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Environmental Impact Assessment Record of Determination

A77 North of Minishant - Resurfacing and Verge Works

GENERAL

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Project Details

Description

Resurfacing works are required to maintain the safety and integrity of a section of the A77 carriageway located south of Ayr as the existing carriageway is displaying surface and structural defects such as fretting, crazing, longitudinal and alligator cracking.

In addition to structural inlays, minor verge works will be carried out, comprising filter stone replacement, vehicle restraint system (VRS) upgrades and footway and layby upgrades.

Resurfacing treatment will include inlays to remove deterioration and reinstate binder layers, with deeper partial reconstructions applied in localised patches where more extensive deterioration is present. The scheme will replace the existing pavement with new Hot Mix Asphalt (HMA) surface course and AC binder layers to ensure consistency, durability and long-term performance. Road studs and lining will be refreshed as part of the scheme.

The following plant and machinery will be required:

- Planer;
- Paver;
- Miller;
- Wagon;
- Roller;
- Excavator; and
- Traffic Management (TM) plant.

The scheme is 1.71 kilometres (km) long, with a total area of approximately 1.4 hectares (ha).

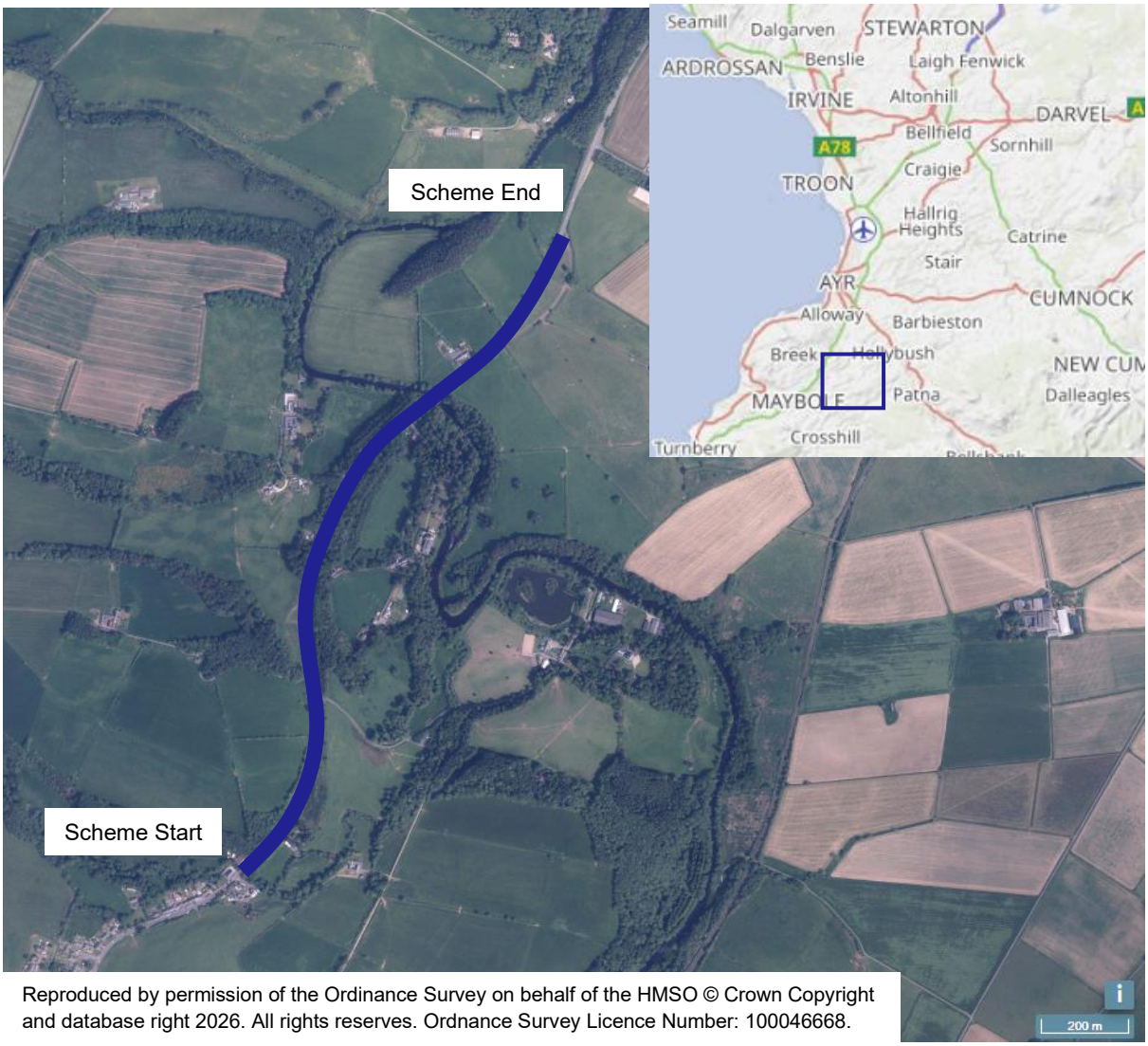
The proposed works are programmed for completion within the 2026-2027 financial year, with construction currently proposed for November 2026. TM will consist of a full road closure, supported by an overnight convoy system. During the closure, northbound traffic will be diverted via the B7023 at Maybole and the A719 towards Ayr, rejoining the A77 at Ayr. Southbound moving traffic will follow the same diversion route in reverse.

The works will be carried out overnight for approximately two-weeks.

Location

This section of the A77 dual carriageway, located north of Minishant, South Ayrshire at the following National Grid References (NGRs) (Figure 1):

- Scheme start: NS 33072 14344
- Scheme end: NS 33797 15798



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Figure 1. Scheme Extents and Location Map.

Description of local environment

Air quality

The A77 is a major carriageway in Scotland, running south-westerly from Glasgow to Portpatrick. The scheme extents cover a rural stretch of the carriageway with baseline air quality likely to be influenced primarily by traffic flow along the A77, with secondary sources from surrounding agricultural activities.

Annual Average Daily Flow (AADF) in 2025 along the A77 within the scheme extents (site number: 94024) was counted at 13,249 total vehicles with 967 (7.3%) Heavy Goods Vehicles (HGVs).

South Ayrshire Council has not currently declared any Air Quality Management Areas (AQMAs).

There are no real-time air quality monitoring stations (Air Quality in Scotland) or any sites on the Scottish Pollutant Release Inventory (SPRI) within 1km of the scheme extents.

There are approximately 25 air quality-sensitive receptors located within 200m, including residential and agricultural properties. The closest receptor is a residential property located 5m from the carriageway at grid reference NS 33059 14345. Refer to the Biodiversity section below for ecological receptors.

Cultural heritage

A desktop study using PastMap has been undertaken, where an asset has been listed more than once its highest statutory designation has been recorded. This refers to designations including World Heritage Sites, Scheduled Monuments, Battlefields and Listed Buildings.

No statutory heritage features fall within the scheme extents, however, two lie within 300m:

- A Category B Listed structure, *Monkwood Bridge over River Doon* (LB1000), which is a single span, round-arched bridge located 8m from the scheme. This lies adjacent to the A77 Monkwood Bridge, with both structures spanning the River Doon.
- A Category B Listed Building, *Brae of Auchendrane with Service Court, Terraces, Gates and Gatepiers* (LB47336) located 180m west.

Historic Environment Records (HERs) and National Records of the Historic Environment (NRHE) provide local and national level information on Scotland's historic environment. There are 15 records listed on the HER and NRHE database located within 200m, with none located within the scheme extents.

Landscape and visual effects

Landscape

The scheme lies within a rural setting, characterised by grazing and arable agricultural land, woodland blocks and dispersed residential and agricultural properties. It falls within the Coastal Headland Landscape Character Type (LCT 62), defined by sparse settlement, exposed landscape and pockets of woodland.

There are no Tree Preservation Orders directly lining the A77 carriageway along the scheme extents. Three areas of woodland designated under the Ancient Woodland Inventory (AWI) line the A77 carriageway within the scheme extents:

- An unnamed area of long-established (of plantation origin) woodland located adjacent to the northbound carriageway (NS329144);
- Blackbyres, an area of ancient (of semi-natural origin) located adjacent to the northbound carriageway (NS331149); and
- An unnamed area of ancient (of semi-natural origin) located adjacent to the northbound carriageway (NS333152).

No areas designated for landscape features or quality such as Garden and Designed Landscapes are located within 500m, or visible to or from the scheme.

Visual

Numerous stationary visual receptors are identified, with varying levels of visual screening between the scheme extents. The closest is a residential property that lies 5m from the carriageway boundary with direct views toward the scheme. This property has an existing open view of the A77 trunk road, woodland and other residential properties.

Transient receptors include road users (motorists, public transport users) travelling along the A77 and users of Walker, Cyclist and Horse-rider (WCH) routes located along the north and southbound carriageway.

Biodiversity

Protected areas

No European sites are located within 2km or have hydrological connectivity with the scheme (Sitelink).

No nationally designated sites, such as Sites of Special Scientific Interest (SSSI) are located within 500m of the works (Sitelink).

Field survey

An ecological field survey was undertaken on the 9 October 2026 by qualified ecologists due the nature of the works, with excavation works within the soft estate required. This identified the following ecological features:

- Invasive Non-Native Species (INNS) of garden privet *(Ligustrum vulgare),* pampas grass *(Cortaderia selloana), rhododendron*, box leaf honeysuckle *(Lonicera nitida),* cherry laurel *(Prunus laurocerasus),* variegated yellow archangel *(Lamium galeobdolon)* and cotoneaster *(Cotoneaster horizontalis).*

Invasive plants

A desktop study using Transport Scotland's Asset Management Performance System (AMPS) has not recorded any INNS within the roadside verges of the scheme extents. It has however identified numerous records of injurious weeds and Transport Scotland target species:

- Rosebay willowherb *(Chamerion angustifolium);*
- Creeping thistle *(Cirsium arvense);* and
- Broad-leaved dock *(Rumex obtusifolius).*

Geology and soils

Geology

The underlying bedrock comprises sedimentary sandstone formations of the Swanshaw Sandstone Member. Superficial deposits comprise sedimentary deposits of Till (Diamicton) and alluvium (clay, silt, sand and gravel) (British Geological Survey Geology Viewer).

There are no Geological Conservation Review Sites (GCRS), Local Geodiversity Sites (LGS) or SSSIs designated for geological features are located within 200m of scheme extents (Sitelink).

The scheme falls within an area underlain by a moderately productive aquifer of the Lanark Group with sandstones, siltstones, mudstones, conglomerates and interbedded lavas (GeoIndex British Geological Survey).

Soils

The local soil type within the scheme extents is recorded as noncalcareous gleys (Scotland's Soils).

Contamination and Land use

The scheme lies within a rural area, with land use predominantly agricultural. The scheme is not located within a coal mining area as defined by the Coal Authority and Mining Remediation Authority. The closest record of a ceased mine is over 700m northwest (GeoIndex British Geological Survey).

Material assets and waste

Materials

HMA will be used for the resurfacing works, with AC base and binder layers. Although Warm Mix Asphalt is a preferred option, HMA has been specified due to the appointed Contractor's plant supply constraints within this region. HMA will provide long-term durability, extending the design life of the carriageway and reducing the need and frequency of future maintenance interventions.

Other materials required will include:

- Road marking materials;
- Road studs;
- Vehicle fuel and oil;
- Verge materials - such filter stones, VRS barriers;
- Grass seed.

Materials will be obtained from recycled, secondary, or re-used origin as far as practicable within the design specifications to reduce natural resource depletion and

associated emissions. For example, the binder and base courses used for resurfacing will contain a percentage of recycled material.

Wastes

Coring investigations have not identified the presence of coal tar within the scheme's treatment depths; therefore, wastes are anticipated to include uncontaminated carriageway planings which will primarily be recycled at a licenced facility, thereby reducing the amount sent to landfill and promoting circular economy practices.

Noise and vibration

The scheme is located within a rural area, where baseline noise levels are primarily influenced by traffic on the A77, with secondary sources from agricultural activities. For AADF details, please refer to the Air Quality section above.

Modelled day-evening-night (L_{den}) noise levels along the scheme range between >70 to 75dB, and night noise levels (L_{night}) for the period 23:00-07:00 range from >65B to 70dB (Scotland's Noise Map).

There are approximately 30 noise-sensitive receptors (NSRs) located within 200m, including residential and agricultural properties. At the closest receptor located 5m from the carriageway (grid reference NS 33059 14345). L_{night} is recorded between >60-65dB.

The works are not located within a Candidate Noise Management Area (CNMA) as defined by Round 3 (2019-2023) or Round 4 (2024-2028) of the Transportation Noise Action Plan (Road Maps) (TNAP).

Population and human health

Given the nature and scale of the proposed works (e.g. transient, like-for-like), a reduced buffer distance of 300m has been adopted for the assessment of Population and Human Health impacts and the identification of associated mitigation measures.

The scheme lies within a rural area, falling within the South Ayrshire council area. Approximately 30 residential properties fall within 300m of the works, the closest is 5m from the carriageway (grid reference NS 33059 14345). Some residential properties have associated agricultural land and farm properties.

No business, educational, community, medical or religious facilities are located within 300m.

The first 150m of the scheme is street-lit, and there is one layby, located along the southbound carriageway. One junction and numerous direct access points to residential and agricultural land are located within the scheme extents.

Footways travel along the length of the scheme extents, adjacent to the northbound carriageway, with dispersed footways located along the southbound carriageway. These provide access to local facilities and residential properties. None are designated as Core Paths or National Cycle Network routes.

Road drainage and the water environment

Surface water

Two classified watercourses are located within 500m of the scheme extents (SEPA Water Classification Hub):

- Culroy Burn/Minishant Burn (ID: 10440) flows beneath the Minishant Bridge, located at the start of the scheme extents. This watercourse exhibits a 'Moderate' quality in 2024 under the Water Framework Directive (WFD).
- River Doon (d/s Muck Water) (ID: 10924) flows beneath the Monkwood Bridge, located within the scheme extents. This watercourse exhibits a 'Good' quality in 2024 under the WFD.

As the scheme lies within a largely rural, agricultural landscape, numerous surface water field drains are located within 500m. There are several drainage assets found within the scheme, including manholes, catchpits, gullies, filter drains, a small culvert and a drainage ditch.

The scheme does not lie within a surface water Drinking Water Protected Area (DWPA).

Groundwater

The scheme lies within the Minishant groundwater body (ID: 150519), with a 'Good' overall condition under SEPA's 2024 classification (SEPA Water Classification Hub). This groundwater area is designated as a Drinking Water Protected Area.

The scheme does not lie within a Nitrate Vulnerable Zone (NVZ), designated by the Scottish Government.

The scheme falls within an area underlain by a moderately productive aquifer of the Lanark Group with sandstones, siltstones, mudstones, conglomerates and interbedded lavas (GeoIndex British Geological Survey).

Flood risk

Localised stretches of the A77 carriageway within the scheme extents are identified at risk of small watercourse or pluvial flooding ranging from 'Low' (0.1%) to 'High' (10%) annual probability (SEPA Flood Maps).

The scheme is not located within a Potentially Vulnerable Area (PVA) for flood risk management within Scotland for the current cycle (2022-2028) or future cycle (2028-2034) of flood risk management planning.

Climate

Carbon Goals

The Climate Change (Scotland) Act 2009 Scottish Carbon Budgets Amendment Regulations 2025 sets out the statutory framework for reducing greenhouse gas (GHG) emissions in Scotland. The prior annual and interim targets have been replaced by five-year carbon budgets, which sets limits on the amount of GHGs that can be emitted in Scotland.

The proposed carbon budgets are aligned with advice from the UK Climate Change Committee (CCC) and calculated in accordance with the 2009 Act. The 2025 Regulations define the baseline years for emissions reductions as 1990 for greenhouse gases including carbon dioxide, methane, and nitrous oxide, and 1995 for others such as hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride (as set out in Section 11 of the Act). The budgets are as follows:

- 2026 - 2030: Average emissions to be 50% lower than baseline.
- 2031 - 2035: Average emissions to be 60% lower than baseline.
- 2036 - 2040: Average emissions to be 80% lower than baseline
- 2041 - 2045: Average emissions to be 94% lower than baseline

These budgets are legally binding and will be supported by a new Climate Change Plan, which will outline the specific policies and actions required to meet the targets.

Transport Scotland remains committed to reducing carbon across Scotland's transport network, this commitment is being enacted through the Mission Zero for Transport. Transport is the largest contributor to harmful climate emissions in Scotland, representing for 37% nationwide, and Transport Scotland are committed to reducing their emissions by 50% by 2030. To support this, Transport Scotland's Fourth Carbon Management Plan is committed to reaching Net Zero emissions

across corporate activities by 2027. This will contribute to achieving a legally binding target of net-zero by 2045.

Amey's Company Wide Carbon Goal is to achieve Scope 1 and 2 net-zero carbon emissions, with a minimum of 80% absolute reduction on our emissions by 2035. Amey is aiming to be fully net-zero, including Scope 3 emissions, by 2040.

Amey are working towards a contractual commitment to have carbon neutral depots on the SW NMC network by 2028. Amey have set carbon goals for the SW NMC contract as a whole to be net-zero carbon by 2032.

Monitoring, Management and Opportunities

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

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

Further information identifying how Amey will obtain the above Carbon Goals can be viewed within the Carbon Management and Sustainability Plan Roadmap to net-zero: STRNMC - South West

Policies and plans

This Record of Determination (RoD) has been undertaken in accordance with Roads (Scotland) Act 1984 (Environmental Impact Assessment) Regulations 2017 (RSA EIA Regulations) along with Transport Scotland's Environmental Impact Assessment Guidance (Guidance – Environmental Impact Assessments for road projects (transport.gov.scot)). Relevant guidance, policies and plans accompanied with the Design Manual for Roads and Bridges (Design Manual for Roads and Bridges (DMRB)) LA 101 and LA 104 were used to form this assessment.

Description of main environmental impacts and proposed mitigation

Air quality

Construction activities have the potential to generate short-term, localised air quality impacts. Dust and fine particulate emissions will be generated during the works, from activities such as milling of the carriageway surface and verges. The presence of increased HGVs and construction plant presence may contribute to short-term exhaust emissions. TM will likely cause congestion and elevated traffic-related emissions during the works.

No likely significant effects are anticipated due to the nature and scale of the works. All air quality effects will be temporary, limited to the construction phase and localised. Following completion of the works, there will be no changes to traffic flow characteristics (composition, speed or flows).

Mitigation measures will follow best practice from the Institute of Air Quality Management (IAQM), from the 'Guidance on the assessment of dust from demolition and construction (January 2024)' including:

- Site layout will be planned (including plant and vehicles) so that machinery and dust causing activities are located away from receptors, as far as reasonably practicable.
- Materials that have a potential to produce dust, such as road planings and excavated verge material will be removed from site as soon as possible (cover or fence stockpiles to prevent wind whipping).
- Drop heights from conveyors and other loading or handling equipment will be minimised.
- Vehicles entering and leaving the work area will be covered/sheeted to prevent escape of materials during transport.
- Equipment will be readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning method.

The following additional mitigation measures will be implemented:

- When not in use, plant and vehicles will be switched off and there will be no idling vehicles.
- All plant and fuel-requiring equipment used during construction will be well maintained to minimise emissions.

No significant air quality effects are anticipated. Therefore, in line with DMRB Guidance document LA 105: Air quality no further assessment is required.

Cultural heritage

The proposed works are restricted to resurfacing, and minor verge works within the existing A77 carriageway boundary. As works will be confined to the previously disturbed ground with no land take or excavations of undisturbed ground, no impacts on known or potential archaeological remains are expected.

Two statutory heritage features lie within 300m, with one, a listed bridge located approximately 8m from the scheme, adjacent to the A77 Monkwood Bridge and spanning the River Doon. However, the works are limited in extent, temporary in nature and will not alter the character, landscape or appreciation of the statutory designation. Therefore, no impacts on the cultural significance of the assets anticipated.

There are 15 records on the HER and NRHE database within 200m, with none located within the scheme extents. The works are not expected to result in any adverse impacts to the records.

There will be no changes to the road alignment or land take, with no lasting changes to views or quality, and therefore no operational impacts on cultural heritage.

The following mitigation measures will be in place:

- Plant and machinery will be stored within the carriageway boundary where practicable.
- Any access beyond the carriageway will be minimised and ideally limited to foot access.
- Site operatives will be made aware of the location of the designated assets within 300m, with no storage of plant, vehicles, machinery within proximity to the designated assets.

No significant effects are anticipated to cultural heritage. Therefore, in line with DMRB Guidance document LA 106: Cultural heritage assessment, no further assessment is required.

Landscape and visual effects

The works involve resurfacing of the existing carriageway, and verge works comprising upgrading VRS, filter drains and lay-by and footway surfacing.

The completed scheme will not result in the introduction of notable new visual features or landscape change and will not detract from overall landscape quality or distinctiveness. As such, no significant landscape or visual effects are anticipated.

Visual impacts will be limited and temporary. Stationary visual receptors are likely to experience close and direct, yet short-term views of the works, including artificial lighting and construction presence. However, effects will be limited as all activities are to take place overnight for approximately two-weeks.

Three areas of AWI woodland are located adjacent to the scheme extents. As all works will be restricted to the existing carriageway and immediate verge, and no vegetation clearance is required, there is no anticipated impact to the woodland areas.

The following mitigation measures will be in place:

- The site will be kept clean and tidy throughout all stages of the works, with appropriate storage of materials, equipment, plant and waste.
- Works will avoid encroaching on land and areas where work is not required or not permitted, including for storage and parking.
- Directional site lighting will be used to minimise visual impacts.

No significant effects are anticipated upon the landscape and visual effects. Therefore, in line with DMRB Guidance document LA 107: Landscape and visual effects no further assessment is required.

Biodiversity

Construction activities have the potential to cause temporary adverse impacts on biodiversity due to vehicle presence, noise and artificial site lighting during the night-time works. These may disturb protected species within the scheme surroundings.

Excavation works within the verge have the potential to spread INNS, injurious weeds or target species that may be present along the verge. As such, the following measures will be implemented during the works, to avoid the risk of spread:

- No works will be carried out within appropriate buffer zones of the INNS identified. Where this is not possible, method statements will be prepared by a qualified ecologist prior to the works and adhered to on site.
- Any access beyond the carriageway surface will be limited to only that required to facilitate any verge works. Biosecurity measures will be in place including the inspection and cleaning of footwear, plant and machinery.

- Site operatives will be briefed on Amey's Invasive Plants environmental briefing prior to the works.

Drainage infrastructure and surrounding watercourses pose a potential pathway to pollute aquatic habitats, particularly during milling operations and periods of heavy rainfall (see Road Drainage and the Water Environment section for further details).

No lasting impacts are anticipated, as the scheme will not alter or fragment any habitats, or introduce new lighting features.

The following mitigation measures will be adhered to:

- A 'soft start' procedure with regard to plant, machinery and vehicles will be implemented daily to gradually increase noise levels and minimise disturbance.
- Directional site lighting will be used, aimed away from sensitive ecological features such as woodland and watercourses.
- If a protected species is encountered, works will be paused and advice sought from Amey's Ecology Team.
- Additional pollution prevention measures are detailed in the Road Drainage and the Water Environment section.

With these mitigation measures in place, no significant effects are predicted for biodiversity. Therefore, in line with DMRB Guidance document LA 108: Biodiversity no further assessment is required.

Geology and soils

There is potential for minor and temporary disturbance of superficial soils during excavation works within the verge. Exposed soils may be vulnerable to accidental pollution incidents through spillage of fuels or oils. The use of heavy plant and machinery such as excavators within the soft estate may result in localised soil compaction, affecting soil structure and permeability within the immediate working area.

Given that the proposed works are limited to carriageway resurfacing and minor verge works within localised stretches, no significant impacts on geology and soils are anticipated.

The following mitigation measures will be implemented:

- Excavated soils will be re-used on site as far as reasonably practicable, i.e. for backfilling.
- Appropriate grass reinstatement will be carried out on completion of the works.

- Appropriate dust control measures will be implemented during construction to minimise the risk of dust deposition on adjacent soils during verge works. This will include, damping down exposed surfaces and excavated materials during dry and windy conditions. Where there are temporary stockpiles of soils, filter stones and other granular material, these will be appropriately managed and retained on site for the shortest practicable duration to reduce the potential for windblown dust.
- Vehicles will not be stored or parked on grass verges to reduce the risk of soil compaction and contamination from accidental leaks or spills.

Additional measures are detailed in within the Road Drainage and Water Environment section.

No operational impacts to geology and soils are anticipated as the scheme will not have any ongoing effects or disturbance to geology or soils.

With mitigation measures in place, no significant effects are anticipated on geology and soils. Therefore, in line with DMRB Guidance document LA 109: Geology and soils no further assessment is required.

Material assets and waste

There is potential for resource depletion through the use and transportation of primary materials such as aggregates. However, the use of HMA provides long-term durability, extending the design life of the carriageway and reducing the frequency of future resurfacing interventions.

Potential impacts related to pollution from materials and waste may result if these are not appropriately managed during construction. Therefore, the following regulatory requirements will be adhered to:

- The Contractor is responsible for the management and disposal of road planings arising from the works. All waste will be managed in accordance with the Environmental Authorisations (Scotland) Regulations 2018, under the relevant SEPA waste authorisation for recovery, reuse or disposal. For example, uncontaminated road planings will be prioritised for recovery or reuse, through recycling into new asphalt, in line with the waste hierarchy. Landfill disposal will only be considered where recovery or reuse options are not available or practicable.
- Waste will be transferred to SEPA-authorised facilities by carriers with valid waste carrier registrations. A waste transfer note (WTN) will be completed for removal of waste from site and retained for two years, in line with statutory Duty of Care requirements.
- A Site Waste Management Plan (SWMP) is required as the scheme value exceeds £350,000. This will detail how resource use and waste arising from the

works will be managed throughout the scheme. This will help control and reduce the amount of waste produced, resulting in less landfilled waste.

The following mitigation measures will be implemented:

- Waste will be stored in suitable, covered containers, and segregated at the source where possible.
- The waste hierarchy (Reduce, Reuse, Recycle and Dispose) will be employed throughout the construction works.
- Good materials management methods (e.g., 'just-in-time' delivery) will be used to minimise and prevent the disposal of unused materials.
- Containment measures will be in place to prevent debris or pollutants from entering the surrounding environment.
- Operators will have a duty of care ensure the safe handling, storage, and transfer of waste. This includes maintaining proper documentation and ensuring that waste is only transferred to licensed carriers.

With best practice mitigation measures in place, no significant effects are predicted for materials and wastes. Therefore, in line with DMRB Guidance document LA 110: Material assets and waste no further assessment is required.

Noise and vibration

Construction activities, including milling and excavation and the operation of plant, machinery and construction vehicles may generate temporary increases in noise and vibration. TM and associated congestion may also contribute to short-term increases in traffic noise along the proposed diversion route, however, such effects will be brief and limited to the short construction period.

No adverse operational noise or vibration impacts are anticipated. The improved road surface and associated verge works will not change the traffic speed, flows or composition, and ambient noise levels are expected to return to pre-construction conditions or may be slightly reduced due to the improved surfacing.

Mitigation measures follow Best Practicable Means as outlined in British Standard (BS) 5228:2009+A1:2014. The standard provides specific detail on suitable measures for noise control in respect to construction operations; for example:

- Quiet working methods will be employed, including use of the most suitable plant, reasonable hours of working for noisy operations, and economy and speed of operations.

- Effects from noise will be kept to a minimum through the use of appropriate mufflers and silencers fitted to machinery. All exhaust silencers will be checked at regular intervals to ensure efficiency.
- Operations will be sequenced to minimise simultaneous use of high-noise equipment, and a 'soft start' to works will be in place, whereby plant, machinery and vehicles are started sequentially as opposed to simultaneously.
- Plant and machinery will be regularly maintained to prevent excessive noise from worn parts or inefficient operation.
- On-site construction tasks will be programmed to be as efficient as possible, with a view to limiting noise disruption to local sensitive receptors. Where night-works are to be undertaken, the noisiest works will be undertaken before 23:00 where possible.

The following further mitigation measures related to noise and vibration will be in place:

- Delivery of Amey's Noise and Vibration environmental briefing to all site operatives prior to the works.
- Notification to South Ayrshire Council Environmental Health Team due to night-time programming.
- Letter drops to NSRs to provide advance notification of the works and the programming schedule.
- Pre-notification of the works through appropriate signage, and/or social media to inform local residents and road users of the upcoming works.

With best practice mitigation measures in place, no significant effects on noise and vibration are predicted. Therefore, in line with DMRB Guidance document LA 111: Noise and vibration no further assessment is required.

Population and human health

Construction activities may result in short-term disruption to road users through temporary TM, noise, delays, and increased journey times.

Direct access to properties will be maintained where the sole point of access is from within the scheme extents. Local residents and road users will be informed of the programme and duration of the works through letter drops, pre-construction notifications, social media release and signage on approach to scheme extents. South Ayrshire Council Environmental Health Team have also been notified of the works.

The layby within the scheme extents is likely to require temporary closure during the works, however, with no permanent change to access or provision post-construction.

Human health determinants such as noise, and air quality will likely experience temporary increases, however, due to the nature and scale of the works no discernible health impact is expected.

Where footway improvement works are required, short-term temporary closures of the footways along the scheme extents will be required. However, alternative provisions and/or signposted diversions will be implemented. The scheme does not permanently remove or sever any existing WCH routes or reduce connectivity to residential properties, businesses, agricultural land or community assets and land, and as such, no adverse long-term changes to WCH movement, community connectivity or population and human health are anticipated.

Please refer to the Landscape and Visual Effects section above for an assessment of the visual impacts to visual receptors.

With best practice mitigation measures in place, no significant effects on population and human health are anticipated. Therefore, in accordance with DMRB Guidance document LA 112: Population and human health, no further assessment is required.

Road drainage and the water environment

Construction activities may pose short-term pollution risks to the water environment through accidental spills of fuels, oils, chemicals, concrete wash water, or road planings which could enter surface runoff, drainage systems and nearby surface watercourses.

Two surface watercourses travel beneath the scheme extents, however, there will be no in-water works, abstraction or transfers of water from, or discharges to a waterbody, and therefore the potential for a pollution incident within a waterbody is unlikely.

The scheme lies within a groundwater DWPA; however, the works are limited to resurfacing of the existing carriageway and localised verge excavations not at depth to impact groundwater quality.

The works will not increase flood risk as there will be no increases in impermeable surface area. Replacement of the existing filter stone may provide a minor beneficial effect by improving the drainage system where localised siltation has occurred.

No other post construction impacts are anticipated.

The following best practice and pollution prevention and control measures will be in place:

- All operatives will follow NetRegs Guidance for Pollution Prevention (GPP) documents.
- 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 both during and following the works.
- All site operatives will be made aware of site spillage response procedures and in the event of a spill all works associated with the spill will stop, and the incident reported. Spill kits will also be available within all site vehicles and spill kits will be replenished on site when required.
- The Amey control room will be contacted if any pollution incidences occur (24 hours, 7 days a week).
- In the event of a pollution incident, SEPA will be notified without delay.
- Where possible, biodegradable lubricant and biodegradable hydraulic oil in plant will be used.
- Weather reports will be monitored prior to and during the works with all construction activities temporarily halting in the event of adverse weather or a 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.
- All storage areas (fuels, machinery, plant, materials) where required will be located and stored:
  - Away (>10m) from surface water drainage systems; and
  - Away from areas that see high vehicular movement (as far as reasonably practicable) to prevent damage by collision or extremes of weather.
- Fuels stored within a drip tray, bund or other form of secondary containment with at least 110% of the maximum volume of a single container.
- Where refuelling on site is required, there will be designated refuelling areas, located more than 10m from surface water drainage systems, and within hard standing and bunds to prevent leaks or spills escaping.
- Concrete mixing and washing areas will be located within a designated, impermeable area and at least 10m from surface watercourses and drainage systems.
- Delivery of Amey's Water Pollution Prevention environmental briefing to all site operatives prior to the works.

With mitigation measures in place, no significant effects are anticipated on the water environment. Therefore, in line with DMRB Guidance document LA 113: Road drainage and the water environment no further assessment is required.

Climate

The use of HMA provides long-term durability, extending the design life of the carriageway and reducing the frequency of future resurfacing interventions. This can result in lower whole-life GHG emissions by reducing the demand for construction materials transportation and maintenance activities over the lifespan of the carriageway.

Construction activities may result in GHG emissions from vehicles, machinery, material production, and transportation. However, given the nature of the scheme, the volume of materials required to be imported on site is low, reducing the overall impact.

The following mitigation measures will be in place:

- Where possible, materials and suppliers will be sourced locally to reduce GHG emissions associated with travel distance.
- Waste disposal will be directed to local licensed facilities.
- Plant, machinery and vehicles will not be left idling when not in use.
- Further actions and considerations for this scheme are detailed in the above Material Assets and Waste section.

With best practice mitigation measures in place, no significant effects are anticipated on Climate. Therefore, in line with DMRB Guidance document LA 114: Climate, no further assessment is required.

Vulnerability of the project to risks

Construction activities are confined to the carriageway boundary and immediate verges, thereby reducing the risk of major accidents or environmental disasters. Furthermore, TM will be designed in line with existing guidance and will comprise of a temporary overnight convoy system and localised diversion routes.

Considering the above, the vulnerability of the project to of major accidents and disasters is considered to be low.

Assessment of cumulative effects

During construction, the works may result in minor, temporary disturbances such as short-term, changes to noise, vibration and air quality. However, given the limited

scale, duration and localised nature of the scheme, no significant environmental impacts are anticipated.

A review of South Ayrshire Council's Planning Portal has identified one extant planning application within 500m of the works, comprising the alteration and extension to an existing bar/restaurant, part change of use of existing staff accommodation to form retail, formation of staff dwelling flat, alterations to existing access and formation of car parking and internal roads (26/00315/APP). However, this is not anticipated to result in cumulative effects with the proposed resurfacing works due to the nature, and proposed timescales associated with the planning proposal.

The Scottish Road Works Commissioner's Interactive Map has not identified any works on the A77 or surrounding road network that would result in cumulative effects.

At present, Amey's current programme of works has not identified any other works on the A77 that will be undertaken concurrently or in conflict with the proposed works. All works are programmed in line with appropriate guidance and contractual requirements, with consideration given to existing and future planned activities. Therefore, any future schemes will be programmed to consider already existing works and as such any effect (such as from TM arrangements and potential construction noise) will be limited.

The scheme is not anticipated to have significant environmental effects having regard to its nature, scale and location. The residual impacts arising from the works can be mitigated and thus no cumulative or in-combination effects are anticipated.

Assessments of the environmental effects

As detailed in the Description of Main Environmental Impacts and Proposed Mitigation section within this Record of Determination, there are no significant effects anticipated on any environmental receptors as a result of the works.

An Environmental Scoping Assessment, Preliminary Ecological Walkover and consultation with South Ayrshire Council have been undertaken in October 2026 by Amey's Environment and Ecology Team.

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:

The works are limited in scope, short-term and confined to the existing carriageway and immediate verge. No significant disturbance to protected species or sensitive habitats is anticipated and the risk of major accidents or disasters is low. Any environmental effects are expected to be temporary and restricted to the construction phase, with no adverse operational impacts. The scheme is expected to deliver minor positive operational effects for road users and nearby receptors through the improved road surface, drainage improvements and safety barriers. No in-combination or cumulative effects have been identified.

Location of the scheme:

The scheme is not located within 2km or has hydrological connectivity with any European site.

The works do not lie within any areas designated for historical, cultural or landscape significance.

Characteristics of potential impacts of the scheme:

Appropriate measures will be implemented to ensure appropriate removal and disposal of waste, alongside containment measures to prevent debris and pollutants from entering the surrounding environment. Measures to minimise the potential disturbance to protected species will also be in place.

Overall, any environmental effects arising from the works are expected to be temporary, minor and confined to the construction phase with no significant or long-term impacts. No in combination effects with other projects or works have been identified.

References of supporting documentation

An Environmental Scoping Assessment undertaken in October 2026.

A Preliminary Ecological Walkover undertaken in October 2026.

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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