

HyNet North West

EWLOE ROUTING AND MITIGATION POSITION PAPER

HyNet Carbon Dioxide Pipeline DCO

Planning Act 2008

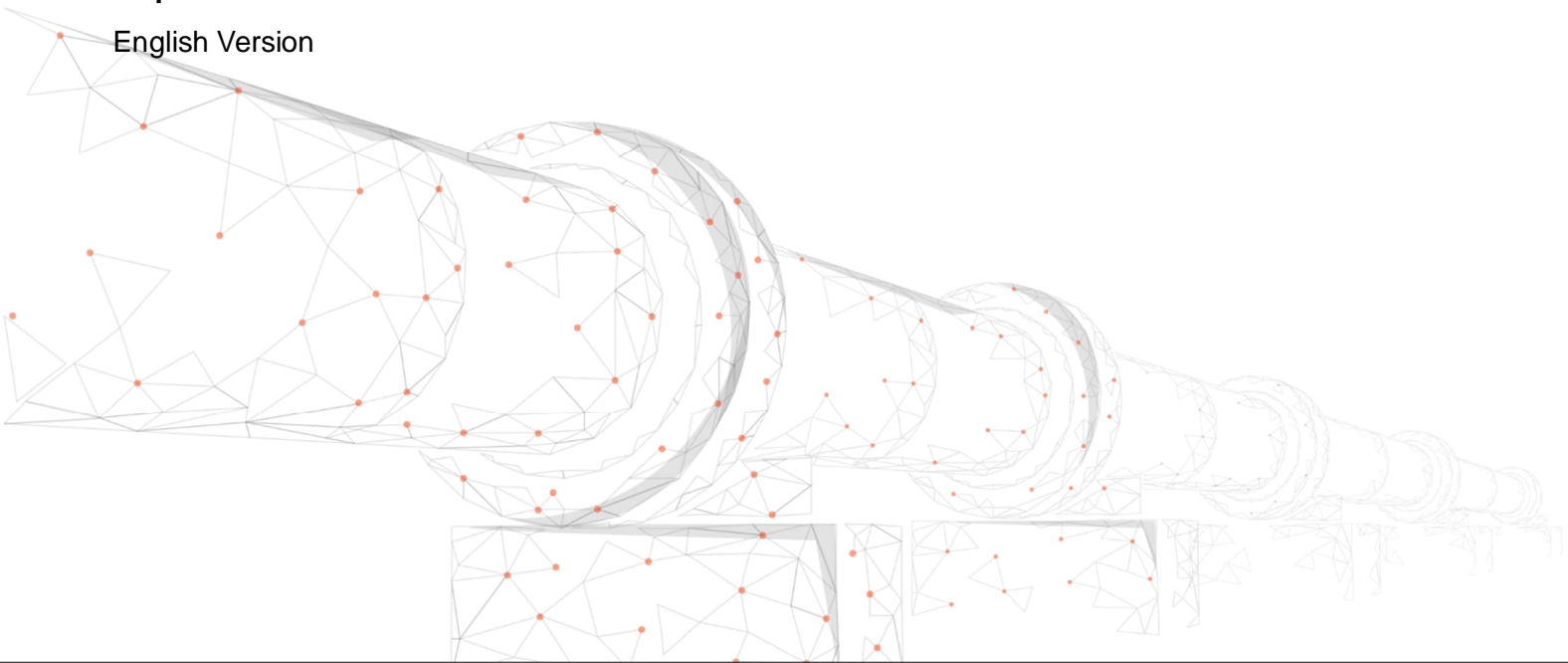
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1. INTRODUCTION

1.1. PURPOSE OF THIS DOCUMENT

- 1.1.1. This document has been prepared on behalf of Liverpool Bay CCS Limited ('the Applicant') and relates to an application ('the Application') for a Development Consent Order (DCO) that has been submitted to the Secretary of State (SoS) for Energy Security & Net Zero (ESNZ) under Section 37 of the Planning Act 2008 ('the PA 2008'). The Application relates to the carbon dioxide (CO₂) pipeline which constitutes the DCO Proposed Development.
- 1.1.2. The purpose of this document is to describe in detail the basis for the pipeline routing and location of essential mitigation land in the Ewloe area. It also sets out the impacts on the farming business at Newbridge Farm and the measures the Applicant has taken to remove, reduce and mitigate these.

1.2. THE DCO PROPOSED DEVELOPMENT

- 1.2.1. HyNet (the Project) is an innovative low carbon hydrogen and carbon capture, transport and storage project that will unlock a low carbon economy for the North West of England and North Wales and put the region at the forefront of the UK's drive to Net-Zero. The details of the project can be found in the main DCO documentation.
- 1.2.2. A full description of the DCO Proposed Development is detailed in Chapter 3 of the consolidated Environmental Statement (ES) **[REP4-029]**, submitted at Deadline 4. On the 12 July 2023, the ExA accepted the Applicant's Change Request 3, subsequently the description of the development will be updated in accordance with Change Request 3 Environmental Technical Note **[CR3-019]**, towards the end of the Examination.

2. PIPELINE ROUTING OPTIONS

2.1. LANDOWNER ENGAGEMENT

- 2.1.1. As part of frequent and ongoing engagement with the landowner of Newbridge Farm, a routing option report was shared with the landowner. The content of that routing option report has been incorporated into this document.
- 2.1.2. The landowner has also asked if the Carbon Dioxide Pipeline can be moved to the east of The Bungalow (being the dwelling to the immediate east of Newbridge Farm which is shown as the orange area in Figure 2. Routing to the east of Newbridge Farm was a route considered at the options stage.
- 2.1.3. Figure 2-1 shows the potential eastern route around Newbridge Farm, as reviewed by the Applicant. This route (depicted by the black arrows) was not selected and has summarised the rationale for the route selection in Section 2.1.4 onwards.

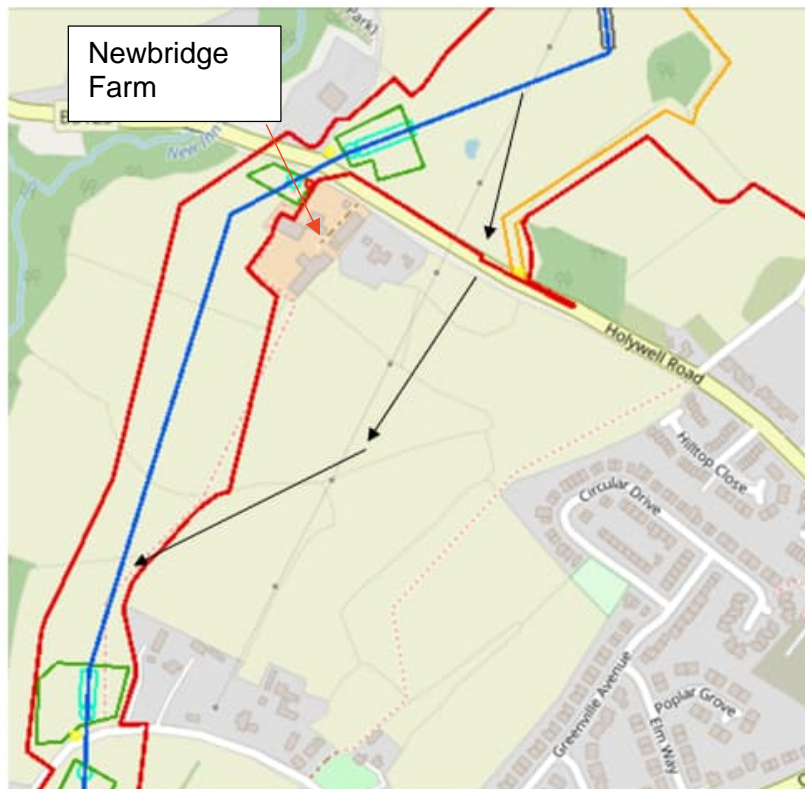


Figure 2-1 – The Selected Ewloe Option (Showing the indicative pipeline alignment in blue and the Order Limits at the time of assessment in red)

- 2.1.4. The selected Ewloe Option runs to the west of Newbridge Farm on the south side of the B5125 highway. Newbridge Farm (highlighted on Figure 2-1 and 2-2) is operated as a dairy farming business., Please refer to Section 3 for further details.
- 2.1.5. This section of the route crossing under the B5125 (Holywell Road) and to the west of the farm buildings is part of Work No 41 (shown on sheet 18 of the Work

Plans the most recent revision of which is CR3-005) which relates to the installation of the Carbon Dioxide Pipeline and ancillary works. Work No 41C, which relates to the creation of a new permanent access from the B5121, is situated to the south of the B5125. Work No 41B for the creation of a temporary construction access is located to the north of the B5125.

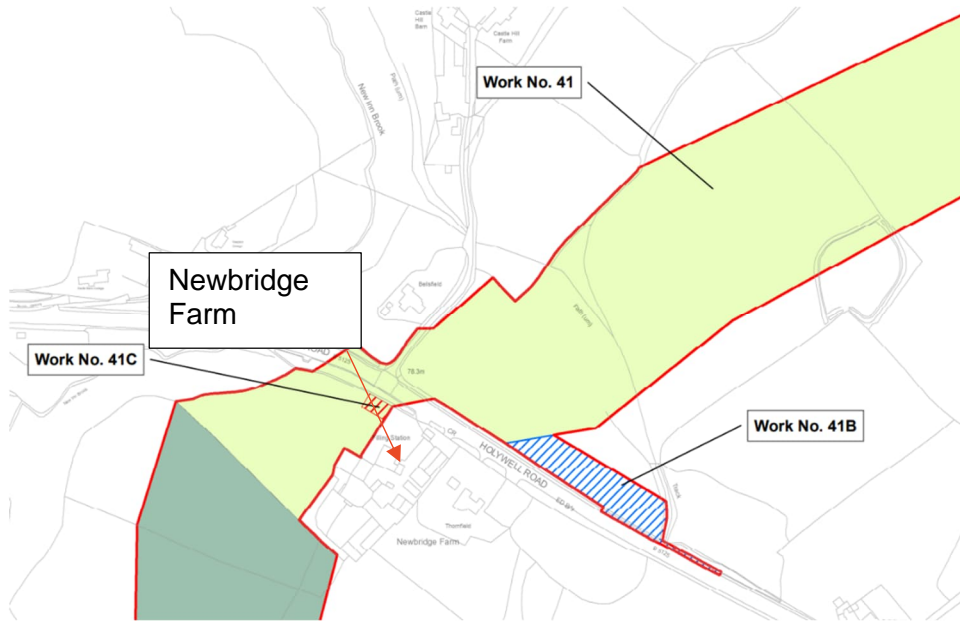


Figure 2-2 – Extract from Works Plans (Rev G) [CR3-005] Sheet 18, Showing Work No.s 41, 41B and 41C

2.1.6. The Order Limits are constrained in this area on the south side of the B5125 to the east by the farm buildings and to the west by existing ancient woodland. On the north of the B5125 (Holywell Road), the Order Limits are constrained to the west by a dwelling. A 100m wide corridor (as has been sought over the majority of the route) is not achievable in this location because of these constraints.

2.2. OPTIONS STAGES 1 AND 2

2.2.1. The Carbon Dioxide Pipeline’s pre-application design development took place in three stages:

- Stage 1: Development and appraisal of strategic corridors;
- Stage 2: Development and appraisal of route options; and
- Stage 3: Refinement of preferred route option and siting.

2.2.2. In developing the Carbon Dioxide Pipeline route corridor options, the following guiding principles were developed:

- To avoid, minimise and manage impacts upon the environment and local amenity;
- To ensure the transportation of the carbon dioxide is undertaken safely and securely;
- To optimise the potential socio-economic benefits within the region;

- To be technically viable and constructible with minimum disruption; and
- To be cost-effective.

2.2.3. The Applicant committed at an early stage to avoiding residential properties and their gardens, and this also formed a constraint in route selection.

2.2.4. The options appraisal methodology was based on best practice adopted by National Grid in developing new gas and electricity infrastructure, intended primarily for major infrastructure projects under the Planning Act 2008. The National Grid guidance sets out the importance of a robust and transparent process as well as balancing the technical, socio-economic, environmental, and cost considerations when selecting a project option.

2.2.5. The Environmental Statement sets out the consideration of alternatives in Chapter 4 [REP4-031]. The Stage 1 appraisal identified four strategic corridors for the newbuild pipeline, shown in Figure 4-1 [REP4-192], repeated on Figure 2-3 in this paper below.

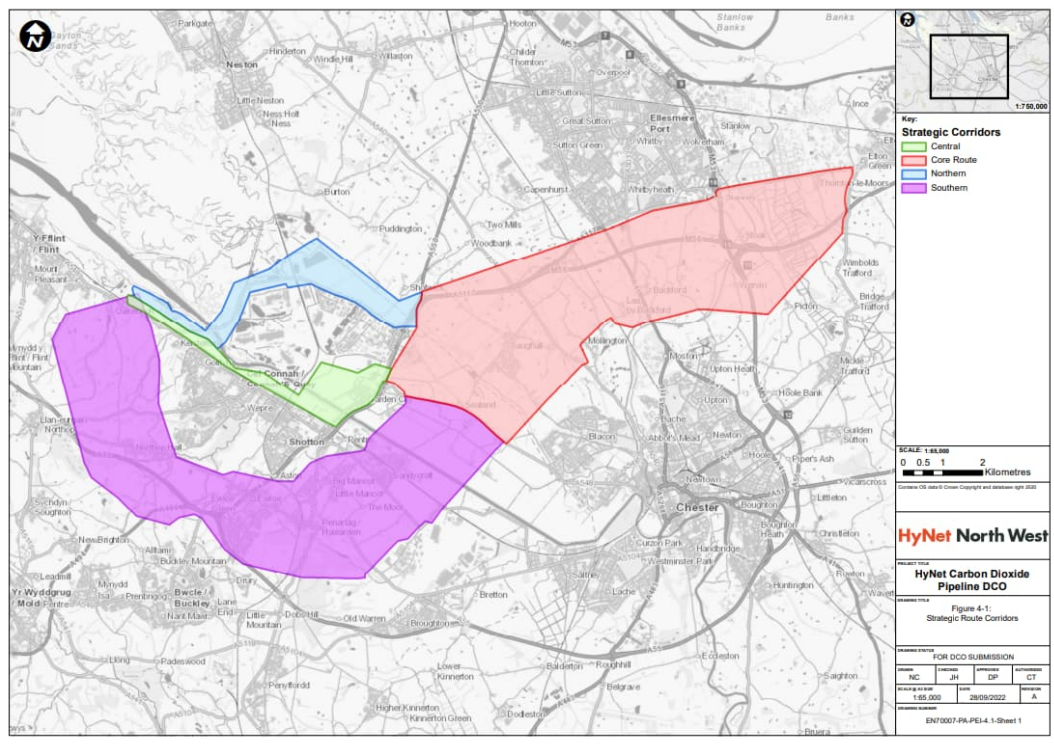


Figure 2-3 – Strategic Route Corridors Identified

2.2.6. The current route is within the ‘southern’ strategic corridor (shaded purple in Figure 23) which covered a broad area around Ewloe to the south and east of Shotton and (in the area concerned) to the north of the A55 highway. Paragraphs 4.5.16 and 4.5.17 of Chapter 4 of the ES [REP4-031] set out the appraisal of the strategic corridors. The southern corridor was selected for the reasons set out in paragraphs 4.5.18 and 4.5.19 of Chapter 4 of the ES [REP4-031], including that it would have a smaller risk of impact on environmental designations and would have the lowest risk in construction.

- 2.2.7. Stage 2 considered options within the strategic corridors selected at Stage 1. This included two southern route options (A and B). The Stage 2 appraisal framework was developed using the objectives and guiding principles broken down further to include a series of 35 ‘factors’ and associated ‘criteria’ which allowed for a more detailed appraisal of the strengths and weaknesses of the preferred route in the selected corridors. This is described in paragraphs 4.5.21 to 4.5.25 of Chapter 4 of the ES [REP4-031]. The factors and criteria are listed in Appendix 4.1 – Guiding Principles, Factors and Criteria for Options Selection [REP4-074].
- 2.2.8. Southern route option A was taken forward to Stage 3 due to having fewer complex infrastructure crossings and the requirement for a shorter length of pipeline.

2.3. OPTIONS STAGE 3

- 2.3.1. Stage 3 considered nine options (labelled A-I) within the route corridors selected at Stages 1 and 2.

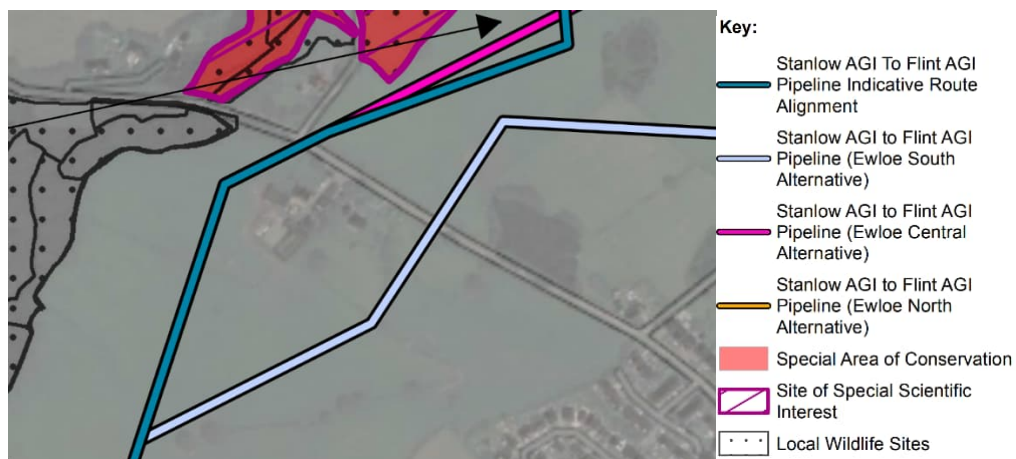


Figure 2-4 – Extract of Figure 4.3 [REP4-194] Showing Newbridge Farm and Surrounding Route Options Figure 2 4 – Extract of ES Figure 4-3 Showing Newbridge Farm and Surrounding Route Options

- 2.3.2. Paragraphs 4.5.40 and 4.5.41 of Chapter 4 of the ES describe the corridors that were considered in this location, which are shown in Figure 4-3 [REP4-194]:

“4.5.40 Due to potential conflicts with existing planning allocations three options were developed in the area north of Ewloe Green (Section 5), to the north, south and through the centre of the Ewloe residential developments as shown in Figure 4- 3 (Volume IV). These routes were subject to assessment and comparison in terms of environmental effects, engineering and cost.

4.5.41 The Ewloe north alternative compared less favourably in environmental, planning, land and safety terms compared to the south and central options. The Ewloe south alternative had the lowest ecological impacts as it is the furthest from Deeside and Buckley Newt SAC (European designated site) and Connah’s Quay Ponds and Woodlands SSSI (Nationally designated site). It was also

preferred by Flintshire County Council as it would avoid direct impacts on the Sea View and Aston Wetland Local Wildlife Sites (LWS) and associated peat deposits; however it had the lowest score for engineering constructability and it also impacts on all the planned developments. The Ewloe central alternative had the second highest environmental score. It minimises impacts to the three planned residential developments as such is an inherently safer design and scored highest in terms of engineering/cost so is the best option for construction viability. As such, the Ewloe central alternative was taken forward as the preferred option.”

2.3.3. Routing the Carbon Dioxide Pipeline to the east of the Newbridge Farm had some environmental benefits, being further from the ancient woodland and in land with limited ecological receptors. However, it would also require moving the alignment to avoid the curtilage of the other residential properties to the east, (Thorntield and The Bungalow). This takes the alignment through the area which was (at the time) identified for the Holywell Road / Green Lane housing allocation in the emerging Flintshire Local Development Plan. As the curtilage of The Bungalow abuts the boundary of the housing allocation, there is no route that would not impact one or the other of these.

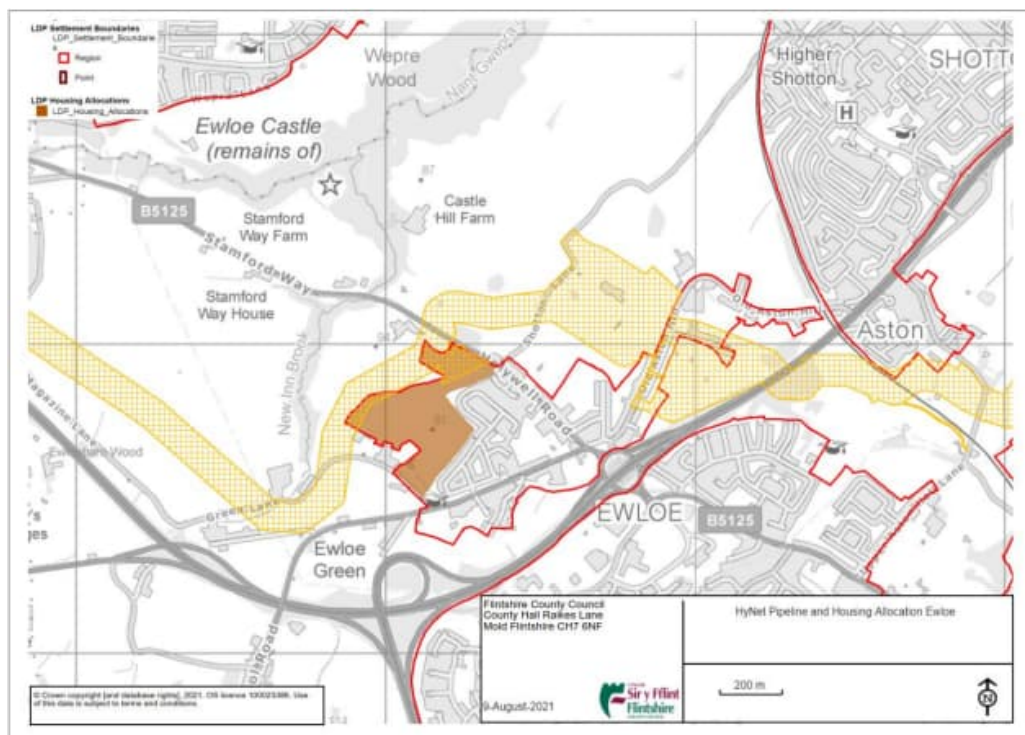


Figure 2-4 – showing the potential Pipeline Corridor (with a route to the East of Newbridge Farm) in Hatched Yellow and the Holywell Road / Green Lane Housing Allocation in Brown Submitted to the Local Development Plan Process, 14 October 2021

- 2.3.4. The emerging Flintshire Local Development Plan was consulted on in 2019 and submitted for Examination on 06 November 2020. The proposed housing allocation at Holywell Road / Green Lane (HN1.7) was therefore taken into account in the Stage 3 options appraisal.
- 2.3.5. The unconfirmed nature of the potential housing development on this site means that it would be very difficult to design the Carbon Dioxide Pipeline with any level of certainty as to the number of housing units rendered undeliverable. This creates risk to the deliverability of the Carbon Dioxide Pipeline design. Reducing the number of units which could be delivered would also have been contrary to the objective of the draft Local Development Plan. Routing through the housing allocation would also increase the costs of delivering the pipeline, especially where the number of units which can be constructed is reduced significantly.
- 2.3.6. Feedback from the statutory consultation was considered in the appraisal. This showed that the highest number of respondents had no preference for any of the options. Flintshire County Council confirmed a preference for the Central option for wildlife (in comparison to the north option) and planning policy reasons.

2.4. RE-CONSIDERATION

- 2.4.1. As part of the farming business, a new slurry tank has been erected, located to the west of the Newbridge Farm farmhouse and buildings, lying between those buildings and the ancient woodland to the west in the area around the New Inn Brook. That slurry tank was not in situ at the time the routing options appraisal was undertaken.
- 2.4.2. The Applicant re-considered the routing in this area in 2022 in response to concerns raised by the landowner and the identification of the new slurry tank over the proposed pipeline corridor, which was constructed after the options appraisal and completed in 2022. The Landowner obtained retrospective planning permission in April 2023 and the tank had accordingly not been identified on the Applicant's searches for live planning applications at earlier stages.
- 2.4.3. The Planning Inspectors' report of the Local Development Plan Examination was issued on 15 December 2022. The report finds the proposed housing allocation to be based on a "*robust and rational site selection process*" (paragraph 8.77). The report recommends that the site at Ewloe be allocated for the delivery of 298 housing units. It also notes that "*the delivery of sufficient housing on the most suitable sites is, of course, fundamental to the success or otherwise of the plan*" (paragraph 8.1). The Flintshire Local Development Plan was adopted by the Council on 24 January 2023 and forms part of the statutory development plan.

- 2.4.4. The woodland to the west of the current route was surveyed in December 2022 and confirmed to be ancient woodland. This constrains the corridor in this area due to the need to protect ancient woodland, resulting in interaction with Newbridge Farm facilities, including the slurry tank, being unavoidable.
- 2.4.5. A farm impact assessment and appraisal of the options to avoid and mitigate the impact on the business, including the slurry tank, was carried out in late 2022. This considered the overall impact on the farm business, including grazing. The Applicant has also taken specialist advice on how and to where the slurry tank could be re-sited within the farm.
- 2.4.6. The Applicant remains committed to avoiding residential properties and their gardens, which requires the route to be in the area towards the outskirts of Ewloe. Moving the route to the east would result in increased proximity to multiple properties (being closer to Ewloe), as well as the potential to interfere with further multiple properties in the future as this is now an allocated site (HN1.7) which is part of the adopted Local Development Plan. Moving the route to this area would increase the risks and complexities of potential third party interference, simultaneous construction operations and safety involved in constructing the pipeline at the same time as any new development. As such, it would also create implications on future developments due to the proximity to potential future residences.
- 2.4.7. The route to the east of Newbridge Farm remains assessed as more complex from a planning, constructability and engineering perspective.
- 2.4.8. The Applicant, having reviewed the route, and considering the balance between the engineering and constructability risks, the potential impacts on receptors, potential impact on the housing allocation, the impact on farm business and the considerations set out in the National Policy Statements and the Local Development Plan, remains of the view that the current route to the West of Newbridge Farm represents the most appropriate option.

3. FARM LOCATION AND EXTENT

- 3.1.1. The Applicant is aware that a single landowner has substantial area of land impacted by the Development in the Ewloe area.
- 3.1.2. The landowner owns land parcels forming Newbridge Farm which are split out into three blocks of land, all within a ringed fence with road frontage and detailed below: (as shown in Figure 3-1):
 - Newbridge Farm Area
 - Castle Hill Farm Area
 - Alltami Brook Area

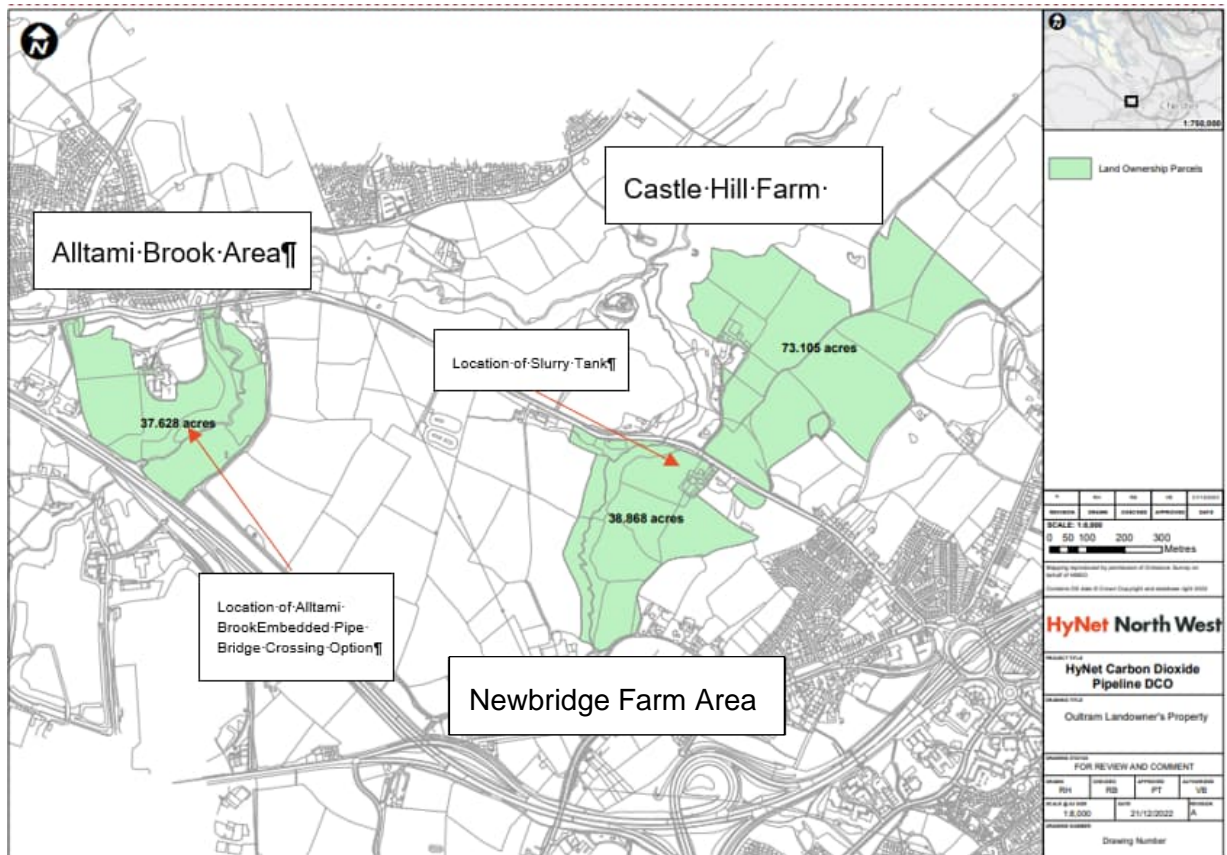


Figure 3-1 – Extent of the Landowner’s Property Impacted by the Development

- 3.1.3. In December 2022, the Applicant attended Newbridge Farm to undertake a Farm Impact Assessment of the landowner’s business, whilst the details of this full assessment are not provided in this document, it does set out the permanent and temporary impacts and summarises the mitigation measures the Applicant has put in place and identifies the remaining residual impacts.
- 3.1.4. Only a small amount of the three land areas were not inspected by the Applicant’s team. The dwellinghouse was not inspected as this was deemed not to be necessary to carry out the assessment.

3.1.5. During the visit the landowner raised several concerns; this report aims to address those concerns and how the Applicant has addressed those as far as practicable.

4. SLURRY TANK INTERACTION

- 4.1.1. A slurry tank has recently been installed on the farm on the property of the landowner detailed in Section 3. Figure 4-1 indicates the location of the slurry tank on the landowner's property.
- 4.1.2. The installation of this tank has been to ensure that the landowner has a minimum of five months of slurry storage on the farm in line with the Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021.
- 4.1.3. The slurry tank was completed in May 2022; however, it was constructed without planning permission in place and without a valid pre commencement consent from Natural Resources Wales. The Landowner has recently received retrospective planning for the slurry tank from Flintshire County Council under reference FUL/000111/23.
- 4.1.4. The slurry tank is located approximately 15 metres from the buildings and approximately 18 metres from the ancient woodland, with a sheer drop down to the road. The topography of the land here is challenging; it is noted that a section of the hillside has been cut out to facilitate construction of the slurry tank.
- 4.1.5. Due to the current stocking levels of 200 dairy cows, the Applicant notes there is significant demand on grass and silage. The current location of the slurry tank within the parcel of land adjoining the farmhouse is considered by the landowner to be the most advantageous location for the landowner due to the existing farming system, topography of the land and proximity to the farm yard and slurry reception pit.
- 4.1.6. The slurry tank was not present when the Carbon Dioxide Pipeline routing was undertaken and the DCO application prepared. Following identification of the slurry tank's location, the Applicant assessed the options available in this area and included these in Change Request 1 which was accepted on 24 April 2023 **[PD-016]**. The two options available are:
1. To route the Carbon Dioxide Pipeline a safe distance from the current location of the slurry tank. This option presents an issue due to its proximity to the ancient woodland to the north and northwest of the slurry tank and would require intrusive encroachment of 2 metres within the 15 metre Root Protection Area (RPA) of trees associated with the ancient woodland. In order to accommodate this routing, a new plot 18-20a was added to the Order land to provide the necessary space to the west of the slurry tank.
 2. To route the Carbon Dioxide Pipeline where the slurry tank is currently situated, requiring relocation of the slurry tank and temporary slurry provision / compensation as required.

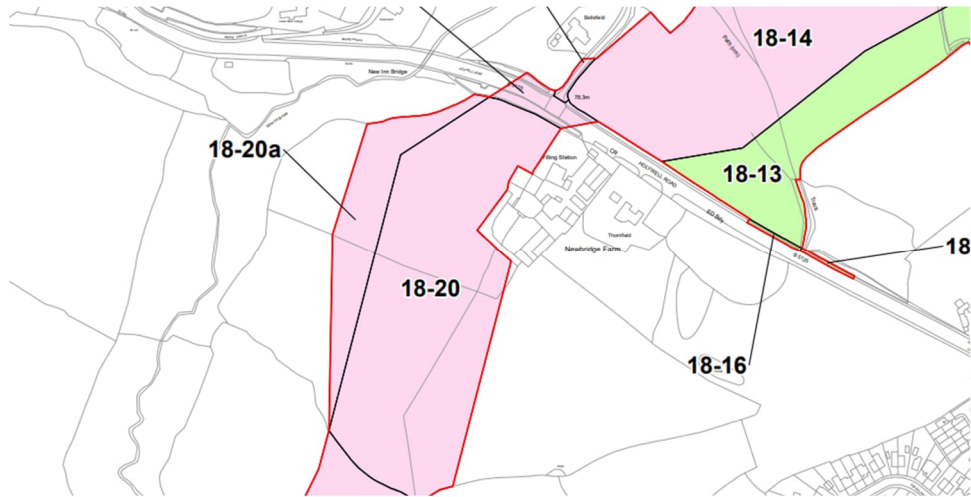


Figure 4-1 – Extract of Land Plans [CR3-003] Showing Sheet 18 and Plot 18-20a

- 4.1.7. The Applicant took specialist advice on how and where the slurry tank could be relocated before preparing Change Request 1 in order to assess if this was a viable option. That advice was that the tank could reasonably be moved further up the hill. The final location would require to be informed by surveys and agreed with the landowner.
- 4.1.8. The Applicant, recognising that moving the slurry tank would have an impact on the landowner's farming operation, has also been progressing discussions with Flintshire County Council to seek to agree arboricultural protection measures which would allow a small infringement into the RPA (a conservative assessment of the RPA was considered in this approach) to avoid needing to relocate the slurry tank. As noted in the statement of common ground with FCC [REP3-025] (Table 3.6.3), FCC have agreed in principle that with protection measures, encroachment into the RPA could be permitted. The extent and nature of such measures have been agreed and the Applicant has prepared an outline of those which would be necessary in this location for discussion with FCC. Provided that this scheme can be agreed, the Applicant will submit that to the Examination in order to support its application for consent for such infringement.

5. PERMANENT IMPACTS TO FARMING

5.1. ALLTAMI BROOK CROSSING

- 5.1.1. An 'embedded pipeline bridge option' for the crossing of Alltami Brook was submitted to the Examination as part of Change Request 2, which was accepted on 29 July 2023 **[PD-019]**. This was to allow for the construction of a concrete bridge over the watercourse, within which the pipe is buried to ensure it remains properly protected. This has been submitted by the Applicant as a non-preferred option.
- 5.1.2. The change is driven by discussions with Natural Resources Wales (NRW) and concerns they have relating to the use of an open cut trench through the bed of the Alltami Brook. While the Applicant still considers open cut trench to be the best option, the Applicant currently understands that NRW does not agree and has advised that they consider it is non-compliant with the Water Framework Directive (WFD). The Applicant has therefore proposed the bridge as a fall back option should the Secretary of State determine that the open cut option is not acceptable.
- 5.1.3. The Applicant notes that at the time of drafting, Change Request 2 is currently under consultation. Surface rights would only be needed for the final crossing point at Alltami Brook. The preliminary design included in Change Request 2 has an indicative span of approximately 14 metres and a width of approximately 4 metres, but the dimensions may vary dependent on the final crossing location selected at detailed design.
- 5.1.4. The concrete embedded pipe bridge will require 'piers' or abutments on either side to support it. Those structures may impact the existing public right of way running alongside the Alltami Brook. Change Request 2 therefore seeks authority to permanently divert the right of way around the pier. That would require the Applicant to create a new section of public right of way, as close as possible to the existing route. The current route would be closed, and the new route would be given the legal status of a public right of way.
- 5.1.5. It should also be noted that the Applicant would need to carry out more ground investigation to finalise where the bridge would be. The plans accordingly allow for a bigger diversion than would actually be needed in order that this can be created in the appropriate location.
- 5.1.6. Alltami Brook is used by the landowner for access to water by cattle and the Applicant confirms that if this option is required, the landowner's current access to the Alltami Brook will be maintained. The exact location of this access will be confirmed during detailed design when the embedded pipe bridge location is confirmed.

5.2. PRIVATE WATER SUPPLIES

- 5.2.1. The landowner has concerns over the potential impacts on his private water supplies (borehole) at both Newbridge and Castle Hill Farms. The Applicant has reviewed the impact the Carbon Dioxide Pipeline could have on these private water supplies. All of the identified private water supplies along the route have been individually assessed, and the Applicant has determined that its works would be outside the zone of influence for such water supplies. Accordingly, the works are not expected to adversely affect these boreholes.

5.3. EWLOE MITIGATION LAND SELECTION

- 5.3.1. The Applicant has included in the DCO a number of Work Numbers which have been selected for Landscape and Ecological Mitigation (and are outlined in the Landscape and Ecological Mitigation **[REP4-190]**). This section of the document outlines the rationale for the selection of the Landscape and Ecological Mitigation land for all sections identified in Wales (which are all located in vicinity of the Ewloe Area). However, it should be noted that the Work Number of the Mitigation planting that impacts the Landowner highlighted in Section 3, is only Work No 57K, located adjacent to the Alltami Brook (see Section 5.2.13).

MITIGATION LAND PLACEMENT BASIS

- 5.3.2. In the first instance, the Applicant has applied the mitigation hierarchy and sought to avoid impacts to habitats where possible. Where this is not possible, the Applicant is seeking to minimise and mitigate impacts thereafter.
- 5.3.3. The Applicant has sought to reduce the impacts of construction upon habitats of increased ecological value (e.g. woodland and trees) to reduce the need for mitigation, however, given the nature of the project, impacts to habitats are inevitable and therefore mitigation is required.
- 5.3.4. The Applicant is seeking to reinstate impacts to habitats as close as possible to the location of the impact, wherever practicable. However, a 24 metre wide easement (12 metre either side of the pipeline) is required within which trees cannot be planted, as such it will not be possible to reinstate all trees in the areas they are lost.
- 5.3.5. In the case of impacts to habitats in Wales and England, land identified for mitigation planting has been provided for within the separate jurisdictions, and calculated independently in each country to be appropriately sized to offset the impact of the development for each country.
- 5.3.6. To primarily mitigate for the loss of trees, the Applicant has assessed and considered appropriate locations within the Order Limits, and subsequently identifying a total of 13 areas between Wales and England to accommodate mitigation planting.

- 5.3.7. These areas will accommodate planting of trees at a 1:3 ratio (meaning that for every 1 tree lost, the Applicant will plant 3), which is secured as part of a commitment in the Outline Landscape and Ecological Management Plan [APP-229]. The Applicant has selected a 1:3 ratio as this aligns with, and better, the recommended 1:2 ratio within Cheshire West and Chester Council's Tree and Woodland Strategy. This has been applied across both sides of the border acknowledging that Flintshire County Council do not currently have any ratio recommendations, only that suitable replacements are sought (TWH1 Development Affecting Trees and Woodlands).
- 5.3.8. The Applicant has taken into consideration relevant local council policies and strategies during the identification of areas for mitigation planting. In particular, CWCC's Local Plan (Part 1) Policy ENV4 and Ecological Network, as considered under Policy DM44 of the Local Plan (Part 2). Within Flintshire Policy STR13 states:
- “Development should identify, respect, protect, enhance and connect Flintshire's environmental assets, to create a multifunctional network of natural and historic resources.”*
- 5.3.9. Recognising the offset requirement from the Carbon Dioxide Pipeline, the Applicant proposes to plant scrub and/or grassland habitats alongside areas of tree planting. Provision of these habitats alongside tree planting will provide additional benefits for biodiversity through the creation of habitat mosaics within the mitigation areas which will help support a variety of fauna and flora.

SITE SPECIFIC MITIGATION SELECTION RATIONALE

- 5.3.10. Areas have been primarily selected to strengthen existing green infrastructure (woodlands) and corridors, providing greater connectivity across the landscape. Other locations have been selected to provide 'stepping stone' habitats with a view to providing greater opportunities for connectivity across the landscape.
- 5.3.11. The following points outline the justifications and reasons for selection of land for mitigation, alongside plot numbers as detailed within the Works Plan [CR3-005] and ES Figure 3.4 Landscape and Ecological Mitigation Plan [REP4-190].
- Work Number 57H (Land Located South East of A494, adjacent to the Borderlands Railway Line)**
- 5.3.12. This plot has been selected on the basis of adding to and strengthening the existing woodland habitat abutting the Order Limits to the south and east, adjacent to the A494.
- 5.3.13. This plot would extend the corridor of woodland habitat, tying into established hedgelines located at the eastern and southern most extent of the proposed mitigation parcel.

- 5.3.14. This will further opportunities for safe movement of species through the landscape through a dedicated corridor (once established) providing links to the wider landscape through hedgerows and habitats to the east.

Work Number 57I (Land Located between Aston Hill and Shotton Lane)

- 5.3.15. This plot has been selected to enhance and support existing woodland and scrub habitats abutting and located north of the Order Limits.
- 5.3.16. This plot would provide a corridor offshoot from the existing woodland, providing connectivity to existing and established hedgelines with trees located at the southern most extent of the proposed mitigation parcel. This parcel would enhance the landscape providing an additional established habitat stepping stone with linkages to more extensive areas of woodland associated with Wepre Park, located north-west of the Order Limits.
- 5.3.17. This will further opportunities for safe movement of species through the landscape (once established) providing linkages to established habitats within the wider landscape.

Work Number 57J (Land adjacent to Pinfold and Magazine Lanes)

- 5.3.18. This plot has been selected on the basis of providing additionality to the existing woodland habitats located either side of the Alltami Brook, whilst also taking into consideration the proposed mitigation planting either side of the Alltami Brook (see Work Number 57K which is also proposed to strengthen the woodland habitats bounding the Alltami Brook).
- 5.3.19. This plot would provide a corridor offshoot from the Alltami Brook adjacent habitats, providing connectivity to an existing and well established hedge line with trees located at the eastern most extent of the proposed mitigation parcel. This will provide a substantial corridor of habitat (once established) facilitating safe passage of species through the landscape with connections into a network of established hedgerows to the north and east.

Work Number 57K (Land Northwest and Southeast of the Alltami Brook)

- 5.3.20. The plots are the only areas that impact the landowner highlighted in Section 3. These plots (one either side of the Alltami Brook) have been selected on the basis of strengthening and enhancing existing woodland habitats located either side of the Alltami Brook which are associated with a larger swathe of woodland located to the north of the Order Limits. This woodland comprises woodland on the ancient woodland inventory and has functional connections to the Deeside and Buckley Newt Sites Special Area of Conservation (SAC) to the north east. The existing woodland and habitats bounding the Alltami Brook also fall under the Brook Farm Park Wood Wildlife Site (WS). These plots in tandem with the plot at Work Number 57J will provide a substantial area of habitat cover (once established), enhancing the connections with the wildlife site designation.

- 5.3.21. These plots would grow the Alltami Brook habitat corridor and provide links to adjacent hedgelines with trees to the north-west of the plot.
- 5.3.22. These proposals will further opportunities for safe movement of species through a substantial protective corridor, providing further linkages to the wider landscape of woodland and hedgerows to the north-west and north-east, through the use of established hedgelines with trees.

6. TEMPORARY IMPACTS TO FARMING

6.1. CONSTRUCTION COMPOUND IMPACT

6.1.1. The originally proposed Shotton Lane compound covers 14 acres of land and is shown as Work No.41A in Figure 6-1 below.

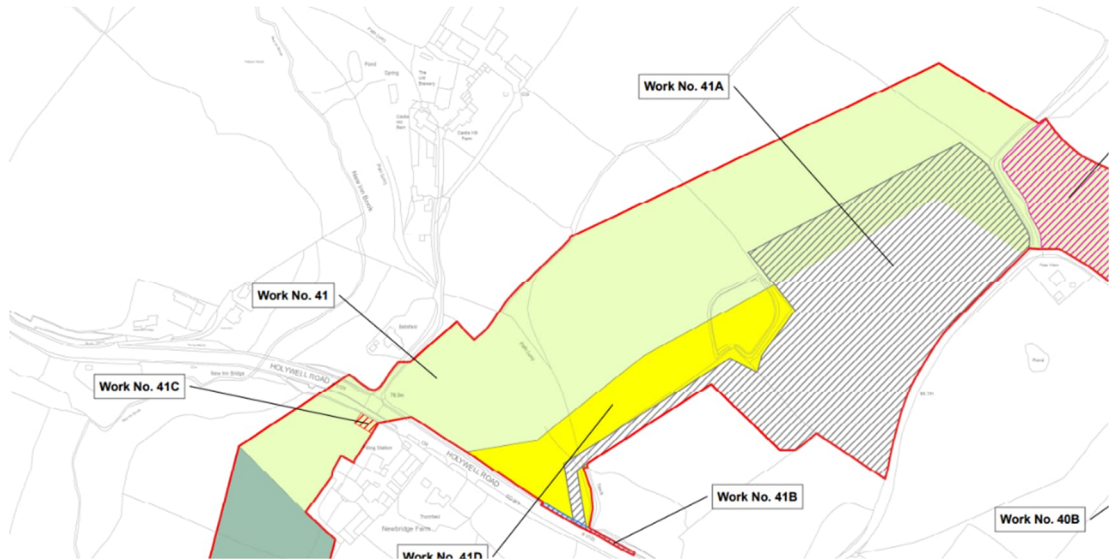


Figure 6-1 – Extract from Works Plans Rev A at Application, [APP-010] Sheet 18

- 6.1.2. The Applicant intended to utilise a temporary construction compound which was sited on the land to the north of the B5125 Holywell Road. This compound was initially considered in early stage work to be required in order to construct the Carbon Dioxide Pipeline. Based on feedback from the landowner that this would have an unmanageable impact on the farm business, the Applicant has undertaken further work to seek to remove this compound from the DCO. That has required some amendments to the intended construction strategy, however the Applicant considers it has reached an acceptable solution and this compound can be removed.
- 6.1.3. The Applicant has accordingly submitted a Change Request to the Examining Authority at Deadline 5 (“Change Request 3”). This request removes the proposed construction compound (Work No. 41A) from the DCO application. The Applicant will still need temporary rights over a small plot of land adjacent to Holywell Lane (currently included in the access for the compound) (Work No. 41B [REP4-006]) to ensure it can deliver construction materials, equipment and personnel for the pipeline construction and undertake the crossing of Holywell Road. The use of this access (labelled as the Castle Farm Access and shown in Figure 6-2) should not impede the use of the access point for cattle movements or other farming activities.

6.1.4. Whilst the access to the Carbon Dioxide Pipeline easement will still be required, the removal of this compound will mean that the landowner is able to graze a substantial amount of land on the north side of the farm. The use of the access track will now be for a far shorter period than the full proposed construction period of 16 months.

- Change Request 3 has now been accepted by the Examining Authority (on 12 July 2023) [PD-025].

6.2. ACCESS TO CASTLE HILL FARM

6.2.1. The landowner fears that the joint use of the track on the opposite side of the road during construction will have a negative impact on his cattle and restrict access to the land.

6.2.2. The plan below illustrates the route (delineated in blue) taken by the landowner's cattle to access grazing on land to the north of the farm.



Figure 6-2 – Typical Landowner Cattle Access Required

6.2.3. Whilst this point is noted by the Applicant, it is submitted that the cattle already cross a busy main road twice daily during the grazing season (which lasts approximately 7 – 8 months). They are already accustomed to traffic movements in this area.

6.2.4. Having regard to the removal of the construction compound (outlined in Section 6.1.3), while there may be a small amount of disruption the initial period of set-up, this is not expected to adversely affect the cattle for the duration of the construction. The cattle are well educated around traffic and therefore it is not believed that the joint use of the track will have any material impact on the cattle.

- 6.2.5. The Applicant will provide free access via the route shown on Figure 6-2 for the cattle morning and night to allow them access into the field. The Applicant is also willing to offer further improved gate systems to assist the landowner in moving his cattle to and from the land.

7. MITIGATION SUMMARY AND RESIDUAL IMPACTS

7.1. INTRODUCTION

7.1.1. The Applicant has set out the rationale for the routing option around Ewloe in the environmental statement and summarised the particular considerations applicable to the selected route through Newbridge Farm above (Section 2). It is accepted that the pipeline construction will have an impact on the landowner, however the Applicant has taken reasonable steps to remove, reduce and mitigate that impact.

7.2. PERMANENT LOSS OF LAND FOR MITIGATION WOODLAND PLANTING

7.2.1. The permanent loss of land for mitigation woodland planting adjacent to the Alltami Brook (Work No. 57K) from the Newbridge Farm landowner would be a maximum of 5.2 acres. The Applicant recognises that this is an adverse impact which must be weighed in the planning balance. The woodland planting has to be provided in order to make the development acceptable in planning terms. As set out in Section 5.3 above, this has been scaled so as to comply with planning policy on tree replacement and sited in order to strengthen existing green infrastructure (woodlands) and corridors, and provide connectivity to the adjacent Wepre Forest. The mitigation planting will inevitably impact on some current uses of land and the Applicant submits that siting this to provide the most overall ecological benefit is accordingly a reasonable approach. The Applicant considers that the loss of land is properly compensatable under compensation code should voluntary agreement not be reached.

7.3. OTHER PERMANENT IMPACTS

7.3.1. The Applicant notes that the other residual impacts on the Landowner are dependent upon the outcome of other assessments and agreements.

7.3.2. Change Request 1 added the optionality of removing the slurry tank or routing around it by infringing into the Root Protection Area (RPA) of the adjacent ancient woodland. The intrusion into the RPA, which is contrary to the approach taken on the rest of the Carbon Dioxide Pipeline route, was proposed as a mitigating alternative to removing the slurry tank. The acceptability of that intrusion is however subject to determination as part of the DCO decision. The Applicant's preference is to route around the tank, and work is ongoing to agree the scope of protection measures for that in order to demonstrate acceptability and allow consent to be granted for this route.

- 7.3.3. The Applicant has submitted Change Request 2 to allow optionality for an embedded pipeline bridge crossing at Alltami Brook. That option has been added only to provide a solution where the open cut trenched crossing is determined not to be acceptable under the Water Framework Directive (WFD). It is not the Applicant's preferred option. The permanent loss of land for the bridge crossing of Alltami Brook would be a small area within the works area for the bridge piers and diversion of the public right of way around the bridge pier. Access to the watercourse would return to the current baseline either side of the bridge pier. The Applicant submits that, where the bridged crossing is required to ensure compliance with the WFD, the land take required cannot be avoided and is justified by the need to avoid unacceptable WFD impacts (as assessed by NRW) on the relevant water body.
- 7.3.4. The Applicant notes that the impact of its easement within the routing of the landowner's business, will allow for resumption of long term use of the land as a farming business. Whilst there are temporary impacts (outlined in Section 7.3), and the existence of the Applicant's easement will by definition restrict the land from other purposes, the landowner will not be restricted from carrying out their core business activities.

7.4. TEMPORARY IMPACTS

- 7.4.1. The Applicant accepts that grazing land will be removed from use during the construction period. It is not possible to construct the Carbon Dioxide Pipeline without occupying the land. The Applicant noted the objections made by the landowner to the extent of temporary land take, and particularly to the construction compound. Recognising the cumulative impacts on this landholding, the Applicant undertook work to seek to find an option to mitigate the impacts, and submitted Change Request 3 seeking to remove the construction compound from the DCO. This will reduce the loss of grazing land during construction.
- 7.4.2. In addition to seeking to reduce the land take of grazing land during construction, a 'zero grazing system' was discussed on site with the landowner and this could potentially be utilised for a 8 month period which would mean that the cattle numbers could remain at their present level.
- 7.4.3. The Applicant does not accept that the presence of construction traffic will have an adverse effect on the landowner's cattle. The cattle are already accustomed to traffic movements in the vicinity and are moved across the live carriageway of the B5125 daily. The Applicant has however offered to provide improved gate systems to assist the landowner in moving his cattle to and from the land in this location.
- 7.4.4. The Applicant and the landowner are in active discussion and continue to discuss the impact of the scheme on the landowner.

7.5. CONCLUSION

- 7.5.1. The Applicant has engaged continually with the landowner at all points prior to and after the DCO submission. The Applicant is aware of the impact of the Carbon Dioxide Pipeline on the landowner and remains committed to ensuring that the impact of the scheme on the landowner's farming business is minimised as far as practicable.
- 7.5.2. The result of some of this ongoing engagement has resulted in changes to the DCO application, including the removal of the impact of a construction compound as part of Change Request 3.
- 7.5.3. The Applicant is also actively engaged with Flintshire County Council in agreeing the RPA measures to agree the principle of routing of the pipeline around the landowner's slurry tank.
- 7.5.4. The remaining permanent impacts include the embedded pipe bridge option over Alltami Brook (which is not the Applicant's preference) and the requirement for suitable mitigation land needed for the development and the Applicant is engaged with the landowner to minimise and compensate against these impacts.
- 7.5.5. The Applicant is confident that construction impacts will be temporary, minimised by good working practices and will be less than the worst case assessed.
- 7.5.6. The Applicant submits that overall, the impacts have been mitigated as far as practicable and the remaining impacts are unavoidable. Given the benefits of and considerable policy support for the Carbon Dioxide Pipeline, the Applicant considers that any adverse impacts on the farming business are considerably outweighed by the considerations in favour of consent being granted with the inclusion of compulsory powers.