



Ulva Pier Development

EIA Screening Request



Date:28/01/2021

Document Control

	Name	Title	Signature	Date
	Innes Beaton	Director		28/01/2021
	Fiona Henderson	Director		28/01/2021
	Innes Beaton	Director		28/01/2021

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1 Introduction

The Extension to Ulva Pier on Mull will provide all states of tide access for the local fisherman, lifeline ferry service and provide additional berths on the pier. The current pier is not accessible at low water on spring tides and has limited access at high tide due to being mostly underwater. In order to improve the availability of the pier it is proposed to lengthen it by 4.5m into deeper water which will allow full access on all low tides. To provide access at high tides it is also proposed that the pier is heighten by 0.5m. The installation of a breakwater will improve the wave climate for the open passenger ferry. A hardstanding will be created adjacent to the pier to provide an area for storage of fishing gear and the slipway will be regraded to align with the extended pier.

The development will involve both marine construction below the mean high water springs (MHWS), as well as construction works above the mean low water springs (MLWS). A Marine Licence is being applied for to consent the works to be conducted below MHWS.

Works above MLWS are being consented under the Town and Country Planning (Scotland) Act 1997. Endorsement of the Isle of Ulva Community Masterplan was received in 2020 (Ref. No: 20/00804/MPLAN) and there were no objections received from either the statutory consultees or local residents and planning permission is being sought in parallel to the marine licence.

Due to the extension of the pier and the inclusion of a breakwater the works are capable of altering the coast and hence the projects falls under Schedule 2, Section 10(m) of the Marine Works (Environmental Impact Assessment) (Scotland) 2017 Act. Projects falling under Schedule 2 of the afore mentioned Act need to be screened to identify if an EIA is required.

This report provides the information requested under Section 10 of the EIA Act, in order to inform the corresponding screening opinion, namely a description of:

- The location of the proposed works;
- The proposed works;
- The environmental sensitivities of the geographical area;
- The aspects of the environment likely to be significantly affected by the proposed works;
- The likely significant effects; and
- The features of the proposed works or proposed measures envisaged to avoid or prevent significant adverse effects on the environment.

2 Project Need

Whilst serving the local fishing community the pier also provides access for the lifeline ferry service to the community on Ulva. Local schooling for Ulva is located on Mull therefore the ferry is utilised each morning and afternoon for transporting the local school children. The ferry is a small open passenger boat and is very susceptible to the wind driven waves which are generated across the short fetch to the south. It is proposed to construct a small rubble mound breakwater to the south of the pier to provide a sheltered area at the pier, which will be particularly welcome for the disembarkation of school children.

3 Location

Ulva is a small, inhabited island located on the west coast of the Isle of Mull, it is separated from Mull by the sound of Ulva, which is a mere 200 metres wide, there is a lifeline ferry which runs twice a day, Monday to Friday in the winter period and more frequently, as well as on demand during the summer. In June of 2018, the community of Ulva and neighbouring Mull bought the island as a first step to restoring to Ulva a thriving human heart. The proposed pier upgrade on the Mull side of the sound is central to the continued development work being carried out on Ulva and has a grid reference of NM 44582 39867, the development footprint is 707m².

Ulva Pier development falls within the boundaries of the Argyll and Bute Council. The development is delineated in Drawing UFFP-WS2238-XX-00-DR-C-0051 P01.

4 Characteristics of Development

The pier extension foundation will be excavated down to rock by an excavator at low tide. Trial pits indicate that the rock head is shallow with only 450mm of sand covering the rock. A mass concrete levelling base will be cast onto the rock to create a level foundation for the walls. All concrete placed underwater or within the tidal zone will have an underwater anti-washout additive. On completion of the foundation the precast concrete blocks will be placed to form the walls and act as permanent shuttering to the mass concrete back fill. The concrete blocks will be craned into position. The precast concrete blocks will be dowelled into the mass concrete using steel dowels. Mass concrete backfill will be used behind the first two courses of blocks to provide the required structural stability. Above this level, the backfill will comprise rockfill. Any large intact pieces of rock from the rock excavation from the levelling of the hardstanding area, will be used as 'plums' in the mass concrete pours to reduce the volume of concrete required. The top of the quay will be finished with a concrete slab.

The existing slipway will be regraded over a short length to tie into the new pier levels. The slipway will be constructed from concrete. A new level hardstanding area will be created adjacent to the pier at +6.0m CD which is above MHWS level. The rockfill infill on the pier will be won from the creation of the hardstanding area. The surplus rock from the hardstanding excavation will be used to form a rock armoured breakwater to the south of the pier. The breakwater will have a footprint of 290m². Both the rock armour and the rockfill for the breakwater will be produced from the hardstanding excavation. The construction of the breakwater will progress from shore, infilling with rockfill with a low fines content (5% less than 80mm size) using an excavator. The rock armour will be placed on the slope using an excavator.

The volume of placed rock for the slipway extension and the breakwater totals of 500m³, this will be made up of 380m³ of cobble (64-256mm) and 120m³ of boulders (>256mm). Based on a place density of 1.9 and 1.8 respectively, hence 722t of cobble and 216t of boulder are expected to be used a total of 938tonnes of rock overall. In addition, 592t of concrete will be utilised in the pier extension and slipway. Steel shutters will be placed on the seabed during construction works for the concrete pours, these will however be removed after the works completed.

During the construction works, the ferry will operate from the pontoons adjacent to the pier, to ensure ongoing access to Ulva.

The Following Drawings detail the pier extension, slipway regrading, breakwater design and the Laydown area.

Drawing Number	Drawing Title
UFFP-WS2238-XX-00-DR-C-0052 P01	Ferry Pier Extension General Layout
UFFP-WS2238-XX-00-DR-C-0053 P01	Ferry Pier Extension Elevations
UFFP-WS2238-XX-00-DR-C-0054 P01	Ferry Pier Extension Sections

5 Known Sensitivities

5.1 Designated Sites

Table 5.1 details the Statutory Nature Conservation Designations: Sites of Special Scientific Interest (SSSI), Special Protection Area (SPA), Special Area of Conservation (SAC), National Scenic Areas (NSA) and Marine Protected Area (MPA) sites within 10km of the proposed development. Sites unlikely to be affected by the development due to their location and/or associated designated features (e.g. Terrestrial biological features that will not interface with the site), are show in grey.

Table 5.1: Statutory Nature Conservation Designations within 10km

Site	Designation	Distance Direction	Feature Category/Feature
Inner Hebrides and the Minches	SAC	2.2Km SW	Designated for Harbour Porpoise (<i>Phocoena phocoena</i>)
Sea of the Hebrides	MPA	3.3Km NW	Designated for Basking Shark (<i>Cetorhinus maximus</i>), Minke Whale (<i>Balaenoptera acutorostrata</i>), Marine Geomorphology of the Scottish Shelf Seabed & Fronts
Ardmeanach	SAC	3.8Km SSE	Designated for species-rich grassland with mat-grass in upland areas, tall herb communities and vegetated sea cliffs.
Mull Oakwoods		8.1Km SE	Designated for Mammals (Otter (<i>Lutra lutra</i>)) Woodland (Western acidic oak woodland)
Cnuic agus Cladach Mhuile	SPA	3.8Km SSE	Designated for its support of Golden eagle (<i>Aquila chrysaetos</i>), breeding.
Lagganulva Wood	SSSI	600m ENE	Designated for Earth Sciences (Tertiary Igneous) Woodland (Upland oak woodland)
Gribun Shore Crags	SSSI	3.8Km SSE	Designated for: <ul style="list-style-type: none"> • cenomanian – maastrichtian; • maritime cliff; • rocky slopes (includes inland cliff, rocky outcrops, chasmophytic vegetation); • permian – triassic (red beds); and subalpine calcareous grassland.
Ben More – Scarisdale	SSSI	6Km SE	Designated for mineralogy of Scotland, quaternary of Scotland, tertiary igneous and upland oak woodland
Ardmeanach	SSSI	6.5Km S	Designated for;

			<ul style="list-style-type: none"> • cenomanian – Maastrichtian; • hettangian, sinemurian, pliënsbachian; • tertiary igneous; • quaternary of Scotland; • maritime cliff; • montane assemblage; • subalpine calcareous grassland; • slender Scotch burnet moth (<i>Zygaena loti</i>); and vascular plant assemblage.
Loch na Keal, Isle of Mull	NSA	Surrounded on all sides	<p>Special Qualities;</p> <ul style="list-style-type: none"> • Highly distinctive seaways and shores • A voyage from enclosed sea loch to the open Atlantic • Dramatic coast of basalt terraces and cliffs • Views of an island-studded sea • Islands and islet groups of astonishingly varied character • A vast natural world, dwarfing human settlement. • World famous Staffa and Fingal's Cave • The horizontal Treshnish Isles • The instantly recognisable Dutchman's Cap

5.2 Biodiversity – Marine

The waters around the Isle of Mull are utilised by numerous marine mammal species, including both cetaceans and seals. Marine mammals are protected under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). Fifteen species of cetacean are regularly encountered in the region [4]. In addition, populations of both grey (*Halichorurus grypus*) and harbour seals (*Phoca vitulina*) are present around this area of the Isle of Mull [1].

The Sea of the Hebrides MPA is designated for basking shark (*Cetorhinus maximus*) and minke whale (*Balaenoptera acutorostrata*). At its closest point, the site is approximately 3.3km NW of the boundary of the MPA. Both these species ranges extend much further than 3.3km and are afforded protection when outwith the MPA.

Basking sharks are considered a vulnerable species and are afforded full protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). They are also a priority marine feature in Scotland's seas. Minke whales are common in Scottish waters during the summer months, often spotted feeding close to shore. They are a European Protected Species and afforded protection under the Habitats Regulations 1994. Records of basking shark but not minke whale have been identified within 5km of the Ulva Ferry Pier from the (NBN) Atlas [3]. However, they are in the outer lochs to the north and south of the development, also due to the shallow (<10m) confined waters, which offer no valuable habitat to the species. Basking sharks are extremely unlikely to be present in the immediate vicinity.

The Inner Hebrides and Minches Special Area of Conservation (SAC) is situated around the Isle of Mull and the boundary of the SAC is approximately 2.2km SW. The SAC is designated for Harbour Porpoise (*Phocoena phocoena*) which are also afforded protection when out with the SAC. Records of harbour porpoise have also been identified from the NBN Atlas within 5km of the Ulva Ferry Pier but are also within outer Loch na Keal [3]. Harbour porpoise are also listed as a European Protected Species (EPS) and afforded protection under the Habitats Regulations 1994.

Records for harbour seal (*Phoca vitulina*) and grey seal (*Halichoerus grypus*) have also been identified within 1km of the Ulva Ferry Pier [3] they are however not within the sound of Ulva itself. There are designated seal haul out-sites around Ulva the closest being 900m to the NNW of the development site. (Marine Scotland NMPI) [7]

5.3 Biodiversity – Terrestrial

European otters (*Lutra lutra*) have been identified in and around the sound of Ulva [3], and are afforded protection under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). The Mull Oakwoods SAC is designated for the support of otters and is 8.1km SE of the development [32].

The area is not subject to any ornithological designations, and it is not a significant nesting or wintering site for birds. There are however 101 species of birds recorded as utilising the area within a 1km radius of the site. Of these 101 species, 6 are protected under Schedule 1 (Part 1) of the Wildlife and Country Act 1981. [3]. The Cnuic agus Cladach Mhuile SPA is designated for the support of breeding populations of Golden eagle (*Aquila chrysaetos*) and the boundary of this is 3.8km SSE of the development [2].

5.4 Cultural Heritage

There are 23 Canmore and 10 Canmore maritime entries [6] within a 1km radius of the proposed development site. Those within 500m of the site are detailed in Table 5.2.

Table 5.2 Details of Listed Buildings and Canmore Interests within 500m of the Development Site

Site/Description	Index No. Primary Reference	Designation/Status	Location (OS NGR)
Ulva Jetty Ferry Jetty	Canmore 178530		NM 44411 39792
Ulva Ferry House Early 19 th Century. Plain Victorian 1 ½ storey. Rubble. Gabled. Slated Roof/ 3 gabled dormers	Canmore 22012 LB11018	Historic Environment Scotland Listed Building Category C	NM 44363 39807
Ulva Thatched Cottages Traditional Thatched Black House	Canmore 157813		NM44341 39849
Eilean A' Chaolais One unroofed building is depicted on the 1 st edition of the OS 6- inch map (Argyllshire, Island of Mull 1882, sheet lxxxii)	Canmore 148320		NM 44315 40284
Eilean A' Chaolais What may be two circular enclosures are depicted on the 1 st edition of the OS 6- inch map (Argyllshire, Island of Mull 1882, sheet lxxxii)	Canmore 148321		NM 44397 40200

5.5 Landscape and Visual

Ulva Ferry Pier lies within the Loch na Keal, Isle of Mull NSA. Loch na Keal is the principal sea loch on the Atlantic shore of Mull. The outer loch is divided into two by the island group of Ulva and Gometra, and the northern water forms Loch Tuath. Although the whole forms one island-studded seascape, the component parts of Loch Tuath, inner Loch na Keal and outer Loch na Keal have distinctive but complementary characters.

The outer loch has a bold and dynamic coastline of cliffs rising in land slipped tiers, unmasked by tree growth, but studded with huge boulders. The north shore has a more intimate character which develops in Loch Tuath where the shoreline is indented by a number of small

bays, into which hazel, rowan and alder-lined burns tumble swiftly and sometimes, like Eas Forss, fall over small precipices which echo the larger cliffs of the south shore.

As the Ulva Ferry Pier already exists within the NSA it is part of the existing landscape character and has a small zone of visibility.

5.6 Land, Air and Water

5.6.1 Land

The underlying geology of the development is categorised as Mull Plateau Lavas Formation and described as Basalt, Lava [8]. The marine geology is recorded by Marine Scotland as Mud and Sandy Mud, and Palaeogene MAFIC Lava & MAFIC Tuff [7]. Basalt rock is extremely hard and is classed as an 8 on the Mohs Hardness Scale. It is very strong and resistant to weathering.

5.6.2 Air

Argyll and Bute Council currently does not have any Air Quality Management Areas (AQMA). Due to data presented in the 2020 Air Quality Annual Progress Report (APR)[5] it is anticipated that it will be very unlikely that it will be necessary to declare any AQMA. No air quality data exists for the development area however, it is anticipated that air quality will be high based on the rural, coastal location.

5.6.3 Water

Ulva Ferry Pier is centred on two water bodies; Loch Tuath (ID: 200074), to the North and Loch na Keal (ID: 200071) to the South which are classified as overall 'good' status in the Scottish River Basin District [9]

There are no bathing waters monitored by SEPA within the development footprint. The closest bathing waters to the Ulva Ferry Pier is Ganavan Bay, near Oban, approximately 42km ESE. There are no freshwater watercourses within the proposed development area.[9]

There are 3 shellfish farms and 3 fish farms within 5km of the Ulva Pier development [10].

5.7 People

The Isle of Ulva currently has a population of eight people who are all involved in the development, refurbishment and restoration of this community owned Island. On the other side of the Sound of Ulva there is a scattered community stretching from Ballygown to the north to Acharonich to the south. The Ulva ferry pier is essential for the local communities on both sides of the sound of Ulva, there are no public services on the island so they rely on this infrastructure to get to Mull for schooling, medical services and shops. The Fishermen on Mull also rely heavily on the Ulva Pier for accessing the fishing resources on the west coast of Mull, for fish farming, shellfish farming and creel fishing.

The closest building to the development is on the west side of the Sound of Ulva and is the boathouse café and restaurant, on the island of Ulva. The closest residential properties on Mull, are adjacent to the School which is 600m away near the junction of the ferry access road with the B8073.

5.8 Traffic, Transportation and Navigation

The access to Ulva pier is down a 700m long unclassified single-track road (C44) from the B8073 the main road all be it single-track linking Gruline to Tobermory.

The Ulva pier is used by the ferry for the local population and to bring tourists to the island and also for the fishermen accessing the waters to the west of Mull.

The infrastructure on the Isle of Ulva consists of non-metalled tracks and paths only and there is currently no means of getting vehicles to the island. The only vehicles on the island currently consist of 2 tractors and a few quad bikes. All of these are utilised by the community for farming and or accessing the islands properties.

As there is no vehicular access to Ulva, parking is required on Mull at the Ulva Pier. Currently, there is a parking area but is a rough hard-cored area with no designated bays.

6 Potential Effects

6.1 Construction

Table 6.1 provides a description of the environmental aspects requiring consideration resulting from the proposed Ulva Pier works. It outlines the sensitivities as detailed in Section 5, identifies any likely significant effects, and proposes mitigation measures, if required, for negative effects on the environment.

Table 6.1: Potential Effects During Project Construction

Aspect		Source	Sensitivities	Likely Significant Effect (excluding mitigation)	Any mitigation measures?
Use of Natural Resources	Rock, Concrete and Metals	Rock will be won from the hard standing creation. Concrete for the slipway and pier extension will be delivered as ready mix by road. Metal associated with rebar etc will be brought to site by road/ferry from mainland Scotland.	None	No – volumes small.	Materials minimised to that required. Use of rock one on site will minimise need for transport also.
	Physical Injury to marine receptors.	Placement of rocks on the seabed	Marine mammals Basking Shark Otter	No – marine mammals and basking shark unlikely to be present in vicinity of works. Potential for otters to be impacted.	Pre-construction otter survey required, to identify if an EPS licence is needed and if there is a requirement for any additional mitigation. Worksite check for marine mammals, otters or other receptors prior to rock dumping.

Aspect		Source	Sensitivities	Likely Significant Effect (excluding mitigation)	Any mitigation measures?
Residues and Emissions	In-Air Noise	Construction machinery, rock placement and general construction works.	Local Population Otter Nesting Birds	No - impact on residential properties due to distance. Potential disturbance of otter or nesting birds if they are present in the local vicinity.	Pre-construction otter survey required, to identify if an EPS licence is needed and if there is a requirement for any additional mitigation. If works are carried out during bird breeding season then check for ground nesting birds should be completed and exclusion zones implemented.
	Under-water Noise.	Marine construction activities including the placement of rock.	Marine mammals, Basking Shark Otter	No – rock placement not particularly noisy.	
	Water pollution	Loss of containment of oil/fuel from construction equipment. Concrete and rock construction materials.	Seawater Marine Biodiversity.	No – small amount of pollutants present.	Standard construction best practice implemented regarding material storage, use and pollution prevention. Additives in concrete to ensure it sets appropriately in the marine environment. Low fines solids utilised.
Traffic, Transport, Access, and Navigation	Pier and Slipway not available.	Construction works restrict access to the pier and slipway.	Ferry and other vessel users.	Yes	Pontoons made available to berth vessels including the ferry. Good communication with vessel owners/operators including timings of works as they will not be able to launch/remove vessels from the water at certain times.
	Navigation effects	During Construction especially diving, the area in the immediate vicinity of the pier, slipway and breakwater will not be available for navigation.	Ferry and other vessel users.	No – very localised restrictions and adequate space to avoid issues.	Notice to Mariners and good communication with local vessel owners/operators.

Aspect		Source	Sensitivities	Likely Significant Effect (excluding mitigation)	Any mitigation measures?
	Construction Traffic	Ready mix concrete Fixtures and fittings Construction staff and equipment.	B8073 and unclassified ferry road.	No – minimal deliveries required.	Reuse of rock on site, minimise deliveries required to ready mix concrete and any fixtures. Mobilisation and demobilisation to avoid peak traffic times where practicable. Convoying of lorries to be avoided.

The scale of the construction works is such that with the implementation of standard good construction practices and simple mitigation there are unlikely to be significant effects on the environment.

Due to the importance of the pier to the local community construction works will need to be appropriately communicated and managed to avoid impacts. Fortunately, the pontoons can be utilised temporarily for the ferry to ensure that the lifeline link to Ulva is not stopped during the construction works.

Risks to otter and appropriate mitigation will be dependent on whether there are active holts, layup or couches in the area at the time of construction, hence pre-construction surveys and if necessary EPS licence sought from NatureScot if required see Section 7.

6.2 Operations

The effects associated with the operation of the project are summarised in Table 6.2. It outlines the sensitivities as detailed in Section 5, identifies any likely significant effects, and proposes mitigation measures, if required, for negative effects on the environment.

Table 6.2: Potential Effects During Operations

Aspect		Source	Sensitivities	Likely Significant Effect (excluding mitigation)	Any mitigation measures?
Use of Natural Resources	Landscape and Visual	Increased pier and inclusion of breakwater.	Loch na Keal, Isle of Mull NSA	No – small increase in pier/slipway all features low lying and in keeping with the existing infrastructure.	
	Coastal Processes	Breakwater	Basalt, Lava Shoreline	No – The Basalt, Lava is very hard, hence unlikely to erode. The breakwater is small hence effects to reduce wave height is very localised.	
Socio-economic	Availability of services.	Increased availability of ferry service. Linking community of Ulva with Mull and facilitating visitors to the island and generate income – restaurant etc.	Ulva Community	Yes – Positive	
Traffic, Transport, Access, and Navigation	Access to Ulva/Mull	Longer/higher pier, improved slipway, and breakwater.	People Ulva Community	Yes Positive Increased availability of the ferry. Increased safety due to calming afforded by the breakwater.	
	Berthing and marine access improvements.	Improved facilities Longer/higher pier and improved slipway.	Pier users including fishing sector.	Yes Positive – improved access to the water in a wider range of sea states.	

The operational effects with regard to ensuring safe berthing of the lifeline ferry and other vessels in a wider range of sea states are positive. The improved operability of the pier will also have socioeconomic benefits for those living on Ulva in terms of their access to facilities in Mull. In addition, it will allow people to visit the island to frequent the restaurant and café, and to buy local crafts and produce hence contribute to the economic sustainability of the island of Ulva.

Screening was specifically required due to the potential for the breakwater and pier extension to affect coastal processes. The breakwater is designed to protect the pier from the wind driven waves, this is especially vital for the ferry, as it is an open boat. The effects of the breakwater on the wave climate will be very localised. There is a very thin layer of sand above rock on the seabed in the sound, hence movements and deposits of significant amounts of sediment are highly unlikely.

The geology in the surrounding coastline is dominated by Basalt, Lava as mentioned in Section 5.6.1 it is a very hard rock and hence will not be noticeably eroded by any changes in water flows.

7 Mitigation

The mitigation measures identified in Section 6 that need to be actively implemented are as follows:

- A pre-construction otter survey should be completed to identify whether or not there are protected features (holts, lay-up or couches) in the vicinity of the works, if there are then appropriate mitigation will need to be identified and a licence sought from NatureScot prior to works commencing.
- Irrespective of whether protected otter features are found, the construction staff should be briefed with regard to otters and the need to check equipment and work areas each day for otters.
- During rock placement visual checks for otters or other animals (including basking sharks and marine mammals) which could be harmed by the rocks should be completed.
- If works are carried out in the bird nesting season, then a check for nests should be completed and appropriate exclusion zone put in place.
- Good communication with vessel owners/operators including discussion around the timings of works to allow them to make appropriate arrangements particularly with regard to the launch/remove vessels when slipway is unavailable.
- Notice to Mariners to be published regarding the works.
- Mobilisation and demobilisation to construction site to avoid peak traffic times where practicable.
- Convoying of lorries to be avoided.

8 Conclusion

Although the proposals to improve the Ulva Pier are relatively small they require screening due to their potential to effect coastal processes. Due to the scale of the development and local geology it is highly unlikely that the pier extension and small breakwater designed to mitigate against wind driven waves will cause any changes to the coastal environment.

Positive impacts on the community of Ulva associated with the ability of the open ferry to operate safely at a wider range of sea states and conditions are potentially significant both in terms of connectivity to services and economic opportunities for Ulva. Other users of the pier and slipway primarily associated with the fishing sector will also benefit from the improved facilities.

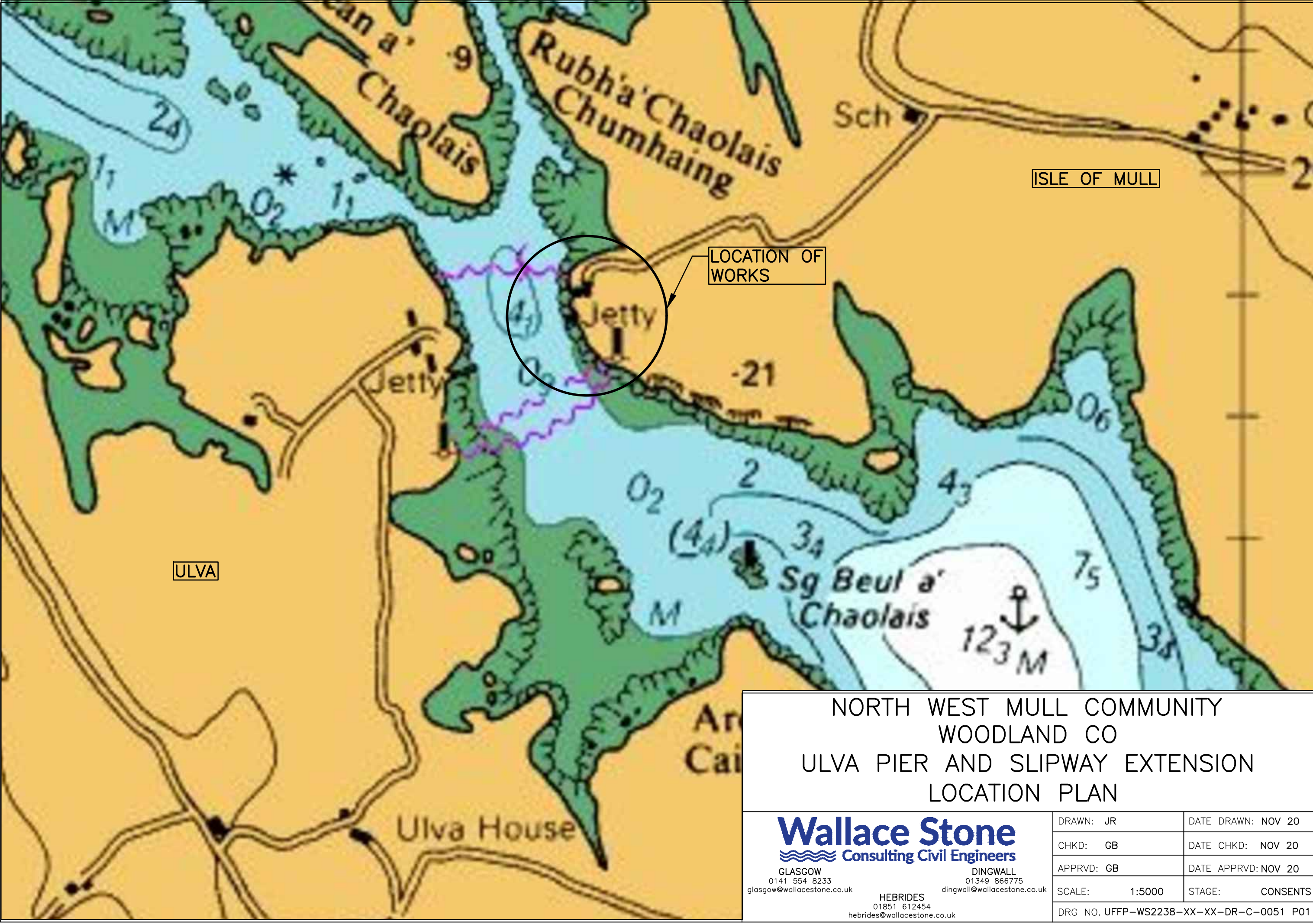
9 References

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10 Glossary

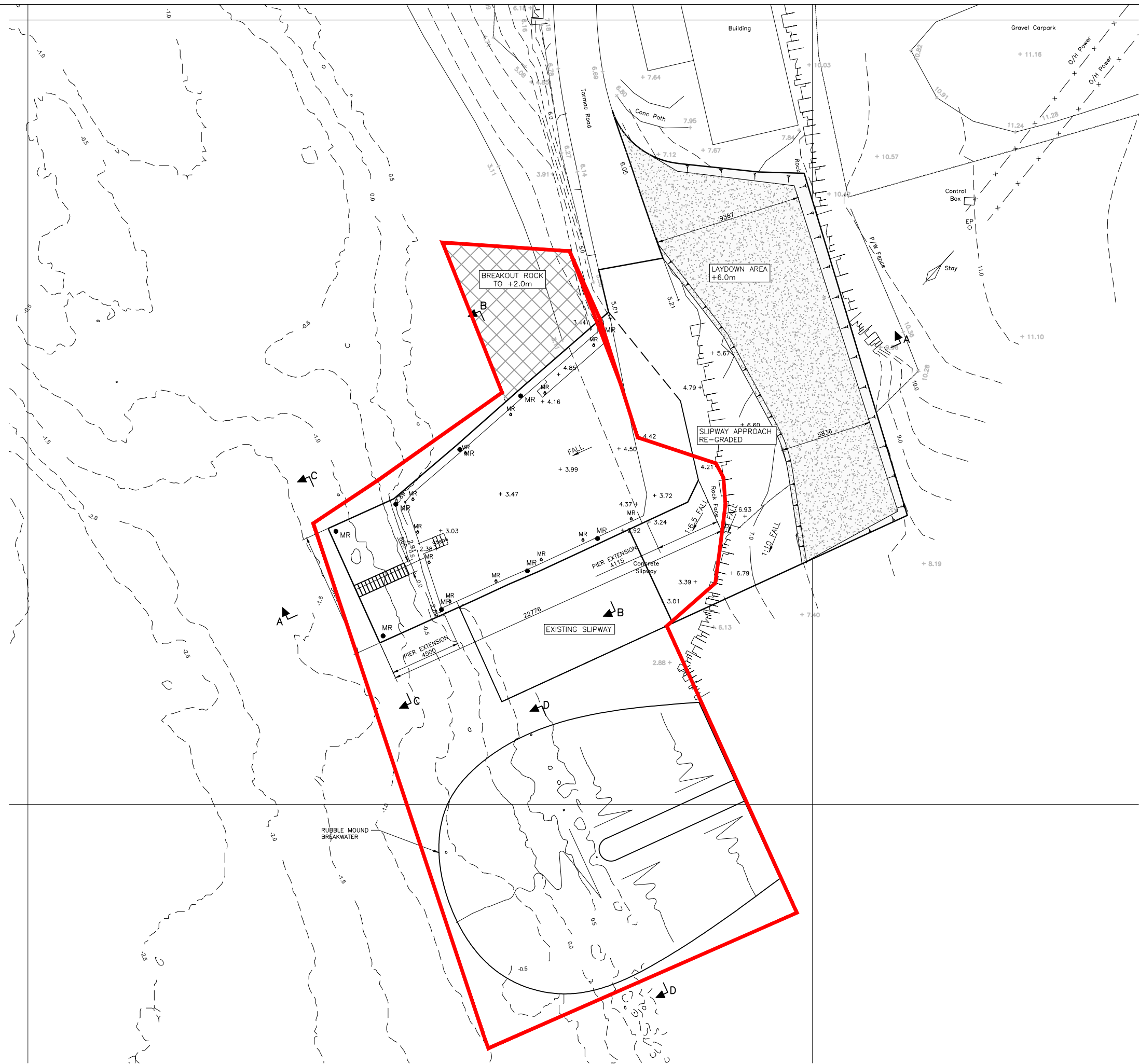
APR	Annual progress Report
AQMA	Air Quality Management Area
EIA	Environmental Impact Assessment
EPS	European Protected Species
HES	Historic Environment Scotland
km	kilometres
MHWS	Mean High Water Spring
MLWS	Mean Low Water Spring
MPA	Marine Protected Areas
NBN	National Biodiversity Network
NSA	National Scenic Areas
SAC	Special Areas of Conservation
SEPA	Scottish Environment Protection Agency
SPA	Special Protection Areas
SSSI	Sites of Special Scientific Interest

11 Drawings



NORTH WEST MULL COMMUNITY
WOODLAND CO
ULVA PIER AND SLIPWAY EXTENSION
LOCATION PLAN

Wallace Stone Consulting Civil Engineers GLASGOW 0141 554 8233 glasgow@wallacestone.co.uk HEBRIDES 01851 612454 hebrides@wallacestone.co.uk	DRAWN: JR	DATE DRAWN: NOV 20
	CHKD: GB	DATE CHKD: NOV 20
	APPRVD: GB	DATE APPRVD: NOV 20
	SCALE: 1:5000	STAGE: CONSENTS
	DRG NO. UFFP-WS2238-XX-XX-DR-C-0051 P01	



PLAN ON FERRY PIER
SCALE 1:125

GENERAL NOTES

1. ALL LEVELS ARE IN METRES AND RELATE TO CHART DATUM.

2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

3. TIDE LEVELS ARE AS FOLLOWS
HAT +4.9mCD
MHWS +4.4mCD
MLWS +0.6mCD
LAT -0.1mCD

4. CHART DATUM IS 1.87m BELOW ORDNANCE DATUM.

5. TO BE READ IN CONJUNCTION WITH
UFFP-WS2238-XX-00-DR-C-SK02.

REV	DATE	DETAILS	DRAWN	CHK'D	APP'D
AMENDMENTS					

CLIENT

NORTH WEST MULL COMMUNITY
WOODLAND CO.

PROJECT

ULVA PIER & SLIPWAY
INSPECTION

Wallace Stone

Consulting Civil Engineers

GLASGOW
0141 554 8233
glasgow@wallacestone.co.uk

DINGWALL
01349 866775
dingwall@wallacestone.co.uk

HEBRIDES
01851 600220
hebrides@wallacestone.co.uk

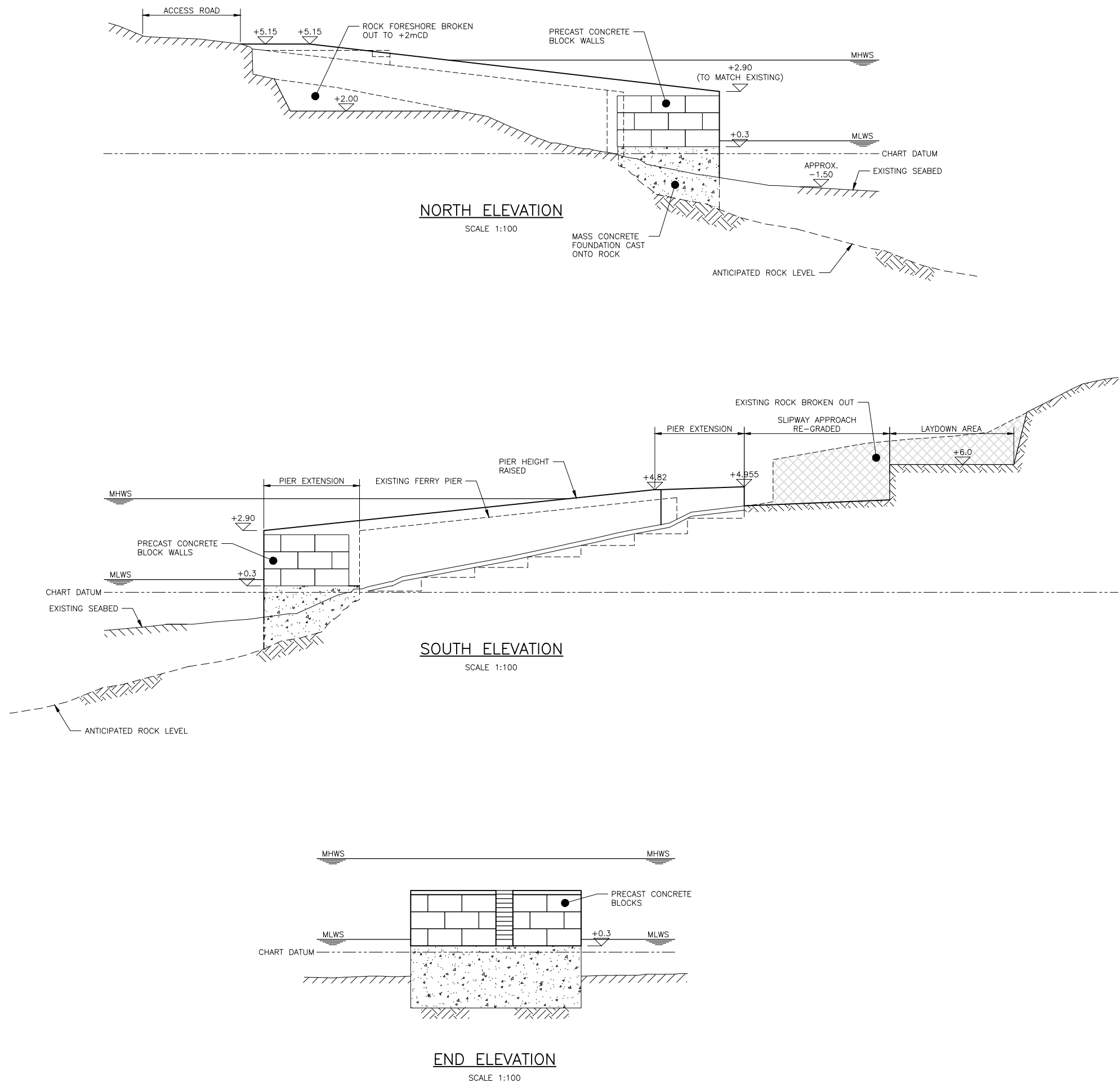
DRAWING TITLE

FERRY PIER EXTENSION
GENERAL LAYOUT

DRAWN TC	CHECKED GB	APPROVED GB
DATE OCT 20	DATE OCT 20	DATE OCT 20
SCALE (A1) AS SHOWN	STAGE CONSENT	REV P01

DRAWING No.

UFFP-WS2238-XX-00-DR-C-0052



- GENERAL NOTES
- ALL LEVELS ARE IN METRES AND RELATE TO CHART DATUM.
 - ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
 - TIDE LEVELS ARE AS FOLLOWS
HAT +4.9mCD
MHWS +4.4mCD
MLWS +0.6mCD
LAT -0.1mCD
 - CHART DATUM IS 1.87m BELOW ORDNANCE DATUM.
 - TO BE READ IN CONJUNCTION WITH
UFFP-WS2238-XX-00-DR-C-SK01.

REV	DATE	DETAILS	DRAWN	CHK'D	APP'D
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AMENDMENTS

CLIENT
NORTH WEST MULL COMMUNITY
WOODLAND CO.

PROJECT
ULVA PIER & SLIPWAY
INSPECTION

Wallace Stone
Consulting Civil Engineers

GLASGOW
0141 554 8233
glasgow@wallacestone.co.uk

DINGWALL
01349 866775
dingwall@wallacestone.co.uk

HEBRIDES
01851 600220
hebrides@wallacestone.co.uk

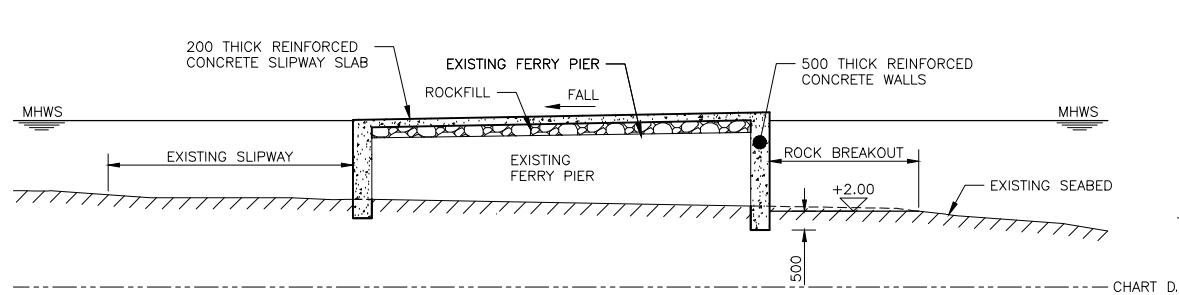
DRAWING TITLE
FERRY PIER EXTENSION
ELEVATIONS

DRAWN TC	CHECKED GB	APPROVED GB
DATE OCT 20	DATE OCT 20	DATE OCT 20
SCALE (A1) AS SHOWN	STAGE CONSENTS	REV P02

DRAWING No.
UFFP-WS2238-XX-00-DR-C-0053

1. ALL LEVELS ARE IN METRES AND RELATE TO CHART DATUM.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
3. TIDE LEVELS ARE AS FOLLOWS

HAT	+4.9mCD
MHWS	+4.4mCD
MLWS	+0.6mCD
LAT	-0.1mCD
4. CHART DATUM IS 1.87m BELOW ORDNANCE DATUM.
5. TO BE READ IN CONJUNCTION WITH
UFFP-WS2238-XX-00-DR-C-SK01.



A cross-sectional diagram of a breakwater structure. The structure consists of a central core of rockfill, flanked by mass concrete infill, and an outer layer of precast concrete blocks. A 200-thick reinforced concrete slipway slab is shown at the top. Water levels are indicated by MHWS (Mean High Water Springs) and MLWS (Mean Low Water Springs) lines. The seabed is shown below the structure, with a chart datum line. Arrows labeled 'FALL' indicate the direction of water flow over the structure. The diagram is labeled 'D.' in the bottom left corner.

P02	29.10.20	GENERAL REVISIONS	TC	GB	GB
REV	DATE	DETAILS	DRAWN	CHK'D	APP'D

PROJECT

ULVA PIER & SLIPWAY
INSPECTION

Wallace Stone
Consulting Civil Engineers

GLASGOW
0141 554 8233
glasgow@wallacestone.co.uk

DINGWALL
01349 866775
dingwall@wallacestone.co.uk

HEBRIDES
01851 600220
hebrides@wallacestone.co.uk

FERRY PIER EXTENSION SECTIONS

DRAWN TC		CHECKED GB		APPROVED GB	
DATE OCT 20		DATE OCT 20		DATE OCT 20	
SCALE (A1) AS SHOWN		STAGE CONSENTS			REV P01

DRAWING No. UFFP-WS2238-XX-00-DR-C-0054