

NOTICE OF DETERMINATION

A82 BALLACHULISH BRIDGE: FIVE YEAR MARINE LICENCE ENVIRONMENTAL IMPACT ASSESSMENT DETERMINATION BY THE SCOTTISH MINISTERS UNDER SECTIONS 20A AND 55A OF THE ROADS (SCOTLAND) ACT 1984

The Scottish Ministers hereby give notice that they have determined that their proposal to carry out maintenance works on the Ballachulish Bridge is –

(a) not a project which falls within Annex I of Council Directive No. 85/337/EEC on the assessment of the effects of certain public and private projects on the environment as amended by Council Directive No. 97/11/EC and Council Directive No. 2003/35/EC of the European Parliament and Council;

(b) a relevant project within the meaning of Sections 20A(9) and 55A(7) of the Roads (Scotland) Act 1984, and falls within Annex II of the said Directive but that having regard to the selection criteria contained in Annex III of the Directive it should not be made subject to an environmental impact assessment in accordance with the Directive,


and accordingly the project does not require the publication of an Environmental Statement.

[Redacted]

[Redacted]

A member of staff of the Scottish Ministers

Transport Scotland
Buchanan House
58 Port Dundas Road
Glasgow
G4 0HF
06 November 2018

Document: Form 113	Record of Determination	
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Related to: All Contracts		
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A82 Ballachulish Bridge: Five Year Marine Licence

Record of Determination

	Name	Organisation	Signature	Date
Prepared By	[Redacted]	Jacobs	[Redacted]	08/05/2018
Checked By	[Redacted]	Jacobs	[Redacted]	17/05/2018
Client:	Transport Scotland			

Distribution		
Organisation	Contact	Copies
BEAR Scotland		
Transport Scotland		

RECORD OF DETERMINATION

Name of Project: A82 870 Ballachulish
Bridge - Five-Year Marine Licence

Location: Ballachulish, Loch Leven
NN 05195 59797

Description of Project:

As part of the 4G NW contract with Transport Scotland for the management and maintenance of the Scottish trunk road network, BEAR Scotland (NW Unit) are responsible for maintenance and improvement works on the bridge. The Ballachulish Bridge is a two-lane steel truss road bridge that carries the A82 trunk road across Loch Leven as shown in Figure 1.

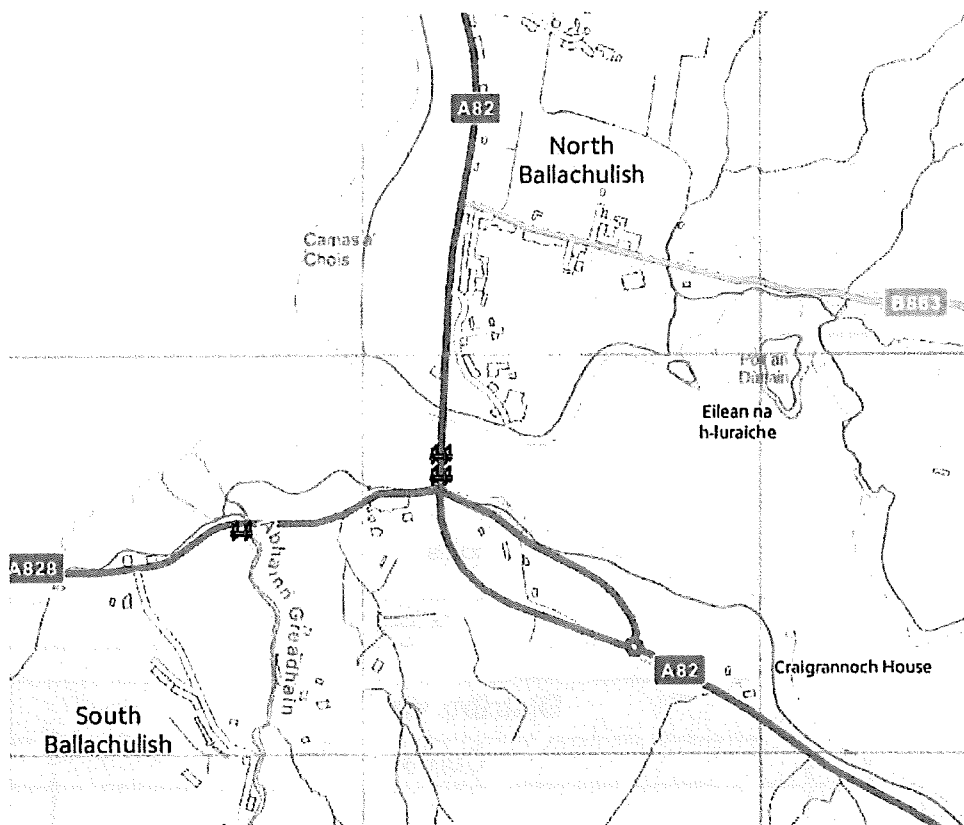


Figure 1: Ballachulish Bridge

The following maintenance works are proposed to be undertaken on the Ballachulish Bridge over the next five years:

- Carriageway and footpath resurfacing
- Bearing Replacement

- Painting
- Concrete repairs
- Gulley and drainage cleaning
- Parapet replacement
- Joint renewal
- Minor bridge maintenance
- Bird Guano removal
- Static and mobile underbridge access units for inspections and minor maintenance
- Point cloud surveys.

The supporting information for the Ballachulish Bridge Five-Year Marine Licence Application is provided in Appendix G.

Project Procurement:

The scheme is executed by the operating company as site operations – 'As of Right' scheme.

Description of Local Environment:

The following baseline descriptions have been sequenced to follow the appropriate Design Manual for Roads and Bridges (DMRB) chapters for environmental assessment and do not reflect a ranking of sensitivity

Refer to Figure 1 above for the location of the proposed works.

AIR AND CLIMATE:

There are no Air Quality Monitoring Areas (AQMAs) within the vicinity of the scheme (AQIS, 2018). The closest site is located in Fort William, 13 miles from the bridge. There are thirteen sensitive receptors within the vicinity of the scheme, comprising of approximately eight residential properties north-east within 200m and approximately five additional residential properties within 200m to the south. There is a small industrial estate containing four commercial properties to the north-east of these scheme within 200m. The Ballachulish Hotel is located approximately 80m south-west of the southern extent of the scheme. Existing air quality at the scheme location is likely to be reasonable due to the open nature of the area.

CULTURAL HERITAGE AND MATERIAL ASSETS:

The Ballachulish Hotel and Garden Walls is a Category B listed building, located approximately 80m south-west of the southern extent of the scheme. There are three Scheduled Monuments located within the vicinity of the scheme: the Rubha Mor Cairn is within 200m to the north-west; the Ballachulish Prehistoric Ritual Site is within 200m to the north-east; and the Ballachulish Home Farm Burial Mound is approximately 250m to the south-west.

Refer to Figure C1 in Appendix C for Historic Environment Scotland (HES) PastMap results.

BIODIVERSITY:Designated Sites

Onich to North Ballachulish Woods and Shore Sites of Special Scientific Interest (SSSI) is located 1km north of the scheme. It is designated for alkaline fen, Dalradian rocks, upland mixed ash woodland, and upland oak woodland.

Onich to North Ballachulish Woods Special Area of Conservation (SAC) is located 1km north of the scheme. It is designated for old sessile oak woods with *Ilex* and *Blechnum* in the British Isles, alkaline fens and *Tilio-Acerion* forests of slopes, screes and ravines (SNH 2018).

The Glen Etive and Glen Fyne SPA is 900m to the south-east at its closest location. The SPA is designated for breeding golden eagle (*Aquila chrysaetos*). The nesting, breeding and optimal foraging habitat for the golden

eagle are found away from roads and on higher elevations.

St John's Church SSSI is located 1.5km south-east of the scheme and is designated for its geology. It is unlikely that the scheme would have any significant effect (direct or indirect) on the features of St John's Church SSSI. Given the localised nature of the scheme, the temporary nature of the activity, and the absence of a reasonable pathway to affect the features; it is our conclusion that there would be no significant effect on the features from the proposed maintenance activities. Therefore, we conclude that there would be no significant effect on the SSSI.

This scheme is located immediately north of two patches of woodland listed as long-established of plantation origin on the Ancient Woodland Inventory. This same area is also noted as a Native Woodland by the Forestry Commission.

The following species and signs of potential species habitat were recorded during a site visit on 22/03/2018:

Otter

Otter (*Lutra lutra*) field signs (spraint of varying ages, including fresh) have been recorded along loch shoreline to south-east of bridge. A well-used otter spraint site was recorded to the south-east of the bridge at NN 05301 59619. Fresh spraint was also recorded further along this bedrock embankment (NN 05373 59588).

Breeding Birds

Breeding bird habitat within woodland to the south of the bridge and potentially along shoreline to the north, although it was noted that there was human disturbance along the beach here (easily accessible).

A single kingfisher (*Alcedo atthis*) was sighted flying across the water and perching on shore habitat beneath the bridge both on the north and south sides during surveys.

Grey herons (*Ardea cinerea*) were recorded nesting in mature conifers approximately 65m south-east of the bridge within the mixed woodland (NN 05256 59611). Although only one nest seemed to be occupied here, a number of large nests were present in the trees.

Bats

Potential foraging and roosting opportunities for bats within the large area of woodland south of the bridge. No suitable features with the potential to support roosting bats were identified on the bridge.

The following PMF habitats have also been recorded in the general vicinity of the Ballachulish Bridge:

- Tide-swept algal communities (*Laminaria hyperborea* on tide-swept infralittoral mixed substrata) on the east and west sides of the bridge (approximately 200m away) and further upstream in Loch Leven;
- Horse mussel beds approximately 400m east of the bridge; and
- Sea loch eggwrack beds in Bishops Bay, approximately 800m north-east of the bridge.

A small watercourse flows down the shore at NN 05033 59687. This area contains the algae *Fucus ceranoides*, characteristic of marine areas with freshwater input.

Fish

As with many other Scottish sea lochs, the area is likely to be utilised by diadromous fish species such as Atlantic salmon (*Salmo salar*), anadromous brown trout (sea trout) (*Salmo trutta*) and European eel (*Anguilla anguilla*). All three species are listed on PMF and the Scottish Biodiversity List (SBL). Atlantic salmon are also listed on Annex II of the Habitats Directive, whilst European eel are considered Critically Endangered and are on the IUCN Red List.

A small watercourse flows down the shore at NN 05033 59687. This area contains the seaweed species *Fucus ceranoides*, specific to areas of freshwater input.

LANDSCAPE:

The scheme is located within the Ben Nevis and Glen Coe National Scenic Area (NSA). The landscape around the Ballachulish bridge is characterised by rolling valleys including the Ben Nevis mountain range. There are

views of Loch Leven and Glen Coe to the east and Loch Linnhe and the Garbh Bheimm peak to the west.

As described in the Air and Climate section, several residential and commercial properties are visible to the north of the bridge. To the south, woodland dominates the landscape with a small number of properties visible, including the Ballachulish Hotel.

LAND:

Land use to the south of the scheme is comprised mainly of forestry land and Dragon's Tooth Golf Course occupies a large section of land south-west of the scheme. There are a small number of residential and commercial properties within the vicinity of the scheme (refer to Air and Climate).

Land use to the north of the scheme is comprised of open grassland, forestry and a small number of commercial and residential properties (refer to Air and Climate).

NOISE:

Existing noise levels within the vicinity of the scheme are influenced by vehicles using the A82.

Noise sensitive receptors will include protected species and residential / properties as identified in the Biodiversity and Air and Climate sections.

POPULATION AND HUMAN HEALTH:

The bridge carries the National Cycle Network (NCN) Route 78 'The Caledonia Way' which runs from Oban to Campbeltown. There is a stepped-up pavement adjacent to each carriageway on the bridge. A traffic count of pedal cycles recording Annual Average Daily Traffic Flow (AADF) was carried out in 2016 and recorded 18 daily pedal cycle movements across the bridge.

Core path LO19.02 is located approximately 170m east of the northern extent of the bridge.

A vehicle traffic count recording AADF was carried out on the bridge in 2016 and recorded 6675 daily vehicle movements. Traffic volumes are expected to be significantly higher in summer months (May-September) due to increased tourist traffic.

There are three bus stops in the vicinity of the scheme. The nearest bus stop is approximately 60m east of the southern extent of the bridge on the A828. Two additional stops are located on the A828 adjacent to the Ballachulish Hotel, approximately 180m west of the southern extents of the scheme. All stops are served by the 114, a once daily service from Fort William to Duror or Kinlochleven and the 918, a once daily service from Fort William to Oban..

WATER:

There are two waterbodies within the vicinity of the scheme, one of which; Loch Leven is directly below the bridge.

Loch Leven is a coastal water body (ID: 20080) of 8.5km² in area located east of the scheme and is rated as follows (2016):

- Overall status: Good
- Overall Ecology: Good
- Physio-chemical status: High
- Hydromorphology: High
- Biological elements: High

Loch Linnhe (south) is a coastal water body (ID: 20080) of 148.7km² in area located west of the scheme and is rated as follows (2016):

- Overall status: Good
- Overall ecology: Good
- Physio-chemical status: High
- Hydromorphology: High

- Biological elements: High

The SEPA flood map indicates that there is a high likelihood of coastal flooding in North Ballachulish. It also indicates a Medium likelihood of coastal flooding on the A828 road which runs below the southern approach to the bridge.

The bridge is not located wholly within a SEPA surface water drinking area. There is a surface drinking water protected area 400m south-west of the scheme. The bridge is located within a ground-water drinking protected area.

SOILS AND GEOLOGY:

The bedrock geology north of the scheme is comprised of Leven Schist Formation – Semipelite, Quartzite and Pelite. This is metamorphic bedrock that formed approximately 541 to 100 million years ago.

The bedrock geology south of the scheme is comprised of Ballachulish Pluton – Quartz-diorite. It is an igneous Bedrock formed approximately 419 to 444 million years ago. There is also another portion of the Leven Schist Formation south-west of the proposed scheme.

There are no designated geological sites within the study area.

WASTE, MATERIALS AND USE OF NATURAL RESOURCES:

Materials to be used for the maintenance programme will include but not be limited to:

Paint;
Replacement bearings;
Replacement expansion joints;
New road surface;
Concrete; and
Replacement parapets.

Waste material will include old paint flakes that have been grit-blasted off the structure, bird guano, and the redundant fixtures and fittings of the bridge that are to be replaced.

Description of the main environmental impacts of the project and proposed mitigation:

As a result of a desktop study and site visit, issues requiring consideration have been identified and potential effects, their magnitude and overall significance (based on the sensitivity of receptor) have been considered. Effects have been split into construction and operational effects and the magnitude of effect is based on designing mitigation measures into the programme. Where reference is made to 'mitigation measures', this will also include embedding good practice and environmental management. Mitigation measures are noted in Table 1: Environmental Impacts and Mitigation Measures Summary.

In some cases, compliance with environmental consents, authorisations and licences will also form part of the measures in place to minimise environmental impacts. Table 1 will also include reference to the conditions of various licences, where relevant.

Unless otherwise stated, the study area considered for the assessment of potential impacts extends 200m in each direction from the centre of the road.

AIR AND CLIMATE:

The proposed work is not expected to affect air quality during the operational stage, as it will not result in

change in traffic levels or dynamics.

During the construction phase, air quality impacts are likely to stem from construction vehicles and plant on-site as well as dust as a result of maintenance activities. Impacts on air quality are not anticipated to be significant, provided the the Site Environmental Management Plan (SEMP) is adhered to and the following mitigation is in place:

- Plant, machinery and vehicles associated with the works will have engines switched off when not in use in order to minimise emissions;
- Machinery and vehicles will have been serviced regularly;
- A traffic management plan will be in place to control the length of time that traffic needs to idle;
- Dust generated from construction activities will be minimised as far as possible via wetting down;
- Large material stockpiles will not be required and drop heights will be minimised to avoid excessive dust generation;
- Any skips holding waste on site will be covered to prevent dust movement; and
- Any loose materials will be covered during transportation to and/or from site.

The construction activities, for example, emissions from construction vehicles and plant will result in release of greenhouse gases for a short-term period. However, due to the short-term nature of the work this is not considered to be significant.

The proposed work is not expected to affect air quality or heat or radiation during the operational stage, since it will not result in changes to traffic levels or dynamics.

CULTURAL HERITAGE AND MATERIAL ASSETS:

The proposed works will be confined to the existing footprint of the bridge structure. The closest cultural heritage asset is The Ballachulish Hotel Category B listed building, 80m south-west of the scheme.

The works will take place entirely within the footprint of the bridge and the compound area. It is likely that the compound will be located on the bridge deck as self contained welfare units, however the location of the compound is a decision for the contractor and by agreement with landowners. Mitigation measures are as follows:

- Confine work related activities to the existing footprint of the scheme and prohibit access to the grounds surrounding the Ballachulish Hotel.

As the assets of cultural heritage interest are located at sufficiently far away distances from the proposed works, no impacts are anticipated during the construction works.

No impacts on cultural heritage assets of interest are anticipated during the operational phase.

BIODIVERSITY:

Designated sites

Onich to North Ballachulish Woods and Shore SSSI is located 1km north of the scheme. Given the localised and temporary nature of the works, and the absence of a reasonable pathway to affect the features and the adherence to mitigation measures and the SEMP, significant impacts are not anticipated to the SSSI during the construction works as confirmed through consultation with SNH on 06/04/2018 shown in Appendix E (Consultation)..

Onich to North Ballachulish Woods SAC is located 1km north of the scheme. Given the localised and temporary nature of the works, and the absence of a reasonable pathway to affect the features and the adherence of mitigation measures and the SEMP, significant impacts are not anticipated to the SAC during the construction works as confirmed through consultation with SNH on 06/04/2018 shown in Appendix E (Consultation).

The Glen Etive and Glen Fyne SPA is located 900m south-east of the scheme at its closest point. Given the localised and temporary nature of the works, and the absence of a reasonable pathway to affect the features and the adherence of mitigation measures and the SEMP, significant impacts to the SPA are not anticipated during the construction works as confirmed through consultation with SNH on 06/04/2018 shown in Appendix E

(Consultation).

St John's Church SSSI is located 1.5km south-east of the scheme. Given the localised and temporary nature of the works, and the absence of a reasonable pathway to affect the features and the adherence of mitigation measures within the SEMP, significant impacts to the SSSI are not anticipated during the construction works as confirmed through consultation with SNH on 06/04/2018 shown in Appendix E (Consultation).

Aquatic habitats

The maintenance works are not located adjacent to or within a designated (or candidate) marine conservation area. In order to prevent materials entering the marine environment, from any of the proposed activities on or under the bridge, good practice measures will include:

- Implementation of debris netting, protective shelters, containment; and sumps;
- Ensure that all milling works are carried out during suitable periods of weather;
- Remove debris from gullies and drains using vacuum truck;
- Double bag guano;
- Contain the underbridge working platform with either debris netting or thickened sheets (if hydro-demolition);
- Layering floor of working platform to prevent any material or water going through (if hydro-demolition);
- Remove all waste concrete from site;
- Adherence to relevant PPGs and GPPs including GPP5 (works and maintenance in or near water);
- Edge protection and toerails to prevent any materials dropping into water; and
- Rock armour will be washed and cleaned prior to placement.

Should any discharge into the marine environment be intended then a CAR licence will be obtained. Adherence to the good practice and management measures, as listed above and in the Water section later on in this document, will result in no significant effects on the benthic receptors beneath and adjacent to the bridge, including PMFs.

There is limited pathway to effect for fish and marine mammals from the proposed works at Ballachulish Bridge and these marine features are not considered further.

Given the nature of the works and adherence to the mitigation measures as set out in the 'Water' and 'Waste Material and Use of Natural Resources' sections, significant impacts upon biodiversity are not anticipated as a result of the scheme.

Given the scope of the works there would be no effect on marine mammals as a result of the proposed construction works

Terrestrial

Without mitigation, there is the potential to disturb receptors, including birds and otters as listed in the Biodiversity baseline section as a result of maintenance works. Activities that have the potential to cause disturbance include the use of machinery, vehicles and plant, floodlighting, removal of vegetation and increased human activity. The good practice methods mentioned in the Air and Climate and Noise sections will ensure disturbance is adequately mitigated so that no likely significant impacts are expected. Mitigation mentioned in the Water and Waste Materials and Use of Natural Resources sections will adequately mitigate pollution of ecological habitat, therefore no likely significant impacts are expected.

Otter

A well used otter spraint site was recorded along the shoreline to the south-east of the bridge during the site walkover. An organisational otter licence (Number 118944 valid from 10 April 2018 to 31st December 2019) obtained by BEAR Scotland NW Unit and the supporting Species Protection Plan (SPP) will be followed during the main works (Appendix F). The contractor must obtain an updated or extended organisational licence, or obtain a project-specific one if the organisational license is not updated after 31st December 2019. Conditions outlined in the licence and SPP will be followed by way of mitigation.

Otter monitoring surveys will be required if works are conducted that could impact the potential otter habitat. Cameras will be deployed for a period of 14 days to monitor the activity of otter. The requirement of these surveys will be dependent on the maintenance work in question and should be taken under the advisement of the BEAR environmental team.

The following mitigation is also proposed:

- Setting up of an exclusion zone of 30m around any potential otter couch;
- Site supervisor will brief all persons on site as part of the induction process to ensure everyone is aware of the presence of otter, the mitigation measures and their legal obligations;
- Otter toolbox talk will be given to site personnel prior to commencement of works;
- Before being used, machinery will be checked for the presence of resting otters;
- Any lighting required to carry out the works as far as reasonably practicable to be directed away from the lochs;
- Pollution prevention measures will be strictly enforced on site and the relevant SEPA Pollution Prevention Guidelines (PPGs) and Guidance for in particular PPG 5 'Works and maintenance in or near water' will be strictly adhered to.

Pre-maintenance otter surveys may be required if works are conducted that could impact any potential otter couch. The requirement of these surveys will be dependent on the maintenance work in question and should be taken under advisement of the BEAR Environmental Team.

Birds

Staff will remain vigilant for breeding birds and nests in the treelines immediately adjacent to the proposed works (up to 10m from the carriageway). Should evidence of nests or breeding birds be seen, works will stop and the site supervisor will be informed who will then seek advice from the BEAR Environment Team;

Bats

The bridge and surrounding area is assessed as being of low potential for roosting bats. It is considered that the woodland with potential to support roosting bats is at a sufficient distance so as to not be significantly impacted by the proposed works.

LANDSCAPE:

During the construction phase, visual impacts are expected as a result of the erection of a temporary access platform and containment structure on the bridge. Due to the temporary nature and scale of the works not resulting in a permanent change to the local landscape character and adhering to the mitigation measures listed below and in the SEMP, significant impacts on landscape are not anticipated during the construction phase.

Mitigation proposed:

- Land required for building the compound area will be confined to the minimum required area., it is likely that the compound will be located on the bridge deck as a self-contained welfare unit;
- The site will be kept clean and tidy during and following maintenance works;
- All waste will be removed from site, with a preference for recycling, otherwise disposal at a licensed waste facility in compliance with Waste Management Regulations; and
- Vehicles and large machinery/equipment will be kept as clean as possible.

LAND:

It is anticipated that the site compound will be located on the bridge deck. It is anticipated that no land take will occur and no change in land use is expected. No residential or commercial properties, community facilities or agricultural land will be affected by the works and so the impact on land use is not anticipated to be significant.

NOISE:

There is a potential for disruption during the construction phase to the protected species stated in the Biodiversity section, as well as the residential and commercial properties and The Ballachulish Hotel as

described in the baseline section. The construction phase noise may originate from the following activities:

- construction plant including vacuum trucks, concrete mixers and underbridge access units etc.;
- grit-blasting of the structure;
- haulage of materials and movement of vehicles;
- road planing;
- spraying of waterproof materials; and
- demolition of expansion joints.

With the implementation of the following mitigation, noise impacts are not anticipated to be significant.

Good practice:

- The owners and occupiers of the residential/commercial properties located within 200m of Ballachulish Bridge will be informed of the works at least 14 days in advance of the works;
- All plant and machinery will be switched off when not in use;
- The Being a Good Neighbour toolbox talk will be included in the SEMP and delivered to site personnel prior to works.
- 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;
- Night works are not expected to be required but this will depend on design requirements and the contractor's programme and method of works. If required, the Highland Council Environmental Health Officer will be consulted prior to the works and evening and night-time working will be completed as quickly and efficiently as practicable;
- Where night works are unavoidable, where practicable the successful contractor will try and ensure that the most disruptive activities (e.g. milling, planning) are carried out within daylight hours;
- All plant will be operated in a mode that minimises noise emissions and will have been maintained regularly to comply with relevant national and international legislation;
- Where fitted and Health and Safety requirements allow, white noise reversing alarms will be used on plant to reduce noise impact;
- All site personnel will be fully briefed in advance of works regarding the need to minimise noise during the night-time period and of the site specific sensitivities;
- Consultation will be carried out ahead of the works with affected residents to inform them of the proposals;
- Residents will be provided with a 24-hour contact number within the consultation letter;
- Temporary staff toilets/site compound will be located as far as is practicable from sensitive receptors; and
- If generators are required, these will be located as far away from residences as reasonably practicable.

The proposed works are not expected to affect noise levels during the operational phase since it will not result in a change in traffic levels or dynamics.

POPULATION AND HUMAN HEALTH:

Traffic management will be implemented to alleviate disruption to vehicle travellers throughout the construction periods. Traffic management will be required periodically and the duration of which will depend on the works required at the time. For example, drainage cleaning may require approximately two days of traffic management whereas waterproofing of the bridge may require approximately three weeks. The bridge will be single-way working, traffic light controlled and with a speed restriction of 30mph. This is expected to result in minor delays and a slight increase in travel time between North and South Ballachulish.

With the implementation of the following mitigation, impacts on vehicle travellers are not anticipated to be significant during the construction phase.

Mitigation proposed:

- A Traffic Management Plan will be developed to minimise disruption to vehicle traveller;
- Traffic will be controlled by temporary traffic lights, maintaining continuity of vehicle movement during the construction phase; and

- Motorists will be informed of works and likely delays via the Traffic Scotland website, media releases and by variable message and fixed signs.

There is a potential for disruption of NMUs using the Ballachulish Bridge during the construction phase. Cyclists using NCN Route 78 across the bridge and pedestrians are likely to be impacted during the construction phase whilst traffic management measures remain in place. Core Path LO19.02 is not anticipated to be impacted by the proposed works.

With the implementation of the following mitigation, impacts on NMUs are not anticipated to be significant during the construction phase.

Mitigation proposed:

- The needs of NMu traffic will be considered within the design of the Traffic Management Plan; and
- NMu access between North and South Ballachulish will be maintained during and following the maintenance works.

The proposed works will not affect the surrounding local population or human health during the operational phase as the works will not result in a change in access. This includes both NMUs and vehicles.

WATER:

There is potential for impacts on water quality as a result of the refurbishment works from potential discharge of silt, fuels, paint fragments, soil and waterproofing chemicals into Loch Leven. Hydro-demolition works will result in the production of large amounts of solids in solution which is likely to be mildly alkaline. This would have potential to cause deterioration of habitats and have adverse impacts on aquatic species should this be discharged into Loch Leven.

The grit blasting of the superstructure will result in significant quantities of paint fragments being removed which could cause negative impacts on the water quality if not contained by the containment structure around the bridge.

Marine Scotland have been consulted regarding the requirement for licensing and a licence will be secured before any works can take place. All conditions set out within the licence will be strictly adhered to.

Waste water generated from hydro-demolition must be contained and either disposed of under a licence or treated before being discharged into Loch Leven. Before any water can be discharged the water parameters must meet a pH requirement of between 4 – 10 and also a Suspended Solids limit of 100mg/l. Depending on the volume of water discharged daily, a Registration (volume <10m³/day) or Simple Licence (volume >10m³/day - <100m³/day) under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) (CAR) must be obtained from SEPA.

With the implementation of the following mitigation, impacts on water environment are not anticipated to be significant during the construction phase.

Mitigation proposed:

- A marine licence will be secured and all conditions will be adhered to;
- An appropriate SEPA CAR licence will be complied with throughout the course of the works;
- Waste water generated from hydro-demolition will be contained and treated before disposal or discharge into Loch Leven. The water parameters must meet a pH requirement of between 4 – 10 and also a Suspended Solids limit of 100mg/l;
- Relevant Construction Industry Research and Information Association (CIRIA) guidance and SEPA's Pollution Prevention Guidelines (PPGs) and Guidance for Pollution Prevention (GPPs) will be followed including PPG 1, 6, 7, 8, 13, 18, 21 and 22. Particular attention will be paid to GPP 5: Works and maintenance in or near water, PPG 6: Working at construction and demolition sites and PPG 21: Pollution incident response planning;
- In the event of a pollution incident occurring, SEPA and BEAR Environment Team will be notified within 24 hours of the event;
- Hydro-demolition works will be encapsulated in a double-skinned membrane to filter hydro-demolition water. Solid waste captured will be bagged and removed from site to a licenced landfill site by licenced waste carriers;
- Containment will be in place and a sump pit used to prevent untreated water being released into the

marine environment;

- Fresh concrete will be poured in such a manner that no concrete is lost or can enter the marine environment;
- A containment structure will be installed during grit blasting to prevent paint particles being released into the environment;
- Removing material through milling will be carried out during suitable periods of weather to ensure that waste material is not blown or washed into the marine environment;
- Debris netting or thickened sheets will be installed around milling working areas, including around working platforms under the bridge, and a process will be in place to retrieve any dropped items;
- Waterproofing will be carried out within protective shelters and during periods of good weather, ensuring that all overspray is enclosed and does not enter marine environment;
- Edge protection will be installed around the bridge to ensure materials can't be knocked over the edge into Loch Leven;
- Sediment traps and sedimentation mats will be used where required during construction to prevent spillages and chemicals entering the water environment;
- All re-fuelling will take place at a designated refuelling site, away from Loch Leven and any road drains;
- Oils, fuels and chemicals will be stored in bunded areas off the bridge at the best practice requirement of 110% of containment capacity of the volume stored. Drip trays will be used and maintained when dispensing;
- Spill trays will be fitted to all stationary construction plant;
- Waste will be stored in designated areas, isolated from surface drains and any other area that discharges into the environment. All skips will be covered or enclosed;
- All materials will be stored on appropriately bunded surfaces to prevent run-off of any materials into Loch Leven;
- Prevention or containment of drainage and surface water run-off from the site compound and storage areas during clearance, construction and post-construction to ensure there is no water pollution; and
- A contingency plan will be put in place to minimise risk of pollution incidents or accidental spillages and all necessary containment equipment will be available on site and staff trained in their use.

The proposed works are not anticipated to affect water quality during the operational phase as it will not result in a change in road drainage patterns or traffic levels.

SOILS AND GEOLOGY:

No sensitive receptors have been identified within the study area in relation to geology and soils. The works to the bridge will have no impact on geological resources during construction and operation.

Mitigation detailed within the 'Water' section will minimise the risk of potential contamination of soils and geology through spillages.

WASTE, MATERIALS AND USE OF NATURAL RESOURCES:

All waste will be removed from site and disposed of safely and legally, preferably by recycling or re-use. Plantings will be disposed of under a paragraph 13(a) exemption (as described in Schedule 3 of the Waste Management Licensing Regulations 1994). All temporary traffic management equipment, including signs and cones, will be removed from site on completion of works. Waste water generated from hydro-demolition must be disposed of legally under the conditions of the agreed CAR licence.

With the implementation of the following mitigation, impacts relating to materials and waste are not anticipated to be significant.

Mitigation proposed:

- The sub-contractor will adhere to waste management legislation and ensure they comply with their Duty of Care;
- The sub-contractor will provide all information on quantities of waste (including recycled and re-use)

and transportation of materials required by the Operating Company;

- Re-use and recycling of waste is encouraged and the sub-contractor will be required to fully outline their plans and provide documentary evidence for waste arising from the works (e.g. waste carriers licence transfer notes and waste exemption certificates) as well as filling in the sub-contractor's waste return spreadsheet; and
- Mitigation measures described in the 'Water' section will be adhered to.

RISK OF MAJOR ACCIDENTS OR DISASTERS:

During the construction phase, with the implementation of appropriate signage and traffic management road, and NMUs will be made aware of lane and footpath closures and the presence of traffic lights. No significant impact on road safety is expected during the construction phase.

The scheme will not result in a change to the alignment or width of the road. The maintenance works are necessary to ensure the longevity of the bridge and operational reliability. The proposed works are not anticipated to result in a greater risk of major accidents during operation as there will be no change in traffic levels or alignment

CUMULATIVE EFFECTS:

The maintenance works on the Ballachulish Bridge are part of a maintenance programme which includes improvements for five bridges in the BEAR North-West Unit.

At this time there are no other relevant developments proposed in the general area of the planned maintenance works to Ballachulish Bridge. With the good practice, management and appropriate mitigation measures in place, as described in each section, potential impacts are not considered significant. Therefore, there is no potential for significant cumulative effects

Extent of EIA work undertaken and details of consultation:

The following environmental parameters have been considered within this Record of Determination:

- Air and Climate
- Cultural Heritage and Material Assets
- Biodiversity
- Landscape
- Land
- Noise
- Population and Human Health
- Water
- Soils and Geology
- Waste, Materials and Use of Natural Resources
- Risk of Major Accidents or Disasters
- Cumulative Effects

Consultation with statutory consultees was deemed necessary because there are potential impacts on biodiversity and the water environment which could be affected during the works. Appendix E provides a list of consultees and a synopsis of their comments.

Statement of case in support of a Determination that a formal EIA and EIA Report is not required:

This is a relevant project falling within Annex II that:

- Lies within the Ben Nevis and Glen Coe NSA

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. Screening using Annex III criteria, reference to consultations undertaken and review of available information has not identified the need for a full EIA.

The project will not have significant effects on the environment by virtue of factors such as:

Characteristics of the scheme:

- Waterproofing / resurfacing renewal, painting, drainage clearing, bird guano removal, expansion joint renewal, parapet renewal and minor concrete repairs and maintenance;
- All works will be confined to the Ballachulish Bridge, with no change to the structure's footprint; and
- Works will improve the integrity of the existing structure

Location of the scheme:

- The proposed works will take place entirely within the footprint of the existing Ballachulish Bridge superstructure;

Characteristics of potential impacts of the scheme:

- No significant adverse environmental impacts are predicted;
- No operational increase in traffic volume is anticipated as a result of the scheme; and
- Potential construction impacts on biodiversity, water, air, noise and road users will be kept to the minimum practicable through appropriate mitigation and good working practice.

File references of supporting documentation: N/A

I have determined, following discussions with the Project Manager, that an EIA Report is not required for this project.

[Redacted]

SIGNATURE:

.. (Transport Scotland Environmental Advisor)

[Redacted]

PRINT NAME:..

DATE: 23 OCTOBER 2018

Authorisation to publish Notice of Determination

[Redacted]

SIGNATURE:

..... (Director, Roads)

[Redacted]

PRINT NAME:

DATE: 21.11.2018