NOTICE OF DETERMINATION

A87 SKYE 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 Skye 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]

A member of staff of the Scottish Ministers

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

A87 Skye Bridge: Five Year Marine Licence

Record of Determination

	Name	Organisation	Signature	Date
Prepared By	[Redacted]	Jacobs	[Redacted]	16/05/18
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Client:	Transport Scotland			

Distribution		
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Transport Scotland	[Redacted]	1

Transport Scotland
Roads

Document: RECORD OF DETERMINATION

DIRECTIVE 2011/92/EU as amended by DIRECTIVE 2014/52/EU

ROADS (SCOTLAND) ACT 1984 (as amended)

THE ROADS (SCOTLAND) ACT 1984 (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017

RECORD OF DETERMINATION

Name of Project: A87 Skye Bridge Five-Year Marine Licence	**Location:** The Skye Bridge at Kyle Akin carries the A87 trunk road between Kyle of Lochalsh and the Isle of Skye.

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. Skye Bridge, together with a second structure, the Carrich Bridge, carries the A87 across Loch Alsh between Kyleakin on the Isle of Skye and Kyle of Lochalsh on the mainland. The Skye Bridge on the A87 trunk road is shown in Figure 1.

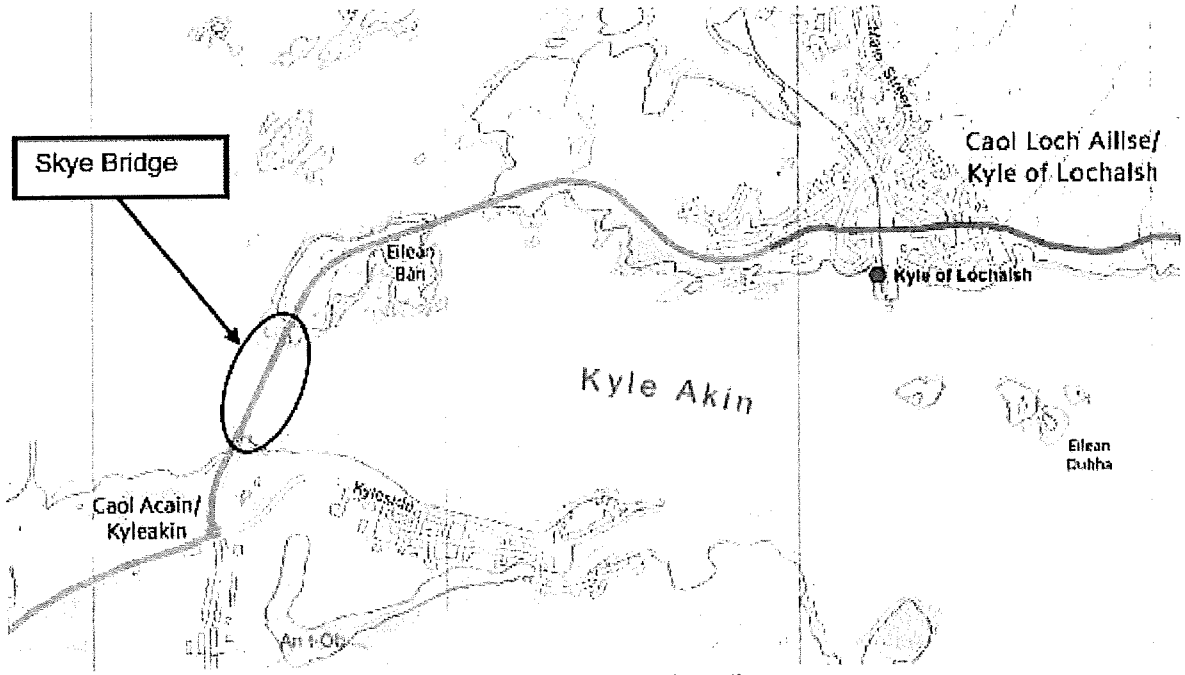

Figure 1: Skye Bridge Location

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

- Drainage cleaning
- Bird guano removal
- Expansion joint renewal
- Carriageway and footpath resurfacing
- Waterproofing
- Parapet renewal
- Minor concrete repairs
- Minor bridge maintenance

- Use of static and mobile underbridge access units for inspections and minor maintenance.

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

Project Procurement:

The maintenance programme 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 is no Air Quality Management Area (AQMA) or monitoring site within the vicinity of the proposed works (DEFRA Website, accessed April 2018). Due to the rural locality of the works, air quality is likely to be reasonable with the main influence being vehicle emissions from the traffic using the A87. For further information regarding traffic volumes on the A87, refer to the Population and Human Health section.

There are approximately ten potential air quality receptors within 300m of the proposed works. The nearest residential property, Kyle House, is located approximately 100m east of the southern aspect of Skye bridge. The village of Kyleakin is located approximately 350m east of the southern aspect of the bridge.

The coastal environments of the Isle of Skye and Kyle of Lochalsh have a mild, wet and windy climate, influenced by the Atlantic Ocean and Gulf Stream to the west.

Refer to Figure B1 and Table B1 of Appendix B for air and climate receptors figure and table.

CULTURAL HERITAGE AND MATERIAL ASSETS:

There are two designated cultural assets within 300m of the proposed works.

Kyleakin Lighthouse (HES ID LB6994) is a Category B listed building located on the island of Eilean Bán, comprising of a lighthouse and two adjoining former keepers' cottages. These are located approximately 27m west and 40m east of the northern aspect of the bridge, respectively.

Kyle House (HES ID LB13995) is a Category B listed building with existing structures dating from the 19th century. Kyle House is located on the Isle of Skye approximately 100m south-east, from the southern aspect of the bridge. The gardens surrounding Kyle House were once designated as a Gardens and Designed Landscape however the designation was removed due to failure to reach the required criteria.

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

BIODIVERSITY:

Designated Sites

Skye Bridge is located wholly within the Lochs Duich, Long and Alsh Marine Protected Area (MPA). The MPA was designated in 2014, to protect the flame shell beds and burrowed mud habitats with fireworks anemones. Covering an area of 0.93km^2, the flame shell bed is one of the largest in the world, with an estimated 100 million flame shells, and extends through the Kyle Akin, under the Skye Bridge and into the Inner Sound. Flame shell beds stabilise the sea bed creating habitat for other animals such as peacock worms, anemones and sponges. These in turn encourage other predatory animals such as whelks, crabs and fish into the area.

The MPA supports the Lochs Duich, Long and Alsh Special Area of Conservation (SAC) which is located directly south of the works (<5m) is designated for extensive tide-swept reefs, extremely sheltered rocky reefs,

and horse mussel beds (*Modiolus modiolus)*. Horse mussel beds have been identified to the east of the Skye Bridge, the closest one approximately 300m from the bridge.

Skye Bridge is also encompassed by the Inner Hebrides and the Minches candidate SAC (cSAC) for which harbour porpoise (*Phocoena phocoena*) is the only qualifying feature. The cSAC proposals are currently out to consultation, during which time the area has policy protection.

The Kinloch & Kyleakin Hills (Monadh Chaol Acainn is Cheann Loch) Site of Special Scientific Interest (SSSI) and Kinloch & Kyleakin Hills SAC are located on the Isle of Skye approximately 1.4km south of the proposed works. Some of the qualifying features of these designated sites include blanket bog, old upland sessile oak woodland, European dry heaths, Northern Atlantic wet heaths and otter.

Terrestrial and aquatic ecological habitat field surveys were undertaken within the study area in 2016 by BEAR Scotland Environment team to identify key supporting habitat and environmental parameters required to support protected species. Follow up surveys were then undertaken in February 2018 by Jacobs UK Ltd. The results of these surveys have been used to characterise the environment and are supplemented by the baseline ecological data provided in the Kyleakin Fish Feed Plant Environmental Statement (2017). The natural environment within proximity to the works can be described as predominantly coastal with wild islands and islets.

Terrestrial Habitat

Ancient woodland (of semi-natural origin) is located 500m south-west and 1.5km south of Skye Bridge. Native woodland is also located in copses and strips on the Isle of Skye within 500m of the Skye Bridge.

Terrestrial habitat on the northern aspect of the bridge, on Eilean Ban, is comprised of heathland including common heather (*Calluna vulgaris*) and cross-leaved heather (*Erica tetralix*), coastal grassland and rocky shore.

Terrestrial habitat on the southern aspect of the bridge, on the Isle of Skye, is comprised of mixed aged and mixed species woodland including Scots pine (*Pinus sylvestris*), beech (*Fagus sylvatica),* alder (*Alnus glutinosa*), ash (*Fraxinus excelsior*), and western hemlock (*Tsuga heterophylla*). The woodland to the south-east of the bridge, on the Isle of Skye, is more mature and varied than on the south-west. This was once a designated Garden and Designed Landscape so non-native ornamental species are likely to exist. For example, the invasive non-native rhododendron (*rhododendron sp.*) is densely dispersed in the woodland and close to the bridge. The woodland on to the south-west of the bridge, on the Isle of Skye, is native-woodland and can be described as upland birchwood.

There is a lack of vegetation on the existing Carrich Bridge footpaths, therefore there is no habitat present that could support protected species.

Intertidal Habitat

The tidal environment surrounding Skye Bridge, namely Kyle Akin, is relatively complex due to the large volume of water that is forced in and out of Loch Alsh during each tidal cycle.

The intertidal habitat on the southern aspect of the bridge, along the coast of Skye, is relatively flat with a clean mobile cobble substratum. Sparse fucoids (*Fucus vesiculosus* and *Fucus serratus*) are present on the shore in this area. Where boulders are present, these are encrusted with barnacles and limpets.

The intertidal habitat adjacent to the bridge footings on the northern aspect of the bridge, on Eilean Bán, is relatively flat with cobble and boulder substrata dominated by mixed fucoid and eggwrack communities (*Ascophyllum nodosum)* with kelp communities (*Saccharina latissima*) at the infralittoral fringe. The western side of Eilean Bán is comprised of steep barnacle covered bedrock with a thin fucoid zone before and kelp dominates the infralittoral fringe. The intertidal habitat on the eastern side of Eilean Bàn is a mix of the steep bedrock and boulder habitat with similar algal communities.

Subtidal Habitat

The component biotopes of the Priority Marine Features (PMF) are 'tide-swept algal communities' and 'kelp and seaweed communities on sublittoral sediment', which are present to the west of Skye Bridge,

approximately 200m away at the closest point. Horse mussel beds, also a PMF, have been identified directly below Skye Bridge in Kyle Akin and to the east in Loch Alsh. The flame shell habitat extends directly under Skye Bridge and into the Inner Sound.

Otter

Otters are known to be present within the study area, based on surveys carried out by BEAR Scotland in 2016 and also during walkovers of the area in March 2018. Otters are a European protected species under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). The coastal environment provides habitat with the potential to harbour and shelter otter including large areas of gorse, rock armour and rocky shores.

During the 2016 surveys, several signs of otter presence were recorded within the study area including seven possible otter couches and one confirmed holt (likely natal). The potential otter couches were located both on the Isle of Skye and Eilean Ban. The 2018 surveys did not record field signs within the study area, however three otters were sighted less than 500m north-east of the proposed works, under Carrich Bridge.

Birds

The 2018 surveys recorded breeding bird habitat within the study area, consisting of thick gorse on the southern side of the A87 on Eilean Ban and vast areas of rhododendron (*rhododendron sp.*) on the southern side of the A87 on the Isle of Skye. No Schedule 1 protected bird were identified during the surveys.

Bats

The 2018 surveys recorded some features that could provide bat roosting and foraging potential. A small copse of trees with low bat potential, including an over mature alder with cavities, was recorded on Eilean Ban. The buildings on Eilean Ban are considered to have negligible bat roosting potential. The mixed woodland associated with Kyle House on the Isle of Skye is considered to provide low bat roosting potential. No signs of bat presence were recorded during the 2018 surveys, and the bridge itself was considered to provide low to negligible bat roosting potential.

Marine Mammals

The bridge lies within the Inner Hebrides and the Minches cSAC for harbour porpoise, which is the only qualifying feature of this cSAC. Harbour porpoise and bottlenose dolphin are regularly sighted in this area.

Harbour seals and grey seals are both recorded from the area with sightings of harbour seals notably higher. However, during the 2018 field survey a grey seal (*Halichoerus grypus*) was recorded in the open water less than 100m north of Carrich Bridge.

Fish

Kyle Akin and Loch Alsh encompass spawning and nursery grounds for a variety of fish and shellfish species, all of which have extensive spawning or nursery grounds across the UK.

Three diadromous fish species are known to be present in the area: Atlantic salmon (*Salmo salar*), anadromous brown trout (sea trout) (*Salmo trutta*) and European eel (*Anguila anguila*). River lamprey (*Lampetra fluviatilis*) may also be present in the wider area. All four species are listed as a PMF and the on the Scottish Biodiversity List (SBL). Atlantic salmon and lamprey are also listed on Annex II of the Habitats Directive, whilst European eel are considered Critically Endangered and are on the International Union for Conservation of Nature (IUCN) Red List.

Invasive Non-Native Species (INNS)

During the site visit, rhododendron (*rhododendron sp.*) was recorded directly adjacent to the bridge on the south-western embankment within Kyle house woodland. The invasive non-native alga *Sargassum muticum* has been recorded in the wider area.

Appendix D displays protected species and INNS that have been recorded within proximity to the works using the National Biodiversity Network (NBN) Atlas under a CC-BY licence.

LANDSCAPE:

The landscape surrounding Skye Bridge can be considered picturesque coastal environment and is characterised by islands, islets, rocky shores, shrub and heath covered hills and mountains. The Inner Sound can be seen to the north and west and Kyle Akin feeding into Loch Alsh to the south and east. The mountains of the Isle of Skye dominate the west and south horizon and more gentle hills are seen to the north and east.

There are no landscape designations, including National Scenic Areas (NSA), within 200m of the works. There are no visual receptors, namely individual residential properties with a prominent view to the bridge, within the study area. The residential areas of Kyleakin on Skye and Kyle of Lochalsh on mainland can be seen from the bridge and are located approximately 350m south-east and 1.2km north-east, respectively.

LAND:

The immediate land use within proximity to the bridge includes tidal Kyle Akin, with the rocky and heath covered Eilean Ban to the north, and thick deciduous woodland to the south on the Isle of Skye.

Beyond the woodland to the south, a mixed cluster of commercial and residential properties is located. These include Mackinnon Country House Hotel, Skye Snack Bar, Handley & Co and residential properties.

NOISE:

The predominant noise and vibration levels at Skye Bridge are influenced by the existing A87; the only road which provides public, commercial and tourist traffic, access to and from the Isle of Skye.

Sensitive receptors to noise and vibration include protected species, cultural assets and residential / commercial properties. Refer to the 'Air and Climate', 'Cultural Heritage and Material Assets' and 'Biodiversity' sections for further details of receptors.

POPULATION AND HUMAN HEALTH:

The Skye Bridge carries the A87 west over Kyle Akin from mainland Scotland to the Isle of Skye and is a critical connection for commercial, domestic and tourist traffic. The Skye Bridge, and the connected Carrich Bridge, provide the only road which connects mainland Scotland and the Isle of Skye, replacing the requirement for ferry transport.

A traffic count recording Annual Average Daily Flow (AADF) has been calculated by Transport Scotland on the A87 between Kyleakin roundabout and Stoney Road in Kyle of Lochalsh which includes the stretch of road associated with the works. AADF was recorded on the Department for Transport interactive Traffic Count map in 2016 was recorded as 5155, an increase of 2110 vehicles since 2014. Traffic volumes are significantly higher during the summer months which is high season for tourists in the Highlands.

There are two designated core paths within the study area. SL18.01 and SL18.02 are located approximately 350m south-east and 260m south, respectively.

The concrete footpaths which run adjacent to the road on either side of the bridge, connecting Kyle of Lochalsh to Isle of Skye, are regularly used by pedestrians. Eilean Bán is accessed by pedestrians directly from the pavement on the northern approach to the bridge, where a network of dirt tracks traverses throughout the island.

There nearest bus stops are located approximately 160m south and 930m east, in Kyleakin. Regular long distance coaches and local bus services are operated out of Kyleakin by Stagecoach, MacLean Coaches, Citylink Scotland and A MacDonald.

WATER:

Kyle Akin is relatively narrow navigable strait directly underneath the Skye Bridge, connecting the Inner Sound from the west to Loch Alsh in the east. The Inner Sound separates mainland Scotland and the Inner Hebridean islands of Skye, Raasay and Rona, and was classified by Scottish Environmental Protection Agency (SEPA) on the Water Classification Hub in 2016 as having High Overall Status, Overall Ecology, Physico-Chemical

Condition and hydromorphology (ID: 200491). Loch Alsh to the east, is a sea loch between mainland Scotland and the Isle of Skye and was classified by SEPA in 2016 as having Good Overall Status, Overall Ecology and High Hydromorphology (ID: 100352).

The Inner Sound and Loch Alsh are important economic drivers which facilitate a wide range of commercial activities including transport, fishing, industry, leisure and tourism. Both Kyleakin and Kyle of Lochalsh have harbours allowing for a range of commerce including daily wildlife-spotting boat trips. The largest area of industry within proximity to the works is the Kyleakin fish feed plant situated on the coast approximately 1.2km west of the works. The plant is currently under construction and due to open in autumn 2018.

The SEPA Flood Maps show that the Inner Sound foreshore on the mainland and Isle of Skye, and the whole of Loch Alsh, are susceptible to high levels of coastal flooding at the 10% Annual Exceedance Probability (AEP) (10-year) event.

Road drainage at the bridge consists of kerb and gullies the length of the bridge, 'over the edge' direct run off the northern approach and a combination of the two on the southern approach.

SOILS AND GEOLOGY:

The bedrock geology underlying the bridge at Eilean Bán and Isle of Skye comprises sandstone of the Applecross Formation. Superficial deposits are found on the southern aspect of the bridge and comprise of marine beach deposits such as gravel, sand and silt close to the shore from the Quaternary Period and raised beach deposits further inland from the Devensian Stage. The soil cover at either side of the bridge, on Eilean Bán and Isle of Skye, consist predominantly of peaty gleys derived from Torridonian sandstone drifts.

There are no designated geological sites within the study area. The Kinloch & Kyleakin Hills (Monadh Chaol Acainn is Cheann Loch) SSSI and Kinloch & Kyleakin Hills SAC are located approximately 1.4km south of the bridge and are designated in part because of their geological condition including Torridonian sandstone deposits, blanket bogs, and dry and wet heaths.

The Ob Lusa to Ardnish Coast Geological Conservation Review (GCR) is a Lower Jurassic site with coral limestone beds located on the Isle of Skye approximately 4.3km west of the works and is also designated as an SSSI.

WASTE, MATERIALS AND USE OF NATURAL RESOURCES:

Materials and resources used for the cyclic maintenance will comprise fresh concrete, three new bridge joints, new parapet, road and footway surfacing, and waterproofing. Waste materials will comprise of excavated road planings, waste from pier excavation, gully and drainage debris, waste water from hydro-demolition (which will contain broken concrete), bird guano, old parapets and old bridge joints.

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:

During the construction phase, there is potential for a short-term minor decrease in air quality during the

construction phase due to activities associated with the works including:

- Emissions from construction vehicles, plant and machinery;
- Resuspension of dust by haulage vehicles, other construction vehicles and from plant.

With the following good practices and management measures in place impacts on air quality are not anticipated to be significant.

Good practice:

- 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 vehicles are idle;
- Large material stockpiles will not be required and drop heights will be minimised to avoid excessive dust generation;
- In prolonged periods of dry conditions, work areas will be dampened down where necessary. The contractor will implement this measure with care to avoid mobilisation of dust and debris as runoff and polluting the local environment;
- 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 works are not expected to affect air quality during the operational stage, since it will not result in change in traffic levels or dynamics.

CULTURAL HERITAGE AND MATERIAL ASSETS:

The works will take place entirely within the footprint of the bridge and the compound area. Category B listed Kyleakin Lighthouse and associated cottage are both situated within 40m of the bridge. The proposed works have the potential to impact on the setting of this site and disturb any visitors. However, the short-term nature of the noise and visual impact on setting, with the application of mitigation detailed in the 'Noise' and 'Landscape' sections, the impact is not expected to be significant.

Category B listed Kyle House is situated 100m east and is considered to be adequately screened by woodland from the noise and visual impact of the construction works and so no significant impact is anticipated.

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

BIODIVERSITY:

Aquatic

As outlined in the 'Biodiversity' baseline section, the maintenance works are located within the Loch Duich, Long and Alsh MPA, the Inner Hebrides and the Minches cSAC and are adjacent to the Lochs Duich, Long and Alsh Reefs SAC. Following consultation with SNH in April 2018, SNH advised that with implementation of good practice and management measures, the proposed maintenance activities would not lead to a significant effect on any Natura 2000 site, MPA or SSSI, and thus their qualifying features. 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;
- Carrying out waterproofing from within protective shelters;
- Carrying out waterproofing during periods of good weather;
- Remove debris from gullies and drains using vaccum truck;
- Double bag guano;
- Contain the underbidge working platform with either debris netting or thickened sheets (if

hydrodemolition);
- Layering floor of working platform to prevent any material or water going through (if hydrodemolition);
- 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.

If required, a CAR licence will be obtained for discharges into the marine environment. 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 effects for fish and marine mammals from the proposed works at Skye Bridge and these marine features are not considered further.

Terrestrial

Without mitigation, there is the potential to disturb receptors such as otter and breeding birds 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.

Otter

Otters are known to be present within the study area and field signs have been recorded in the 2016 and 2018 surveys including a holt and several couches. The maintenance activities have the potential to disrupt otters in the study area including a disruption to normal foraging and commuting routes, and resting sites, and so an organisational licence will be required. BEAR currently hold an organisational licence that permits disturbance of otter for the purpose of preserving public health and safety.

An organisational otter licence (Number 118944 valid from 10 April 2018) obtained by BEAR Scotland NW Unit and its accompanying Species Protection Plan (SPP) will be followed during the main works to reduce disturbance to otter; the licence and SPP are included as Appendix F. The contractor must obtain a copy of an updated or extended organisational licence, or obtain a project-specific one if the organisational one is not updated, for any works affecting otters after 31 December 2019. Conditions outlined in the licence will be followed by way of mitigation.

Further otter surveys, consisting of remote monitoring using infra-red trail cameras and site visits, will be required to monitor use of the known otter shelter on Eilean Ban and the location/use of other possible shelter sites.

The following mitigation is also proposed:
- Setting up of an exclusion zone, distance to be determined following monitoring results;
- 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;
- The Otter Toolbox talk will be included in the Site Environmental Management Plan (SEMP) and delivered to site personnel prior to commencement of works;
- A 'soft start' to works shall be implemented whereby machinery shall be switched on and before being used, machinery will be checked for the presence of otters;
- Any excavations created will be covered over at the end of each shift and following completion of the works to avoid entrapment of otters - or failing that, a ramp shall be provided within the excavations;
- Any entrances to pipes/drains that are in the process of being constructed will be suitably protected to prevent otter access; and
- Any lighting required to carry out the works to be directed away from the Eilean Ban and Kyle Akin, as far as reasonably practicable.

Birds

The proposed works are confined to the bridge, however there is potential disturbance to any nesting birds during the construction phase if works are conducted during the birds breeding season (March to August,

inclusive). If works are required during this timeframe, pre-maintenance breeding bird checks may be required. 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.

On site, staff will remain vigilant for breeding birds and nests in the gorse immediately adjacent to the proposed works and within the woodland at Kyle House (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.

Areas with rhododendron (*rhododendron sp.*) will be avoided but if this is not possible, the BEAR Environment Team will be consulted and management will be required to prevent the spread of this INNS. If management is required, the site ECoW will check the rhododendron for bird nests before any is removed.

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 there will be a temporary visual impact as a result of works on the bridge, provision of fencing, traffic management, situation of vehicles and machinery, and use of the site compound. Due to the nature of the works and location of the site there is minimal vegetation removal expected as a result of the works. With the following good practice in place impacts on landscape are not anticipated to be significant.

Good practice:

- 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.

The proposed works are not expected to affect the local landscape during the operational stage, since it will not result in a major change in loss of vegetation, change in land use, increase in traffic flows, or change in structure / design.

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 of sensitive receptors during the construction phase to the protected species mentioned in the 'Biodiversity' baseline section, the Gavin Maxwell Museum and wildlife hide on Eilean Bán, and Kyle House. The construction phase noise may be derived from the following activities:

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

Currently, the works are programmed to take place entirely during daytime hours to reduce potential impact from noise and vibration. If this changes, The Highland Council Environmental Health Officer will be consulted and this will be included as an addendum to the Record of Determination.

With the implementation of the following good practice and management measures, noise and vibration impacts are not anticipated to be significant.

Good practice:

- The owners and occupiers of residential and commercial properties located within 200m of Skye Bridge will be informed of the works at least 14 days in advance of the works. This includes Eilean Bán Trust, Kyle House, Pinewood and MacKinnon Country House Hotel;
- Consultation will be carried out ahead of the works with residential and commercial properties to inform them of the proposals. A 24-hour contact number will be provided;
- Temporary staff toilets/site compound will be located as far as is practicable from sensitive receptors;
- 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;
- If generators are required, these will be located as far away from residences as reasonably practicable;
- The Being a Good Neighbour toolbox talk will be included in the SEMP and delivered to site personnel prior to works;
- 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 practicable, the successful contractor will try and ensure the most disruptive activities (e.g. milling, planning) are carried out within daylight hours;
- All site personnel will be fully briefed in advance of works regarding the need to minimise noise during any night-time period and of the site specific sensitivities; and
- Mitigation measures described in the 'Air and Climate' section will be adhered to.

The proposed works are not expected to affect noise and vibration 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. Lane closures and traffic lights will be set out in accordance with the Traffic Signs Manual Chapter 8 and Safety at Street Works and Road Works: A Code of Practice will likely be required for most of the works. Speed limits will be reduced from 60mph to 30mph throughout the works area, which is expected to result in minor delays and a slight increase in travel times along the A87. Emergency vehicles will have access through the works at all times.

With the implementation of the following good practice and management measures, impacts on vehicle travellers are not anticipated to be significant.

Good practice:

- A Traffic Management Plan will be developed to minimise disruption to vehicle traveller;
- Traffic will be controlled by temporary traffic lights, allowing vehicles to continue to use one lane of Skye Bridge 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 Skye Bridge during the construction phase. Although there are no recognised cycle routes over the bridge, both pedestrians and cyclists are considered likely to be impacted during the period of maintenance works and whilst traffic management measures remain in place. Equestrians are unlikely to use this section of the A87 and Skye Bridge due to the high speed and volume of traffic. Core Paths SL18.01 and SL18.02 are not anticipated to be impacted by the proposed works.

With the implementation of the following good practice, impacts on NMUs are not anticipated to be significant.

Good practice:

- The needs of NMU traffic will be considered within the design of the Traffic Management Plan; and
- NMU access between mainland Scotland and the Isle of Skye, via the Skye Bridge, will be maintained

during the maintenance works.

The proposed works will not affect the surrounding local population or human health during the operational phase since works will not result in a change in access. This includes both non-vehicular uses (NMUs) and vehicle users.

WATER:

There is potential for impacts on water quality as a result of the refurbishment works for potential discharge of silt, fuels, soils and waterproofing chemicals into the Kyle Akin, and subsequently, the Inner Sound and Loch Alsh. Hydro-demolition works may be required and would result in the production of large amounts of solids in solution which is likely to be mildly alkaline.

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.

Any waste water generated from hydro-demolition must be contained and either disposed of under a licence or treated before being discharged into Kyle Akin. 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 <10m^3/day) or Simple Licence (volume >10m^3/day - <100m^3/day) would be required under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) (CAR) must be obtained from SEPA.

With the implementation of the following good practice, management measures and mitigation, impacts on water environment are not anticipated to be significant.

Mitigation proposed:

- A marine licence will be secured and all conditions will be adhered to;
- If required, an appropriate SEPA CAR licence will be obtained for all discharges into Kyle Akin and the conditions of the 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 Kyle Akin. 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 (PPGs) 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;
- 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 cannot be knocked over the edge into Kyle Akin;
- 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 Kyle Akin 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;
- Gully cleaning vehicles are to be used which will vacuum water and debris from the gullies, and vacuum trucks will be emptied at licenced facilities;
- Bird guano will be double bagged to prevent spillage and will be taken to a licenced facility for disposal;
- All materials will be stored on appropriately bunded surfaces to prevent run-off of any materials into Kyle Akin;
- Prevention or containing of drainage and surface water run-off from 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 expected to affect water quality during the operational phase since 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. There is no connectivity between Ob Lusa to Ardnish Coast GCR / SSSI and the proposed works.

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. Planings 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. If required, waste water generated from hydro-demolition must be disposed of legally under the conditions of an agreed CAR licence.

With the implementation of the following good practice and management measures, impacts relating to materials and waste are not anticipated to be significant.

Good practice:

- 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 users, 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 works 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 is will be no change in traffic

levels or alignment

CUMULATIVE EFFECTS:

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.

At this time the only other relevant developments proposed in the general area are the planned maintenance works at Carrich Bridge and Dornie Bridge. However, no significant adverse effects were predicted at either Carrich or Dornie bridge as outlined in the respective RODs for each bridge, and hence there would be no in-combination effects with Dornie Bridge.

Appropriate programme planning will be undertaken, including scheduling the works as to avoid simultaneous traffic management at Carrich and Dornie where practicable.

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 nature conservation and water environment parameters 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:

- **Is located wholly within and in close proximity to sensitive areas. The proposed works are located within the Lochs Duich, Long and Alsh MPA and Inner Hebrides and the Minches cSAC, and adjacent to Lochs Duich, Long and Alsh Reefs SAC.**

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, drainage clearing, bird guano removal, expansion joint renewal,

parapet renewal and minor concrete repairs and maintenance;
- All works will be confined to Skye Bridge, with no change to the structure's footprint; and
- Works will improve the integrity of the existing structure.

Location of the scheme:
- The works will take place entirely within the footprint of Skye Bridge and it is anticipated that there will be no requirement for further land take; and
- Appropriate mitigation, and the conditions of the Marine licence and CAR Registration / Simple Licence will be adhered to throughout the duration of the works to protect the MPA, SAC and cSAC.

Characteristics of potential impacts of the scheme:
- Potential impacts during construction on the environmental disciplines discussed will be minimised through robust mitigation measures, best working practice and compliance with measures set out in the Marine Licence.
- Operation of the bridge will not differ from existing baseline, therefore there would be no impacts on environmental receptors during the operation.
- No significant adverse impacts are predicted.

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: 2.11.2018