R5. Amlygodd yr Ymgeisydd fod y mesurau lliniaru arfaethedig wedi'u seilio ar y senario achos gwaethaf. Byddai adolygiad (prawf sensitifrwydd HRA) yn cael ei gynnal gan ecolegydd yn ystod neu ar ôl y cam dylunio manwl i bennu'r angen am fesurau lliniaru sŵn, yn dibynnu ar agosrwydd y gwaith a'r lefelau sŵn a fyddai'n cael eu cynhyrchu (yn unol â mesur D-BD-067 y REAC, a sicrheir gan dDCO R5).</p> <p>O ran pryderon NE [RR-065, REP1-070] ynglŷn â datganiad yr Ymgeisydd yn yr HRAR bod aflonyddwch</p>	Mater wedi'i ddatrys.

		<p>sylweddol yn annhebygol y tu hwnt i bellter o 300m, ymatebodd yr Ymgeisydd drwy ddweud nad oedd yn disgwyl y byddai angen gwneud gwaith gosod seilbyst neu dorri hydrolig neu unrhyw weithgareddau eraill sy'n creu llawer o aflonyddwch. Byddai hynny'n cael ei bennu'n derfynol yn ystod y cam dylunio manwl trwy'r prawf sensitifrwydd HRA. Ar ôl gweithredu mesurau lliniaru a chan ystyried y cyfnod byr ac argaeledd cynefin amgen, roedd yr Ymgeisydd o'r farn na fyddai AEOI ar yr AGAau a'r safleoedd Ramsar.</p> <p>Cyflwynodd yr Ymgeisydd dSoCG wedi'i ddiweddarau [REP4-246] gydag NE erbyn Terfyn Amser 4, lle y cydnabu'r Ymgeisydd gyngor NE i ystyried gwaith sy'n creu llawer o aflonyddwch, gan gynnwys gwaith sy'n cynnwys gosod seilbyst a thorri hydrolig sy'n achosi aflonyddwch sŵn y tu hwnt i 300m, er yr ailadroddodd nad oedd yn disgwyl y byddai angen gwaith o'r fath. Cadarnhaodd y dSoCG y byddai unrhyw ofyniad am waith sy'n achosi llawer o aflonyddwch yn cael ei bennu yn ystod y cam dylunio manwl ac y byddai prawf sensitifrwydd o'r HRA yn cael ei gynnal, fel y disgrifir yn yr OCEMP [REP6-008] ac a sicheir gan y dDCO [REP4-008].</p> <p>Dywedodd yr Ymgeisydd yn y dSoCG y disgwyliwyd i groesfan Afon Dyfrdwy gymryd hyd at bedair wythnos ac y byddai unrhyw aflonyddwch sŵn ar adar sy'n gaeafu yn para am gyfnod dros dro, a bod digon o gynefin amgen ar gael ar hyd Afon Dyfrdwy i gynnal adar wedi'u dadleoli dros dro pe byddai hyn yn digwydd. Disgrifiodd y mesurau lliniaru arfaethedig a amlygwyd yn yr HRAR wedi'i ddiweddarau a gyflwynwyd erbyn Terfyn Amser 2 [REP2-023] ac a fanylir yn yr OCEMP [REP6-008].</p>	
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		<p>Mae'r dSoCG yn dangos bod cytundeb ar y mater hwn a dywedir bod NE wedi cadarnhau, mewn gohebiaeth e-bost ddyddiedig 5 Mehefin 2023, ei fod yn cytuno â'r mater hwn ar ôl adolygu'r wybodaeth ychwanegol a ddarparwyd yn yr HRAR wedi'i ddiweddarau.</p> <p>Yn ymateb NE [REP5-043] i ExQ2.11.5, dywedodd ei fod wedi mynegi pryderon yn flaenorol ynglŷn ag effeithiau aflonyddwch sŵn ar adar sy'n gysylltiedig ag AGA a safle Ramsar Aber Afon Dyfrdwy ac AGA/safle Ramsar Aber Afon Mersi ac LSE ar bibyddion coesgoch o ganlyniad i agosrwydd y Datblygiad Arfaethedig i'r ardaloedd lle y cofnodwyd niferoedd sylweddol o bibyddion coesgoch yn yr arolygon adar sy'n gaeafu. Nododd fod yr asesiadau LSE ac AEOI wedi cael eu diweddarau yn yr HRAR (Fersiwn C, mis Mai 2023) mewn perthynas ag aflonyddwch sŵn a'i fod o'r farn bod mesurau lliniaru addas wedi cael eu cynnig i gyfyngu ar aflonyddu ar adar yn ystod y gwaith ar groesfan Afon Dyfrdwy. Cadarnhaodd ei fod yn fodlon bod y wybodaeth yn yr HRAR wedi'i ddiweddarau yn mynd i'r afael â'i sylwadau blaenorol.</p>	
ACA SAFLEOEDD MADFALLOD DŴR GLANNAU DYFRDWY A BWCLE			
2	GCN – arolygon	<p>Amlygodd CNC yn y dSoCG a gyflwynwyd erbyn Terfyn Amser 1 [REP1-023] nad oedd yn ymddangos bod y pellteroedd gwasgaru diwygiedig ar gyfer GCN, fel y'u hamlinellir yng nghanllawiau 2022 y Cyd-bwyllgor Cadwraeth Natur (JNCC) wedi'u diweddarau, yn cael eu hadlewyrchu yn yr HRAR, a bod y mater hwn yn destun trafodaeth ar hyn o bryd. Dangosodd y dSoCG â CNC a gyflwynwyd erbyn Terfyn Amser 3 (REP3-026) fod y mater hwn yn parhau i gael ei drafod. Ni chyflwynwyd</p>	<p>Mater heb ei ddatrys.</p> <p><u>Mae'r ExA yn gofyn am ddiweddariad ar y mater hwn gan yr Ymgeisydd a CNC erbyn Terfyn Amser 7, a datganiad gan yr Ymgeisydd ynghylch pryd y bydd y HRAR wedi'i</u></p>

		<p>dSoCG â CNC erbyn Terfyn Amser 4 na Therfyn Amser 5.</p> <p>Wrth ymateb i ExQ2.11.14 a oedd yn gofyn am ddiweddariad ar y sefyllfa, esboniodd yr Ymgeisydd [REP5-025] y cytunwyd mewn cyfarfod â CNC ar 29 Mehefin 2023 nad oedd angen arolygon GCN ychwanegol. Cytunwyd hefyd, er mwyn sicrhau bod yr HRA yn adlewyrchu ac yn cydnabod canllawiau diwygiedig y JNCC, y byddai'r HRAR yn cael ei ddiweddarau cyn diwedd yr Archwiliad i ystyried pyllau o fewn 1.6km o'r ACA fel rhai swyddogaethol gysylltiedig. Dywedodd yr Ymgeisydd y cytunwyd bod y casgliad ynghylch dim AEOI yn yr HRAR yn annhebygol o newid ac y byddai CNC yn cadarnhau ei safbwynt pan fyddai wedi adolygu'r HRAR wedi'i ddiweddarau.</p> <p>Cadarnhaodd CNC yn ei ymateb [REP5-044] i ExQ2.11.15 ei fod o'r farn bod yr arolygon GCN yn briodol ac yn gymesur, a'i fod yn fodlon ag ymagwedd arfaethedig yr Ymgeisydd at liniaru fel yr amlinellir yn y Datganiad Amgylcheddol, yr OCEMP a'r Cynllun Rheoli Tirwedd ac Ecolegol Amlinellol (OLEMP) [APP-229] ac a sicrheir gan Ofynion 5 ac 11 y dDCO [REP4-008]. Cydnabu bod yr Ymgeisydd wedi mynegi yng nghyfarfod mis Mehefin 2023 y byddai'r HRAR yn cael ei ddiweddarau i adlewyrchu cyngor diwygiedig y JNCC. Fodd bynnag, dywedodd na allai gynghori ynglŷn â chasgliad o ddim AEOI ar yr ACA ar hyn o bryd nes bod y wybodaeth yn cael ei darparu. Byddai'n trafod y mater hwn mewn cyfarfod arall â'r Ymgeisydd ar 13 Gorffennaf 2023.</p> <p>Mae'r SoCGd rhwng yr Ymgeisydd a CNC a gyflwynwyd yn D6 [REP6-028] yn cofnodi, mewn cyfarfod gyda CNC ar 12 Gorffennaf 2023, fod yr Ymgeisydd wedi egluro sut</p>	<p><u>ddiweddarau yn cael ei gyflwyno.</u></p>
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Adroddiad ar y Goblygiadau i Safleoedd Ewropeaidd ar gyfer
Piblinell Carbon Deuocsid Arfaethedig HyNet

		<p>yr oedd wedi mynd i'r afael ag ystyriaeth o bellter gwasgaru 1.6km GCN o fewn yr HRA. Cytunodd i roi golwg ymlaen llaw i CNC o'r gwelliannau i'r HRAR, gyda'r nod y byddai'r mater hwn yn cael ei gytuno. Mae eitem 3.3.14 yn Nhabl 3-3 yn dangos ei statws fel y cytunwyd arno, er bod y drafodaeth ochr yn ochr â hi yn dal i adlewyrchu pryderon cychwynol CNC ac nid yw'n darparu sylwebaeth ychwanegol ar gytundeb o'r fath.</p>	
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4.4 Crynodeb o ganlyniadau'r Archwiliad mewn perthynas ag effeithiau niweidiol ar gyfanrwydd

- 4.4.1 Heriwyd casgliadau'r Ymgeisydd ynglŷn ag effeithiau ar gyfanrwydd yn ystod yr Archwiliad. Hyd yma, mae un mater, a amlygir yn Nhabl 4.1 yr adroddiad hwn, heb ei ddatrys o hyd; nid yw'r Ymgeisydd a CNC wedi cytuno eto na fyddai AEOI ar ACA Safleoedd Madfallod Dŵr Glannau Dyfrdwy a Bwcle.
- 4.4.2 Amlinellir dealltwriaeth yr ExA o safbwyntiau presennol yr Ymgeisydd a Chyrff Cadwraeth Natur Priodol (ANCB) mewn perthynas ag AEOI yn Nhablau A1.1 i A1.9 Atodiad 1 yr adroddiad hwn.

ATODIAD 1: CRYNODEB O GASGLIADAU ASESIADAU SGRINIO AC AEOI

Mae'r tablau yn yr Atodiad hwn yn crynhoi dealltwriaeth yr ExA o ymarfer sgrinio'r Ymgeisydd a'i asesiad o effeithiau ar gyfanrwydd, a chytundeb ag ANCB ar adeg cyhoeddi'r Adroddiad hwn, ar gyfer yr holl safleoedd Ewropeaidd a aseswyd.

Allwedd:

- A = Adeiladu
- G = Gweithredu
- X = dim LSE/AEOI
- ✓ = LSE/AEOI

Tabl A1.1: ACA Mynydd Helygain

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC? ⁷	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC? ⁹
Glaswelltiroedd metelaidd <i>Violetalia calaminariae</i> / Rhostiroedd sych Ewropeaidd / Glaswelltiroedd sych lled-naturiol a chyfansoddiadau prysgdir ar swbstradau calchaid (<i>Festuco-Brometalia</i>) / Dolydd <i>Molinia</i> ar briddoedd calchaid, mawnog neu lawn clai-silt (<i>Molinion caeruleae</i>)	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	Oes [REP1-071]	dd/b	Oes [REP1-071]
	Darnio cynefinoedd/rhywogaethau	X	Oes [REP1-071]	dd/b	Oes [REP1-071]
	Effeithiau hydrolegol	X	Oes [REP1-071]	dd/b	Oes [REP1-071]
	Effeithiau ar ansawdd aer	X	Oes [REP1-071]	dd/b	Oes [REP1-071]
Madfallod dŵr cribog	Colli cynefin yn uniongyrchol ac yn	X	Oes [REP1-071]	dd/b	Oes [REP1-071]

⁷ Mae hyn yn berthnasol i effeithiau o'r Datblygiad Arfaethedig yn unigol ac ar y cyd, oni nodir fel arall.

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC? ⁷	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC? ⁹
	anuniongyrchol a/neu farwoldeb				
	Aflonyddu	X	Oes [REP1- 071]	dd/b	Oes [REP1-071]
	Darnio cynefinoedd/ rhywogaethau	X	Oes [REP1- 071]	dd/b	Oes [REP1-071]
	Effeithiau hydrolegol	X	Oes [REP1- 071]	dd/b	Oes [REP1-071]

Tabl A1.2: ACA Coedwigoedd Dyffryn Alun

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC? ⁸	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC? ⁹
Coedwigoedd <i>Tilio-Acerion</i> o lethrau, sgrïau a cheunentydd / Glaswelltiroedd sych lled-naturiol a chyfansoddiadau prysgdir ar swbstradau calchaid (<i>Festuco-Brometalia</i>) / Coedwigoedd llifwaddodol sy'n cynnwys <i>Alnus glutinosa</i> a <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	Oes [REP1-071]	dd/b	Oes [REP1-071]
	Darnio cynefinoedd/rhywogaethau	X	Oes [REP1-071]	dd/b	Oes [REP1-071]
	Effeithiau hydrolegol	X	Oes [REP1-071]	dd/b	Oes [REP1-071]
	Effeithiau ar ansawdd aer	X	Oes [REP1-071]	dd/b	Oes [REP1-071]

⁸ Mae hyn yn berthnasol i effeithiau o'r Datblygiad Arfaethedig yn unigol ac ar y cyd, oni nodir fel arall.

Tabl A1.3: ACA Afon Dyfrdwy a Llyn Tegid

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC ac NE? ⁹	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC ac NE? ⁹
Cyrsiau dŵr ar lefel wastadedd i fynydd sy'n cynnwys llystyfiant <i>Ranunculus fluitantis</i> a <i>Callitriche-Batrachion</i> / Llyriad-y-dŵr arnofiol	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	NE Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Darnio cynefinoedd/rhywogaethau	X	NE Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Effeithiau hydrolegol	X	NE Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Effeithiau ar ansawdd aer (dyddodion llwch)	✓	NE Oes [REP1-070] CNC - Oes [REP1-071]	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]

⁹ Mae hyn yn berthnasol i effeithiau o'r Datblygiad Arfaethedig yn unigol ac ar y cyd, oni nodir fel arall.

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC ac NE? ⁹	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC ac NE? ⁹
Eogiaid / Llysywod pendoll y môr / Llysywod pendoll y nant / Llysywod pendoll yr afon / Bawd y melinydd	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	NE Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Aflonyddu	✓ ¹⁰	NE Oes [REP1-070] CNC - Oes [REP1-071]	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Darnio cynefinoedd/rhywogaethau	✓	NE Oes [REP1-070] CNC - Oes [REP1-071]	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Effeithiau hydrolegol	X	NE Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Effeithiau ar ansawdd aer (dyddodion llwch)	✓	NE Oes [REP1-070]	X	NE - Oes [REP1-070]

¹⁰ O oleuadau o amgylch gwaith gosod croesfan ddi-ffos Afon Dyfrdwy.

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC ac NE? ⁹	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC ac NE? ⁹
			CNC - Oes [REP1-071]		CNC - Oes [REP1-071]
Dyfrgwn	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	✓ ¹¹	NE Oes [REP1-070] CNC - Oes [REP1-071]	X	NE Oes [REP1-070] CNC - Oes [REP1-071]
	Aflonyddu	X	NE Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Darnio cynefinoedd/rhywogaethau	X	NE Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Effeithiau hydrolegol	X	NE Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]

¹¹ Colli cynefin swyddogaethol gysylltiedig (ar hyd Nant Gweptra) a marw o ganlyniad i gael eu dal mewn gwagleoedd.

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC ac NE? ⁹	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC ac NE? ⁹
	Effeithiau ar ansawdd aer (dyddodion llwch)	✓	NE Oes [REP1-070] CNC - Oes [REP1-071]	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]

Tabl A1.4: ACA Safleoedd Madfallod Dŵr Glannau Dyfrdwy a Bwcle

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC? ¹²	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC? ⁹
Hen goedwigoedd derw mes di-goes sy'n cynnwys <i>Ilex</i> a <i>Blechnum</i> yn yr Ynysoedd Prydeinig	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	✓	Oes [REP1-071]	X	Oes [REP1-071]
	Darnio cynefinoedd/rhywogaethau	X	Oes [REP1-071]	dd/b	Oes [REP1-071]

¹² Mae hyn yn berthnasol i effeithiau o'r Datblygiad Arfaethedig yn unigol ac ar y cyd, oni nodir fel arall.

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC? ¹²	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb â CNC? ⁹
	Effeithiau hydrolegol	✓ ¹³	Oes [REP1-071]	X	Oes [REP1-071]
	Effeithiau ar ansawdd aer	X	Oes [REP1-071]	dd/b	Oes [REP1-071]
Madfallod dŵr cribog	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	✓	Oes [REP1-071]	X	Nac oes [REP5-044]
	Aflonyddu	✓	Oes [REP1-071]	X	Nac oes [REP5-044]
	Darnio cynefinoedd/rhywogaethau	✓	Oes [REP1-071]	X	Oes [REP1-071]
	Effeithiau hydrolegol	X	Oes [REP1-071]	dd/b	Oes [REP1-071]

¹³ O ganlyniad i weithio o fewn ac o amgylch Nant/Ceunant Gwepra.

Tabl A1.5: AGA Aber Afon Mersi

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE? ¹⁴	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE? ⁹
Cwtiaid aur / Hwyaid yr eithin (nad ydynt yn bridio) / Corhwyaid Ewrasiaidd (nad ydynt yn bridio) / Hwyaid llosthafain gogleddol (nad ydynt yn bridio) / Cwtiaid aur Ewropeaidd (nad ydynt yn bridio) /	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	Oes [REP1-070]	dd/b	Oes [REP1-070]
	Aflonyddwch sŵn ar adar sy'n defnyddio FLL	X (yn unigol) ✓ (ar y cyd)	Nac oes [RR-065]	dd/b (yn unigol) X (ar y cyd)	Oes [REP5-043]
	Aflonyddu o ganlyniad i oleuadau	X	Oes [REP1-070]	X	Oes [REP1-070]
	Darnio cynefinoedd/rhywogaethau	X	Oes [REP1-070]	dd/b	Oes [REP1-070]
	Effeithiau hydrolegol	X	Oes [REP1-070]	dd/b	Oes [REP1-070]

¹⁴ Mae hyn yn berthnasol i effeithiau o'r Datblygiad Arfaethedig yn unigol ac ar y cyd, oni nodir fel arall.

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE? ¹⁴	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE? ⁹
Pibyddion y mawn (nad ydynt yn bridio) / Rhostogod cynffonddu (nad ydynt yn bridio) /					
Casgliad adar dŵr (nad ydynt yn bridio)/ Pibyddion coesgoch (nad ydynt yn bridio)	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	Oes [REP1-070]	dd/b	Oes [REP1-070]
	Aflonyddwch gweledol (goleuadau)	✓ ^{15, 16}	Oes [REP1-070]	X	Oes [RR-065]
	Aflonyddwch sŵn (adeiladu)	✓	Oes [REP5-043]	X	Oes [REP5-043]
	Darnio cynefinoedd/ rhywogaethau	X	Oes [REP1-070]	dd/b	Oes [REP1-070]
	Effeithiau hydrolegol	X	Oes [REP1-070]	dd/b	Oes [REP1-070]

¹⁵ O ganlyniad i oleuadau o amgylch gwaith gosod croesfan ddi-ffos Afon Dyfrdwy.

¹⁶ Ar gyfer nodwedd pibyddion coesgoch y casgliad yn unig.

Tabl A1.6: Safle Ramsar Aber Afon Mersi

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE? ¹⁷	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE? ⁹
Maen prawf 5 – casgliad adar dŵr	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	Oes [REP1-070]	dd/b	Oes [REP1-070]
	Aflonyddu	✓ ¹⁸	Oes [REP5-043]	X	Oes [REP5-043]
	Darnio cynefinoedd/rhywogaethau	X	Oes [REP1-070]	dd/b	Oes [REP1-070]
	Effeithiau hydrolegol	X	Oes [REP1-070]	dd/b	Oes [REP1-070]
Maen prawf 6 – rhywogaethau/poblogaethau sy'n digwydd ar lefelau	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	Oes [REP1-070]	dd/b	Oes [REP1-070]

¹⁷ Mae hyn yn berthnasol i effeithiau o'r Datblygiad Arfaethedig yn unigol ac ar y cyd, oni nodir fel arall.

¹⁸ Ar gyfer pibyddion coesgoch yn unig. O ganlyniad i oleuadau o amgylch gwaith gosod croesfan ddi-ffos Afon Dyfrdwy.

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE? ¹⁷	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE? ⁹
o bwysigrwydd rhyngwladol	Aflonyddwch sŵn ar adar sy'n defnyddio FLL	✓ ¹⁹	Oes [REP5-043]	X	Oes [REP5-043]
	Aflonyddwch gweledol	X	Oes [REP1-070]	dd/b	Oes [REP1-070]
	Darnio cynefinoedd/rhywogaethau	X	Oes [REP1-070]	dd/b	Oes [REP1-070]
	Effeithiau hydrolegol	X	Oes [REP1-070]	dd/b	Oes [REP1-070]

¹⁹ Ar gyfer pibyddion coesgoch yn unig. O ganlyniad i oleuadau o amgylch gwaith gosod croesfan ddi-ffos Afon Dyfrdwy.

Tabl A1.7: ACA Aber Afon Dyfrdwy

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ²⁰	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ⁹
Gwastadeddau llaid a gwastadeddau tywod nad ydynt o dan ddŵr môr adeg llanw isel / Salicornia a phlanhigion unflwydd eraill ar laid a thywod / Dolydd heli Iwerydd (<i>Glaucopuccinellietalia maritimae</i>) / Aberoedd / Llystyfiant unflwydd ar linellau drifft / Clogwyni môr â llystyfiant Arfordiroedd yr Iwerydd a'r Baltig / Egin-dwyni symudol / "Twyni symudol ar hyd y draethlin gydag <i>Ammophila arenaria</i> ("twyni gwynwhite dunes")" / "Twyni arfordirol sefydlog gyda llystyfiant llysiuol ("twyni llwyd")" /	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Darnio cynefinoedd/rhywogaethau	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Effeithiau hydrolegol	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]

²⁰ Mae hyn yn berthnasol i effeithiau o'r Datblygiad Arfaethedig yn unigol ac ar y cyd, oni nodir fel arall.

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ²⁰	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ⁹
Llac twyni gwlyb					
Llysywod pendwll y môr / Llysywod pendwll yr afon	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Aflonyddu	✓ (yn unigol yn unig)	NE - Oes [REP1-070] CNC - Oes [REP1-071]	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Darnio cynefinoedd/ rhywogaethau	✓ (yn unigol yn unig)	NE - Oes [REP1-070] CNC - Oes [REP1-071]	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Effeithiau hydrolegol	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ²⁰	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ⁹
Llysiâu'r afu petalog	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Aflonyddu	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Darnio cynefinoedd/ rhywogaethau	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Effeithiau hydrolegol	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]

Tabl A1.8: AGA Aber Afon Dyfrdwy

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ²¹	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ⁹
Rhostogod cynffonfraith (nad ydynt yn bridio) / Rhostogod cynffonddu (nad ydynt yn bridio) /	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
Môr-wenoliaid cyffredin (bridio) / Gylfinirod (nad ydynt yn bridio) / Pibyddion y mawn (nad ydynt yn bridio) /	Aflonyddwch sŵn ar adar sy'n defnyddio FLL	X	NE - Oes [REP5-043] CNC - Oes [REP1-071]	X	NE - Oes [REP5-043] CNC - Oes [REP1-071]
Cwtiaid llwyd (nad ydynt yn bridio) / Pibyddion yr aber (nad ydynt yn bridio) /	Aflonyddwch gweledol	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
Môr-wenoliaid bychan (bridio) / Pïod y môr (nad ydynt yn bridio) / Hwyaid llosthafain (nad ydynt yn bridio) /	Darnio cynefinoedd/rhywogaethau	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]

²¹ Mae hyn yn berthnasol i effeithiau o'r Datblygiad Arfaethedig yn unigol ac ar y cyd, oni nodir fel arall.

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ²¹	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ⁹
Môr-wenoliaid pigddu (nad ydynt yn bridio) / Hwyaid yr eithin (nad ydynt yn bridio) / Corhwyaid (nad ydynt yn bridio)	Effeithiau hydrolegol	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
Pibyddion coesgoch (nad ydynt yn bridio) Casgliad adar dŵr	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Aflonyddwch gweledol	✓ ^{22, 23}	NE - Oes [REP1-070] CNC - Oes [REP1-071]	X	NE - Oes [RR-065] CNC - Oes [REP1-071]
	Aflonyddwch sŵn ar adar sy'n defnyddio FLL	✓	NE - Oes [REP5-043] CNC - Oes [REP1-071]	X	NE - Oes [REP5-043] CNC - Oes [REP1-071]

²² O ganlyniad i oleuadau o amgylch gwaith gosod croesfan ddi-ffos Afon Dyfrdwy.

²³ Ar gyfer nodwedd pibyddion coesgoch y casgliad yn unig.

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ²¹	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ⁹
	Darnio cynefinoedd/ rhywogaethau	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Effeithiau hydrolegol	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]

Tabl A1.9: Safle Ramsar Aber Afon Dyfrdwy

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ²⁴	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ⁹
Maen prawf 1 – Gwastadeddau llaid a thywod rhynglanw helaeth (20 km gan 9 km) gydag eangderau mawr o forfeydd heli tua phen yr aber.	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Darnio cynefinoedd/ rhywogaethau	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Effeithiau hydrolegol	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
Maen prawf 2 – Llyffantod y twyni	Colli cynefin yn uniongyrchol ac yn anuniongyrchol	X	NE - Oes [REP1-070]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]

²⁴ Mae hyn yn berthnasol i effeithiau o'r Datblygiad Arfaethedig yn unigol ac ar y cyd, oni nodir fel arall.

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ²⁴	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ⁹
	a/neu farwoldeb		CNC - Oes [REP1-071]		
	Aflonyddu	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Darnio cynefinoedd/ rhywogaethau	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Effeithiau hydrolegol	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
Maen prawf 5 – Casgliad adar dŵr y tu allan i'r tymor bridio	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ²⁴	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ⁹
	Aflonyddu	✓	NE - Oes [REP5-043] CNC - Oes [REP1-071]	X	NE - Oes [REP5-043] CNC - Oes [REP1-071]
	Darnio cynefinoedd/ rhywogaethau	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Effeithiau hydrolegol	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
Maen prawf 6 – rhywogaethau/ poblogaethau sy'n digwydd ar lefelau o bwysigrwydd rhyngwladol	Colli cynefin yn uniongyrchol ac yn anuniongyrchol a/neu farwoldeb	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]

Nodwedd	Effaith bosibl (A a G oni nodir fel arall)	LSE?		AEoI?	
		Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ²⁴	Casgliad yr Ymgeisydd (yn unigol neu ar y cyd)	Cytundeb ag NE a CNC? ⁹
	Aflonyddu	✓ ²⁵	NE - Oes [REP5-043] CNC - Oes [REP1-071]	X	NE - Oes [REP5-043] CNC - Oes [REP1-071]
	Darnio cynefinoedd/ rhywogaethau	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]
	Effeithiau hydrolegol	X	NE - Oes [REP1-070] CNC - Oes [REP1-071]	dd/b	NE - Oes [REP1-070] CNC - Oes [REP1-071]

²⁵ Ar gyfer pibyddion coesgoch yn unig. O ganlyniad i oleuadau o amgylch gwaith gosod croesfan ddi-ffos Afon Dyfrdwy.



The Planning Inspectorate
Yr Arolygiaeth Gynllunio

REPORT on the IMPLICATIONS for EUROPEAN SITES

Proposed HyNet Carbon Dioxide Pipeline

An Examining Authority report prepared with the
support of the Environmental Services Team

Planning Inspectorate Reference: EN070007

01 August 2023

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1 INTRODUCTION

1.1 Background

- 1.1.1 Liverpool Bay CCS Ltd (the Applicant) has applied to the Secretary of State (SoS) for a Development Consent Order (DCO) under section 37 of the Planning Act 2008 (PA2008) for the proposed HyNet Carbon Dioxide Pipeline (the application). The SoS has appointed an Examining Authority (ExA) to conduct an examination of the application, to report its findings and conclusions, and to make a recommendation to the SoS as to the decision to be made on the application.
- 1.1.2 The relevant SoS is the competent authority for the purposes of the Habitats Directive¹ and the Habitats Regulations² for applications submitted under the PA2008 regime. The findings and conclusions on nature conservation issues reported by the ExA will assist the SoS in performing their duties under the Habitats Regulations.
- 1.1.3 This Report on the Implications for European sites (RIES) documents and signposts the information in relation to potential effects on European Sites³ that was provided within the DCO application and submitted throughout the Examination by the Applicant and Interested Parties (IPs), up to Deadline 6 (D6) of the Examination (4 July 2023). It is not a standalone document and should be read in conjunction with the Examination documents referred to. Where document references are presented in square brackets [] in the text of this report, that reference can be found in the Examination Library published on the National Infrastructure Planning website at the following link:
[EN070007-001186-HyNet Carbon Dioxide Pipeline Bilingual Examination Library.pdf \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk/examination-library/EN070007-001186-HyNet%20Carbon%20Dioxide%20Pipeline%20Bilingual%20Examination%20Library.pdf)
- 1.1.4 This RIES is issued to ensure that Interested Parties including the Appropriate Nature Conservation Bodies (ANCBs), Natural England (NE) and Natural Resources Wales (NRW), are consulted formally on Habitats Regulations matters. This process may be relied on by the SoS for the purposes of Regulation 63(3) of the Habitats Regulations.
- 1.1.5 It also aims to identify and close any gaps in the ExA's understanding of IPs' positions on Habitats Regulations matters, in relation to all sites and features of interest as far as possible, in order to support a robust and thorough recommendation to the SoS.

¹ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (as codified) (the 'Habitats Directive').

² The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations).

³ The term European Sites in this context includes Sites of Community Importance (SCIs), Special Areas of Conservation (SACs) and candidate SACs, Special Protection Areas (SPAs), possible SACs, potential SPAs, Ramsar sites, proposed Ramsar sites, and any sites identified as compensatory measures for adverse effects on any of the above. For a full description of the designations to which the Habitats Regulations apply, and/ or are applied as a matter of Government policy, see PINS Advice Note 10.

1.1.6 Following consultation the responses will be considered by the ExA in making their recommendation to the SoS and made available to the SoS along with this report. The RIES will not be revised following consultation.

1.2 Documents used to inform this RIES

1.2.1 The Applicant's Habitats Regulations Assessment (HRA) Report (the HRAR) comprises the following document:

- Habitats Regulations Assessment – Information to Inform an Appropriate Assessment [REP4-243].

1.2.2 A HRAR was provided with the DCO application (the 'application HRAR') [APP-226]. This was subsequently updated during the Examination [CR1-121, REP2-023]. A version was provided at D4 [REP4-243] which was the same as the version provided at D2 [REP2-023]. All references to the HRAR in this report are to REP4-243 unless indicated otherwise.

1.2.3 Section 6.3 Tables 6.2 – 6.9 of the HRAR contains screening matrices for effects of the Proposed Development alone. Integrity matrices were not provided.

1.2.4 In addition to the HRAR, the RIES refers to representations submitted to the Examination by IPs, Issue Specific Hearing (ISH) documents, Statements of Common Ground (SoCGs) and other Examination documents as relevant. All documents can be found in the Examination Library⁴.

1.2.5 The ExA issued written questions relating to HRA matters during the Examination [PD-014, PD-022].

1.3 Change Requests

1.3.1 To date, the Applicant has made the following change requests:

- Change Request 1 (CR1) submitted on 27 March 2023 [CR-001 to CR-126] and accepted by the ExA on 24 April 2023 [PD-016];
- Change Request 2 (CR2) [CR2-001 to CR2-021] submitted on 26 May 2023 and accepted by the ExA on 2 June 2023 [PD-019]; and
- Change Request 3 (CR3) [CR3-001 to CR3-019] submitted on 5 July 2023 and accepted by the ExA on 12 July 2023 [PD-025].

1.3.2 CR1 comprised 18 changes. These included the relocation of some elements of the Proposed Development; the retention of a slurry tank; diversions of footways, cycleways and a Public Right of Way (PRoW); and the extension of construction working hours. Extensions and reductions to the Order Limits were proposed in various locations to accommodate these changes.

⁴ Examination Library accessible at: <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN070007/EN070007-001186-HyNet%20Carbon%20Dioxide%20Pipeline%20Bilingual%20Examination%20Library.pdf>

- 1.3.3 A revised HRAR [CR1-121] was provided as part of the CR1 documentation. No additional European sites were identified. The HRAR explained that two of the changes had potential to change the conclusions of the HRA:
- Change PS02b - the retention of the slurry tank and movement of the Newbuild Pipeline closer to the functionally linked woodland of the Deeside and Buckley Newt Sites Special Area of Conservation (SAC); and
 - Change PS03 - the relocation of the Northop Hall Above Ground Installation (AGI), that would introduce a drainage connection into Wepre Brook Tributary 1, which is hydrologically linked to the Deeside and Buckley Newt Sites SAC.
- 1.3.4 An assessment of the potential impacts of the changes on the old sessile oak woods qualifying feature of the SAC is provided in evidence notes (a) (PS02b) and (d) (PS03) to HRAR screening matrix Table 6.3. It was concluded that there would be no likely significant effect (LSE) on the SAC arising from these changes. No IP disputed this conclusion.
- 1.3.5 It was also explained within the HRAR that it had been updated to reflect amended information relating to construction methodology for the crossing of the River Dee.
- 1.3.6 CR2 comprised 2 changes:
- Change 1 – a proposed alternative option for Work No. 43, the Alltami Brook trenched crossing, consisting of an embedded pipe bridge; and
 - Change 2: the addition and removal of small parcels of land to the Order Limits at the location of Work No. 34 to optimise temporary construction access.
- 1.3.7 The Applicant did not identify any changes to the HRA resulting from CR2. This was not challenged by any IP.
- 1.3.8 CR3 comprised four changes which would result in a removal of land parcels from the Order Limits and a change to the Outline Surface Water Drainage Strategy [CR3-017]. The Applicant did not identify whether there would be any changes to the HRA resulting from CR3. However, in its D6 cover letter [REP6-001], it explained, in response to the clarification requested in the ExA's Procedural Decision on CR3 [PD-025], that CR3 could result in "minor nominal changes" to the proximity of the European sites to the Order Limits and the cited distances. It considered that the CR3 changes did not result in any change to the LSE assessment contained within REP4-243 and therefore that the results and conclusions of the HRA did not need to be amended. The cited distances would be changed in an updated HRAR submitted before the close of the Examination.
- 1.3.9 Relevant HRA matters arising from these change requests are detailed in Sections 2, 3 and 4 of this RIES.

1.4 Structure of this RIES

1.4.1 The remainder of this report is as follows:

- **Section 2** provides an overview of the European sites that have been considered within the DCO application that could be affected by the Proposed Development, along with a summary of key Examination matters up to D6.
- **Section 3** identifies the European sites and qualifying features screened by the Applicant for potential LSEs, either alone or in combination with other plans and projects. The section also identifies the issues that have emerged during the Examination up to D6.
- **Section 4** identifies the European sites and qualifying features that have been considered in terms of adverse effects on site integrity, either alone or in combination with other plans and projects. The section also identifies the issues that have emerged during the Examination, including where IPs have disputed the Applicant's conclusions, up to D6.
- **Annex 1** contains a table summarising the ExA's understanding of screening and adverse effects conclusions at the point of publication of this RIES.

RIES questions

- 1.4.2 This RIES contains questions predominantly targeted at the Applicant, NE and NRW, which are drafted in ***blue, underlined italic text***.
- 1.4.3 The responses to the questions posed within the RIES and comments received on it will be of great value to the ExA in understanding IPs' positions on Habitats Regulations matters. However, it is stressed that responses to other matters discussed in the RIES are equally welcomed.
- 1.4.4 In responding to questions contained in Tables 3.1 and 4.1, please refer to the ID number in the first column.
- 1.4.5 Comments on the RIES are timetabled for D7 (5 September 2023).

2 OVERVIEW

2.1 European Sites Considered

Introduction

- 2.1.1 The Proposed Development is not connected with or necessary to the management for nature conservation of any European site.
- 2.1.2 The Applicant identified European sites within 10km of the 'Newbuild Infrastructure Boundary'⁵.

Sites within the UK National Site Network

- 2.1.3 The Applicant's HRAR [APP-226] identified nine European sites within the UK National Site Network (NSN) for inclusion within the assessment. These are listed in Section 5 of the HRAR and are as detailed in Table 2.1 below.
- 2.1.4 The Proposed Development is located in both England and Wales and therefore European sites in both countries have been identified; Natural England is responsible for those located in England and NRW is responsible for those located in Wales. Responsibility is shared for cross-border sites.

Table 2.1: European sites identified in the Applicant's HRAR

Name of European Site	Country	Distance from Proposed Development
River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC	England and Wales	0km (crossed by the Proposed Development)
Deeside and Buckley Newt Sites SAC	Wales	Immediately adjacent to the Newbuild Infrastructure Boundary
Halkyn Mountain/ Mynydd Helygain SAC	Wales	248m
Mersey Estuary SPA	England	0.8km
Mersey Estuary Ramsar site	England	0.8km
Dee Estuary/Aber Dyfrdwy SAC	England and Wales	1km

⁵ Defined in ES Chapter 3 [APP-055] as the Order Limits minus the existing Connah's Quay to Point of Ayr (PoA) Terminal Pipeline ('the Flint Connection to PoA Terminal Pipeline'). The Newbuild Infrastructure Boundary includes the maximum extent of all potential permanent and temporary construction works required as part of the Proposed Development.

Name of European Site	Country	Distance from Proposed Development
Dee Estuary SPA	England and Wales	1km
Dee Estuary Ramsar site	England and Wales	1km
Alyn Valley Woods/Coedwigoedd Dyffryn Alun SAC	Wales	6km

- 2.1.5 The locations of these sites relative to the Proposed Development are depicted on Annex A Figure 9.1.1, Sheets 1 and 2 of ES Appendix 9.1 [REP4-091].
- 2.1.6 NE highlighted in REP1-070 that additional European sites lie within 10km of the application site, including Midland Meres and Mosses Phase 1 and Phase 2 Ramsar sites and suggested that for clarity wording could be inserted in the HRAR about these sites. However, it confirmed that it was satisfied with the sites and features included in the assessment.
- 2.1.7 In response [REP5-025] to Q2.11.1 of the ExA's second round of written questions and requests for information (ExQ2) [PD-022] the Applicant identified that the two Ramsar sites are approximately 8.6km and 8.9km, respectively, to the east of the Proposed Development at their closest point, and are designated for their habitats and floral assemblage. The Applicant determined that they are beyond the potential zone of influence of the Proposed Development and confirmed that the qualifying habitats/species are not found within the Newbuild Infrastructure Boundary. On this basis it considered that there were no potential impact pathways that could lead to an LSE but would update the HRAR prior to the end of the Examination to include reference to these sites.
- 2.1.8 NRW confirmed in REP1-071 that it concurred with the sites and features considered in the Applicant's HRA.
- 2.1.9 In response [REP5-025] to ExQ2.11.2 [PD-022] the Applicant confirmed that it had amended the distance of the Halkyn Mountain/Mynydd Helygain SAC from the Proposed Development site from 280m to 248m in the updated HRAR [REP2-023]. In relation to the Dee Estuary SPA and Ramsar site (and SAC) it stated that it would amend the distance from the Proposed Development site identified in the HRAR as 1.2km to 1km in an updated HRAR.

Non-UK sites

- 2.1.10 The Applicant has not identified any potential impacts on European sites in any European Economic Area (EEA) States.

2.2 Potential impact pathways

- 2.2.1 Section 6 of the HRAR detailed the potential impacts from the Proposed Development, along with the potential geographical extent of effects.
- 2.2.2 The potential impact pathways considered include:
- direct and indirect habitat loss (including functional habitat);
 - mortality of species;
 - fragmentation of habitats and/or species;
 - visual or noise/vibration disturbance;
 - hydrological effects; and
 - air quality effects (dust deposition).
- 2.2.3 The HRAR assessed the potential impacts during construction and operation and maintenance; it did not assess impacts during the decommissioning phase. The Environmental Statement (ES) [APP-055] confirmed that the pipeline is designed to a life span of 40 years and associated infrastructure designed to 25 years. When decommissioned, the pipeline would be filled with nitrogen and left in-situ, and above ground features would be dismantled, cleared and ground conditions restored to their previous condition.
- 2.2.4 The Applicant acknowledged in REP1-044 that decommissioning was included in the draft DCO (dDCO). It addressed decommissioning in the updated HRAR provided at D2 [REP2-023]. The HRAR cross-references to Section 3.8 of ES Chapter 3 [APP-055], which describes the proposed approach to decommissioning.
- 2.2.5 The Applicant anticipated that impacts associated with decommissioning would be comparable to construction impacts and explained that references in the HRAR to construction impacts were considered equally applicable to decommissioning impacts.
- 2.2.6 Tables A1.1 to A1.9 in Annex 1 of this RIES detail the potential impact pathways considered in the HRAR by European site and qualifying features.
- 2.2.7 During the Examination, the ExA also requested information on air quality impacts arising from vehicular emissions [PD-022] (see Table 3.1 of this report for further details).

2.3 In-combination effects

- 2.3.1 Section 6.4 of the HRAR detailed the Applicant's approach to assessing in-combination effects. Appendix B of the HRAR listed 42 'Other Developments' for consideration in the in-combination assessment. Nine of the Other Developments were initially considered to have the potential to contribute to result in LSE together with the Proposed Development; these are detailed in Table 6.10 of the HRAR and shown on ES Figure 19.1 [REP4-234].

- 2.3.2 The Applicant highlighted, in its response [REP1-044] to Q1.11.3 of the ExA's written questions and requests for information (ExQ1) that one development (ID14) had been removed from the HRA following discussions with the North and Mid Wales Trunk Road Agent (NMWTRA). This was reflected in the updated HRAR [CR1-121]. In addition, the shortlist of Other Developments contained in Appendix 19-1 Table 3 (now Table 1.3) was updated as part of CR1 [CR1-044]. The HRAR would be updated to reflect the changes to Table 3. The Applicant considered that the changes would not have any material effect on the conclusions within the HRAR.
- 2.3.3 NE, in RR-065 and REP1-070, noted that the in-combination assessment included other schemes that formed part of the wider HyNet North West Project and suggested that the assessment continued to be updated as more information became available. The Applicant committed in REP1-044 to reviewing the need to update the assessment should additional or new information become available.
- 2.3.4 No additional plans or projects were identified by IPs for inclusion in the in-combination assessment.

2.4 Summary of the Applicant's Assessment

- 2.4.1 The Applicant's conclusions in respect of screening and assessment of effects on integrity are presented in Sections 6 and 7 of the HRAR.
- 2.4.2 The Applicant concluded that there was potential for LSE on seven European sites. These European sites were subsequently assessed by the Applicant to determine if they could be subject to an adverse effect on integrity (AEoI) as a result of the Proposed Development alone or in-combination with other plans and projects, in view of their conservation objectives.
- 2.4.3 The Applicant concluded that the Proposed Development would not result in AEoI to any European site.

2.5 HRA Matters Considered During the Examination

- 2.5.1 The Examination to date has focussed on impacts to bird species using functionally linked land (FLL).
- 2.5.2 Further details are provided in Sections 3 and 4 of this report.

3 LIKELY SIGNIFICANT EFFECTS

3.1 Applicant's approach

- 3.1.1 A total of nine European sites for which the UK is responsible were screened by the Applicant in its HRAR.
- 3.1.2 The outcomes of the Applicant's screening exercise are summarised in Section 6 of the HRAR. Section 6.3 provides an assessment of effects of the Proposed Development alone. Tables 6.2 – 6.9 of the HRAR contain screening matrices for the Proposed Development alone for all European sites assessed except Alyn Valley Woods/Coedwigoedd Dyffryn Alun SAC. Section 6.4 provides a summary of the assessment of in-combination effects, fuller details of which are contained in Appendix B of the HRAR. Table 6.11 in Section 6.5 summarises the screening conclusions. It does not identify whether the predicted effects are from the Proposed Development alone or in combination with other plan and projects.

Wintering bird surveys

- 3.1.3 Paragraph 4.2.3 of the application HRAR [APP-226] stated that the wintering bird surveys undertaken to inform the assessment were carried out with a minimum of one visit per month throughout October to February and two visits per month during March to September.
- 3.1.4 NE [RR-065] considered this to be limited survey effort with regards to passage and wintering birds and advised two surveys per month during October to March and that passage surveys should include weekly visits between September to November (or March to May) and be undertaken at different tidal states. It sought further information to explain the reduced survey effort and queried whether additional information was available to enable a robust assessment of impacts to wintering birds. NE reiterated this in REP1-070.
- 3.1.5 The Applicant responded [REP1-042] that one visit per month was undertaken between December 2020 and February 2021 and two surveys per month were completed between March 2021 and March 2022, which is different to the information provided within the application HRAR. It considered that this was a proportionate approach in the context of the Proposed Development and the proposed short term, temporary and localised construction works. It highlighted that, given the potential for SPA qualifying species and its connectivity to the Dee Estuary SPA, Transect 2 (along the River Dee) received the most survey coverage, with surveys completed at differing tidal states to ensure representative results. The Applicant considered that given the volume of field survey results obtained across the survey period it was sufficient to inform the HRA and its conclusions. The draft SoCG (dSoCG) submitted at D4 shows that NE had agreed this matter [REP4-246].

[Q. Please could the Applicant update paragraph 4.2.3 in the next version of the HRAR to reflect the information on survey visits as set out in REP1-042.](#)

3.2 Sites for which the Applicant concluded no LSE on all qualifying features

3.2.1 The Applicant concluded that the Proposed Development would not be likely to give rise to significant effects, either alone or in combination with other plans or projects, on any of the qualifying features of the following European sites:

- Alyn Valley Woods/Coedwigoedd Dyffryn Alun SAC (HRAR Section 5.1); and
- Halkyn Mountain/Mynydd Helygain SAC (HRAR Table 6.4).

3.2.2 NRW confirmed it agreed with the Applicant's conclusion of no LSEs in respect of the above European sites [REP1-071].

3.2.3 The qualifying features and the ExA's understanding of the Applicant's and NRW's positions in respect of these sites are detailed in Annex 1 Tables A1.1 to A1.2 of this RIES.

3.3 Sites for which the Applicant concluded LSE on some or all qualifying features

3.3.1 The Applicant concluded that the Proposed Development would be likely to give rise to significant effects, either alone or in combination with other plans or projects, on one or more of the qualifying features of the remaining seven sites:

- River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC;
- Deeside and Buckley Newt Sites SAC;
- Mersey Estuary SPA;
- Mersey Estuary Ramsar site;
- Dee Estuary/Aber Dyfrdwy SAC;
- Dee Estuary SPA; and
- Dee Estuary Ramsar site.

3.3.2 The qualifying features and LSE pathways screened in by the Applicant are summarised in Table 6.11 of the HRAR and are identified in Annex 1 Tables A1.1 to A1.9 of this report.

3.3.3 In response [REP1-070] to ExQ1.11.1 [PD-014], NE confirmed that it was satisfied with the Applicant's conclusions in relation to the River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC. It deferred to NRW in respect of the Deeside and Buckley Newt Sites SAC.

3.3.4 NE did not agree [REP1-070] with the Applicant's screening conclusion of no LSE in relation to potential noise disturbance to wintering birds (on FLL) that were features of the Mersey Estuary SPA and Ramsar site and the Dee Estuary SPA and Ramsar site. The Applicant subsequently took this impact pathway forward to AEoI assessment in the updated D2 HRAR [REP2-023].

- 3.3.5 NRW confirmed that it agreed with the Applicant's conclusions in relation to all of the European site relevant to Wales [REP1-071].
- 3.3.6 The potential LSE pathways screened in by the Applicant have not been disputed by any IPs. However, the Applicant's decision to exclude certain LSE impact pathways were disputed by IPs and questioned by the ExA during the Examination. See Section 3.4 of this RIES for further details.

3.4 Examination matters

- 3.4.1 Matters raised in the Examination to date or for which the ExA seeks clarity, in relation to LSEs screened out or not considered by the Applicant, are summarised in Table 3.1 below.

Table 3.1: Issues raised in the Examination to date by the ExA and IPs in relation to the Applicant's screening of LSEs (alone and in-combination)

ID	Potential impact pathway	Examination Matters
MERSEY ESTUARY SPA, MERSEY ESTUARY RAMSAR SITE, DEE ESTUARY SPA and DEE ESTUARY RAMSAR SITE		
1	Impacts on FLL - noise disturbance impacts on wintering birds	<p>Paragraph 6.2.9 of the HRAR stated that noise disturbance is likely during construction. However, the Applicant screened out an LSE from noise disturbance for all wintering birds. The Applicant's screening matrices noted that the Proposed Development would cross the River Dee using trenchless crossing methods and stated that the elevation difference between the mudflat habitat and the proposed trenchless crossing exit/entrance pits would reduce the potential for disturbance. It is stated that numbers of qualifying bird species recorded elsewhere along the route of the Proposed Development were low. There is no consideration of noise disturbance from other construction activities.</p> <p>NE [RR-065] stated that it did not agree with the Applicant's conclusions regarding noise disturbance to wintering birds and sought further detail on expected noise levels. It did not agree with the Applicant's generalisation that significant disturbance is unlikely beyond a distance of 300m and advised that consideration should be given to high disturbance works (including piling and hydraulic breaking). NE reiterated these points in REP1-070.</p> <p>The Applicant provided further information on noise levels in REP1-042 and in the updated HRAR [REP2-023]. The predicted noise levels at 10m from the trenchless installation techniques were 82dB. The exit and entry pits would be located at least 16m from the riverbanks and at an elevation change of approximately 2m, potentially providing a small degree of attenuation. The predicted noise levels at 16m were approximately 78dB. The Applicant acknowledged the potential for the noise levels to exceed the thresholds that may elicit a response from the birds. It stated that the proposed crossing works would be short in duration and any disturbance would be temporary and that there was sufficient alternative habitat available along the River Dee to accommodate temporarily displaced birds. This was</p>

ID	Potential impact pathway	Examination Matters
		<p>the basis for the original conclusion of no LSE. The Applicant had decided to carry this impact pathway forward to an AEoI assessment, on the basis that a LSE could not be ruled out during construction in the absence of mitigation, and the D2 HRAR provided an update accordingly.</p> <p>In response to ExQ2.11.3 the Applicant stated that the qualifying species of the Mersey Estuary SPA/Ramsar site and the Dee Estuary SPA/Ramsar site are primarily ducks and waterbirds, for which estuarine and water environments would represent functionally linked habitat [REP5-025]. As detailed in the relevant screening matrices in the HRAR, the majority of the Newbuild Infrastructure Boundary is comprised of arable farmland, poor semi-improved grassland and improved grassland, which are unfavourable habitats for the qualifying bird species, and therefore not considered functionally linked to the European sites.</p> <p>In relation to how the extent of functional habitat had been established, the Applicant explained that it had taken into account the habitat preferences and lifecycles of the qualifying species of the Mersey Estuary SPA/Ramsar site and the Dee Estuary SPA/Ramsar site, the presence of habitat suitable to support these species; and the results of the baseline bird surveys undertaken to inform the ecological impact assessment (ES Appendix 9.8: Bird Report [REP4-112]).</p> <p>In respect of the noise levels that the Applicant considers would result in either an LSE or an AEoI, the Applicant explained that a literature review had identified evidence of disturbances to waders and waterfowl at noise levels exceeding 56dB, as detailed in paragraph 6.2.11 of the HRAR, and that this was used as the threshold for determining the potential for LSE. In relation to AEoI, the Applicant considered that it was not appropriate to consider a noise threshold in isolation and that a number of other factors informed such an assessment. These include the number of qualifying birds affected; the duration, proximity and spatial extent of the noise disturbance; topography; and the availability of alternative resource/habitat to accommodate any displaced birds. All of these factors informed the assessment set out in Section 7 of the HRAR and the conclusion that the Proposed</p>

ID	Potential impact pathway	Examination Matters
		<p>Development would not result in an AEOI on the Mersey Estuary SPA/Ramsar site and the Dee Estuary SPA/Ramsar site.</p> <p>In response to ExQ2.11.4 about whether there would be any large amplitude 'startling' components used during construction in proximity to these sites, the Applicant confirmed [REP5-025] that it did not anticipate that there would be any construction mechanisms or methodologies that could be considered large amplitude or startling. Regular and standard plant and equipment would be used to construct the River Dee crossing.</p> <p>Further commentary on this matter is contained in Table 4.1 of this report.</p>
2	Disturbance – in-combination	<p>The Applicant responded in REP5-025 to ExQ2.11.6 about which qualifying features and to which type of disturbance its conclusion of potential for LSE resulting from in-combination disturbance effects applies. It stated that as only common tern and redshank were recorded in numbers greater than 1% of the SPA citation/Ramsar Information Sheet or WeBS populations (as set out in paragraph 4.2.9 of the HRAR) in-combination disturbance effects would only be relevant to these two qualifying species. Disturbance would arise from construction activities and could be from light, noise, vibration, and/or human presence. The Applicant confirmed that all of these disturbance pathways were considered in reaching the in-combination assessment conclusions.</p>
DEE ESTUARY/ABER DYFRDWY SAC		
3	Hydrological effects	<p>Section 6.2 of the HRAR notes that 'frac-out'⁶ during the HDD trenchless crossing works could result in mortality of qualifying fish species but states that given the geology of the River Dee this is unlikely to occur. The HRAR screens out an LSE from hydrological effects to sea lamprey and river lamprey of the Dee Estuary/Aber Dyfrdwy SAC.</p>

⁶ Where drilling mud is released through fractured bedrock into the surrounding rock and sand and travels towards the surface.

ID	Potential impact pathway	Examination Matters
		<p>NRW [RR-066] requested that mitigation was proposed to avoid the main run-time for key fish species to ensure such effects are minimal, and clarification regarding timeframes for trenchless crossings of the River Dee.</p> <p>In response [REP5-044] to ExQ2.11.7, NRW stated that it considered the main migratory period for sea lamprey to generally fall between April – June, with a caveat that this can be water temperature-dependent as 12° is a trigger temperature. It identified river (and brook) lamprey migration as occurring between October and March, with spawning occurring in April.</p> <p>The Applicant explained [REP1-042] that completion of the trenchless crossing was expected to take no longer than four weeks, as indicated in the HRAR. As set out in HRAR Section 6.2, geotechnical investigations either side of the River Dee had been undertaken, the results of which are contained within [APP-135]. The crossing would be at a sufficient depth (at least 15m) at which there would be an adequate thickness of low permeability, stiff cohesive strata such that a bentonite frac-out was unlikely to occur. In the highly unlikely event of a frac-out due to the fast-flowing tidal nature of the River Dee, bentonite would be dissipated and diluted rapidly within the water column, preventing localised suspension. The Applicant therefore considered that there would not be an LSE on receptors, including key fish species, within the River Dee and that seasonally timed works were not required.</p> <p>NRW accepted [REP1-071] the Applicant’s conclusions on the low risk of frac-out during the HDD works. It also highlighted that due to the proposed 4-week timescale for the works the peak migratory periods could be avoided.</p> <p>NRW confirmed in its response [REP5-044] to ExQ2.11.8 that it agreed that there would be no LSE on the sea and river lamprey features of the SAC.</p>

ID	Potential impact pathway	Examination Matters
RIVER DEE AND BALA LAKE/AFON DYFRDWY A LYN TEGID SAC		
4	Air quality effects – in combination	<p>Table 6.10 of the application HRAR [APP-226] identified the potential for Other Development 14 to have in-combination disturbance effects on qualifying fish species of the River Dee and Bala Lake/Afon Dyfrdwy a Lyn Tegid SAC and in-combination effects on “qualifying features of the River Dee SAC [sic] as a result of dust deposition”.</p> <p>It was subsequently explained in paragraph 19.9.1 of the ES Addendum for CR1 [CR1-124] that Welsh Government had confirmed that construction of ID14 would not take place concurrently with the Proposed Development. Accordingly, it was deleted from the list of plans and projects included in the in-combination assessment in the updated HRAR [CR1-121] provided with the accepted change request documents.</p> <p>Potential for in-combination dust effects was also identified in Table 6.10 of the HRAR in relation to Other Development 27. In response to ExQ2.11.9 the Applicant confirmed that the conclusion of a LSE for in-combination dust effects on the River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC applied to all qualifying features (habitats and species) [REP5-025].</p>
	Otter - in combination effects	<p>Table 6.10 of the application HRAR [APP-226] identified the potential for Other Development 27 to have in-combination effects on otter, but did not specify the potential impact pathway. In response to ExQ2.11.10 the Applicant confirmed that its conclusion, that there was potential for an in-combination LSE on otter should construction of each development take place at the same time, was in relation to loss of habitat (including functionally linked habitat) and mortality as a result of entrapment in voids [REP5-025].</p>
5	Otter – effects alone and in combination	<p>The list of watercourses where signs of otter were recorded contained in paragraph 4.4.7 of the updated D2 HRAR included additional locations within and in proximity to the Newbuild Infrastructure Boundary. In response to ExQ2.11.11 the Applicant confirmed [REP5-025] that potential impacts to otter along all watercourses surveyed, and where otter field signs were recorded, were considered within the HRAR. Field signs confirmed the presence of otter along these watercourses but no resting places were recorded. The Applicant stated</p>

ID	Potential impact pathway	Examination Matters
		that the assessment presented in evidence note (b) to the screening matrix contained in HRAR Table 6.2 remained valid, which concluded that there was potential for an LSE on otter in relation to the loss of functionally linked habitat along Wepre Brook and the potential entrapment of otter in voids created during construction.
DEESIDE AND BUCKLEY NEWT SITES SAC		
6	Air quality impacts	<p>The HRAR does not assess air quality impacts from vehicular emissions at four road diversions within 200m of the Deeside and Buckley Newt Sites SAC on the basis that diversions would be “temporary and short in duration” (Section 6.2 of the HRAR).</p> <p>In response to ExQ2.11.12 about the duration of the road diversions and the anticipated vehicle movements along these diversions, the Applicant confirmed that the road closures were anticipated to last a maximum of two weeks [REP5-025]. The temporary closure of Pinfold Lane and Shotton Lane would result in traffic being diverted onto the B5125 Holywell Road, which is the route closest to the SAC. The Applicant stated that this would not be in excess of expected normal daily variation in terms of traffic volumes.</p> <p>NRW confirmed in its response [REP5-044] to ExQ2.11.12 that it considered that potential changes to air quality resulting from the proposed road diversions were not likely to have an LSE in respect of the conservation objectives for the features of the SAC (great crested newt (GCN) and broadleaf woodland).</p>
7	GCN - direct and indirect habitat loss and/or mortality; disturbance; fragmentation of habitats/species	<p>Paragraph 4.3.6 of the HRAR states that as a result of the CR1 proposed changes five additional waterbodies that were scoped in had not been subject to Habitat Suitability Index (HSI) assessment for GCN as they were identified outside of the seasonal survey windows. ExQ2.11.13 asked the Applicant to confirm the approach that was taken to assessment of waterbodies that were not subject to HSI assessment, including the five additional waterbodies scoped in as a result of CR1.</p> <p>The Applicant responded in REP5-025. It explained that in England impacts to these waterbodies not subject to HSI assessment and which were located outside NE’s ‘red risk zone’ (which contain GCN populations of regional, national or international importance)</p>

ID	Potential impact pathway	Examination Matters
		<p>would be covered by a District Level Licence (DLL) (measure D-BD-044 of the REAC [REP6-006].</p> <p>It confirmed that a precautionary assessment was applied to waterbodies not subject to HSI assessment located within the red risk zone in England or located in Wales (unless scoped out due to unsuitable environmental conditions at the time of the survey or separated from the Proposed Development by a major barrier to dispersal), and GCNs were assumed to be present.</p> <p>The Applicant highlighted that only 80 of the 222 waterbodies across the survey area (HRAR paragraph 4.3.6) are located in Wales and only a proportion of these are within the Deeside and Buckley Newt Sites SAC and Halkyn Mountain/Mynydd Helygain SAC or within approximately 500m of the SACs (and therefore functionally linked and of relevance to the HRA). The Applicant also highlighted that the five additional waterbodies scoped in as part of CR1 are located at the northeast end of the Proposed Development in England and not functionally linked to either of the SACs.</p>
8	GCN - surveys	<p>NRW stated in its WR and response to ExQ1.4.8 [REP1-071] that it considered that the GCN surveys were undertaken in accordance with published guidance, proportionate and therefore satisfactory for the purposes of informing the principles of constructing and operating the Proposed Development. However, it also questioned whether consideration of low rainfall conditions during Spring 2022 (which may affect breeding) had been included in the assessments; and whether consideration was given to the foraging range for GCN within ponds located in England, which may potentially forage within land in Wales.</p> <p>The Applicant was of the view [REP2-038] that it had appropriately considered these matters within the assessment and through the mitigation contained within the Outline Construction Environmental Management Plan (OCEMP) [REP6-008]. It explained that only seven of the ponds taken forward for presence/absence surveys in Wales were recorded as dry during the course of the surveys. Of these, GCN presence was recorded in one during the initial five surveys; it was recorded as dry on the sixth survey visit. All waterbodies that</p>

ID	Potential impact pathway	Examination Matters
		<p>were subsequently recorded as dry were subject to at least one successful survey, and were recorded as dry on the second, third or fourth survey visit. Regardless, the proposed mitigation measures and application of a Precautionary Working Method Statement (PWMS) (as set out within the OCEMP) to safeguard GCN during construction would be applied across the entire Proposed Development. Pre-construction surveys would be completed to inform licensing and mitigation requirements as secured by dDCO R12 [REP4-008]. The Applicant agreed that it was likely that the terrestrial foraging range of GCN in England extended into Wales and considered that the proposed mitigation would safeguard GCN during construction.</p> <p>Further commentary on this matter is contained in Table 4.1 of this report.</p>

3.5 Summary of Examination outcomes in relation to screening

- 3.5.1 The Applicant concluded LSE on seven European sites for which the UK is responsible. These European sites and qualifying features were further assessed by the Applicant to determine if they could be subject to an AEOI from the Proposed Development, either alone or in combination with other plans and projects; see Section 4 of this report for further details.
- 3.5.2 The Applicant agreed during the Examination that an LSE should also be screened in for potential noise disturbance impacts on wintering birds using FLL associated with the Mersey Estuary SPA and Ramsar site and Dee Estuary SPA and Ramsar site. This matter is considered further in Section 4 of this report.
- 3.5.3 The ExA's understanding of the Applicant's, NE's and NRW's current positions in relation to LSEs is set out in Annex 1 Tables A1.1 to A1.9 of this report.

4 ADVERSE EFFECTS ON INTEGRITY

4.1 Conservation Objectives

- 4.1.1 The conservation objectives for all of the European sites for which an LSE was identified by the Applicant at the point of the DCO application were included within Appendix A of the Applicant's HRAR. Table 5.2 of the HRAR details the known threats and pressures to these sites.
- 4.1.2 NE [REP1-070] and NRW [REP1-071] confirmed in response to ExQ1.11.2 that they were satisfied that the conservation objectives for the European sites as set out in HRAR Appendix A were correct.
- 4.1.3 In response to ExQ2.11.16 about the current conservation status of the European sites for which the HRA concluded an LSE, the Applicant stated that this information is not known to be publicly available [REP5-025]. It explained that the information on conservation objectives presented in Appendix A of the HRAR was obtained from the Conservation Objectives (England) or Core Management Plan (Wales) documents for each European site.

4.2 Applicant's approach

- 4.2.1 The European sites and qualifying features for which LSE were identified were further assessed by the Applicant to determine if they could be subject to an AEOI from the Proposed Development, either alone or in combination. The outcomes of the Applicant's assessment of effects on integrity are summarised in Section 7 of the HRAR.

Mitigation measures

- 4.2.2 Proposed mitigation measures are identified in Section 7 of the HRAR. Section 7.1 confirmed that a Construction Environmental Management Plan (CEMP) would be implemented during construction, which would be informed by the measures detailed within the REAC [REP6-006] and OCEMP [REP6-008].
- 4.2.3 Further specific mitigation measures are detailed throughout Section 7 and include best practice measures in relation to dust and pollution prevention, relevant protected species licences, measures to avoid otter entrapment, appropriate lighting design, and replacement woodland planting. These measures have been taken into account in the Applicant's assessment of effects on integrity.
- 4.2.4 In response to ExQ1.11.5 [PD-014] the Applicant highlighted the guidance it had used, principally Institute of Air Quality Management (IAQM) guidance, to develop appropriate mitigation for the control of construction dust [REP1-044].
- 4.2.5 In respect of in-combination effects, HRAR Section 7.8 confirmed that Other Developments 1a, 19, 21 and 27 propose their own mitigation measures (as detailed in HRAR Appendix B). It noted that the remaining Other Developments are at pre-application stage and assumed that they would secure appropriate mitigation to avoid adverse impacts.

4.3 AEOI from the Proposed Development alone or in combination

- 4.3.1 The Applicant's assessment of effects from the Proposed Development alone and in combination with other plans or projects is presented in Sections 7.2 to 7.7 and Section 7.8 (supported by Appendix B) of the HRAR, respectively. It concluded that the Proposed Development would not adversely affect the integrity of any of the European sites and features assessed.
- 4.3.2 NE [RR-065] confirmed that it was satisfied that impacts of construction phase lighting would be unlikely to result in an AEOI of the Dee Estuary SPA, Dee Estuary Ramsar site, River Mersey SPA and River Mersey Ramsar site. It stated in REP1-070 in response to ExQ1.4.15 [PD-014] that it was satisfied that the proposed mitigation for lighting disturbance was adequate, however it remained unclear about mitigation for noise disturbance. It requested that further consideration was given to the timing of works that would be in close proximity to significant numbers of SPA birds and confirmation of the timing of works in close proximity to the River Dee. It confirmed that it was satisfied with the measures within the OCEMP [REP6-008] to limit movement of personnel around the working areas and so avoid disturbance effects to birds.
- 4.3.3 NRW confirmed that it agreed with the Applicant's conclusions that there would be no AEOI on any European site [REP1-071]. It advised that it had reviewed the 5-year mean peak of redshank recorded in the Dee Estuary SPA both at site designation and according to the most recent data in order to inform a condition assessment of the passage and overwintering redshank. It concluded that the redshank population was in favourable condition. Based on this and the nature of the disturbance as described by the Applicant, NRW concluded that the Proposed Development was unlikely to have a significant effect on the Dee Estuary SPA.
- 4.3.4 NRW subsequently stated in its response to ExQ2 that it could not yet agree no AEOI on the Deeside and Buckley Newt Sites SAC [REP5-044].
- 4.3.5 Table 4.1 below identifies where the Applicant's assessment approach or conclusion of no AEOI has been disputed by IPs during the course of the Examination. Table 4.1 reflects the ExA's understanding on AEOI at the point of reporting and identifies where clarification on IPs' positions is sought.

Table 4.1: Issues raised in the Examination to date by the ExA and IPs in relation to the Applicant's assessment of effects on integrity (alone and in combination)

ID	Potential impact pathway	Details of issue	ExA observation/ question
MERSEY ESTUARY SPA, MERSEY ESTUARY RAMSAR SITE, DEE ESTUARY SPA and DEE ESTUARY RAMSAR SITE			
1	Impacts on FLL - noise disturbance impacts on wintering birds	<p>The Applicant provided information on proposed noise mitigation in REP1-042 and in the updated D2 HRAR [REP2-023]. It identified proposed mitigation as including temporary noise screening methods, acoustic barriers and management, such as hoarding (as set out in REAC measures D-NV-005 and D-NV-009 [REP6-006]), secured by dDCO [REP4-008] R4 (Scheme design) and R5 (CEMP). REAC measure D-NV-009, secured by dDCO R5, details that noise screening methods should achieve a minimum attenuation of 10dB, resulting in a reduced noise level of approximately 68dB.</p> <p>Noise mitigation measures would be detailed within a Noise and Vibration Management Plan (as set out in REAC measure D-NV-001), to be included within the CEMP, secured by dDCO R5. The Applicant highlighted that the proposed mitigation was based on the worst case scenario. A review (HRA sensitivity test) would be undertaken by an ecologist during or following detailed design to determine the need for noise mitigation, depending on the proximity of works and the noise levels that would be generated (in line with REAC measure D-BD-067, secured by dDCO R5).</p> <p>In relation to NE's concerns [RR-065, REP1-070] about the Applicant's statement in the HRAR that significant disturbance is unlikely beyond a distance of 300m, the</p>	Matter resolved.

		<p>Applicant responded that it did not anticipate a need for piling or hydraulic breaking or any other high disturbance activities. That would be finally determined at the detailed design stage through the HRA sensitivity test. Following the implementation of mitigation and taking into account the short-duration and availability of alternative habitat the Applicant considered that there would be no AEOI of the SPAs and Ramsar sites.</p> <p>At D4 the Applicant submitted an updated dSoCG [REP4-246] with NE, in which the Applicant acknowledged NE's advice to consider high disturbance works including piling and hydraulic breaking causing noise disturbance beyond 300m, although it reiterated that it did not anticipate a need for such works. The dSoCG confirmed that any requirement for high disturbance works would be determined at the detailed design stage and a sensitivity test of the HRA would be undertaken, as described within the OCEMP [REP6-008] and secured by the dDCO [REP4-008].</p> <p>The Applicant stated within the dSoCG that the crossing of the River Dee was expected to take up to four weeks and any noise disturbance on wintering birds would be temporary, and that there was sufficient alternative habitat resource along the River Dee to accommodate temporarily displaced birds should this occur. It described the proposed mitigation measures identified in the updated D2 HRAR [REP2-023] and detailed in the OCEMP [REP6-008].</p> <p>This issue is shown as agreed in the dSoCG and it is stated that NE had confirmed in email correspondence dated 5 June 2023 that, on review of further information provided within the updated HRAR, it agreed this matter.</p> <p>In NE's response [REP5-043] to ExQ2.11.5, it stated that it had previously raised concerns about noise disturbance</p>	
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		<p>impacts on birds associated with the Dee Estuary SPA and Ramsar site and the Mersey Estuary SPA/Ramsar and an LSE on redshank due to the proximity of the Proposed Development to the areas where significant numbers of redshank were recorded in the wintering bird surveys. It noted that the LSE and AEOI assessments had been updated in the HRAR (Version C, May 2023) in relation to noise disturbance and considered that suitable mitigation had been proposed to limit disturbance to birds during the River Dee crossing works. It confirmed that it was satisfied that the information in the updated HRAR addressed its previous comments.</p>	
DEESIDE AND BUCKLEY NEWT SITES SAC			
2	GCN – surveys	<p>NRW highlighted within the D1 dSoCG [REP1-023] that the revised dispersal distances for GCN, as set out in updated 2022 Joint Nature Conservation Committee (JNCC) guidance, did not appear to be reflected in the HRAR, and that this matter was currently under discussion. The dSoCG with NRW submitted at D3 (REP3-026) showed that this matter was still under discussion. No dSoCGs with NRW were submitted for D4 or D5.</p> <p>In response to ExQ2.11.14 requesting an update on the position, the Applicant [REP5-025] explained that it was agreed at a meeting with NRW on 29 June 2023 that further GCN surveys were not required. It was also agreed that to ensure that the HRA reflected and acknowledged the updated JNCC guidance the HRAR would be updated prior to the end of the Examination to consider ponds within 1.6km of the SAC as functionally linked. The Applicant stated that it was agreed that the conclusion in the HRAR of no AEOI was</p>	<p>Matter outstanding.</p> <p><u>The ExA requests an update on this matter from the Applicant and NRW for D7, and a statement from the Applicant about when the updated HRAR will be submitted.</u></p>

		<p>unlikely to change and that NRW would confirm their position once they have reviewed the updated HRAR.</p> <p>NRW confirmed in its response [REP5-044] to ExQ2.11.15 that it considered the GCN surveys to be appropriate and proportionate, and that it was satisfied with the Applicant's proposed approach to mitigation as set out in the ES, OCEMP and Outline Landscape and Ecological Management Plan (OLEMP) [APP-229] and secured by Requirements 5 and 11 of the dDCO [REP4-008]. It acknowledged that the Applicant had indicated at the June 2023 meeting that the HRAR would be updated to reflect the updated JNCC advice. However, it stated that it was currently unable to advise in relation to the conclusion of no AEOI on the SAC until the information was provided. It would be discussing this matter at another meeting with the Applicant on 13 July 2023.</p> <p>The dSoCG between the Applicant and NRW submitted at D6 [REP6-028] records that, at a meeting with NRW on 12 July 2023, the Applicant had explained how it had addressed consideration of the 1.6km dispersal distance of GCN within the HRA. It agreed to provide NRW with advance sight of the amendments to the HRAR, with the aim that this matter would be agreed. Item 3.3.14 in Table 3-3 subsequently shows its status as agreed, although the discussion alongside it still reflects NRW's initial concerns and does not provide any additional commentary on such agreement.</p>	
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4.4 Summary of Examination outcomes in relation to adverse effects on integrity

- 4.4.1 The Applicant's conclusions regarding effects on integrity were disputed during the Examination. To date, one matter, identified in Table 4.1 of this report, remains unresolved; agreement has not yet been reached between the Applicant and NRW that there would not be an AEoI on the Deeside and Buckley Newt Sites SAC.
- 4.4.2 The ExA's understanding of the Applicant's and ANCBs' current positions in relation to AEoIs is set out in Tables A1.1 to A1.9 of Annex 1 of this report.

ANNEX 1: SUMMARY OF SCREENING AND AEOI ASSESSMENT CONCLUSIONS

The tables in this Annex summarise the ExA's understanding of the Applicant's screening exercise and assessment of effects on integrity, and agreement with ANCBs at the time of publication of this report, for all European sites assessed.

Key:

- C = Construction
- O = Operation
- X = no LSE/AEoI
- ✓ = LSE/AEoI

Table A1.1: Halkyn Mountain/ Mynydd Helygain SAC

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NRW? ⁷	Applicant's conclusion (alone or in combination)	Agreement with NRW? ⁹
Calaminarian grasslands of the <i>Violetalia calaminariae</i> / European dry heaths / Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) / <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	Direct and indirect habitat loss and/or mortality	X	Yes [REP1-071]	n/a	Yes [REP1-071]
	Fragmentation of habitats/species	X	Yes [REP1-071]	n/a	Yes [REP1-071]
	Hydrological effects	X	Yes [REP1-071]	n/a	Yes [REP1-071]
	Air quality effects	X	Yes [REP1-071]	n/a	Yes [REP1-071]
Great crested newt	Direct and indirect habitat loss and/or mortality	X	Yes [REP1-071]	n/a	Yes [REP1-071]
	Disturbance	X	Yes [REP1-071]	n/a	Yes [REP1-071]

⁷ Applies to impacts from the Proposed Development alone and in combination, unless otherwise stated.

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NRW? ⁷	Applicant's conclusion (alone or in combination)	Agreement with NRW? ⁹
	Fragmentation of habitats/species	X	Yes [REP1- 071]	n/a	Yes [REP1-071]
	Hydrological effects	X	Yes [REP1- 071]	n/a	Yes [REP1-071]

Table A1.2: Alyn Valley Woods/Coedwigoedd Dyffryn Alun SAC

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NRW? ⁸	Applicant's conclusion (alone or in combination)	Agreement with NRW? ⁹
<i>Tilio-Acerion</i> forests of slopes, scree and ravines / Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) / Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)	Direct and indirect habitat loss and/or mortality	X	Yes [REP1- 071]	n/a	Yes [REP1- 071]
	Fragmentation of habitats/species	X	Yes [REP1- 071]	n/a	Yes [REP1- 071]
	Hydrological effects	X	Yes [REP1- 071]	n/a	Yes [REP1- 071]
	Air quality effects	X	Yes [REP1- 071]	n/a	Yes [REP1- 071]

⁸ Applies to impacts from the Proposed Development alone and in combination, unless otherwise stated.

Table A1.3: River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NRW and NE? ⁹	Applicant's conclusion (alone or in combination)	Agreement with NRW and NE? ⁹
Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation / Floating water-plantain	Direct and indirect habitat loss and/or mortality	X	NE Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1- 070] NRW - Yes [REP1-071]
	Fragmentation of habitats/species	X	NE Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1- 070] NRW - Yes [REP1-071]
	Hydrological effects	X	NE Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1- 070] NRW - Yes [REP1-071]
	Air quality effects (dust deposition)	✓	NE Yes [REP1-070] NRW - Yes [REP1-071]	X	NE - Yes [REP1- 070] NRW - Yes [REP1-071]

⁹ Applies to impacts from the Proposed Development alone and in combination, unless otherwise stated.

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NRW and NE? ⁹	Applicant's conclusion (alone or in combination)	Agreement with NRW and NE? ⁹
Atlantic salmon / Sea lamprey / Brook lamprey / River lamprey / Bullhead	Direct and indirect habitat loss and/or mortality	X	NE Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1- 070] NRW - Yes [REP1-071]
	Disturbance	✓ ¹⁰	NE Yes [REP1-070] NRW - Yes [REP1-071]	X	NE - Yes [REP1- 070] NRW - Yes [REP1-071]
	Fragmentation of habitats/species	✓	NE Yes [REP1-070] NRW - Yes [REP1-071]	X	NE - Yes [REP1- 070] NRW - Yes [REP1-071]
	Hydrological effects	X	NE Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1- 070] NRW - Yes [REP1-071]
	Air quality effects (dust deposition)	✓	NE Yes [REP1-070]	X	NE - Yes [REP1- 070]

¹⁰ From lighting around the River Dee trenchless crossing installation.

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NRW and NE? ⁹	Applicant's conclusion (alone or in combination)	Agreement with NRW and NE? ⁹
			NRW - Yes [REP1-071]		NRW - Yes [REP1-071]
Otter	Direct and indirect habitat loss and/or mortality	✓ ¹¹	NE Yes [REP1-070] NRW - Yes [REP1-071]	X	NE Yes [REP1- 070] NRW - Yes [REP1-071]
	Disturbance	X	NE Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1- 070] NRW - Yes [REP1-071]
	Fragmentation of habitats/species	X	NE Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1- 070] NRW - Yes [REP1-071]
	Hydrological effects	X	NE Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1- 070] NRW - Yes [REP1-071]

¹¹ Loss of functionally linked habitat (along Wepre Brook) and mortality as a result of entrapment in voids.

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NRW and NE? ⁹	Applicant's conclusion (alone or in combination)	Agreement with NRW and NE? ⁹
	Air quality effects (dust deposition)	✓	NE Yes [REP1-070] NRW - Yes [REP1-071]	X	NE - Yes [REP1- 070] NRW - Yes [REP1-071]

Table A1.4: Deeside and Buckley Newt Sites SAC

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NRW? ¹²	Applicant's conclusion (alone or in combination)	Agreement with NRW? ⁹
Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Direct and indirect habitat loss and/or mortality	✓	Yes [REP1- 071]	X	Yes [REP1-071]
	Fragmentation of habitats/species	X	Yes [REP1- 071]	n/a	Yes [REP1-071]

¹² Applies to impacts from the Proposed Development alone and in combination, unless otherwise stated.

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NRW? ¹²	Applicant's conclusion (alone or in combination)	Agreement with NRW? ⁹
	Hydrological effects	✓ ¹³	Yes [REP1-071]	X	Yes [REP1-071]
	Air quality effects	X	Yes [REP1-071]	n/a	Yes [REP1-071]
Great crested newt	Direct and indirect habitat loss and/or mortality	✓	Yes [REP1-071]	X	No [REP5-044]
	Disturbance	✓	Yes [REP1-071]	X	No [REP5-044]
	Fragmentation of habitats/species	✓	Yes [REP1-071]	X	Yes [REP1-071]
	Hydrological effects	X	Yes [REP1-071]	n/a	Yes [REP1-071]

¹³ Due to working in and around the Wepre Brook/Gorge.

Table A1.5: Mersey Estuary SPA

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NE? ¹⁴	Applicant's conclusion (alone or in combination)	Agreement with NE? ⁹
Golden plover / Common shelduck (non-breeding) / Eurasian teal (non-breeding) / Northern pintail (non-breeding) / European golden plover (non-breeding) /	Direct and indirect habitat loss and/or mortality	X	Yes [REP1-070]	n/a	Yes [REP1-070]
	Noise disturbance to birds using FLL	X (alone) ✓ (in combination)	No [RR-065]	n/a (alone) X (in combination)	Yes [REP5-043]
	Disturbance from lighting	X	Yes [REP1-070]	X	Yes [REP1-070]
	Fragmentation of habitats/species	X	Yes [REP1-070]	n/a	Yes [REP1-070]
	Hydrological effects	X	Yes [REP1-070]	n/a	Yes [REP1-070]

¹⁴ Applies to impacts from the Proposed Development alone and in combination, unless otherwise stated.

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NE? ¹⁴	Applicant's conclusion (alone or in combination)	Agreement with NE? ⁹
Dunlin (non-breeding) / Black-tailed godwit (non-breeding) /					
Waterbird assemblage (non-breeding)/ Common redshank (non-breeding)	Direct and indirect habitat loss and/or mortality	X	Yes [REP1-070]	n/a	Yes [REP1-070]
	Visual disturbance (lighting)	✓ ^{15, 16}	Yes [REP1-070]	X	Yes [RR-065]
	Noise disturbance (construction)	✓	Yes [REP5-043]	X	Yes [REP5-043]
	Fragmentation of habitats/species	X	Yes [REP1-070]	n/a	Yes [REP1-070]
	Hydrological effects	X	Yes [REP1-070]	n/a	Yes [REP1-070]

¹⁵ From lighting around the River Dee trenchless crossing installation.

¹⁶ For redshank feature of the assemblage only.

Table A1.6: Mersey Estuary Ramsar site

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NE? ¹⁷	Applicant's conclusion (alone or in combination)	Agreement with NE? ⁹
Criterion 5 – waterfowl assemblage	Direct and indirect habitat loss and/or mortality	X	Yes [REP1- 070]	n/a	Yes [REP1-070]
	Disturbance	✓ ¹⁸	Yes [REP5- 043]	X	Yes [REP5-043]
	Fragmentation of habitats/species	X	Yes [REP1- 070]	n/a	Yes [REP1-070]
	Hydrological effects	X	Yes [REP1- 070]	n/a	Yes [REP1-070]
Criterion 6 - species/populations occurring at levels of international importance	Direct and indirect habitat loss and/or mortality	X	Yes [REP1- 070]	n/a	Yes [REP1-070]
	Noise disturbance to birds using FLL	✓ ¹⁹	Yes [REP5- 043]	X	Yes [REP5-043]

¹⁷ Applies to impacts from the Proposed Development alone and in combination, unless otherwise stated.

¹⁸ For redshank only. From lighting around the River Dee trenchless crossing installation.

¹⁹ For redshank only. From lighting around the River Dee trenchless crossing installation.

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NE? ¹⁷	Applicant's conclusion (alone or in combination)	Agreement with NE? ⁹
	Visual disturbance	X	Yes [REP1-070]	n/a	Yes [REP1-070]
	Fragmentation of habitats/species	X	Yes [REP1-070]	n/a	Yes [REP1-070]
	Hydrological effects	X	Yes [REP1-070]	n/a	Yes [REP1-070]

Table A1.7: Dee Estuary/Aber Dyfrdwy SAC

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ²⁰	Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ⁹
Mudflats and sandflats not covered by seawater at low tide / Salicornia and other annuals colonizing mud and sand / Atlantic salt meadows (<i>Glauco- Puccinellietalia maritimae</i>) / Estuaries / Annual vegetation of drift lines / Vegetated sea cliffs of the Atlantic and Baltic Coasts / Embryonic shifting dunes / "Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes")" / "Fixed coastal dunes with herbaceous vegetation ("grey dunes")" / Humid dune slacks	Direct and indirect habitat loss and/or mortality	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Fragmentation of habitats/species	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Hydrological effects	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]

²⁰ Applies to impacts from the Proposed Development alone and in combination, unless otherwise stated.

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ²⁰	Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ⁹
Sea lamprey / river lamprey	Direct and indirect habitat loss and/or mortality	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Disturbance	✓ (alone only)	NE - Yes [REP1-070] NRW - Yes [REP1-071]	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Fragmentation of habitats/species	✓ (alone only)	NE - Yes [REP1-070] NRW - Yes [REP1-071]	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Hydrological effects	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
Petalwort	Direct and indirect habitat	X	NE - Yes [REP1-070]	n/a	NE - Yes [REP1-070]

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ²⁰	Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ⁹
	loss and/or mortality		NRW - Yes [REP1-071]		NRW - Yes [REP1-071]
	Disturbance	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Fragmentation of habitats/species	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Hydrological effects	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]

Table A1.8: Dee Estuary SPA

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ²¹	Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ⁹
Bar-tailed godwit (non-breeding) / Black-tailed godwit (non-breeding) / Common tern (breeding) / Curlew (non-breeding) / Dunlin (non-breeding) / Grey plover (non-breeding) / Knot (non-breeding) / Little tern (breeding) / Oystercatcher (non-breeding) / Pintail (non-breeding) / Sandwich tern (non-breeding) / Shelduck (non-breeding) / Teal (non-breeding)	Direct and indirect habitat loss and/or mortality	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Noise disturbance to birds using FLL	X	NE - Yes [REP5-043] NRW - Yes [REP1-071]	X	NE - Yes [REP5-043] NRW - Yes [REP1-071]
	Visual disturbance	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Fragmentation of habitats/species	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]

²¹ Applies to impacts from the Proposed Development alone and in combination, unless otherwise stated.

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ²¹	Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ⁹
	Hydrological effects	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
Redshank (non-breeding) Waterbird assemblage	Direct and indirect habitat loss and/or mortality	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Visual disturbance	✓ ^{22, 23}	NE - Yes [REP1-070] NRW - Yes [REP1-071]	X	NE - Yes [RR-065] NRW - Yes [REP1-071]
	Noise disturbance to birds using FLL	✓	NE - Yes [REP5-043] NRW - Yes [REP1-071]	X	NE - Yes [REP5-043] NRW - Yes [REP1-071]

²² From lighting around the River Dee trenchless crossing installation.

²³ For redshank feature of the assemblage only.

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ²¹	Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ⁹
	Fragmentation of habitats/species	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Hydrological effects	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]

Table A1.9: Dee Estuary Ramsar site

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ²⁴	Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ⁹
Criterion 1 - Extensive intertidal mud and sand flats (20 km by 9 km) with large expanses of saltmarsh towards the head of the estuary.	Direct and indirect habitat loss and/or mortality	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Fragmentation of habitats/species	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Hydrological effects	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
Criterion 2 – Natterjack toad	Direct and indirect habitat loss and/or mortality	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]

²⁴ Applies to impacts from the Proposed Development alone and in combination, unless otherwise stated.

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ²⁴	Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ⁹
	Disturbance	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Fragmentation of habitats/species	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Hydrological effects	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
Criterion 5 – waterbird assemblage during the non-breeding season	Direct and indirect habitat loss and/or mortality	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Disturbance	✓	NE - Yes [REP5-043] NRW - Yes [REP1-071]	X	NE - Yes [REP5-043] NRW - Yes [REP1-071]

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ²⁴	Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ⁹
	Fragmentation of habitats/species	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Hydrological effects	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
Criterion 6 - species/populations occurring at levels of international importance	Direct and indirect habitat loss and/or mortality	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Disturbance	✓ ²⁵	NE - Yes [REP5-043] NRW - Yes [REP1-071]	X	NE - Yes [REP5-043] NRW - Yes [REP1-071]

²⁵ For redshank feature only. From lighting around the River Dee trenchless crossing installation.

Feature	Potential impact (C & O unless otherwise stated)	LSE?		AEoI?	
		Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ²⁴	Applicant's conclusion (alone or in combination)	Agreement with NE and NRW? ⁹
	Fragmentation of habitats/species	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]
	Hydrological effects	X	NE - Yes [REP1-070] NRW - Yes [REP1-071]	n/a	NE - Yes [REP1-070] NRW - Yes [REP1-071]