

**21/02454/AAC Request for a formal opinion on the scope of an
Environmental Statement (ES) under Regulation 10 and 11 of the
Environmental Impact Assessment Regulations 2017: HyNet North West
Carbon Dioxide Pipeline**

(Lead Local Flood Authority response – 18th June 2021)

The proposal is to scope in water to consider impacts on the surface water and groundwater receptors to include Main Rivers, Ordinary Watercourses and WFD water bodies. We are in agreement with the proposed assessment requirements, but have the following specific comments:

Above ground installations, block valve stations and compound areas will require a flood risk assessment and drainage strategy in accordance with NPPF. Where development is proposed within Flood Zone 2 and 3 mitigation measures should be provided in accordance with NPPF and Environment Agency standing advice.

Where ordinary watercourses are crossed via trenched crossings, a Land Drainage Consent will be required for both the temporary and permanent works and mitigation measures provided through temporary diversion or pumping along with method statement for undertaking the works.

Potential for increased groundwater flood risk up gradient of longitudinal below ground structures should be assessed and mitigation measures provided to manage any temporary and permanent groundwater emergence at the surface.

The proposed development is generally within an area at low risk of surface water flooding but there are parts of the development which are at medium to high risk of surface water flooding which need to be considered as part of the layout to ensure any overland flow routes are retained.

Surface water management for the above ground works needs to follow the drainage hierarchy:

- Infiltration into ground
- Connection to the watercourse
- Connection to discharge water sewer and as a last resort;
- Connection to the combined sewer.

SuDS should be designed to control surface water as close to its source as possible. Well-designed sustainable drainage systems also provide opportunities to:

- reduce the causes and impacts of flooding,
- remove pollutants from urban run-off at source,
- combine water management with green space providing benefits for amenity, recreation and wildlife.

The use of SuDS should also help achieve the sustainability objectives of the National Planning Policy Framework (NPPF).

The suitability of sustainable drainage systems should be assessed in accordance with paragraphs 051, 079 and 080 of the revised NPPF Planning Practice Guidance for Flood Risk and Coastal Change (<https://www.gov.uk/guidance/flood-risk-and-coastal-change>).

Sustainable drainage systems should be designed in line with national Non-Statutory Technical Standards for SuDS (<https://www.gov.uk/government/publications/sustainable-drainage-systems-non-statutory-technical-standards>) and local policies ENV1, DM40, DM41, DM42 and DM43 of the Core Strategy.

Surface water attenuation requirements should be assessed that offer a reduction in surface water runoff rate in line with the Policy DM 41 (i.e. at least 30% betterment on brownfield flows and greenfield runoff for existing greenfield sites). Please note that all new connections to the watercourses shall comply with reduction of flows to greenfield runoff rates.

Surface water should be managed to ensure there is no increased surface water from the proposed development and runoff from extreme events should be managed such that adjacent third party land is not affected.

Hydraulic calculations and drawings to support the design need to be provided along with an assessment of overland flow routes for extreme events that is diverted away from buildings.

Maintenance of SuDS is essential for its proper operation and a clear management and maintenance plan for the lifetime of the works.

In considering a development that includes a sustainable drainage system, Cheshire West and Chester Council as local planning authority will want to be satisfied that the proposed minimum standards of operation are appropriate and that there are clear arrangements in place for ongoing maintenance. Information sought by Cheshire West and Chester Council would be no more than necessary, having regard to the nature and scale of the development concerned in line with NPPF Paragraph 081.

A management and maintenance plan for the lifetime of the development which shall include the arrangements for adoption by any public body or statutory undertaker, or any other arrangements to secure the operation of the sustainable drainage scheme throughout its lifetime should be provided.

Au, Megan

From: Solis, Gabriel
Sent: 15 June 2022 10:47
To: Au, Megan
Subject: FW: Flood Risk and Drainage Enquiry - Hynet North West CO2 Pipeline (the DCO Proposed Development)

Importance: High

From: Solis, Gabriel
Sent: 02 May 2022 15:56
To: LLFA@cheshirewestandchester.gov.uk; [REDACTED]
Cc: Quentin Bahlmann [REDACTED]; Trevor Croft [REDACTED]
[REDACTED]; [REDACTED] Gonzalez Cano, Gala [REDACTED] Peter, Lara
[REDACTED] Franklin-Losardo, Declan [REDACTED] Mohun, Vic
[REDACTED] Isnenghi, Enrico [REDACTED] Marlow, Frances
[REDACTED]
Subject: RE: Flood Risk and Drainage Enquiry - Hynet North West CO2 Pipeline (the DCO Proposed Development)
Importance: High

Hello,

Hope you had a good bank holiday weekend.

I would like to follow up on the request for information initially send on the 01/03/2022.

Please note that this request was made over two months ago and we did not receive any reply yet.

Kind regards,

Gabriel

From: Solis, Gabriel
Sent: 14 April 2022 11:53
To: LLFA@cheshirewestandchester.gov.uk
Cc: Quentin Bahlmann [REDACTED] Patterson, Daniel
[REDACTED] Trevor Croft [REDACTED]; [REDACTED]
[REDACTED] Gonzalez Cano, Gala [REDACTED] Peter, Lara
[REDACTED] Franklin-Losardo, Declan [REDACTED] Mohun, Vic
[REDACTED] Isnenghi, Enrico [REDACTED] Marlow, Frances
[REDACTED]
Subject: RE: Flood Risk and Drainage Enquiry - Hynet North West CO2 Pipeline (the DCO Proposed Development)
Importance: High

Hello,

I am following up on the emails I sent on the 01/03/2022 and the 14/03/2022.

We did not receive any response since the first enquiry over a month ago. I cannot emphasise enough how important is this consultation for the project.

Should you need any further information, please do not hesitate to contact me. In the meantime, I look forward to hearing from you.

Kind regards,

Gabriel

From: Solis, Gabriel

Sent: 14 March 2022 15:48

To: LLFA@cheshirewestandchester.gov.uk

Cc: Quentin Bahlmann [REDACTED] Patterson, Daniel

[REDACTED]; Trevor Croft [REDACTED]
[REDACTED] Gonzalez Cano, Gala [REDACTED]; Peter, Lara
[REDACTED] Franklin-Losardo, Declan [REDACTED] Mohun, Vic
[REDACTED] Isnenghi, Enrico [REDACTED] Marlow, Frances
[REDACTED]

Subject: RE: Flood Risk and Drainage Enquiry - Hynet North West CO2 Pipeline (the DCO Proposed Development)

Good afternoon,

I am following up on an email I sent on 01 March (below). Please could you review the email and respond as soon as possible?

If you would like to discuss the email in further detail, please contact me directly.

I look forward to hearing from you.

Kind regards,

Gabriel

From: Solis, Gabriel

Sent: 01 March 2022 18:17

To: LLFA@cheshirewestandchester.gov.uk

Cc: Quentin Bahlmann [REDACTED] Patterson, Daniel

[REDACTED] Trevor Croft [REDACTED]
[REDACTED] Gonzalez Cano, Gala [REDACTED] Peter, Lara
[REDACTED] Franklin-Losardo, Declan [REDACTED]; Mohun, Vic
[REDACTED]; Isnenghi, Enrico [REDACTED] Marlow, Frances
[REDACTED]

Subject: Flood Risk and Drainage Enquiry - Hynet North West CO2 Pipeline (the DCO Proposed Development)

Good afternoon,

WSP are supporting Liverpool Bay CCS Ltd (the Applicant) on the DCO planning application for the Hynet North West CO₂ Pipeline (the DCO Proposed Development) which crosses Cheshire (England) and Flintshire (Wales) (see location map). Overall the DCO Proposed Development involves the installation of a 36 inch and 20 inch pipeline below ground. A more detailed description of the DCO Proposed Development is available in the Preliminary Environmental Information Report (PEIR) which, as part of the ongoing Section 42. statutory consultation, is available at the following link: [REDACTED]. Please find attached a plan showing the draft DCO Order Limits, pipeline alignment and Above Ground Installations (AGIs) and Block Valves (BVS) within Cheshire (England) to this email.

The pipeline will be buried at a minimum depth of 1.2m in open-cut sections, however for special crossings such as railway lines, specified roads and main rivers, the depth would be greater to avoid existing services, physical obstructions and to take account of the higher ground loading.

WSP have previously consulted with you on the DCO Proposed Development and more information about this consultation can be found [here](#). More general information about the wider HyNet project can be found at 

WSP is currently undertaking a Flood Risk Assessment (FRA) for the DCO Proposed Development to assess the flood risk. We have provided below a list of general enquiries which you may currently hold and which we would like to request in order to inform the preparation of the FRA for the application submission.

Information request to complete the Flood Risk Assessment

Watercourses (within 200m of the current proposed route of the new pipeline, AGIs/BVSSs)

- A map and details of any hydraulic structures / pumping stations and associated maintenance regime.
- AIMS records within the study area

Flood Defences / Other Structures (within 200m of the current proposed route of the new pipeline, AGIs/BVSSs)

- Details of any flood defences in the area including standard of protection, condition, type and maintenance regime.
- Details of any proposals for any future flood alleviation scheme that could affect the site and if so, provide details and timescales
- Details of any pumping stations / other man-made structures / sources of flood risk that could affect the sites - including discharge rates as well and where they discharge to?

Previous Flooding Records (within 200m of the current proposed route of the new pipeline, AGIs/BVSSs)

- Any previous flooding records for the site or the surrounding area including dates, source, depth, extent and any further details

Surface Water

- Information regarding any specific local pressures or objectives that may be of particular relevance to the construction of a below ground pipeline?
- Information regarding licensed surface water abstractions/discharges and private surface water abstractions/discharges within the 200m study area (ones with a current licence)
- Any known issues associated with water quality within the area? (200m)

Other queries

- Does the site lie near or within a Critical Drainage Area?
- Any information on groundwater flooding/emergence issues and depth monitoring information at key locations
- Any local ground infiltration potential/information
- Any information on existing and proposed flood storage areas
- Any information on existing culverts (alignment, depth, sizes, conditions) within the study area
- Any information on proposed culvert diversion schemes
- Any information on proposed river channel or open watercourse diversion schemes
- Any local highway drainage issues or flooding issues

Information request to develop a surface water drainage strategy and future surface water drainage design for AGIs/BVSSs

Each of these installations will be constructed at key locations along the pipeline and are essential to their operation. In order to inform the assessment and design of these facilities, please could you provide guidance on the following:

- Surface water drainage detail design criteria including discharge rates, discussion on preferable discharge locations, and the use of SUDs
- Surface water management requirements including any treatment or pre-treatment before discharge to the local receptors
- Pre-app/full app requirements to progress with surface water drainage design for the proposed AGIs/BVS facilities

We would be very grateful if you could review the above information and advise what you be able you would be able to provide. We would also like to request an indication of the associated costs and the timescales for the provision of this information. Given the tight programme for the preparation of the application submission, we would appreciate your response and support as soon as possible.

We would also like to request a teleconference with you to discuss the above matters relating to flood risk and mitigation, surface water drainage design and temporary drainage mitigation measures/management. Please can you respond with your availability on W/C 28/2/22 and 7/3/22.

Kind Regards,



Gabriel N. Solis

Assistant Engineer
MEng GMICE

