Lochmaddy Ferry Terminal Development

EIA Screening Request

Prepared by Redacted

Checked by Redacted

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Contents

1 Introduction

A development of the Lochmaddy Ferry Terminal on the east coast of North Uist is proposed by Comhairle nan Eilean Siar (CnES), in order to accommodate a new larger ferry that has been procured by Caledonian Maritime Assets Ltd (CMAL). The development will involve both marine construction and dredging works below mean high water springs (MHWS), as well as construction works above mean low water springs (MLWS). A Marine Licence will be applied for to consent the works to be conducted below MHWS.

Works above MLWS are consented under The CnES (Various Harbours) Harbour Revision Order 2002 (HRO), which grants permission to CnES to provide and improve harbour facilities within their harbour areas. As such these works are exempt from Town and Country Planning (Scotland) Act 1997, under the provisions of the Harbours Act 1964 (as amended).

A formal Screening Opinion is requested from Marine Scotland under regulation 10(1) of the Marine Works (Environmental Impact Assessment (EIA)) Regulations 2017 ('EIA Regulations'); to determine whether an EIA will be required to support the Marine Licence application for the proposed development of the Lochmaddy Ferry Terminal.

This report provides the information requested under Section 10 of the EIA Regulations, in order assist in the consideration of this request, and inform the corresponding screening opinion:

- A description of the location of the proposed works.
- A description of the proposed works.
- A description of the location of the proposed works, including the environmental sensitivity of geographical areas likely to be affected.
- A description of the aspects of the environment likely to be significantly affected by the proposed works.
- A description of any likely significant effects.
- A description of any features of the proposed works or proposed measures envisaged to avoid or prevent significant adverse effects on the environment.

It is not considered that the proposed Lochmaddy Ferry Terminal Development constitutes a Schedule 1 Development, as defined the regulations. However, the total footprint of the proposed development is approximately 1.1Ha, and as is likely to be classified as a Schedule 2 Development and may require an EIA, subject to an assessment against Schedule 3 of the EIA Regulations.

2 Location

Lochmaddy is located on the east coast of the Isle of North Uist and has a grid reference centre point of NF 92036 68002 (Figure 39.01). Lochmaddy is the largest settlement on the island of North Uist. The ferries that utilise this terminal provide the shortest link between the Uists and Uig on Skye which has road links to the Scottish Mainland. The harbour is situated to the south east of the main village, within the shelter of the sea loch, Loch Nam Maddah.

Lochmaddy falls within the boundaries of the CnES. The development is delineated in Figure 1975-907.

3 Characteristics of Development

The Lochmaddy Ferry Terminal development comprises of the following main components (Figure 1975-901);

- Pier extension, reconstruction and fendering;
- Dredging;
- Upgrade to the existing substation; and
- Marshalling and reclamation areas.

3.1 Project Phases

3.1.1 Construction

3.1.1.1 Pier Extension, Reconstruction and Fendering

Prior to works to the pier commencing a temporary fendering system will be installed to allow berthing of the ferry throughout the works. Steel piles will be installed into the underlying rockhead, which will then be tied back to the existing structure to form a steelwork frame. Pneumatic fenders will be attached to the temporary steel framework. Following the completion of the permanent works, the temporary fendering system will be removed.

The existing pier will be extended to the south east of the current structure, this will require breaking out the underlying rock head and installation of rock mattressing to form a level foundation. A steel frame will be installed on the foundation, before a new concrete caisson (constructed offsite in a dry-dock) is floated into place, and installed on the steel foundation frame. A reinforced concrete slab will then be constructed to form the new deck, and the concrete roundhead will be levelled and tied into the newly installed deck. Bollards, surface drainage, lighting and power will be installed.

The existing pier will be reconstructed to accommodate the installation of the new fenders, work will include breaking out edge of the existing concrete deck, before forming a new quay edge using reinforced concrete. New bollards, surface drainage, lighting and power will also be installed to the existing pier.

Generally, the new fendering system will be installed by driving piles into the underlying rock head. The sleeve mounted fenders will then be installed over the fender piles and grouted up. Fendering will be connected into the pier structure. Some of the fendering will be directly connected to the existing structures or new caisson without the requirement for fender piles.

Localised scour protection may also be placed on the sea bed around the new / existing structures.

3.1.1.2 Dredging

Dredging will be undertaken to allow for vessel manoeuvres at the harbour. The dredge material is expected to be a mixture of granular seabed material and underlying rockhead. Dredged spoil, if suitable, will be utilised to contribute to the infill material for the reclamation works.

Currently it is anticipated that a drum cutter will be used to perform the dredging works in hard ground, however drilling and blasting may be required in some areas if hard bedrock is present. This will be informed by further ground investigations.

3.1.1.3 Substation

The existing sub-station will be upgraded to a larger sub-station. This process may require additional onshore cabling, ducting and infrastructure works.

3.1.1.4 Marshalling Area and Reclamation

The marshalling and infill areas will be extended and bituminised to sustain the increase in personnel and vehicles. This will include rock armouring to protect the seaward edges, and infilling to reclaim and re-profile the areas; dredged spoil may be utilised as the infill material. The reclaimed area will be tied into existing adjacent areas. In addition, improvements to supporting infrastructure will be made, such as surface drainage including appropriate oil and silt interceptors, lighting and, power.

A new 10t water tank is also proposed to buffer water bunkering operations by the vessel, including all necessary pumps, standby pump, pipework and control systems.

3.1.2 Operation

As the project is a replacement and extension of an existing ferry terminal significant change in operation from the current conditions are not expected. The new ferry will be working a similar timetable and route. This upgrade is proposed to allow for the berthing and operation of a larger ferry which means there will be a potential increase in personnel and vehicles utilising the terminal and ferry.

The marshalling yard will be capable of handling the increase in traffic which will take the pressure of the current situation; where by traffic is backed up into the main and only thorough road within Lochmaddy village. The marshalling yard will continue to occupy the additional land take through the life of the project.

Once the fendering, pier and substation are replaced/upgraded minimal operational changes are expected.

It is likely that maintenance dredging will be required during operation, in order to maintain the required depth alongside the berth.

3.1.3 Demolition/Reinstatement

A degree of demolition of the existing fendering and pier structures is required to facilitate the proposed works. The volumes of demolished material will be minimised through design. However, where required, it is anticipated that the affected infrastructure will be removed and where possible recycled.

As a lifeline ferry service, there are no future plans to discontinue use of this site. Therefore it is not considered necessary to plan for demolition and reinstatement works for closure of this site.

4 Known Sensitivities

4.1 Designated Sites

Table 1 details the Statutory Nature Conservation Designations Sites of Special Scientific Interest (SSSI), Special Protection Area (SPA), proposed Special Protection Area (pSPA), Special Area of Conservation (SAC) and Ramsar sites within 20km of the proposed development. Most notably the site is located within the Loch nam Madadh SAC/SSSI, the designated features that could be affected by the project are Otters (*Lutra lutra*), coastal geomorphology formation, rocky shores, and reefs. However, the total area of the designation is 300.85ha therefore it is unlikely that the 1.1ha total area will significantly impact the designation. No Foxtail stonewart (*Lamprothamnium papulosum*) has been identified in the uncleared area therefore it is unlikely to be impacted directly by this development.

Table 1: ***Statutory Nature Conservation Designations within 20km of the Development Site [17].***

Site	Designation	Distance Direction	Feature Category/Feature
Loch nam Madadh	SSSI SAC	Development within Designated Sites	Designated for its Coastal Geomorphology (Earth Sciences), Fox tail stonewart (*Lamprothamnium papulosum*) (Non-Vascular Plant), mudflats, rocky shore, Saline lagoon and tidal rapids (Marine). Otter (*Lutra lutra*) (Mammals), Intertidal mudflats and sandflats, Lagoons, Reefs, Shallow inlets and bays, Subtidal sandbanks (Marine)
Mointeach Scadabhaigh	SSSI SPA	1.2km SW	Designated for Black throated diver (*Gavia arctica*) breeding, Red throated diver (*Gavia stellata*) breeding, Breeding bird assemblages,
Loch an Duin	SSSI Ramsar	1.3km NE	Designated for Brackish water cockle (*Cerastoderma glaucum*) (Invertebrates), Breeding Bird assemblage, Coastal Geomorphology (Earth Sciences), Otter (*Lutra lutra*) (Mammals), Saline Lagoon and Tidal rapids (Marine)
Mointeach Scadabhaigh	SAC	2.6km W	Blanket bog, Depressions on peat substrates (Upland) and Dystrophic and oligotrophic lochs, Acid peat-stained lakes and ponds, Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels (Freshwater habitats).
Inner Hebrides and the minches	pSAC	5km E	Designated for Harbour porpoise (*Phocoena phocoena*) (Marine)
Loch Obisary	SSSI	5.5km SSW	Designated for Saline Lagoon Marine (including marine mammals)
North Uist Machair and Islands	SPA Ramsar	8 – 19km N & W 1.3 – 15.5km NE, NW, W	Designated for Breeding Birds Corncrake (*Crex crex*), Dunlin (*Calidris alpine schinzii*), Oystercatcher (*Haematopus ostralegus*), Redshank (*Tringa totanus*), Ringed plover (*Charadrius hiaticula*) and Non-breeding birds Greenland barnacle goose (*Branta leucopsis*), Purple sandpiper (*Calidris maritima*), Ringed plover (*Charadrius hiaticula*).
North Uist Machair	SAC	8 – 19km NNW to SW	Naturally nutrient-rich lakes or lochs which are often dominated by pondweed (Freshwater Habitats), Annual vegetation of drift lines, Atlantic salt meadows, Dune Grassland, Humid dune slacks, Machair, Shifting dunes (Coast), Slender naiad (*Najas flexilis*) (Vascular plants). Turnstone (*Arenaria interpres*) Non-breeding.
Machairs Robach and Newton	SSSI	8.5km NW	Designated for Coastal Geomorphology, Machair and Sand Dunes

Site	Designation	Distance Direction	Feature Category/Feature
Obain Loch Euphoirt	SSSI SAC	9km SW	Designated for Foxtail stonewart (*Lamprothamnium papulosum*) and Saline Lagoon Marine (including marine mammals). Lagoons (Marine)
West Coast of the Outer Hebrides	pSPA	10km NE	Designated for Red throated diver breeding, Black-throated diver, common eider, great northern diver, long tailed duck, re-breasted merganser, Slavonian grebe. (Proposed Marine SPA)
Berneray	SSSI	12km NNW	Designated for Greenland Barnacle goose (*Branta leucopsis*) non-breeding and Coastal Machair
Loch at Clachan	SSSI	13km SW	Designated for Dystrophic loch (freshwater habitats) and Saline Lagoon Marine (including marine mammals)
Baleshare and Kirkibost	SSSI	13.2km SW	Designated for Breeding bird assemblage, Machair, Saltmarsh and Sand Dunes (Coast)
Boreray	SSSI	13.5km NW	Designated for Greenland Barnacle goose (*Branta leucopsis*) non-breeding and Greylag goose (*Anser anser*) non-breeding
Vallay	SSSI	15.5km NW	Designated for Greenland Barnacle goose (*Branta leucopsis*) non-breeding, Breeding Bird assemblage, Machair, Saltmarsh and Sand Dunes (Coast)
Pabbay	SSSI	18.5km NNW	Designated for Breeding Bird assemblage, Greenland Barnacle Goose (*Branta leucopsis*) non-breeding, Bryophyte assemblage (non-vascular plants), Machair(coast), Springs(wetlands) and Coastal Geomorphology.
Aird and Borve, Benbecula	SPA	19km SW	Designated for Breeding Birds Corncrake (*Crex crex*)
Balranald Bog and Loch nam Feithean	SSSI	19.5km W	Designated for Breeding Bird assemblage, Greenland Barnacle goose (*Branta leucopsis*) non-breeding, Machair, Saltmarsh, Sand Dunes (Coast), Eutrophic loch (Freshwater habitats) and Mudflats Marine (including marine mammals)

4.2 Biodiversity– Terrestrial

European otters (*Lutra lutra*) have been identified in and around Lochmaddy [11], and are afforded protection under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). There are 23 species of birds recorded as utilising the area within a 5km radius of the site [11].

4.3 Biodiversity– Marine

The waters around the Isle of Harris and the Outer Hebrides 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). Eight species of cetacean are regularly encountered in the region and a further three species occur less frequently [15]. In addition, breeding populations of both grey (*Halichorerus grypus*), and common seals (*Phoca vitulina*) are present in the Outer Hebrides [16].

Various fish species are likely to be located in the waters surrounding the Lochmaddy Ferry Terminal. Otters (Section 4.2) may be found within the marine environment as well as the terrestrial environment.

Limited information on the benthic ecology within the area means that the sensitivity of this is unknown. As such, this has been considered as a sensitivity during this screening report.

4.4 People

The nearest dwellings are two adjoining properties plus the visitor centre, which are situated within the boundary of the marshalling area of the ferry terminal these are approximately 40 m away from the site. The Lochmaddy Hotel is the next closest property 145 m along the road into the village, there is a further residential property situated 240 m away overlooking the site. The main boundary of the village is approximately 375 m away.

5 Potential Effects

5.1 Construction

Table 2 provides a description of the likely effects resulting from the proposed construction of Lochmaddy Ferry Terminal upgrade on the environment resulting from the use of natural resources and the expected residues and emissions. Additionally, it outlines the sensitivities as per Section 0 and proposes mitigation measures for any effects that could have a potential impact on the environment.

Table 2: Construction Screening Effects and Sensitivities

	Sensitivities (Section 0)	Source	Potential Effect (no mitigation)	Proposed mitigation
Use of Natural Resources				
Use of Material (eg steel)	None	Construction of infrastructure	YES	Efficient use of resources
Use of Land and Soil	None	Infill material (dredge and fill) Aggregate Concrete/tarmac	NO	No mitigation required
Use of Water	None	Construction water requirements	NO	No mitigation required
Biodiversity / Land-Take	Biodiversity – Land Biodiversity – Marine Loch nam Madadh SAC	Removal of habitat Clearing flora	YES	Environmental survey will be conducted to identify sensitive habitats and species, to allow appropriate mitigation to be identified.
Residues and Emissions				
In-Air Noise and Vibration	People Biodiversity - Land	Plant and vessel movements Piling	YES	Works conducted in line with current practice for noise and vibration control on construction and open sites [2] Use of a vibrating hammer instead of pneumatic impact hammer where possible.

	Sensitivities (Section 0)	Source	Potential Effect (no mitigation)	Proposed mitigation
Under Water Noise and Vibration	Biodiversity – Marine Loch nam Madadh SAC	Piling Dredging Plant and vessel movements	YES	Marine mammal observation and/or Passive acoustic monitoring protocols; aligned to guidelines [10]. Use of a vibrating hammer instead of pneumatic impact hammer where possible.
Air Emission Dust	People Biodiversity - Land	Material handling and storage Cleared areas Plant movements	YES	Dust Management in line with existing guidelines [8,9].
Air Emission GHG and Climate Change	None	Plant and vessel movements Electricity use Intrinsic material use	YES	New more efficient substation installed. Plant and vehicles well maintained.
Emission to Marine Water	Biodiversity – Marine Loch nam Madadh SAC	Sedimentation from dredging and piling Risk of unplanned emission resulting from: • Oil/ fuel storage and handling • Silt water run off • Waste materials • Concrete and cement use	YES	Use of precast concrete where possible, including offsite caisson construction. Works conducted in line with standard best practice and existing guidelines – • Storage and handling [4,5,6,7,8,12,13] • Waste management [1,8] • Surface water management [4,6,8] • Cement management [8] • Dredging [1]
Emission to Land	Biodiversity - Land	Risk of unplanned emission resulting from: • Oil/ fuel storage and handling • Cement washings • Silt water run off • Waste materials	YES	Works conducted in line with standard best practice and existing guidelines – • Storage and handling [4,5,6,7,8,12,13] • Waste management [8] • Surface water management [4,6,8] • Cement management [8]
Emission to Surface Water Bodies	None	Risk of unplanned emission resulting from: • Oil/ fuel storage and handling • Cement washings • Silt water run off • Waste materials	NO	No mitigation required

	Sensitivities (Section 0)	Source	Potential Effect (no mitigation)	Proposed mitigation
Light Emissions	Biodiversity – Land Biodiversity - Marine	Plant vessel lights Light for construction	YES	Standard best practice in line with existing guidelines on lighting [3,14] and nuisance management [8].

Terrestrial species (including otters) and the various species of birds that utilising the area may be impacted by the land take, in-air noise, dust emissions, emissions to land such as unplanned releases and light emissions. These impacts will be reduced through aligning practices with:

- Code of practice for noise and vibration control on construction and open sites: British Standards (BS) 5228-1:2009 [BS Institute, 2008].
- Working at construction and demolition sites: Pollution Prevention Guidance (PPG) 6 [Environmental Agency, Northern Ireland Environmental Agency (NIEA) & Scottish Environmental Protection Agency (SEPA), 2012].
- Guidance on the assessment of dust from demolition and construction [Institute of Air Quality Management (IAQM), 2016].
- Coastal and Marine Environmental Site Guide (C584) [Budd, John, Simm & Wilkinson, 2003].
- Safe Storage and disposal of used oils: PPG8 [Environment and Heritage Service, SEPA & Environment Agency, 2004].
- Use and design of oil separators in surface water drainage systems: PPG 3 [Environment and Heritage Service, SEPA & Environment Agency 2006].
- Above ground oil storage tanks: Guidance for Pollution Prevention (GPP) 2 [NIEA, SEPA & Natural Resources Wales, 2017].
- Drums and intermediate bulk containers: PPG 26 [NIEA, SEPA & Environmental Agency, 2011].
- Light and lighting - Lighting of work places: BS EN 12464-2:2014 [BS Institute, 2014].
- Health and Safety in Ports (SIP009) – Guidance on Lighting. [PSS, 2010].

Additionally, an environmental survey will be conducted to identify sensitive habitats and species, to allow appropriate mitigation to be identified prior to construction.

The waters around the Isle of Harris and the Outer Hebrides are utilised by numerous marine mammal species, including both cetaceans and seals. These have the potential to be impacted by the utilisation of the marine environment during development, light emissions, under-water noise and vibration, and emissions to the marine environment. These impacts will be reduced through aligning practices with the guidelines outlined above and:

- Good practice guidelines for ports and harbours operating within or near United Kingdom (UK) European marine sites [Associated British Ports (ABP) Research & Consultancy Ltd,1999]
- Statutory nature conservation agency protocol for minimising the risk of injury to marine mammals from piling noise [Joint Nature Conservation Committee (JNCC), 2010].
- Works and maintenance in or near water: GPP 5 [Natural Resources Wales, NIEA, & SEPA, 2017].

Hydrocarbon separators will be installed as part of the upgrade to the terminal. This will improve the current surface water management process and result in a positive impact on the environment.

During the construction of the Lochmaddy Ferry Terminal development people using the adjacent housing , the Lochmaddy Hotel, the residential property situated 240 m away and the main village have the potential to be impacted. This may occur as a result of in-air noise and dust emissions. These impacts will be reduced through dust and noise management aligned with standard practices and guidelines outlined above.

CMAL will ensure that the contractor produces and instigates a suitable construction environmental management plan (CEMP) to ensure appropriate mitigation is implemented.

5.2 Operation

Table 3 provides a description of the likely effects resulting from the proposed operation of the upgraded Lochmaddy Ferry Terminal on the environment resulting from the use of natural resources and the expected residues and emissions. Additionally, it outlines the sensitivities as per Section 0 and proposes mitigation measures for any effects that could have a potential impact on the environment.

As the project is a replacement of an existing harbour, emissions during operation are not expected to constitute a significant change from the current conditions. The new ferry is a replacement for the existing ferry, and will be working a similar timetable. As such it is not expected to have any significant negative environmental effect from the previously operated site. Table 3 only discusses the operational effects associated with the increase capacity of the harbour.

Table 3: Operational Effects and Sensitivities

	Sensitivities (Section 0)	Source	Potential Effect (no mitigation)	Proposed mitigation
Use of Natural Resources				
Use of Material (eg steel)	None	Slight increase in use of materials required for maintenance, not significant.	NO	No mitigation required
Use of Land and Soil	None	None	NO	No mitigation required
Use of Water	None	Slight increase from current conditions due to potential additional passengers, not significant.	NO	No mitigation required
Biodiversity / Land-Take	Biodiversity – Land Biodiversity – Marine Loch nam Madadh SAC	The new rock armour may provide additional habitat.	YES (positive)	Positive effect
Residues and Emissions				
In-Air Noise and Vibration	People Biodiversity - Land	Slight increase in noise may result from increase traffic, not significant.	NO	No mitigation required
Water Noise and Vibration	Biodiversity - Marine	No significant increase from current conditions	NO	No mitigation required

	Sensitivities (Section 0)	Source	Potential Effect (no mitigation)	Proposed mitigation
Air Emission - Dust	People Biodiversity - Land	None	NO	No mitigation required
Air Emission - GHG and Climate Change	None	Additional Traffic Larger vessel movements. Electricity Use	YES	Plant and vehicles well maintained.
		New more efficient substation installed. New vessel capable of operating with Liquefied Natural Gas (LNG) (reduced NOx and SOx emissions).	YES (positive)	Positive effect
Emission to Marine Water	Biodiversity – Marine Loch nam Madadh SAC	Sedimentation from maintenance dredging	YES	Standard best practice in line with existing guidelines on waste management [1] and dredging [1].
		The installation and use of hydrocarbon separators for surface water run off prior to any discharge occurring.	YES (positive)	Positive effect Standard best practise in line with existing guidelines on hydrocarbon separators [6]
Emission to Land	Biodiversity - Land	None	NO	No mitigation required
Emission to Surface Water	None	None	NO	No mitigation required
Light Emissions	Biodiversity – Land Biodiversity - Marine	No significant increase from current conditions. Increase lighting with larger marshalling area and pier extension.	YES	Standard best practice in line with existing guidelines on lighting [3,14].

As the project is a replacement extension to of an existing harbour, emissions during operation are not expected to constitute a significant change from the current conditions.

However, four positive impacts will result from the development of this project that will be evident during its operation. These includes:

- an upgrade to a more efficient substation;
- the potential for the new vessel to operate on LNG in addition to using marine gas oil (MGO);
- the installation of a hydrocarbon separator system prior to discharge of contaminated surface water; and
- the installation of rock arming which may provide additional habitat.

Unfortunately, the infrastructure for providing LNG instead of MGO is not currently available in Scotland to realise this potential environmental benefit in the short term.

The waters around the Isle of Harris and the Outer Hebrides are utilised by numerous marine mammal species, including both cetaceans and seals. These have the potential to be impacted during the operation of the upgraded terminal, primarily through emissions to the marine environment during maintenance dredging and the increase in lights required for the larger area. These impacts will be reduced through aligning practices with the guidelines outlined above and:

- Good practice guidelines for ports and harbours operating within or near UK European marine sites [ABP Research & Consultancy Ltd,1999]
- Light and lighting. Lighting of work places. Outdoor work places: BS EN 12464-2:2014 [British Standards Institute, 2014].
- Health and Safety in Ports (SIP009) – Guidance on Lighting. [PSS, 2010].

Terrestrial species (including otters) and the various species of birds that utilise the area may also be impacted by the increase in light pollution resulting from the larger area. These impacts will be minimised through operating in line with the previous guidelines.

6 Summary

The Lochmaddy Ferry Terminal development is required to accommodate a larger ferry which will operate from this facility. This development requires; dredging, pier extension and reconstruction, installation of fendering, reclamation to increase in the marshalling area, and an upgrade to the substation. These activities require the use of natural resources and will result in emissions which without mitigation may affect environmentally significant areas including the nearby people, marine and terrestrial biodiversity.

During construction, there is a potential to have significant effects, however standard environmental good practice mitigation will be effective in minimising these. CMAL will ensure that the contractor produces and implements a suitable construction environmental management plan (CEMP) to ensure appropriate mitigation is implemented.

The Lochmaddy development is an upgrade of an existing harbour to accommodate a larger ferry vessel. As such significant impacts during operation are not expected to differ significantly from the current conditions.

7 References

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8 Glossary

Acronym	Definition
ABP	Associated British Ports
BS	British Standard
CEMP	Construction Environmental Management Plan
CMAL	Caledonian Maritime Assets Ltd
CnES	Comhairle nan Eilean Siar
EIA	Environmental Impact Assessment
EIA Regulations	Marine Works (Environmental Impact Assessment) Regulations 2017
GPP	Guidance for Pollution Prevention
Harbours Act	Harbours Act 1964 (as amended)
HRO	Harbour Revision Order
IAQM	Institute of Air Quality Management
JNCC	Joint Nature Conservation Committee
LNG	Liquefied Natural Gas
MGO	Marine Gas Oil
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
NBN	National Biodiversity Network
NIEA	Northern Ireland Environmental Agency
PPG	Pollution Prevention Guidance
pSPA	Proposed Special Protection Area
SAC	Special Area of Conservation
SEPA	Scottish Environmental Protection Agency
SPA	Special Protection Area
SSSI	Sites of Special Scientific Interest
UK	United Kingdom

Lochmaddy

N

0 2.5 5 7.5 10 km

Affric
making it happen

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Farr, Inverness, IV2 6AW

Telephone: 01808 521 498
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www.affriclimited.co.uk

Title: 39.01 Lochmaddy Location

Projection: OSGB 1936/British National Grid EPSG: 27700

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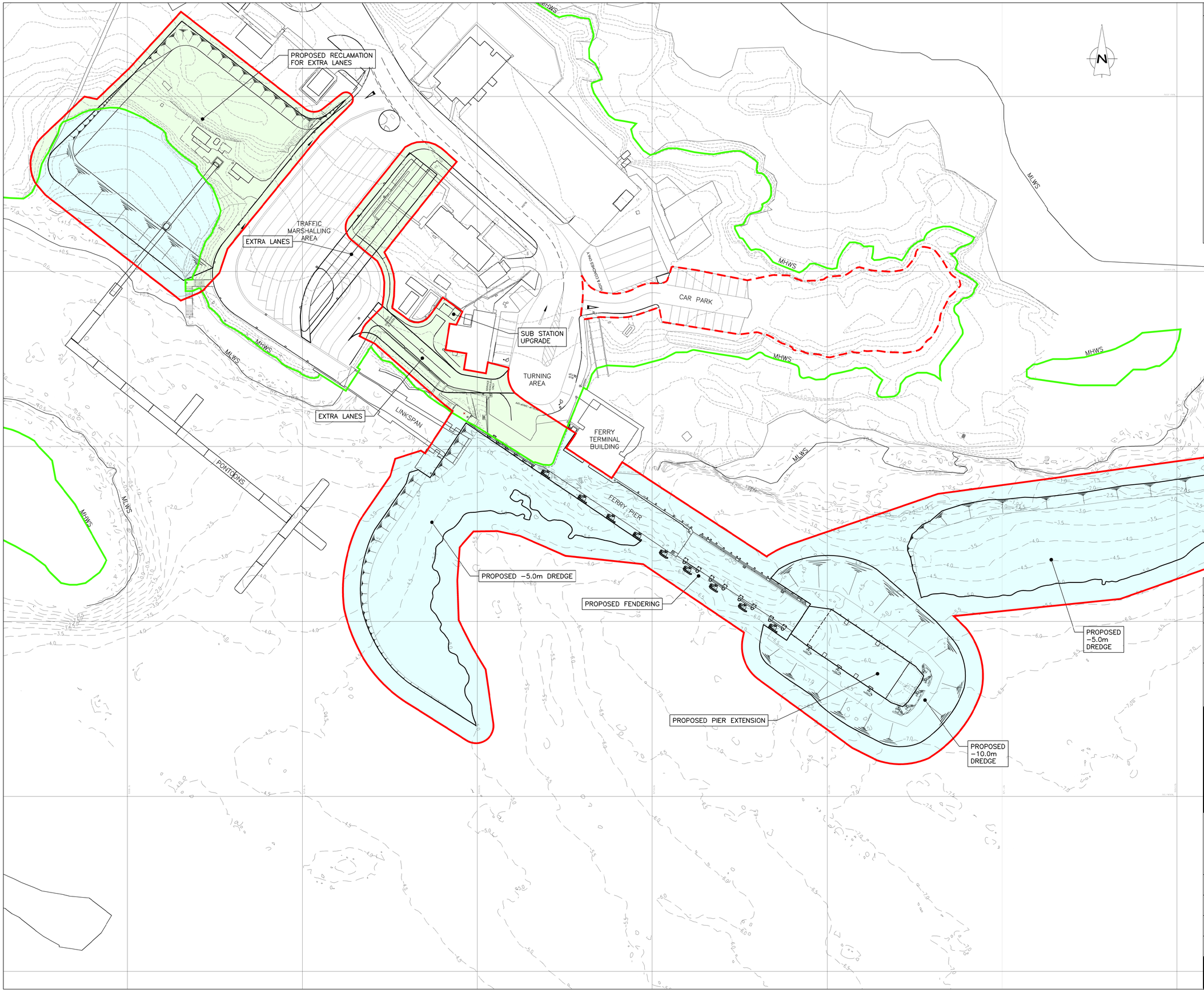
Legend

- Inland Water
- Foreshore
- Lochmaddy
- Buildings
- Tidal Water
- Woodland
- Roads



GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. ALL LEVELS ARE IN METRES AND RELATE TO CHART DATUM.
3. ORDNANCE DATUM IS 2.59m ABOVE CHART DATUM.
4.

H.A.T.	+5.6m	LAT	+0.1m
M.H.W.S.	+4.8m	M.L.W.S	+0.7m
M.H.W.N	+3.6m	M.L.W.N	+1.9m

LEGEND

- MHWS
- SITE BOUNDARY ABOVE MHWS
- SITE BOUNDARY BELOW MHWS
- SITE COMPOUND

REV	DATE	DETAILS	DRAWN	CHK'D	APP'D
A	09.06.17	BOUNDARY LINES AMENDED	JHG	TR	TR

AMENDMENTS

CLIENT

CMAL Calmanach Maritime Assets Ltd Dìobra Ioarra Calaonach Bhc

Comhairle nan Eilean Siar

PROJECT

LOCHMADDY FERRY TERMINAL UPGRADE WORKS

Wallace Stone
CONSULTING CIVIL ENGINEERS

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0141 554 8233
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01349 866775
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01851 612454
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DRAWING TITLE

PROPOSED CONSENTS SITE BOUNDARY

DRAWN	CHECKED	APPROVED
Redacted		
DATE 07.06.17	DATE 07.06.17	DATE 07.06.17

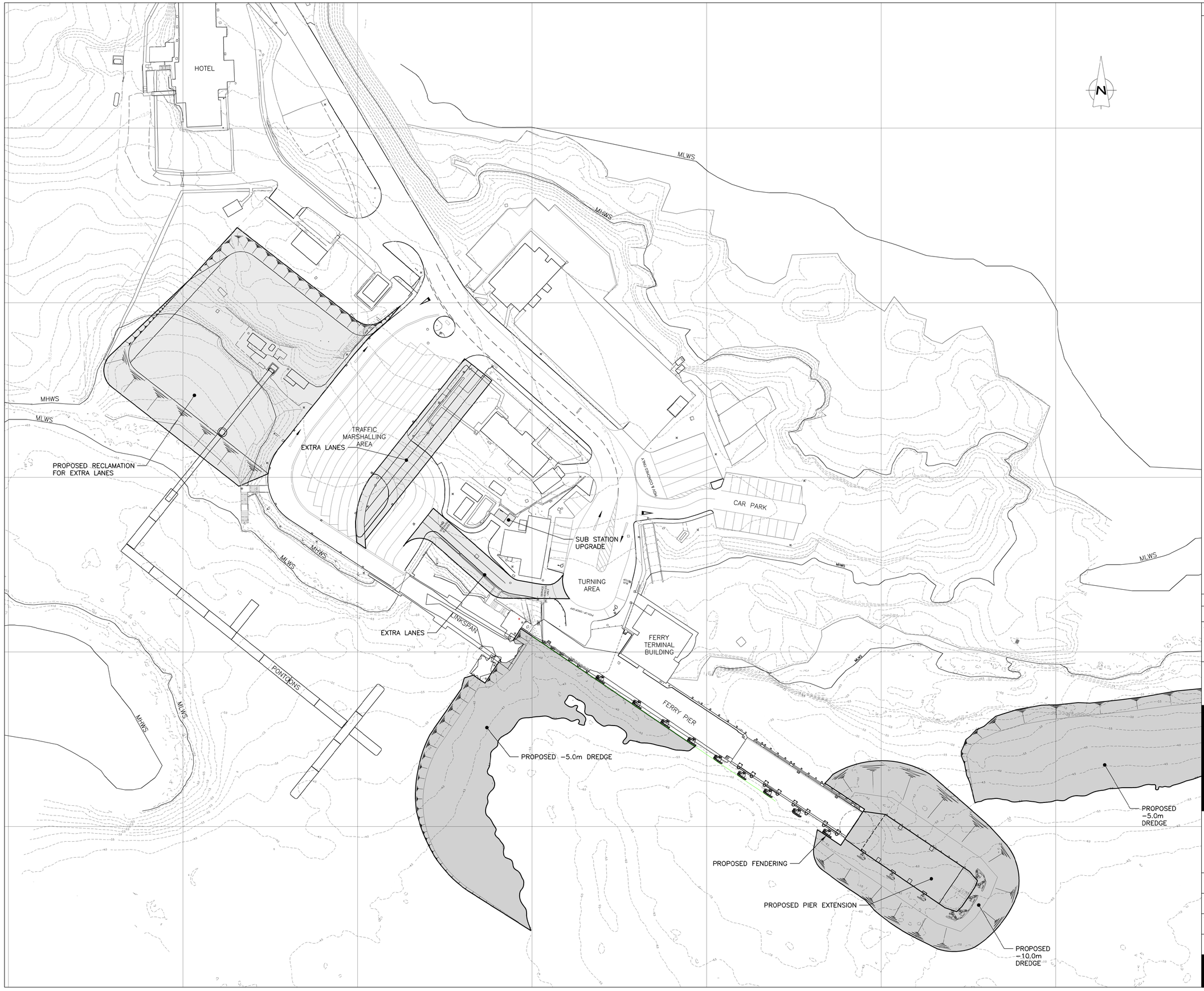
SCALE (A1) 1:500

STAGE INFORMATION

REVISION A

PROJECT No. 1975

DRAWING No. 907



GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. ALL LEVELS ARE IN METRES AND RELATE TO CHART DATUM.
3. ORDNANCE DATUM IS 2.59m ABOVE CHART DATUM.
4.

H.A.T.	+5.6m	LAT	+0.1m
M.H.W.S.	+4.8m	M.L.W.S	+0.7m
M.H.W.N	+3.6m	M.L.W.N	+1.9m

5. FOR EXISTING PIER SHOWING ROCKHEAD REFER TO DRAWING 1975/012

REV	DATE	DETAILS	DRAWN	CHK'D	APP'D

AMENDMENTS

CLIENT

CMAL Calmac Ferries Dunlline Assets Ltd Ceòla Ferry Dùileachaich Ltd

Comhairle nan Eilean Siar

PROJECT

LOCHMADDY FERRY TERMINAL UPGRADE WORKS

Wallace Stone
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DRAWING TITLE

PROPOSED SITE LAYOUT

DRAWN	CHECKED	APPROVED
Redacted		
DATE 08.05.17	DATE 09.05.17	DATE 09.05.17

SCALE (A1) 1:500

STAGE INFORMATION

REVISION

PROJECT No. 1975

DRAWING No. 901