Environmental Impact Assessment (EIA) Screening for Cumbrae Slipway Reconstruction

Document no: HP_104_1071-JAC-ZZ-CUM-RP-EN-0003
Version: P01

CMAL
B2451100

Cumbrae Slipway Reconstruction
1 March 2024

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Client name:	CMAL		
Project name:	Cumbrae Slipway Reconstruction		
Client reference:	B2451100	**Project no:**	B2451100
Document no:	HP_104_1071-JAC-ZZ-CUM-RP-EN-0003	**Project manager:**	PM
Version:	P01	**Prepared by:**	Env4
Date:	1 March 2024	**File name:**	HP_104_1071-JAC-ZZ-CUM-RP-EN-0003

Document status: S2 - For information

Document history and status

Version	Date	Description	Author	Checked	Reviewed	Approved
P01	February 2024	EIA Screening Report	Env4	Env1	Env5; APM	PM

Distribution of copies

Version	Issue approved	Date issued	Issued to	Comments
P01	PM	01/03/24	CMAL	For information
P01	PM	01/03/24	MD-LOT	For decision
P01	PM	01/03/24	North Ayrshire Council	For decision

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1. Introduction

Caledonian Maritime Assets Ltd. (CMAL) requests a formal screening opinion from the Marine Directorate Licensing Operations Team (MD-LOT) and North Ayrshire Council (NAC) to determine whether the proposed Cumbrae ferry slipway reconstruction project (hereafter referred to as 'the proposed works') is an Environmental Impact Assessment (EIA) development. This EIA Screening Report sets out an initial assessment of the proposed works to consider whether it requires an EIA.

Formal EIA Screening Opinions were provided by North Ayrshire Council and MD-LOT for a previous design of the Cumbrae ferry slipway reconstruction project. The previous NAC EIA Screening Opinion was dated 22 June 2023 (NAC reference 23/00407/EIA) and the previous MD-LOT EIA Screening Opinion was dated 16 August 2023 (MD-LOT reference SCR-0060). The design of the project has subsequently been revised and this EIA screening report relates to the revised design.

This EIA Screening Report includes a description of the proposed works and comprehensive EIA screening assessment of the proposed works with regards to the EIA regulations, specifically The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 and The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017.

As described in this report, our view is that the proposed works is not an EIA development as it falls under Schedule 2 of both of the EIA Regulations referred to above and the findings of the EIA screening process conclude that the proposed works are not likely to result in significant environmental effects.

1.1 Background and description of the Proposed Works

The original slipway was built in 1970s and has been repaired frequently over the years and is now deteriorating. An inspection of the facility in November 2020 identified that the general condition of the slipway was 'serviceable', but it was certainly at the end of its useful life. The conclusion was that maintaining a reliable lifeline ferry service might not be possible if the slipway was not replaced at the earliest opportunity. Detailed design of the slipway reconstruction is currently underway.

The proposed works involves the construction of a replacement slipway approximately 27.5m to the south of the existing slipway. The existing slipway would remain during construction in order to maintain the ferry service, and then once the replacement slipway was operational the existing slipway would be demolished back to the previous quay wall. The land in this area will be raised so as to be level with the surrounding area and a revetment placed in front of the old quay wall.

A reclaimed vehicle marshalling area would be constructed to the south of the replacement slipway. An area between the replacement slipway and the existing slipway would be reclaimed to provide a new bus stop and waiting area for pedestrians and cyclists. A new terminal building would be constructed within the pedestrian area along with the provision of facilities for public use. It is anticipated that the terminal building will include both staff and public welfare facilities.

1.2 Location

The Cumbrae ferry slipway is located on the north-east coast of Great Cumbrae, in the Firth of Clyde, Scotland and is shown in Figure 1. The ferry slipway is owned by Caledonian Maritime Assets Limited (CMAL) and operated by Caledonian MacBrayne Ferries Ltd. (CFL). The terminal site also includes a single vehicle marshalling lane, car park, bus stop and turning area and toilet blocks owned by others.

Figure 1. Location of the existing ferry slipway at Great Cumbrae, Scotland

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1.3 Details of the proposed works

The proposed works include the construction of a replacement slipway to the south of the existing slipway which would be demolished following the new slipway becoming operational. The proposed works also include the construction of a marshalling area and pedestrian area. The indicative construction area is outlined in Figure 2. The work area above Mean Low Water Springs (MLWS) is 9,880m^2 and the work area below Mean High Water Springs (MHWS) is 9740m^2. The indicative site area shown in Figure 2 has been extended seaward of the replacement slipway and marshalling area retaining wall to allow for temporary works to construct the slipway, the wall potentially changing to a revetment and the marshalling area potentially extending southwards. Space has been allowed generally on the seaward extents for other potential design changes e.g. the revetment slopes and toe details.

The ferry service will be maintained throughout the works from the existing slipway, with the MV Loch Shira being the largest vessel servicing this route at the moment. This vessel has a Gross Tonnage of 1027te. The replacement slipway is being designed for the MV Loch Shira and other CMAL ferries that have served the route or may do so in the future. The Gross Tonnage of the vessel's considered in the design ranges from approximately 150te to 1050te. It is anticipated at this stage that the proposed work will not change the type of ferry (CMAL's small vessel fleet) or the frequency of ferries using the terminal.

1.3.1 Construction

It is anticipated that construction would take approximately 16 months. The proposed works include replacing the existing double width slipway with a new slipway to the south. Construction for the replacement slipway,

marshalling area and pedestrian area will generally be confined to areas not currently used as part of the ferry operations at Cumbrae. To minimise the number of deliveries taken on the ferry we envisage that the majority of the fill material will be delivered to site by barge.

1.3.1.1 Slipway

1.3.1.1.1 Construction

The new slipway is proposed to be 24.6m wide and 53.5m long on a 1:8 slope to suit CMAL's fleet of Loch Class vessels, with a transition area of 7.2m on a 1:15 slope. The replacement slipway will be constructed approximately 27.5m to the south of the existing slipway.

The lower section of the replacement slipway will be formed by a perimeter of retaining walls to create a cell which will be filled to the correct profile with granular material. Options for the retaining wall construction are currently being considered. This will create a solid base material to support the new concrete slab which will form the surface of the slipway. The seaward edge of the upper section of the slipway will be formed by a rock armour revetment.

It is the intention at present to construct the lower section of the replacement slipway within a cofferdam which will be dewatered to allow these works to be undertaken in the dry. This would enable the construction of a concrete surface with improved quality and long-term durability when compared to a concrete slab in this location constructed without a cofferdam. The construction of the cofferdam also lends itself to pouring the concrete slab with insitu concrete and therefore avoiding joints running latterly across the slipway between precast units.

It is anticipated that most of the construction materials will be imported by barge to avoid disruption to the ferry service.

1.3.1.1.2 Demolition

On completion of the new slipway, the existing slipway will be demolished. The seabed will be reinstated to the profile indicated in historical drawings prior to construction of the slipway or to tie in with the adjoining bed profile, with non-natural material removed as confirmed by comparing pre and post works bathymetric surveys and by divers. It is anticipated that this will be undertaken using a long reach excavator and a crane barge carrying skips of material back to the mainland. Material generated by the removal of the existing slipway will be taken to a licenced site on the mainland for disposal or recycling.

1.3.1.2 Marshalling Area and Pedestrian Area

Granular fill material will be imported to create the reclaimed marshalling area which would be surfaced with asphalt or block paving. The new marshalling lanes will be orientated to avoid clashing with the existing marshalling lane thereby ensuring that the existing lane can remain fully operational during the construction phase. Drainage and service ducts would be provided within the marshalling area.

The seaward edge of the marshalling area and pedestrian waiting area will primarily be formed by a revetment slope with a layer of rock armour and geotextile material protecting the granular material. The section at the southern end of the marshalling area may be retained by a precast concrete retaining wall rather than revetment, if an incoming potable water supply pipe for the island needs to be diverted around the marshalling area to facilitate construction of the area. Site investigations are proposed in March 2024 to establish an option that is acceptable to Scottish Water to divert the pipe around or through the marshalling area or protect the existing pipe where it intersects the marshalling area. It is anticipated that works on the water supply pipe will be required in advance of the proposed works commencing onsite.

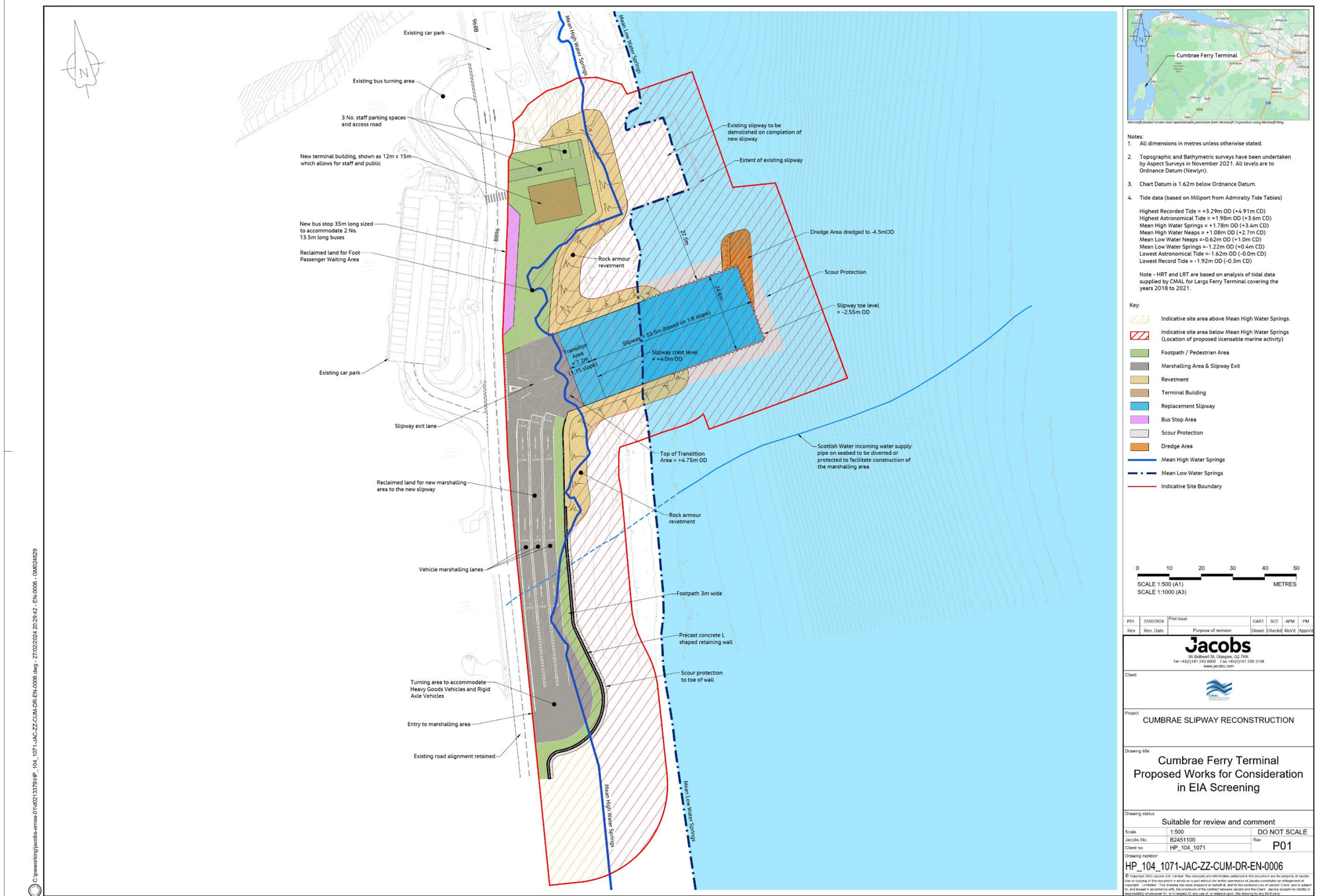
Most of the construction materials will be transported from the mainland to the site on a barge and placed using a long reach excavator or crane. Some granular material for the landward side of the marshalling areas

may be transported initially by road and ferry, if it cannot be placed using marine plant. A compactor will also be used to compact the fill above approximately mid tide level. No piling is anticipated to be required for the construction of the marshalling area and the temporary area.

1.3.1.3 Dredging

Dredging will be required at the toe of the new slipway to provide access for ferries. The location of this dredging is shown in Figure 2. The dredging area is approximately 350m^2 to an estimated maximum depth of -4.50Dm – Ordnance Datum (OD) is 1.62m above Chart Datum. The total estimated dredge volume is approximately 350m^3.

Figure 2. Construction plan of Cumbrae Ferry Slipway reconstruction works



2. Relevant Legislation

2.1 EIA Regulations

In Scotland there are several EIA regulations that implement the requirements of the Directive 2011/92/EU as amended by Directive 2014/52/EU. Those relevant in relation to the proposed works are The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (hereafter referred to as the Town and Country Planning EIA Regulations) and The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (hereafter referred to as the Marine Works EIA Regulations).

3. Screening Assessment

Both the Marine Works EIA Regulations and Town and Country Planning EIA Regulations form the legislative framework for undertaking EIA for certain projects and define an 'EIA development' as either a 'Schedule 1' or 'Schedule 2' development likely to have significant effects on the environment by virtue of factors such as the projects nature, size or location. This section outlines consideration of whether the proposed works is classed as an EIA development under both of the relevant EIA Regulations.

Table 1 provides assessment of the proposed works against Schedules 1, 2 and 3 of the Town and Country Planning EIA Regulations and Table 2 provides assessment against the Marine Works EIA Regulations.

As shown in Tables 1 and 2 the proposed works are not considered to fall under Schedule 1 of the Marine Works EIA Regulations or Town and Country Planning EIA Regulations. The proposed works are considered to fall under Schedule 2 of the Marine Works EIA Regulations and Town and Country Planning EIA Regulations. EIA screening is therefore required to determine whether the proposed works are likely to have significant effects on the environment.

The proposed works have been screened against the Schedule 3 criteria used to determine if developments listed in Schedule 2 trigger an EIA. The screening is provided in Tables 1 and 2 and the findings of the screening assessment conclude that the proposed works are not likely to result in significant environmental effects and therefore an EIA is not required.

We therefore request MD-LOT and North Ayrshire Council provide an EIA Screening Opinion for the proposed works.

Table 1. Assessment against Town and Country Planning EIA Regulations

Schedule	Paragraph	Applicable to the proposed works	Justification
Schedule 1	Works do not fall under Schedule 1.	No	The proposed works are **not listed** as a Schedule 1 development.
Schedule 2	Paragraph 10 (m) Coastal work to combat erosion and maritime works capable of altering the coast through the construction, for example, of dykes, moles, jetties and other sea defence works, excluding the maintenance and reconstruction of such works.	Yes	It is our view that the proposed works fall under paragraph 10(m) of Schedule 2 of the Town and Country Planning EIA Regulations and meets the corresponding threshold in Column 2 of Schedule 2: 'All Development'.
Schedule 3 Characteristics of works. 1. The characteristics of works must be considered having regard, in particular, to:	a) the size and design of the development;	No	Indicative plans show that the area within the proposed works site boundary above MLWS is approximately 9880m^2. This area is required to enable the construction for example through storage of materials and movement of construction equipment.
	(b) cumulation with other existing development and/or approved development;	No	The proposed works will include demolition of the existing ferry slipway and construction of the new slipway, construction of marshalling area, pedestrian area and a new building. There are no other existing developments and/or consented developments occurring which would potentially give rise to significant cumulative effects.
	(c) the use of natural resources, in particular land, soil, water and biodiversity;	No	Land to the north and south of the new slipway is proposed to be reclaimed to enable construction, and provide a foot passenger waiting area and a new marshalling area. A new terminal building is proposed. This will be built at the top of the existing slipway, which will be raised to the existing road level. The existing slipway will be demolished once construction of the new slipway is complete, with the seabed to be returned to the profile indicated in historical drawings prior to construction of the slipway or to tie in with the adjoining bed profile,. No significant effects are anticipated related to the use of natural resources.
	(d) the production of waste;	No	During construction, waste will be either be reused or removed from site to an appropriate waste facility. During operation there may be requirement for maintenance works, however, the production of waste from these works is anticipated to be low volume and would not be considered to result in a significant effect.
	(e) pollution and nuisances;	No	The proposed works are not located within a Noise Management Area (NMA) or an Air Quality Management Area (AQMA).

Schedule	Paragraph	Applicable to the proposed works	Justification
			The nearest receptor is the former Cumbrae National Watersports Centre, a property located approximately 300 m south of the site. The nearest residential receptor is a single property approximately 450m south and there is one farm located approximately 650m south-west. The temporary adverse construction noise and vibration impacts during the construction period are considered negligible due to lack of noise sensitive receptors within 300m of the site. During the construction phase, temporary potential impacts may arise from dust generation, however, these are considered to be negligible and temporary and can be managed adequately through dust control measures on-site. The sound levels and air quality during operation are not anticipated to change from current operations at the Cumbrae ferry facility.
	(f) the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge;	No	The coastal flood risk at the site of the proposed works is 10% per year (SEPA, 2023). It is not anticipated that the project will increase flood risk, and as the new slipway will generally operate as the existing one does now, it is not anticipated that there would be additional risk of major accidents and disasters.
	(g) the risks to human health (for example due to water contamination or air pollution)	No	The construction site is located approximately 450m from the nearest residential property. Disturbance during construction (e.g. from noise and dust) will be temporary and is not anticipated to result in significant effects, especially if best practice construction methods and adherence to standards are considered. No significant effects anticipated during construction or operation.
Schedule 3 Location of works: 2. The environmental sensitivity of geographical areas likely to be affected by works must be considered having regard in particular to:	(a) the existing and approved land use:	No	The proposed works are to replace the existing facility; therefore, it is not considered that overall, the project will permanently change the existing and approved land use. The project includes reclamation of land which will result in permanent land take however this is not anticipated to result in a significant effect.
	(b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;	No	No part of the proposed works fall within/or adjacent to a statutory site designated for its ecological or geological value. Part of the proposed works site lies within the Bell Bay to Whitebay Local Nature Conservation Site. The Ballochmartin Bay Site of Special Scientific Interest (SSSI) is located approximately 450m to the south of the proposed works and is the only statutory designated site within 2km of the proposed works. The qualifying features for this site are Sandflats – Marine – including marine mammals. There is no feature condition assessment for this site.

Schedule	Paragraph	Applicable to the proposed works	Justification
			The British Geological Survey seabed geology layers indicate that the material is likely to be mud and sandy, however due to the area being in a narrow channel with reasonably strong tidal streams, there is a presumption that the material will be towards the coarser end of the classification. Dredging is anticipated to result in a short term resuspension of sediments, the duration and extent of which will be dependent on sediment size, dredging methodology and timing of works. Assuming a realistic worse case, increased turbidity from localised resuspension is expected to disperse over a single tidal cycle and is unlikely to result in increased deposition on the Ballochmartin Bay SSSI site 450m away from the proposed works. A sediment sampling plan has been prepared, which will assess the proposed dredge area for sediment bound contaminants. The WFD classification for the waterbody (Largs Channel) is Good with a Pass for specific pollutants and the Marine Scotland Hazardous Substances data do not indicate any levels of concern in the area to be dredged. No significant effects are therefore predicted on the features of the SSSI. The Cumbrae ferry facility is located on the coast of the Firth of Clyde, a marine environment. The following protected species are known to occur within the wider project area: ▪ harbour porpoise (Phocoena phocoena); ▪ common dolphin (Delphinus delphis); ▪ basking shark (Cetorhinus maximus). The proposed works have a potential to create some disturbance during construction to the identified protected species, especially harbour porpoise. However, any disturbance during the construction stage (noise and/or vibration) would affect small numbers of individuals as the scale of the proposed works is minor and temporary. A preliminary walkover of the site did not identify any signs of protected species. Disturbance to biodiversity during construction works will be mitigated with best practice measures and European Protected Species (EPS) disturbance licences will be obtained where required. JNCC Guidelines for the prevention of injury or harm to marine mammals will be followed. (https://data.jncc.gov.uk/data/31662b6a-19ed-4918-9fab-8fbcff752046/JNCC-CNCB-Piling-protocol-August2010-Web.pdf). In line with JNCC guidelines, non percussive (vibro, augered, pushed or gravity) piling methods would be used preferentially to drive piles to target depths. Where percussive piling is required to make depth then hammer modifications should be investigated to reduce noise levels. Soft or ramp starts would be used where possible to allow

Schedule	Paragraph	Applicable to the proposed works	Justification
			marine mammals to exit the affected area during piling activities. A Marine Mammal Observer may be required to undertake pre works checks and ensure that the area is clear of marine mammals before work commences. The duration and extent of effects from dredging may be mitigated by the selection of dredger type and timing of works. Where possible the dredge will be undertaken by a method that minimises the opportunity for sediment remobilisation. Undertaking dredging activities on neap tidal cycles may reduce the extent to which sediments are distributed beyond the site. Biodiversity enhancements will be considered as part of the proposed works design. These have the potential to increase habitat area available to recolonisation by marine fauna and flora. No significant adverse effects are anticipated.
	(c) the absorption capacity of the natural environment, paying particular attention to the following areas – (i) wetlands, riparian areas, river mouths; (ii) coastal zones and the marine environment; (iii) mountain and forest areas; (iv) nature reserves and parks; (v) European sites and other areas classified or protected under national legislation; (vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure; (vii) densely populated areas; (viii) landscapes and sites of historical, cultural or archaeological significance.	No	With regard to the sub-criteria: (i) Not applicable to the proposed works as the works take place on the coast. (ii) The proposed works at the Cumbrae Ferry Slipway are located adjacent to the Firth of Clyde, a marine environment. No significant effect on coastal waters is anticipated during operation. Impacts during construction are temporary and are not anticipated to result in significant effects. (iii) Not applicable to the proposed works as the works taking place on the coast and there is no woodland identified within the works area. (iv) The proposed works are not located in a national park or nature reserve. (v) The proposed works are not located within/adjacent to a European site or other areas classified or protected under national legislation. The closest statutory designated site (Ballochmartin Bay SSSI) is located within approximately 450m south of the proposed works. (vi) The proposed works are not located in an area in which there has already been a failure to meet the environmental quality standards laid down in EU legislation and relevant to the works or in which it is considered that there is such a failure. (vii) The proposed works are not located in a densely populated area. (viii) The proposed works are located within the Cumbrae Special Landscape Area. Significant landscape and visual effects are not anticipated. The proposed works do not lie within any conservation areas designated for its historical value. There are no scheduled monuments or listed buildings identified within 300m of the project. There are broken up remains of an aircraft wreck Consolidated Catalina Flying Boat (Reference: 102752) listed under Canmore Maritime, located

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			approximately 80m east of the proposed works at a depth of approximately 24m below sea surface chart datum (CD). The wreck is not considered to be disturbed by the works given the distance between the works and the wreck. It is anticipated that there will be no impact to cultural heritage features as no records within the proximity of the works were identified, therefore no change to existing conditions is anticipated.
Schedule 3 Characteristics of the potential impact 3. The likely significant effects of the works on the environment must be considered in relation to criteria set out in paragraphs 1 and 2 above, with regard to the impact of the works on the factors specified in regulation 4(3), taking into account -	(a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected); (b) the nature of the impact; (c) the transboundary nature of the impact; (d) the intensity and complexity of the impact; (e) the probability of the impact; (f) the expected onset, duration, frequency and reversibility of the impact; (g) the cumulation of the impact with the impact of other existing and/or approved development; (h) the possibility of effectively reducing the impact.	No	As this project is a slipway reconstruction project, it is not considered that there would be cumulative or transboundary effects.

Table 2. Assessment against Marine Works EIA Regulations

Schedule	Paragraph	Applicable to reconstruction works	Justification
Schedule 1	Works do not fall under Schedule 1.	No	The proposed works are not listed as a Schedule 1 development.
Schedule 2	Paragraph 10 (m) Coastal work to combat erosion and maritime works capable of altering the coast through the construction, for example, of dykes, moles, jetties and other sea defence works, excluding the maintenance and reconstruction of such works.	Yes	It is our view that the proposed works fall under paragraph 10(m) of Schedule 2 of the Marine Works EIA Regulations. The proposed works meet the corresponding threshold described in Column 2 of Schedule 2: *'All Works'*.
Schedule 3 Characteristics of works. 1. The characteristics of works must be considered having regard, in particular, to:	a) the size and design of the works;	No	Indicative plans show that the area within the proposed works site boundary below MHWS is approximately 9880m^2. This area is required to enable the construction for example through storage of materials and movement of construction equipment.
	(b) cumulation with other existing development and/or approved development;	No	The proposed works will include demolition of the existing ferry slipway and construction of the new slipway, construction of marshalling area, pedestrian area and a new building. There are no other existing developments and/or consented developments occurring which would potentially give rise to significant cumulative effects.
	(c) the use of natural resources, in particular land, soil, water and biodiversity;	No	Land to the north and south of the new slipway is proposed to be reclaimed to enable construction, and provide a foot passenger waiting area and a new marshalling area. The proposed works also include dredging, which is required at the toe of the new slipway. A new terminal building is proposed. This will be built at the top of the existing slipway, which will be raised to the existing road level. No significant effects are anticipated related to the use of natural resources.
	(d) the production of waste;	No	During construction, waste will be either be reused or removed from site to an appropriate waste facility. During operation there may be requirement for maintenance works, however, the production of waste from these works is anticipated to be low volume and would not be anticipated to result in a significant effect.
	(e) pollution and nuisances;	No	The proposed works are not located within a Noise Management Area (NMA) or an Air Quality Management Area (AQMA).

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			The nearest receptor is the former Cumbrae National Watersports Centre, a property located approximately 300m south of the site. The nearest residential receptor is a single property approximately 450m south and there is one farm located approximately 650m south-west. The temporary adverse construction noise and vibration impacts during the construction period are considered negligible due to lack of noise sensitive receptors within 300m of the site. During the construction phase, temporary potential impacts may arise from dust generation, however these are considered to be negligible and temporary and can be managed through dust control measures on-site. The sound levels and air quality during operation are not anticipated to change from current operations at the Cumbrae ferry facility.
	(f) the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge;	No	The coastal flood risk at the site of the proposed works is 10% per year (SEPA, 2023). It is not anticipated that the project will increase flood risk, and as the new slipway will generally operate as the existing one does now, it is not anticipated that there would be additional risk of major accidents and disasters.
	(g) the risks to human health (for example due to water contamination or air pollution)	No	The construction site is located approximately 450m from the nearest residential property. Disturbance during construction (e.g. from noise and dust) will be temporary and is not anticipated to result in significant effects, especially if best practice construction methods and adherence to standards are considered. No significant effects anticipated during construction or operation.
Schedule 3 Location of works: 2. The environmental sensitivity of geographical areas likely to be affected by works must be considered having regard in particular to:	(a) the existing and approved land use:	No	The proposed works are to replace the existing facility; therefore, it is not considered that overall, the project will permanently change the existing and approved land use. The project includes reclamation of land, which will result in permanent land take however this is not anticipated to result in a significant effect.
	(b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;	No	No part of the proposed works falls within/or adjacent to a statutory site designated for its ecological or geological value. Part of the proposed works site falls within the Bell Bay to Whitebay Local Nature Conservation Site. The Ballochmartin Bay Site of Special Scientific Interest (SSSI) is located approximately 450m to the south of the proposed works and is the only statutory designated site within 2km of the proposed works. The qualifying features for this site are Sandflats – Marine – including marine mammals. There is no feature condition assessment for this site.

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			The British Geological Survey seabed geology layers indicate that the material is likely to be mud and sandy, however due to the area being in a narrow channel with reasonably strong tidal streams, there is a presumption that the material will be towards the coarser end of the classification. Dredging is anticipated to result in a short term resuspension of sediments, the duration and extent of which will be dependent on sediment size, dredging methodology and timing of works. Assuming a realistic worse case, increased turbidity from localised resuspension is expected to disperse over a single tidal cycle and is unlikely to result in increased deposition on the Ballochmartin Bay SSSI site 450m away from the proposed works. A sediment sampling plan has been prepared, which will assess the proposed dredge area for sediment bound contaminants. The WFD classification for the waterbody (Largs Channel) is Good with a Pass for specific pollutants and the Marine Scotland Hazardous Substances data do not indicate any levels of concern in the area to be dredged. No significant effects are therefore predicted on the features of the SSSI. The Cumbrae ferry facility is located on the coast of the Firth of Clyde, a marine environment. The following protected species are known to occur within the wider project area: ▪ harbour porpoise (*Phocoena phocoena*); ▪ common dolphin (*Delphinus delphis*); ▪ basking shark (*Cetorhinus maximus*). The proposed works have a potential to create some disturbance during construction to the identified protected species, especially harbour porpoise. However, disturbance during the construction stage (noise and/or vibration) would affect small numbers of individuals as the scale of the proposed works is minor and temporary. A preliminary walkover of the site did not identify any signs of protected species. Disturbance to biodiversity during construction works will be mitigated with best practice measures and EPS disturbance licences will be obtained where required. JNCC Guidelines for the prevention of injury or harm to marine mammals will be followed. (https://data.jncc.gov.uk/data/31662b6a-19ed-4918-9fab-8fbcff752046/JNCC-CNCB-Piling-protocol-August2010-Web.pdf). In line with JNCC guidelines, non-percussive (vibro, augered, pushed or gravity) piling methods would be used preferentially to drive piles to target depths. Where percussive piling is required to make depth then hammer modifications should be investigated to reduce noise levels. Soft or ramp starts would be used where possible to allow marine mammals to exit the affected area during piling activities. A Marine Mammal Observer

Schedule	Paragraph	Applicable to reconstruction works	Justification
			may be required to undertake pre works checks and ensure that the area is clear of marine mammals before work commences. The duration and extent of effects from dredging may be mitigated by the selection of dredger type and timing of works. Where possible the dredge will be undertaken by a method that minimises the opportunity for sediment remobilisation. Undertaking dredging activities on neap tidal cycles may reduce the extent to which sediments are distributed beyond the site. Biodiversity enhancements will be considered as part of the new slip way design. These have the potential to increase habitat area available to recolonisation by marine fauna and flora. As the proposed works include the reconstruction of existing facility and will be used for the same purposes, no significant effects are anticipated during the operational stage. No significant adverse effects are anticipated.
	(c) the absorption capacity of the natural environment, paying particular attention to the following areas – (i) wetlands, riparian areas, river mouths; (ii) coastal zones and the marine environment; (iii) mountain and forest areas; (iv) nature reserves and parks; (v) European sites and other areas classified or protected under national legislation; (vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure; (vii) densely populated areas; (viii) landscapes and sites of historical, cultural or archaeological significance.	No	With regard to the sub-criteria: (i) Not applicable to the proposed works as the works taking place on the coast. (ii) The proposed works at the Cumbrae ferry facility are located adjacent to the Firth of Clyde, a marine environment. The proposed works include the reconstruction of the existing ferry facility, therefore no significant effect on coastal waters is anticipated during operation. Impacts during construction are temporary and are not anticipated to result in significant effects. A dredging licence will be prepared for the dredging works. (iii) Not applicable to the proposed works as the works taking place on the coast and there is no woodland identified within the works area. (iv) The proposed works are not located in a national park or nature reserve. (v) The proposed works are not located within/adjacent to a European site or other areas classified or protected under national legislation. The closest statutory designated site (Ballochmartin Bay SSSI) is located within approximately 450m south of the project. (vi) The proposed works are not located in an area in which there has already been a failure to meet the environmental quality standards laid down in EU legislation and relevant to the works or in which it is considered that there is such a failure. (vii) The proposed works are not located in a densely populated area. (viii) The proposed works lies within the Cumbrae Special Landscape Area. Significant landscape and visual effects are not anticipated. The proposed works do not lie within any conservation

Schedule	Paragraph	Applicable to reconstruction works	Justification
			areas designated for its historical value. There are no scheduled monuments or listed buildings identified within 300m of the project. There are broken up remains of an aircraft wreck Consolidated Catalina Flying Boat (Reference: 102752) listed under Canmore Maritime, located approximately 80m east of the proposed works at a depth of approximately 24m below sea surface chart datum (CD). The wreck is not considered to be disturbed by the works given the distance between the works and the project. It is anticipated that there will be no impact to cultural heritage features as no records within the proximity of the works were identified, therefore no change to existing conditions is anticipated.
Schedule 3 Characteristics of the potential impact 3. The likely significant effects of the works on the environment must be considered in relation to criteria set out in paragraphs 1 and 2 above, with regard to the impact of the works on the factors specified in regulation 5(3), taking into account -	(a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected); (b) the nature of the impact; (c) the transboundary nature of the impact; (d) the intensity and complexity of the impact; (e) the probability of the impact; (f) the expected onset, duration, frequency and reversibility of the impact; (g) the cumulation of the impact with the impact of other existing and/or approved development; (h) the possibility of effectively reducing the impact.	No	As this project is reconstructing an existing slipway, it is not considered that there would be cumulative or transboundary effects.

4. References

National Regulations

The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017

Assessments and reports

Site Visit Report by Arch Henderson

CMAL Cumbrae Slipway Options Assessment by Arch Henderson

Cumbrae Ferry Users Group Meeting Presentation 10 January 2023 by CMAL. https://www.cmassets.co.uk/wp-content/uploads/2022/01/Cumbrae-Slipway-Development-CFUG-Meeting-Jan-2023-FINAL.pdf [Accessed April 2023]

JNCC (2010) Statutory nature conservation agency protocol for minimising the risk of injury to marine mammals from piling noise. https://data.jncc.gov.uk/data/31662b6a-19ed-4918-9fab-8fbcff752046/JNCC-CNCB-Piling-protocol-August2010-Web.pdf [Accessed April 2023]

SEPA (2023). Flood Hazard and Flood Risk Information. Available at: https://map.sepa.org.uk/floodmaps/FloodRisk/PostCode [Accessed April 2023]