

# Record of Determination A75 Kirkdale to Carsluith

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# Environmental Impact Assessment Record of Determination

# Transport Scotland

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# **Project Details**

# **Description**

This scheme is required to improve the overall quality on this section of the A75 carriageway. A visual survey was carried out which found a high number of defects which indicates an ageing surface. Most of the scheme length is displaying crazing and in several areas, in a severe condition. Several lengths of longitudinal cracking and rutting are also present throughout scheme.

The current filter drain material will be replaced.

Works will involve carriageway surface reconstruction utilising TS2010 treatment across the full extents of the works. If deeper treatment is required, then a binder will be used.

Construction activities are likely to include:

- Milling of existing bituminous material by road planer;
- Additional bituminous material removed by jack hammer where not accessible by planer;
- Road sweeper to collect any loose material;
- HGV for removal and replacement of material;
- Tack/bond coat laid;
- New bituminous material laid by a paver;
- Material compacted using a heavy roller;
- Road markings and studs will be applied where necessary.
- Removal of filter drain contents and reinstallation.

These works are programmed to take place in August 2021 and will consist of weekday and weekend working.

The local Environmental Health team have been notified of these works (06/05/2021).

# Location

The Scheme is situated on a rural section of the A75 approximately 400m south of Carsluith, Dumfries & Galloway.

- Scheme start NX 51641 53031
- Scheme end NX 49098 54528

The scheme is approx. 3,038m in length and the total area is approximately 24,300 m<sup>2</sup>.

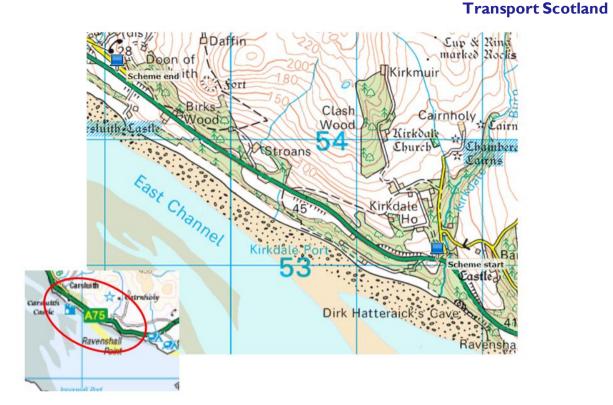


Image 1 - Scheme location

# **Description of Local Environment**

# Population and Human Health

The scheme is located on a rural stretch of the A75 approx. 400m south of Carsluith, Dumfries & Galloway. The ambient noise levels are likely influenced by traffic on the A75 as well as local agricultural practices.

There are a number of residential properties located intermittently along the A75 carriageway within proximity to the scheme, the closest of these being directly adjacent to the carriageway.

There are no footpaths, CorePaths, cycleways or bridleways identified within the scheme extents.

There are a number of accesses throughout the scheme extents which lead to residential properties and agricultural access. One access at the scheme start leads to the local road network.

There are a number of parking laybys within the scheme extents adjacent to each carriageway.

The scheme does not fall within a Candidate Noise Management Area (CNMA) as defined by the Transportation Noise Action Plan, Road Maps.

# **Biodiversity**

The scheme is flanked on both sides by a mixture of woodland and agricultural land. A number of residential properties exist within the scheme extents. The scheme is situated on the coast sitting approximately 190m from Wigtown Bay.

A desktop study using <u>SiteLink</u> has identified the following designated sites in proximity:

- Ravenshall Wood Site of Special Scientific Interest (SSSI) (ID 1334);
  - Designated for Lichen Assemblage, Upland Oak woodland and Vascular plant assemblage.
  - The entirety of the SSSI sits just to the south of the carriageway.
- Cree Estuary SSSI (ID 461):
  - Designated for features including mudflats and saltmarsh.
  - Sits approximately 200m south of the scheme start.
- The Solway Firth SPA (ID 10487);
  - Located approximately 560m south of the scheme.

Amey's Invasive Non-native Species (INNS) Database has not identified any records of INNS within the scheme extents.

## Scheme survey

A scheme survey was carried out on 05/03/2021 by members of the Environment and Sustainability Team. The area around the carriageway was surveyed for signs of protected species activity and shelter. No evidence was found and thus it was deemed there is no protected species shelter in close proximity to the works.

#### Land

This section of the A75 is a rural single-carriageway with vegetated road verges. A mixture of agricultural fields, and woodland makes up the wider environment.

#### Soil

Scotland Soils Map has identified the soil in the area as brown earths.

British Geological Survey Maps has identified the bedrock geology of the area as Hawick Group – Wacke. No superficial deposit records exist for the local geology.

#### Water

The Scottish Environment Protection Agency (SEPA) Water Classification  $\underline{\text{Map}}$  has identified the Bladnoch & Cree Estuary (outer) (ID -200323) approximately 180m south of the scheme. SEPA have given this waterbody an overall status of 'Good', with an overall ecology status of 'Good'. Kirkdale Burn (unclassified by SEPA) flows approximately 60m east of the scheme start. An unclassified issue flows below the carriageway towards the middle of the scheme extents.

SEPA Flood Risk <u>map</u> has identified a small section of carriageway at the scheme start susceptible to surface water flooding.

Drainage is currently facilitated by a filter drain system on the verge. Road drainage is likely to outfall into the Bladnoch and Cree Estuary.

#### Air

The A75 is a key route between Stranraer and Dumfries. The average annual daily flow (AADF) for the A75 within the scheme extents in 2020 was 3,801 with a heavy goods vehicle (HGV) traffic count of 27.4%.

The local air quality is likely to be impacted by traffic on the A75.

Dumfries & Galloway Council has not declared any Air Quality Management Areas (AQMAs).

# **Climate Change**

The Climate Change (Scotland) Act sets out the target and vision set by the Scottish Government for tackling and responding to climate change. The Act includes a target of reducing CO2 emissions by 80% before 2050 (from the baseline year 1990).

Amey, working on behalf of Transport Scotland, undertake carbon monitoring. Emissions from our activities are recorded using Transport Scotland's Carbon Management System.

To support the journey towards carbon neutral and zero waste, Amey include potential opportunities for enhancement utilising circular economy principals within assessment of material assets.

#### **Material Assets**

Table 1 - Construction materials

Key Materials Required for Activities				
Activity	Material Required	Origin/ Content		
Site Construction	Road planings Binder Road paint/studs Filter material	TS2010 Surface Course allows a wider array of aggregate sources to be considered when compared to typical SMA. As a result the use of TS2010 will reduce the usage of imported aggregates, and increase the use of a wider range of sustainable aggregate sources.		

#### Waste

Table 2 – Construction waste materials

Key Waste Arising from Activities				
Activity	Waste Arising	Disposal/ Regulation		
Road planings Road paint/studs construction Filter material		Further on-site investigations of the carriageway condition are required, including coring and testing. Due to this, condition of surfacing could not be fully determined, including presence of coal tar. As such, presence of tar is not currently known for this scheme.		
	Presence of tar should be confirmed prior to the commencement of the works.			
	Road paint/studs	If testing does not identify any coal tar within the scheme extents, road planings generate as a result of the works may be recovered in accordance with the criteria stipulated within SEPA document 'Guidance on the Production of Fully Recoverable Asphalt Road Planings		
		If evidence of tar is identified during further site investigations, any tar-contaminated planings will require removal off site for treatment/disposal at a licenced waste facility.		
		All materials that can be should be reused throughout the network in line with applicable legislation.		

# **Cultural Heritage**

PastMap has identified the following features of cultural heritage in within the scheme extents:

- One scheduled monument (Carsluith Castle) approximately 80m east of the scheme start and 20m south of the carriageway.
- Three listed buildings (Former Steading Pavilions Flanking Carsluith Castle) –
  Category C approximately 30m south of the carriageway towards the scheme
  end.

# Description of Main Environmental Impacts and Proposed Mitigation

# **Population and Human Health Impacts**

- Traffic management arrangements may prolong travel time for carriageway users
- Accesses may be blocked by the works as well as the laybys.
- Residential properties adjacent to the carriageway may experience a level of disturbance during the works. Works are programmed for daytime hours and therefore disturbance is not likely to be significant.

#### **Mitigation**

- Residential properties in proximity will be notified prior to commencement of the works, detailing nature, timings and duration of the expected works.
- Local access will be given if blocked by works.

It has been determined that the proposed project will not have direct or indirect significant effects to Population and Human Health.

# **Biodiversity**

## **Impacts**

- There is potential for protected species to be active in the area surrounding the scheme.
- The proposed works are restricted to the existing carriageway footprint and therefore have no impact on the SSSI's.
- There is no predicted impact on the SPA due to the distance from the works, the Ravenshall Woods will act as a noise barrier between the works and the SPA and the works will be transient.

# **Mitigation**

- Operatives must be vigilant for potential presence of protected species. If a
  protected species is sighted within proximity to the works location, work will be
  temporarily suspended, until it has moved on. Any sightings will be reported to
  the Environment and Sustainability Team.
- Works must be kept to the existing carriageway footprint.
- Vehicles and plant will not be left idling when not in use.
- Vehicles and plant will be fitted with muffles/silencers.

It has been determined that the proposed project will not have direct or indirect significant effects to Biodiversity.

#### Land

The works will be kept to the existing A75 carriageway boundary and will not require access to private or community land. Plant, materials and any temporary storage will be kept to the made carriageway surface only.

It has been determined that the proposed project will not have direct or indirect significant effects to land.

#### Soil

#### **Impacts**

- Removal and re-instatement of filter drain material may result in soil disturbance on the verge areas. Soil disturbance can create adverse conditions, including erosion and polluted soils.
- Soils and debris may mobilise and enter nearby drains, which may pollute local water.

#### **Mitigation**

- Weather reports will be monitored prior to the works, with all construction activities temporarily halting in the event of predicted high rainfall or wind.
- Excavated materials will not be stored on site, and will be appropriately contained/covered, and protected from the elements.
- Excavated materials will not be placed, even temporarily, within the SSSI boundary (immediately south of the west bound carriageways VRS).

It has been determined that the proposed project will not have direct or indirect significant effects to Soil.

#### Water

#### **Impacts**

- If not adequately controlled, debris and run off from the works could be suspended in the surface water. In the event of a flooding incident, this debris may be mobilised and could enter the road drainage having a detrimental effect on the surrounding local water environment.
- Adverse weather may result in unsuitable working conditions. In the event of flooding, works may be delayed.
- Potential for fuel/chemical spillages through the use of various plant and vehicles, which may adversely impact the water environmental.
- Filter drainage will be renewed as part of these works.

## **Mitigation**

- Appropriate measures will be implemented onsite to prevent any potential
  pollution to the natural water environment (e.g. debris, dust and hazardous
  substances). This will include spill kits being present onsite at all times, and use
  of drip trays and funnels during re-fuelling;
- All debris which has the potential to be suspended in surface water and wash into the local water environment will be cleaned from the site following the works;
- Visual pollution inspections of the working area will be conducted in frequency, especially during heavy rainfall and wind;
- Weather reports will be monitored prior to and during the works with all
  construction activities temporarily halting in the event of adverse weather/flooding
  event. The works will only continue when it is deemed safe to do so and runoff/drainage can be adequately controlled to prevent pollution.

It has been determined that the proposed project will not have direct or indirect significant effects to water.

#### Air

#### **Impacts**

 On site construction activities carry a potential to produce airborne particulate matter that may have a slight temporary impact on local air quality levels.

# **Mitigation**

- Plant should not be left to idle and all machinery should be switched off when not in use.
- Dust suppression should be available on site if required.

It has been determined that the proposed project will not have direct or indirect significant effect on air quality.

# **Climate Change**

#### **Impacts**

 Greenhouse gas emissions will be emitted through the use of machinery, vehicles and materials used (containing recycled and virgin materials).

# **Mitigation**

- Where possible local suppliers will be used as far as practicable to reduce travel time and greenhouse gas emitted as part of the works;
- Vehicles/plant shall not be left on when not in use to minimise and prevent unnecessary emissions being emitted.

 Further actions and considerations for this scheme are detailed in Material Assets.

It has been determined that the proposed project will not have direct or indirect significant effects to climate.

#### **Material Assets**

#### **Impacts**

- Contribution to resource depletion through use of virgin materials,
- Greenhouse gas emissions generated by material production and transporting to and from site.

#### **Mitigation**

- Materials will be derived from recycled, secondary or re-used origin as far as practicable within the design specifications to reduce natural resource depletion.
- The chosen material TS2010 Surface Course allows a wider array of aggregate sources to be considered when compared to typical stone mastic asphalt (SMA).
   As a result, the use of TS2010 should reduce the usage of imported aggregates and increase the use of a wider range of sustainable aggregate sources.

#### **Circular Economy**

The design life for the TS2010 surfacing proposed is estimated to be 20 years. This will reduce the requirement for maintenance to this section of road over the period.

It has been determined that the proposed project will not have direct or indirect significant effects to the consumption of material assets or disposal of waste.

#### **Waste**

#### **Impacts**

- Transportation and recovery of planings will require energy deriving from fossil fuel,
- Limited quantity of waste from sweeping will arise requiring disposal.
- Special waste may be generated if coal tar is present in planings.

# **Mitigation**

- Road planings generated will be recovered by a licenced contractor for reuse and/or recycling in accordance with the criteria stipulated within SEPA document 'Guidance on the Production of Fully Recoverable Asphalt Road Planings'.
- Road sweeping waste will be treated at a licenced facility to separate useful materials such as stone/aggregate as far as reasonably practicable, recovering this waste and diverting it from landfill.

If coal tar is present, then this will be treated as special waste and a SEPA consignment note is required and the waste will be disposed of at an appropriate and licenced facility.

# **Cultural Heritage**

Given the restriction of the works to the existing carriageway and the distance separating works from the above highlighted features of cultural heritage, no impact is predicted.

It has been determined that the proposed project will not have direct or indirect significant effects to Cultural Heritage.

# **Vulnerability of the Project to Risks**

As the works will be limited to the like-for-like replacement of the carriageway pavement there is no change to the vulnerability of the road to the risk or severity of major accidents / disasters that would impacts on the environment.

#### **Cumulative Effects**

Another resurfacing scheme (A75 Carsluith West) will be taking place in the same month slightly further north of this scheme. It is not predicted that the close proximity of the works will increase the likelihood of significant impact to the local environment.

## **Assessments of the Environmental Effects**

Provided that mitigation measures and best practice are followed the residual impact is deemed neutral.

Dumfries & Galloway Council's Environmental Health team have been notified of these works (06/05/2021).

# Statement of case in support of a Determination that a statutory EIA is not required

This is a relevant project in terms of section 55A (16) of the Roads (Scotland) Act 1984 as it is a project for the improvement of a road and the completed works (together with any area occupied by apparatus, equipment, machinery, materials, plant, spoil heaps, or other such facilities or stores required during the period of construction) exceed 1 hectare in area.

The project has been subject to screening using the Annex III criteria to determine whether a formal Environmental Impact Assessment is required under the Roads (Scotland) Act 1984 (as amended by The Roads (Scotland) Act 1984 (Environmental Impact Assessment) Regulations 2017). Screening using Annex III criteria, reference to consultations undertaken and review of available information has not identified the need for a statutory EIA.

The project will not have significant effects on the environment by virtue of factors such as:

Characteristics of the scheme:

- Construction activities are restricted to the 1.35 ha area of existing carriageway.
- Materials will be derived from recycled, secondary or re-used origin as far as practicable within the design specifications.
- The chosen material, TS2010 Surface Course allows a wider array of aggregate sources to be considered when compared to typical SMA.
- Road planings will be fully recycled in accordance with Guidance on the Production for Fully Recovered Asphalt Road Planings.
- The design option (replacing the defective surfacing) conveys sustainability benefits by significantly reducing the quantity of maintenance interventions required at the location over approximately 20 years.

#### Location of the scheme:

- The scheme will be confined within the existing carriageway boundaries and as a result will not require any land take and will not alter any local land uses.
- The scheme is not situated in whole or in part in a "sensitive areas" as listed under regulation 2 (1) of the Environmental Impact Assessment (Scotland) Regulations 1999 (as amended).
- There are no significant impacts predicted on nearby designated sites.

#### Characteristics of potential impacts of the scheme:

- As the works will be limited to the like-for-like replacement of the carriageway pavement, there is no change to the vulnerability of the road to the risk or severity of major accidents / disasters that would impact on the environment.
- No significant residual impacts are predicted. Disruption due to construction activities are not expected to be significant and will be mitigated as far as is reasonably practicable.
- The successful completion of the scheme will afford benefits to road users.
- The use of TS2010 road surfacing affords the benefits of a reduction in mid to high frequencies of traffic noise and a reduction in ground vibrations. As a result, ambient noise levels should decrease post construction.

## **Annex A**

"sensitive area" means any of the following:

- land notified under sections 3(1) or 5(1) (sites of special scientific interest) of the Nature Conservation (Scotland) Act 2004
- land in respect of which an order has been made under section 23 (nature conservation orders) of the Nature Conservation (Scotland) Act 2004
- a European site within the meaning of regulation 10 of the Conservation (Natural Habitats, &c.) Regulations 1994
- a property appearing in the World Heritage List kept under article 11(2) of the 1972 UNESCO Convention for the Protection of the World Cultural and Natural Heritage
- a scheduled monument within the meaning of the Ancient Monuments and Archaeological Areas Act 1979
- a National Scenic Area as designated by a direction made by the Scottish Ministers under section 263A of the Town and Country Planning (Scotland) Act 1997
- an area designated as a National Park by a designation order made by the Scottish Ministers under section 6(1) of the National Parks (Scotland) Act 2000.



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