

# Strategic Environmental Assessment Report

**Environmental Report for Consultation  
Non-Technical Summary**

East Airdrie Link Road Scheme  
North Lanarkshire Council

15<sup>th</sup> August 2022

## Quality information

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# 1. Introduction

## 1.1. Purpose of the Non-Technical Summary

- 1.1.1. The purpose of this document is to provide a non-technical summary of the Strategic Environmental Assessment (SEA) Report for the East Airdrie Link Road scheme.

## 1.2. Background of the Project

- 1.2.1. The East Airdrie Link Road scheme is a significant sub-project of the Pan-Lanarkshire Orbital Transport Corridor Project. This forms part of the Glasgow City Region City Deal, a £1.13bn infrastructure investment programme.
- 1.2.2. The Pan-Lanarkshire Orbital Transport Corridor Project seeks to deliver the transport infrastructure needed to improve connectivity between centres of population and employment sites in North Lanarkshire, unlocking the economic development potential of the former steelworks site of Ravenscraig, now a strategic economic investment location with national development status.
- 1.2.3. The Pan-Lanarkshire Orbital Transport Corridor Project will provide:
- 1.2.4. New and upgraded road infrastructure on an orbital route from the M74 at Motherwell, through the strategic economic investment site of Ravenscraig to the M8 at Eurocentral/Newhouse Industrial Estate/Chapelhall and onward past Airdrie via a new link road, to connect with the A73 to the south of Cumbernauld.
- 1.2.5. An improved public transport interchange at Motherwell train station, incorporating access improvements, enhanced public realm, park and ride expansion and active travel links.
- 1.2.6. The spine of North Lanarkshire's Active Travel Network (north/south).
- 1.2.7. Together with South Lanarkshire's planned City Deal investment to upgrade Stewartfield Way and Greenhills Road/A736, and SPT's Bus Investment Programme to improve sustainable transport options and orbital connections, the Pan-Lanarkshire Orbital Transport Corridor Project will play a key role in providing the links needed to unlock commercial and housing development across the Local Authority area.
- 1.2.8. Together it is expected that these projects will enhance the economic growth potential of North Lanarkshire and the larger Glasgow City Region.
- 1.2.9. AECOM has been commissioned to undertake a Strategic Environmental Assessment (SEA) of North Lanarkshire Council's emerging East Airdrie Link Road scheme.

## 1.3. SEA Requirements

- 1.3.1. SEA is the process by which information about the environmental effects of proposed plans, policies and programmes are evaluated.
- 1.3.2. The Environmental Assessment (Scotland) Act 2005 transposes the requirements of the European Community SEA Directive (2001/42/EC). Under the Environmental Assessment

(Scotland) Act 2005, those bodies preparing qualifying Scottish plans are required to undertake a SEA of plans that are likely to have significant environmental effects, if implemented.

1.3.3. The SEA aims to offer greater protection to the environment by ensuring public bodies (in this case, North Lanarkshire Council) and those organisations preparing plans of a 'public character' consider and address the likely significant environmental effects.

1.3.4. The SEA is developed to incorporate the feedback from statutory Consultation Authorities. The Scottish statutory Consultation Authorities are:

- Scottish Environment Protection Agency (SEPA);
- NatureScot; and
- Historic Environment Scotland (HES).

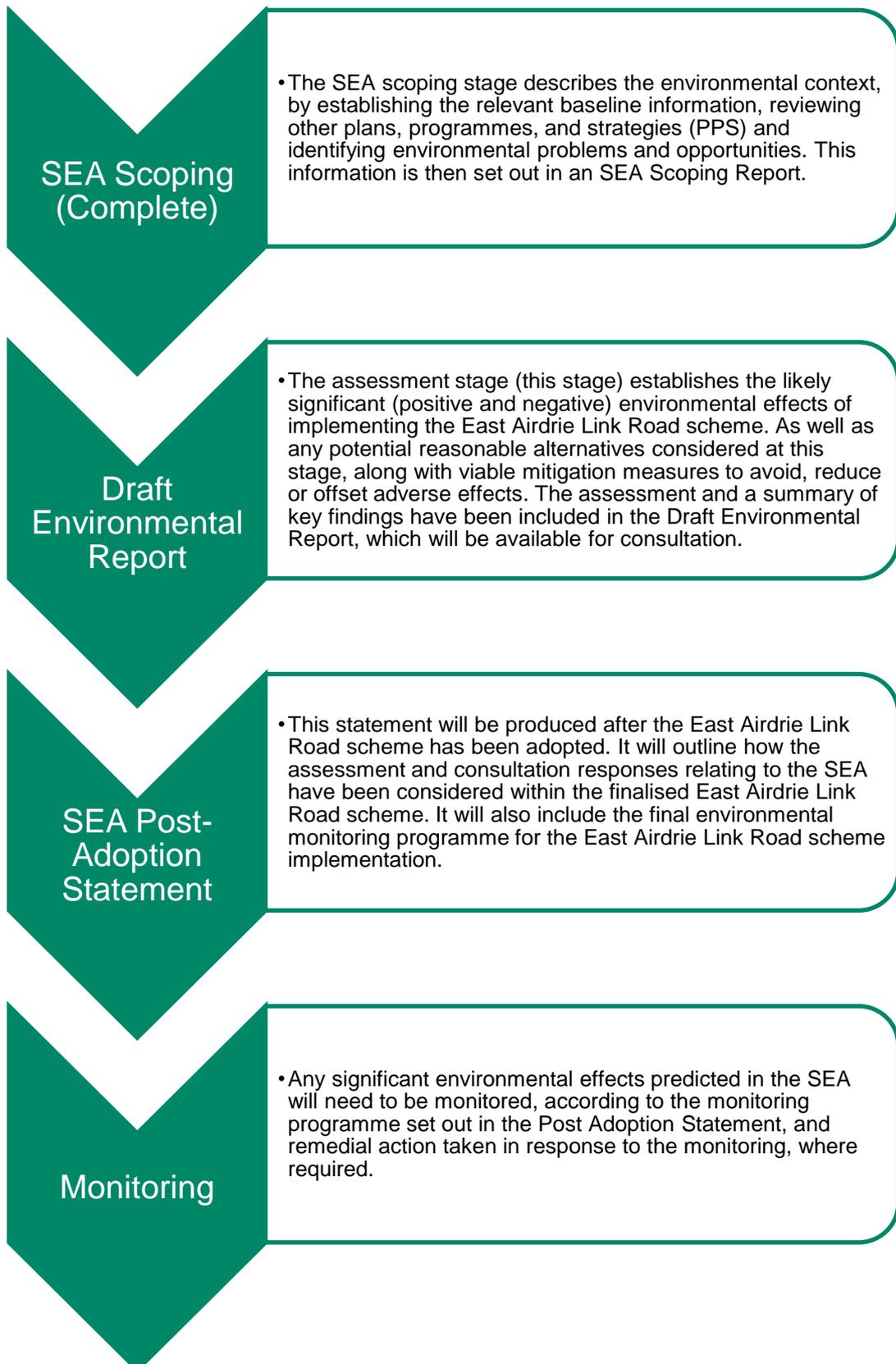
1.3.5. The SEA for the East Airdrie Link Road scheme has assessed the impact of the project on nine environmental themes as set out in the Scottish Government (2013) SEA Guidance:

- |                                  |                           |
|----------------------------------|---------------------------|
| • Biodiversity, Flora and Fauna; | • Air;                    |
| • Population and Human Health;   | • Climatic Factors;       |
| • Water;                         | • Material Assets;        |
| • Soil;                          | • Cultural Heritage; and, |
|                                  | • Landscape.              |

1.3.6. A set of objectives were developed to cover each of these environmental themes. These were then used to assess the environmental performance of the project. The key findings of this assessment are presented in Section 8 'Environmental Assessment'.

## 2. Key SEA Stages

2.1.1. The key stages in the SEA process have been set out below.



### 3. Legislative and Policy Context

3.1.1. The East Airdrie Link Road scheme is supported by plans, policies and strategies (PPS) from national, regional and local levels in Scotland. At the national level, the most relevant and closely linked are as follows:

- **The National Planning Framework 3 (NPF3)** (Scottish Government, 2014) outlines the key principles that guide the wider planning system in Scotland for the next 20 to 30 years. NPF3 identifies that improved internal transport links are necessary to facilitate growth and highlights under its key theme “A Connected Place” that the Scottish road network in some cases requires *“upgrading to provide sufficient capacity, reduce congestion and address safety issues”* (Page 52).
- **The Infrastructure Investment Plan (IIP)** (Scottish Government, 2015) sets out why the Scottish Government invests, how it invests and where it intends to invest in up to 2035 by sector. The IIP recognises that *“investment in transport across Scotland will deliver the best possible connectivity across the roads and public transport network, improving journey times and tackling inequality by improving accessibility of services and opportunities”* (Page 21).
- **Scotland’s Economic Strategy** (Scottish Government, 2015) sets out four principles, with associated actions, to ensure economic growth is shared and sustainable. A key strategic priority in the policy is ‘investing in our people, infrastructure and assets in a sustainable way’, this priority recognises the importance of investment in infrastructure to drive competitiveness and create opportunities.
- **The National Transport Strategy (NTS2)** (Transport Scotland, 2020) provides a vision and associated long-term key strategy objectives and outcomes for transport in Scotland over the next 20 years. NTS2 sets the following vision for transport in Scotland: *“We will have a sustainable, inclusive, safe and accessible transport system, helping deliver a healthier, fairer and more prosperous Scotland for communities, businesses and visitors”* (Page 5).

## 4. Consultation and Stakeholder Engagement

- 4.1.1. Consultation specific to the SEA is required at several stages in line with the Scottish Government's SEA Guidance (2013). As a minimum, the statutory SEA Consultation Authorities (Scottish Environment Protection Agency (SEPA), NatureScot and Historic Environment Scotland (HES)) are consulted on the need for SEA and the scope of the SEA.
- 4.1.2. The Draft Environmental Report and SEA Post Adoption Statement will all be consulted on via the SEA Gateway website: <https://www.gov.scot/policies/environmental-assessment/strategic-environmental-assessment-sea/>. Consultation on the Scoping Report was previously carried out in January and February 2022.
- 4.1.3. Consultation with the wider public is also undertaken at different stages in the SEA and is crucial for ensuring transparency in the SEA decision-making process.

## 5. Project Description

### 5.1. Development of Options

5.1.1. The assessment for the SEA has been carried out in two stages:

- **The Preliminary Assessment** - An initial assessment considering eight strategies (and their associated options) was carried out to determine if any of the strategies would not achieve any of the six objectives or were not feasible and therefore could be rejected at an early stage without further assessment.
- **The Detailed Assessment** - A detailed assessment of the options associated with the preferred strategy (Strategy 4: New route to the east of the A73) is undertaken in line with the SEA Directive and relevant guidance documents.

5.1.2. The eight strategies that underwent preliminary assessment are as follows:

- **Strategy 1:** On-line enhancements – A73.
  - Upgrade A73 from Chapelhall to Stand.
  - Upgrade the congested and constrained (urban) sections and junctions.
- **Strategy 2:** On-line enhancements – alternative north south routes.
  - Upgrades of selected sections of the network to the east of the A73.
  - Upgrades of selected sections of the network to the west of the A73.
- **Strategy 3:** Off-line enhancements – new routes west of the A73.
  - New north-south link road to the west of the A73.
- **Strategy 4:** Off-line enhancements – new routes east of the A73.
  - New north-south link road to the east of the A73.
- **Strategy 5:** New/ improved bus provision options.
  - Public transport co-ordination package.
  - Increased frequency of daytime bus services.
  - Extended bus operating hours (evenings and weekends).
  - Improve public transport infrastructure and vehicles.
  - Improve public transport information provision and marketing.
  - Express bus park and ride.
  - New north-south bus routes.
  - Subsidised bus services.
- **Strategy 6:** Traffic management options.
  - Restrict HGV movements.
  - Reduce speed limits.
  - Limit the number of turning movements onto and from the A73.
- **Strategy 7:** Active travel options on existing A73.
  - Improved pedestrian and cycle crossing facilities.
  - New/improved pedestrian and cycleways.

- **Strategy 8:** New/ Improved railway options.
  - New north-south railway.
  - Increased frequency of services within the Study Area.
  - New railway linking Glasgow-Edinburgh line with Motherwell-Cumbernauld line.
  - Coatbridge Central-Coatbridge Sunnyside pedestrian link.

5.1.3. Following the initial assessment work, the emerging recommendation was to retain Strategy 4 as the preferred strategy, as it would:

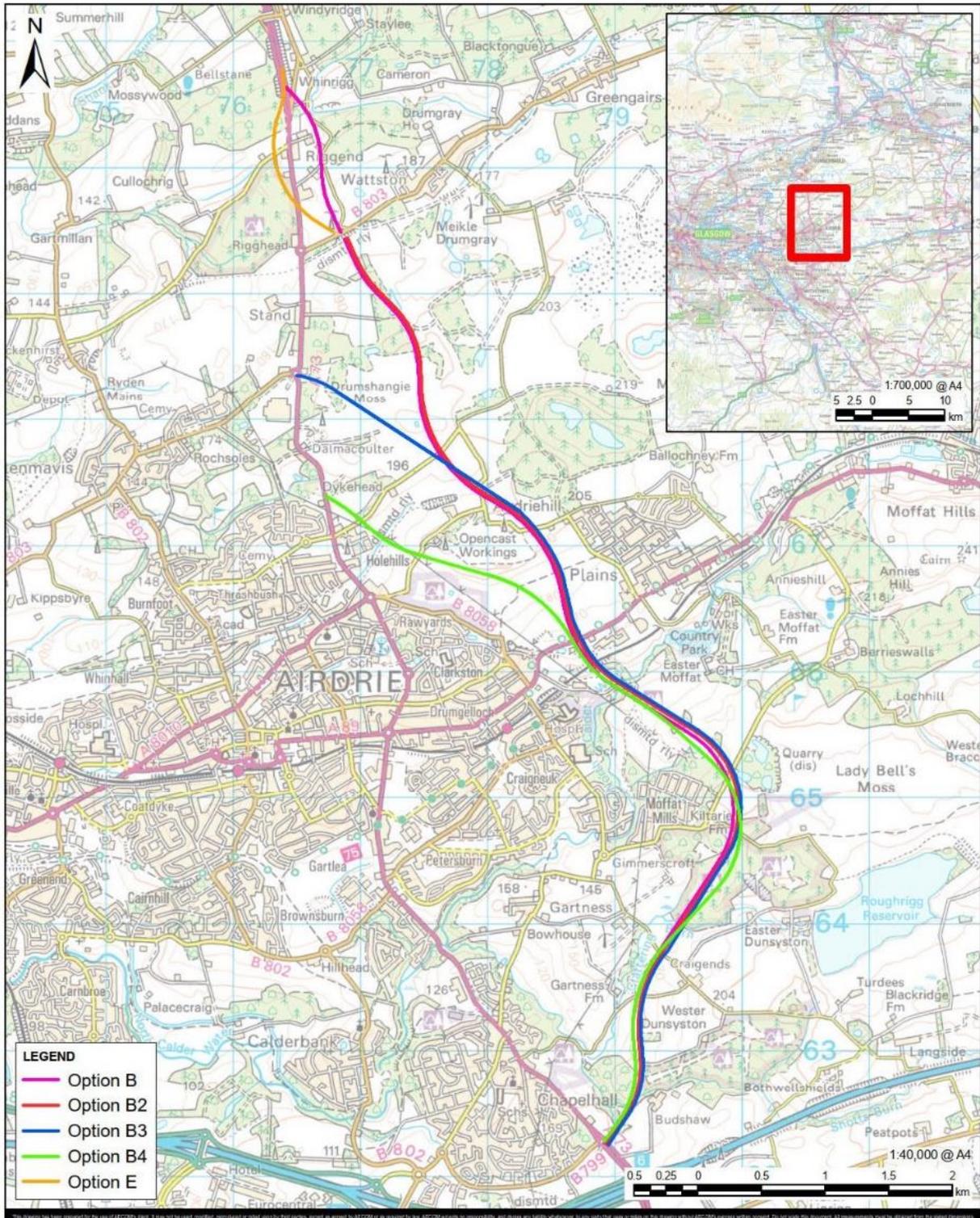
- Improve journey times, reliability and resilience between Cumbernauld and M8.
- Support development opportunities for existing businesses and assist in unlocking stalled development sites.
- Improve road safety for all users.
- Reduce levels of traffic-related air pollution within the Chapelhall AQMA.
- Facilitate improvements to public transport infrastructure and reliability, encouraging modal shift.
- Facilitate improved connectivity between residential areas and centres of economic activity, improving access to employment, education and training opportunities.
- Provide active travel infrastructure linking to existing networks, encouraging modal shift.

## 5.2. Description of Options

5.2.1. The preferred scheme, Scheme 4 (and the associated options), follow the same route to the east of Airdrie, starting at the Lancaster Avenue/A73 roundabout at Chapelhall, to the south of Airdrie. The options then follow a similar route between the A83 at Lancaster Avenue and the A89 at Plains. Once the options pass the A89, the routes diverge to terminate at different sections of the A73 to the north of Airdrie

5.2.2. The five shortlisted options to be assessed as reasonable alternatives through the SEA are shown in Image 5.1 'Scheme Options' below.

Image 5.1 Scheme Options Location



## 6. SEA Approach and Methodology

- 6.1.1. A desk-based assessment approach was primarily used for the Environmental Report stage as the SEA, focussing on a general study area of 500m from each of the options. The information gathered as part of this desk-based assessment was then used to identify the potential for likely significant effects as a result of the scheme. The key sustainability issues based on the information gathered for each of the SEA themes is set out in Section 7.
- 6.1.2. A Phase 1 Habitat Survey was also carried out to support the Biodiversity, Flora and Fauna assessment. The surveyors recorded and mapped all habitat types in the study area and any relevant ecological features. The survey was also extended to search for evidence of protected and/or notable species and to assess the suitability of the habitat present to support such species, including breeding birds.
- 6.1.3. The SEA has utilised a set of SEA objectives that cover each of the SEA themes scoped into the assessment. These SEA objectives were developed to reflect the context of the East Airdrie Link Road scheme following a review of the key sustainability issues and the legislative and policy context.
- 6.1.4. The SEA objectives are set out in Table 6.1 below.

**Table 6.1 SEA Objectives**

Theme	SEA Objective
<b>Biodiversity, Flora and Fauna</b>	Protect and enhance the natural environment (including the aquatic environment), wildlife, its habitats and other natural features, including internationally and nationally designated sites.
<b>Population and Human Health</b>	Improve the health and wellbeing of residents within the Study Area.
	Promote sustainable transport use and reduce the need to travel. Delivery of a transport infrastructure to meet the foreseeable needs of the varied communities within the Study Area.
<b>Water</b>	Promote the efficient and effective use of natural water resources and protect and enhance the water environment.
<b>Soil</b>	Promote the efficient and effective use of natural soil resources
<b>Air</b>	Improve air quality within the Study Area
<b>Climatic Factors</b>	Support climate change mitigation in the Study Area through limiting the contribution of transport to greenhouse gas emissions.
	Support the resilience of the Study Area to the potential effects of climate change, including flooding.
<b>Material Assets</b>	Promote the efficient and the efficient and effective use of material resources.
<b>Cultural Heritage</b>	Protect and enhance the significance of the historic environment, heritage assets and their settings.
<b>Landscape</b>	Protect and enhance the character and quality of the Study Area's landscapes and townscapes.

## 7. Key Sustainability Issues

### Biodiversity, Flora and Fauna

There are **eleven protected ecological sites** with potential relationships within the Study Area; including a Local Nature Reserve (LNR), Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC), Special Protection Areas (SPA) and a Ramsar Wetland.

There are **42 non-statutory designated** Sites of Importance of Nature Conservation (SINC) across the Study Area.

There are large areas of **Ancient Woodland** present throughout the Study Area.

These protected sites support **important habitats**, such as bogs and ancient and native woodland, and important protected species, including otter, badger, bats, water vole and great crested newt.

The drive towards Biodiversity Net Gain (BNG), meeting United Nations (UN) sustainability targets in relation to biodiversity and consideration of Natural Capital in policy will be key to the future protection and enhancement of Scottish biodiversity and the wider natural environment.

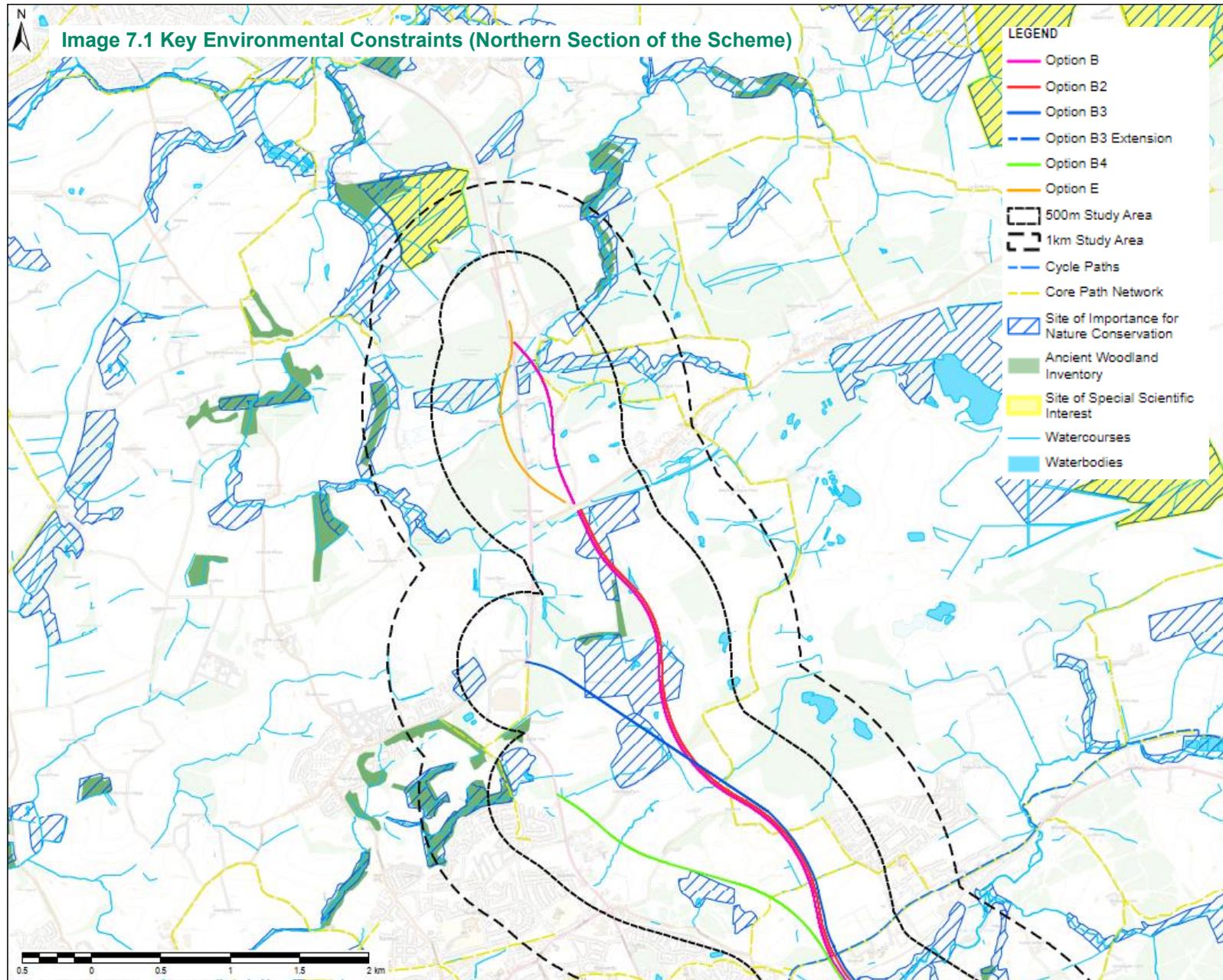
### Population and Human Health

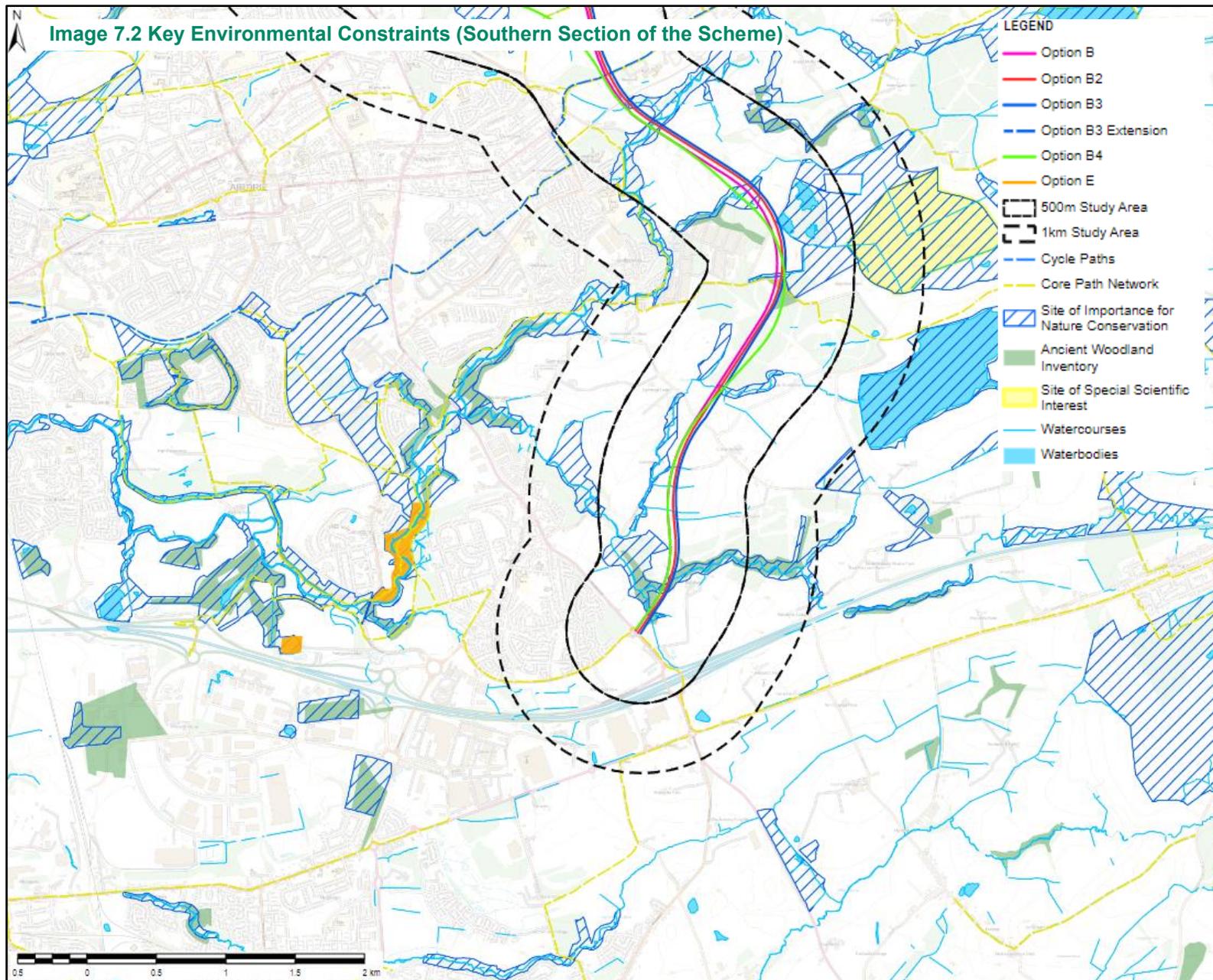
**Air quality** and **noise** from transport could result in significant impacts on human health on the population, particularly the more urban areas affected by the East Airdrie Link Road scheme.

There are a number of **areas of high deprivation** within the North Lanarkshire Council area, and these areas would be more vulnerable to changes in the environment.

New transport infrastructure should seek to **improve economic vitality**, **reduce congestion**, and **improve overall quality of life** for residents in the local population centres (Plains, Airdrie, Calderbank and Chapellhall) and **avoid severance** of these communities.

**Access to services** is an important consideration for communities and improved connectivity can reduce health inequalities.





## Soil

Soil is a key part of our environment and **soil degradation** can have major implications for air and water quality as well as our climate, biodiversity, and economy.

Soils in Scotland are rich in organic matter and account for over 50% of the UK's soil carbon.

Within the Study Area the soils are predominantly clayey and sandy loam. **Peat and locally peaty soil** types are also present at various points across the Study Area appearing in small deposits. Large deposition of peat and peaty soil can be found in the Drumshangie Moss area and north of Plains.

Scotland's soils are under pressure from the effects of **climate change and changes in land-use and land management**.

## Air

Poor air quality can have detrimental impacts on **human health** and **quality of life**.

The transport sector is the most significant source of **air pollution** in the UK.

Air Quality Management Areas (AQMA) are designated by local authorities in areas where Air Quality Objectives (AQOs) are not (or are unlikely to be met). There are currently **four designated AQMAs** within North Lanarkshire including one within the Study Area (Chapelhall AQMA).

## Climatic Factors

The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 amended the **greenhouse gas emissions targets** in the Climate Change (Scotland) Act 2009, and set a 'net zero' target emissions year of 2045.

Transport is estimated to account for 25% of Scotland's total **energy use**, contributing to climate change.

Scotland's annual rainfall has increased approximately 13% above the average for the early 1900s, and increased precipitation, and intense periods of rainfall may result in **flooding** events (fluvial and surface water) and disrupt operation of the Scheme.

Key long-term **climate change** trends for Scotland are that weather may become more variable, typical summers will be hotter and drier, winter and autumn will be milder and wetter and sea levels will continue to rise.

## Material Assets

The road network plays an essential role in **enabling mobility** in the North Lanarkshire Council area.

Other key transport assets in the region include the **Glasgow to Edinburgh via Bathgate railway line** (providing a rail link from Airdrie to Glasgow and Edinburgh) and **National Cycle Network Route 75**.

The primary mineral resources extracted include **hard rock, peat and coal**.

There are **79 waste management sites** in the North Lanarkshire Council area, five of which are located within the Study Area.

The **changing climate** is expected to affect material assets in future years due to the predicted increase in annual rainfall for Scotland and more frequent, higher intensity rainfall events.

## Cultural Heritage

There are a number of designated heritage assets present within the Study Area, including eight **listed buildings** and four **Scheduled Monuments**. New transport infrastructure proposed through the East Airdrie Link Road scheme has the potential for beneficial or adverse effects on these designated heritage assets and the wider historic environment.

## Landscape

Landscapes are a significant part of the country's **cultural and natural heritage**, contributing to the economy and the wellbeing of the population.

The Scheme Options have the potential to result in **both direct and indirect change** to the **landscape character** of the Study Area.

The main pressures that influence the character of the landscape are land use intensification, incremental development, climate change and climate change adaptation, and biosecurity threats.

## 8. Environmental Assessment

### 8.1. Introduction

8.1.1. The SEA has reported that the project is not likely to have any significant effects on the following SEA topics at a strategic level:

- Water;
- Soil;
- Air;
- Climatic Factors; and,
- Cultural Heritage.

8.1.2. The SEA reported that there would be likely significant (negative) environmental effects for the following SEA topics:

- Biodiversity, Flora and Fauna,
- Population and Human Health;
- Material Assets; and,
- Landscape.

### 8.2. Significant Environmental Effects

#### ***Biodiversity, Flora and Fauna***

8.2.1. All Scheme Options would likely result in significant negative effects on **Sites of Nature Conservation Importance (SINCs)**, which are designated by North Lanarkshire Council and subject to local policy protection. This is because there are numerous SINCs in the Study Area, and, in addition to the intrinsic value of all the SINCs, several contain priority UK habitats that are also considered important in national policy, namely blanket bog (and associated deep peat) and semi-natural ancient woodland.

8.2.2. Options, B, B2, B3 and E have the potential to cause significant negative effects on **blanket bog** habitat. However, Options, B, B2 and E have the potential to be rerouted more favourably reducing the effect to minor adverse.

8.2.3. For all Scheme Options, the effect on **ancient woodland** is significant negative. This depends on whether bridging of woodland is possible with at least shrub/ground flora retained, and in the case of non-ancient woodland whether compensatory planting is sufficient.

8.2.4. Of those **protected species** that are known or considered likely or potentially present (otter, bats, badger, water vole, great crested newt, birds and fish), significant negative effects would likely be rendered neutral with due implementation of licensing and associated mitigation, all of which would likely be standard. Option B4 would likely have the least impact on great crested newt, if any since it avoids all direct impacts on ponds. Similarly, significant negative effects arising from unavoidable disturbance of **Japanese knotweed**, and potentially other invasive

plants, is likely also to be rendered neutral through production and implementation of a Biosecurity Management Plan.

### **Population and Human Health**

- 8.2.5. Options B, E and B2 will result in a permanent significant negative effect on **development land and businesses** as a result of the partial acquisition of a site designated in the Proposed LDP for a Potato Processing Factory (Site NLC00585).
- 8.2.6. All of the Scheme Options will impact National Cycle Route (NCR) 75, Core Paths and Rights of Way at several points throughout their routes. Due to the lack of detail at this stage it is assumed any impact on WCH provision will be result in a moderate change to journey length (i.e. a change of between 250m and 500m). **NCR75** due to its national designation is of very high sensitivity as a result all Scheme Options will have a significant negative effect on the route.
- 8.2.7. All options will have a significant negative effect on two **Rights of Way** (along the Edinburgh-Glasgow Railway and the Plains to Airdrie route), while Option B4 will have additional impact on a Right of Way linking the Plains to Airdrie route with Airdriehill Road.
- 8.2.8. **Core paths** are of high sensitivity due to their regional designation, as a result, all options will have significant negative effect on core paths in the area. Option B4 will impact three core paths (201, 162, and 178). Options E, B2 and B3 will all impact four core paths (201, 162, 178, and 159 [at two separate points]). Option B will impact six core paths (201, 162, 178, and 159 [at two separate points] and 157 and 158).
- 8.2.9. Noise modelling has been undertaken to predict the potential short term and long-term operational **noise** impacts at properties within a 600m study area. During both daytime and night-time, Options B2, B3 and B4 are predicted to result in the least number of significant negative effects on properties while Options B and E are predicted to result in a slightly greatest number.

### **Material Assets**

- 8.2.10. All Scheme Options would lead to a significant negative effect as a result of the reduction or alteration of **landfill capacity**. Landfill capacity is a finite resource and is the least preferred management option in the waste hierarchy. Scheme Options may result in significant reduction in Scottish landfill capacity if mitigation measures are not viable.

### **Landscape**

- 8.2.11. In general, each of the Scheme Options would result in significant **visual effects** on one or more visual receptor groups.
- 8.2.12. Options B and E would give rise to significant negative effects on four of the receptor groups, including Riggend, Plains, rural properties east of Airdrie and rural properties east of Chapelhall receptor groups. While Options B2, B3 and B4 would also give rise to significant negative effects on three receptor groups, in part due to their shorter length. Options B2 and B3 would result in significant negative effects on the following three receptor groups: Plains, rural properties east of Airdrie and rural properties east of Chapelhall receptor groups. While Option

B4 would result in significant negative effects on the Northeast of Airdrie, rural properties east of Airdrie and rural properties east of Chapelhall receptor groups.

### 8.3. Key Recommendations

- 8.3.1. The SEA finds that none of the possible Scheme Options should be discounted on environmental grounds and in many instances, due to the stage of assessment and lack of design detail, it is difficult to differentiate between the possible route options and their associated environmental effects. However, the assessment shows that overall, in many respects, Option B4 would have the most limited impact on the environment, followed closely by Options B3 and B2. Options B and E are the worst performing option in relation to this SEA theme environmentally due to their increased impact on environmentally constrained areas. Options B2, B3 and B4 would result in more limited overall environmental effects and can be more easily delivered with environmental protection and enhancement as part of the project. This would also help to reduce the time required for additional iterative design and approvals, such as environmental licences.
- 8.3.2. Although the SEA has not indicated that any of the possible route options have significant negative effects which cannot be effectively avoided or mitigated, in some instances possible route options are considered to be more or less constrained than others. Table 8.1 provides a summary of these key environmental constraints. Where possible, differences in constraints between the possible route options are highlighted.

**Table 8.1 Key Constraints across Scheme Options**

SEA Theme	Key Constraints
Biodiversity, Flora and Fauna	Of the five Scheme Options, Option B4 is considered the most preferable ecologically as it bypasses impacts on blanket bog. Options B, B2 and E have the potential to be rerouted to minimise impacts on blanket bog. Option B3 does not have the potential to avoid blanket bog impacts and therefore is the least preferable ecologically.
Population and Human Health	Of the five Scheme Options, Option B4 is considered the most preferable as it avoids land take of designed housing (Site 0001/07) as designated in the Proposed LDP) and business development land (Site NLC00585) and will impact the least number of core paths. Option B3 will also avoid housing and business development land; however, it will impact on an additional core path. Options B, B2 and E will all result in a loss of housing and business development land and will impact four core paths. Option B will also impact an additional two core paths, resulting in a total impact on six core paths.
Water	Scheme Options which minimise the hydrological pathway to surface waters and groundwater would be preferred. Particularly in the northern portion of the Study Area, this correlates with the shorter options such as B2, B3 and B4. In particular, these options would minimise the potential for adverse impact within the Luggie Water sub-catchment. Options B and E would be the least preferred due to their higher number of crossings.
Soil	All Scheme Options would result in similar impacts on soil.
Air	In terms of a route preference, taking into consideration the number of receptors located within 200 m of the options which have the potential to be adversely affected by dust, the options were ranked as B4 (most preferable), B3, B2, E, B (least preferable). With regards to NO <sub>2</sub> , PM <sub>10</sub> and PM <sub>2.5</sub> impacts during operation the options were ranked B (most preferable), E, B3 and B4 were similar followed by B (least preferable).
Climatic Factors	The impacts of climate change on all Scheme Options are likely to be similar.
Material Assets	The impacts of materials assets on all Scheme Options are likely to be similar.
Cultural Heritage	Enhancement opportunities should be considered to provide wider access to the historic environment to enhance local diversity and distinctiveness.
Landscape	Consider opportunities for landscape, placemaking and public realm improvements to help the scheme tie into the surrounding landscape, urban realm and visual context. This is likely to be most applicable to locations close-by to settlement and along settlement edges or in locations which are used for recreation

## 9. Inter-relationships and Cumulative Effects

9.1.1. As set out in the Scottish Government's SEA Guidance (2013), the inter-relationship of environmental effects between the topics has been considered within the SEA. Some inter-relationships have the potential to result in a cumulative effect.

9.1.2. Cumulative effects arise, for instance, where several developments each have insignificant effects but together have a significant effect; or where several individual effects of the plan (e.g. noise, dust and visual) have a combined effect.

9.1.3. In terms of 'several individual effects' of the East Airdrie Link Road scheme having a combined effect, the following were identified:

- During construction of any large-scale infrastructure it is recognised that the population within the route corridor and people travelling nearby may be subject to several types of temporary disturbance such as changes to noise and vibration, air quality, visual amenity and access to/from properties.
- It is likely that peat would be impacted by the project, due to high coverage of peat soils within the corridor. The loss of peat under the footprint of the project could result in degradation of peatlands and loss of high-value carbon sink and blanket bog/peat habitats.
- As a result of outfalls from road drainage networks and road maintenance works causing a reduction in surface water quality due to the introduction of particles and pollutants all of the Scheme Options would have the potential to result in impacts on surface water quality at the Luggie Water (includes Shank Burn and Cameron Burn), the South Burn, the Shotts Burn (including the Clattering Burn), and the North Calder Water.
- Woodland/forestry would be impacted by the project due to the felling required for its construction and operation. The loss of woodland/forestry as a natural resource could result impacts on climatic factors, population and human health, biodiversity and landscape.

9.1.4. Additionally, known and expected projects with the potential for cumulative effects with the East Airdrie Link Road scheme by virtue of their characteristics, scale, location, or timing were identified and considered. The following potential cumulative effects were identified:

- Major infrastructure works (such as the Monklands Hospital and Proposed Drumshangie Waste Plant projects) will have the potential to result in significant cumulative effects in combination with the East Airdrie Link Road scheme. These projects are likely to result in cumulative impacts on biodiversity, flora and fauna, climatic factors, material assets and landscape during construction and operation due to the scale of the projects and the extent of construction activities.

9.1.5. Monitoring of potential cumulative effect identified in the SEA is recommended throughout the future stages of design development. The mitigation and enhancement recommendations

outlined in the SEA will also be further developed to reduce effects from the East Airdrie Link Road scheme.

## **10. SEA Monitoring and Mitigation**

10.1.1. A framework of mitigation, monitoring and enhancement recommendations for each SEA theme are provided in the Environmental Report. The framework is an example at this stage and will be subject to review following feedback from the public consultation on the Environmental Report. The final framework will be included in the SEA post Adoption Statement. This will include recommendations for environmental protection and enhancement at all future project stages.

## **11. Next Steps**

11.1.1. The SEA Scoping Report, draft Environmental Report and SEA Post Adoption Statement will be available on Scotland's SEA Gateway website: <https://www.gov.scot/policies/environmental-assessment/strategic-environmental-assessment-sea/>

## 12. References

European Parliament (2001) Directive 2001/42/EC of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment [Online] Available at: <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32001L0042>

Scottish Government (2013) Strategic Environmental Assessment - Guidance [Online] Available at: <https://www.gov.scot/publications/strategic-environmental-assessment-guidance/>

Scottish Government (2014) National Planning Framework 3 (NPF3) [Online] Available at: [www.gov.scot/publications/national-planning-framework-3/](http://www.gov.scot/publications/national-planning-framework-3/)

Scottish Government (2015a) A National Mission with Local Impact: Infrastructure Investment Plan for Scotland 2021-22 to 2025-26 [Online] Available at: <https://www.gov.scot/publications/national-mission-local-impact-infrastructure-investment-plan-scotland-2021-22-2025-26/>

Scottish Government (2015b) Scotland's Economic Strategy [Online] available at: <https://www.gov.scot/publications/scotlands-economic-strategy/>

Scottish Parliament (2005) The Environmental Assessment (Scotland) Act 2005

Transport Scotland (2020) National Transport Strategy 2 (NTS2) [Online] Available at: <https://www.transport.gov.scot/publication/national-transport-strategy-2/>

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