EC DIRECTIVE 97/11 (as amended)
ENVIRONMENTAL IMPACT ASSESSMENT (SCOTLAND) REGULATIONS 1999 (as amended)
ROADS (SCOTLAND) ACT 1984

RECORD OF DETERMINATION

Name of Project:	**Location:**
A887 Allt Lagain Bhain Bridge Replacement	The proposed scheme is located on the A887 trunk road in Glen Moriston, approximately 500m west of the small settlement of Dundreggan.

Description of Project:

The A887 Allt Lagain Bhain Bridge Replacement scheme consists of replacing the existing A887 road bridge with a new structure (see Figure 1 for location). The existing bridge structure consists of a single 5m span bridge and follows a single track alignment. It has been propped at its mid-span since 2001 and has a history of parapet damage due to its narrow deck width. It is currently in very poor condition with the main reinforcement being severely corroded. The new bridge would replace and upgrade this bridge to a standard single carriageway width and in the future, allow an upgrade of the short section of the single track road lying immediately to the west.

The proposed work would include the installation of a concrete box structure. The base of the box structure would be lower than strictly necessary, to allow a more natural bed of sediment and gravel to be provided. In addition, boulders would be secured in the stream bed to provide a low-flow channel that would allow migratory fish to pass through.

In order to accommodate the new structure and facilitate safe working, the historic masonry arch bridge that lies upstream of the trunk road would require to be demolished. The proposed works would require temporary diversion routes to the north of the existing A887 road bridge and realignment of a short length of Allt Lagain Bhain watercourse back to its original alignment.

The proposed working area during construction is anticipated to be slightly less than 1 hectare.

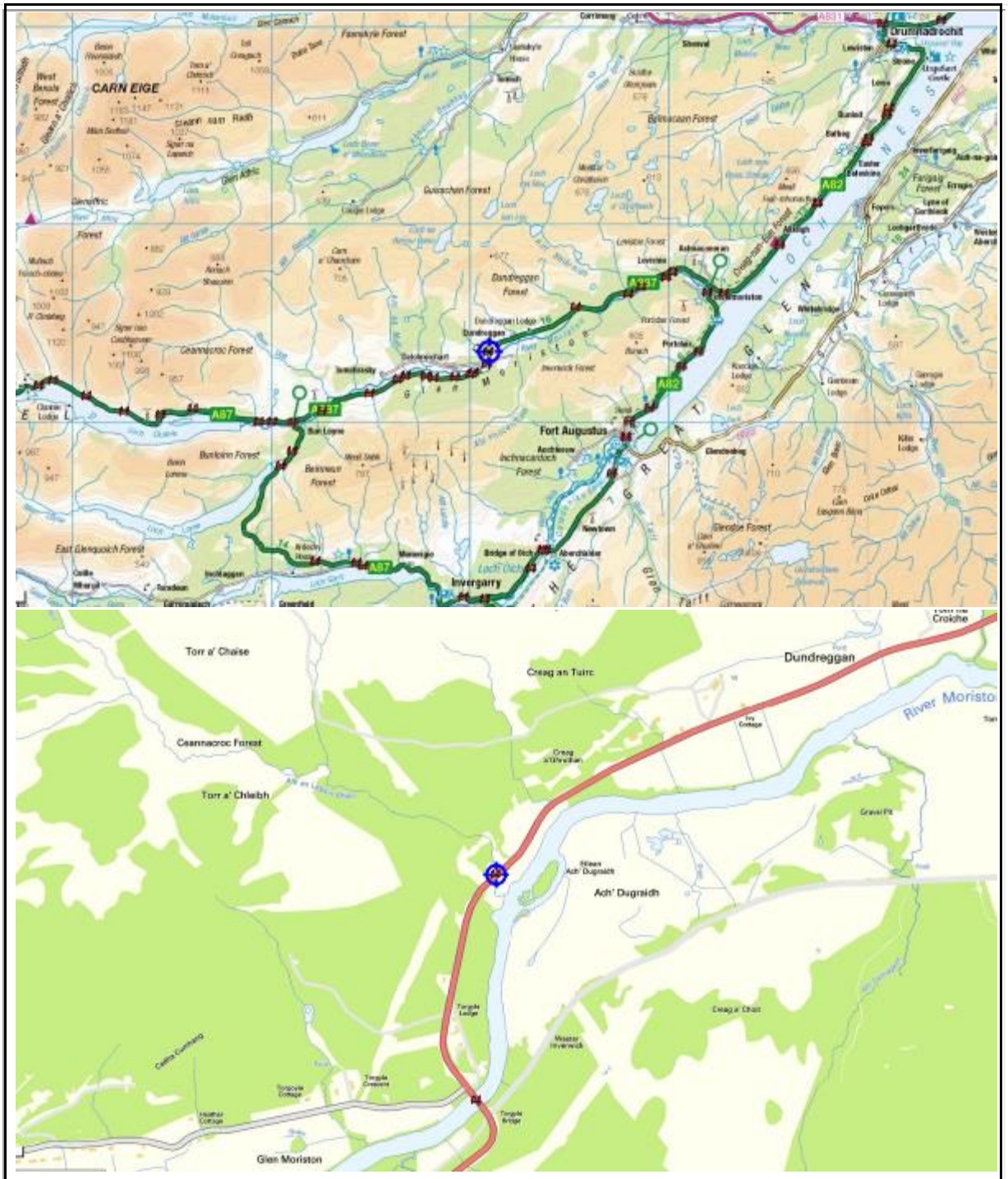

Figure 1: Location of A887 Allt Lagain Bhain

Project Procurement:

The scheme will be executed by the Operating Company as Principal Contractor.

Description of Local Environment:

1. AIR QUALITY:

In the vicinity of the scheme, local air quality would be primarily influenced by traffic on the A887. There are no sensitive receptors within 200m of the scheme.

2. CULTURAL HERITAGE:

The following sites of cultural heritage interest are located within the study area of a 300m buffer around the footprint of the works:

- Torgyle Chapel, located 360m south of the bridge;
- Torgyle House or Inn, 430m south of the bridge; and
- Glenmoriston Footprints, located 300m to the north.

During consultation with the Highland Council Historic Environment Team it was established that the historic masonry arch bridge was of significant cultural heritage interest. The cultural heritage of the existing trunk road bridge was also considered. Both of these heritage sites were previously unrecorded in the Highland Historic Environmental Record (HER) and are located within the study area.

A search of the HES PastMap website in November 2016 indicated that Torgyle Chapel, Torgyle House or Inn, the Glenmoriston Footprints, the old masonry bridge and the existing A887 road bridge were recorded within 300m of the proposed scheme.

There are no listed buildings, scheduled monuments, inventory battlefields, gardens and designed landscape inventory sites or conservation areas within the study area.

There are un-recorded ruins identified by an 1871 Ordnance Survey Map showing a smithy and settlement called Lagganbane, located directly north of the existing trunk road bridge.

3. ECOLOGY AND NATURE CONSERVATION:

The size of the study area for ecology and nature conservation varied according to the species or habitat being considered. On the broadest scale, baseline data was obtained for species identified within a 10km square of the scheme boundary.

Habitats of significance to conservation within the study area include:

- River Moriston Special Area of Conservation (SAC). The Allt Lagain Bhain immediately downstream of the bridge forms part of the SAC;
- Allt Lagain Bhain and an unnamed watercourse, which are tributaries of the River Moriston.;
- fragments of Ancient Woodland Inventory (AWI) woodland;
- other areas of woodland, including recently planted birch trees.

4. LANDSCAPE AND VISUAL:

The study area for landscape and visual impact is within 10km of the proposed scheme footprint.

The proposed works are not located within a National Scenic Area (NSA), National Park or Special Landscape Area. The existing A887 road bridge is located in a rural location with views of the surrounding woodland and hills beyond. The verges are mainly grass and are fringed with intermittent broadleaf trees. Land use within the study area is predominantly a mixture of rough pasture and broadleaf woodland. There is an old masonry arch bridge directly adjacent to the trunk road bridge which adds interest to the landscape. There are no public footpaths within the proposed scheme, however, there is an old drove road that runs north of the proposed scheme linking Fort Augustus to Tomich (Strathglass). There is minimal development within the area of the proposed scheme. There is, however, major linear infrastructure in the form of Beauly to Denny power line that runs approximately 100m west of the proposed scheme.

The landscape character of the study area is within the Wooded Glen landscape type. This is characterised by broad glen with steep upper slopes, undulating lower slope and a narrow floor mostly occupied by river

Description of Local Environment:

terraces. It contains a mix of broadleaf woodland, small coniferous plantations and pastures that cover the lower slopes. On the upper slopes there are larger coniferous plantations and open moorlands. There is limited visibility with the glen floor creating an intimate semi-enclosed landscape. There are areas of open hill ground allowing distant views of the glens.

The study area for visual impact is within 10km of the proposed scheme footprint. There are no public viewpoints that afford an overview of the proposed scheme. The nearest houses are at Torgyle to the south and Dundreggan to the north. The bridge is not visible to any of the properties.

5. LAND USE:

The existing land use within the vicinity of the bridge consists mainly of woodland, coniferous forestry plantations and rough grazing.

Land use in the immediate vicinity of the A887 Allt Lagain Bhain Bridge is dominated by native broadleaved woodland. The wider catchment of Allt Lagain Bhain includes rough pasture and coniferous forest.

There is minimal development within the area of the proposed scheme, apart from the Beauly to Denny power line that runs approximately 100m west of the proposed scheme.

6. NOISE AND VIBRATION:

Road traffic using the existing A887 is identified as the primary source of noise and vibration within the study area. There are no sensitive residential receptors within 200m of the proposed scheme.

7. PEDESTRIANS, CYCLISTS, EQUESTRIANS AND COMMUNITY:

The main residential communities are in Dundreggan and Torgyle located approximately 500m east and 400m to the south respectively. There are no footpaths or designated long distance walking routes within the vicinity of the scheme. The nearest core path runs approximately 250m to the north and east starting at Dundreggan. There are no National Cycle Network (NCN) routes in the vicinity of the scheme, however, the road may still be popular with cyclists. It is unlikely that the road will be heavily used by equestrians.

8. VEHICLE TRAVELLERS:

The existing A887 is a single carriageway road, and it connects road vehicles westbound and eastbound between the A87 near Bun Loyne and the A82 near Invermoriston. Locals and visitors use the A887 road that runs along Glen Moriston and Inverwick Forest. Existing annual average daily traffic flow at the bridge is 965 and in August daily flows increase to 1367. The carriageway at the bridge is single track with passing places. The bridge deck is narrow at this location with history of parapet damage by vehicles.

9. ROAD DRAINAGE AND THE WATER ENVIRONMENT:

The main hydrological features in the vicinity of the scheme are the Allt Lagain Bhain watercourse and the River Moriston. The River Moriston and the Allt Lagain Bhain downstream of the A887 is designated as an SAC due to qualifying interests in freshwater pearl mussel and Atlantic salmon.

The Allt Lagain Bhain does not meet the criteria under the Water Framework Directive (WFD) to qualify as a water body as it has a catchment less than 10 km^2, subsequently, SEPA hold no data for this water body.

The River Moriston (Dundreggan Dam to Bun Loyne) is designated by SEPA as a heavily modified water body (HMWB) on account of physical alterations that cannot be addressed without a significant impact on water storage for hydroelectricity generation. SEPA classified this water body as being at good ecological potential in 2016. There is also an un-named watercourse, less than 1m wide, culverted under the A887 trunk road to the west of the bridge.

The proposed scheme is within the North Highland Groundwater as identified on the SEPA Water Environment

Description of Local Environment:

Hub (SEPA 2016b). This groundwater body was classified by SEPA in 2016 as having an overall status of Good. It was classified as Good for water flows and levels and Good for water quality and it is expected to achieve Good status in 2021, 2027 and beyond. It is also designated as a Drinking Water Protection Area (DWPA).

Much of the area on the south side of the A887 is floodplain associated with the River Moriston and is shown as an area at risk of flooding from rivers on the SEPA Flood map (SEPA, 2016a). The land beside the burn upstream of the A887 road bridge is not shown to be at risk of flooding. The land slopes steeply up from the burn on both sides and during extreme storm events, high flows in the burn are likely to be contained within these slopes until and if the road level is reached.

There are 17 existing CAR Licences / Registrations and three known private water abstractions for locations within 1.5 km of the proposed scheme.

10. GEOLOGY AND SOILS:

There are no statutory geological designations covering the site. British Geological Survey (BGS, 2013) mapping shows the bedrock geology in the area as Tarvie Psammite Formation – Psammite. Psammite normally refers to metamorphosed sandstones and BGS refers to this particular Psammite as "well bedded, flaggy, fawn to brown and white quartzose psammite, where predominant pelites (metamorphosed mudstones) pass into predominantly psammitic lithologies". The superficial geology (deposits overlying the bedrock) at the location comprises Glaciofluvial Ice Contact Deposits, Devensian – gravel, sand and silt.

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

The following environmental impacts have been numbered to follow the appropriate Design Manual for Roads and Bridges (DMRB) chapters for environmental assessment and do not reflect a ranking of impact severity. Construction impacts and impact on Policies and Plans are covered within each environmental topic heading where applicable.

1. AIR QUALITY:

There is the potential for a minor decrease in air quality during the construction phases due to activities associated with the works e.g. demolition activities and emissions from vehicles idling at temporary traffic lights. The proposals would not affect air quality at the operational stage because they would not result in any change in traffic levels or dynamics on the A887. Mitigation proposals include the following. Vehicles and plant engines would be switched off when not in use to reduce and control emissions. The road surface would be swept regularly and wheel washes would be used as required. Exposed earth to be wetted where required to keep down dust. Any material stockpiles which could be affected by wind blow would be covered or a wind break used while being kept on site. A daily visual dust monitoring regime would be implemented, noting also weather and construction activities.

2. CULTURAL HERITAGE:

The proposed scheme would result in the permanent and irreversible loss of the masonry arch bridge which is predicted to be a residual effect of moderate significance. Proposed mitigation measures include a Terrestrial Laser scan of the bridge, annotated scaled layout ground plan, elevations, ortho-elevation, longitudinal and cross sections, 2D representation of significant architectural features of the bridge, 3D representation of the bridge in its current setting for a fly-through video clip and a photographic survey to ensure proper recording of each bridge. Representation will be made of other significant architectural features of each bridge. Furthermore, a watching brief would be undertaken by an appropriately qualified and competent archaeologist during demolition works.

The works could result in disturbance and/or damage to the unrecorded remains at Lagganbane. Consequently, the residual effect on these remains would be of potentially moderate significance and would be mitigated by appropriate recording and watching brief if they are disturbed.

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

It is considered that, following mitigation, significance of effect on the other cultural heritage receptors would be neutral to slight and are not considered to be significant. These mitigation measures include establishment of protection zones around assets when establishing locations for site compounds etc. and the establishment of an exclusion zone around remains close to the works.

3. ECOLOGY AND NATURE CONSERVATION:

Consultation with SNH was carried out by Scotland TranServ in September 2012 with regards to Habitats Regulations Appraisal of the River Moriston SAC. They confirmed that there would be a 'likely significant effect' on the qualifying interest of fresh water pearl mussel and that Appropriate Assessment should be carried out to determine whether there would be a significant adverse effect on the integrity of the site. A Statement to Inform Appropriate Assessment (SIAA) concluded that, with appropriate pollution prevention control and good practice measures in place, there would be no adverse effect on the site integrity. SNH were in agreement with this assessment.

The proposed scheme is predicted to have a significant impact on bat species where known bat roosts would be lost at the historic masonry arch bridge. Due to the permanent loss of an area of ancient woodland, the proposed scheme is predicted to have a significant impact on this habitat receptor.

There are a number of mitigation measures that would be implemented. This includes but are not limited to:

- Incorporating measures into the design and construction of the bridge to reduce the impact on habitats and species;
- take measures during construction to reduce pollution using SEPA Pollution Prevention Guidelines (PPGs) and Guidance for Pollution Prevention (GPPs);
- the provision of bat boxes;
- carry out further surveys and monitoring within the study area to establish further understanding and mitigation measures for protected species.

4. LANDSCAPE AND VISUAL:

The main landscape impact would be the loss of the historic masonry arch bridge. This is a permanent, irreversible impact. The loss of the structure represents a moderate adverse impact significance. However, the overall impact on the landscape character is assessed as a slight adverse significance.

Overall it is considered that visual impact would be minimal. With the new parapet faced in stone it is considered that visual impact would be minimised and would be slight significance at most.

5. LAND USE:

There are no properties requiring demolition and the land is not considered to be suitable for development. The affected land is primarily semi-natural woodland that has potential for use for rough grazing. Land take as part of the project is unavoidable and is a small percentage of the total available land. A predicted slight adverse effect is not considered to be significant.

6. NOISE AND VIBRATION:

There are no sensitive residential receptors within 200m of the proposed scheme. However, there would be noise during construction that would potentially affect users of the road. Users of these roads include locals and visitors who will use this route as walkers, cyclists and vehicle travellers. Mitigation measures would be put in place to minimise noise impact during construction. These would include: guidance on working hours; reversing on site to be minimised; plant to be operated in the mode that minimises noise emissions; all material handling to be carried out in a way that minimises noise; and battery powered generators to be used in preference to diesel powered and especially for traffic management.

7. PEDESTRIANS, CYCLISTS, EQUESTRIANS AND COMMUNITY:

There would be some disruption to pedestrians and cyclists during construction, however, this is anticipated to be minor and of a temporary nature during the works only. It is unlikely that a high number of equestrians would use the road at this location. A traffic management plan would be developed and implemented by the

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

contractor and would take into account the needs of both vehicle and non-vehicular travellers. During the operation of the scheme, the presence of the new wider bridge and tie-ins would allow safer passage which would result in a slight or moderate beneficial effect.

8. VEHICLE TRAVELLERS:

There are no predicted significant impacts of the proposed scheme on vehicle travellers. There would be no predicted increase in traffic flows as a result of the proposed scheme. There would be a slight effect due to temporary traffic disruption during construction. A traffic management plan would be developed and implemented by the contractor and would take into account the needs of both vehicle and non-vehicular travellers. During the operation of the scheme, driver stress is likely to be reduced slightly through the widening of the road from a single track alignment to a single carriageway width of the bridge.

9. ROAD DRAINAGE AND THE WATER ENVIRONMENT:

It is predicted that some construction activities following mitigation could result in an effect of moderate significance on water quality of the Allt Lagain Bhain watercourse (which forms part of the River Moriston SAC downstream of the A887 bridge). The impacts, however, are likely to be temporary, localised and short-term in nature.

Consultation with SNH was carried out by Scotland TranServ in September 2012 and March 2018 with regards to Habitats Regulations Appraisal of the River Moriston SAC. They confirmed that there would be a 'likely significant effect' on the qualifying interest of fresh water pearl mussel and that Appropriate Assessment should be carried out to determine whether there would be a significant adverse effect on the integrity of the site. A report to inform appropriate assessment concluded that with appropriate pollution prevention control measures in place, there would be no adverse effect on the site integrity. SNH were in agreement with this assessment.

Mitigation measures would include:

- Incorporating measures into the design of the bridge and road to encourage a natural bed of gravels to build up beneath the bridge and prevent creation of a hydraulic drop;
- Implementing measures to control runoff from the site; and
- Compliance with relevant guidance documents and incorporation of relevant good practice measures. This includes but is not limited to SEPA PPGs and GPPs and SEPA Engineering in the Water Environment Good Practice Guide: Temporary Construction Methods.

10. GEOLOGY AND SOILS:

The impact on geology and soils is not predicted to be significant. However, during construction works would follow best practice measures in order to minimise the impact on geology and soils.

Extent of EIA work undertaken and details of consultation:

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

- Air Quality;
- Cultural Heritage;
- Disruption Due to Construction;
- Ecology and Nature Conservation;
- Landscape and Visual;
- Land Use;
- Noise and Vibration;
- Pedestrians, Cyclists, Equestrians and Community Effects;
- Vehicle Travellers;
- Road Drainage and the Water Environment;

Extent of EIA work undertaken and details of consultation:

- Geology and soils;
- Policies and Plans.

An Environmental Statement (EIA Report) has been prepared for this project under the terms of the Roads (Scotland) Act 1984 as amended by the Environmental Impact Assessment (Scotland) Regulations 1999 (as amended).

The scope of the EIA has been defined in accordance with Design Manual for Roads and Bridges (DMRB) guidance, through the review of the Scoping Report (Scotland TranServ, 2013), and through consultation with stakeholders. The following statutory and non-statutory organisations were consulted during the preparation of the Environmental Statement :

- Scottish Natural Heritage (SNH);
- Scottish Environment Protection Agency (SEPA);
- Highland Council Historic Environment Team;
- Ness District Salmon Fishery Board;
- Ness and Beauty Fisheries Trust.

Statement of case in support of a Determination that a formal EIA and Environmental Statement is required:

The EU Directive (2014/52/EU) regarding EIA was transposed into UK legislation on 16 May 2017. However, as this project was subject to scoping procedure prior to 16 May 2017, the Environmental Impact Assessment (Scotland) Regulations 1999 (as amended) have been followed. This is in line with the transitional arrangements described in the 2014/52/EU Directive and Regulation 12(2)(a) of the Roads (Scotland) Act 1984 (Environmental Impact Assessment) Regulations 2017.

The scheme is considered to constitute a relevant project falling within Annex II as referred to in the Environmental Impact Assessment (Scotland) Regulations 1999 (as amended), since it is situated in part within a 'Sensitive Area', namely the River Moriston Special Area of Conservation (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 by the EIA (Scotland) Regulations 1999 (as amended). Screening using Annex III criteria, reference to consultations undertaken and review of available information has identified the need for a full EIA because the works are likely to have a significant effect on the environment by virtue of factors such as:

- potential cultural heritage impacts due to demolition of the historic masonry arch bridge;
- potential impact on bat species where known bat roosts would be lost at the historic masonry arch bridge;
- potential impact on water quality of the Allt Lagain Bhain watercourse (which forms part of the River Moriston Special Area Conservation downstream of the A887 bridge) during construction.

Characteristics of the scheme:

The works entail replacing the existing A887 road bridge with a new bridge structure and upgrading the existing single track alignment to a standard single carriageway width. In order to accommodate the new structure and facilitate safe working, the historic masonry arch bridge that lies upstream of the trunk road needs to be demolished. The proposed works would require temporary diversion routes to the north of the existing A887 road bridge and realignment of a short length of Allt Lagain Bhain watercourse back to its original alignment.

Location of the scheme:

The proposed scheme is located at the A887 trunk road in Glen Moriston approximately 500m west of the small

settlement of Dundreggan in a largely rural area. The proposed scheme is situated in part within the River Moriston SAC. The River Moriston and the Allt Lagain Bhain watercourse downstream of the A887 forms part of the River Moriston SAC.

Characteristics of potential impacts of the scheme:
Potential impacts of the proposed scheme include permanent impacts through demolition of the historic masonry arch bridge. The potential decrease in water quality of the Allt Lagain Bhain watercourse downstream of the A887 bridge during construction would be a temporary impact.

File references of supporting documentation:

BGS (2013). BGS website Available at: http://mapapps.bgs.ac.uk/geologyofbritain/home.html. [Accessed 18th November 2013.]

Highland Council (2012). Highland Wide Local Development Plan, April 2012.

SEPA (2015). The River Basin Management Plan for the Scotland River Basin District 2015-2027.

SEPA (2016a). SEPA Flood Map Website Available at: http://map.sepa.org.uk/floodmap/map.htm [Accessed June 2016]

SEPA (2016b). SEPA Water Environment Hub Website Available at: http://www.sepa.org.uk/data-visualisation/water-environment-hub/ [Accessed April 2016.]

Scotland TranServ (2013): A887 Allt Lagain Bhain – Scoping Report

Scotland TranServ (2012): Allt Lagain Bhain Bridge: Report to Inform Appropriate Assessment for River Moriston SAC

ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION: SUMMARY

Issue	Baseline Conditions	Impact	Mitigation
General	The existing bridge structure consists of a single 5m span bridge and follows a single track alignment. It been propped at its mid-span since 2001 and has a history of parapet damage due to its narrow deck width. It is currently in very poor condition with the main reinforcement being severely corroded.	The work would meet the existing standards and provide a long-term solution to structural issues with the bridge.	None.
Air Quality	In the vicinity of the scheme, local air quality would be primarily influenced by traffic on the A887. There are no sensitive receptors within 200 m of the scheme.	There is the potential for a minor decrease in air quality during the construction phases due to activities associated with the works e.g. demolition activities and emissions from vehicles idling at temporary traffic lights. The proposals would not affect air quality at the operational stage because they would not result in any change in traffic levels or dynamics on the A887.	Vehicles and plant engines would be switched off when not in use to reduce and control emissions. The road surface would be swept regularly and wheel washes would be used as required. Exposed earth to be wetted where required to keep down dust. Any material stockpiles which could be affected by wind blow would be covered or a wind break used while being kept on site. A daily visual dust monitoring regime would be implemented, noting also weather and construction activities.
Noise and vibration	Road traffic using the existing A887 is identified as the primary source of noise and vibration within the study area. There are no sensitive residential receptors within 200m of the proposed scheme.	No significant noise impacts. Noise during construction would potentially affect users of the road.	Mitigation measures would be put in place to minimise noise impact during construction including: guidance on working hours; reversing on site to be minimised; plant to be operated in the mode that minimises noise emissions; all material handling to be carried out in a way that minimises noise; and battery powered generators to be used in preference to diesel powered and especially for traffic management.

Cultural Heritage	There are no listed buildings, scheduled monuments, inventory battlefields, gardens and designed landscape inventory sites or conservation areas within the study area. There are six sites of cultural heritage interest recorded within 300m of the proposed scheme. This includes Torgyle Chapel, Torgyle House or Inn, Glenmoriston Footprints, the historic masonry arch bridge, the existing trunk road bridge, and un-recorded ruins call Lagganbane.	The proposed scheme would result in the permanent and irreversible loss of the masonry arch bridge which is predicted to be a residual effect of moderate significance. The works could result in disturbance and/or damage to the unrecorded remains at Lagganbane. Consequently, the residual effect on these remains would be of potentially moderate significance It is considered that, following mitigation, significance of effect on the other cultural heritage receptors would be neutral to slight and are not considered to be significant.	Proposed mitigation measures include a Terrestrial Laser scan of the bridge, annotated scaled layout ground plan, elevations, ortho-elevation, longitudinal and cross sections, 2D representation of significant architectural features of the bridge, 3D representation of the bridge in its current setting for a fly-through video clip and a photographic survey to ensure proper recording of each bridge. Representation will be made of other significant architectural features of each bridge. Furthermore, a watching brief would be undertaken by an appropriately qualified and competent archaeologist during demolition works. Impact on the unrecorded remains at Lagganbane would be mitigated by appropriate recording and watching brief if they are disturbed. Mitigation measures for the other cultural heritage receptors include establishment of protection zones around assets when establishing locations for site compounds etc. and the establishment of an exclusion zone around remains close to the works.
Land Use	The existing land use within the vicinity of the bridge consists mainly of woodland, coniferous forestry plantations and rough grazing. There is minimal development within the area of the proposed scheme, apart from the Beauly to Denny power line that runs approximately 100 m west of the proposed scheme.	There are no properties requiring demolition and the land is not considered to be suitable for development. Land take as part of the project is unavoidable and is a small percentage of the total available land. A predicted slight adverse effect is not considered to be significant.	None.

Geology and soils	There are no statutory geological designations covering the site. There is bedrock geology in the area as Tarvie Psammite Formation – Psammite. Psammite normally refers to metamorphosed sandstones and BGS refers to this particular Psammite as "well bedded, flaggy, fawn to brown and white quartzose psammite, where predominant pelites (metamorphosed mudstones) pass into predominantly psammitic lithologies". The superficial geology (deposits overlying the bedrock) at the location comprises Glaciofluvial Ice Contact Deposits, Devensian – gravel, sand and silt.	No significant impacts predicted.	Follow best practice measures during construction.

Road drainage and the water environment	The main hydrological features in the vicinity of the scheme are the Allt Lagain Bhain watercourse and the River Moriston. The River Moriston and the Allt Lagain Bhain downstream of the A887 is designated as an SAC. There is also an un-named watercourse, less than 1 m wide, culverted under the A887 trunk road to the west of the bridge. The proposed scheme is within the North Highland Groundwater and designated as a Drinking Water Protection Area. Much of the area on the south side of the A887 is floodplain associated with the River Moriston and is shown as an area at risk of flooding from rivers. The land beside the burn upstream of the A887 road bridge is not shown to be at risk of flooding. There are 17 existing CAR Licences / Registrations and three known private water abstractions for locations within 1.5 km of the proposed scheme.	Consultation with SNH was carried out by Scotland TranServ in September 2012 with regards to Habitats Regulations Appraisal of the River Moriston SAC. They confirmed that there would be a 'likely significant effect' on the qualifying interest of fresh water pearl mussel and that Appropriate Assessment should be carried out to determine whether there would be a significant adverse effect on the integrity of the site. A report to inform appropriate assessment concluded that with appropriate pollution prevention control measures in place, there would be no adverse effect on the site integrity. SNH were in agreement with this assessment It is predicted that some construction activities following mitigation could result in an effect of moderate significance on water quality of the Allt Lagain Bhain watercourse (which forms part of the River Moriston SAC downstream of the A887 bridge). The impacts, however, are likely to be temporary, localised and short-term in nature.	Potential mitigation measures would include incorporating measures into design to encourage a natural bed of gravels to build up beneath the bridge and prevent creation of a hydraulic drop implementing measures to control runoff and compliance with relevant guidance documents and good practice measures.

Ecology and Nature Conservation	There are a number of species of conservation interest confirmed within the study area. Habitats of significance to conservation within the study area include River Moriston Special Area of Conservation, Allt Lagain Bhain, and an unnamed watercourse which are tributaries of the River Morison, fragments of ancient woodland and other areas of woodland.	Consultation with SNH was carried out by Scotland TranServ in September 2012 with regards to Habitats Regulations Appraisal of the River Moriston SAC. They confirmed that there would be a 'likely significant effect' on the qualifying interest of fresh water pearl mussel and that Appropriate Assessment should be carried out to determine whether there would be a significant adverse effect on the integrity of the site. A report to inform appropriate assessment concluded that with appropriate pollution prevention control measures in place, there would be no adverse effect on the site integrity. SNH were in agreement with this assessment. The proposed scheme is also predicted to have a significant impact on bat species where known bat roosts would be lost at the historic masonry arch bridge. Due to the permanent loss of an area of ancient woodland, the proposed scheme is predicted to have a significant impact on this habitat receptor.	Mitigation measures would include, incorporating measures into the design to reduce the impact on habitats and species, taking measures during construction to reduce pollution, the provision of bat boxes and carrying out further surveys and monitoring within the study area to establish further understanding and mitigation measures for protected species.

Landscape and Visual Impact	The proposed works are not located within a National Scenic Area (NSA), National Park or Special Landscape Area. The existing A887 road bridge is located in a rural location with views of the surrounding woodland and hills beyond. The verges are mainly grass and are fringed with intermittent broadleaf trees. Land use within the study area is predominantly a mixture of rough pasture and broadleaf woodland. There is an old masonry arch bridge directly adjacent to the trunk road bridge which adds interest to the landscape. There are no public footpaths within the proposed scheme, however, there is old drove road which runs north of the proposed scheme linking Fort Augustus to Tomich (Strathglass). There is minimal development within the area of the proposed scheme. There is however, major linear infrastructure in the form of Beauly to Denny power line that runs approximately 100 m west of the proposed scheme. The landscape character of the study area is within the Wooded Glen landscape type. There are no public viewpoints that afford an overview of the proposed scheme. The nearest houses are at Torgyle to the south and Dundreggan to the north. The bridge is not visible to any of the properties.	The main landscape impact would be the loss of the historic masonry arch bridge. This is a permanent, irreversible impact. The loss of the structure represents a moderate adverse impact significance. However, the overall impact on the landscape character is assessed as a slight adverse significance. Overall it is considered that visual impact would be minimal. With the new parapet faced in stone it is considered that visual impact would be minimised and would be slight significance at most.	None.

Pedestrians Equestrians Cyclists and Community Effects	The main residential communities are in Dundreggan and Torgyle located within 500m. There are no footpaths or designated long distance walking routes within the vicinity of the scheme. The nearest core path runs approximately 250m to the north and east starting at Dundreggan. There are no National Cycle Network (NCN) routes in the vicinity of the scheme, however, the road may still be popular with cyclists. It is unlikely that the road would be heavily used by equestrians.	There would be some disruption to pedestrians and cyclists during construction, however, this is anticipated to be minor and of a temporary nature during the works only. It is unlikely that a high number of equestrians would use the road at this location.	A traffic management plan would be developed and implemented by the contractor and would take into account the needs of both vehicle and non-vehicular travellers. During the operation of the scheme, the presence of the new wider bridge and tie-ins would allow safer passage which would result in a slight or moderate beneficial effect.
Vehicle Travellers	The existing A887 is a single carriageway road. It connects road vehicles westbound and eastbound between the A87 near Bun Loyne and the A82 near Invermoriston. Locals and visitors use the A887 road which runs along Glen Moriston and Inverwick Forest. Existing annual average daily traffic flow at the bridge is 965. In August daily flows increase to 1367. The carriageway at the bridge is single track with passing places. The bridge deck is narrow at this location with history of parapet damage by vehicles.	There are no predicted significant impacts of the proposed scheme on vehicle travellers. There would be a slight effect due to temporary traffic disruption during construction which would increase journey time and severance. During operation of the scheme, driver stress is likely to be reduced slightly by the proposed scheme through the widening of the road from a single track alignment to a single carriageway width of the bridge.	A traffic management plan would be developed and implemented by the contractor and would take into account the needs of both vehicle and non-vehicular travellers.