

HyNet North West Hydrogen Pipeline

Delivering clean growth



Chapter 14

Land Use

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14. Land Use

14.1 Introduction

- 14.1.1 The Draft Environmental Statement has been produced to fulfil the Applicant's consultation duties and enable consultees to develop an informed view of the likely significant effects of the Project.
- 14.1.2 This chapter presents the assessment of the likely significant effects of the Project with respect to land use, focussing on natural resources (minerals), tourism and recreation uses, based on the information obtained to date. Following consultation, the assessment will be updated for the final Environmental Statement that will accompany the DCO application for the Project.
- 14.1.3 This chapter should be read in conjunction with the project description provided in **Chapter 2: The Project** and with respect to relevant parts of the following chapters:
- **Chapter 5: Biodiversity;**
 - **Chapter 8: Landscape and Visual;**
 - **Chapter 9: Air Quality;**
 - **Chapter 10: Noise and Vibration;**
 - **Chapter 13 Agriculture and Soil Resources**
- 14.1.4 This chapter describes:
- the legislation, policy and technical guidance that has informed the assessment (**Section 14.2**);
 - consultation and engagement that has been undertaken and how comments from consultees relating to land use have been addressed (**Section 14.3**);
 - the methods used for baseline data gathering (**Section 14.3.7**);
 - overall baseline, including existing and future baseline (**Section 14.5**);
 - embedded environmental measures relevant to land use (**Section 14.6**);
 - the scope of the assessment for Land Use (**Section 14.6.2**);
 - the methodology applied for the assessment (**Section 14.8**);
 - the assessment of Land Use effects (**Section 14.9**);
 - the assessment of cumulative (inter-project) effects (**Section 14.12**);
 - a summary of the significance conclusions (**Section 14.13**);
 - additional measures proposed (**Section 14.14**); and
 - Land Use residual effects assessment (**Section 14.14.2**).

14.1.5 This chapter is supported by the following appendix:

- **Appendix 14A: Minerals Resource Assessment (MRA).**

14.1.6 A Golf Course Impact Assessment is underway. The results of this assessment will be reported within a separate appendix to this chapter as part of the Final ES.

14.1.7 Work is also ongoing in regard to the Project's status as a Major Accident Hazard Pipeline (MAHP). This work has the potential to be relevant to the Land Use chapter, in that a MAHP could restrict future proposals for developments or land uses in proximity to the operational pipeline. Where restrictions may be relevant to a MAHP, the Health and Safety Executive (HSE) will designate consultation zones. Where a future development proposal meets the criteria of that consultation zone, then the HSE has to be consulted as part of the planning application process. The HSE will then provide either a "Advise Against" or "Does Not Advise Against" recommendation. These consultation zones are common around MAHPs of which close to 22,000km currently exist. The size of any consultation zones implemented, and what criteria would trigger HSE consultation within these zones is a matter for the HSE to determine. However, given that hydrogen pipelines of the scale and nature of the Project are relatively novel across the world, there is little information available at this stage for the Project to use to identify what the consultation zones may consist of. Further information on this subject is available within **Chapter 16: Major Accidents and Disasters** and as an appendix to the **Consultation Summary Report**¹, both of which are issued at Statutory Consultation. An assessment of this matter on Land Use receptors will be included in the Final ES as required.

Project overview

14.1.8 The Project includes the construction, and operation and eventual decommissioning of approximately 100km of new pipeline to distribute hydrogen to industry in the North West. A number of Hydrogen Above Ground Installations (HAGIs), including Block Valve Installations (BVIs) are required to control the flow and pressure of hydrogen at key points along the proposed pipeline.

14.1.9 The Project connects the Hydrogen Production Plant (HPP) at the Stanlow site, as the source of hydrogen, for onward distribution to the network. The pipeline transports hydrogen to the Central Hub at the centre of the network, which then serves as the connection and onward distribution point to the North, East and South corridors, which would extend to St. Helens, Partington and Northwich respectively. Branching off from each main corridor would be pipeline spurs connecting hydrogen customers to the main pipeline. Infrastructure has also been included which supports the potential blending of hydrogen with methane in the existing gas network. The Project would also link to underground hydrogen storage facilities in Cheshire used to balance supply and demand through the network.

¹ WSP (2024). HyNet North West Hydrogen Pipeline Project – Consultation Summary Report.

- 14.1.10 The presently anticipated maximum extent of land in which the Project may take place, which is assessed in this Draft ES, is defined by the 'Draft Order Limits', land within which is hereafter referred to as 'land within the Draft Order Limits'.
- 14.1.11 A proportionate degree of flexibility has been incorporated into the project design so that unforeseen issues that may be encountered following consent can be sufficiently mitigated. For example, previously unidentified poor ground conditions may require a pipeline section to be re-routed slightly for geotechnical reasons. Therefore, to allow for this, new infrastructure would be constructed within specified Limits of Deviation (LoD) which identify a maximum distance or measurement of variation within which the works must be constructed; further detail is provided on LoD in **Chapter 2: The Project**.

Limitations and assumptions

- 14.1.12 Where this chapter considers indirect effects on tourism and recreational receptors, it relies on the findings of **Chapter 5: Biodiversity**, **Chapter 8: Landscape and Visual**, **Chapter 9: Air Quality** and **Chapter 10: Noise and Vibration**. As this is a draft Environmental Statement, the assessment work included in other chapters may evolve between now and the final DCO submission and therefore this assessment may be limited by the current progress on those chapters.
- 14.1.13 Ground investigation work to date has focused on areas where ground investigation would be most useful for construction design. As such the minerals resource assessment work has been reliant on publicly available borehole records from the BGS (British Geological Survey) for the majority of the ground information used. Due to the location and consistent information provided by the boreholes identified, they do appear to be representative of the expected ground conditions, but as they do not always correspond with locations along the pipeline route some assumptions have had to be made in the assessment. These assumptions are detailed in **Appendix 14A** as relevant.
- 14.1.14 Other than for the Golf Course Impact Assessment (which is the process of being prepared for inclusion in the Final ES), the data used has been sourced from desk based research only. There is no indication from the information found to date, or from previous consultation responses received, that would indicate this data is not relevant and up to date.

14.2 Relevant Legislation, Planning Policy and Technical Guidance

- 14.2.1 This section identifies the legislation, planning policy and technical guidance that has informed the assessment of effects with respect to land use. Further information on policies relevant to the Project is provided in **Chapter 4: Legislation and policy overview**.

Legislation

- 14.2.2 This chapter has been provided in accordance with the Infrastructure Planning (Environmental impact Assessment) EIA Regulations 2017. There is however no dedicated UK legislation that specifies the detailed scope of a land use assessment or that provides appropriate standards and thresholds for determining significance of effects.

Planning policy

- 14.2.3 There are a number of national policies that may be relevant to the Project. Under Section 104 of the Planning Act 2008 the Secretary of State will decide how much weight to give to the National Policy Statements. Those relevant to the Project are the overarching National Policy Statement for Energy (EN-1) and the National Policy Statement for Natural Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4).
- 14.2.4 Other national and local policies may also provide additional guidance on this environmental topic and could be considered material to the consideration of this Project. Policy potentially relevant to the Project and to this environmental topic is summarised within **Table 14.1 Planning policy context relevant for the land use assessment**.

Table 14.1 Planning policy relevant to the land use assessment

Policy	Policy context
National planning policy	
National Policy Statement for Overarching Energy (EN-1), November 2023 ²	Existing and proposed land uses near and within the Project should be identified along with any effects of replacing an existing development or use of land with the proposed project or preventing a development or use on neighbouring land from continuing. Any effects on new or proposed development should also be assessed. The local community should be consulted on proposals to build on open space, sports or recreational buildings and land. Applicants should consider providing new or additional open space that is lost as a result of the proposals. Where a minerals safeguarding area is affected, appropriate mitigation measures should be put in place to safeguard minerals resources, and the safeguarding of all minerals resources should taking onto account the long-term potential of the land use after decommissioning of the proposals.

² Department of Energy Security and Net Zero (2023). Overarching National Policy Statement for Energy (EN-1). (online) Available at: <https://assets.publishing.service.gov.uk/media/65bbfbdc709fe1000f637052/overarching-nps-for-energy-en1.pdf> (accessed June 2024).

Policy	Policy context
National Policy Statement for Natural Gas Infrastructure and Gas and Oil Pipelines (EN-4), November 2023 ³	In relation to minerals, EN-4 identifies that underground cavities or unstable ground conditions may present particular risks to pipeline projects and impacts could include the sterilisation of mineral resources. Mitigation measures should be proposed which minimise effects on geology and ensure residual impacts are minor. EN-4 states proposals will be acceptable where routes are selected which reduce or eliminate impacts on geology, and that the integrity of the pipeline should be a consideration in the selection of the route. Pipeline integrity could include factors such as the risk of fracture or impact on high population areas.
National Planning Policy Framework (Department for Levelling Up, Housing & Communities), December 2023 ⁴	Paragraph 89 of the NPPF states that planning decisions should enable the retention of local facilities such as sports venues and open space in rural areas, and paragraph 97 provides similar protection to valued facilities and services in other areas. Paragraph 103 goes on to state that where such facilities would be lost to other development they should be replaced by equivalent or better provisions or evidence is available that shows they are surplus to requirements. Chapter 17 of the NPPF covers the sustainable use of minerals and paragraph 215 identifies that minerals are finite resource, which can only be worked where they are found. Paragraph 216 states that other development proposals should not normally be granted where they would sterilise known minerals resources. It also states that prior extraction should take place (if minerals resources were to be affected by non-minerals development) where this is practical and environmentally feasible.
Local planning policy	
Cheshire East Local Plan Strategy ⁵	Policy SE10: states that Cheshire East will make provision for an adequate and steady supply of minerals, including

³ Department of Energy Security and Net Zero (2023). National Policy Statement for Natural Gas Infrastructure and Gas and Oil Pipelines (EN-4). (online) Available at: [National Policy Statement for Natural Gas Supply Infrastructure and Gas and Oil Pipelines \(EN-4\) \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/115444/national-policy-statement-for-natural-gas-infrastructure-and-gas-and-oil-pipelines-en-4.pdf) (accessed June 2024).

⁴ Department for Levelling Up, Housing & Communities (2023) National Planning Policy Framework. (online) Available at: https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2023.pdf (accessed June 2024).

⁵ Cheshire East Council (2017), Cheshire East Local Plan Strategy 2010-2030, available at: [https://www.cheshireeast.gov.uk/planning/spatial-planning/cheshire-east-local-plan/local-plan-strategy/local-plan-strategy.aspxLocalPlanStrategy\(cheshireeast.gov.uk\)](https://www.cheshireeast.gov.uk/planning/spatial-planning/cheshire-east-local-plan/local-plan-strategy/local-plan-strategy.aspxLocalPlanStrategy(cheshireeast.gov.uk)) (accessed August 2024)

Policy	Policy context
	maintaining appropriate landbanks and by safeguarding minerals through safeguarding areas designated in the Sites Allocations and Development Policies Document.
Cheshire East Site Allocations and Development Policies Document ⁶	Does not contain any minerals related policies, instead stating they will be contained within a separate Minerals and Waste Plan which has not yet been adopted.
Cheshire East (Cheshire Replacement Minerals Local Plan) ⁷	As the Minerals and Waste Plan referred to in the Site Allocations and Development Policies Document has not yet been adopted, minerals policies remain from the existing Replacement Minerals Local Plan. Policy 6: Prior Extraction; supports the prior extraction of minerals in advance of non-minerals development providing that the extraction can be undertaken in an acceptable timescale and would not compromise the subsequent development. Areas of search are identified for potential sand extraction, which is located close to Natural Resources Study Area.
Cheshire East Draft Minerals and Waste Plan 2022 ⁸	The draft Minerals and Waste Local Plan proposes safeguarding areas for salt, sand (silica and aggregate), sandstone and shallow coal. A sand safeguarding area is located close to the Natural Resources Study Area.
Cheshire West and Chester Local Plan Part 1 Strategic Policies ⁹	Policy SOC 6: Open space, sport and recreation; states that the Council will protect, manage and enhance open spaces, sports and recreational facilities. Policy ENV9: Minerals supply and safeguarding; supports the safeguarding of minerals to ensure the prudent use of natural finite resources.
Cheshire West and Chester Local Plan Part	Policy M1: Future sand and gravel working; identifies allocations, preferred areas and an area of search for new minerals extraction.

⁶ Cheshire East Council (2022), Cheshire East Site Allocations and Development Policies Document. Available at: [Site Allocations and Development Policies Document \(cheshireeast.gov.uk\)](https://cheshireeast.gov.uk/site-allocations-and-development-policies-document) (accessed August 2024)

⁷ Cheshire County Council (1999) The Cheshire Replacement Minerals Local Plan. (online) Available at: <https://www.cheshireeast.gov.uk/pdf/planning/spatial-planning/strategic-planning/en-ldf-crepmlp-99.pdf> (accessed August 2024)

⁸ Cheshire east Council (2022) Draft Minerals and Waste Plan, available at: [Minerals and Waste Plan \(cheshireeast.gov.uk\)](https://cheshireeast.gov.uk/minerals-and-waste-plan) (accessed August 2024)

⁹ Chester West and Chester Council (2015). Local Plan (Part One) Strategic Policies. (online) Available at: https://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/adopted_cwac_lp/lp_1_adapted?tab=files (Accessed August 2024)

Policy	Policy context
2 Land allocations and detailed policies ¹⁰	Policy M2: Minerals safeguarding areas; identifies minerals safeguarding areas and states that non-minerals development in these areas will only be supported where one of the following is relevant: mineral sterilisation will not occur, the mineral is not viable for commercial extraction, prior extraction can take place, there is an overriding need for the non-mineral development which outweighs the value of the mineral resource or the non-minerals development is considered exempt from sterilisation (pipeline development is not included as an exempted development).
Halton Delivery and Allocations Local Plan ¹¹	Policy CS(R)25: Minerals; identifies minerals safeguarding areas and areas of search for new minerals extraction. Policy HE10: identifies minerals safeguarding areas.
St Helens Borough Local Plan ¹²	Policy LPC14: Minerals; minerals safeguarding areas will be identified around deposits of coal, clay and sandstone. Proposals for non-minerals development in these areas will be permitted where one of the following is relevant: prior extraction can take place, mineral sterilisation will not occur, prior extraction is not feasible, there is an overriding need for the non-mineral development which outweighs the value of the mineral resource or the non-minerals development is considered exempt from sterilisation (pipeline development is not included as an exempted development).
Trafford (Greater Manchester Joint Minerals Development Plan) ¹³	Policy 8: identifies minerals safeguarding areas and states that non-minerals development within these areas should extract any viable minerals prior to construction, unless the

¹⁰ Chester West and Chester Council (2019). Local Plan (Part Two) Land Allocations and Detailed Policies. (online) Available at: https://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/adopted_cwac_lp/parttwo_adopted?tab=files (Accessed August 2024)

¹¹ Halton Borough Council (2022). Halton Delivery and Allocations Local Plan. (online) Available at: <https://www3.halton.gov.uk/Documents/planning/planning%20policy/newdalp/DALP%20Adopted.pdf> (Accessed August 2024)

¹² St Helens Borough Council (2022). St Helens Borough Local Plan up to 2037. (online) Available at: https://www.sthelens.gov.uk/media/4410/St-Helens-Borough-Local-Plan-up-to-2037/pdf/Local_Plan_Written_Statement_-_FINAL_adoption_version_16.06.2022_with_appendices.pdf?m=637934026451200000 (Accessed August 2024)

¹³ Greater Manchester Authorities 2013. Greater Manchester Joint Minerals Development Plan. (online) Available at: <https://www.trafford.gov.uk/planning/strategic-planning/docs/Greater-Manchester-Joint-Minerals-Plan-2013.pdf> (Accessed August 2024)

Policy	Policy context
	development is considered exempt (pipeline development is not included as an exempted development).
Warrington Local Plan ¹⁴	Policy ENV3: Identifies minerals safeguarding areas and states that proposal for non-minerals development in these areas will be permitted where one of the following is relevant: the mineral is not of economic value, the extraction of the mineral is not physically viable, prior extraction can take place, prior extraction is not feasible, the development is temporary and can be completed in a way that doesn't prohibit future minerals extraction, there is an overriding need for the non-mineral development, which outweigh the value of the mineral resource or the non-minerals development is considered exempt from sterilisation (pipeline development is not included as an exempted development).
Sports England Playing fields policy and guidance 2021 ¹⁵	The policy states that Sport England will oppose any planning proposals which would lead to the loss of, or would prejudice the use of and used or allocated playing field. There are a number of expectation including where there is sufficient capacity on other playing fields nearby to accommodate the displaced sporting activities.

Technical guidance

- 14.2.5 There is no dedicated UK guidance that specifies the detailed scope of a land use assessment or that provides appropriate standards and thresholds for determining significance of effects. In Scotland, Historic Environment Scotland and Scottish Natural Heritage published the Environmental Impact Assessment Handbook in 2018 which contains a section on how to assess effects on tourism and recreation receptors. The methodology utilised in this assessment is consistent with that guidance.

¹⁴ Warrington Borough Council 2023. Warrington Local Plan. (online) Available at: [Warrington local plan - 2021-22 - 2038-39 - Adopted December 2023](#) (Accessed June 2024)

¹⁵ Sport England (March 2018, updated 2021). Playing fields policy and guidance. (online) Available at <https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fs-public/2021-12/Playing%20Fields%20Policy%20and%20Guidance%20%E2%80%93%20Last%20updated%20December%202021.pdf?VersionId=2gSKc.DNZ7CfiMQJQZTyBvpI2AMDljHn> (Accessed August 2024).

14.3 Consultation and Engagement

Overview

- 14.3.1 The assessment has been informed by consultation responses and statutory and technical engagement. An overview of the approach to consultation is provided in **Section 3.12 of Chapter 3: Approach to preparing the Draft Environmental Statement**.

Scoping opinion

- 14.3.2 A Scoping Opinion was adopted by the Secretary of State, administered by the Planning Inspectorate, on 08 March 2022. A summary of the relevant responses received in the Scoping Opinion in relation to land use and confirmation of how these have been addressed within the assessment is presented in **Table 14.2**.

Table 14.2 Summary of EIA Scoping Opinion responses for land use

Consultee	Consideration	How addressed in this Draft Environmental Statement
Planning Inspectorate (PINS)	The Applicant proposes that direct effects on linear features such as national trails, cycle routes and Public Rights of Way during the operational phase can be scoped out on the basis that all land from the pipeline route would be reinstated to its original condition on completion of the construction works. In addition, any permanent land take required for Hydrogen Above Ground Infrastructure (HAGI) which would impact on a linear route would see a diversion of that route around the HAGI. In the absence of detailed information regarding the sensitivity of the routes proposed for diversion, the Inspectorate does not consider that it is appropriate to scope out an assessment of effects. The ES should provide an assessment, or evidence to demonstrate that such diversions would not give rise to a likely significant effect.	Addressed in Chapter 11: Traffic and Transport .

Consultee	Consideration	How addressed in this Draft Environmental Statement
	Impacts from decommissioning should therefore be provided in the ES. The assessment should be proportionate but include a description of the process and methods of decommissioning, land use requirements and estimated timescales.	Addressed at Section 14.11 where it is identified that decommissioning effects are expected to be similar to the construction phase effects, in a worst case scenario, and therefore a separate decommissioning assessment has not been undertaken for amenity issues on receptors. Section 14.11 describes how decommissioning could affect minerals safeguarding areas.
PINS, Cheshire East and Cheshire West and Chester Council	The Applicant proposes to scope out effects on salt minerals on the basis that the pipeline would not be laid at a depth and would therefore not impact on these resources (salt is extracted at 120-250m depth). The Scoping Report does not state whether there would be a requirement for restrictions of development over the route of the pipeline corridor. The Proposed Development therefore has potential to sterilise the mineral resource and impact on any above ground infrastructure required in connection with any salt extraction. The Inspectorate therefore considers that this matter cannot be scoped out. Potential impacts on existing salt and brine extraction and the use of the existing salt caverns (including sterilisation of resource) should be assessed within the ES and any necessary mitigation measures described.	Addressed at Paragraph 14.9.48 , where further detail is provided on how the Project would interact with ground infrastructure and below ground works. The Applicant has commissioned a Halite Risk Assessment (Appendix 12C) to identify the potential for the Project to interact with existing and/or intended salt and brine extraction as well as for the potential for such extraction works to affect the Project (pipeline).
PINS, Cheshire East and Cheshire West and Chester Council	Existing mineral sites and resources (including Holford Brinefield) should be included within the ES baseline, scope and evaluation to assess the impact of the Proposed Development on minerals provision and the	Addressed at Paragraph 14.9.48 , where further detail is provided on how the Project would interact with ground infrastructure and below ground works.

Consultee	Consideration	How addressed in this Draft Environmental Statement
	potential for effective mineral sterilisation. The Applicant's attention is drawn to the consultation responses from Cheshire West and Chester Council and St Helens Borough Council in this regard.	The Applicant has commissioned a Halite Risk Assessment to identify the potential for the Project to interact with existing and/or intended salt and brine extraction as well as for the potential for such extraction works to affect the Project (pipeline).
Cheshire East	The proposed application area is likely to be within or close to an allocated 'Area of Search' in the Cheshire Replacement Mineral Local Plan 1999 (CRMLP) on land north of M56/Agden Hall. The CRMLP forms part of the Development Plan and the impact on this allocation in terms of potential for sterilisation of mineral resources and associated impact on the overall sand and gravel landbank for the authority should be assessed and this should also be identified on Figure 14.2.	The Area of Search referred to falls outside of the Draft Order Limits and will not be affected by the Project.
Cheshire East	Environmental measures should be included in table 14.1 to avoid or minimise conflict with areas of known mineral resource and prevent potential sterilisation of minerals. It should also refer to prior extraction of minerals and use of extracted minerals during construction where possible.	Paragraphs 14.6.4 to 14.6.5 discuss why prior extraction is not appropriate on a pipeline development of this nature, however it is proposed to use any surplus minerals from extraction within the Project wherever this is possible.
Cheshire East and Cheshire West and Chester	When assessing the magnitude of effects, as set out in table 14.3, the impact on sand and gravel should take account of the fact that reserves in the North West have reduced significantly over the last few years and very few of the minerals planning authorities within the North West have the required 7-year supply. Cheshire East currently has less than the required 7-year supply set out in planning	Sand and gravel landbanks for the North West and for local areas have been identified within the baseline (Section 14.5) and taken into account when addressing minerals resource sensitivity in the relevant assessments. A Mineral Resource Assessment (Appendix 14A) has been prepared in order to inform the route of the pipeline and to quantify

Consultee	Consideration	How addressed in this Draft Environmental Statement
	policy and is likely to experience additional pressure on reserves in the future. There could also be significant sterilisation resulting from HS2. As such, it is particularly important to prevent sterilisation of sand and gravel resources in this area.	the potential effects upon existing mineral resource.
Cheshire West and Cheshire	Mineral resources are covered within the land use chapter (chapter 14). Paragraph 14.5.5 identifies that mineral safeguarding areas for sand and gravel exist within the West Corridor (and also in the East Corridor and both options in the South Corridor). What about salt and brine? Allocations, existing sites and minerals infrastructure should all also be included as potential receptors. Environmental measures should be included in Table 14.1 to avoid or minimise conflict with minerals safeguarding areas and prevent sterilisation of large areas of land. It should also refer to prior extraction of minerals and use of extracted minerals during construction where possible.	Sand/gravel and salt/brine resources have been identified within the baseline (Section 14.5) and assessed where relevant in the assessments. A Mineral Resource Assessment (Appendix 14A) has been prepared in order to inform the route of the pipeline and to quantify the potential effects upon existing mineral resource.
Cheshire West and Cheshire	This identifies that mineral safeguarding areas for salt and sand and gravel resources exist within both options in the south corridor. The south corridor option A covers the safeguarded existing Forest Hill sand and gravel quarry (Local Plan Part Two policy M1 A), the allocated site for sand and gravel north of the railway to extend Forest Hill, Sandiway (policy M 1.B, which now has planning permission), the preferred area at Moss Farm and north of the railway forming an extension to Forest Hill, Sandiway (policy M	Minerals safeguarding areas, preferred areas and areas of search have been identified within the baseline (Section 14.5) and assessed where relevant in the assessments. A Mineral Resource Assessment (Appendix 14A) has been prepared in order to inform the route of the pipeline and to quantify the potential effects upon existing mineral resource.

Consultee	Consideration	How addressed in this Draft Environmental Statement
	1.C) and part of the area of search (policy M 1.D). It also includes part of the preferred area for rock salt (policy M 6). The south corridor option B covers part of the sand and gravel mineral safeguarding area and the salt mineral safeguarding area. It also includes the preferred area for controlled brine extraction and the safeguarded site at Holford brinefields. The west corridor, north corridor, east corridor, central hub, and some AGIs include part of the sand and gravel mineral safeguarding area. As such, the pipeline route could impact on existing and potential future sand and gravel quarries and this could have very significant impacts on the ability of CWaC to meet its sand and gravel requirements and provide sufficient reserves. It may also impact on salt and brine extraction. The impact on the operation of existing quarries and their ability to expand in the future should be included within the baseline, scope and evaluation to ensure that there is no negative impact on minerals provision.	
Cheshire West and Cheshire	This refers to receptor sensitivity and identifies that existing or allocated mineral sites are high sensitivity. We agree that these are high sensitivity, but this should also include Preferred Areas for sand and gravel (as identified in policy M 1 of the Cheshire West and Chester Local Plan (Part Two)). The Preferred Area is not an allocation but identifies an area that is likely to be more suitable for sand and gravel extraction and this is required to ensure that the Council maintains a steady and adequate	Preferred Areas have been identified within the baseline (Section 14.5) and assessed where relevant in the assessments. A Mineral Resource Assessment (Appendix 14A) has been prepared in order to inform the route of the pipeline and to quantify the potential effects upon existing mineral resource.

Consultee	Consideration	How addressed in this Draft Environmental Statement
	supply of aggregate land-won sand and gravel throughout the plan period and a minimum seven-year landbank. This is particularly important given the current and anticipated future pressures on sand and gravel extraction described above. The potential pipeline routes cover quite large sections of the sand and gravel mineral safeguarding areas, but for most of the route there would be the ability for the pipeline to avoid the mineral safeguarding areas. It is key to ensure that the pipeline does not cut across large sections of safeguarded mineral reserves causing sterilisation.	
Cheshire West and Cheshire	A number of Mineral Safeguarding Areas, Preferred areas for future mineral extraction, as well as minerals infrastructure for both sand and gravel and salt (both brine and rock salt) lie within the Scoping Boundary.	Minerals safeguarding areas and Preferred Areas have been identified within the baseline (Section 14.5) and assessed where relevant in the assessments.
St Helens	Chapter 14 relates to Land Use and includes mineral resources. The receptor sensitivity for minerals is identified as high with which I agree. When assessing the magnitude of effects, as set out in table 14.3, it should be noted that there is a scarcity of sand and gravel supply within the LCR and wider NW region with many MPAs falling below the 7-year land bank. Therefore, the mineral resource should not be sterilised or lost.	Sand and gravel landbanks for the North West of England and for local areas have been identified within the baseline (Section 14.5) and assessed where relevant in the assessments. A Mineral Resource Assessment (Appendix 14A) has been prepared in order to inform the route of the pipeline and to quantify the potential effects upon existing mineral resource.
St Helens	The scope of this chapter is acceptable	Noted. This chapter follows the proposed scope, with the addition of the further requests made in the Scoping Opinion.

Consultee	Consideration	How addressed in this Draft Environmental Statement
Warrington (also received from Sports England)	Comments from Sport England have been received and the full response will be attached to this response but they also are summarised below: "Sport England considers that the impact of a development on sports facilities or activities fall within the scope of the Land Use (Chapter 14) and People and Communities (Chapter 15) assessments of the Scoping Report. As Sport England have a statutory consultee status, through the planning process, to protect playing fields and outdoor sport associated with playing fields, then we consider we would be a non-prescribed consultation body."	Sports facilities and activities are considered within this chapter where relevant.
Warrington	Chapter 14.5 Baseline Conditions - In addition to the sources specified other sources which should be used to help identify playing fields that could be affected by the pipeline are: Sport England's Active Places Power website provides maps and details of sports facilities located within Local Authority areas. Playing Pitch Strategies for Halton, Cheshire East, Cheshire West and Chester, Warrington, St Helens and Trafford. Playing Pitch Strategies identify future development proposals for each of the sites in the short, medium and long term" The Scoping Report does identify sports facilities as a receptor and that is welcomed. However, the relationship between outdoor sport as a Land Use and the outdoor sport facilities users should be well integrated i.e. the impact of loss of use, whether through physical loss or prejudicial impact, of an outdoor	Sport England's Active Places Power website has been used to inform the baseline receptors (Section 14.5).

Consultee	Consideration	How addressed in this Draft Environmental Statement
	sports facility on the people using that facility. Having reviewed the EIA Scoping Report prepared by Wood Group UK Limited (Ref: 807733-WOOD-IA-SC-RP-M5-20942) it appears that the following sports and recreational facilities listed in Chapter 14 p.340- 342 may be affected by the proposal: West Corridor: Runcorn Golf Club Sutton Hall Golf Club North Corridor: The Big Hand Riding School Moore Rugby Union Club Golf courses at Sherdley Park and Fiddlers Ferry (True Fit) The Fiddler's Ferry Sailing Club Sutton Leisure Centre sports ground Rainhill Cricket Club KSTA Rainhill football Mersey Valley Golf Club Whalton Hall Golf Club East Corridor: Antrobus and High Legh golf courses South Corridor: Vale Royal Golf Club	

Statutory consultation

- 14.3.3 Stage 2 Statutory consultation took place between 12 September and 10 November 2022 in accordance with the Planning Act 2008. Prescribed and non-prescribed consultees and members of the public were consulted. Various methods of consultation and engagement were used in accordance with the Statement of Community Consultation (SoCC) including letters, website, public exhibitions, publicity and advertising in newspapers and webinar briefings.

- 14.3.4 Cadent Gas Ltd (Cadent)(“the Applicant”) prepared a Preliminary Environmental Information Report (PEIR) which was publicised at this consultation stage. The Applicant sought feedback on the environmental information presented in that report. Feedback received during statutory consultation was considered by the Applicant and incorporated, where relevant into the design of the Project and its assessment and is presented in this Draft Environmental Statement.
- 14.3.5 A summary of the relevant responses received in response to statutory consultation, together with any subsequent discussions held in relation to Land Use and confirmation of how these have been considered within the assessment to date is presented in **Table 14.3**.
- 14.3.6 Technical engagement with consultees in relation to Land Use is ongoing and responses to the Draft Environmental Statement received at the next Statutory Consultation exercise will be considered in preparation of the final Environmental Statement for DCO submission.

Table 14.3 Summary of Section 42 Consultation responses for land use

Consultee	Consideration	How addressed in this Draft Environmental Statement
Sport England	Requested that the relevant federations/organising bodies of relevant sports clubs were contacted to discuss effects on any such clubs.	Ongoing design work has removed options within the project design which could have impacted on a number of sports clubs. Discussions with affected golf clubs are ongoing directly, and England Golf have been engaged and will be consulted with further as required. An assessment of the Project on the golf clubs is provided within Section 14.9 .
Sport England	Concern raised over potential for noise and visual impacts on golfers at Sandiway Golf Club, and potential screening fencing requested.	An assessment of the Project on the golf club, and potential mitigation to be considered, is provided within Section 14.9 .
Sport England	Concerns raised over direct impacts on True Fit golf club from the pipeline route being located within the course.	An assessment of the Project on the golf club, and potential mitigation to be considered, is provided within Section 14.9 .
Sports England	Identify Warrington Town FC, Moore Lane, Fiddlers Ferry Sports Club, Rainhill High School and Albert Fellows Park as locations	The receptors have been identified and assessed as necessary in Section 14.9

Consultee	Consideration	How addressed in this Draft Environmental Statement
	where football may be affected by the Project.	
Sports England	Confirmed that Moore Rugby Club and St Helens Rugby League club have no concerns over the Project.	The confirmation is noted. Both clubs are considered in Section 14.9 .
Sports England	Concern over impact on Big Hands Riding School.	Ongoing design work has removed options within the project design which would have run adjacent to the Riding School. Indirect effects on the Riding School are assessed within Section 14.9 whilst effects upon horse riders using Public Rights of Way (PRoWS) are considered within the Draft Outline PRoW Management Plan (Appendix 16C) .
Sports England	Advised that Sport England's Playing Field Policy and Guidance should be used as a reference document.	The document has been reviewed and considered in the assessment work.
Sports England	Query on whether the project would make funding available to sports clubs.	Where any sports clubs are impacted by the Project, discussions are ongoing directly with the club in relation to potential mitigation or compensatory measures.
Cemex	Raised a number of queries around the potential impact on Forest Hill Quarry.	Discussions have been ongoing with Cemex to avoid any impact on their operations. Forest Hill Quarry is assessed as part of the Sandiway Minerals Safeguarding Area in Appendix 14A and Section 14.9 .
Bostock Green Estate	Concern over impact on rock salt resources and extraction under their land holdings.	The impact on the salt minerals safeguarding area (which includes the land of interest to the Bostock Green Estate) is assessed as part of the Sandiway Minerals Safeguarding Area in Appendix 14A and Section 14.9 .

- 14.3.7 Through the scoping and consultation activities, this chapter's scope has been confirmed to only cover the topics of minerals, tourism and recreational receptors. Other land use matters such as future development plans, agriculture or impacts on commercial business are covered in other chapters such as **Chapter 13 Agriculture and Soils, Chapter 15 People and Communities and Chapter 19 Intra Project Effects**.

14.4 Data Gathering Methodology

Study area

- 14.4.1 The Study Area for this chapter will differ for the natural resources sub-topic and the tourism and recreation sub-topics. For natural resources, the focus of the assessment will be on whether the Project would sterilise any minerals resources. This is focused on direct effects where the land take from the Project overlaps with areas of minerals resource. The Natural Resources Study Area, for both data gathering and assessment, is therefore the Draft Order Limits (**Figure 14.1**).
- 14.4.2 For tourism and recreation, there could potentially be both direct effects (from land take) and indirect effects (from visual impact or by emissions from the Project). The Tourism and Recreation Study Area, for both data gathering and assessment, therefore utilises the extents of the scope and assessment Study Areas identified in **Chapter 8: Landscape and Visual, Chapter 9: Air Quality and Chapter 10: Noise and Vibration** because significant effects on tourism and recreation receptors could only occur within these extents (**Figure 14.1**). Justifications for each of these extents can be found in the relevant chapters. These extents, measured from the Draft Order Limits, are:
- 1km for Landscape and Visual, with all low or medium sensitivity receptors scoped out;
 - 300m for Air Quality, Dust and Noise/Vibration, from construction operations, with all pipe-laying works scoped out; and
 - 500m from operational HAGIs for Noise/Vibration.
- 14.4.3 Both Study Areas accord with the proposed approach agreed in the Scoping Opinion.

Desk study

- 14.4.4 A summary of the sources of data, together with the nature of that data is outlined in **Table 14.4**.

Table 14.4 Data sources used to inform the Land Use assessment

Source	Date	Summary
Cheshire East Local Plan Strategy Cheshire East Site Allocations and Development Policies Document Cheshire East (Cheshire Replacement Minerals Local Plan) Cheshire East Draft Minerals and Waste Plan 2022 Cheshire West and Chester Local Plan Part 1 Strategic Policies Cheshire West and Chester Local Plan Part 2 Land allocations and detailed policies Halton Delivery and Allocations Local Plan Greater Manchester Joint Minerals Development Plan St Helens Borough Local Plan Warrington Local Plan	Accessed online July 2024	Policy designations for protected and allocated minerals sites, minerals safeguarding areas.
MAGIC website (magic.defra.gov.uk)	Accessed July 2024	Countryside and Rights of Way Act land (registered common land and open access land).
Google Earth Pro	Accessed July 2024	Quarries. Tourism/recreation facilities.
Sports England Active Places Power website	Accessed July 2024	Sports facilities.

Source	Date	Summary
BGS Geoindex Onshore	Accessed July 2024	Geological information, including borehole records
North West Aggregates Working Party Annual Monitoring Report 2022.	Published December 2023	Aggregate minerals sales and reserve information
Cheshire East Local Plan Strategy Local Aggregate Assessment 2023	Published September 2023	Aggregate minerals sales and reserve information
Cheshire West & Chester Council Local Plan Strategy Local Aggregate Assessment 2023	Published October 2023	Aggregate minerals sales and reserve information

Survey work

- 14.4.5 As reflected by common practice and due to publicly accessible information being available on identified receptors from online sources, the survey work to date has predominantly been desk research based. The only on-site survey work currently undertaken has been visits to the Sandiway golf course as part of the ongoing Golf Course Impact Assessment work.

14.5 Overall Baseline

Current baseline

- 14.5.1 The current baseline looks at the land uses which may be affected - within the Natural Resources and Tourism and Recreation Study Areas. (See **Figure 14.1** and **Section 14.4** for further details of the Study Areas).
- 14.5.2 The baseline is described different for natural resources and tourism / recreation due to the differing nature of the subjects. Natural Resources includes both the wider aggregates supply baseline relevant to the host authorities and to the North West region, plus the individual minerals receptors identified along the Project route. Tourism and Recreation only needs to consider the individual receptors found within the Study Area along the Project Route.

Aggregate Sand and Gravel reserves

- 14.5.3 A number of comments received from the host authorities as part of the Scoping Opinion and Statutory Consultation mentioned the low level of aggregate sand and gravel resources in the North West and therefore the importance of avoiding minerals sterilisation along the route of the Project. The North West Aggregates Working Party report from 2022 shows that aggregate sand and gravel reserves in the North West region have decreased substantially in the period from 2011 to 2021. In 2011, aggregates sand and gravel reserves stood at over 34 million tonnes (mt), but they had reduced to under 19mt in 2021. Aggregate sand and gravel sales in that period had remained relatively steady, fluctuating between 1.91 and 2.85 million tonnes per annum (mtpa), indicating that reserves were not being replaced by new permissions as they are used.
- 14.5.4 Across the six host authorities there is a similar baseline position in respect of aggregate sand and gravel. Cheshire East (Local Aggregate Assessment (LAA), 2023) shows that there is an estimated 1.9mt of aggregate sand and gravel reserves, which is down by 0.73mt from 2021. Forecasts for aggregate sand and gravel sales in Cheshire East are around 0.462mtpa for the next 20 years. Given the reserve position, there is only 4.11 years supply available at these rates.
- 14.5.5 Chester West and Chester (LAA 2023) shows that aggregates sand and gravel reserves dropped from around 4.5mt in 2013 until 2015 when a new site permission was granted which increased reserves to 8mt. They have since dropped down to 3.61mt which would provide around 5.64 years of supply at average sales rates from the past 10 years.
- 14.5.6 The latest information for information for Halton, St Helens and Warrington is all contained within a Joint LAA with the Greater Manchester and Merseyside areas (2019). This shows that aggregates sand and gravel reserves fell from 6.1mt in 2009 to 1.2mt in 2019. Given recent sales rates, this would provide 4.4 years of supply. However, the Joint LAA also identifies that there is only one active quarry (Astley Moss, within Salford Council) remaining in the Joint LAA area. The latest information for Trafford is contained within the Greater Manchester Joint Minerals Development Plan Authority Monitoring Report 2019-20. This also reports there is only a single sand and gravel quarry operating in the Joint Minerals development plan area, which will also be Astley Moss Quarry due to its location in Salford. The sales and reserves position reported is the same as for the Joint LAA report.

Silica sand

- 14.5.7 Silica sand is not subject to the same detailed monitoring as found within the regional Aggregates Working parties or local aggregates assessments and information on the baseline position is therefore found within the relevant policy documents of the host authorities.
- 14.5.8 Cheshire East identify silica sand as a mineral that requires consideration in terms of minerals policy and planning. However, none of the existing silica sand extraction sites, nor any of the allocated sites for continued and potential future extraction within the adopted Minerals Local Plan, are within the Natural Resources Study Area.

- 14.5.9 Until recent years, there was no indication that Cheshire West and Chester area had any silica sand resources, but representations to the Local Plan Part 2, and a subsequent planning application, for a site at Rudheath Lodge, Cranage identified a reserve of silica sand. This site is around 5 kilometres outside of the Natural Resources Study Area.
- 14.5.10 Policy documents from Halton, St Helens, Trafford and Warrington indicate that there is no silica sand extraction or expected future interest within their areas.

Salt

- 14.5.11 The Cheshire Replacement Minerals Local Plan contains policies which identify preferred areas for future rock salt and brine extraction, and the Draft Minerals and Waste Plan proposes safeguarding areas for salt. The Draft Order Limits do not overlap within any of the preferred areas in the adopted Minerals Local Plan, but where the Draft Order Limits, the Cheshire East boundary and the Trafford Boundary meet near Dunham Woodhouses on the East Corridor, the Draft Order Limits overlap with the proposed safeguarding areas by approximately 1ha.
- 14.5.12 Cheshire West and Cheshire's planning policy documents contain has policy commitments to maintaining a steady and sustainable supply of salt and brine and aims to achieve this by safeguarding extraction from the existing Winsford Rock Salt Mine and Holford Brinefield (both on the South Corridor) and by the identification of Preferred Areas of salt and brine extraction identified at Winsford and Holford. The existing Winsford Rock Salt Mine extracts around 1mtpa and has a permitted reserve of around 30mt.
- 14.5.13 Policy documents from Halton, St Helens, Trafford and Warrington indicate that there is no salt extraction or expected future interest within their areas.

Coal and clay

- 14.5.14 St Helens planning policy documents has commitments to safeguard shallow coal resources within land which the North Corridor passes through. Coal is now generally considered as an unlikely mineral for viable extraction due to the environmental impacts of burning coal, and clay resources have historically been viable only with coal extraction. In addition, much of the safeguarding area for shallow clay is constrained by the extent of urban development and motorway networks in the area. The safeguarding policy provides no presumption or support to the extraction of coal in this area and it appears that no coal extraction works have taken place in the Borough since the early 1990s¹⁶.

Minerals extraction allocations

- 14.5.15 Further information on areas permitted or allocated for minerals extraction or the safeguarding of minerals resources is contained within the following paragraphs looking at the route by individual corridor.

¹⁶ Northern Mines Research Society, [St Helens Coalfield - Northern Mine Research Society \(nmrs.org.uk\)](https://nmrs.org.uk), (Accessed 8 July 2024).

Tourism and Recreation

14.5.16 For the purposes of this chapter, the baseline consists of the individual receptors identified within the Tourism and Recreation Study Area and contained within the following paragraphs looking at the route by individual corridor.

West Corridor

14.5.17 There are no permitted minerals extraction sites or policy allocations supporting future minerals extraction within the West Corridor. Minerals safeguarding areas for sand and gravel have been identified as being relevant to the baseline within the Natural Resources Study Area for a stretch of around 4km between Sutton Weaver and Aston Grange and from Dutton Park Farm to the Central Hub area.

14.5.18 Hover Force (outdoor activity centre) and Runcorn Model Flying Association are within the Draft Order Limits. There are also the following recreational receptors within the Tourism and Recreation Study Area on the West Corridor: Aston by Sutton Primary School, Beachwood Primary School, Castle Park, Elton Primary School, Frodsham Cricket Club, Frodsham Leisure Centre, Frodsham Water Sports, Gowy Meadows Nature Reserve, Helsby Community Sports Club, Helsby High School, Helsby Parish Field, Runcorn Golf Club, Runcorn Rowing Club, Saltworks Farm Playing Fields, the Heath School and Weston Primary School. The school receptors all relate to the outdoor sports facilities registered at the schools.

14.5.19 Sutton Hall Golf Club was identified in the Scoping Report as a receptor but is now closed and has been converted to agricultural use and therefore does not form a part of the baseline.

14.5.20 These receptors relating to the West Corridor are shown in **Figure 14.2**.

North Corridor

14.5.21 Within the North Corridor there is a permitted minerals extraction site at Bold Heath Quarry which lies adjacent to the Draft Order Limits. Land adjacent to the quarry is also allocated as a minerals safeguarding area to safeguard the existing minerals workings here. In addition, a minerals safeguarding area for coal and clay exists in the St Helens council area. No other mineral safeguarding areas have been identified which are relevant to the baseline on the North Corridor.

14.5.22 The following recreational receptors are within the Draft Order Limits on the North Corridor (including the Spurs): Moore Nature Reserve, Fiddlers Ferry (True Fit) golf course, Morley Common and the allotments at Centre Link Bridge / A5060.

14.5.23 The Tourism and Recreation Study Area also includes: Albert Fellowes Park, Big Hand Riding School, Doe Green Recreation Area, Fiddlers Ferry Sailing Club, King George V Playing fields / Sutton Manor Crown Green Bowls Club, Loushers Lane Recreation Ground, Meadow Bank caravan park, Moore football pitch, Moore RUFC, Penketh South Primary School, Platts Field, Rainhill Cricket Club, Rainhill Ex-Services Club, Rainhill High School, Sherdley Park Golf Club, St Helens rugby league ground (the Totally Wicked Stadium), St John Vianney Roman Catholic Primary School, Sutton Manor Primary School, Sutton Manor Woodland, Thatto Heath Meadows Nature Reserve, Two Acre Caravan Park (Higher Walton),

Walton Hall and Gardens, Walton Hall Golf Club, Warrington Sports Club, Warrington Sports for All Centre and Warrington Town FC. The school receptors all relate to the outdoor sports facilities registered at the schools.

14.5.24 These receptors relating to the North Corridor are shown in **Figure 14.3**.

East Corridor

14.5.25 There are no permitted minerals extraction sites or policy allocations supporting future minerals extraction within the East Corridor. Minerals safeguarding areas for sand and gravel have been identified as being relevant to the baseline within the Natural Resources Study Area in the Higher Whitley and Antrobus area, to the west of Dunham Woodhouses and through land to the south-east of Partington.

14.5.26 The following recreational receptor are within the Draft Order Limits on the East Corridor: Partington Nature Reserve Trail. The Tourism and Recreation Study Area also includes Antrobus Golf Club, High Legh Golf Club, High Legh Tennis Club, Moss View Playing Fields, Park Moss Nature Reserve and Partington Sports Village.

14.5.27 These receptors relating to the East Corridor are shown in **Figure 14.4**.

South Corridor

14.5.28 The permitted Forest Hill Quarry exists adjacent to the Draft Order Limits on the South Corridor and consists of both the current operational quarry and a permitted extension to the north of the operational site. In addition, Preferred Areas and Areas of Search for potential new minerals development near Forest Hill Quarry exist within the Natural Resources Study Area for the South Corridor. Minerals safeguarding areas for sand and gravel resources also exist within the Natural Resources Study Area, although within the South Corridor they are largely consistent with the Preferred Areas and Areas of Search above.

14.5.29 Preferred Areas for future extraction of salt are identified within the area between Moulton and Wharton and across to the Hydrogen Storage Facility, and they relate to potential expansion of the Winsford Rock Salt Mine. Minerals safeguarding areas in relation to salt exist in these areas as well, and also include land relating to the Holford Brinefield but again are largely consistent with the Preferred Areas for salt extraction within the Natural Resources Study Area. The Draft Order Limits pass over land utilised by both the Winsford Salt Mine and the Holford Brinefield (which are both underground salt extraction operations).

14.5.30 Parts of Sandiway Golf Club are located within the Draft Order Limits, although this does not include any of the playing areas of the course. No other recreational receptors have been identified within the Draft Order Limits on the South Corridor. The Tourism and Recreation Study Area also includes the Bartington caravan park, Bostock Green Playing Fields, Moulton Playing Fields, Norley Road Playing Fields, Petty Pool fishing lake, Vale Royal Falconry Centre, Vale Royal Golf Club, Vale Royal River caravan park, Weaverdale caravan park and Weaverham Road Playing Fields.

14.5.31 These receptors relating to the South Corridor are shown in **Figure 14.5**.

Future baseline

- 14.5.32 The baseline with regard to minerals availability will change in the future, with existing permitted reserves being depleted as they are extracted and sold. It would be expected that new reserves are permitted through planning permissions being granted. The various Local Plans provide allocations and policy support to additional reserves which could be able to replenish these depleted reserves, however it is not always the case that subsequent planning applications will be consistent with allocations. It is therefore not possible to know by how much reserves will be depleted, what resources they will be replenished by, and which reserves will be affected or when this will happen.
- 14.5.33 Planning policy may change prior to the Project becoming operational, which could have an effect on allocations or safeguarding areas for minerals through the designation of new areas for development. Emerging policy has already been identified, where this is advanced enough to provide a steer on possible future policy. However, nothing has been identified which would have a substantial effect on the existing minerals safeguarding areas.
- 14.5.34 The future baseline may also change if new tourism or recreational facilities are developed. However, no information has been found which indicates there are currently any proposals which would change or affect the future sensitivity of the Land Use baseline receptors identified or add new receptors to the baseline.

14.6 Embedded Environmental Measures

- 14.6.1 As part of the project design process, a number of embedded environmental measures are proposed to reduce the potential for impacts on Land Use. These are broken down into measures that are incorporated into the overall design of the Project, and those that are to be implemented during its construction and operational phases. No measures have been specifically identified for the decommissioning phase of the Project. However, it is anticipated that measures equivalent to those implemented during construction would also be effective in mitigating effects on Land Use during decommissioning. **Table 14.5** outlines how these embedded measures will influence the Land Use assessment.

Table 14.5 Summary of embedded environmental measures

Embedded measures	Compliance mechanism
Construction	
Fencing to provide screening along shared boundary of Sandiway golf course and the project. Exact details will be subject to the Golf Course Impact Assessment to be completed for the Final ES.	DCO requirements

Embedded measures	Compliance mechanism
Surplus minerals obtained will be re-used elsewhere in the Project, or potentially off project, subject to the quality and quantity of the mineral and in accordance with the Materials Management Plan.	DCO requirements (Construction Environmental Management Plan)
All phases	
Crossing of main rivers and canals will be constructed using trenchless techniques. Will avoid direct impacts on recreational use of the watercourses.	DCO works plans and DCO requirements
The Draft Order Limits have been designed to avoid all World Heritage Sites, National Nature Reserves and Registered Parks and Gardens, and to minimise interaction with other tourist and recreational facilities.	DCO works plans and DCO requirements
The Draft Order Limits have been designed to either avoid, or minimise conflict with local nature reserves and National Trust land, where possible.	DCO works plans, description of development and requirements
The Draft Order Limits have considered the location of the minerals safeguarding areas, policy allocation for potential future minerals extraction and permissions for minerals extraction, in order to minimise the effect on identified mineral resources.	DCO works plans and DCO requirements

- 14.6.2 In relation to minerals, the Minerals Resource Assessment (**Appendix 14A**) describes how minerals may be encountered through the excavation of land for the Project, particularly the pipeline trenching and trenchless crossing pits required as the Draft Order Limits pass through minerals safeguarding areas.
- 14.6.3 The design of the Project has considered the location of minerals safeguarding areas, policy allocations for minerals extraction and permitted minerals extraction sites through the routeing work undertaken. Due to the extent of the minerals safeguarding areas (some of which cover the entirety of the relevant geological strata) it has not been possible to avoid them entirely. However, all operational minerals extraction sites have been avoided except for in the Sandiway area, where discussion have been held with Cemex, the operator of Forest Hill Quarry to ensure that the pipeline route and programme can be developed to avoid any currently operational or planned future extraction works.
- 14.6.4 Planning policy with NPA EN-1 and local planning policy, states that minerals should be safeguarded from non-minerals developments which may sterilise these resources. Where a non-mineral development is proposed on land where minerals

are present at shallow depths, it is common practice to consider the prior extraction of the mineral lying underneath the land, so that they can be used for a beneficial purpose and not sterilised. Prior extraction takes advantage of land being opened up for development to gain access to all of the mineral available below that land. As ground investigation data gathered so far is not comprehensive across all areas, it cannot be known what quantity of minerals could be encountered or whether these would be of a quality to be suitable for beneficial use. In addition, the nature of a pipeline development, being a long, thin linear route, makes prior extraction difficult. The thin linear nature of the land requirements is not suited to minerals extraction as they do not provide the width of land required for stable slopes/quarry walls to provide safe working at depths. Any such extraction that is achievable, would leave a trench feature in the landscape which would either create landscape impacts if left in situ, or would require materials to be imported to site to fill the trench. This importation would itself create logistical, transport and subsequent environmental effects which cannot be understood at this stage.

- 14.6.5 It is therefore considered that prior extraction as a mitigation method is not appropriate for a pipeline development. Instead, mitigation is proposed in the form of the use of incidental or surplus minerals extracted from the Project. Where excavations take place, materials taken out of the ground will be stored close to the location of excavation and then re-used to backfill the excavations once the pipelines are laid. Surplus minerals remaining after this exercise (due to either displacement or bulking of ground materials) will then be considered for re-use. This will be undertaken in accordance with a Materials Management Plan.

14.7 Scope of the Assessment

- 14.7.1 The scope of the assessment has been refined as the project design has evolved and responds to feedback received to date as set out in **Section 14.3**.

Spatial scope

- 14.7.2 The Spatial scope of the assessment is the same as the Study Areas identified in **Section 14.3.7**. This the Draft Order Limits for the Natural Resources Study Area, and for the Tourism and Recreation Study Area, this is (measured from the Draft Order Limits):
- 1km for Landscape and Visual, with all low or medium sensitivity receptors scoped out;
 - 300m for Air Quality, Dust and Noise/Vibration, from construction operations, with all pipe-laying works scoped out, and
 - 500m from operational HAGIs for Noise/Vibration.

Temporal scope

- 14.7.3 The temporal scope of the assessment of land use is consistent with the period over which the Project would be carried out and therefore covers the construction, operational (including maintenance) and decommissioning periods.

Potential receptors

14.7.4 The principal Land Use receptors that have been identified as being potentially subject to effects are summarised in **Table 14.6**.

Table 14.6 Land Use receptors subject to potential effects

Receptor	Reason for consideration
Construction and decommissioning	
Minerals resources	Sterilisation of minerals resources where the pipeline runs through, or HAGIs are located in, minerals policy allocations or permitted mineral sites
Tourist attractions, outdoor sports, country parks, nature reserves	Receptors may lose land to the construction activities leading to a reduced tourism/recreational or commercial offer during this phase.
Cycling and walking routes, public rights of way, navigational waterways	Linear recreational routes (cycling/walking/waterways) could be severed or diverted leading to users not being able to follow the route. These are being considered within Chapter 11: Traffic and Transport .
Tourism and recreational receptors	The effects from noise emissions, or on-air quality or views, may impact on receptors away from the construction work area itself.
Agriculture	This is being considered within Chapter 13: Agriculture and Soil Resources for both construction and operational phases.
Businesses	This is being considered within Chapter 15: People and Communities for both construction and operational phases.
Amenity of residential properties/settlements	These will be considered within Chapter 19: Intra-Project Effects for both construction and operational phases.
Operation and Maintenance	

Receptor	Reason for consideration
Minerals resources	Sterilisation of minerals resources where the pipeline runs through, or HAGIs are located in, minerals policy allocations or permitted mineral sites.
Tourist attractions, outdoor sports, country parks, nature reserves.	Land take to accommodate HAGIs leading to a reduced tourism/recreational or commercial offer
Tourism and recreational receptors.	The effects arising from noise emissions, or views to HAGIs, may impact on receptors away from the operational area itself.

Likely significant effects

14.7.5 The effects on land use receptors which have the potential to be significant and have been taken forward for detailed assessment are summarised in **Table 14.7**.

Table 14.7 Land Use receptors scoped in for further assessment

Receptor	Likely significant effects
<i>Construction and decommissioning</i>	
Minerals resources	Sterilisation of minerals resources where the pipeline runs through, or HAGIs are located in, minerals policy allocations or permitted mineral sites
Tourist attractions, outdoor sports, country parks, nature reserves	Receptors may lose land to the construction activities leading to a reduced tourism/recreational or commercial offer during this phase.
Tourism and recreational receptors	Tourism and recreational receptors are scoped in due to indirect effects from noise emissions, or on-air quality or views from construction work.
<i>Operation and Maintenance</i>	
Minerals resources of sand and gravel (with the exception of silica sand) and salt.	Sterilisation of minerals resources where the pipeline runs through, or HAGIs are located in, minerals policy allocations or permitted mineral sites.
Tourist attractions, outdoor	Land take to accommodate HAGIs leading to a reduced tourism/recreational or commercial offer

Receptor	Likely significant effects
sports, country parks, nature reserves	
Tourism and recreational receptors	The effects arising from noise emissions, or views to HAGIs, may impact on receptors away from the operational area itself.

Elements scoped out of further assessment

14.7.6 The receptors/effects detailed in **Table 14.8** have been scoped out from the assessment because the potential effects are not considered likely to be significant.

Table 14.8 Summary of effects scoped out of the Land Use assessment

Receptors/potential effects	Justification
Coal Mineral Safeguarding Areas	Although there is a minerals safeguarding area for coal designated within the St Helens Local plan, it is not considered that coal extraction is a viable proposition in the UK for an urban coalfield due to climate change policies, proximity to residents and public opinion. Therefore the possibility of coal being considered for future extraction is not realistic. No significant effects on the coal resources here can therefore take place.
Silica sand	No existing silica sand extraction or policy allocations/support for silica sand sites exist within (or close to) the Natural Resources Study Area. No significant effects on silica sand resources can therefore take place.
Indirect effects from pipeline laying works in highway	The proposals to lay pipeline within highways (e.g. on the Warrington Spur from the A5060 to Novelis or on the St Helens Spur from the B5204 to Glass Futures) would not create any impacts greater than usual highways works for utility provision or maintenance. The effect of the works proposed is therefore not sufficient to create significant effects.

14.8 Assessment Methodology

Introduction

- 14.8.1 The generic project-wide approach to the assessment methodology is set out in **Chapter 3: Approach to preparing the Draft Environmental Statement**, and specifically in **Section 3.23**. However, whilst this has informed the approach that has been used in this land use assessment, it is necessary to set out how this methodology has been applied, and adapted as appropriate, to address the specific needs of this land use assessment.

Assessment criteria

- 14.8.2 There is no definitive guidance on assessment criteria for land use effects; as such the criteria proposed are based on experience gained from other projects. The criteria were presented within the PEIR with no comments being received on the proposed approach.
- 14.8.3 The significance of a land use effect will be determined by assessing the magnitude of the impact and the sensitivity of the receptor. The magnitude of an impact represents its severity. Key factors when assessing magnitude include the extent (number of groups and/or people affected) and how the impact affects the receptor's ability to fulfil its original function. **Table 14.9** details the proposed criteria for assessing the magnitude of effect.

Table 14.9 Magnitude of effect

Magnitude of Effects	Criteria
High	A change that will be very adverse/beneficial and very likely to affect a large number of people or prevent the receptor from fulfilling its function.
Medium	A change that will be adverse/beneficial and that is likely to affect a moderate number of people or partially prevent the receptor from fulfilling its function.
Low	A change that will be adverse/beneficial and that it is likely to affect a small number of people or which have a limited effect on how the receptor fulfils its function.
Negligible	A change that is anticipated to have a slight effect on the receptor.
No impact	There is no change to the receptor.

- 14.8.4 The sensitivity of a receptor relates to its importance to tourists, recreational users or minerals supply, or to what degree they will be affected by the land take or amenity effects to be generated by the Project. For example, a local business that has a reliance on its outdoor setting (a petting zoo or a wedding venue) would be more sensitive than a local business that largely runs in an indoor venue (bowling alley). **Table 14.10** details the proposed criteria for assessing receptor sensitivity.

Table 14.10 Receptor Sensitivity

Receptor Sensitivity	Criteria
High	Businesses, individuals or groups who have little or no capacity to experience the impact without incurring a material loss (or gain). A recreational receptor which is considered nationally significant. Existing or allocated minerals sites.
Medium	Businesses, individuals or groups who have some capacity to experience the impact without incurring a material loss (or gain). A recreational receptor which is considered regionally significant. Minerals safeguarding or consultation areas.
Low	Businesses, individuals or groups that generally have capacity to experience the impact without incurring a material loss (or gain). No minerals resources identified. A recreational receptor which is considered to be locally significant.

Significance evaluation methodology

- 14.8.5 The significance of a Land Use effect is determined by combining both the magnitude of the effect and the sensitivity of the receptor. The proposed approach to determining significance is summarised in **Table 14.11** The approach will be the same for both direct effects (where a receptor is within the Draft Order Limits and the development proposed physical affects the receptor) and indirect effects, where a receptor is not physically affected but an impact such as noise or visual impact is relevant.

Table 14.11 Determining significance

Receptor Sensitivity	Impact Magnitude				
	High Impact	Medium Impact	Low Impact	Negligible Impact	No Impact
High	Major – significant	Major – significant	Moderate – potentially significant	Minor – not significant	No Impact
Medium	Major – significant	Moderate – potentially significant	Minor – not significant	Negligible – not significant	No Impact
Low	Moderate – potentially significant	Minor – not significant	Negligible – not significant	Negligible – not significant	No Impact

14.9 Assessment of Land Use Effects

Construction phase

- 14.9.1 Direct effects from construction phase activities could occur on any minerals receptor or on tourism or recreational receptors that are within the Draft Order Limits and may be disrupted by construction activities. In addition, tourism and recreational receptors, which are outside of the site boundary but within the Study Area, could be affected by the indirect effects of construction.
- 14.9.2 The **Minerals Resource Assessment Appendix 14A** provides details on all the minerals safeguarding areas that have been scoped into the assessment and presents the calculations that have been used to determine the minerals volumes used within the following sections of this chapter.
- 14.9.3 These minerals assessments are made on a worst case scenario basis, where a buffer zone of 50m either side of the pipeline has been considered as an area to be directly sterilised by the Project. This 50m buffer is not reflective of the Draft Order Limits or LoD and is instead based on the 40 yard (37m) distance referenced in the mining code, pursuant to the Acquisition of Land Act 1981. Within this 40 yard distance from a pipeline, any proposals for minerals extraction would need to be notified to Cadent and agreed with them before they occur. The EIA has extended the distance to 50m, and also considered that any minerals in this area would be sterilised, to provide a worst case assessment. In practice, minerals extraction could be agreed subject to negotiation with Cadent.
- 14.9.4 The assessment work considering indirect effects takes into consideration the findings of **Chapters 8: Landscape and Visual, 9: Air Quality and 10 Noise and Vibration**.

West Corridor: Minerals

- 14.9.5 A minerals safeguarding area for sand and gravel resources has been identified for assessment within the Draft Order Limits in between Sutton Weaver and Aston Grange. Some land is also included in minerals safeguarding areas on the west corridor from Dutton Park Farm heading towards the Central Hub, however this also runs into the South Corridor and it is therefore included under the South Corridor section in this chapter (**Paragraph 14.9.46** and **Figure 14.5**).

Aston Grange Minerals Safeguarding Area

- 14.9.6 Between Sutton Weaver and Aston Grange the Draft Order Limits pass through a minerals safeguarding area for approximately 3.7km. The Minerals Resource Assessment (MRA) has found that there is potential to sterilise around 1.2 million m³ (approximately 1.8 million tonnes¹⁷ (mt)) of sand / gravel due to the Project in this area. However, this should be taken in the context that there would be around 3.7 million m³ of sand still available in the minerals safeguarding area in this area. Minerals safeguarding areas are a **medium** sensitivity receptor, and without mitigation the pipeline could lead to **high** magnitude of adverse change. This would lead to a **major adverse** impact, which would be **significant**.

West Corridor: Tourism and Recreation receptors

- 14.9.7 All receptors are shown on **Figure 14.2**.

*Receptors within the Draft Order Limits**Hover Force Outdoor Activity Centre*

- 14.9.8 Hover Force is an outdoor activity centre which includes off-road hovercraft, karting and buggy racing, plus activities such as shooting, archery and axe-throwing. It is mostly located outside of the Draft Order Limits, although the north east corner of the site would be directly affected by open cut pipe trenches during the construction phase. The remainder of the site is immediately adjacent to, and all within 250m of, the Draft Order Limits. The construction phase would temporarily result in around 10% of the off-road activity area being unavailable. As an activity centre which relies on the use of its land, it is considered that the centre is of **medium** sensitivity to direct effects. Given the nature of the off-road racing which takes place, it is also considered that the centre is of a **low** sensitivity in terms of indirect effects from any noise, air quality or visual impacts arising from the construction of the pipeline in this location. It is expected that a 10% reduction in the off-road driving area would result in a **low**, adverse magnitude of change for the centre. A low magnitude of change on a medium sensitivity receptor would result in a **negligible, adverse** effect which is **minor** and **not significant**.

¹⁷ The density of sand will vary depending on its exact qualities, but standard calculations typically use a ratio of 1 cubic metres to 1.5 tonnes.

Runcorn Model Flying Association

- 14.9.9 Runcorn Model Flying Association is located adjacent to the Hover Force site, with access off Lordship Lane. The organisation has a clubhouse and a field used for the flying of model aircraft located within the Draft Order Limits, but outside of the LoD. It is expected that the construction works would see the organisation ceasing operations for a temporary period of time as the pipeline is constructed in this area. However, once construction has passed this location operations could then resume immediately. The receptor is considered to be of **low** sensitivity and a **medium** magnitude of impact is expected as the need to stop operations but only for a short, temporary duration. This would give rise to a **minor, adverse** effect which is **not significant**.

Receptors outside of the Draft Order Limits

- 14.9.10 Receptors outside of the Draft Order Limits can only be affected indirectly by the Project, through amenity related effects: visual impacts, air quality and noise. **Chapter 9: Air Quality** has found there would be no significant effects on any receptors during the construction phase and references the standard mitigation measures which would be employed on construction activities and controlled by the DCO requirements. The consideration of all of the following receptors is therefore made on the basis that no significant air quality effects will occur on them.
- 14.9.11 Of the West Corridor receptors, the following are located more than 300m away from potential significant noise generating activities during construction, and therefore significant noise effects will not be relevant (as described in **Chapter 10: Noise and Vibration**): Beachwood Primary School, Elton Primary School, Frodsham Cricket Ground, Gowys Meadows Nature Reserve, the Heath School, Helsby Community Sports Club, Helsby Parish Field, Helsby High School, Castle Park (Frodsham), Frodsham Leisure Centre, Saltworks Farm Playing Fields and Weston Primary School. In addition, these receptors are all screened from the construction activities by existing development and built infrastructure such as residential development, rail lines, M56, Runcorn Golf Course and/or the Weston Point Expressway therefore no visual impacts will occur. With either no impacts, or negligible impacts occurring, any effect on these receptors will be **not significant**.

Frodsham Water Sports

- 14.9.12 Frodsham Water Sports is located on the River Weaver, to the east of Bridge Lane in Frodsham. Although it would be within 300m of the trenchless crossing compounds at Mill Lane, any water sports activities will be on the River itself. The River is located at a lower level than the construction compound and there is existing built development (residential and commercial) located between them, which would provide screening for any noise or visual effects that may arise). The receptor is considered to be of **low** sensitivity and a **negligible** magnitude of impact is expected. This would give rise to a **negligible** effect, for a temporary period of time during construction works, which is **not significant**.

Runcorn Golf Club

- 14.9.13 Runcorn Golf Club is located within 300m of the construction compound required for the Runcorn HAGI on the Runcorn Spur, however it would be screened from the works by existing tree cover along the southern boundary of the golf course and the A557 Western Point Expressway. Any noise arising from the construction works are therefore unlikely to be noticeable above the traffic noise from the A557. The land on which the HAGI and its construction compound will lie, is at a lower level than the golf course and therefore it is unlikely that any views will be available from the golf course of the construction activities. **No impact** is therefore expected on this receptor.

Runcorn Rowing Club

- 14.9.14 Runcorn Rowing Club is located on the north bank of the Weaver Navigation off Cholmondeley Road. It is located within 300m of the trenchless crossing compound required for the crossing of the M56. The stretch of the Weaver Navigation at this location is a similar distance away from the Frodsham Substation and the M56 as it is the trenchless crossing compound with existing industrial activities also located within 500m of the receptor. Any noise arising from the construction works are therefore unlikely to be a disturbance to rowers on the Weaver Navigation given the baseline noise environment. Due to the ground levels of the HAGI and related construction works, plus existing vegetation on the southern bank of the Weaver Navigation, it is unlikely any of the construction works in this location would be visible. Pipeline construction works for the Runcorn Spur would also take place around 200m north of the Rowing Club. However, the ground levels and vegetation are again likely to screen all meaningful views. The receptor is considered to be of **low** sensitivity and a **negligible** magnitude of impact is expected. This would give rise to a **negligible** effect, for a temporary period of time during construction works, which is **not significant**.

Aston by Sutton Primary School

- 14.9.15 Aston by Sutton Primary School is located within the small settlement of Aston, adjacent to Aston Lane. The school playing field would be located around 90m from the Draft Order Limits. Some visual screening would be offered by existing woodland to the west, scattered mature trees along Aston Lane and the school buildings. Some noise may be audible to users of the School's playing field but this would be from pipeline trenching works which **Chapter 10 Noise and Vibration** identifies as being not significant. The receptor is considered to be of **high** sensitivity and a **negligible** magnitude of impact is expected as although some noise and views of the construction works may be available, this is unlikely to be of a level which creates a substantial effect to people involved in sporting activities on the field. This would give rise to a **minor adverse** effect, for a temporary period of time during construction works, which is **not significant**.

North Corridor: Minerals

- 14.9.16 A minerals safeguarding area for sandstone has been identified for assessment around Bold Heath Quarry on the North Corridor.

Bold Heath Minerals Safeguarding Area

14.9.17 In the Bold Heath area the Draft Order Limits pass through this minerals safeguarding area for approximately 2km. The Minerals Resource Assessment (MRA) has found that there is potential to sterilise around 1.9 million m³ of sandstone due to the Project in this area. However, this should be taken in the context that there would be around 11 million m³ of sand still available in the minerals safeguarding area in this area. As the pipeline would not impact on the operational works at the existing quarry, and there is land available within the minerals safeguarding area within which the quarry could extend if the operators wished to expand their operations in the future, it is not considered that the pipeline would impact on current or future workings here. In addition, the sandstone within the quarry is mostly utilised for fill, and sandstone excavated as part of the pipeline trenching works will be utilised to backfill the trench. The sandstone will be used for its usual purpose. Minerals safeguarding area are a **medium** sensitivity receptor, and the pipeline could lead to **high** magnitude of adverse change. This would lead to a **major adverse** impact, which would be **significant**. However, **no impact** would occur on the operational Bold Heath Quarry

North Corridor: Tourism and recreation receptors

14.9.18 All receptors are shown on **Figure 14.3**.

Receptors within the Draft Order Limits

Moore Nature Reserve

14.9.19 The Draft Order Limits have a direct impact on the Moore Nature Reserve. The main pipeline of the North Corridor would cross the Nature Reserve from Birch Wood in the south east of the reserve, passing to the north of Birchwood Pool and then to the south of the restored Arpley landfill site and along Lapwing Lane. The Warrington Spur could also pass through the Nature Reserve, with one option for its route running past Pump House Pool and Eastern Reedbed pool to reach Eastford Road to the east. Due to the east-west linear nature of Moore Nature Reserve, and the need for the pipeline to avoid running under areas of built development, it is not possible for the pipeline to avoid the Nature Reserve completely. For the main pipeline, the route has been designed to run along the northern boundary of the reserve around Birchwood Pool and Lapwing Wood so as to limit the land take required from the reserve. It is not possible for the pipeline to run further north, outside of the Nature Reserve area, due to the presence of the landfill site. On the Warrington Spur, there is an alternative option that would run outside of the Nature Reserve, however this would run through Morley Common, an area of registered Common Land.

14.9.20 Moore Nature Reserve covers an area of around 100ha, and the pipeline (mainline and Warrington Spur option) would run for around 2.5km through the nature reserve, requiring around 8ha of land during the construction phase. If the alternative Warrington Spur option through Morley Common was utilised, then land take within the Nature Reserve would decrease to around 5ha during construction. The route has also been designed to avoid important individual trees where

possible, to retain their visual and ecological value. The works would however require existing vegetation to be cleared, which will provide an adverse experience for recreational users of the Moore Nature Reserve. However, over 90% of the Nature Reserve will remain open with public access retained and with no effect on existing woodland or other habitats. Distance and screening provided by retained vegetation will reduce the indirect effects created by the construction works to visitors to the nature reserve using the un-affected parts of the site. The Nature Reserve is considered to be of **low-medium** sensitivity for recreational users and the proposals would have a **medium** magnitude of change, which would be adverse. The effects would therefore be **minor to moderate, adverse** effect and be potentially significant. Given the works have been designed to reduce impacts where possible, and a large amount of the Nature Reserve will remain open for public restoration away from the pipeline works, it is considered the minor to moderate adverse effect would be **not significant**.

Morley Common

- 14.9.21 Morley Common is located on the Warrington Spur and consists of Common Land (designated for public access) and also houses four grass football pitches and a children's playground. One option for the Warrington Spur would see the pipeline run along the western side of the adjacent rail lines, before running along Eastford Road to the northern boundary of Morley Common. An area of land would be required from Morley Common to accommodate a pipe storage compound and a trenchless crossing compound (for the crossing of the Runcorn and Latchford Canal and the Walton Lock Cut). This would require around 0.7ha of land and take one football pitch out of use for the duration of the works as well as the removal of a number of trees and hedgerow on the northern boundary of the Common.
- 14.9.22 A second option would see the Warrington Spur run along the eastern side of the rail lines and pass through Morley Common to reach the same trenchless crossing compound. This would also utilise the same construction compound area but also cut across a further two football pitches, although there would be space to move the pitches further east to avoid any impacts.
- 14.9.23 Discussions with Warrington Council have identified that a Council-led proposal for the Western Link Road would utilise some of the same land as the Warrington Spur in the Eastford Road area and the Council may therefore prefer the Warrington Spur route to the east of the rail lines, despite this potentially having a greater impact on Morley Common. The Western Link Road proposal is also planning to use a similar extent of the Common for construction compound purposes. It is understood that it might be possible to reschedule football pitch use around the other pitches on the Common or elsewhere in the area to accommodate the teams who use this facility. The re-allocation of teams to pitches and re-location of the other football pitches on Morley Common have not yet been confirmed and it is likely that the two projects would be undertaken at different times. This would create a cumulative effect with one football pitch being lost to public use, and indirect effects from visual amenity and disturbance from noise, being experienced either for an extended period of time, or at different times. There is the potential to apply mitigation such that the construction of the Project in this location takes place outside the football season.

- 14.9.24 Morley Common is considered to be of **medium** sensitivity receptor and a **high** magnitude of change is estimated (using a worst case scenario of three football pitches being affected during the Project and then cumulative effects with the Western Link Road leading to one pitch being lost and amenity impacts arising across an extended period of time). This would give rise to a **major adverse** effect which would be **significant**.

Allotments adjacent to Centre Link Bridge

- 14.9.25 The Allotments adjacent to the Centre Link Bridge (Slutchers Lane) and the A5060 are located on the Warrington Spur, on land to the south of the Centre Link Bridge and west of the A5060, adjacent to the River Mersey. The land here is needed to accommodate a trenchless crossing compound for the crossing of the Runcorn and Latchford Canal and the Walton Lock Cut, and the allotments would therefore need to be cleared during the construction works. Once construction is completed, the allotments would be re-provided in this location. Due to the temporary nature of the construction works required, it is unlikely that alternative allotments will be able to be provided. The allotments are considered to be a **high** sensitivity receptor due to the number of allotments available in the Warrington area and the high number of people on the Council waiting list for a plot. The Project would have a **high** magnitude of change. This would give rise to a **major adverse** effect which would be **significant**.

True Fit Golf Club

- 14.9.26 The Draft Order Limits provide two route options in the area around the True Fit Golf Club at Fiddlers Ferry. Option NP6 runs along the northern boundary of the course, with the pipeline proposed to lie outside of the course but the working area required for the construction phase utilising land within the course. Option NP7 would follow the line of an existing gas pipeline which runs through the centre of the golf course in an east-west position. As part of the ongoing Golf Course Impact Assessment being produced for the Final ES, an on-site meeting with the golf course operators is proposed. This will confirm the exact impacts on the golf course. In the meantime, using aerial photography imagery, the following impacts have been identified.
- 14.9.27 Both options would lead to the loss of holes from the course during the construction phase from land-take requirements. It is understood that the reinstatement of holes after construction works could take up to six months for most parts of the holes affected, but up to 18 months where greens need to be reinstated. Option NP6 would directly affect four holes and option NP7 would directly affect seven holes and the driving range at the course. However, the east-west route of NP7 across the course may mean that access is restricted to additional holes in the southern part of the course. This would affect a further four holes. Once construction works have been completed, the access to the southern part of the course would be reinstated and the four holes would become available again. The driving range would also need to be closed for the period of the construction works to avoid the risk of golf ball strike on construction workers, unless safety fencing was able to be erected to protect workers.

- 14.9.28 The golf course is considered to be of **medium-high** sensitivity. NP6 is considered to have a **medium-high** magnitude of change as golf would still be available but for a period of 18 months to 2 years it would not be able to operate as a full 18 hole course. This would lead to a **major adverse** effect which would be **significant** for a period of up to 2 years.
- 14.9.29 NP7 would see a **high** magnitude of change occur, from the closure of seven (18 months to two years) or eleven holes plus the driving range for the period of the construction works only. This would lead to a **major adverse** and **significant** effect.

Receptors outside of the Draft Order Limits

- 14.9.30 Receptors outside of the Draft Order Limits can only be affected indirectly by the Project, through amenity related effects: visual impacts, air quality and noise. **Chapter 9: Air Quality** has found there would be no significant effects on any receptors during the construction phase due to the standard mitigation measures, which would be employed on construction activities and controlled by the DCO requirements. The consideration of all of the following receptors is therefore made on the basis that there will be no significant air quality impacts.
- 14.9.31 The caravan sites at Two Acre Park (Higher Walton) and Meadow Bank (higher Walton / Moore) are residential caravan sites, not tourist or recreation sites. They therefore fall outside of the scope of the Lands Use chapter and will be considered with other residential receptors in the relevant chapters.
- 14.9.32 Of the North Corridor receptors, the following are located more than 300m away from potential significant noise generating activities during construction and therefore will not have any significant noise effects relevant (as described in **Chapter 10: Noise and Vibration**): Big Hands Riding School, Doe Green Recreation Ground, King George V Playing fields / Sutton Manor Crown Green Bowls Club, Moore football pitch, Moore RUFC, Penketh South Primary School, Rainhill Cricket Club, Rainhill Ex-Services Club, Rainhill High School, Sutton Manor Primary School, Walton Hall and Gardens, Walton Hall Golf Club and Warrington Sports Club. In addition, these receptors are all screened from the construction activities by existing development and infrastructure such as residential development, A56, Walton Lea Crematorium and/or school buildings meaning that no visual impacts will occur. With either no impacts, or negligible impacts occurring, any effect on these receptors will be **not significant**.
- 14.9.33 The following receptors are located on sections of the pipeline, where the pipeline will be laid within the highway, and the construction activities will therefore be similar to any roadworks activities which can be undertaken for a variety of highway or utility maintenance reasons. As such, any impacts on the receptors from these works will be not significant: Loushers Lane Recreation Ground, Sherdley Park Golf Club, St John Vianney Roman Catholic Primary School, Totally Wicked Stadium, Thatto Heath Meadows Nature Reserve and Platts Field.

Fiddlers Ferry Sailing Club

14.9.34 Fiddlers Ferry Sailing Club is located within 300m of the trenchless crossing compounds required for the crossing of the River Mersey, Sankey Canal and the Warrington to Stockport rail line. Users of the boat club have access to the River Mersey and utilise the river both adjacent to the sailing club itself and further afield. The club hosts sailing training lessons as well as a range of races and events from March to October. For users of boats on the river, the trenchless crossing compound to the north west will be screened by the rail line, Sankey Canal and boat yard and small scale commercial/industrial units at Fiddlers Ferry meaning there are unlikely to be any noise or visual impacts. The compound to the south east is likely to be visible to people using the clubhouse and potentially to some boat users on the River, although the topography could provide screening. Noise would be audible for boat users but given the nearby rail line and commercial and industrial land uses and the focus of boat users on the sailing activities this is not expected to be a significant concern for boat users on the River. The sailing club has a **low** sensitivity and a **low** magnitude of change is estimated. This would give rise to a **negligible** effect which would be **not significant**.

Albert Fellows Park

14.9.35 Albert Fellows Park is located to the east of Rainhill, located between residential properties and the Draft Order Limits. Parts of the Park lie within 300m the trenchless crossing compound required for the crossing of the Liverpool Lime Street to Glazebury rail line. The Park contains a number of football pitches and a children's playground. An existing tree belt lies on the eastern boundary of the park. The trenchless crossing compound would be around 200m away from the children's playground and nearest football pitch, and at that distance and with the existing tree belt, it is not expected that noise or visual impacts would be distracting to recreational or sporting activities. The park is of **low** sensitivity and a **low** magnitude of change is estimated. This would give rise to a **negligible** effect which would be **not significant**.

Sutton Manor Woodland

14.9.36 Sutton Manor Woodland is a country park located to the north east of the crossing of the M62 by the B5419. Although a construction compound and trenchless crossing compound for the crossing of the M62 lie within 300m of the Woodland crossing, the M62 lies between the Woodland and these compounds. Noise from the compounds is therefore not expected to be audible above the motorway traffic noise and views of the compounds will be screened by either the motorway, the B5419 or woodland itself. **No impact** is therefore predicted on the Woodland.

East Corridor: Minerals

14.9.37 Minerals safeguarding areas for sand and gravel resources have been identified for assessment at Lower Whitley, to the west of Dunham Woodhouses and through land to the south east of Partington (**Figure 14.4**).

Lower Whitley Minerals Safeguarding Area

14.9.38 In the Lower Whitley area, the Draft Order Limits run through around 500m of this minerals safeguarding area. The **MRA (Appendix 14A)** has found that there is potential to sterilise around 150,000 m³ (approximately 225,000 tonnes) of sand / gravel due to the Project in this area. However, this should be taken in the context that there would be around 570,000 m³ of sand still available in the minerals safeguarding area in this area. Minerals safeguarding areas are a **medium** sensitivity receptor, and without mitigation the pipeline could lead to **high** magnitude of adverse change. This would lead to a **major adverse** impact, which would be **significant**.

Dunham Massey Minerals Safeguarding Area

14.9.39 Near Dunham Massey, between Agden Bridge and the River Bollin the Draft Order Limits pass through a minerals safeguarding area for around 1.5km. The **MRA (Appendix 14A)** has found that there is potential to sterilise around 385,500m³ (approximately 578,000 tonnes) of sand / gravel due to the Project in this area. However, this should be taken in the context that there would be around 2.4 million m³ of sand still available in the Minerals Safeguarding Area in this area. Minerals safeguarding areas are a **medium** sensitivity receptor, and without mitigation the pipeline could lead to **high** magnitude of adverse change. This would lead to a **major adverse** impact, which would be **significant**.

Partington Minerals Safeguarding Area

14.9.40 From Peterhouse Farm the Draft Order Limits then pass through around 1.8km of a minerals safeguarding area up to Heath Farm Lane at Partington. From Sinderland Green north to Heath Lane, the proposed route runs close to an existing gas pipeline which will having previously sterilised minerals resource in this area. However, the area from Peterhouse to Sinderland is free from constraints. The **MRA (Appendix 14A)** has found that there is potential to sterilise around 630,000m³ (approximately 945,000 tonnes) of sand / gravel due to the Project in this area. However, this should be taken in the context that there would be around 2.3 million m³ of sand still available in the Minerals Safeguarding Area in this area. Minerals safeguarding areas are a **medium** sensitivity receptor, and without mitigation the pipeline could lead to **high** magnitude of adverse change. This would lead to a **major** adverse impact, which would be **significant**.

East Corridor: Tourism and recreational receptors

14.9.41 All receptors are shown on **Figure 14.4**.

Receptors within the Draft Order Limits

Partington Nature Reserve Trail

14.9.42 Partington Nature Reserve Trail runs along the south side of the SAICA Paper Mill and joins to the former rail line running north-west/south-east and crossing the East Corridor close to the Partington HAGI (PH1) location. Whilst the trail (former rail line) crosses the Draft Order Limits, the Nature Reserve is outside. The trail

(former rail line) is, or has been, immediately adjacent to industrial activities on its northern side, some of which is being replaced with employment/warehouse type developments, with residential development to the south. The Trail (former rail line) is surrounded by and includes mature woodland planting making access difficult in places and meaning therefore that noise and visual impacts from the construction activities associated with the construction of the Partington HAGI are likely to be screened from users of the Trail. Whilst the pipe would be open cut across the former rail line management measures set out within the **Draft Outline PROWMP (Appendix 16C)** would ensure that effects upon users are minimised. The Trail (including the former rail line) is a **low** sensitivity receptor, and there is considered to be a low magnitude of impacts. This would result in a **negligible** effect which is **not significant**.

Receptors outside of the Draft Order Limits

- 14.9.43 Receptors outside of the Draft Order Limits can only be affected indirectly by the Project, through amenity related effects: visual impacts, air quality and noise. **Chapter 9: Air Quality** has found there would be no significant effects on any receptors during the construction phase due to the standard mitigation measures which would be employed on construction activities and controlled by the DCO requirements. The consideration of all of the following receptors is therefore made on the basis that no significant air quality effects will occur on them.
- 14.9.44 Of the East Corridor receptors, the following are located more than 300m away from potential significant noise generating activities during construction and therefore will not have any relevant significant noise impacts (as described in **Chapter 10: Noise and Vibration**): Antrobus Golf Course, Park Moss Nature Reserve. High Legh Park Golf Course, Moss View Playing Fields and Partington Sports Village. In addition, Antrobus Golf Course, High Legh Park Golf Course, High Legh Tennis Club, Moss View Playing Fields and Partington Sports Village are all screened from the construction activities by existing development, landscape features and infrastructure such as residential development, woodland planting or tree cover meaning that no significant visual impacts will occur. Whilst the pipeline is proposed to run immediately adjacent to the southern boundary of the Park Moss Nature reserve, the permissive path network inside the reserve is mainly located centrally within the woodland, and therefore visual impacts will be largely screened from users by the woodland cover around the edges of the reserve. Where any of the construction works are visible, these will be intermittent views only. With either no impacts, or negligible impacts occurring, any effect on Antrobus Golf Course, Park Moss Nature Reserve. High Legh Park Golf Course, Moss View Playing Fields and Partington Sports Village will be **not significant**.

South Corridor: Minerals

- 14.9.45 Minerals safeguarding areas for sand and gravel have been identified for assessment in the South Corridor in the Dutton/Central Hub/Acton Bridge area, and at Sandiway. These areas are shown on **Figure 14.5**.

Acton Bridge Minerals Safeguarding Area

14.9.46 The Draft Order Limits pass through a minerals safeguarding area for sand and gravel in the Dutton/Central Hub/Acton Bridge area, for around 6km. This area of contains a number of constraints which would affect the viability of minerals extraction (including the Trent and Mersey Canal, River Weaver, A49 and the proximity of residential properties). However, it may still be possible to quarry in some or all of this land. The **MRA (Appendix 14A)** has found that there is potential to sterilise around 1.7 million m³ (approximately 2.5mt) of sand / gravel due to the Project in this area. However, this should be taken in the context that there would be around 3.5 million m³ of sand still available in the minerals safeguarding area in this area. Mineral safeguarding areas are a **medium** sensitivity receptor, and without mitigation the pipeline could lead to **high** magnitude of adverse change. This would lead to a **major adverse** impact, which would be **significant**.

Sandiway Minerals Safeguarding Area

14.9.47 To the east of Sandiway, the Draft Order Limits pass to the east of Forest Hill Quarry and the Quarry's recently permitted extension to the north of the Northwich to Chester Rail line. Land adjacent to these sites, which overlaps with the Draft Order Limits, is designated as either a preferred area for future sand and gravel extraction, an area of search for potential sand and gravel extraction or a minerals safeguarding area. To the east of the original quarry, there is opportunity for future sand and gravel expansion but some limitations from the TPO on the woodland at Littledales Gorse and residential properties at Moss Farm exist. Land is also available to the east of the Quarry's northern extension between Weaverham Road, Hodge Lane and the Northwich to Chester rail line. Discussions have been held with the operator of quarry to plot a pipeline route which could accommodate their current and future plans for working. The **MRA (Appendix 14A)** has found that there is potential to sterilise around 480,000 m³ (approximately 720,000 tonnes) of sand / gravel due to the Project in this area. However, this should be taken in the context that there would be around 8.4 million m³ of sand still available in the minerals safeguarding area in this area. In terms of the Project's impact on the minerals policy designations in this area, the minerals resources covered by the policies would be of **high** sensitivity. The Project would bring about a **high** magnitude of change. This would lead to a **major adverse** impact which would be **significant**. However, it should be noted that the Draft Order Limits have been drafted in discussion with the minerals operator in this location and their future plans for minerals extraction are not fully consistent with the Preferred Area/Area of Search policies in place. The Draft Order Limits would allow the operator to continue their operations at both the current Forest Hill Quarry, the permitted extension to the north and their potential plans for further expansion of minerals extraction following completion of the northern extension. In terms of the Project's impacts on the minerals extraction that is planned by the operator, the Project would be considered to have a **negligible to low** magnitude of impact. On a **high** sensitivity receptor, this would create a **minor to moderate, adverse** effect which would be **not significant**.

Bostock Green Minerals Safeguarding Area

14.9.48 In addition, on the South Corridor between Meadowbank and the Hydrogen Storage Facility, the Draft Order Limits run through a minerals safeguarding area and preferred area for future extraction of salt and brine. These policies relate to salt resources which are of interest to the Winsford Rock Salt Mine and the Holford Brinefield operations. The salt and brine extraction occurs at depths of between 120m and 250m so there would be **no direct impact** created by the proposed pipeline on the salt resources in this area. Potential sterilisation could occur if the pipeline utilised land which was needed for above ground infrastructure needed for salt extraction, or if the pipeline created land stability issues which affected the stability of the underground workings. Given the depth and extent of the salt resources identified in policy, it is expected that the pipeline would have **no impact** on future above ground infrastructure needed for salt or brine extraction. This is because the depth allows flexibility for where above ground facilities can be located. Once any above ground facility is connected to the underground resources, working can then occur laterally to exploit the salt or brine. The above ground infrastructure therefore does not have to be located directly above any single point. A Halite Risk Assessment study (**Appendix 14B**) has been undertaken on the Project, which has identified that as long as the Project avoids any impact on the waters contained within 'wet rockhead' (i.e. where groundwaters exist within the halite strata) then no ground stability issues are likely to occur. The groundworks of the Project will be completed in accordance with this advice (secured by the DCO). It is therefore found that **no impact** would occur on the existing or potential future salt or brine extraction works in this area through land stability issues.

South Corridor: Tourism and recreational receptors

14.9.49 All receptors are shown on **Figure 14.5**

Receptors within the Draft Order Limits

Sandiway Golf Club

14.9.50 The Draft Order Limits encroach on Sandiway Golf Club in two locations. Within the north east corner of the golf club adjacent to the club car park, and on the eastern boundary over a parcel of land measuring around 0.25ha. The Draft Order Limits on the north east boundary of the Golf Club's land will all be underground at this location as the pipeline utilised a trenchless crossing of the A556. In addition, there are no playing areas of the golf course close by here. The Golf Club provided information that a water pumping station is located in or close to this location, but this would be identified by the pre-construction surveys and avoided by the works (in the same way that any other below ground infrastructure would be). On the eastern boundary, Draft Order Limits do not encroach on any of the Golf Course's holes or other playing areas, but they do encroach on small 'sand pit' used for extracting sand for use in the Golf Course's bunkers. If this sand pit was to be lost, and no other pits identified on the Golf Course site, the Golf Course would have to purchase sand from off-site sources adding an additional cost to the running of the Golf Club.

- 14.9.51 In addition, the pipeline would run adjacent to, or close to, the Golf Course for around 700m on the eastern side of the Course. Some of the eastern boundary would be screened from the construction works by existing trees and landscaping. However, depending on the time of year and vegetation cover, and exact direction of shot taking, there could be background views of construction activity for golfers. This could create a negative effect due to movement in the field of vision whilst taking shots. It may therefore be required for screening fencing to be erected as temporary measure along some parts of the eastern boundary. This fencing could also help screen any noise from the construction works, although it is noted that **Chapter 10: Noise and Vibration** does not find any significant effects on noise on Golf Course.
- 14.9.52 The Golf Course is considered to be a **medium-high sensitivity** receptor, and due to the mitigation available from the screening fencing and minimal area of non-operational land potentially affected, it is considered that the magnitude of change would be **negligible** and therefore result in a **minor to moderate adverse** effect which is **not significant** (subject to the requirement for and the cost of external sand supply.)

Receptors outside of the Draft Order Limits

- 14.9.53 Receptors outside of the Draft Order Limits can only be affected indirectly by the Project, through amenity related effects: visual impacts, air quality and noise. **Chapter 9: Air Quality** has found there would be no significant effects on any receptors during the construction phase due to the standard mitigation measures, which would be employed on construction activities and controlled by the DCO requirements. The consideration of all of the following receptors is therefore made on the basis that no significant air quality effects will occur on them.
- 14.9.54 The caravan sites at Weaverdale and Bartington (both at Bartington) are residential caravan sites, not tourist or recreational sites. They therefore fall outside of the scope of the Lands Use chapter and will be considered with other residential receptors in the relevant chapters.
- 14.9.55 Of the South Corridor receptors, the following are located more than 300m away from potential significant noise generating activities during construction and therefore will not have any significant noise effects relevant (as described in **Chapter 10: Noise and Vibration**): Moulton Playing Fields, Petty Pool Fishing Lake, Vale Royal Golf Club and Vale Royal River Caravan Park. In addition, Moulton Playing Fields, Petty Pool Fishing Lake, Vale Royal Golf Club and Vale Royal River Caravan Park are all screened from the construction activities by existing development, landscape features and infrastructure such as residential development, woodland planting or tree cover or the West Coast Mainline meaning that no significant visual impacts will occur. With either no impacts, or negligible impacts occurring, any effect on Moulton Playing Fields, Petty Pool Fishing Lake, Vale Royal Golf Club and Vale Royal River Caravan Park will be **not significant**.

Vale Royal Falconry Centre

14.9.56 Vale Royal Falconry Centre is located immediately adjacent to the pipeline route between Acton Bridge and the Weaver Navigation. The centre is a registered zoo, although it only operates on an appointment basis. Discussions with the operators have led to the Draft Order Limits being moved away from the buildings at the centre and to reduce the impact the proposal has on the fields they use for displays. Although the construction works will remove some of their land for a temporary period, the centre will still be able to undertake displays from the site and will also be able to undertake off-site displays. Construction management measures as set out within the Draft Outline CEMP should ensure that any indirect effects upon the operation of the centre are minimised. The Falconry Centre is considered to be a **low** sensitivity receptor and would receive a **medium** magnitude of change. This would lead to a **minor** adverse effect which is **not significant**.

Bostock Green playing fields

14.9.57 Bostock Green Playing Fields are located behind the Hayhurst Arms public house in the Bostock Green and include grass football pitch and previously a lawn bowling green, although aerial photography indicates it has not been used as a bowling green since before 2017¹⁸. The playing fields are located around 275m from a trenchless crossing compound (to facilitate the crossing of London Road and protected trees along the roadside). The playing field itself is screened from the trenchless crossing compound and other elements of the construction works by existing trees and field boundary features, the pub car park and the pub buildings themselves. Any views or impacts from noise should therefore be limited and should not distract from users of the playing fields who are engaged in sporting activities. The playing fields are considered to be a **low** sensitivity receptor and would receive a **low** magnitude of change. This would lead to a **negligible** effect which is **not significant**.

14.10 Operational Phase

Minerals

14.10.1 The buffer zone identified which may sterilise minerals will be relevant through the operational phase as it was during the construction phase. Any potential minerals sterilisation effects identified within the construction phase will therefore also be relevant for the operational phase.

Tourism and recreation receptors

14.10.2 As noted within **Section 14.7**, the only significant effects that could occur from operational matters would be noise impacts within 500m of an operational HAGI or visual impacts within 1km of an operational HAGI. Taking into account existing screening effects from built development, the only tourism and recreational

¹⁸ Google Earth Pro, version 7.3.6.9796. Accessed September 2024.

receptors that would fall within these categories are Moore Nature Reserve on the North Corridor and Partington Nature Reserve Trail on the East Corridor.

Moore Nature Reserve and Partington Nature Reserve Trail

- 14.10.3 **Chapter 10 Noise and Vibration** concludes that the effects of the operational HAGIs are unlikely to change background noise levels by more than 3 decibels which would be not significant. Given both Moore Nature Reserve and Partington Nature Reserve Trail are located adjacent to existing industrial activities this conclusion is considered to be valid for both of these receptors. The industrial elements of the baseline landscape for both receptors is also likely to mean that the visual impacts of the operational HAGIs are limited and would not have a substantial effect on the receptors. Moore Nature Reserve is considered to be of **low-medium** sensitivity and Partington Nature Reserve Trail of **low** sensitivity. The magnitude of change on both receptors is expected to be **low**, which would lead to a **negligible to minor** adverse effect which would be **not significant**.

14.11 Decommissioning Phase

- 14.11.1 The decommissioning phase is expected to involve all of the HAGIs being removed, the pipeline being left in situ and any trenchless crossings would be backfilled with grout. Any land disturbed by these works would see land restored back to pre-decommissioning conditions. Any impacts arising from decommissioning works are expected to be similar to the construction phase effects in a worst-case scenario, so the conclusions of the construction assessment are considered relevant to the decommissioning phase.
- 14.11.2 As it is not possible to identify where minerals developers may be interested in future minerals extraction, where the pipeline runs through sand and gravel minerals safeguarding areas the pipeline would be left in situ. However, it would be possible to remove the pipeline in the future which would remove any minerals sterilisation issues. Any such pipeline removal works would not be of a scale that is likely to make an extraction scheme unviable. The minerals contained within the safeguarding areas would therefore become available again for long-term extraction potential. Minerals safeguarding areas are a **medium** sensitivity receptor and leaving the pipeline in situ is considered to present a **low** impact. This would give a **minor**, adverse effect which is **not significant**.

14.12 Assessment of Cumulative (inter-project) Effects

- 14.12.1 A Cumulative Effects Assessment (CEA) has been undertaken for the Project which considers the combined impacts with other developments on the same single receptor or resource (inter-project effects). The detailed method followed in identifying and assessing potential cumulative effects is set out in **Chapter 3: Approach to preparing the Draft Environmental Statement**.
- 14.12.2 In relation to inter-project cumulative effects with Land Use impacts, from the Shortlisted CEA development identified in **Appendix 3A** the following have been scoped out:

- Application references 22/79794/FUL, 19/74411/HYBIA, 22/0872M, P/2020/0061/HYBR, P/2018/0060/FUL/P/2021/0405/RES, 22/00543/OUTEIA, 20/00337/OUTEIA, P/2020/0083/OUEIA, A/23/95155/OUTMES and A/23/95156/MAJES, 100109/FUL/20, 113942/EIASCO/24, the Hydrodec Oil Re-Refinery Eastham DCO proposal, and the Places for Everyone Timperley Wedge and St Helens Moss Nook Urban Village development allocations. These are all over 1km from the Draft Order Limits and therefore cannot cumulatively interact with any of the Land Use impacts from the Project.
- The Keuper Gas Storage DCO is located within the same salt minerals safeguarding area as the Project. However, the Project will have no impact on the salt minerals safeguarding area and therefore there cannot be any cumulative effects.
- Application references P/2022/0212/HYBR, 22/00569/OUT, 23/03369/FUL, 24/00261/FUL, 22/03693/FUL, 21/04076/FUL, 112794/FUL/24, 113549/EIASCO/24, P/2023/0075/FUL, 21/04091/FUL and the HyNet CO2 Pipeline DCO. These are all outside of, but within 1km of the Draft Order Limits, but any Land Use receptors have been scoped out of the Project EIA due to intervening built development features which mean the receptors would not receive any impacts. The same features would also screen the receptors from impacts from any potential cumulative impacts.

14.12.3 The following applications have been identified as potentially having cumulative effects with the Project and been considered in more detail below.

2019/36100 Proposed Western Link, Warrington

14.12.4 Consideration of the cumulative effects of the Project with the Western Link are provided within **Paragraphs 14.9.21 to 14.9.24**.

19/02452/MIN Forest Hill Quarry: northern extension

14.12.5 The effects of the Project on Forest Hill Quarry and its northern extension are considered within **Paragraph 14.9.47** on the Sandiway Minerals Safeguarding Area.

DCO application, Frodsham Solar Farm

14.12.6 The DCO proposal for the Frodsham Solar farm is currently at Scoping Stage and therefore limited information is available about the Scheme. However, the boundary provided in the DCO Scoping Request shows that the Scheme would be over 600m away from the closest Land Use receptor where an effect is identified (the Hover Force Outdoor Activity Centre and Runcorn Model Aircraft Club.) At that distance there are no noise or air quality matters which could affect these receptors and any visual impacts would not affect the operation of either facility. No cumulative effects will therefore occur.

2023/00392/EA Former Fiddlers Ferry Power Station: Proposed phased development comprising the construction of units for general industrial (Use Class B2) and/or storage or distribution (Use Class B8) uses, together with ancillary offices (Use Class E(g)(i)), and associated development

14.12.7 Application 2023/00392/EA relates to the development of part of the former Fiddler Ferry Power Station site for Class B2 and B8 industrial uses and offices, the application is within 1km of route option NP7 as it passes through True Fit Golf Course. Both Projects have identified 300m study areas as being relevant in this location for noise and air quality impacts and the two project boundaries are further than 600m apart. Visually, the Golf Course is well screened from the former power station site by existing landscaping and properties and it is not expected that the industrial developments would be visible. It is not expected that any cumulative impacts could occur to users of the golf course.

14.13 Significance Conclusions

14.13.1 A summary of the results of the land use assessment is provided in **Table 14.12**.

Table 14.12 Summary of significance of effects

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale	LPA ⁴ and Chapter section reference
Construction Phase: West Corridor					
Aston Grange Minerals Safeguarding Area	Medium	High	Major adverse and Significant	The Project would sterilise sand and gravel within the minerals safeguarding area.	CWACC <i>Section 14.9</i>
Hover Force Outdoor Activity Centre	Medium	Low	Minor adverse and Not significant	More than 90% of the centre's land will remain available for outdoor activities.	CWACC <i>Section 14.9</i>
Runcorn Model Flying Association	Low	Medium	Minor adverse and Not significant	Model aircraft flying will need to cease during construction works but will be able to re-commence once ground levels are re-instated.	CWACC <i>Section 14.9</i>
Beachwood Primary School, Elton Primary School, Frodsham Cricket Ground, Gowys Meadows Nature Reserve, the Heath School,	Various	Negligible to No impact	Negligible to no impact and Not Significant	Distance and screening mean that any impacts can only be negligible at worst, meaning significance could only be negligible or no impact on any of these receptors within the Tourism and Recreation Study Area.	HBC or CWACC <i>Section 14.9</i>

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale	LPA ⁴ and Chapter section reference
Helsby Community Sports Club, Helsby Parish Field, Helsby High School, Castle Park (Frodsham), Frodsham Leisure Centre, Saltworks Farm Playing Fields and Weston Primary School					
Frodsham Water Sports	Low	Negligible	Negligible and Not Significant	Indirect impacts will be limited by existing screening from built development, vegetation and topography.	CWACC Section 14.9
Runcorn Golf Club	Low	No impact	No impact	Indirect impacts will be screened by built development, vegetation and topography.	HBC Section 14.9
Runcorn Rowing Club	Low	Negligible	Negligible and Not Significant	Indirect impacts will be limited by existing screening from built development, vegetation and topography.	HBC Section 14.9

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale	LPA ⁴ and Chapter section reference
Aston by Sutton Primary School (playing field)	High	Negligible	Minor adverse and Not Significant	Indirect impacts will be limited by existing screening from built development, vegetation and topography.	<i>CWACC</i> <i>Section 14.9</i>
Construction Phase: North Corridor					
Bold Heath Minerals Safeguarding Area	Medium	High	Major adverse and Significant	The Project would sterilise sandstone within the minerals safeguarding area.	<i>SHBC</i> <i>Section 14.9</i>
Bold Heath Quarry	High	No impact	No impact	The Project would have no impact on the existing operational quarry.	<i>SHBC</i> <i>Section 14.9</i>
Moore Nature Reserve	Low-Medium	Medium	Minor to moderate adverse and Not Significant	The Project would impact on a maximum of 8% of the Nature Reserve and has been designed to reduce impacts on important features.	<i>WBC</i> <i>Section 14.9</i>
Morley Common	Medium	High	Major adverse and Significant	The Project would affect up to three out of four football pitches for the construction phase and create noise and visual impacts for users of the Common.	<i>WBC</i> <i>Section 14.9</i>

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale	LPA ⁴ and Chapter section reference
Allotments adjacent to Centre Link Bridge	High	High	Major adverse and Significant	The Project would remove the allotments from use for the construction phase.	WBC Section 14.9
True Fit Golf Club	Medium-high	Option NP6: Medium-high Option NP7: High during construction works, dropping to medium high, then low-medium during restoration works	Option NP6: Major adverse and Significant Option NP7: Major adverse and Significant, dropping to Moderate adverse and Potentially Significant	Across both options, the Project would remove a number of holes from the golf course for varying periods of time meaning the golf club would not be able to offer the full, 18-hole golf course experience it usually offers.	WBC Section 14.9

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale	LPA ⁴ and Chapter section reference
Big Hands Riding School, Doe Green recreation Ground, King George V Playing fields / Sutton Manor Crown Green Bowls Club, Moore football pitch, Moore RUFC, Penketh South Primary School, Rainhill Cricket Club, Rainhill Ex-Services Club, Rainhill High School, Sutton Manor Primary School, Walton Hall and Gardens, Walton Hall Golf Club and Warrington Sports Club	Various	Negligible to No impact	Negligible to no impact and Not Significant	Distance and screening mean that any impacts can only be negligible at worst, meaning significance could only be negligible or no impact on any of these receptors within the Tourism and Recreation Study Area.	<i>WBC or SHBC</i> <i>Section 14.9</i>

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale	LPA ⁴ and Chapter section reference
Fiddlers Ferry Sailing Club	Low	Low	Negligible and Not Significant	Indirect impacts will be limited by existing screening from built development, vegetation and topography.	<i>WBC</i> <i>Section 14.9</i>
Albert Fellows Park	Low	Low	Negligible and Not Significant	Indirect impacts will be limited by existing screening from distance and vegetation.	<i>SHBC</i> <i>Section 14.9</i>
Sutton Manor Woodland	Low	No impact	No impact	Indirect impacts will be screened by built development and vegetation.	<i>SHBC</i> <i>Section 14.9</i>
Construction Phase: East Corridor					
Lower Whitley Minerals Safeguarding Area	Medium	High	Major adverse and Significant	The Project would sterilise sandstone within the minerals safeguarding area.	<i>CWACC</i> <i>Section 14.9</i>
Dunham Massey Minerals Safeguarding Area	Medium	High	Major adverse and Significant	The Project would sterilise sandstone within the minerals safeguarding area.	<i>TC</i> <i>Section 14.9</i>

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale	LPA ⁴ and Chapter section reference
Partington Minerals Safeguarding Area	Medium	High	Major adverse and Significant	The Project would sterilise sandstone within the minerals safeguarding area.	<i>TC</i> <i>Section 14.9</i>
Partington Nature Reserve Trail	Low	Low	Negligible and Not Significant	Whilst the Nature Reserve lies outside of the Draft Order Limits, the trail, connecting to the former rail line is crossed by the Project. Indirect impacts across the majority of the trail (and the reserve itself) will be limited by existing amenity effects and screening from vegetation. Direct effects upon that part of the trail which constitutes the former rail line will be temporary with the pipeline open cut. Management techniques reflecting those proposed by the Applicant within the Draft Outline PROWMP Appendix 16C will mitigate effects upon users.	<i>TC</i> <i>Section 14.9</i>
Antrobus Golf Course, Park Moss Nature Reserve. High Legh Park Golf Course, Moss View Playing Fields and	Various	Negligible to No impact	Negligible to no impact and Not Significant	Distance and screening mean that any impacts can only be negligible at worst, meaning significance could only be negligible or no impact on any of these receptors within the Tourism and Recreation Study Area.	<i>CWACC, CEC or TC</i> <i>Section 14.9</i>

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale	LPA ⁴ and Chapter section reference
Partington Sports Village					
Construction Phase: South Corridor					
Acton Bridge Minerals Safeguarding Area	Medium	High	Major adverse and Significant	The Project would sterilise sandstone within the minerals safeguarding area.	CWACC <i>Section 14.9</i>
Sandiway Minerals Safeguarding Area (and Preferred Area and Area of Search for minerals extraction)	High	High	Major adverse and Significant	The Project would sterilise sandstone within the minerals safeguarding area.	CWACC <i>Section 14.9</i>
Forest Hill Quarry (within Sandiway Minerals Safeguarding Area)	High	Negligible to Low	Minor to moderate adverse and Not Significant	The Project has been designed to avoid the operational quarry, permitted extension and potential future working areas.	CWACC <i>Section 14.9</i>
Bostock Green Minerals Safeguarding Area	High	No impact	No impact	The Project would have no impact on the deep lying salt resources of the Bostock Green Minerals Safeguarding Area.	CWACC <i>Section 14.9</i>

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale	LPA ⁴ and Chapter section reference
Sandiway Golf Club	Medium-high	Negligible	Minor to Moderate adverse and Not Significant	Impacts would not occur on playing areas of the course with indirect effect arising from construction screened from these areas. The Draft Order Limits include a very small area of land which depending upon the final pipe alignment may include an area used for sand extraction by the golf club.	CWACC Section 14.9
Moulton Playing Fields, Petty Pool Fishing Lake, Vale Royal Falconry Centre, Vale Royal Golf Club and Vale Royal River Caravan Park.	Various	Negligible to No impact	Negligible to no impact and Not Significant	Distance and screening mean that any impacts can only be negligible at worst, meaning significance could only be negligible or no impact on any of these receptors within the Tourism and Recreation Study Area.	CWACC Section 14.9
Vale Royal Falconry Centre	Low	Medium	Minor adverse and Not Significant	The Project has been designed to avoid land used by the centre and minimise impacts on operations	CWACC Section 14.9
Bostock Green Playing Fields	Low	Low	Negligible and Not Significant	Indirect impacts will be limited by screening from built development and vegetation.	CWACC Section 14.9

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale	LPA ⁴ and Chapter section reference
Operation Phase: Minerals					
Aston Grange, Bold Heath, Lower Whitley, Dunham Massey, Partington, Acton Bridge and Sandiway minerals safeguarding areas	Medium	High	Major adverse and Significant	The Project would sterilise minerals within these minerals safeguarding area.	<i>CWACC, SHBC, TC</i> <i>Section 14.10</i>
Operation Phase: North Corridor					
Moore Nature Reserve	Low-medium	Low	Negligible to Minor and Not Significant	Depending upon the Higher Walton Option chosen users of the nature reserve will have limited or no views of the HAGI. The reserve is situated adjacent to existing industrial areas. There would be no direct effects during operation.	<i>WBC</i> <i>Section 14.10</i>
Operation Phase: East Corridor					
Partington Nature Reserve Trail	Low	Low	Negligible to Minor and Not Significant	There would be no direct operational effects. The trail leading from the nature reserve would pass to the south of either Partington HAGI option albeit screened by vegetation. The trail is located in proximity to existing industrial/commercial and residential areas	<i>TC</i> <i>Section 14.10</i>

Receptor and summary of predicted effects	Sensitivity/ importance/ value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale	LPA ⁴ and Chapter section reference
				with any consequential increases in operational noise from the HAGI being limited and not significant.	
Decommissioning: All Corridors					
Mineral Safeguarding Areas	Medium	Low	Minor and Not Significant	Should decommissioning involve the removal of the pipeline this would result in any potentially sterilised material becoming available again for extraction once the process of decommissioning was complete.	<i>All LPAs Section 14.11</i>

1. The sensitivity/importance/value of a receptor is defined using the criteria set out in **Section 14.8** and is defined as low, medium and high.
2. The magnitude of change on a receptor resulting from activities relating to the development is defined using the criteria set out in **Section 14.8** and is defined as No Impact, Negligible, Low, Medium, High.
3. The significance of the environmental effects is based on the combination of the sensitivity/importance/value of a receptor and the magnitude of change and is expressed as major (significant), moderate (potentially significant), minor/negligible (not significant) or No Impact subject to the evaluation methodology outlined in **Section 14.8**.
4. Local Planning Authority: Cheshire West and Chester Council (CWACC); Cheshire East Council (CEC); Halton Borough Council (HBC); Warrington Borough Council (WBC); St. Helens Borough Council (SHBC); Trafford Council (TC).

14.14 Additional Mitigation Measures

14.14.1 The assessment set out above has concluded that it will be necessary to implement additional measures. These have been identified and would be in addition to those embedded measures outlined and assessed in **Section 14.6**. **Table 14.13** outlines how these additional measures will influence the land use assessment.

Table 14.13 Summary of the additional environmental measures

Receptor	Potential changes and effects	Additional measures	Compliance mechanism
Construction			
Morley Common	Temporary loss of one football pitch and potential impact on two other pitches for Warrington Spur pipeline and construction compound.	Reallocation of football teams using lost pitch needed by Warrington Borough Council. Seasonal working outside of the football season, or re-location of three football pitches within Morley Common to limit impacts to loss of one pitch only, if required.	Legal agreement with WBC
True Fit Golf Club (the ongoing Golf Course Impact Assessment will confirm the exact effects and mitigation required at True Fit Golf Club)	Temporary loss of some holes due to direct impact of construction works. Temporary loss of driving range during construction works due to golf ball strike risk on construction workers.	Depending on the outcome of the Golf Course Impact Assessment, reconfiguration of some holes will be considered to minimise the number of holes temporarily lost from use during construction works. Fencing/netting erected to provide a safety screen for workers.	Legal agreement/DCO Requirement
Sandiway Golf Club (the ongoing Golf Course	Loss of sand-pit used for supply of sand to replenish bunkers on course.	Depending on the outcome of the Golf Course Impact Assessment, either re-	Legal agreement/DCO Requirement

Receptor	Potential changes and effects	Additional measures	Compliance mechanism
Impact Assessment will confirm the exact effects and mitigation required at Sandiway Golf Club)		location of the limited works within temporary areas of Draft Order Limits, or provision of alternative sand supply will be considered.	

14.14.2 Effects upon the minerals safeguarding areas (construction and operational phases) and the allotments at Central Link Bridge, Warrington (construction phase) have also been identified as experiencing significant adverse effects. No additional, residual mitigation has been identified and as such, the effects would remain significant.

14.15 Residual Effects Assessment

14.15.1 Taking into account the additional mitigation measures identified in Section 14.14, the residual effects assessment considers how those mitigation measure would change the assessment, to provide the residual land use effects of the Project on the relevant receptors.

Morley Common

14.15.2 Morley Common is a medium sensitivity receptor as a designated area of Common Land and the home to four grass football pitches and a children's playground. With the implementation of the additional mitigation measures outlined in **Table 14.13**, there would be a **low** magnitude of impact, which would result in a **minor adverse** effect which would be **not significant**.

True Fit Golf Club

14.15.3 The ongoing Golf Course Impact Assessment will confirm the exact effects and mitigation measures and this will be completed in order to feed into the Final ES. However, from the existing information available, it is expected that with the additional mitigation measures outlined in **Table 14.13**, Option NP6 would lead to the temporary loss of one hole in its entirety during construction works. The mitigation would allow the other three holes affected to be reconfigured to allow their use to continue. Once the construction works are complete, the reinstatement works needed could last up to 18 months before the green of the lost hole is available for play again. This would mean that the course has to operate as a 17 hole golf course for a period of 18 months to two years.

- 14.15.4 Option NP7 would also lead to the loss of one hole during the construction works, with the other six holes affected to be reconfigured to allow play to continue on them. The driving range would also be able to stay open. However, access to the southern part of the course would still be affected and lead to another four holes being unavailable during the construction works. The hole that is unavailable during the construction works would not require any reinstatement works to its green, so following the construction works, its reinstatement would only take around six months until the fairway is playable again. This would mean that the course could remain open as a 13 hole golf course for the period of the construction works, and then a 17 hole golf course for a further period of around six months. The driving range would also be able to stay open and not have to close for any period of time.
- 14.15.5 The golf course is considered to be of **medium-high** sensitivity. NP6 is considered to have a **medium-high** magnitude of change as golf would still be available as a 17 hole golf course. This would lead to a **major adverse** effect which would be **significant** for a period of up to 2 years.
- 14.15.6 NP7 would see a **high** magnitude of change occur for the period of the construction works, as it would have to operate as a 13 hole golf course. This would then change to a **medium-high** change for a period of 6 months as it operates as a 17 hole course.
- 14.15.7 Either option would lead to a **major adverse** and **significant** effect, although this would be for a reduced period of time for Option NP7.

Sandiway Golf Club

- 14.15.8 Sandiway Golf Club is a medium-high sensitivity receptor and the mitigation measures would see the sand pit on site remain available for use during the construction works or sand supplied to the Club for their use. This would mean **No Impact** is realised on the club from sand supply, with the only issues remaining being the indirect effects identified in **Paragraph 14.9.51**. This would lead to a **negligible** magnitude of impact, which would result in a **negligible to minor adverse** effect which is **Not Significant**.

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