

A87 Clachan Duich
Appendix A – Supporting Information
March 2026



experience that delivers





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1. Introduction

The A87 Clachan Duich Bridge is a low-level estuarial crossing comprising pre-cast, pre-stressed, inverted T-beam bridge that carries the A87 trunk road over Loch Duich. The bridge is supported over full height mass concrete gravity abutments and reinforced concrete solid wall piers. The substructure is founded on steel plate cofferdams. The bridge is 25.4m long and crosses Loch Duich in three spans. It is 11m wide, consisting of a 9m carriageway with 1m wide footpaths on either side. The three spans range in length from 12.5m at the sides, to 12.9m at midspan.

BEAR Scotland are responsible for the maintenance and improvement schemes on the bridge as part of the NW Unit Network Management Contract (NMC) with Transport Scotland for the management and maintenance of the Scottish trunk road network.

A87 Clachan Duich Bridge is located at National Grid Reference (NGR) NG 94647 20847 within the Highland Council local authority, approximately 1.7km northeast of the small settlement of Invershiel, as shown in Figures 1 and 2. Typical views below the bridge are shown in Figure 3. Typical plan and sectional elevation sketches of the bridge are shown in Figure 4.

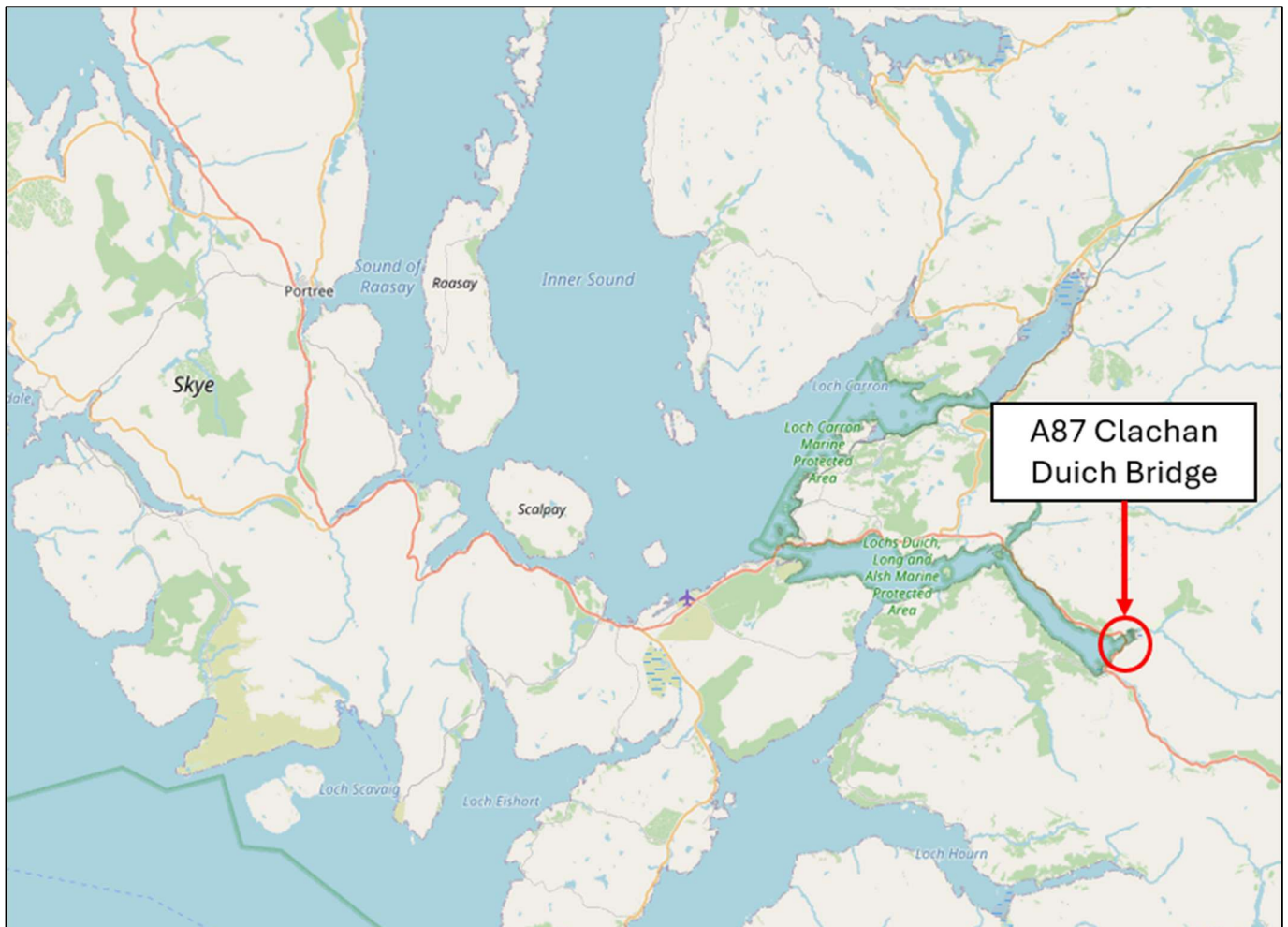


Figure 1. A87 Clachan Duich Bridge location in wider area

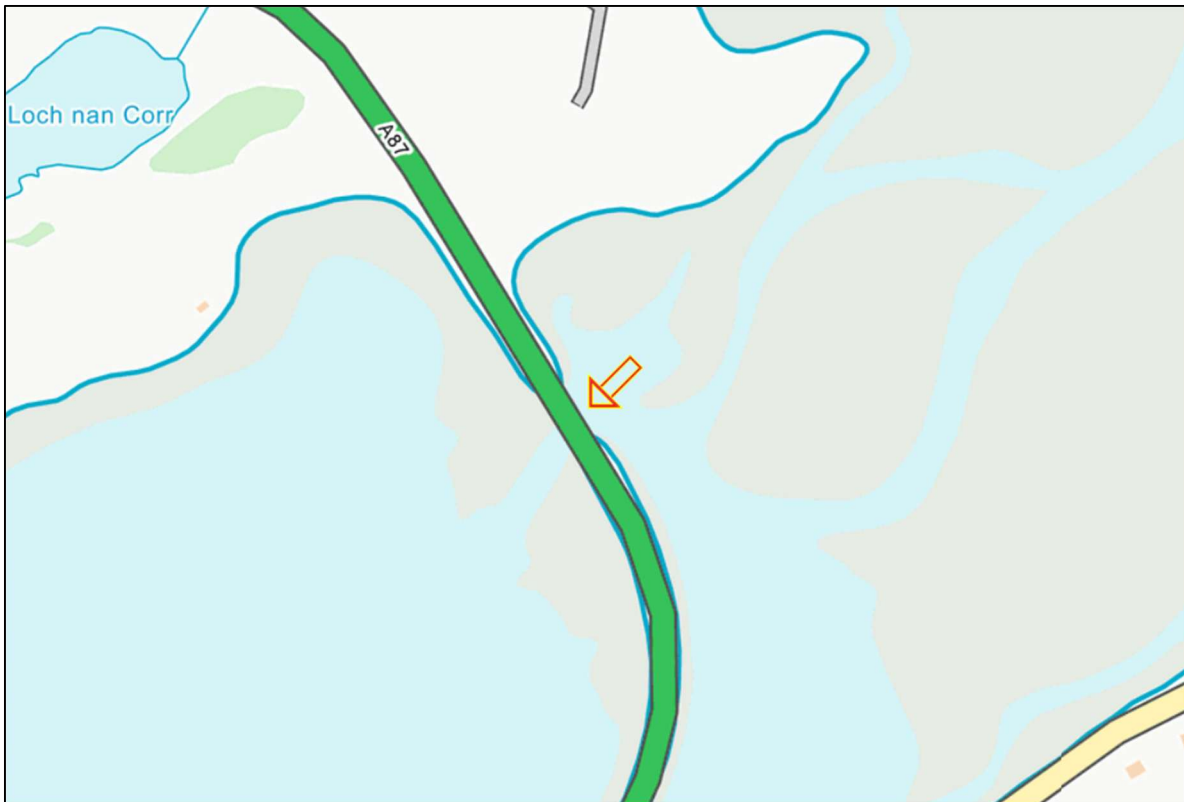


Figure 2. A87 Clachan Duich Bridge location (1:2,500 scale)



Figure 3. A87 Clachan Duich Bridge typical view below the bridge

2. Programme of Works

Below are details of the engineering works including the estimated period/duration, estimated value of works, location on the bridge, works description, an outline method statement and proposed mitigation measures related to the protection of the marine environment.

The works methodologies described below are designed to prevent any material or equipment entering the marine environment. It should be noted that additional measures may be required, and these will be confirmed with the contractor prior to works commencing. Where access platforms are noted, any dimensional constraints caused to the Highway, private land or over the marine environment will be considered and consultation completed with stakeholders where required. A87 Clachan Duich Bridge is a low-level estuarial crossing and there is no designated navigation channel.

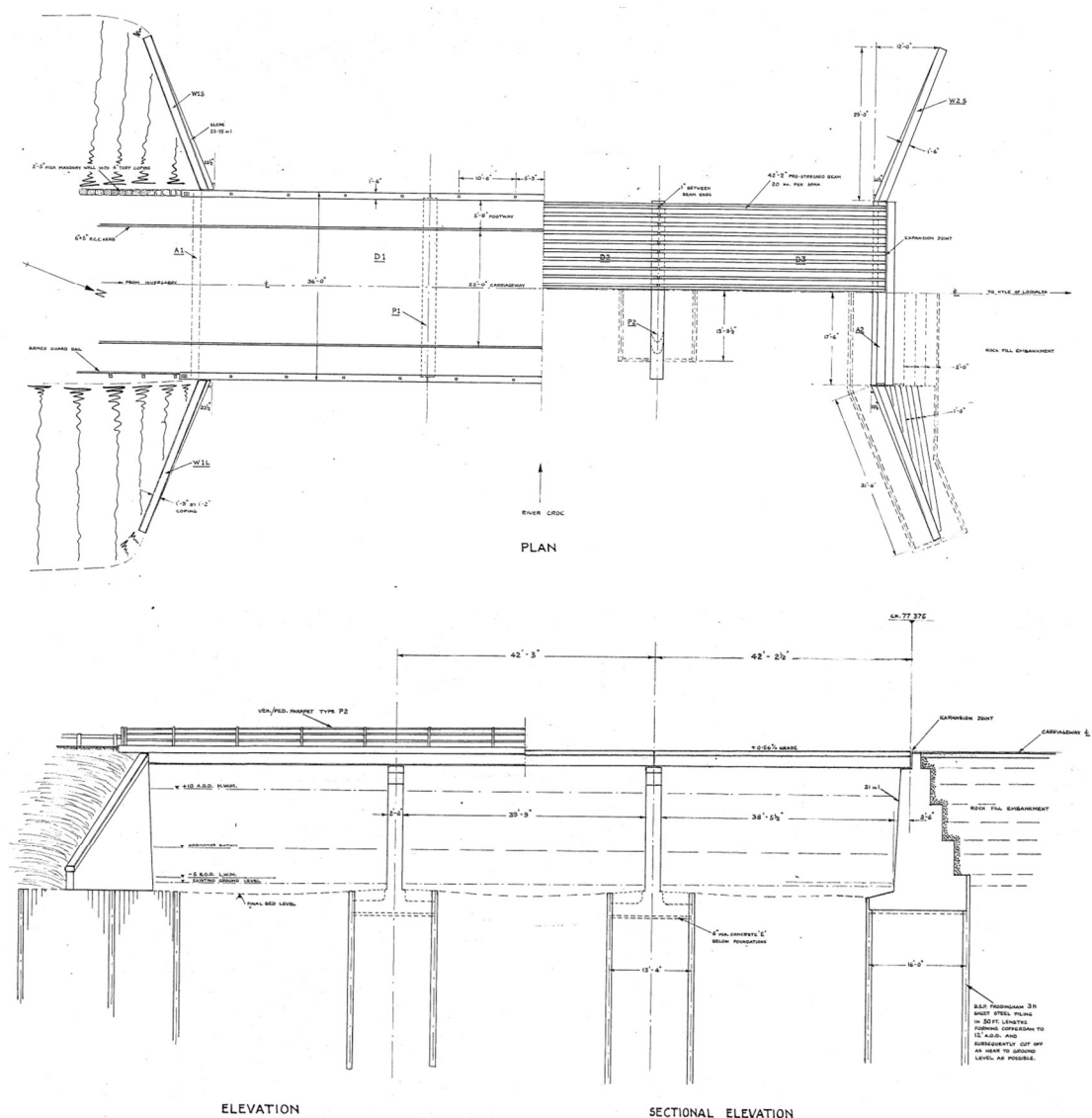


Figure 4. A87 Clachan Duich Bridge typical elevation and cross section

2.1. Scheme Programme of Works

A87 Clachan Duich Bridge Works	
Estimated construction period and working times	Works are planned to start in FY 2026/27 (exact dates are to be confirmed) and have an estimated duration of 10 days, following a daytime working pattern (08:00-18:00).
Estimated construction value	£ 300,000
Location on structure	- Borehole will be drilled using rigs placed on the bridge deck, with temporary scaffolding (or proprietary access system) erected to support weight (access required from the deck only). - Integrity and sonic testing of sheet piles will be undertaken from small boats positioned along the bridge (access required from bridge deck and beneath bridge deck from boats)
Description of the works	The A87 Clachan Duich Bridge is noted as the structure in Schedule 2 Appendix 4 Table 4 .13.1 of the NMC Contract as a structure with known defects requiring monitoring that is not sub-standard. This requirement is for two-yearly monitoring (biennial dive survey) to determine the rate of corrosion of sheet pile cofferdams around the pier footings. In addition, the submerged elements of both the north and south piers are subject to continuous monitoring due to significant bed scour and corrosion of the surrounding sheet piles. For this reason, it is essential to investigate the condition of the sheet pile cofferdams at the piers and abutments. To facilitate the monitoring, works are required and will involve the inspection and investigation of the sheet piles that surround the abutments and piers of the bridge to determine the integrity, thickness and depth. To verify the depth of the existing sheet piles, boreholes will be drilled adjacent to the abutments and piers using drilling rigs positioned on the bridge deck. Boreholes will be drilled directly through the water to the riverbed until the required pile depth is reached. A temporary scaffold platform or proprietary access system will be erected on the deck to support the weight of the drilling rig, personnel, and associated equipment, with allowances for dynamic loads generated during drilling. The platform may be configured to cantilever beyond the bridge parapets using beams or counterweights to provide the required reach. In line with health and safety requirements, all work beneath the bridge will be carried out from adequately supported platforms with edge protection to prevent falls of personnel or materials. Containment will be provided through debris netting or thickened sheets attached to the platform to prevent material from falling into the water. Integrity and sonic testing of the sheet piles will be undertaken from small boats positioned along the structure, with strict containment measures implemented to prevent pollution of the surrounding marine environment. Site compound and access to the site No site compound is required for the works. Access to the site will be on the A87 and facilitated through traffic management. This may include lane closures, diversion signage, temporary barriers, and coordination with local authorities in accordance with statutory requirements. Drilling operations methodology

	Drilling rigs will be positioned on the bridge deck, supported on a temporary scaffold platform or proprietary access system designed to carry the self-weight of the rig, personnel, and equipment, including allowances for dynamic loads during operation. Boreholes will be drilled through the riverbed adjacent to abutments and piers to determine the embedded depth of the sheet piles. Edge protection and containment measures will be employed where necessary to prevent materials or equipment from falling into the water. Condition survey and testing methodology A comprehensive condition survey of the sheet piles will be carried out, including: • Thickness measurement of the sheet pile tops using callipers or a suitable alternative. • Integrity testing using sonic echo methods to detect any defects, discontinuities, or damage along the pile length. • Thickness testing of steel sections using ultrasonic or similar non-destructive methods. • Bathymetric survey of the riverbed surrounding the bridge to record riverbed levels and ensure safe positioning of boreholes. • Where required, small boats or underbridge units will be used to access sections of the piles beneath water, with strict containment measures in place to prevent any pollution of the marine environment. Following works, traffic management will be removed and works will be demobilised from site.
Construction plant and equipment	• Rotary drilling rig • PVC casing for the borehole drills. • Drill mast. • Drill rods and drill bits. • Lifting equipment • Pump and water supply • Measuring devices • Core barrels /samples • Temporary access/working platforms • Small boats/underbridge units
Outline method statement	• Establish access which may include traffic management, temporary working/access platforms, drilling rig, underbridge units and/or small boats • Complete inspection and surveys • Demobilise access
Materials / waste	Materials (for investigation works): • Borehole casing (uPVC). • Backfill / hole sealing materials: bentonite pellets • Drilling flush / water supply (and, if required, drilling fluid additives such as bentonite/polymer). • UT thickness testing consumables: couplant/gel (above-water) and underwater couplant (usually water) if required; cleaning consumables (wire brushes/abrasive pads/scrapers). • Marking and recording consumables: chalk/paint markers, tapes/labels. • Diver consumables and PPE (if dive inspection/UT is used): drysuits, gloves, masks, cylinders, weights, comms/spares. • Environmental protection: spill kits (absorbents/booms), drip trays, waste bags/drums. • Containment and protection: Double Silt traps • Measuring tools (vernier callipers etc)

Proposed mitigations	Waste: No waste will be generated by the investigation, except for drilled arisings (riverbed soil and silt). Any silt disturbed during drilling will be captured within the silt traps and removed from site for appropriate disposal.
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