

# Record of Determination

A76 Kirkconnel ARC to Polneul Cottage

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# Environmental Impact Assessment Record of Determination

# Transport Scotland

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# **Project Details**

# **Description**

This scheme is required to resurface this section of the A76 carriageway. Large areas of the scheme are displaying signs of fretting and potholing.

Construction will involve resurfacing with structural inlays throughout the scheme extents. Sliding out as well as the installation of kerbs will also take place. Construction Activities are likely to include the following:

- 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;
- Siding out in areas where there are no existing kerbs; and,
- Kerbs to be installed towards the end of the scheme extents.

The Environment and Sustainability (E&S) team contacted Dumfries & Galloway Council's Environmental Health team (31/08/2021) to notify them of the night works.

The exact construction dates are yet to confirmed but works will take place in November 2022 and will last for three nights.

Traffic Management (TM) for this scheme will involve the total closure of the carriageway facilitated by an appropriate diversion.

#### Location

The scheme is located on a semi-rural section of the A76 carriageway on the western edge of Kirkconnel, Dumfries & Galloway (D&G). The National Grid Reference being:

- Scheme start NS 73009 12247
- Scheme end NS 71094 12157



# **Description of Local Environment**

# Population and Human Health

The scheme is located on a semi-rural stretch of the A76 carriageway on the western edge of Kirkconnel. As such the ambient noise level will primarily come from traffic on the carriageway.

There are a number of residential properties in close proximity to the scheme extents, the closest being adjacent to the carriageway on Main Street.

Core Path 87 Mavis Bank Path (identified by D&G Council) runs close by the A76 carriageway.

A footpath runs on either side of the carriageway towards the scheme start. Another footpath exists within the scheme extents, it alternates between being on the side of the eastbound and westbound carriageway.

There are no cyclepaths or bridleways within the scheme extents.

There are a number of accesses within the scheme extents which lead to the local road network, residential properties and St. Connal's cemetery.

TM for this scheme will involve total road closure facilitated by an appropriate diversion.

# **Biodiversity**

The scheme is situated on a semi-rural section of the A76, farmland flanks the majority of the scheme on both sides while the village of Kirkconnel surrounds the scheme start. The River Nith flows alongside and below the carriageway at various points.

There are no designated areas within close proximity to the scheme extents.

Amey's Invasive Non-native Species (INNS) database shows no records within the scheme extents.

A previous site visit to the area found no evidence of protected species shelter or activity.

#### **Field Survey**

A Field survey has been ruled out for this scheme due to a lack of evidence of protected species in the area. The close proximity of agricultural land to the riverbank means the bank has likely been altered, this and the fact the riverbanks are flat means the area does not present ideal resting places or shelter for otter.

#### Land

These works will take place on the carriageway of the A76, farmland flanks the majority of the scheme on both sides while the village of Kirkconnel surrounds the scheme start. The River Nith flows alongside and below the carriageway at various points.

#### Soil

<u>Sitelink</u> shows the scheme does not fall within an area for Geological conservation review.

Scotland's Soil <u>map</u> has record of the soil in this area being a combination of brown earth soils and non-calcareous gleys.

#### Water

The River Nith flows alongside the carriageway for the extents of the scheme, this was given an overall status of 'Poor' by the Scottish Environment Protection Agency (SEPA). Glenwharrie Burn also flows below the carriageway within the scheme extents. This was given an overall status of 'Moderate' by SEPA in 2018.

There is a potential for river flooding which may reach the carriageway within the scheme extents in accordance with SEPA Flood Risk Maps.

#### Air

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

Background air pollution at this location is likely to derive primarily from the road traffic and agricultural practices.

According to the Department of <u>Transport</u> the Average Annual Daily Traffic (AADT) flow on this stretch of the carriageway in 2020 was 3,293 with 640 of these being Heavy Goods Vehicles (HGVs).

There are no local air quality monitoring stations on Department for Environment Food & Rural Affairs (DEFRA).

# **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 – Site construction materials

Key Materials Required for Activities				
Activity	Material Required	Origin/ Content		
Site construction	<ul><li>Road paint</li><li>Road surfacing</li><li>Binder</li><li>Kerb stones</li></ul>	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 - Site construction waste

Key Waste Arising from Activities				
Activity	Waste Arising	Disposal/ Regulation		
Site Construction	<ul><li>Road planings</li><li>Road paint/studs</li></ul>	Uncontaminated road planings generated as a result of the required works, will be fully recycled in accordance with the criteria stipulated within SEPA document 'Guidance on the Production of Fully Recoverable Asphalt Road Planings.		

## **Cultural Heritage**

<u>PastMaps</u> has identified Guildhall Bridge is a category C listed building which carries the carriageway over the River Nith and is within the scheme extents.

# Description of Main Environmental Impacts and Proposed Mitigation

# Population and Human Health

#### **Impacts**

- There is potential that noise from night works will cause disruption to residential properties.
- Works may temporarily block footpaths within the scheme extents.
- Accesses may be blocked during work hours.
- TM will likely alter traffic journey times.

# **Design Mitigation and Regulatory Requirements**

The E&S team contacted Dumfries & Galloway Council's Environmental Health team (31/08/2021) to notify them of the night works.

### **Site Specific Control Measures**

 A letter drop detailing work timings and activities will be delivered to residential properties.

- All plant/vehicles will be fitted with mufflers/silencers.
- Engines will not be left idling when plant/vehicle is not in use.
- Site operatives will not raise voices on site.
- If footpaths are blocked then safe alternative passage must be put in place for pedestrians of all ability.
- Local access will be granted by site operatives if required.
- Appropriate signage detailing TM must be put in place prior to works starting.

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

# **Biodiversity**

#### **Impacts**

- There is potential for protected species to be active around the scheme area.
- Artificial lighting from night works has the potential to cause disturbance to nocturnal species.

#### **Site Specific Control Measures**

- If protected species are found on site then all works must stop immediately until
  the animal has passed by. The E&S team and the control room should be
  contacted.
- Artificial lighting will be pointed directly at the works are all times.

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

#### Land

As works are restricted to the carriageway, it has been determined that the proposed project will not have direct or indirect effects to the land around the scheme.

#### Soil

#### **Impacts**

The works have the potential to impact soils during the sliding out section of works.

There is potential for works to impact on the soil if plant is parked on roadside verges.

#### **Site Specific Control Measures**

- Any soils excavated will not be moved from the carriageway edge.
- No plant or vehicles should be parked on the roadside verge unless necessary.

 All roadside verges will be reinstated to their original condition if works cause damage.

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

#### 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.

Potential for spills, leaks or seepage of fuels and oils associated with plant to escape and reach drainage systems and watercourses, if not controlled.

#### **Site Specific Control Measures**

- Spill kits will always be replenished and readily available at all times, for the duration of the works.
- Appropriate measures, as detailed in the Guidance for Pollution Prevention
   (GPP) 1 and 5 issued by <u>NetRegs</u>, should be implemented to prevent pollution to
   the natural water environment (e.g. debris, dust sand and hazardous substances)
   via entering nearby drains.
- Road drainage will be suitably protected before the works commence.
- Weather reports will be monitored prior to and during the works with all construction temporarily halting in the event of adverse weather/flooding.
- The works will only continue when it is deemed safe to do so and run-off/drainage can be adequately controlled to prevent pollution.
- Kickboards will be placed on the bridge to ensure that no debris enters the water through the fencing.
- Water Pollution Prevention toolbox talk will be delivered to all site operatives.

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

#### Air

#### **Impacts**

The presence of plant and machinery on site has the potential to temporarily impact the local air quality in a negative way.

There is potential for dust to be produced during these works.

#### **Site Specific Control Measures**

- All plant and machinery must be maintained in accordance with manufacturer standards.
- Engines will not be left idling when not in use.
- All materials on site must be covered during transportation and storage.
- If weather is forecast to be dry then a water bowser should be present on site to dampen the ground before and during works.

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

# **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.
- Further actions and considerations for this scheme are detailed in Material Assets (Table 1).

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.

#### **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'.

# **Cultural Heritage**

#### **Impacts**

There are no impact predicted as the works will be restricted to the existing carriageway footprint.

# **Design Mitigation and Regulatory Requirements**

The E&S team contacted the Dumfries & Galloway Council planning department to give them notice of these works and assure them no impact would be made to the listed building (31/08/2021) they replied with no further mitigation requests and advised that listed building consent is not required.

# **Site Specific Control Measures**

• Ensure works are restricted to the existing carriageway footprint.

Provided best practice is followed the residual impact is deemed neutral.

# **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. The sliding out and installation of kerbing will also have no impact.

#### **Cumulative Effects**

There are no schemes in close proximity to this one which will add to effects to the local environment.

## **Assessments of the Environmental Effects**

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

The E&S team contacted Dumfries & Galloway Council's Environmental Health team (31/08/2021) to notify them of these night works. Dumfries & Galloway Council's Planning department were also contacted (02/09/2021), and they advised that listed building consent is not required due to the like for like replacement of the carriageway pavement.

# 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 11,612m<sup>2</sup> 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).

#### 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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