

INTRODUCTION

The Padeswood Carbon Dioxide Spur Pipeline Proposed Development forms part of the wider HyNet Project and is focused on Carbon Capture and Storage (CCS). The objectives of HyNet are to reduce carbon dioxide emissions from industry and support economic growth in North Wales and the North West of England.

The Proposed Development will connect to the HyNet Carbon Dioxide Pipeline, a Nationally Significant Infrastructure Project which was granted a Development Consent Order by the Secretary of State for Energy Security and Net Zero in March 2024.

PADESWOOD SPUR PIPELINE

The Padeswood Carbon Dioxide Spur Pipeline Proposed Development will be approximately 10km in length, connecting the Heidelberg Materials (formerly known as Hanson) cement works in Padeswood (Flintshire) with the HyNet Carbon Dioxide Pipeline at the Northop Hall Above Ground Installation (AGI) in Flintshire.

This is an outline of how the route from the Heidelberg Materials cement works to the HyNet Carbon Dioxide Pipeline connection at the Northop Hall AGI was determined.

STAGE 1: DEVELOPMENT OF THE ROUTE CORRIDOR

To determine the corridor of land that could house the proposed development, a weighting exercise was conducted by topic area. The topic areas included, among others, ecology, cultural heritage, water environment and ground and soils.

The weighting exercise identified constraints that were fed into a digital mapping tool. The digital mapping tool produced a series of maps, narrowing down the corridor and route options.

The team considered the identified constraints as well as environmental issues, land ownership constraints, technical considerations and planning policy.

A route corridor was identified based on these considerations.

STAGE 2: DEVELOPMENT OF ROUTE OPTIONS

To determine the route options within the identified corridor, the team split the corridor into 11 sections. Some of the sections were further split into multiple route options, so there were 20 route options across the 11 sections.

A detailed appraisal of all the route options, focusing on Environment, Land ownership, Engineering and Planning considerations was undertaken. Building on the information considered during 'Stage 1: Development of the route corridor'.

Where a section had more than one route option, the weighting process used during 'Stage 1: Development of the route corridor' was applied to determine the 'preferred route options', 'options with some potential' and 'least preferred option' for that section.

The proposed route will be appraised in an iterative process that will consider findings from ongoing review, survey information and designs of the pre-determined constraints from 'Stage 1: Development of the route corridor' and feedback from future consultation periods.

STAGE 3: REFINEMENT OF THE PROPOSED ROUTE OPTION

We will conduct an Environmental Impact Assessment to identify environmental impacts, such as the impact on biodiversity, air quality, greenhouse gases and soil, and solutions to help mitigate these impacts.

The mitigation measures can include modifications to the design, developing an Environmental Management Plan and industry standard actions to reduce environmental impacts. The results of this Environmental Impact Assessment will refine the design of the preferred route option.

A draft Environmental Statement will be made available at the statutory Pre-Application Consultation for the Padeswood Carbon Dioxide Spur Pipeline Proposed Development, allowing the public to comment on the proposed route option, and the surveys and assessments undertaken to date. Feedback received at the Pre-Application Consultation will be considered in finalising the Environmental Statement, which will be submitted as part of the planning application submission to Flintshire County Council.

For more information about the HyNet Carbon Capture and Storage project please visit our website www.hynethub.co.uk or email our team at hello@hynethub.co.uk

- ▶ The diagram shows the route options during ‘Stage 2: Development of Route Options’



- ▶ The diagram shows a red line area refined during ‘Stage 2: Development of Route Options’ within which construction will take place.

