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Environmental Impact Assessment Record of Determination

A9 Tummel – Emergency Left Bank Repairs Phase 2

Contents

Project Details

Description

BEAR Scotland has been commissioned by Transport Scotland to carry out urgent repair works on a section of embankment 30m north of the A9 Tummel bridge south of Pitlochry.

During sustained inclement weather in October 2023 (Storm Babet), the River Tummel scoured a significant proportion of downstream left embankment away adjacent to the A9 northbound offslip at the junction southeast of Pitlochry. The area of scour extended to a length of approximately 55m. As such, a phase of emergency works (A9 River Tummel – Emergency Works (Phase 1)) were progressed in November 2023, which saw the installation of rock bags over a 55m length from the toe to the top of bank. The goal of these repairs was to provide sufficient protection to trunk road assets until such times that an interim repair can be designed, consented and constructed.

Subsequent high river flows, after sustained inclement weather in February 2024, led to a further failure of the downstream left embankment. This occurred immediately downstream of the previous repaired section. As such, a further package of emergency works has been identified as being required to provide protection to the trunk road assets. This additional package of temporary repair works will be similar to first phase of emergency repairs, consisting of rock bags being built up to provide protection to the embankment over an approximate 31m length. Repairs will tie into the existing gabion mattress present along this bank, with a view to preventing it being undermined and preventing continued bank erosion further downstream of existing repairs.

All works in this second phase of emergency works are also to be considered temporary in nature, with their goal being to provide sufficient protection to trunk road assets until such times that an interim repair can be designed, consented and constructed.

Anticipated sequence of works

- BEAR Scotland's Operations team to close traffic on the slip road with diversions in place. Remove the existing temporary varioguard to make space for the crane and excavator.
- BEAR Scotland's Operations team to enter the site location within the closed slip road to install approximately 70 rock bags. A long reach excavator to prepare the base of the excavation for bag installation and crane to be used to install bags over geotextile membrane.

- After completion of rock bag installation, BEAR Scotland's Operations team to install varioguard barrier as detailed in the subcontractor's traffic management drawing.
- Following barrier installation, subcontractor to complete traffic management (TM) installation and finally open the slip road to A9 northbound.

Approximate length of the bank reinstatement is 31m, and the total works area is assumed to be less than 1ha.

The works are being progressed as a high priority and are programmed to commence in June 2024, when the water level in the River Tummel is assumed to be at its lowest. It is expected that the works will take 8 days to complete, utilising daytime working hours (08:00 – 17:00).

The works will be completed under a road closure (slip road). A site compound will be situated within TM.

Location

The scheme is located along the A9 northbound off-slip along the River Tummel, south of Pitlochry in the Perth and Kinross Council area (Figure 1). The scheme has the National Grid References (NGRs) NN 95202 56719 - NN 95188 56701.

Figure 1. Location of the proposed scour repair works at A9 Tummel bridge. Source: BEAR Scotland. F108 – Environmental Assessment Request (Scheme ref: 23-NW-1201-17).

Description of local environment

Air quality

The scheme does not fall within any Air Quality Management Areas (AQMA) (Air Quality Scotland). The nearest air quality monitoring station is located in Perth, approximately 36km southeast of the scheme (Air Quality Scotland). The monitoring station at Perth records levels of particulate matter (PM2.5 and PM10) and nitrogen dioxide (NO2). Pollution levels in the general vicinity of works are anticipated to be lower than those at the monitoring station in Perth due to the more remote nature of the scheme location.

Baseline air quality is likely to be primarily influenced by traffic along the A9 trunk road and local road network, with secondary sources likely to arise from agricultural activities and nearby urban activities associated with Pitlochry. The Highland Main Rail railway line lies south to north 150m east of the scheme. Rail emissions may also have an impact on local air quality level.

No sites are registered on the Scottish Pollutant Release Inventory (SPRI) (Scotland's Environment) within 10km of the scheme.

Average Annual Daily Flow (AADF) for the A9 carriageway approximately 0.6km south of the scheme extents accounted for 15,632 vehicles in 2022, of which 9.6% were heavy goods vehicles (HGV) (Road Traffic Statistics).

Cultural heritage

The following cultural heritage features have been recorded on PastMap within 300m of the scheme extents:

- One Canmore and Two Historic Environment Records (HER); the closest of which is 'Dunkeld - Dalnacardoch - Ruthven - Aviemore - Inverness Military Road, Moulinearn to Pitlochry' (MPK9292) which is located 200m northeast of the scheme and comprises a record of old military road.

There is no connectivity between the scheme and the noted cultural heritage records as they lie out with the trunk road boundary at least 200m from the scheme.

There are no Scheduled Monuments, Listed Buildings, Conservation Areas, Garden and Designed Landscapes, Inventory Battlefields, or World Heritage Sites within 300m of the scheme.

There are no cultural heritage features present within the scheme disturbance area and as such 'cultural heritage' is scoped out and is not discussed further within this RoD.

Landscape and visual effects

The scheme is not situated within a 'sensitive area' designated for landscape features e.g., National Park (NP), National Scenic Area (NSA), etc.

The Landscape Character Type (LCT) within the scheme extent is recorded as Lower Upland Glens (LCT No. 372), which has the following key characteristics:

- Lower sections of the principal glens north of the Highland Boundary Fault.
- Larger scale landscapes than the mid and upper reaches of these glens, which are generally wider with broader floodplains.
- Combinations of upland and lowland attributes, with evidence of glaciation, but lacking many of the classic glacial features, such as corries, hanging valleys and misfit rivers, found higher up.
- Broad floodplains, often with meandering rivers, interspersed with narrower, gorge-like sections where harder rocks cross the glens.
- The most settled parts of the glens, with transport corridors housing main roads and railways, large towns, castles, fortified manor houses, historic estates and estate villages.
- Modern expansion of larger settlements, with pockets of smaller housing development out of the main settlements.
- Fertile farmland on valley floor and valley slopes with large fields separated by hedgerows with tree lines, woodland belts and post and wire fences.
- Substantial and varied woodland cover - broadleaf woodlands clothing steeper slopes, around estate properties and along rivers, with conifer forests on valley sides and associated with estates
- Influence of large estates, castles and Victorian development, with their historic buildings and parkland.
- Corridor views along the valley.

Land use surrounding the scheme is comprised of agricultural land and freshwater habitat provided by the River Tummel. The scheme lies within the outskirts of Pitlochry with six residential properties located within 300m of the scheme.

The A9 Trunk Road connects Perth with Thurso. It commences immediately north of Inveralmond Roundabout in Perth leading generally northwards for a distance of 357 kilometres to its junction with an unclassified road leading to Holborn Head lighthouse at Scrabster. The A9 is a mixture of single carriageway, '2+1' carriageway, and stretches of two-lane dual carriageway. The A9 at the scheme extent is a A9 northbound slip road.

Biodiversity

A desktop study using NatureScot SiteLink (SiteLink) has identified that the River Tummel at the scheme extents is noted as the River Tay Special Area of Conservation (SAC).

One other designated biodiversity site is located within 2km of the scheme: Shingle Islands SAC (EU Site Code: UK0030274). The SAC lies along the banks of the River Tummel, with the nearest site being 1.2km south of the scheme. Shingle Islands SAC is designated for alder woodland on floodplains.

Several bird species have been recorded within 2km of the works. Under the Wildlife and Countryside Act 1981, all wild birds and their active nests are protected.

The NBN Atlas holds record of the following invasive non-native species (INNS) of plant under the same search criteria:

- Himalayan Balsam (*Impatiens glandulifera*), recorded on the eastern bank of the River Tummel 140m south of the scheme.
- Japanese Knotweed (*Fallopia japonica*) is recorded on the eastern bank of the River Tummel 300m south of the scheme.

Transport Scotland's Asset Management Performance System (AMPS) holds no records of INNS within the works. One record of common ragwort *(Senecio jacobaea),* injurious weeds (*as listed under the Weeds Act 1959)* is noted along the banks of A9 300m east of the scheme.

Habitat in the surrounding area comprises young woodland/shrubland, and freshwater habitat as provided by the River Tummel. The habitat is somewhat limited due to presence of infrastructure corridors which form ecological pockets between A9 slip roads and railway line. The habitat further is compromised by agricultural land and urban development associated with Pitlochry.

An area of woodland listed as Ancient (of semi-natural origin) on the Ancient Woodland Inventory (AWI) lies approximately 200m northeast of the scheme extent. No Tree Preservation Orders (TPOs) are located within 300m of the scheme.

Jacobs UK, on behalf of BEAR Scotland, has undertaken various ecological surveys and a preliminary ecological appraisal (PEA) between June and July 2022 to facilitate previous works on A9 Tummel Bridge, which lies just 50m south of the scheme.

BEAR Scotland Environmental team undertook the role of Ecological Clerk of Works (ECoW) for the Phase 1 works during the November 2023.

Geology and soils

The scheme is not located within a Geological Conservation Review Site (GCRS), or a geologically designated Site of Special Scientific Interest (SSSI) (SiteLink).

The bedrock geology for the scheme extent is part of the Southern Highland group – semipelite and psammite, which are metamorphic bedrocks. Superficial deposits are recorded as sedimentary superficial deposits of alluvium (clay, silt, sand and gravel) (BGS).

The generalised soil type within the scheme extent is recorded as mineral podzols.

Soils within the scheme extent are recorded as being 'Class 0', as displayed on Scotland's Peat Map. Class 0 is considered to be mineral soil, and peatland habitats are not typically found on such soils.

Material assets and waste

The proposed works are necessary to reinstate a section of embankment and associated track road. Materials used for stabilisation works will consist of the following:

- Rock bags (70) – Mesh size 25mm, filled 2 tonne rock bags, volume 1.25m^3
- Loose Rock – 120m^3
- Geotextile membrane 60m^2

Wastes are anticipated to be excavated material, including loose rock approx. 50m^3. All excavated material will be reused onsite as back fill material where suitable.

The cost of the works is not expected to exceed £350,000. In the event that the scheme value exceeds £350,000, a site waste management plan (SWMP) will be created for this scheme.

Noise and vibration

The scheme extent lies on the outskirts of Pitlochry, with six residential properties lying within 300m of the works. The closest property lies 200m east of the scheme, with all properties screened by intervening shrubland.

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

The day, evening, and night (Lden) noise modelled data is recorded as 60-70 dB for the scheme extent (Scotland's Noise Scotland's Environment). Baseline noise and vibration is likely to be primarily influenced by traffic along the A9 trunk road and local road network, with secondary sources likely to arise from agricultural activities and nearby urban activities associated with Pitlochry. The Highland Main Rail railway line lies south to north 150m east of the scheme. Rail emissions may also have an impact on local air quality levels.

Population and human health

Six residential properties are located within 300m of the scheme, as outlined in the Noise and Vibration section above.

There are no Core Paths, National Cycle Network (NCN) routes or walking routes as listed on WalkHighlands within 300m of the scheme.

A single track road which leads to a private property is located directly adjacent to the embankment (scheme extents). The trunk road will be closed for the public with access to the property (temporary) facilitated within the TM.

Road drainage and the water environment

The scheme is located on the left bank of River Tummel (section of Loch Faskally to River Tay) (ID: 6828), at the southeast periphery of Pitlochry. River Tummel (L Faskally to R Tay) is within the River Tay catchment, and the main stem is approximately 9.2 kilometres in length. This waterbody has been classified by the Scottish Environment Protection Agency (SEPA) under the Water Framework Directive 2000/60/EC (WFD), and was assigned a condition of 'Good' in 2022.

One minor, unnamed tributary is located within 300m of the scheme.

The scheme falls within the 'Killin, Aberfeldy and Angus Glens' (ID: 150699) and 'Tummel and Tay Sand and Gravel' (ID: 150735) groundwater bodies which were classified by SEPA in 2020 as having an overall status of 'Good'. These groundwater bodies are also designated as Drinking Water Protected Areas (DWPA) (ground).

River Tummel at the scheme location has a potential for river water flooding (each year this area has a 10% chance of flooding) (SEPA Flood Map).

Climate

The Climate Change (Scotland) Act 2009 sets out the target and vision set by the Scottish Government for tackling and responding to climate change (The Climate Change (Scotland) Act 2009). The Act includes a target of reducing CO_2 emissions by 80% before 2050 (from the baseline year 1990). The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 amended the Climate Change (Scotland) Act 2009 to bring the target of reaching net-zero emissions in Scotland forward to 2045 (Climate Change (Emissions Reduction Targets) (Scotland) Act 2019).

The Scottish Government has since published its indicative Nationally Determined Contribution (iNDC) to set out how it will reach net-zero emissions by 2045, working to reduce emissions of all major greenhouse gases by at least 75% by 2030 (Scotland's contribution to the Paris Agreement: indicative Nationally Determined Contribution – gov.scot (www.gov.scot)). By 2040, the Scottish Government is committed to reducing 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 and this commitment is being enacted through the Mission Zero for Transport (Mission Zero for transport | Transport Scotland). Transport is the largest contributor to harmful climate emissions in Scotland. In response to the climate emergency, Transport Scotland are committed to reducing their emissions by 75% by 2030 and to a legally binding target of net-zero by 2045.

Policies and plans

This Record of Determination has been undertaken in accordance with all relevant regulations, guidance, policies and plans, notably including the Environment and Sustainability Discipline of the Design Manual for Roads and Bridges (Design Manual for Roads and Bridges (DMRB)) and Transport Scotland's Environmental Impact Assessment Guidance (Guidance – Environmental Impact Assessments for road projects (transport.gov.scot)).

Description of main environmental impacts and proposed mitigation

Air quality

Construction activities associated with the proposed works have the potential to temporarily cause local air quality impacts. Activities undertaken on site may cause dust and particulate matter to be emitted to the atmosphere. However, taking into account the nature and scale of the works and the following mitigation measures, the risk of significant impacts to air are considered to be low.

- When not in use, plant and vehicles will be switched off; there will be no idling vehicles.
- All plant, machinery and vehicles associated with the scheme will be maintained in order to minimise emissions, as per manufacturing and legal requirements. No significant dust, particulate matter, and exhaust emissions sources will be introduced by the works.
- Green driving techniques will be adopted, and effective route preparation and planning to be undertaken prior to works.
- All delivery vehicles carrying material with dust potential will be covered when travelling to or leaving site, preventing the spread of dust beyond the work area.
- Material stockpiles will be reduced as far as is reasonably practicable by using a ‘just in time’ delivery system. All material will be stored on made ground.
- Any stockpiled material on site will be monitored daily to ensure no risks of dust emissions exists.
- Waste materials will be removed from site as soon as is practicable.
- Good housekeeping will be employed throughout the work.
- Drop heights to and from haulage vehicles will be minimised as far as is reasonably practicable.

With the above mitigation measures in place, it is anticipated that any air quality effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this Record of Determination (RoD).

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Landscape and visual effects

There is potential for minor to moderate temporary visual impacts to the local landscape during the construction phase, as a result of presence of vehicles, machinery and site compound on the A9 slip road, in addition to works at and around the River Tummel embankment. Permanent visual change will occur due to use of infill materials within the river; however these will be localised to the current area of damaged embankment.

Land use will not change as a result of the works, and the works will not result in any major residual change to the visual amenity of the local landscape. The following mitigation measures will be put in place during works:

- Throughout all stages of the works, the site will be kept clean and tidy, with materials, equipment, plant and wastes appropriately stored, reducing the landscape and visual effects as much as possible.
- Works will avoid encroaching on land and areas where work is not required or is not permitted. This includes general works, storage of equipment/containers and parking.
- Where applicable, upon completion of the works, any damage to the local landscape shall be reinstated as much as is practicable.
- The site will be left clean and tidy following construction.

With the above mitigation measures in place, it is anticipated that any landscape and visual effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Biodiversity

Activities undertaken on site could potentially have a temporary adverse impact on biodiversity in the area as a result of the potential for disturbance to protected species and removal or pollution of habitats.

Designated sites

The works will take place within the River Tay SAC. Due to the location of the scheme which has connectivity to the above designated site, a Habitats Regulations Appraisal (HRA) was produced in line with NatureScot consultation to assess whether the proposed works could result in Likely Significant Effects (LSE) on the qualifying features of the above sites.

An HRA Proforma was completed to assess potential impacts of the proposed works on the River Tay SAC. The HRA Proforma concluded that the works have the

potential for LSE on the qualifying features of the SAC. However, the works would not result in any adverse effects on site integrity (AESI).

Although the works do include the modification of the River Tummel embankment, the works are confined to approximately 31m long stretch of the River Tummel embankment and will include stabilisation of recently eroded section of the embankment with no established habitat present.

- All works will be undertaken from the River Tummel embankment with no machinery or personnel entering the watercourse.
- Good practice measures and required working methods (e.g., containment measures) will be in place and are adhered to as standard to protect the water environment.
- Good practice measures will be adopted as a standard for proposed works that may result in increased noise levels on site.
- No significant dust, particulate matter, and exhaust emissions sources will be introduced by the works.
- The works are of short duration, undertaken during the daytime working hours.
- The works are programmed to be undertaken out of the sensitive fish spawning season (October to May inclusive).
- No spawning fish habitat was identified within close proximity of the proposed works area during the aquatic surveys during the summer of 2022.
- All works will be undertaken from the banks of the River Tummel, as such pollution pathways between the area of proposed works and the SAC are limited to run-off from weather events/heavy rainfall via the River Tummel embankment. Fish species may be indirectly affected by the works due to water pollution, which could affect water quality, pH and fish populations within the River Tummel. However, in-stream works are not required for the scheme and the risk of pollution is considered to be low due to the nature of the works. Good practice measures will be adhered to as standard to protect the water environment. Therefore, the risk to fish species, their food sources, and supporting habitat within the working areas is considered to be low, and it is expected that the conservation objectives will be met. The water environment and associated habitat for qualifying species will remain unchanged as a result of the works.
- Specific good practice measures will be in place and are followed as standard by BEAR Scotland when there is potential to encounter mammals to comply with the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended),

which protects certain species as a European Protected Species (EPS). Measures include, but are not limited to:

  - A Toolbox Talk will be included in the SEMP and provided to all site staff prior to works commencing.
  - The working area and any machinery stored on site will be checked at the start of each shift for the presence of mammals. A soft start will be implemented to ensure a gradual increase in noise and activity.
  - Any areas where an animal could be trapped (e.g., storage containers) will be covered over when not in use, at the end of each shift, and following completion of the works.
  - If fencing is used at any point during works, a gap of 200mm from ground level will be provided, allowing free passage and preventing entrapment.
  - If artificial lighting is required, it will be directed away from the watercourse and nearby bankside habitats as far as is safe and reasonably practicable.
  - If mammals are encountered or move within 50m of the active works, the works will cease until the animal(s) move further away than 50m from the construction site or until the BEAR Scotland NW Environment Team can provide advice.

- An ECoW will monitor and over see the works at the phase 2.

The HRA Proforma NatureScot has been sent to NatureScot for their feedback. Works will not be undertaken without agreement from NatureScot. Any change to the proposed working methods will be reviewed by NatureScot where required.

Although Shingle Islands SAC lies within 2km of the scheme, the features of the Shingle Islands SAC are immobile in nature and there is no requirement for land take, site clearance or resources from the SAC. Works will therefore not result in habitat loss or negatively impact the function of the SAC. Standard good practice measures to prevent pollution and disturbance to the environment will be detailed in the Site Environmental Management Plan (SEMP) and adhered to on site. The works have no potential to cause LSE on the Although Shingle Islands SAC.

The works are limited to the reinstatement of failed river bank and will not affect the bed or channel of the watercourse.

Terrestrial Ecology

Although INNS were noted during the previous site visits to be within 300m of the scheme, no INNS were recorded within disturbance buffers of the scheme extents. No presence of INNS within the scheme extents was also confirmed during the ECoW site visits. As such, there is only limited potential to spread or introduce INNS.

Pollution controls and good practice measures to reduce impacts of works on the local environment will be detailed in the SEMP and adhered to on site. Therefore, with the following mitigation measures in place, the risk of significant impacts on biodiversity are considered to be low:

- An Ecological Clerk of Works will oversee the works, to monitor adherence to advised mitigation measures and any authorisation/consent.
- Site personnel will remain vigilant for the presence of potentially unrecorded instances of INNS or injurious weeds in road verges throughout the works period. Should any INNS be identified in working areas, no works will take place within 7m of these areas until the BEAR Scotland Environment Team can provide further advice on additional mitigation measures.
- Works will be strictly limited to areas required for access and works. Unnecessary encroachment onto terrestrial or aquatic areas will not be tolerated.
- Site personnel will remain vigilant for the presence of any protected species throughout the works period. Should a protected species be noted during construction, works will temporarily halt until the species has sufficiently moved on. Any sightings of protected species shall be reported to the BEAR Scotland Environment Team.
- A ‘soft start’ will be implemented on site each day. This will involve switching on vehicles sequentially and checking under/around vehicles and the immediate work area for mammals prior to works commencing to ensure none are present and that there is a gradual increase in noise.
- Relevant toolbox talks for working with protected species will be included in the SEMP.
- Any excavations, exposed pipes/drains, or areas where an animal could become trapped (e.g., storage containers) will be covered over when not in use, at the end of each shift, and following completion of the works to avoid animals falling in and becoming trapped.
- Any temporary lighting used during periods of low light levels will be directional, and will avoid spilling into sensitive areas where possible.
- If fencing is utilised at any point during the works, a gap of 200mm from ground level will be provided, allowing free passage for mammals and preventing entrapment.
- Additional mitigation measures related to pollution are outlined in the Road drainage and the water environment section below.

With the above mitigation measures in place, it is anticipated that any biodiversity effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Geology and Soils

The works will require some excavation to facilitate the embankment stabilisation works. The following measures will be applied on site:

- Any damage to local landscape/soils will be reinstated on completion of works and will utilise appropriate and compatible imported soil types where required.
- Standard good practice measures, like containment measures for working near water, to prevent water and soil pollution will be detailed in the SEMP and adhered to on site.

With the above mitigation measures in place, it is anticipated that any geology and soils effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Material assets and waste

There is potential for impacts as a result of resource depletion through use and transportation of new materials. However, materials will be sourced locally where possible and the following mitigation measures will be put in place:

- Materials will be sourced from recycled origins as far as reasonably practicable within design specifications.
- Care will be taken to order the correct quantity of required materials to prevent the disposal of unused materials.
- Where possible, minimal packaging will be requested on required deliveries to reduce unnecessary waste and production of packaging materials.

There is potential for impacts during works as a result of the improper storage or disposal of waste. The following mitigation measures will be put in place:

- The waste hierarchy (Reduce, Reuse, Recycle and Dispose) will be employed throughout the construction works.
- The subcontractor will adhere to waste management legislation and ensure they comply with their Duty of Care.
- Containment measures will be in place to prevent debris or pollutants from entering the surrounding environment.

- All wastes and unused materials will be removed from site in a safe and legal manner by a licensed waste carrier upon completion of the works. The appointed waste carrier will have a valid SEPA waste carrier registration, a copy of which will be provided to and retained by BEAR Scotland as early as possible.
- All appropriate waste documentation will be present on site and will be available for inspection. A copy of the Duty of Care paperwork will be provided and filed appropriately in accordance with the Code of Practice (as made under Section 34 of Environmental Protection Act 1990 as amended).
- Re-use and recycling of waste will be encouraged, and the subcontractor will be required to fully outline their plans and provide documentary evidence for waste arising from the works (e.g., waste carrier's licence, transfer notes, and waste exemption certificates).
- Staff will be informed that littering will not be tolerated. Staff will be encouraged to collect any litter seen on site.

With the above mitigation measures in place, it is anticipated that any material assets and waste effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Noise and vibration

Construction activities associated with the proposed works have the potential to cause noise and vibration impacts through the use of equipment and construction vehicles for the proposed activities. Numerous properties fall within 300m of the scheme, however moderate levels of screening exist between these and the proposed scheme due to presence of intervening shrubland. In addition, the works will be completed by utilising a daytime working pattern. Due to the localised nature of the works, the proposed scheme is anticipated to result in temporary minor noise impacts during the construction programme. The following mitigation measures will be put in place:

- The Best Practicable Means, as defined in Section 72 of the Control of Pollution Act 1974, will be employed at all times to reduce noise to a minimum.
- Residents within 300m of the scheme will be notified in advance of the works, likely by a letter drop. This notification will include details of proposed nature, timings and duration of the works, and a 24-hour contact number for the BEAR Scotland Control Room.
- On-site construction tasks will be programmed to be as efficient as possible, with a view to limiting noise disruption to local sensitive receptors.

- All site personnel will be fully briefed in advance of works regarding the need to minimise noise during works and of the site-specific sensitivities.
- All plant will be operated in such a way that minimises noise emissions and will have been maintained regularly to the appropriate standards.
- Where fitted, and where permitted under Health and Safety requirements, white noise reversing alarms will be utilised during construction.
- Where ancillary plant such as generators are required, they will be positioned so as to cause minimum noise disturbance.

With the above mitigation measures in place, it is anticipated that any noise and vibration effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Population and human health

During construction, activities undertaken on site may have temporary adverse impacts on local residents, vehicle travellers, and non-motorised road users (NMUs) as a result of construction presence, and associated noise and delays due to traffic management measures. Restrictions to the slip road will be in place during the works, however following the works the slip road will be open for travelling public. Road users and local bus operators will be informed of works and TM restrictions through a media release, which will provide details of construction dates and times. With the following mitigation measures in place, the risk of significant impacts on population and human health is considered to be low:

- Slip road closures and detoured routes will be sign posted in advance of the works.
- Notification will be issued to local residents and local public transport operators prior to commencement of the works, advising of any proposed works and expected restrictions.
- Any changes of schedule (e.g. change from daytime works to night-time works) will be communicated to local residents throughout the programme.
- Appropriate provisions / measures will be implemented within the TM to allow the safe passage of NMUs.
- Journey planning information will be available for drivers online at the trafficscotland.org website. Journey planning information will also be available for drivers online through BEAR Scotland’s social media platforms.

With the above mitigation measures in place, it is anticipated that any population and human health effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Road drainage and the water environment

There is potential for temporary impacts on the water environment due to operation within and within proximity of the River Tummel. Potential changes in water quality from pollution events (either by accidental spillage of sediments, particulate matter, chemicals, fuels or by mobilisation of these in surface water caused by rain or tidal movements) during works have the potential to have a direct or indirect effect on the this and surrounding waterbodies.

Consultation with SEPA has been undertaken, and it was confirmed that a 'simple licence' will be required under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) ('CAR'). SEPA has agreed that the works meet the requirement of Regulation 18 accelerated determination. Simple licence will be in place prior to commencement of the works.

The following mitigation measures will be put in place to reduce the risk of pollution incidents as a result of works:

- Any conditions outlined in obtained authorisation from SEPA will be enacted on site during the works. A copy of the SEPA CAR 'simple licence' will be retained on site and made available for inspection as required.
- All conditions of SEPA's General Binding Rules (GBRs) 6 and 9 (The CAR Practical Guide) will be adhered to during works.
- All machinery will operate from the A9 northbound slip road.
- Pollution control measures, including relevant SEPA Pollution Prevention Guidelines (PPGs) and Guidance for Pollution Prevention (GPPs), as well as other good practice measures for working in or near water, will be detailed in the SEMP and adhered to on site to prevent sediment or other materials entering the water environment.
- A toolbox talk on silt and sediment containment will be delivered to all site staff as part of the site induction.
- No discharges into any watercourses or drainage systems will be permitted. Appropriate containment measures will be in place to prevent any loss of construction materials into the water environment (e.g. dust, debris, wet concrete). Any dust, concrete debris, or other materials produced during works will be contained and removed from site to be disposed of appropriately.
- Rock material to be placed within the watercourse will be washed off site prior to installation, to remove fine sediments.
- An incident response (contingency) plan will be put in place to reduce the risk from pollution incidents or accidental spillages. All necessary containment equipment, including suitable spill kits (for oil and chemicals) will be available on site, quickly accessible if needed, and staff trained in their use.

- All spills will be logged and reported. In the event of any spills into the water environment, all works will stop and the incident will be reported to the project manager and the BEAR Scotland Environmental Team. SEPA will be informed of any such incident as soon as possible using the SEPA Pollution Hotline.
- All plant and equipment will be regularly inspected for any signs of damage and leaks. A checklist will be present to make sure that the checks have been carried out.
- Storage of hazardous material, oil and fuel containers will be distanced more than 10m away from any watercourses.
- If required, a designated refuelling area will be identified. Fuel bowsers will be stored on an impermeable area and be fully bunded. This will be distanced more than 10m from any watercourses.
- During refuelling of smaller mobile plant, a funnel will be used, and drip trays will be in place. Care will be taken to reduce the chance of spillages. Spill kits will be quickly accessible to capture any spills should they occur. The ground / stone around the site of a spill will be removed, double bagged and taken off site as special waste.
- Generators and static plant may have the potential to leak fuel and / or other hydrocarbons, and will have bunding with a capacity of 110%. If these are not bunded then drip trays will also be supplied beneath the equipment with a capacity of 110%.
- All material within the compound area and works area will be stored on made ground and, where feasible, 10m away from potential pollution pathways such as drains and watercourses.
- Materials required within the area of works will be transported only as required. No stockpiling will occur within the dry working area or within 10m of the watercourse boundary.
- Any materials transported into the area of works will be temporarily situated on or within appropriate containment systems until ready for use.

With the above mitigation measures in place, it is anticipated that any road drainage and the water environment effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Climate

Construction activities associated with the proposed scheme have the potential to cause local air quality impacts as a result of the emission of greenhouse gases through the use of vehicles and machinery, material use and production, and transportation of materials to and from site. The following mitigation measures will be put in place:

- BEAR Scotland will adhere to their Carbon Management Policy.
- Local contractors and suppliers will be used as far as practicable to reduce fuel use and greenhouse gas emitted as part of the works.
- Where possible, materials will be sourced locally to reduce greenhouse gas emissions associated with materials movement, and waste will be disposed at local landfill.

With the above mitigation measures in place, it is anticipated that any climate effects associated with the proposed works are unlikely to be significant. This receptor is not considered further in this RoD.

Vulnerability of the project to risks

The River Tummel and associated embankment at the works location are recorded as being at high risk of river water flooding; the nature of the repair works further reinforces this assessment. These works are required to prevent any further embankment erosion scour potential in proximity to the A9 Tummel bridge structure, and associated risk to the A9 carriageway.

Works will be programmed as far as is reasonably practicable to avoid periods of adverse weather or heavy rainfall, and will ideally be undertaken during periods of low water levels.

Traffic management will be designed in line with existing guidance and will involve closure of the A9 northbound off slip. Access to the property accessed by a farm track road, which lies directly adjacent to the scheme extents, will be maintained. The road closure and diversion route will be publicised in advance. Local residents will be notified of working hours and provided with appropriate contact information. Pedestrians or other NMUs will be accommodated within the traffic management setup.

These measures, along with mitigation measures and standard working practices, will be detailed in the SEMP and adhered to on site. The vulnerability of the project to risks of major accidents and disasters is considered to be low.

Assessment of cumulative effects

During construction, activities associated with the works may create several types of minor temporary disturbances such as changes to noise and vibration and air quality. However, these impacts will be temporary in nature and are not anticipated to result in a significant cumulative effect.

A search of the Perth and Kinross Council Planning Portal (Map Search) identified one planning application within 300m of the scheme extents:

- 23/00924/FLL Dalshian House Croftinloan Pitlochry PH16 5TD – Part change of use of dwellinghouse to nursery business – Refused.

The planning application has been refused therefore no cumulative effects (such as overlap of construction operations or combined traffic impacts) will arise.

A search of the Scottish Roads Works Commissioner's website (Map Search) has identified that the A9 slip road at the scheme extents is currently closed to traffic. The works will be undertaken under the current traffic management arrangement and will not include additional restrictions.

No other roadworks are currently ongoing, or noted as being planned, on the trunk road at the same time as this scheme.

BEAR Scotland programme all of their proposed works in line with appropriate guidance and contractual requirements. All schemes are programmed to take into account existing and future planned works, with a view of limiting any cumulative effects relating to traffic management. As a result of this exercise, where a potential for cumulative impacts is identified, BEAR Scotland will reprogramme schemes to avoid / limit any cumulative effects or will utilise existing traffic management to complete multiple schemes at once. This approach allows BEAR Scotland to effectively manage the potential cumulative effects as a result of traffic management, resulting in minimal disruption to users of the Scottish trunk road network.

Overall, it is unlikely that the proposed works will have a significant cumulative effect with any other future works in the area.

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 proposed works. An HRA was undertaken to determine whether the works could negatively impact designated features of the River Tay SAC. The HRA concluded that the project has potential for LSE, however there will be no adverse effects on a site's integrity (AESI).The HRA has been submitted to NatureScot and Transport Scotland.

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) are situated partially within 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 (EIA) 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 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 an area of <1ha on a 31m stretch of the River Tummel embankment.
- The works will be temporary and localised to the area of the eroded embankment.
- Works are not expected to result in significant disturbance to protected species that may be present in the wider area.
- Field surveys to date have not identified any protected species shelters and no protected species licences have been required.
- The risk of major accidents or disasters is considered to be low.
- By reinstating areas of eroded embankment, this will aim to reduce risk of failure at the adjacent A9 Tummel bridge and associated carriageway, which will result in safer conditions for road users.
- No impacts on the environment are expected during the operational phase as a result of works.

Location of the scheme:

- The works are located within the River Tay SAC. An HRA has been undertaken to establish whether the works will have an adverse effect on the qualifying features of the River Tay SAC.
- The scheme will be located within the existing A9 road boundary and as such, no land take will be required.
- There are no GCRS or a geologically designated SSSI within 300m of the scheme.
- The scheme does not lie within any sites of historical, cultural, or archaeological significance.
- The scheme lies within a rural area with sensitive receptors (residential properties) suitably set-back and screened from the scheme extents by intervening shrubland.
- The site compound will be located on made ground.

Characteristics of potential impacts of the scheme:

- Containment measures of the working area will be in place to prevent debris or pollutants from entering the surrounding environment.
- Residual visual impacts will be localised to the existing reinstated embankment and are not considered significant.
- Measures will be in place to ensure appropriate removal and disposal of waste.
- The SEMP will include plans to address environmental incidents.
- No impacts on the environment are expected during the operational phase as a result of works. The works are expected to result in positive impacts on users of the A9 northbound slip road during the operational phase due to reinstatement.
- In the event that INNS are found on site, measures to prevent potential INNS spread will be implemented.

References of supporting documentation

Habitats Regulations Appraisal (HRA) Proforma - A9 Tummel Emergency Works Ph2 (BEAR Scotland, 2024).

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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Published by Transport Scotland, June 2024

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