transport.gov.scot



Environmental Impact Assessment Record of Determination

M90 Friarton Bridge Emergency Resurfacing and Bridge Deck Repairs

Contents

Project Details	3
Description	3
Location	3
Description of local environment	6
Air quality	6
Cultural heritage	6
Landscape and visual effects	7
Biodiversity	7
Geology and soils	8
Material assets and waste	8
Noise and vibration	9
Population and human health10	С
Road drainage and the water environment10	С
Climate12	1
Policies and Plans12	2
Description of main environmental impacts and proposed mitigation	3
Air quality13	3
Cultural heritage14	4
Biodiversity14	4
Material assets and waste16	6
Noise and vibration	7
Population and human health17	7
Road drainage and the water environment18	8
Climate20	С
Vulnerability of the project to risks22	1
Assessment cumulative effects22	1
Assessments of the environmental effects22	2
Statement of case in support of a Determination that a statutory EIA is not required	2
Annex A24	4

Project Details

Description

The works are required to maintain the safety and integrity of the M90 carriageway upon the Friarton Bridge structure within Perth, Perth and Kinross. The carriageway upon the structure has several deep potholes which currently expose two layers of reinforcement in the deck slab which pose a serious risk to road users. The Amey emergency response team have undertaken temporary repairs to these potholes as an interim measure, however, due to bridge traffic volumes and the amount of movement of the bridge deck, these repairs are required frequently and are thus not a viable long-term option for the safety of the Friarton Bridge carriageway and its users.

Construction activities will involve the implementation of Traffic Management (TM) followed by the removal of the existing defective bridge surface surrounding the potholes (both northbound and southbound). This will be followed by concrete repairs to the bridge deck, with the reinstatement of waterproofing also being undertaken. A new road surface will then be laid in areas requiring improvement with treatment followed by the removal of TM.

The total area of works is approximately 16,620m². This is the span of the Friarton bridge structure as a whole.

Plant/machinery/vehicles required for these works are as follows:

- TM vehicles;
- Cement mixer(s);
- Hand tools; and
- Asphalt hot box.

Works are programmed to commence prior to the end of 2023/2024 with the scheme proposed to last for approximately two consecutive nights. Works are only programmed to take place during night-time and the TM will entail a full carriageway closure on and approaching the Friarton Bridge structure with diversions in place.

Location

The scheme is located in an urban area of Perth, Perth and Kinross on the Friarton Bridge (M90 carriageway). The National Grid Reference (NGR) start/end coordinates

of the scheme are detailed below while the scheme location is illustrated in both Figure 1 and Figure 2.

- Scheme start: NO 13028 21564
- Scheme end: NO 13183 21902.



Environmental Impact Assessment Record of Determination Transport Scotland



Figure 1: Location of the scheme within eastern Scotland. Contains public sector information licensed under the Open Government Licence v3.0. Contains OS data © Crown copyright and database right [2023]. Contains Royal Mail data © Royal Mail copyright and database right [2023]. Contains National Statistics data © Crown copyright and database right [2023].

Description of local environment

Air quality

The scheme is located within an urban area of Perth, Perth and Kinross. Approximately five residential properties are located within 200m of the scheme, with the closest of these being located approx. 120m east of the scheme extents. With regard to non-residential air quality receptors, Willowgate Activity Centre is located approx. 225m east of the scheme.

Perth & Kinross Council has declared two <u>Air Quality Management Areas (AQMAs</u>) at Perth City and Crieff High Street. Perth City AQMA is declared for its levels of particulate matter of a diameter less than 10 micrometres (PM₁₀) and nitrogen dioxide (NO₂) and the M90 carriageway at Friarton Bridge is located within this designation. Crieff High Street AQMA is declared for its levels of PM₁₀ and NO₂ and is located approx. 26km west of the proposed scheme extents.

In 2021, this area of carriageway (<u>count point 40770</u>) had an Annual Average Daily Flow (AADF) of 36,080 vehicles, with 3,736 of these being Heavy Goods Vehicles (HGVs).

Cultural heritage

A desktop study using <u>PastMap</u> has identified the following features of cultural heritage within 300m of the scheme:

- Perth, Friarton Bridge; Bridge: Historic Environment Record (HER) (Ref: MPK6428) – Located within the scheme extents;
- River Tay/Perth: HER (Ref: MPK 3471) Located within the scheme extents;
- River Tay, Limeyhaugh Fishing Lodge: HER (Ref: MPK7000) Located approx.
 60m west of the scheme extents;
- Friarton Bridge: HER (Ref: MPK3640) Located approx. 120m southwest of the scheme extents;
- Lairwell House: HER (Ref: MPK15005) Located approx. 135m east of the scheme extents;
- West Lodge, Kinfauns Castle, Gatepiers: Listed Building (Ref: LB11962) Located approx. 210m northwest of the scheme extents; and
- Perth; Sailing Club HER (Ref: MPK 8662) Located approx. 225m east of the scheme extents.

Landscape and visual effects

The surrounding landscape has been classified as a mixture of rectilinear farms and fields, recreation area and industrial and commercial land by <u>Scotland's Historic</u> <u>Land-Use Map</u>.

A desktop study using <u>PastMap</u> has not identified any areas designated for their landscape quality within 1km of the scheme extents.

Views of, and from the carriageway will be temporarily affected during construction due to the presence of works, TM and plant. As the works are minor and operating on a like-for-like basis, no permanent changes to landscape features are predicted.

Works will be restricted to the existing carriageway boundary and will not impact upon the surrounding landscape. As such, impact to local landscape has been assessed as being 'no change' and has been scoped out of requiring further assessment.

Biodiversity

The area surrounding the carriageway upon the structure is unvegetated due to the elevation and general nature of the structure. The area below the Friarton Bridge contains the River Tay and areas of recreation, farmland, rough grazing and small areas of roadside woodland. <u>Scotland's Ancient Woodland Inventory</u> has identified the Deucheny Wood located approx. 360m north of the scheme extents within the Kinnoull Hill area of Perth.

A desktop study using Nature Scot's <u>Sitelink</u> online interactive map has highlighted the River Tay Special Area of Conservation (SAC) (NatureScot site ID: 8366) flowing below the Friarton Bridge structure. This resource has also identified the Kinnoull Hill Site of Special Scientific Interest (SSSI) (site ID: 861) located approx. 500m north of the scheme.

<u>The National Biodiversity Network (NBN) Atlas</u> has not indicated any records of Invasive Non-Native Species (INNS) within the scheme extents however, occurrences of Japanese knotweed (*Fallopia japonica*) (one record), giant hogweed (*Heracleum mantegazzianum*) (five records) and Himalayan balsam (*Impatiens* glandulifera) (three records) have been identified within 500m of the scheme extents. The closest of these records is giant hogweed below the Friarton Bridge structure with no records on the structure itself.

Geology and soils

<u>The National Soil Map of Scotland</u> has identified the soil present surrounding the Friarton Bridge structure as brown earth soils.

<u>The British Geological Society Geology Viewer</u> has identified the bedrock geology beneath the structure as that of Ochil Volcanic Formation - Conglomerate. Sedimentary bedrock formed between 419.2 and 393.3 million years ago during the Devonian period. This resource has identified the superficial deposits present surrounding the structure as that of Alluvium - Clay, silt, sand and gravel. Sedimentary superficial deposit formed between 11.8 thousand years ago and the present during the Quaternary period.

A desktop study using Nature Scot's <u>Sitelink</u> online interactive map has highlighted the Kinnoull Hill SSSI (site ID: 861) located approx. 500m north of the scheme. This area is designated as a SSSI for ecological features as well as its cliffs. The cliffs present at the site are important for their exposure of geological dykes in Corsiehill Quarry of which assist in explaining Scotland's geological history.

As the works will be restricted to the existing carriageway boundary and previously engineered layers, it has been determined that the proposed project does not carry the potential to cause direct or indirect impact to geology or soils. As such, impact has been assessed as being 'no change' and has been scoped out of requiring further assessment.

Material assets and waste

Key Materials Required for Activities				
Activity	Material Required	Origin/ Content		
Site Construction	 Bituminous surfacing materials; Thermoplastic road markings (where relevant); Cementitious repair materials; Bridge waterproofing; Vehicle fuel; Oil; and Lubricant. 	A proportion of reclaimed asphalt pavement (RAP) is used in asphalt production. Typical RAP values for base and binder are 10% -15% with up to 10% in surface course. Material should come from a suitable source using as few virgin materials as possible. Depending on the condition of concrete, concrete can be recycled and act a replacement for gravel.		

Table 1: Key materials required for activities.

Environmental Impact Assessment Record of Determination Transport Scotland

Key Materials Required for Activities			
	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 will reduce the usage of imported aggregates and increase the use of a wider range of sustainable aggregate sources.		

Table 2: Key waste arising from activities.

Key Waste Arising from Activities				
Activity	Waste Arising	Disposal/ Regulation		
Site Construction	 Road planings (inert bituminous materials); Removed iron/metal/plastic components; Broken out concrete; and Concrete wash water. 	Uncontaminated road planings generated as a result of the works, will be fully recycled in accordance with the criteria stipulated within the Scottish Environment Protection Agency (SEPA) document ' <u>Guidance on the Production of</u> <u>Fully Recoverable Asphalt</u> <u>Road Planings.</u> ' All waste must be transported by suitable licenced contractor and must be accompanied by correctly completed waste transfer note.		

Noise and vibration

This section of the M90 carriageway is surrounded by farmland, industrial and commercial properties, residential properties and recreational areas. In 2021, this area of carriageway (count point 40770) had an AADF of 36,080 vehicles with 3,736 of these being HGVs.

With regard to noise sensitive receptors, approximately seven properties are present within 300m of the scheme extents. The closest property is located approximately 120m east of the scheme extents. Thin areas of woodland and the general elevation

of the structure compared to the surrounding landscape provide an element of natural and man-made screening.

Baseline noise is likely to be influenced by vehicle traffic from the M90 carriageway and nearby agricultural/industrial activities (with potential for urban activities to influence baseline noise levels). <u>Scotland's Noise Map</u> has indicated that modelled day-time noise levels (Lden) around the scheme extents show levels ranging from 75-80dB within 20m of the carriageway, 60–75dB within 120m carriageway and 55-60dB beyond 120m of the carriageway. Modelled night-time levels (Lnight) show levels of 65-70dB within 40m of the carriageway and 55-65dB within 60m.

This section of the M90 carriageway is not designated as a <u>Candidate Noise</u> <u>Management Area (CNMA)</u> as defined by the Transportation Noise Action Plan, Road Maps.

Population and human health

The surrounding landscape has been classified as a mixture of rectilinear farms and fields, recreation area and industrial and commercial land by <u>Scotland's Historic</u> <u>Land-Use Map</u>. Approximately seven properties are present within 300m of the scheme extents. The closest property is located approximately 120m east of the scheme extents.

This section of the M90 carriageway is unlit and there are no laybys, bus stops or pedestrian footways within the proposed scheme extents. No access roads are present within the scheme extents. On and off-slip roads are present beyond the Friarton Bridge extents both northbound and southbound which link the M90 carriageway with the A85 carriageway (northbound) and the M90 westbound carriageway (southbound).

No <u>Perth and Kinross Council Core Paths</u> are present within the scheme extents however, Core Path WCAR/50 is present beneath the Friarton Bridge structure and Core Paths WCAR/1 and WCAR/119 are present approximately 150m east of the scheme extents. No <u>National Cycle Network</u> routes are present within 300m of the scheme extents.

Road drainage and the water environment

A desk study using the SEPA <u>Water Classification Hub</u> has identified the River Tay (site ID: 6498) flowing below the Friarton Bridge structure. This watercourse is classified as having 'Moderate Ecological Potential' under the Water Framework Directive (WFD).

<u>SEPA's Flood Map</u> has identified areas (both northbound and southbound) of the M90 carriageway on the Friarton Bridge as being at a 'Medium' (0.5%) risk of surface water flooding each year. The areas surrounding and beneath the Friarton Bridge structure are at a 'High' (10%) risk of river water flooding each year.

The M90 carriageway on the Friarton Bridge is drained via top-entry gullies for the full extent of the scheme.

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 (GHG) 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.

Transport Scotland is committed to reducing carbon across Scotland's transport network, this commitment is being enacted through the <u>Mission Zero for Transport</u>. Transport is the largest contributor to harmful climate emissions in Scotland. In response to the climate emergency, TS are committed to reducing their emissions by 75% by 2030 and to 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 NE NMC network by 2028. Amey have set carbon goals for the NE 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 – North East.

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 (<u>Guidance – Environmental Impact Assessments for road projects</u> (transport.gov.scot)). Relevant guidance, policies and plans accompanied with the Design Manual for Roads and Bridges (<u>Design Manual for Roads and Bridges</u> (DMRB)) LA 101 and LA 104 were used to form this assessment.

Description of main environmental impacts and proposed mitigation

Air quality

Impacts

- On site construction activities carry a potential to produce airborne particulate matter and generate emissions that may lead to a temporary decrease in local air quality.
- TM may result in a slight increase in associated vehicle emissions within the surrounding road network and local areas, which may cause a temporary decrease in local air quality.
- The Perth City AQMA and Crieff High Street AQMA will not be impacted by this scheme due to the general short-term nature of the works, and their location within an open area (i.e. no canyon effect caused by high-sided buildings) of the Perth AQMA.

Mitigation

- The following best practice as outlined in the <u>Guidance on the assessment of</u> <u>dust from demolition and construction (2014)</u> published by the Institute of Air Quality Management (IAQM) will be followed:
 - All plant and fuel-requiring equipment utilised during construction will be well maintained in order to minimise emissions.
 - $\circ~$ All vehicle engines will be switched off when stationary.
- Planing operations will be wetted to reduce dust arising.
- Drop heights to haulage vehicles and onto conveyors will be minimised where practicable.
- Lorries will be sheeted when carrying dry materials.
- Surfaces will be swept where loose material remains following planing.
- Green driving techniques will be adopted, and effective route preparation and planning will be undertaken prior to works.
- The Amey E&S Team has contacted Perth & Kinross Council in June 2023 and February 2024 due to the proximity of the proposed scheme to the Perth City AQMA This consultation included information on the scheme and the proposed mitigation measures. Perth & Kinross Council responded on the 14th of June

2023 and in February 2024 with no further comments/recommendations regarding the scheme.

The residual significance of effect on air quality is deemed to be neutral. Therefore, in accordance with DMRB Guidance document LA 105: Air Quality, no further assessment is required.

Cultural heritage

Impacts

- Construction activities have the potential to temporarily disturb the setting of the cultural heritage assets within 300m of the scheme due to the presence of plant, machinery and TM.
- Works in areas contained within an HER site will not repurpose the nature of the designation and will be made to ensure the long-term viability and structural integrity of the designated structure (the Friarton Bridge).

Mitigation

- Should the nature of the works change, the Amey E&S team will be contacted prior to works commencing.
- Site operatives will be made aware of the cultural heritage designations within 300m of the scheme and their locations in regard to the scheme extents.
- All plant, machinery and materials will be stored within the carriageway boundary at all times.

The residual significance of effect on cultural heritage is deemed to be neutral. Therefore, in accordance with DMRB Guidance document LA 106: Cultural Heritage, no further assessment is required.

Biodiversity

Impacts

- During night-time programming, misdirected site lighting could cause temporary disturbance to any surrounding nocturnal species.
- During night-time programming, additional noise from construction activities could cause temporary disturbance to any surrounding nocturnal species.
- There is potential for protected species to be active within the surrounding area and for the works to result in disturbance to these species.

- Due to the nature of the structure, it is highly unlikely that INNS will be present on the Friarton Bridge structure.
- The Kinnoull Hill SSSI and the Deucheny Wood Ancient Woodland will not be detrimentally impacted by the scheme due to the proximity of the designations from the Friarton Bridge structure and the minor, localised nature of the scheme.
- There is potential for the works to impact upon the designated European site (River Tay SAC) located below scheme extents. Pollution incidents have the potential to impact upon this site and the habitats they are designed to protect. A Stage 1 Habitats Regulations Appraisal (HRA) has been undertaken for this scheme and has concluded that there will be no likely significant effects on the designated site. The minor nature of the scheme combined with its transient and unintrusive nature regarding the surrounding environment has allowed for this conclusion.

Mitigation

- All temporary lighting will be directional and pointed away from sensitive ecological receptors (such as the SAC and the adjacent woodland) to minimise disturbance to protected species. Directional lighting will be used for all construction activities where works are required at night. This will include avoiding light spill onto watercourses and adjacent woodland parcels. Lighting will be restricted to the top deck and spill over to the underside of the bridge will be avoided.
- Plant, machinery and vehicles will be switched off when not in use to minimise disturbance. Noise and vibration should be kept to a minimum to minimise disturbance to these species.
- In the event of observing a protected species on the live working site, all works will temporarily stop. The protected species will not be approached and the area isolated until the animal has moved on.
- All works and storage of plant, machinery, vehicles and equipment will be restricted to the boundary of the carriageway.
- Noise mitigation measures as outlined in the Noise and Vibration section below will be adhered to during the works.
- Mitigation measures detailed in the Road Drainage and the Water Environment section below will be adhered to during the works.
- The scheme has been reviewed by an ecologist who has concluded that due to the transient nature of the works and the requirement of the works to be contained within the carriageway, a site survey is not required. The works in question will be like-for-like in nature and with the control measures detailed in this document in place, combined with the Stage 1 HRA being undertaken and

concluding no likely significant effects, the residual significance of effect on biodiversity is considered neutral. Therefore, in accordance with DMRB Guidance document LA 108: Biodiversity, no further assessment is required.

Material assets and waste

Impacts

- 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.
- The works will result in contribution to resource depletion through use of virgin materials.
- Greenhouse gas (GHG) emissions will be generated by material production and transportation 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 and associated emissions.
- It is Amey policy to reuse or recycle as much waste material as possible. Where recycling is not feasible, waste material will be removed to a licenced waste facility.
- Where possible, different waste streams will be separated at the source.
- Waste will be stored in suitable containers and covered.
- Following on-site coring investigations and testing, no coal-tar was identified within the surfacing of the carriageway within the scheme extent. As such, road planings generated as a result of the works may be recovered in accordance with the criteria stipulated within SEPA document <u>'Guidance on the Production of Fully</u> <u>Recoverable Asphalt Road Planings.</u>'

With best practice mitigation measures in place, the residual significance of effect on material assets and waste is considered to be neutral. Therefore, in accordance with DMRB Guidance document LA 110: Material Assets and Waste, no further assessment is required.

Noise and vibration

Impacts

- TS2010 road surfacing is shown to have superior durability and noise reducing features compared to standard road surfacing mixes. Vehicle travellers and nearby residential properties will benefit from improved road surfacing as a result of the scheme.
- Works taking place during night-time hours could cause disturbance for residential properties within 300m of the scheme and for the nearby amenity users.

Mitigation

- Due to night-time programming, the Amey E&S team will contact Perth & Kinross Council's Environmental Health Team prior to the commencement of the works.
- Due to night-time programming, properties within 300m of the scheme extents will be notified in advance of the works. Pre-notification will include details of proposed timings and duration of the works and will also include a 24hr contact number should members of the public wish to contact the Amey control centre in relation to the scheme.
- The noisiest works will be completed before 23:00 where feasible.
- Plant/machinery will be fitted with silencers/mufflers.
- No plant, vehicles or machinery will be left idling when not in use.
- Operatives will be briefed with the Noise & Vibration toolbox talk prior to the works commencing.

With best practice mitigation measures in place, the residual significance of effect on noise and vibration is considered to be neutral. Therefore, in accordance with DMRB Guidance document LA 111: Noise and Vibration, no further assessment is required.

Population and human health

Impacts

• TM for the works will involve the closure of a section of the M90 carriageway with a diversion in place. This will likely result in temporary delays and longer journey times for road users and local residents.

- The scheme will have no impact on the aforementioned Perth and Kinross Council Core Paths due to factors such as distance and the transient, short-term nature of the scheme.
- Construction site lighting during night-time hours could cause disturbance for surrounding residential properties.
- The scheme will have no detrimental impacts on human health other than the possible effects outlined in the Noise and Vibration and Air Quality sections above.

Mitigation

- Due to night-time programming, properties within 300m of the proposed scheme extents will be notified in advance of the works. Pre-notification will include details of proposed timings, duration of the works and alternative access/egress routes for those affected by temporary road closures.
- TM restrictions/arrangements and any expected travel delays will be publicised within the local and wider area, in an effort to minimise disturbance to vehicular travellers.
- When in place, TM will be monitored to ensure it is effectively managing traffic flow.
- Temporary site lighting used throughout the scheme will be directional and pointed only at the area of works and away from residential areas.

With best practice mitigation measures in place, the residual significance of effect on population and human health is considered to be neutral. Therefore, in accordance with DMRB Guidance document LA 112: Population and Human Health, no further assessment is required.

Road drainage and the water environment

Impacts:

- If not adequately controlled, debris and runoff from the works could be suspended in 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, which may negatively affect the surrounding water environment.
- Should flooding occur, this may delay the scheduled works.

- There is potential for pollutants to enter the River Tay during the works if uncontained.
- The use of concrete and similar materials in construction can have adverse impacts on the surrounding water environment such as a change in drainage capacity and the potential for pollution.

Mitigation

- 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.
- Debris and dust generated as a result of the works will be prevented from entering the drainage system. This will be via the use of drain covers or similar.
- Appropriate measures will be implemented onsite to prevent any potential pollution to the natural water environment (e.g., debris, dust, and hazardous substances). This will include spill kits being present onsite at all times, and the use of funnels and drip trays when transferring fuel etc.
- The Amey E&S control room will be contacted if any pollution incidences occur (24 hours, 7 days a week).
- Visual pollution inspections of the working area will be conducted frequently, especially during heavy rainfall and wind.
- Weather reports will be monitored prior to and during all construction activities. In the event of adverse weather/flooding events, all activities will temporarily stop, and only reconvene when deemed safe to do so.
- All operatives working on site will be informed of the location of the River Tay SAC prior to works commencing.
- All storage of materials/fuel and any refuelling activities will be more than 10m away from any drainage inlet at all times and placed on a hardstanding surface.
- Storage areas will be located away from areas that see high vehicular movement to prevent accidental damage.
- All oils and fuels will be returned to storage area after use.
- Bunds will be provided around drums up to 205 litres with 25% of their capacity.
- Bunds will be provided around bulk storage to a capacity of 110% of the stored fuel/oil.
- All operatives will be briefed on SEPA's Guidance for Pollution Prevention (GPP) documents, namely, GPP 1, GPP 2, GPP 5, PPG 6, GPP 8 and GPP 22.

- When mixing/using concrete on site, site operatives will apply suitable controls to prevent the mixture escaping to the surrounding environment:
 - All mixing will take place a minimum of 10m away from any drains where possible.
 - Drains within proximity to any mixing will be securely covered or sealed off.
- No washout from concrete mixing will be allowed to enter the water environment and will be taken off site for appropriate treatment.
- All works for the proposed scheme will be undertaken in line with <u>SEPA General</u> <u>binding Rule 9.</u>
- The Amey Water Pollution Prevention briefing will be delivered to all site operatives before works start.
- The Amey E&S Team has contacted Marine Scotland due to the proposed works being undertaken over the River Tay. A response has been received from Marine Scotland stating that the proposed scheme is exempt from Marine Licensing due to the emergency nature of the works.

Providing all works operate in accordance with current best practice, as demonstrated by SEPA's GPPs the residual significance of effect on the water environment is considered to be neutral. Therefore, in accordance with DMRB Guidance document LA 113: Road drainage and the water environment, no further assessment is required.

Climate

Impacts:

• GHG emissions will be emitted through the use of machinery, vehicles and materials used (containing recycled and virgin materials) and transporting to and from site.

Mitigation

- Local suppliers will be used as far as reasonably practicable to reduce travel time and GHG emitted as part of the works.
- Vehicles/plant will 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 section.

With best practice mitigation measures in place, the residual significance of effect on climate is considered to be neutral. Therefore, in accordance with DMRB Guidance document LA 114: Climate, no further assessment is required.

Vulnerability of the project to risks

As the works will be limited to the like-for-like replacement of the carriageway structure, there will be no change in vulnerability of the road to risk, or in severity of major accidents/disasters that would impact 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

The <u>Scottish Road Works Commissioner's</u> Interactive Map has not highlighted any other works during the proposed timescale and at the location of the proposed works.

<u>Perth & Kinross's Planning Portal</u> has not highlighted any relevant proposed developments or planning applications during the proposed timescale and at the location of the proposed works.

Amey's current <u>programme of works</u> has not highlighted any other works on the M90 that will be undertaken in conjunction with the scheme.

No other nearby schemes which may result in a combined effect on nearby receptors have been identified.

Any future 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 as detailed within this Record of Determination, and provided that mitigation measures are in place and best practice is followed, the residual effect is deemed neutral and there will be no significant effects on the environment.

The following environmental surveys/reviews have been undertaken:

- An Initial Environmental Review of the scheme, undertaken by the Amey Environment and Sustainability Team in June 2023 (update in February 2024).
- A Habitats Regulations Appraisal Stage 1 Screening Assessment was undertaken by the Environment and Sustainability Team at Amey in June 2023.

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 and are situated in part over the River Tay SAC which is a sensitive area within the meaning of regulation 2(1) of the Environmental Impact Assessment (Scotland) Regulations 1999.

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 existing carriageway.
- At end of life, components can be recycled, reducing waste to landfill.
- Any uncontaminated road planings will be recycled in accordance with Guidance on the Production for Fully Recovered Asphalt Road Planings.
- 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.
- 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 boundary and as a result will not require any land take and will not alter any local land uses.
- The Friarton Bridge structure spans the River Tay SAC and as such, a Stage 1 HRA was undertaken which concluded that no significant effects were likely upon this designation as a result of the scheme.

Characteristics of potential impacts of the scheme:

- The successful completion of the scheme will afford benefits to carriageway users due to improved condition and ride quality of the carriageway surface combined with improving the long-term safety of the Friarton Bridge structure.
- 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.
- Disruption due to construction activities are not expected to be significant and will be mitigated as far as is reasonably practicable.

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.



© Crown copyright 2024

You may re-use this information (excluding logos and images) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit http://www.nationalarchives.gov.uk/doc/open-government-licence or email: <u>psi@nationalarchives.gsi.gov.uk</u>

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

Further copies of this document are available, on request, in audio and visual formats and in community languages. Any enquiries regarding this document / publication should be sent to us at info@transport.gov.scot

This document is also available on the Transport Scotland website: www.transport.gov.scot

Published by Transport Scotland, February 2024

Follow us:

f transcotland

(atranscotland)



Scottish Government Riaghaltas na h-Alba gov.scot

transport.gov.scot