A1 Northumberland
Alnwick to Ellingham

Preliminary Environmental Information Report
Appendix D - Transboundary Effects

February 2019

Criteria	Relevant Considerations
Characteristics of the development	The Scheme includes approximately 8 km of online widening between the single carriageway north of Denwick to the dual carriageway south of Brownieside to create a dual carriageway, which would comprise: • Approximately 8 km of online widening; • Junction improvement at South Charlton; • An accommodation bridge near Broxfield; • Private Means of Access; • Drainage works; • Additional culverts within watercourses and extension of existing culverts; • Statutory Diversions; • Signage; • Lighting; • Temporary diversions of Public Rights of Way during construction and permanently during operation; • Temporary site construction compounds; • Traffic Management Systems during construction; and • Soil storage areas, Some of the resources required for the construction of the Scheme are likely to be obtained from the global market, e.g. steel, but it is likely that materials would be obtained locally wherever possible. No waste, nuisances or accidents are likely that would extend beyond the border of the UK. No novel technologies are proposed that have potential for transboundary impacts.
Geographical area	It is not anticipated that any impacts are likely to extend beyond the jurisdiction of the UK, with the exception of the potential release of greenhouse gas emissions (as discussed in Chapter 15 of this Scoping Report).
Location of the development	The Scheme is located in Northumberland, North East England, crossing predominantly rural existing land uses. The Scheme is located wholly within the UK. The Scheme is not part of the Trans-European transport network. The closest EAA state is Ireland, approximately 350 km west of the Scheme.
Cumulative Impacts	Chapter 16 of the Scoping Report identifies a number of cumulative developments proposed in the area surrounding the Scheme. Additionally, the Highways England A1 in Northumberland: Morpeth to Felton project is located approximately 12 km south of the Scheme. The traffic model developed to assess impacts for the Scheme includes assumptions on traffic generation from proposed development in the area. The potential cumulative effect upon transport emissions from the Scheme and proposed development will therefore be accounted for in the Scheme Environmental Impact Assessment. However, it is not anticipated that there is potential for cumulative transboundary effects from these developments other than greenhouse gas emissions.

Carrier	Impacts arising from greenhouse gas emissions would be carried by air.
Environmental importance	Chapter 8 of the Scoping Report reports that there are areas of high landscape value in the vicinity of the Scheme. However, it is not anticipated that the Scheme would have a significant effect on landscape during both the construction and operation of the Scheme. As described in Chapter 10, five designated sites of European or International importance are located within 10 km of the main areas of works. It is anticipated that the Scheme would have no significant effects on the designated statutory and non-statutory site of importance. As reported in Chapter 11, seven watercourses and/or tributaries within 500 m of the Scheme (permanent area of works, Main Compound and Lionheart Enterprise Park Compound) are assessed by the Environment Agency in accordance with the objectives of the Water Framework Directive. It is anticipated that the Scheme could have significant effects on the surface water features. No environmental values of other EEA states would likely be impacted.
Extent	The only pathway of potential effect to another EEA Member State would be the release of greenhouse gas emissions. With the consideration of the design measures built into the Scheme and the implementation of mitigation measures and best practice (in line with regulatory body requirements), it is not anticipated that the release of greenhouse gas emissions would have a significant impact on another EEA Member State.
Magnitude	The likely magnitude of change to greenhouse gas emissions would be negligible, on the basis that the UK's construction industry emits approximately 101.1 m tonnes of carbon dioxide equivalent gases (2011 data, ONS) and the UK as a whole emitted 634.8 m tonnes of carbon dioxide equivalent. The Scheme would make a negligible contribution to the overall amount. It is proposed to calculate the likely greenhouse gas emissions as part of the EIA.
Probability	The probability of the Scheme to contribute to greenhouse gas emissions is likely and would occur as a consequence of the construction processes and typical operating conditions of such a Scheme.
Duration	The impact of greenhouse gas emissions is likely to occur during both construction and operation of the Scheme and be a long-term negligible impact.

Frequency	The frequency of impact is likely to be constant.
Reversibility	The impact is considered irreversible within human lifetimes.