



**TRANSPORT
SCOTLAND**
CÒMHDHAIL ALBA

Environmental Impact Assessment Record of Determination

A8 Finlaystone to Langbank Eastbound

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Project Details

Description

The proposed works are located on a stretch of the A8 dual carriageway running through Langbank, which falls within Renfrewshire and Inverclyde, and are being undertaken to replace the existing surface course which has reached the end of its serviceable life, as well as to remove structural defects within the pavement layers by utilising deeper inlays in isolated areas.

Construction activities will involve the milling and excavation of the existing pavement surface, and the associated disposal of this material. This will be followed by the laying and compaction of the new road surface materials. Construction materials will include haulage, paver and roller.

These works are programmed to take place in June of 2022, however the exact working dates are yet to be confirmed. Works will be carried out at night.

Traffic management (TM) will likely involve overnight lane closures with potential for diversion routes, to be confirmed.

Location

The scheme is located on a semi-rural section of the A8 dual carriageway (east bound) running through Langbank, Renfrewshire and Inverclyde. The National Grid References (NGRs) for the scheme are:

- Scheme start – NS 37191 73618
- Scheme end - NS 38702 73182



Figure 1 - Scheme Location

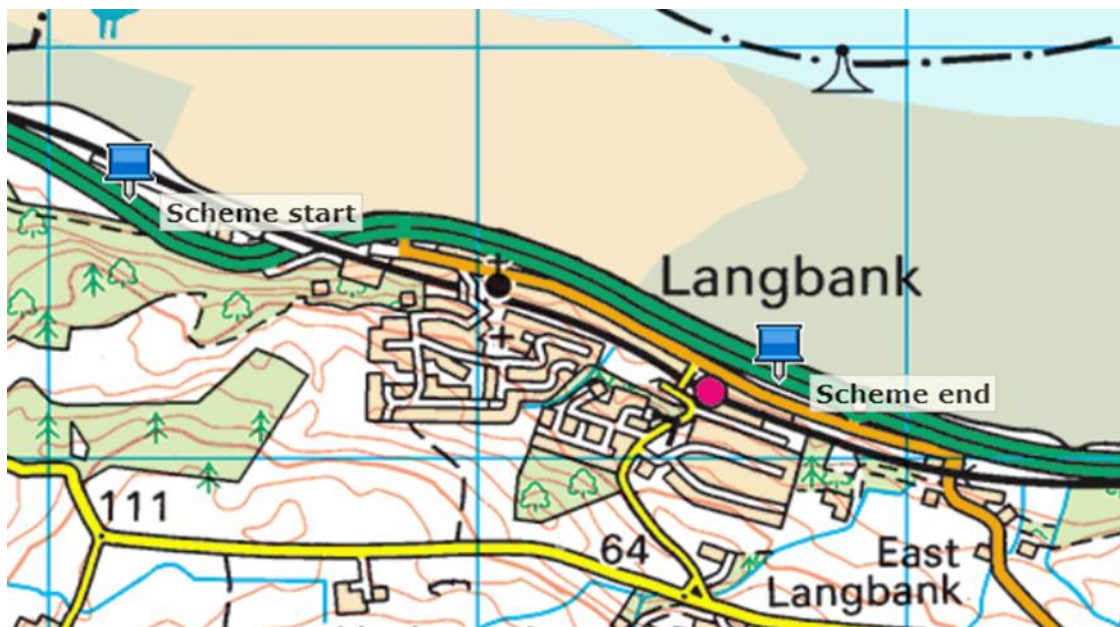


Figure 2 - Scheme Extents

Description of local environment

Air quality

This section of the A8 is a rural carriageway primarily surrounded by agricultural land and areas of residential property.

The scheme is located on a combination of rural and residential section of the A8 carriageway. The A8 is a key route through Inverclyde and Renfrewshire, in 2020 annual average daily flow (AADF) [road traffic data](#) shows that approx. 21,362 vehicles use this section of the carriageway with 981 being Heavy Goods Vehicles (HGVs).

The scheme does not fall within any [Air Quality Management Areas](#) (AQMA) declared by Renfrewshire or Inverclyde Council.

Cultural heritage

[PastMap](#) has identified the following designated features of cultural heritage within 200m of the scheme extents:

- Langbank, Main Street, Woodside Cottages - Category B listed buildings, approx. 70m south of the scheme.
- East Lodge of Finlaystone House - Category B listed building, approx. 20m north of the scheme extents.

- Langbank Crannog Scheduled monument lies 100m from the scheme extents.

As works are restricted to existing A8 dual carriageway, no impact is anticipated to these features.

It has been determined that the proposed project will not have direct or indirect significant effects to features of undiscovered cultural heritage.

Landscape and visual effects

[NatureScot Sitelink](#) and [PastMap](#) have identified Finlaystone House designated as a Garden & Designed Landscape (GDL), which sits adjacent (south) of the scheme start.

As works are restricted to existing dual carriageway and will be like-for-like in nature, it has been determined that the proposed project will not have direct or indirect significant effects to landscape or visual effects.

Biodiversity

The scheme is set in a combination of rural and residential area with the Clyde estuary to the north and a mixture of residential areas, woodland & farmland to the south.

[NatureScot Sitelink Interactive Map](#) has identified that the scheme lies within close proximity to:

- Inner Clyde RAMSAR
 - Approx. 10m north of the scheme at the closest point
 - Designated for Redshank *Tringa totanus*, (non-breeding)
- Inner Clyde Special Protection Area (SPA)
 - Approx. 10m north of the scheme at the closest point
 - Designated for Redshank *Tringa totanus*, (non-breeding)
- Inner Clyde Site of Special Scientific Interest (SSSI)
 - Approx. 10m north of the scheme at the closest point
 - Designated for Cormorant *Phalacrocorax carbo* (non-breeding) & Eider *Somateria mollissima* (non-breeding)

Amey's Invasive Non-native Species (INNS) Database has identified four records of Japanese knotweed *Fallopia japonica* and one record of Himalayan balsam *Impatiens glandulifera* within the scheme extents.

[The NBN Atlas Scotland](#) (2002 – 2022) has highlighted records (via commercially available information) of the following protected species within 2km of the works:

- Soprano pipistrelle *Pipistrellus pygmaeus*
- Brown long-eared bat *Plecotus auritus*

Field survey

A field survey was carried out in August 2021, the ground was largely flat and waterlogged in some areas (as evidenced by the presence of bulrush *Typha latifolia*). The majority of undergrowth comprised of lady fern *Athyrium filix-femina* and rhododendron *Rhododendron ponticum*. A well-worn path was noted throughout the length of the accessible woodland. No other more definitive signs were noted to confirm the presence of protected species in this area. Given the restriction of movement (i.e. stone wall and road/rail lines) and lack of field signs, it is unlikely that this area is inhabited by protected species. No other signs of protected or invasive species were noted during the survey. A follow up survey will not be required.

Consultation

NatureScot were consulted to inform them the works are located in close proximity to designated sites. They were provided with general mitigation measures that will be put in place and also asked for any further comments. They have agreed that there will be no impact on the protected birds of the Inner Clyde European SPA as they will not have arrived back on migration during the period when the works are ongoing.

Geology and soils

The [National Soil Map of Scotland](#) has identified the surrounding local soils to consist of brown soils.

A desktop study using the [British Geological Survey Map](#) has identified major local geology type as the following:

Bedrock

Strathgryfe Lava Member - Mugearite. Igneous Bedrock formed approximately 331 to 345 million years ago in the Carboniferous Period. Local environment previously dominated by eruptions of silica-poor magma.

Superficial

Raised Marine Deposits of Holocene Age - Clay, Silt, Sand And Gravel. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by shallow seas (U).

Material assets and waste

Key Materials Required for Activities

The following materials will be required for the works:

- Road paint
- Filter drain
- Road surfacing
- Binder

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

Key Waste Arising from Activities

The following waste is likely to be produced as a result of the works:

- Road planings
- Road paint/studs
- Road kerbs

Core testing has shown that there is no presence of coal tar in the road planings. The road planings can therefore be recovered and recycled in line with current best practice and legislation.

Noise and vibration

The works are located on a combination of rural and residential area with the Clyde estuary to the north and a mixture of residential areas, woodland & farmland to the south. There are a large number of residential properties within close proximity to the scheme location, the closest of which lies on Main Road, Langbank, at approx. 35m from the scheme.

Baseline noise levels are likely primarily influenced by vehicle traffic from the carriageway, with secondary sources from local agriculture activity.

The scheme falls within a [Candidate Noise Management Area \(CNMA\)](#) - CNMA number 72, A8 Greenock Road - as defined by the Transportation Noise Action Plan, Road Maps.

The Annual Average Daily Traffic Flows (AADT, 2020) at this location is approx. 21,362 vehicles, approximately 4.5% of which consists of Heavy Goods Vehicles (HGVs).

Population and human health

The scheme is located in a semi-rural location. The carriageway does not contain footpaths, cycleways or designated bridleways; however, [Core Path LAN/1](#) runs alongside the westbound carriageway for the entirety of the scheme extents.

One access to residential properties exists within the scheme limits – B789 at NS 37875 73517.

There is one residential access within the scheme extents.

Road drainage and the water environment

The Scottish Environmental Protection Agency's (SEPA) [Water Classification Hub](#) has identified that The Clyde Estuary flows approx. 10m from the scheme at the closest point. This has been given an overall status of 'Moderate Ecological Potential'.

Finlayston Burn (Unclassified by SEPA) flows below the carriageway approx. 500m west of the scheme start and outflows into the Clyde Estuary.

The [Indicative River & Coastal Flood Map](#) by SEPA has highlighted a potential risk of surface water flooding within the scheme extents.

Climate

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).

The Scottish Government has since published its indicative Nationally Determined Contribution (NDC) to set out how it will instead reach Net Zero by 2045, working to

reduce emissions of all major greenhouse gases by at least 75% by 2030. By 2040, the Scottish Government is committed to reduce emissions by 90%, with the aim of reaching net zero by 2045 at the latest.

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.

Description of main environmental impacts and proposed mitigation

Air quality

Impacts

- Traffic Management (TM) for the works is yet to be confirmed, however will likely involve overnight closures, with potential for diversion routes.
 - In the event of a diversion, TM will result in increased traffic levels and associated vehicle emissions on the surrounding local road network, due to requirement for a diversion route.
- The use of vehicles, plant and generators emitting carbon emissions may temporarily affect air quality and will require the use of finite resources.
- On site construction activities carry a potential to produce airborne particulate matter that may have a slight impact on local air quality levels.

Mitigation

- If required, the diversion route will be effectively planned to reduce traffic levels in the surrounding road network to that which is as minimal as possible.
- All works shall operate in accordance with current best practice as outlined in the Guidance on the assessment of dust from demolition and construction (2014) published by the IAQM, which includes the following mitigation relevant to this scheme:
 - When not in use plant and vehicles will be switched off; there will be no idling vehicles.
 - All plant and fuel-requiring equipment utilised during construction shall be well maintained in order to minimise emissions, as per manufacturing and legal requirements.
 - Green driving techniques will be adopted, and effective route preparation and planning shall be undertaken prior to works.
 - Planing operations will be wetted to reduce dust arising.
 - Drop heights to haulage vehicles and onto conveyors will be minimised.
 - Lorries will be sheeted when carrying dry materials.
 - Surfaces will be swept where loose material remains following planing.

Providing all works operate in accordance with current best practice, the residual impact for air is considered neutral.

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

Noise and vibration

Impacts

- Noise from night works has potential to impact on local residents, with potential for disturbance to sleep.
- TS2010 road surfacing is shown to have superior durability and noise reducing features compared to standard road surfacing mixes. Vehicle travellers and nearby receptors will benefit from improved road surfacing as a result of the scheme.

Mitigation

- The Amey E&S team will contact Renfrewshire and Inverclyde Council's Environmental Health Team prior to works starting to notify them of the night works.
- Properties in proximity shall receive a letter drop detailing the work times and activities.
- The noisiest works will be completed before 23:00 where possible.
- Plant/machinery shall be fitted with silencers/mufflers.
- No plant, vehicles or machinery will be left idling when not in use.
- The Noise & Vibration briefing shall be delivered to all site operatives before works start.

Providing all works operate in accordance with current best practice, the residual impact for noise and vibration on nearby receptors is considered neutral, with slight adverse impact predicted during construction.

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

Population and human health

Impacts

- Potential for obstruction to pedestrian access/Core Paths due to presence of works/TM.
- Potential impact to residential access within scheme.
- Traffic management will involve overnight lane closures;

- Potential for increased travel times along this section of carriageway in the event of diversion routes/traffic restrictions.
- Potential for an increase in traffic levels in the surrounding road network in the event of diversion routes.
 - Due to the rural location minimal disruption due to potential delays are expected.
- TS2010 road surfacing will be utilised. TS2010 can improve the skid resistance of the road.
- The use of TS2010 is shown to have superior durability to standard road mixes as such this will extend the life span of the carriageway preventing the need for reoccurring routine maintenance and associated levels of disruption.

Mitigation

- In the event of footway/Core Path obstruction, operatives should install a safe method of passage around the works area.
- In the event of closures and diversion route, advance notice shall be given, with any expected closures advertised within the local and wider area.
- In the event of diversions, these will be effectively planned and clearly signed to reduce potential driver frustration.

Providing all works operate in accordance with current best practice, the residual impact for population and human health is considered neutral.

It has been determined that the proposed project will not have direct or indirect significant effects to population and human health.

Biodiversity

Impacts

- No impact is predicted to the sensitive sites within the scheme extent, by virtue of the following factors;
 - Works will be restricted to the carriageway and will have no physical impact on the surrounding land for which the sites are designated.
 - NatureScot have been consulted and have agreed that, due to the timing of the works, there will be no likely significant effects on the qualifying features of the sensitive sites.
 - Works will be undertaken out with the period that wintering bird species will be present.
 - In the case that works are re-programmed during wintering bird season, a further HRA screening will be undertaken and NatureScot consulted.

- There is potential for protected species to be active within the local surrounding area.
- In the event of night-time programming, misdirected site lighting could cause disturbance to any surrounding nocturnal species.
- In the event of night-time programming, additional noise from construction activities could cause disturbance to any surrounding nocturnal species.
- There is potential for INNS to spread within the scheme extents.

Mitigation

- All temporary lighting will be directional and pointed away from sensitive ecological receptors.
- In the event of observing a protected species on the live working site, all works will temporarily stop until the animal has moved on. The control room will be contacted for environmental record.
- Pollution prevention measures as outlined in the *Road Drainage and the Water Environment* section below will be adhered to during the works.
- Noise mitigation measures as outlined in the *Noise and Vibration* section below will be adhered to during the works.
- In the event of a change to programming resulting in the works being undertaken within the wintering bird period (August-March), the following will be undertaken:
 - Habitats Regulations Appraisal (HRA) Stage 1 Screening will be undertaken by an Amey Ecologist, to determine likely significant effects (LSE), or rule out LSE;
 - NatureScot will be consulted.
- Works should avoid areas of INNS growth where possible. Where works are required to be undertaken within or within close proximity of an area of growth, the following measures are required to prevent spread:
- Plant/equipment and footwear washing facilities must be in place prior to starting construction works.
- Prior to operatives leaving an area of INNS growth, a visual check of all PPE should be undertaken. All soil and plant fragments must be removed from PPE.
- Any cut back INNS, wash water and soils should be contained and redistributed within areas of INNS (it must not be removed from site).
- All plant and equipment must also be thoroughly cleaned and checked to ensure it is free from any soil and plant fragments. As above, this material should be appropriately contained and collected, for redistribution within the contaminated area.

On the condition that best practice is adhered to, residual impact to local biodiversity is considered neutral as a result of the works.

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

Material assets and waste

Impacts

- Contribution to resource depletion through use of virgin materials.
- Greenhouse gas (GHG) emissions generated by material production and transporting to and from site.
- Transportation and recovery of materials/waste will require energy deriving from fossil fuel, a non-renewable source.

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.
- Waste will be treated at a licenced facility to separate useful materials such as metal as far as reasonably practicable, recovering this waste and diverting it from landfill.
- Road planings arising from the scheme will be recycled and reused as a material throughout the network.
- The use of TS2010 would reduce the use of imported aggregates and increase the use of a wider range of sustainable aggregate sources.
- Where possible, materials will be obtained locally, and operatives deployed from the local depot where possible to reduce haulage and scheme associated journeys, reducing impact of associated GHG emissions on climate change.

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

Road drainage and the water environment

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; and,
- There is potential for flooding to occur within the works area.

- In the event of a flooding incident, the works will carry an increased risk of allowing fine sediments/debris to become mobilised in surface water.

Mitigation

- Appropriate measures will be implemented on site to prevent any potential pollution to the natural water environment (e.g. debris, dust and hazardous substances). This shall include spill kits being present onsite at all times, and the use of funnels and drip trays when transferring fuel.
- Debris and dust generated as a result of the works will be prevented from entering nearby watercourses or drains, via the use of drain covers, containment boards or similar.
- Visual pollution inspections of the working area will be conducted in frequency, especially during heavy rainfall and wind.
- Weather reports shall be monitored prior and during all construction activities. In the event of adverse weather / flooding events, all activities should temporarily stop, and only reconvene when deemed safe to do so, and run-off / drainage can be adequately controlled to prevent pollution.

Best practice, as detailed by SEPA's Guidance for Pollution Prevention (GPPs), will always be adhered to onsite. The residual impact for the water environment is considered neutral.

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

Climate

Impacts

- Greenhouse gas emissions will be emitted through the use of machinery, material production, materials used (containing recycled and virgin materials), and transporting to and from site.

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 the above Material Assets and Waste.

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

Vulnerability of the project to risks

Due to the like-for-like nature of the works, 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.

It has been determined that the proposed project is not expected to alter the vulnerability of the existing trunk road infrastructure to risk of major accidents or disasters.

Assessment cumulative effects

Amey's current programme of works does not feature any nearby schemes during the period of June 2022 which may result in a combined effect on nearby receptors, such as vehicular travellers and residential/sensitive properties.

A review of Renfrewshire and Inverclyde Councils traffic notices has not highlighted any works that may have a potential cumulative effect on the local population or users of the carriageway.

Any future Amey schemes will be programmed to take into account already programmed works, and as such any effect (such as from TM arrangements and potential construction noise) will be limited.

Assessments of the environmental effects

Following assessment and provided that mitigation measures are in place and best practice is followed, the residual impact is deemed neutral and there will be no significant effects on the environment.

The following environmental surveys / reviews have been undertaken:

- A design Initial Environmental Review of the scheme, undertaken by the Environmental and Sustainability Team at Amey in September 2021, and updated March 2022.
- High-level HRA screening was undertaken in July 2021 to determine any LSE on nearby sensitive sites, supplemented by consultation with NatureScot.

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) which exceeds 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:

- Materials will be derived from recycled, secondary or re-used origin as far as practicable within the design specifications.
- Construction activities are restricted to the approximate area of 15,664m² of the 23,000m² (2.3ha) area of existing east bound carriageway, from NS 37191 73618 to NS 38702 73182.
- At end of life, components can be recycled, reducing waste to landfill.
- 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 conveys sustainability benefits by significantly reducing the quantity of maintenance interventions required at the location.

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 located within, however is located within proximity to a “sensitive area” as listed under regulation 2 (1) of the Environmental Impact Assessment (Scotland) Regulations 1999 (as amended).
- Consultation with NatureScot confirmed that, due to programming out with the wintering bird period (August to March), no impact is predicted to the quantifying features of the nearby designated sites.

Characteristics of potential impacts of the scheme:

- 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.
- Due to the like-for-like nature of the works, 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.
- The successful completion of the scheme will afford benefits to residential properties in proximity, due to improved condition and ride quality of the carriageway surface, and improved carriageway drainage.
- 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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