

# **Planning Report**

Port Pier – Extension Works

Report No. CM1379-MA-RP-004
October 2025
Revision 00
Donegal County Council





## **Document Control**

**Project** 

Port Pier - Extension Works

Client

**Donegal County Council** 

**Document** 

Planning Report

**Report Number:** 

CM1379-MA-RP-004

#### **Document Checking:**

Date	Rev	Details of Issue	Prepared by	Checked by	Approved by
Oct 2025	00	Client Review	DC	SG	SG

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## [1] Introduction

Donegal County Council (DCC) is seeking planning permission for the extension to the existing Port Pier located at Inver Bay, Co. Donegal. The development is essential to provide the local fishing industry with a facility of sufficient capacity, befitting current and forecasted demands. It will enable the launching and berthing of vessels across a broader tidal cycle, thus increasing the facility's utilisation. It will also provide significant safety improvements to the overall facility.

This Planning Report outlines the details of the proposed development and its planning context and presents a planning assessment of the development on this basis. The report should be read in conjunction with the planning application drawings and various specialist environmental reports also submitted with this application.

DCC partially owns Port Pier and has an agreement in place with the landowner of the adjacent land (Folio Number DL38591) for the use of the land for the development of the pier infrastructure. Evidence of this agreement is attached to this application. Since Port Pier is a fishing harbour, the Department of Agriculture, Food, and the Marine (DAFM) is responsible for providing the permission to undertake the works on the harbour's foreshore. The applicant, therefore, has full control and ability to implement the proposed works at Port Pier following receipt of planning permission from An Bord Pleanála (ABP) and foreshore consent from DAFM detailed in Chapter [7.1].

This report aims to provide ABP with a comprehensive description of the proposed development and all considerations to support the review.

This Planning Report is set out as follows:

- Section 1 Introduction and Context
- Section 2 Site Location, Context and Background
- Section 3 Requirement for the Development
- Section 4 Development Description
- Section 5 Construction Description
- Section 6 Strategic and Statutory Planning Context
- Section 7 Planning and Environmental Issues and Assessment
- Section 8 Conclusion



## [2] Site Location, Context and Background

### [2.1] Site Location

Port Pier is located on the northwestern shoreline of Inver Bay in southwest Donegal, between the towns of Killybegs and Donegal Town, as shown in Figure 2-1 below.



Figure 2-1: Port Pier Location

The site is strategically located to provide easy access to Inver Bay, making it ideal for fishing vessels. The location's sheltered nature also provides a safe harbour for vessels during harsh weather conditions, protecting them from waves and strong winds.

#### [2.2] Background

The exact construction date of the pier and slipway is uncertain, but Donegal County Council (DCC) has provided a timeline for its development. The original pier, built over 200 years ago, was extended between the 1970s and 1980s. Around the same time, the northern slipway was constructed, followed by the raising of a section of the concrete deck at the head of the pier in approximately 2017. The most recent addition, a southern slipway, was completed in 2023.



Port Pier is a masonry and concrete structure aligned east-west, with concrete slipways on both the north and south sides, the latter being the newly constructed 2023 addition. Located in a sheltered area on the western side of Inver Bay, the pier protects from offshore waves generated in the Atlantic Ocean. The harbour dries out at Lowest Astronomical Tides (LAT), as illustrated in Figure 2-2 below. During the higher tides, there is good vessel access to the slipways and berthing areas but is inundated during extreme high tides.

However, the harbour approaches are shallow, and access from Inver Bay is restricted to higher tides. Siltation within the harbour further limits water depth at the berths. The existing slipway becomes exposed at mid-tide, so vessels can only be launched from it during high tide.



Figure 2-2: Existing Harbour at Low Tide

#### [2.3] Context

Local beneficiaries have requested the Seafood Taskforce to seek funding to extend and enhance Inver Pier. The current situation is challenging, with smaller vessels, especially those heavily laden with fish, often having to travel to Killybegs to dock, even in hazardous weather, due to the limitations of Inver Pier. Those that do manage to berth at Inver must do so at high tide to ensure sufficient under-keel clearance, which is only sometimes feasible. During consultations with local fishermen, it was revealed that some are forced to discard part of their catch when they cannot dock in time due to tidal restrictions.

The proposed extension of the Pier is a solution that promises significant benefits. It would address the current issues by providing safe and suitable berthing for smaller vessels, especially during higher tides. It would also offer significant protection during storm conditions, as the current high bed levels make the pier unusable as a haven during adverse weather. The extension would not only improve operational safety but also ensure better economic outcomes for the local fishing community, as fewer catches would be lost, and vessels could dock more reliably.

This initiative aligns with broader funding programs, such as those driven by the Seafood Taskforce and government-backed schemes aimed at improving Ireland's coastal infrastructure and the fishing industry, particularly in light of post-Brexit challenges.



## [3] Requirement for the Development

#### [3.1] Overview

The key objectives of the development are to provide the local fishing industry with a new pier that is more accessible and utilised during a broader range of tides during normal sea conditions to facilitate the safe berthing of inshore fishing vessels. This will allow the local fishing industry to berth catch at all tide states in Port Pier successfully. Currently, this is not possible due to depth restrictions at low tide, which are having a negative effect on productivity.

#### [3.2] Development Justification

The current pier facility at Port Inver needs to be updated to meet the functional, safety, and environmental standards required to effectively support the local fishing industry. This extension is vital to ensuring that the pier remains a viable, long-term resource for the community and local fishermen, accommodating modern needs and environmental challenges.

#### [3.2.1] Concerns with the Existing Facility

**Shallow Seabed and Limited Berthing:** The natural shallow seabed in the existing harbour, particularly at low tide, severely restricts fishermen's ability to launch and berth vessels. This limitation leads to underutilisation during critical fishing hours and diminishes the harbour's overall productivity. In its current state, the facility is not optimised for modern fishing practices, reducing the number of fishermen who can effectively use it.

**Health, Safety, and Environmental Non-Compliance:** The current pier is outdated in terms of health, safety, and environmental standards. It lacks essential safety features, putting users at unnecessary risk. With increased fishing activity and modern vessel sizes, the absence of compliance with these standards is a growing concern, making it less competitive compared to other modernised harbours in Ireland.

**Overtopping Risks**: The existing structure is prone to overtopping, especially during high tides and storm surges. This poses a serious safety threat during operations and further compromises the long-term durability of the infrastructure. Additionally, with rising sea levels, the current freeboard provision is insufficient, exposing the pier to the risk of regular inundation.

**Lack of Service Provisions:** The facility currently needs more critical utilities such as lighting, water, and electricity. This limits its operational efficiency, especially in low-light conditions, and needs more waste disposal systems, causing operational delays and compromising hygiene standards.

#### [3.2.2] Benefits of the New Pier Extension

**Enhanced Berthing and Increased Utilisation:** By dredging the harbour to a depth of -0.9m CD, the extension will enable fishermen to berth and launch their vessels regardless of tidal conditions, significantly increasing the number of operational hours and, therefore, the overall catch. The additional berth length, combined with wider quayside aprons, will improve vessel handling, making the operations safer and more efficient. This upgrade is crucial for accommodating the modern fishing fleet and larger vessels.



**Improved Health, Safety, and Environmental Compliance:** The new development will be built in accordance with the latest health, safety, and environmental standards, ensuring a safer environment for all users. Features such as proper quayside lighting, enhanced storm protection, and safety equipment will bring the facility up to par with other Irish fishing harbours, ensuring long-term functionality and user safety.

**Protection Against Overtopping and Environmental Resilience:** Designed with future climate conditions in mind, the extension will include provisions for storm surges and rising sea levels. By adhering to the latest guidelines on freeboard and wave protection, the new infrastructure will significantly reduce the risk of overtopping during storm conditions. This will make the pier safer for operations in all weather conditions and protect it from future environmental stresses.

**Provision of Modern Utilities and Services:** The new pier will be equipped with high-mast lighting, a waste transfer facility, and accessible water and electricity supplies, which are essential for the efficient day-to-day functioning of a fishing port. These improvements will not only improve operational efficiency but also ensure that the harbour remains a competitive and attractive option for local and visiting fishermen alike.

#### [3.3] Alignment with Policy and Legislation

The proposed development aligns with several national, regional and local policies, frameworks and strategies. A list of the policies is listed below, and a detailed description is provided in Section [6].

- National Planning Policy Framework (2023): The development aligns with the objectives outlined in the 2023 framework, emphasising the need for sustainable infrastructure that supports regional economies, enhances tourism, and protects environmental assets.
- Regional Spatial and Economic Strategy (2023): This project supports the strategy's goals of promoting balanced regional growth, enhancing connectivity, and encouraging economic development, particularly in coastal communities.
- County Donegal Development Plan (2024–2030): The extension is consistent with the local development plan's vision for sustainable growth, tourism promotion, and infrastructure improvement, including the expansion of fishing and marine facilities.
- National Heritage Policy (2022): The project respects the principles of heritage preservation, ensuring that the pier's design and implementation consider Donegal's surrounding natural and cultural heritage.
- Maritime Area Planning Act (2021): The proposal complies with the regulatory framework established under the Act, addressing spatial planning and licensing for marine development.
- National Spatial Strategy (NSS) (2002–2020): Though superseded, the NSS provided the foundational principles that continue to inform current planning policies, particularly in promoting regional development and supporting rural economies.
- National Marine Planning Framework (NMPF) (2021): The project aligns with the NMPF by integrating maritime spatial planning principles, promoting sustainable use of marine resources, and supporting the economic resilience of coastal communities.
- National Ports Policy (2013): While primarily focused on larger commercial ports, this policy also emphasises the development and sustainability of all marine infrastructure,



which can indirectly relate to fishing harbours and piers, particularly in enhancing connectivity and supporting local economies.

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## [4] Development Description

#### [4.1] Port Pier Extension

Ayesa developed various options to identify the preferred solution that would meet the functional requirements for the extended pier and overall harbour.

Several options were discarded due to inapplicability, while others progressed to a multi-criteria analysis (MCA), where they were evaluated based on various client-agreed criteria. Infilled sheet-piled construction, encapsulated with a capping beam and concrete deck, was selected.

The extension of Port Pier includes the addition of two sections: 44.5 m x 10.1 m to the south and 49.3 m x 10.1 m in an easterly direction. An additional area of approximately  $1121 \text{m}^2$  behind the existing pier will be reclaimed using predominantly the dredged material. Utilising this material provides several benefits. Mainly, costs are greatly reduced, and an all-around environmentally friendly solution is produced, as it reduces the amount of imported fill required. It also means that dredged material does not require removal from the site and disposal at a landfill.

To negate the existing harbour's characteristically shallow nature, proposed bed levels within the new extension will be reduced to ensure that a suitable depth is achieved. This allows the harbour to remain operational, crucially through a broader range of tides, increasing the overall utilisation of the facility. Providing this will be of huge benefit to the local fishing industry and will increase productivity significantly.

Prior to bed level reduction works, a separate 42.8m length sheet piled retaining wall will be constructed in front of the southern face of the existing concrete slipway, located on the southern side of the existing pier. The purpose of this wall is to protect the slipway from being undermined during the dredging works and continual support permanently thereafter.

The development will be formed by driving interlocking steel sheet piles to a required depth, which will form the perimeter walls of the new pier, which are securely fixed using steel tie rods. When all piles have been installed, the structure will be infilled using dredged material, which will be excavated to form the new berthing area and new approach channel to the harbour. Material is placed and compacted in layers, then the outside face of the quay wall sheet piles encased in concrete and a capping beam is constructed to fix it at the top. The sheet piles placed in front of the existing slipway does not require encapsulation. When this is complete, a reinforced concrete slab will be constructed, forming the new pier deck. Figure 4-1 below is a section through the proposed pier extension.



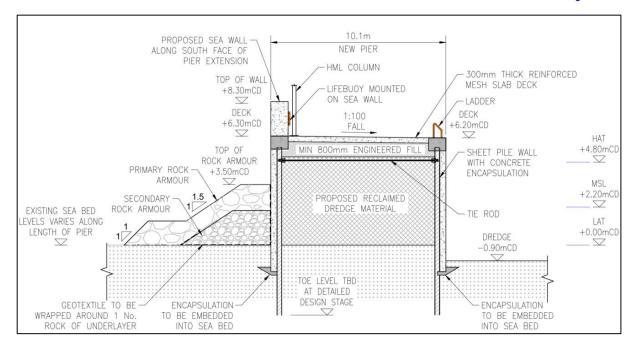


Figure 4-1: Proposed Section of the Pier Extension (Refer to Appendix D)

Photomontages of the proposed encapsulated sheet piles are provided below. Additional photomontages are provided in Appendix C: Photomontages. These images are not georeferenced renderings but accurately represent the proposed works.



Figure 4-2: Photomontages of Proposed Development (Refer to Appendix C)



The piled wall (except in front of the existing slipway) will be externally cased in a concrete façade, as shown below in Figure 4-3. There are several benefits to the construction method. It provides a clean berthing face from bed to deck level, offering enhanced flexibility for the fishing vessels which will have self-mounted fenders; it offers an improved appearance aesthetically; it improves safety by reducing the risk of snagging, improving efficiency, resulting in smoother maritime activities and minimising the potential for accidents or disruptions at all stages of the tidal cycle. The concrete façade provides enhanced resistance to deterioration and degradation, thereby preserving its integrity over an extended period and reducing maintenance requirements.



Figure 4-3: Photomontage of the proposed Port Pier Development (Refer to Appendix C)

#### [4.2] Pier Furniture

#### [4.2.1] Mooring Rings and Bollards

Mooring rings and 10ton bollards will be provided on the deck coping beam, designed in accordance with BS 6349 [1] to determine suitable size/capacity rating and spacing.

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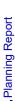






Figure 4-4: Proposed Mooring Ring and Bollards

### [4.2.2] Ladders

Ladders will be provided, which will be recessed into the concrete face so as not to sit proud of the quay face. Centres of ladders will be designed as per guidance in BS 6349. Hand grips will be provided at deck level and enable persons to manoeuvre to the quay deck from the ladders safely. The placement of ladders at the specified centres enables multiple points of access to the quay should an incident occur where a person should fall into the water.

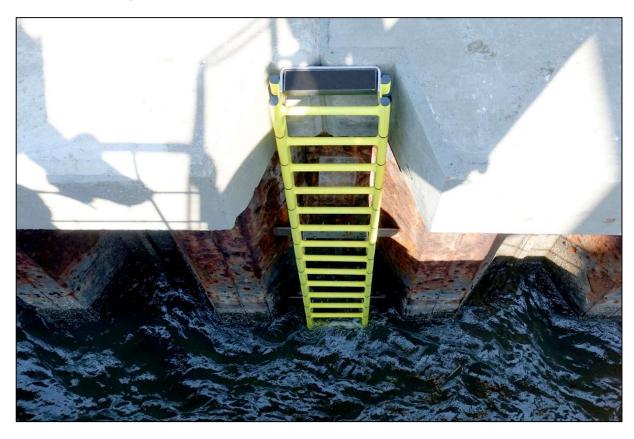


Figure 4-5: Proposed Ladder Recessed

#### [4.2.3] Lifebuoys

Lifebuoy rings shall be 750 mm in diameter and contained in a red-coloured sealed housing to protect against exposure to the element and shall have a 20m floating line attached. The lifebuoy and housing shall be mounted on the seawall, and a galvanised steel or aluminium



support stand with a minimum post diameter of 75 mm or 75 mm x 75 mm box section, coloured red with suitable maintenance-free coating, and securely fixed to the pontoon structure.



Figure 4-6: Typical Lifebuoy

#### [4.2.4] Toe Rails

Safety toe rails will be installed along the front face of the quay and incorporated into the coping beam construction to ensure sound fixity. This will provide an additional safety barrier to persons walking or manoeuvring near the quay edge.

#### [4.2.5] Handrails

A safety handrail will be provided around the proposed staircase, which is located at the eastern end of the east/west leg of the extension.



Figure 4-7: Standard Galvanised Handrail

#### [4.3] Wave Wall and Rock Armour Revetment

A wave wall, complemented by a rock armour revetment, will protect the southern face of the pier extension. These two elements are designed to work in tandem, effectively dissipating and deflecting waves approaching perpendicular to the structure. This combination not only



minimises wave energy impact but also prevents long-term erosion, ensuring the structural integrity of the pier over time.

The height of the wave wall is critical to ensuring the extension's protection while maintaining a balance between functionality and visual harmony with the surrounding landscape. To achieve this balance, advanced analytical tools and design parameters have been employed, allowing for an optimised solution that maximises protection without compromising the area's aesthetics.

#### [4.4] Services

This new state-of-the-art harbour will provide all the modern utilities and services expected and necessary for an effective and efficiently run fishing harbour.

#### [4.4.1] Lighting

Suitable high mast lighting will be provided along the pier and seawall to allow safe use, day or night. Lighting shall be designed not to impair the navigator's night vision. Lighting shall be designed to switch on automatically when natural light drops below a safe level. The lighting capacity shall be aligned with local standards and guidelines.

The proposed lighting will be finalised during the detailed design stage, subject to Irish Light's agreement.

#### [4.4.2] Waste Disposal

Waste disposal at the pier will be facilitated through a purpose-designed and secure Waste Station strategically positioned at or near the harbour extension. The Waste Station will be designed to ensure efficient and controlled waste management at the designated location.

#### [4.4.3] Electricity and Water Provisions

Power and freshwater utilities shall be provided via integrated utility pedestals. Water and electrical infrastructure shall be incorporated into service pedestals equipped with meters and valves, and a pay-as-you-go system shall be established to promote responsible use and reduce overconsumption and waste.

Each utility supply line and pedestal will be installed so as not to obstruct the pier's use. All utilities will be designed and specified in accordance with international design codes and standards.

#### [4.4.3.1] Water

Potable running water shall be provided from the service pedestal with spacing specified following international design codes and standards.

Supply lines are designed to provide adequate flow without significant pressure loss when 25% of outlets are used.

A main isolation valve shall be installed in an accessible location to control the water supply to the entire system. Secondary isolation valves shall be installed as deemed necessary by the



Contractor to allow for maintenance and drain-down of each system. All outlets shall be fitted with non-return valves.

#### [4.4.3.2] Electricity

The design, provision, and installation of electrical services for the development shall comply with the national electrical and fire standards, codes, and guidelines. All equipment and wiring will be of marine standard.

Power outlets will be a 2-phase 220V and shall adhere to the following list of standards is non-exhaustive, recommended for use by PIANC 149 (Part IV):

- IEC (International Electrotechnical Commission) Specification 60309;
- IEC Specification 60364-7-709;
- BS 7671;
- BS EN 60092;
- BS EN 60309 (Same as IEC 60309).

#### [4.4.4] Electric Vehicle Charge Points

As part of the wider national and international agenda for using green energy and reducing carbon emissions, electrical car charge points will be provided at the vehicle parking area close to the harbour's entrance. This provision will encourage the local industry to embrace this change and safeguard the nation's environmental health.

#### [4.5] CCTV

CCTV is not included in this project. However, ducting will be installed to accommodate the future installation of CCTV at various locations along the harbour.



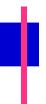
## [5] Construction Description

The preferred construction methodology for the pier extension is intended to be implemented using a combination of floating and land-based plant, including a jack-up barge with an attending crane or excavator, complete with a vibrating hammer to install the sheet piles to their required depth. An attending crane will be required to move materials onto the barge from land.

The general sequencing and approach to construction at the site are expected to be as set out below; however, the Contractor will determine the final details.

- Secure site boundaries with temporary fencing.
- Establish the compound at the end of the existing pier or the Contractor's preferred location. The finalised location is to be agreed upon between the client and the Contractor before construction.
- Installation of silt curtains surrounding the site.
- A section of existing stone wall on the RHS of the existing pier entrance will be demolished (approximately 11m) as this is the proposed entrance to the new development.
- Sheet piles for both the proposed development and retaining wall will be driven into the seabed as shown on the drawings, using an excavator or crane fitted with a vibratory pile hammer (or similar).
- The sheet piles tie-back system will be installed, which will consist of a series of tierods and waling beams.
- The pier will be filled with material either from the dredging operation or selected fill imported from commercial sources.
- The area behind the pier will also be reclaimed using the dredged material.
- The fill will be compacted in layers (approximately 300mm) using a 5t roller (or similar).
- Selected engineering fill will be used in the top 900mm to create a base layer for the concrete slab.
- The selected fill will be compacted in layers (approximately 300mm) using a 5t roller (or similar). On top of the sheet piles and engineered fill, a reinforced concrete capping slab will be constructed. This will involve installing rebar cages, shuttering, and concrete casting.
- A concrete capping beam shall be constructed and will incorporate cast-in mooring items such as mooring rings and bollards. The toe rail will also be incorporated into the capping beam construction.
- In unison, a new capping beam to fix the head of the sheet piled retaining wall to the foundation of the existing concrete slipway will be constructed.
- A sea wall on the southern face of the east-west extension will be constructed on top of the capping beam.
- Quayside services such as lighting, drainage, navigation aids, and utilities shall be installed in accordance with relevant standards and regulations.
- Along the southern face of the structure, a rock armour revetment will be formed for scour protection, protecting the structure from tidal erosion.





Refer to the Appendix B: Outline Construction Method Statement For further details of construction sequencing and methodology.



## [6] Strategic and Statutory Planning Policy Context

#### [6.1] National Marine Planning Framework (2023)

National Planning Policy Framework [2] Sets out the Government's strategic vision for planning in Ireland. The following objectives are particularly relevant to the proposed development of Port Pier:

- Invest in the seafood sector and Fishery Harbour Centres by improving the facilities available to the local fishing industry. This will help make the harbour a more attractive base for fishing vessels, benefiting the local economy.
- Ensure the sustainable management of Ireland's coastal resources by creating a more sheltered and protected harbour. This will help to protect the coastal environment and ensure its sustainable use for future generations.
- Address the effects of climate change and coastal flooding by making the harbour more resilient to climate change's effects, such as sea level rise and storms. Thus, the harbour will be future-proofed, making it a more viable resource for the local area.

#### [6.2] Regional Spatial and Economic Strategy (2023)

The proposed development is consistent with the policies of the Regional Spatial and Economic Strategy [3] In Ireland, in several ways:

- Support the maritime economy by enhancing Enhance Port Pier's functionality and safety as a vital piece of maritime infrastructure supporting the local fishing and sailing community. This aligns with the national policy objective of supporting the sustainable growth and development of the maritime economy.
- Development of fishery harbour centres by improving the berthing facilities for fishing vessels, contributing to the continued investment in fishery harbour centres as outlined in the national policy objectives.
- **Regional and rural development** by enhancing the harbour's capacity and functionality, contributing to the economic viability of rural coastal communities. Port Pier is an important economic driver for the local community and surrounding areas.

#### [6.3] County Donegal Development Plan (2024–2030)

The extension of the port pier at Inver in Co. Donegal can be closely connected to the objectives of the County Donegal Development Plan. [4] In several ways, particularly in how it supports maritime infrastructure and the fisheries industries:

- **Economic Development:** Extending the pier at Inver aligns with the objective of promoting economic development by enhancing maritime infrastructure crucial for fisheries and broader maritime industries. This expansion would improve facilities for local fishing fleets, support seafood processing operations, and provide opportunities for commercial activities, thus boosting the local economy.
- Transport and Infrastructure: The development plan emphasises the importance of robust infrastructure, which includes maritime transport and logistics. Extending the port pier would directly enhance transport links, facilitate more efficient loading and unloading of goods, and support the growth of the fisheries sector by enabling access



for larger vessels, improving operational efficiency, and connecting to national and international markets.

- Climate Change Mitigation and Adaptation: Extending the pier will include design
  features that account for future climate change impacts, such as sea level rise and
  increased storm frequency. Enhancing maritime infrastructure in this way supports the
  plan's climate objectives by building resilience against environmental challenges,
  ensuring that fishing and marine operations can continue sustainably
- Protection of Natural and Built Heritage: The extension project will incorporate
  environmentally sensitive construction practices to protect local marine habitats. This
  aligns with the plan's commitment to safeguarding natural heritage, ensuring that
  fisheries and other marine activities do not adversely impact the local environment.
  Sustainable pier expansion supports both economic use and environmental
  stewardship.
- Community and Social Development: The pier's expansion can benefit the local community by boosting the local fishing industry. This aligns with the plan's objective of fostering community development and improving quality of life, particularly in coastal areas where the fishing industry is a key part of the social and economic fabric.

#### [6.4] National Heritage Policy (2022)

Relevant policies from the National Heritage Policy [5] that are connected in support of the development of Port Pier are as follows:

#### [6.4.1] Theme 1: Communities and Heritage

- Objective 1: Enhance support for local authorities and County/City Heritage Forums in community heritage engagement: The development will involve close collaboration with the Donegal County Council and the local fishing industry to ensure that the design and implementation of the development are consistent with the needs and aspirations of the local community.
- **Objective 6:** Enhance physical and digital access to heritage in public and private ownership: The development will improve access and provide a safer, more accessible berthing area for fishing vessels, benefiting the local fishing community.

#### [6.4.2] Theme 2: Leadership and Heritage

Objective 3: Ensure the conservation and presentation of our national heritage estate
is appropriately resourced through increased capital investment over the lifetime of
this plan. The development will provide much-needed capital investment to construct
the extension, thereby improving the facilities at Por Pier, a valuable piece of Ireland's
maritime heritage.



#### [6.5] Maritime Area Planning Act 2021

The project is aligned with the goals and objectives of the Maritime Area Planning Act. [6] As follows:

- Sustainable Development: The MAP Act emphasises the importance of sustainable development in maritime areas, balancing economic growth with environmental protection. The development will be designed and implemented with minimal environmental impacts while promoting substantial operational and economic benefits. The extension will be constructed incorporating the latest practices, construction practices, and environmental measures, ensuring the protection of marine habitats and adhering Act's focus on sustainability.
- Supporting Economic Growth and Local Communities: The Act supports the
  development of maritime infrastructure that drives economic growth, including port
  facilities that contribute to the blue economy. The development supports local economic
  growth by providing a new facility which will drive and stimulate the local fishing industry
  and potentially further economic activity in the region. This aligns with the MAP Act's
  objective to foster economic development through improved maritime infrastructure.

#### [6.6] National Spatial Strategy (NSS) (2002–2020)

The National Spatial Strategy [7] is a strategic planning framework aimed at achieving balanced regional development across Ireland. It sought to guide the country's spatial development over nearly two decades, addressing disparities between regions and promoting sustainable growth.

 Objective 5: Support for Rural Communities: The development can be directly linked to supporting this objective by providing a new facility that enhances and boosts the livelihood of the local fishing community that uses Port Pier.

#### [6.7] National Marine Planning Framework (NMPF) (2021)

The National Marine Planning Framework [8] is Ireland's overarching plan for managing the sustainable use of its maritime area. It sets out objectives and policies for a range of marine sectors, including the fishing industry. It aims to balance the needs of various marine users while protecting the marine environment.

The proposed development is consistent with the following Fisheries objectives and planning policies:

#### Objectives:

- **Deliver a sustainable seafood sector** by ensuring that Port Pier has a modern, safe, fit-for-purpose facility that enables improved efficiency and productivity. This will help support the sustainability of the seafood sector in the area.
- **Promote a sustainable, profitable and self-reliant industry** by providing a new facility which will protect and enhance the social and economic fabric of the rural coastal community at Port Pier, Inver which is dependent on the seafood sector.
- Manage utilisation of sea fisheries resources by ensuring that the local fishing industry at Inver can access the harbour to land catch sustainably.



#### **Planning Policies:**

- Fisheries Policy 1: The proposed development will not significantly impact access to
  existing fishing activities. It will improve access to existing fishing activities by making
  the harbour more modern and efficient
- **Fisheries Policy 2:** The proposed development is committed to engaging with local fishing interests and other stakeholders at an early stage to discuss it. This will help ensure that the development is designed to minimise any potential impacts on the fishing industry.
- **Fisheries Policy 3:** The proposed development will enhance the sustainability of the fisheries industry by making it more efficient and productive. This development will help to ensure that the industry can continue to provide food for the people of Ireland sustainably.
- **Fisheries Policy 4:** The proposed development will enable access to fishing activities by improving the harbour's safety and efficiency, making it more attractive to the local fishing industry and boosting the local economy.
- **Fisheries Policy 5:** The proposed development will not have a significant adverse impact on essential fish habitat
- **Fisheries Policy 6:** The proposed development is committed to providing a facility required to support a viable fishing fleet in this area. The development is necessary because the existing pier is outdated, lacks operational capacity and is no longer fit for purpose.

#### [6.8] National Ports Policy (2013)

The National Ports Policy [9] aims to ensure the effective development and operation of Ireland's port infrastructure, which will support economic growth and regional development.

The proposed development aligns with and supports the key objectives and principles outlined in the policy as follows:

- Enhancing Port Infrastructure: The extension of the Port Pier directly contributes to enhancing port infrastructure and improving facilities for fishing operations and other maritime activities. This aligns with the policy's objective to modernise and expand port facilities to meet increasing demand and improve operational efficiency.
- **Supporting Regional Development:** The proposed development at Port Pier will support regional development by significantly boosting the local economy.
- Facilitating Economic Growth: The pier extension will increase capacity to handle larger volumes of fishing vessels, thereby supporting economic growth and strengthening the regional economy. This is aligned with the policy's emphasis on economic development through enhanced harbour infrastructure.
- Improving Port Efficiency and Competitiveness: The development at Port Pier improves the efficiency and operational capacity, including better facilities for loading and unloading, reduced congestion, and enhanced safety. Such improvements increase the port's competitiveness and operational effectiveness.
- Aligning with National Strategic Goals: The proposal is consistent with national strategic goals by contributing to infrastructure development, supporting economic



growth in Co. Donegal, and enhancing regional balance. The project aligns with the policy's vision of developing port infrastructure to meet national and regional needs.

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## [7] Planning and Environmental Issues and Assessments

#### [7.1] Planning Route Consent

As per Part XAB of the Planning and Development Act 2000 [10], as inserted by Section 57 of the Planning and Development (Amendment) Act 2010 [11], FCC, as the Local Authority, proposes to carry out development which has been carried out where an environmental impact assessment, a determination as to whether an environmental impact assessment is required, or an appropriate assessment, was or is required.

Part XAB requires An Bord Pleanála to screen proposed developments for which applications are made to the Board or which are the subject of an appeal to determine if an appropriate assessment is required and to carry out the assessment where relevant.

Section 177AE of the Planning and Development Acts 2000 [10] states that Local Authorities are required to make an application to An Bord Pleanála for any proposed development in their functional area or on the foreshore, where an appropriate assessment under the Habitats Directive is required.

Therefore, the proposed development for Port Pier falls under Section 177AE, which involves an application to An Bord Pleanála to approve a proposed development.

Whilst the Maritime Area Planning Act 2021 [6] has superseded the Foreshore Act, Section 15 (1B) of the Foreshore Act [12] remains in situ where appropriate. Since the proposed development falls within Section B, as stated below, then the appropriate authority to approach is the Minister for Agriculture, Food and the Marine (DAFM), and MARA does not have the power to consent to either Maritime Usage Licences or MACs in these instances.

15[1B.—In the Foreshore Acts 1933 to 2011 "appropriate Minister" means—

- (a) concerning a fishery harbour centre, the Minister for Agriculture, Fisheries and Food,
- (b) in relation to a function in respect of— (i) an activity which is wholly or primarily for the use, development or support of aquaculture or (ii) an activity which is wholly or primarily for the use, development or support of sea-fishing including the processing and sale of sea-fish and manufacture of products derived from sea-fish, the Minister for Agriculture, Fisheries and Food,

#### [7.2] Pre-Planning Consultation

#### [7.2.1] Donegal County Council

Pre-planning consultation was held on the 13th of July 2023 where it was agreed that the application should be submitted to ABP. However, as part of the Part 8 development, the application will also be sent to the Donegal CC planning department for public consultation. During the public consultation period, it is necessary to provide public notices on the site and in approved newspapers for a duration of six weeks.

#### [7.2.2] Public Consultation

DCC originally engaged the local fishing industry in conjunction with previous designers where they provided valuable input to key parameters which were later implemented in the detailed design stage.



The considerations have been retained in the new development and further consultation to confirm the preferred dredge depth, location and general layout have been confirmed through recent engagement with the local fishermen.

#### [7.3] Content of the Application

#### [7.3.1] Environmental Impact Assessment (EIA) Requirements

The proposed development has been screened to determine whether an Environmental Impact Assessment (EIA) is required. The screening process involves reviewing the development against various criteria to assess its potential environmental impact.

Item 10 of Part 2 of Schedule 5 relates to Infrastructure Projects. Part (e) specifies the following class of development:

"New or extended harbours and port installations, including fishing harbours, not included in Part 1 of this Schedule, where the area, or additional area, of water, enclosed would be 20 hectares or more, or which would involve the reclamation of 5 hectares or more of land, or which would involve the construction of additional guays exceeding 500 metres in length."

The proposed development includes the construction of a pier extension, total length of 83.7m in length and a width of 10.1m. In this regard, the development does not reach the mandatory threshold. Furthermore, the area of reclamation totals to 0.1 hectares and therefore also does not reach the mandatory threshold.

Item 12 of Part 2 of Schedule 5 relates to Infrastructure Projects. Part (b) specifies the following class of development:

"Sea water marinas where the number of berths would exceed 300 and freshwater marinas where the number of berths would exceed 100."

The proposed development will increase the number of berths, however, does not reach the mandatory threshold.

In summary, the development does not fall under any of the thresholds in Schedule 5 Part 1 for mandatory EIA, and it does not meet/exceed the thresholds for which it falls under in Schedule 5 Part 2. Therefore, it is considered that a mandatory EIA is not required and that it is a sub-threshold development.

The EIA screening assessment has been undertaken and enclosed in this planning application.

## [7.4] Supporting Information for Screening Appropriate Assessment (SISAA) Requirements

#### [7.4.1] Appropriate Assessment Screening

Two Special Areas of Conservation (SAC) and one Special Protection Areas (SPA) are within 20km radius of the Port Pier harbour. Figure 7-1 shows the locations and extents of the SPA's and SAC's in this region. A screening for appropriate assessment was accordingly undertaken and is provided with the application documentation.

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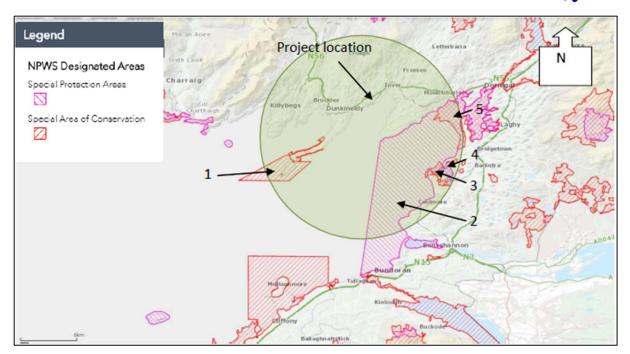


Figure 7-1: Zone of Influence: Natura 2000 Sites around Inver Bay, Co.Donegal

The screening assessment was completed in compliance with the relevant European Communities and national legislation and associated guidance.

From this screening exercise, it was concluded that the development is not within a Natura 2000 site. However, a hydrological and acoustic link is considered to exist with St John's Point SAC, Donegal Bay SPA, Donegal Bay (Murvagh) SAC and other Annex species occurring in the bay.

The project has been assessed in terms of the likely impacts the proposal may have on the Natura 2000 sites in the area. The significance of impacts identified has been determined, and although the project works will be temporary and relatively small in the wider context of the marine environment, in the absence of mitigation, the project may pose a risk to the above aforementioned areas of interest. Consequently, it is the opinion of the assessing ecologist that the development requires a Stage 2 Appropriate Assessment.

#### [7.4.2] Natura Impact Assessment (NIS)

Ayesa has prepared a Natura Impact Statement for the proposed development. Stage 2 of the NIS identifies any adverse impacts the plan or development might have on the integrity of relevant Natura 2000 Sites. As part of the assessment, a key consideration is 'in combination' effects with other plans or developments. Where adverse impacts are identified, mitigation measures can be proposed to avoid, reduce, or remedy any such negative impacts, and the plan or development should then be amended accordingly, thereby avoiding the need to progress to Stage 3.

The NIS has been completed in compliance with the relevant European and national guidelines. The potential impacts of the proposed development have been considered in the context of the European Sites potentially affected, their Qualifying Interests (QIs), Special Conservation Interests and Conservation Objectives. Robust and effective mitigation measures have been proposed to avoid any impacts affecting marine water quality and QIs of the several nearby Natura 2000 sites.



The project is not within a Natura 2000 site, however as identified in the AA screening, a hydrological and acoustic link is considered to exist with St John's Point SAC (000191), Donegal Bay SPA (004145), Donegal Bay (Murvagh) SAC (000133), as well as with other Annex species frequenting the bay.

Considering the mitigation measures proposed, and based on the best scientific knowledge available, it is concluded that there will be no significant adverse impacts (either directly or indirectly, alone or in combination with other plans or projects) on the integrity of Donegal Bay SPA, St Johns Point SAC and Donegal Bay (Murvagh) SAC, as a result of the proposed development.

The Natura Impact Statement accompanies the Port Pier Extension Planning Application.

#### [7.5] Specialist Reports

#### [7.5.1] Underwater Archaeology Impact Assessment (UAIA)

An UAIA was completed by Mizen Archaeology on behalf of DCC to assess the likelihood of the proposed works impacting the archaeological significance of the area. The UAIA included a desktop-based study and walk-over visual survey of the area.

The proposed development is next to the remains of a whaling/saltworks building, which is not listed as a protected site, but holds historical and archaeological value. Mitigation measures such as preservation by record (of all surviving structures) and physical protection through fencing was considered sufficient to limit the impact of the proposed works.

Furthermore, a 25m stone alignment (possibly early pier) was identified during the walk-over survey. Archaeological testing is recommended to determine the significance of the feature.

Finally, the dredging and construction may disturb unrecorded industrial infrastructure, the stone alignment and waterlogged archaeological materials in the basin of the proposed pier. All dredging operations and excavations works is therefore to be conducted under the supervision of a licensed underwater archaeologist.

Through the implementation of the proposed mitigation measures during the project's execution, the residual impact will be imperceptible to slight on the archaeological heritage of the site. All features of significance will be preserved either in-situ or by record. The full UAIA can be found as part of the planning application.

#### [7.6] Planning Policy Statement

The proposed development to extend the pier at Port Pier, Inver is a strategic investment that will greatly enhance the harbour's operations and the improvements to the port will provide a safer and more advanced facility for the local fishing industry.

The National Spatial Strategy (NSS) recognises the importance of sustainable development in the marine and fisheries sector. It emphasises the need to support rural and coastal communities, particularly those relying strongly on the fishing industry. The proposed development in the harbour aligns with this policy, as it will reinstate, improve, strengthen, modernise and have a lasting impact on the local fishing industry in the Inver area. Overall, the principle of the development is fully supported at all levels of strategic and statutory planning policy.

#### [7.7] Land and Visual Impact

The proposed development is a concrete-encased sheet pile wall construction, with a concrete deck and a sea wall along its southern face. The development has been designed in such a way that it integrates as best as possible and will have a very small impact on the land and visual surroundings. 4 No graphic illustrations of the proposed development are included in Appendix D: Drawings.

#### [7.8] Access and Traffic

A traffic impact assessment was not considered necessary due to the limited size of the proposed development relative to existing traffic volumes.

Every effort shall be made to ensure that the works to extend the pier will have any effect on operations of the existing facility. Any live interfaces such as at the entrance to the site where a small section of concrete wall will require to be demolished for construction works to commence shall be carefully co-ordinated and managed by the contractor.

#### [7.9] Waste, Noise and Dust

Construction stage noise and dust are expected to create a short-term, slight negative impact due to the temporary nature of the proposed works. At an operational stage, however, while dust is not likely to be an issue, noise levels may increase slightly due to the increased operations of the port. However, the distance of the port from any residential or commercial businesses and the small scale of the development noise levels are considered slight to negligible.

Construction stage waste will be segregated and collected by a licensed operator. Further details are provided in the Outline Construction Method Statement in Appendix B: Outline Construction Method Statement.

#### [7.10] Water Usage

Service pedestals are expected to further reduce water usage by providing a centralised location for water meters and valves and enabling a pay-as-you-go service. These measures give the client greater control over water flow, enabling them to regulate water usage more effectively while incentivising users to conserve water.





## [8] Conclusion

In conclusion, the proposed development to extend the pier is vital, offering a host of compelling reasons for its implementation. The main concern is the restrictive access to the facility during lower tides.

Enhancement of safety is also a priority - the extension will eliminate current hazards and provide improved more sheltered and secure berthing conditions for the fishing vessels. The provision of services and the proposed state-of-the-art functionality provides a significant improvement.

With a minimum design life of 50 years, the development provides a robust, enduring solution to meet the community's long-term maritime needs.

The proposed development aligns with national, regional and local policies and objectives outlined in the Development Plans. Through meticulous planning and adherence to sustainable development principles, the mitigation measures were proposed to ensure the integrity of nearby Natura 2000 sites, particularly the Donegal Bay SPA, St. Johns Point and Donegal Bay (Murvagh) SAC's.

Furthermore, the assessment extends beyond ecological considerations, demonstrating a reasonable balance that protects the area's biodiversity, high landscape quality, visual amenities and built heritage assets. The proposed development integrates with the area's planning and sustainable development.

These benefits provide a compelling case for adopting this development, securing the harbour's future, promoting safety, and fostering a thriving maritime community.

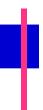


## [9] References



- [1] B. Standards, "BS 6349-1:2000: Maritime Structures, Part 1 Code of Practice for General Criteria," 2000.
- [2] L. G. a. H. Department of Housing, "National Marine," 2021.
- [3] Government of Ireland, "Regional Spatial and Economic Strategy," 2023.
- [4] D. C. Council, "County Donegal Development Plan 2024-2030," 2024.
- [5] Government of Ireland, Heritage Ireland 2030 A framework for Heritage, 2022.
- [6] Government of Ireland, "Maritime Area Planning Act," 2021.
- [7] G. o. Ireland, "National Spatial Strategy for Ireland 2002-2020," 2002.
- [8] Government of Ireland, National Planning Framework, 2023.
- [9] T. a. S. Department of Transport, "National Ports Policy," 2013.
- [10] Irish Government, Planning and Development Act, 2000.
- [11] Government of Ireland, "Planning and Development (Amendment) Act," 2010.
- [12] Government of Ireland, "Foreshore Act," 1933.





## **Appendix A: Site Photographs**

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Figure 0-1: Ariel photo of the pier from the seaside.





Figure 0-2: Ariel photo of the surrounding area.



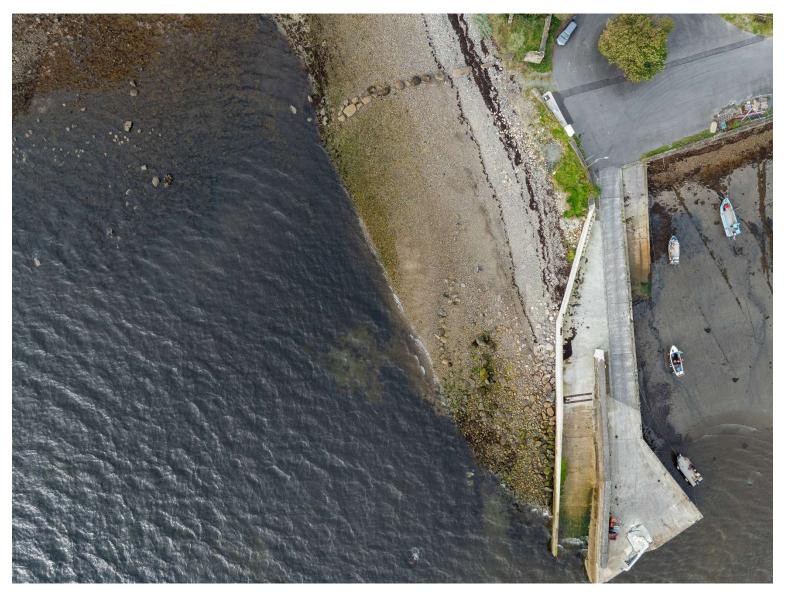


Figure 0-3: Top-down ariel photo of the pier.



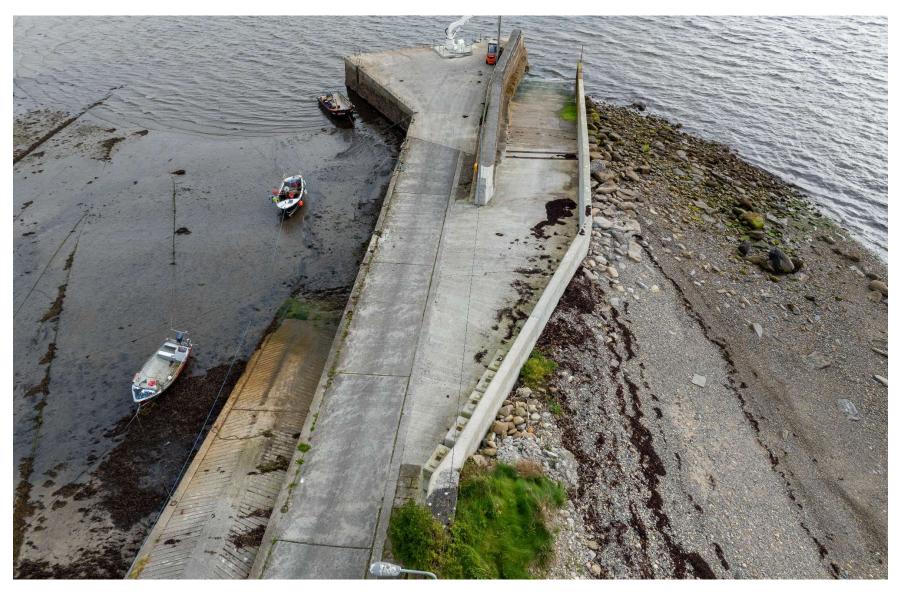


Figure 0-4: Drone photo of the pier from the landside.





Figure 0-5: Typical rocky shore in the area for the proposed pier.



Figure 0-6: New slipway constructed to the South of the existing pier.



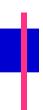


Figure 0-7: Inside of the harbour dried out during low tide.



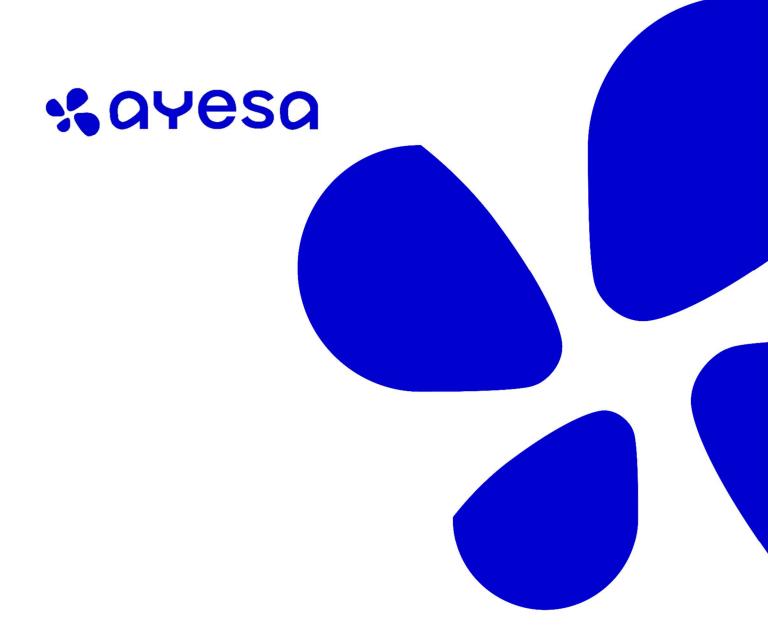
Figure 0-8: Vessels moored in the dried-out harbour.





# **Appendix B: Outline Construction Method Statement**

Planning Report



# Outline Construction Method Statement

Port Pier Extension

Report No. CM1379-MA-R003-R001
October 2025
Revision 00
Donegal County Council





## **Document Control**

**Project** 

Port Pier Extension

Client

**Donegal County Council** 

**Document** 

**Outline Construction Method Statement** 

**Report Number:** 

CM1379-MA-R003-R001

#### **Document Checking:**

Date	Rev	Details of Issue	Prepared by	Checked by	Approved by
Oct 2025	00	ABP Planning Submission	DC	POC	SG

Disclaimer: Please note that this report is based on specific information, instructions, and information from our Client and should not be relied upon by third parties.



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#### [1] Introduction

#### [1.1] Purpose

Ayesa has been appointed by Donegal County Council (DCC) (the "Client") to provide engineering consultancy services for the Port Pier Extension. This Outline Construction Method Statement (OCMS) aims to provide a high-level method statement of the project's construction works, its planning context, and its potential impact on the surrounding area. The method statement provided in this document is based on the preliminary design and limited geotechnical information, which is subject to change.

It is recommended that the OCMS and the accompanying drawings be reviewed together to understand the proposed development and its potential implications.

#### [1.2] Site Location

Port Pier is located within Inver Bay, on the Northern shoreline of Donegal Bay on the Western coast of Ireland, see Figure 1-1. The site is located between the town of Donegal and Killybegs and can be accessed via the N56.



Figure 1-1: Port Pier Inver Locality Map

The site is strategically located to provide easy access to Inver Bay, making it ideal for fishing vessels. The location's sheltered nature also provides a safe harbour for vessels during harsh weather conditions, protecting them from waves and strong winds.

#### [1.3] Development Description

The extension of Port Pier includes the addition of two sections: 44.5m x 10.1m to the south and 49.3m x 10.1m in an easterly direction. An additional area of approximately 1200m<sup>2</sup> behind the existing pier will be reclaimed using predominantly the dredged material. To negate the existing harbour's characteristically shallow nature, proposed bed levels within the new extension will be reduced to ensure that a suitable depth is achieved. This allows the harbour



to remain operational, crucially through a broader range of tides, increasing the overall utilisation of the facility.

Prior to bed level reduction works, a separate 42.8m length sheet piled retaining wall will be constructed in front of the southern face of the existing concrete slipway, located on the southern side of the existing pier. The purpose of this wall is to protect the slipway from being undermined during the dredging works and continual support permanently thereafter.

#### [1.4] Background

Port Pier is a masonry/concrete pier with an east-west alignment and a small concrete slipway on the same alignment. The harbour is in a sheltered location on the western side of Inver Bay, where it is protected against offshore waves generated in the Atlantic Ocean. Almost the whole harbour area dries out at Lowest Astronomical Tide (LAT) but is covered at high tides. The existing slipway becomes exposed at mid-tide, so vessels can only be launched from it during high tide.



Figure 2: Port Pier, Inver





Figure 3: Existing Port Pier

In 2023, a new slipway to launch at shallower water levels was constructed on the southern side of the existing pier, as shown below.

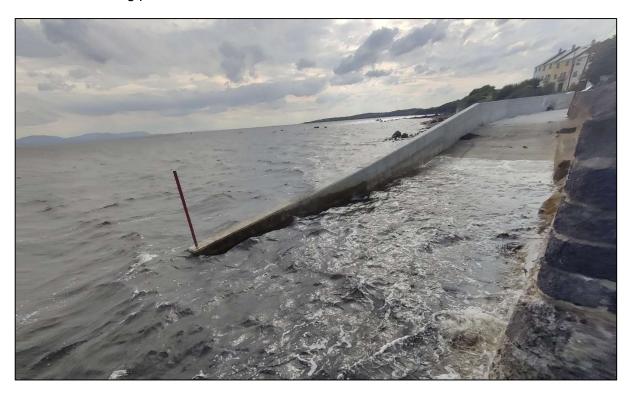


Figure 4: New Slipway constructed in 2023

#### [1.5] Programme

The timing of the works will largely depend on statutory and regulatory requirements and receipt of the foreshore license. The project is expected to commence during 2025/2026 and be completed within 6 months.



#### [2] Construction Environmental Management Plan

This section comprises a high-level Construction Environmental Management Plan (CEMP) for the works. The final CEMP can only be prepared subject to planning permission, foreshore consent, and other consents being provided.

#### [2.1] Responsible Person

Donegal County Council will appoint a competent and experienced Contractor. The tender will require that the Contractor is suitably qualified and have relevant experience in Environmental Construction Management and Health and Safety. Regular meetings will be held between the Contractor and Fingal County Council representatives, focusing on the CEMP. Some of the principal duties and responsibilities of this role include:

- Overall responsibility for the implementation of the CEMP;
- Allocating the correct resources to ensure the successful implementation of the CEMP; and,
- Assist in the management review of the CEMP for suitability and effectiveness.

#### [2.1.1] Construction Manager

The Construction Manager is directly responsible to the Construction Director in successfully executing the proposed development. The principal duties and responsibilities of this role in respect of the CEMP include:

- To report to the Construction Director on the ongoing performance and development of the CEMP:
- To discharge their responsibilities as will be specified within the final CEMP; and,
- To support and augment the Construction Management Team (CMT) through the provision of adequate resources and facilities for the duration of the implementation of the CEMP.

#### [2.1.2] Environmental Officer

The CMT Environmental Officer will have responsibility for daily tasks on site; some of the principal duties and responsibilities of this role include:

- Report to the Construction Manager on the environmental performance of staff, employees and contractors.
- Ensure compliance with environmental procedures and method statements; and,
- Ensure the development of the CEMP and that environmental procedures, method statements and work instructions are adequately executed and adhered to concerning environmental requirements on-site daily.

#### [2.2] Working Hours

Water levels and inclement weather may restrict some work.



- Night-time and weekend work are not permitted except with the approval of the Employer's Representative.
- Further restrictions on working hours may be put in place due to the noise induced during the piling and dredging works.
- The PSCS will liaise with the Client and Engineer regarding allowable working hours.
- As is good practice, no lone working is permitted on the development at any time. The PSCS/Main Contractor must ensure they always provide a supervisor for all Work outside of normal working hours.

The following restrictions apply to all areas of the development of the project:

**Table 2-1: Site Working Hours** 

Day	Working Hours
Monday to Saturday	8:00 am – 8:00 pm (or sunset, whichever is first)
Sundays and Bank Holidays	No Working

#### [2.3] Traffic Management Plan

#### [2.3.1] Overview

As required, Donegal County Council, Transport Infrastructure Ireland (TII), and the National Transport Authority (NTA) will agree upon a Traffic Management Plan (TMP).

The appointed Contractor will be responsible for:

- The creation and implementation of the TMP;
- Design, planning, installation, maintenance and decommissioning of traffic safety measures as required;
- Detailed traffic management plans compiled per Chapter 8 of the Traffic Signs Manual, Department of Transport, 2010, including:
  - Phasing of works
  - Detailed traffic management drawings
  - o Traffic management of marine plant
  - Timing of operations and works
  - Road lighting
- Compliance with the Temporary Closing of Roads Regulations and amendments (Roads Act 1993);
- Public signage;
- Temporary warning and information signs;
- Traffic cones and taping;
- Road danger lamps;
- Temporary construction of roadways;
- Appointment of Traffic Safety and Control Officer, responsible for:



- Liaison with Donegal County Council Traffic Manager and An Garda Siochana
- Management of traffic
- o Notification of accidents to An Garda Siochana
- Ensure the safe working operation of plant and machinery
- Pre-and post-work road condition surveys;
- Issuing of notices to the local newspapers where required;
- Cleaning of internal site roads and adjacent site entrance road; and,
- Making traffic orders and authorisation of signage and signals.

#### [2.3.2] Noise

The Contractor shall take all necessary precautions to reduce the noise hazards to site operatives and the public in general. The Contractor will comply with the standards in BS 5228-1-1: Code Of Practice for Noise and Vibration Control on Construction and Open Sites. [1].

The Contractor shall limit excessive noise-generating activities to Daylight Hours, as discussed in Section [2.2], unless the Engineer Representative consents.

All construction activities that have the potential to generate excessive noise or vibration shall be carried out during permitted hours. Noise levels shall be limited to:

- 75 DBA between 8.00hrs 20.00hrs (Mon to Sat).
- 45 DBA for all other times

The Contractor shall comply with European Communities (Protection of Workers) (Exposure to Noise) Regulations, 1990 [2].

#### [2.3.3] Vibration

Vibration monitoring shall be carried out during piling operations to ensure that vibration levels are kept within acceptable limits.

The Contractor shall take all necessary precautions to reduce the noise hazards to site operatives and the public in general. The Contractor will comply with the standards BS 5228-2: Code of Practice for Noise and Vibration Control on Construction and Open Sites [3].

#### [2.4] Pollution Prevention

The Contractor will be required to develop a pollution prevention plan involving identifying potential sources of pollution, implementing measures to reduce or eliminate those sources, and monitoring the effectiveness of those measures. During dredging, reclamation and piling associated with constructing a new pier, critical pollution prevention is centred on spills/accidental releases of hazardous substances or pollutants that could harm human health and the environment. Spill prevention measures that can be taken:

 Identify potential spill hazards: Conduct a hazard assessment to identify potential spill hazards, such as chemicals, fuels, and waste materials, that are present in your facility or operation.



- Develop a spill prevention plan: Develop a spill prevention plan that outlines the
  procedures for preventing, containing, and responding to spills. The plan should
  include spill response procedures, spill clean-up procedures, and the roles and
  responsibilities of employees and contractors.
- Implement spill prevention measures: Implement spill prevention measures, such as installing spill containment systems, secondary containment, and leak detection devices. Ensure that all hazardous materials are stored in appropriate containers and properly labelled.
- Conduct regular inspections: Conduct regular inspections of the facility or operation to ensure all spill prevention measures are in place and working effectively. Inspections should include checking for leaks, spills, and other potential hazards.
- Provide employee training: Provide employee training on spill prevention measures and spill response procedures. Ensure that all employees know the potential spill hazards and how to respond during a spill.
- Respond promptly to spills: In the event of a spill, follow the spill response procedures
  outlined in your spill prevention plan. This spill response may involve evacuating the
  area, containing the spill, and contacting emergency responders.
- Review and update the spill prevention plan: Regularly review and update the plan to ensure it remains effective and current with current regulations and best practices.
- Use environmentally friendly materials: The Contractor should use environmentally friendly materials during construction. For instance, they can use bio-degradable lubricants and hydraulic fluids for their machinery and equipment.

Other project pollution prevention measures:

- Proper handling and disposal of construction waste, such as excess soil and debris, is
  essential in preventing pollution. Construction waste should be segregated and
  disposed of at authorised facilities.
- Silt curtains help limit sediment dispersion and reduce the environmental impact on the surrounding water bodies,
- Regular monitoring of water quality can be conducted to assess the effectiveness of the mitigation measures and detect any potential pollution events. Monitoring can also provide early warning of any potential environmental impacts and allow for prompt action to be taken to prevent further pollution,
- Construction activities can generate noise levels that exceed local noise regulations and impact nearby residents. Noise mitigation measures such as using noise barriers or mufflers on equipment can be used to minimise noise levels,

The Pollution Prevention Plan is a "live" document and can be continually improved based on monitoring and evaluation results observed during the works. This may involve revising the plan, implementing new measures, and ensuring that employees and contractors are aware of any changes to the plan.

#### [2.5] Health and Safety

Donegal County Council understands the Client's duties per the Safety, Health and Welfare at Work Act 2005 provisions and the Safety, Health and Welfare at Work (Construction Regulations) 291 of 2013.



A Project Supervisor Design Process has already been appointed (Ayesa), and the Project Supervisor Construction Stage will be appointed prior to the construction stage of the Contract.

#### [2.6] Marine Mammal Observer (MMO)

NPWS 'Guidance to manage the risk to marine mammals from man-made sound sources in Irish waters – January 2014' (NPWS, 2014) recommended that stated mitigation procedures for dredging and piling are followed and monitored by a suitable qualified Marine Mammal Observer (MMO).

An Assessment of risk to marine mammals has been undertaken and outlined the following requirements:

A qualified and experienced marine mammal observer (MMO) shall be appointed to monitor marine mammals and to log all relevant events using standardised data forms (as presented in Appendix 7; NPWS, 2014).

#### [2.6.1] Dredging

A dedicated Marine Mammal Observer will conduct a 30-minute watch for marine mammals within 500m of the dredging vessel prior to start-up. If a seal, cetacean, basking shark, turtle, or otter is sighted within 100m of the vessel, start-up must be delayed until the animal is observed to move outside the mitigation zone or 30 minutes have passed without the animal being sighted within the mitigation zone.

#### [2.6.1.1] Pre-Start Monitoring

Dredging activities shall only commence in daylight hours where effective visual monitoring, as performed and determined by the MMO, has been achieved. Where effective visual monitoring, as determined by the MMO, is not possible, the sound-producing activities shall be postponed until effective visual monitoring is possible.

An agreed-upon and clear on-site communication signal must be used between the MMO and the Works Superintendent to determine whether the relevant activity may proceed or resume following a break (see below). It shall only proceed upon positive confirmation with the MMO.

In waters up to 200m deep, the MMO shall conduct pre-start-up constant effort monitoring at least 30 minutes before the sound-producing activity is due to commence. Sound- producing activity shall not commence until at least 30 minutes have elapsed with no marine mammals detected within the Monitored Zone by the MMO.

This prescribed Pre-Start Monitoring shall subsequently be followed immediately by normal dredging operations. The delay between the end of Pre-Start Monitoring and the necessary full dredging output must be minimised.

#### [2.6.1.2] Dredging Operations

Once normal dredging operations commence, there is no requirement to halt or discontinue the activity at nighttime if weather or visibility conditions deteriorate or if marine mammals occur within a 500m radial distance of the sound source, i.e., within the Monitored Zone.



#### [2.6.1.3] Breaks in Sound Output

If dredging sound output is interrupted for a period greater than 30 minutes (e.g., due to equipment failure, shut-down, or location change), all Pre-Start Monitoring must be undertaken in accordance with the above conditions prior to the recommencement of dredging activity.

#### [2.6.1.4] Reporting

The regulatory authority must receive full reporting on MMO operations and mitigation undertaken, as outlined in Appendix 7 (NPWS, 2014).

#### [2.6.2] Pile Driving

- A qualified and experienced marine mammal observer (MMO) shall be appointed to monitor marine mammals and to log all relevant events using standardised data forms (Appendix 7).
- 2. Unless information specific to the location and/or plan/project is otherwise available to inform the mitigation process (e.g., specific sound propagation and/or attenuation data) and a distance modification has been agreed with the Regulatory Authority, pile driving activity shall not commence if marine mammals are detected within a 1,000m radial distance of the pile driving sound source, i.e., within the Monitored Zone.

#### [2.6.2.1] Pre-Start Monitoring

- 3. Pile driving activities shall only commence during daylight hours where effective visual monitoring, as performed and determined by the MMO, has been achieved. Where effective visual monitoring, as determined by the MMO, is not possible, sound-producing activities shall be postponed until effective visual monitoring is possible.
- 4. The MMO and the Works Superintendent must use an agreed-upon and clear on-site communication signal to determine whether the relevant activity may proceed or resume following a break (see below). It shall only proceed upon positive confirmation with the MMO.
- 5. In waters up to 200m deep, the MMO shall conduct pre-start-up constant effort monitoring at least 30 minutes before the sound-producing activity is due to commence. Sound-producing activity shall not commence until at least 30 minutes have elapsed with no marine mammals detected within the Monitored Zone by the MMO.
- 6. This prescribed Pre-Start Monitoring shall subsequently be followed by an appropriate Ramp-Up Procedure, which should include continued monitoring by the MMO.

#### [2.6.2.2] Ramp-Up Procedure

- 7. In commencing a pile driving operation where the output peak sound pressure level (in water) from any source, including equipment testing, exceeds 170 dB re: 1μPa @1m, an appropriate Ramp-up Procedure (i.e., "soft-start") must be used. The procedure for use should be informed by the risk assessment undertaken, giving due consideration to the pile specification, the driving mechanism, the receiving substrate, the duration of the activity, the receiving environment and species therein, and other information (see section 3 of DAHG, 2014).
- 8. Where possible, according to the operational parameters of the equipment and materials concerned, the underwater acoustic energy output shall commence from a



- lower energy start-up (i.e., a peak sound pressure level not exceeding 170 dB re:  $1\mu$ Pa @1m) and thereafter be allowed to gradually build up to the necessary maximum output over a period of 20-40 minutes.
- 9. This controlled build-up of acoustic energy output shall occur in consistent stages to provide a steady and gradual increase over the ramp-up period.
- 10. Where the measures outlined in steps 8 and 9 are not possible, alternatives must be examined whereby the underwater output of acoustic energy is introduced in a consistent, sequential and gradual manner over a period of 20-40 minutes prior to the commencement of the full necessary output.
- 11. In all cases where a Ramp-Up Procedure is employed, the delay between the end of the ramp-up and the necessary full output must be minimised to prevent unnecessary high-level sound from entering the environment.
- 12. Once an appropriate and effective Ramp-Up Procedure commences, there is no requirement to halt or discontinue the procedure at night-time, nor if weather or visibility conditions deteriorate nor if marine mammals occur within a 1,000m radial distance of the sound source, i.e., within the Monitored Zone.

#### [2.6.2.3] Breaks in sound output

- 13. If there is a break in pile driving sound output for a period greater than 30 minutes (e.g., due to equipment failure, shut-down or location change), then all Pre-Start Monitoring and a subsequent Ramp-up Procedures (where appropriate following Pre-Start Monitoring) must be undertaken.
- 14. For higher output pile driving operations which have the potential to produce injurious levels of underwater sound (see sections 2.4, 3.2 of DAHG, 2014), as informed by the associated risk assessment, there is likely to be a regulatory requirement to adopt a shorter 5-10 minute break limit after which period all Pre-Start Monitoring and a subsequent Ramp-up Procedure (where appropriate following Pre-Start Monitoring) shall recommence as for start-up.

#### [2.6.2.4] Reporting

15. The Regulatory Authority must receive full reporting on MMO operations and mitigation, as outlined in Appendix 7 of DAHG, 2014.

Furthermore, Section 7 of the NIS details mitigation measures pertaining to the project's construction phase (including pollution and sediment controls).

#### [2.7] Management of Dust, Odour and Air Quality

#### [2.7.1] Management of Dust

Due to the temporary nature of the proposed works, noise and dust are anticipated to generate a short-term, slight adverse influence during the construction stage. Dust and particulate matter emissions may arise from delivering material and other goods to the site combined with storing material on the site; however, if adequate mitigation measures are adhered to, dust and, ultimately, air quality is not anticipated to be a concern.

Potential causes of dust and particulate matter emissions may include the following:



- Stockpiles and storage compounds the stockpiling of material for long periods will
  increase dust emissions. This is dependent on the type of material, the quantity of silt
  contained therein and the moisture content of the material;
- Demolition works;
- Excavation and earthworks;
- Concrete batching;
- Cutting, grinding and sawing;
- Scabbling; and,
- Waste disposal and burning.

#### [2.7.1.1] Mitigation Measures

The following mitigation measures are proposed:

- Public roads outside the development shall be regularly checked for cleanliness and cleaned as necessary;
- Stockpiling of material shall be minimised, and exposure to wind shall be minimised where possible;
- Site roads shall be regularly swept, cleaned and maintained as appropriate. Vehicles
  departing the development shall be subject to wheel washing;
- Stockpiled material and gravel surfaces shall be sprayed with water if required; and,
- Burning shall not be permitted.

#### [2.7.2] Management of Odour

The disturbance of seabed sediments could create an odour. These works will be carried out in the coastal environment, where wind speeds are generally greater than inshore, as there are no physical obstructions. This will result in the rapid dispersion of odours, not likely to transport them to sensitive receptors within the harbour or extended area.

To address any odour complaints, we have a robust investigation plan in place. If a complaint is verified, we will promptly implement appropriate mitigation measures, such as temporarily suspending the works, to address the issue.

#### [2.8] Contamination Management

Measures shall be implemented to minimise the impact of construction activities on the environment. These measures include erosion and sediment control measures, suitable waste disposal, spill prevention and spill response procedures.

#### [2.9] Sediment Control

Sediment control/prevention measures will be implemented to minimise the impact of sediment dispersion on the receiving environment. The measure includes the use of:

Silt Curtains/Turbidity barriers to contain sediment plumes and prevent dispersion.



Sediment retention ponds to allow sediment to settle out before being discharged.





#### [3] Outline Construction Methodology

#### [3.1] Site Survey and Permits

#### [3.1.1] Geotechnical Investigation

The geotechnical investigation (GI) is a pivotal step in any piling and dredging project. It provides crucial data about the anticipated dredge material and the founding conditions for the piles, informing our design decisions and ensuring the work is carried out effectively.

The GI campaign is typically undertaken during the design stage by the Designer and provided to the Contractor as information for the tender pack. The Contractor is responsible for confirming that the material is suitable for piling and that any performance requirements set in the Works Specification can be met with the proposed material specification.

#### [3.2] Pre-Construction Considerations

After the Contract has been awarded, there will be a pre-mobilisation phase before the project commences on-site. During this phase, the following items will be progressed as detailed in the Construction Programme included in the work proposals:

- Project Documentation;
- Design Development;
- Consultations with the Client and any other relevant third parties/stakeholders; and,
- Procurement of labour, plant, materials & subcontractors.

#### [3.2.1] Site Preparation

Clearing the development of any obstructions is a crucial first step to initialising the works, as it ensures that the construction site is safe and free of any hazards that may impede the construction process. The clearance process will likely involve the removal of vehicles parked on the pier, clearance of any removal furniture and debris, and partial closure of the pier during the specific works, to be agreed upon with the Harbour Master and DCC.

Prior to the commencement of construction, the Contractor will need to carry out a precondition survey, aiming to identify and record the condition of the existing pier and surrounding area at the time of handover to the Contractor. This survey will also require a full inspection report to be submitted alongside photographic evidence.

#### [3.3] Site Compound and Storage Area

The site compound and storage area are proposed at the left side of the existing pier entrance.

The storage of materials, containers and waste, however temporary, will follow best practices at all times and be stored in designated areas within the Site compound. Potentially polluting material, such as fuels or oils, will be stored in bunded areas, on an impermeable base, and undercover to prevent damage from the elements. All containers will be stored upright and labelled. Sufficient waste storage will be supplied near all working areas.





Figure 5: Proposed site compound and storage area

#### [3.3.1] Parking Spaces

Designated parking spaces will be made available to the contractor outside of the existing pier for the duration of the works. Additionally, public parking spaces can be found to the north of the site.

#### [3.3.2] Site Security and Site Boundaries

The site will be secured by security site boundary fencing and exclusion signage installed, warning third parties of the potential hazards on site and thus excluding unauthorised access within the works site.

The site boundaries will be laid out with visual markers, and these boundaries will be communicated to all personnel. Works will be confined to the proposed site boundaries unless instructed otherwise by the Employers Representative.

#### [3.4] Temporary Works and Plant Requirements

The following temporary works may need to be considered by the Contractor to execute the works:

- Pumping systems These may be used to manage water levels during construction, such as filling the encapsulated sheet pile section with the selected rock fill.
- Access control and security This will need to be installed to prevent access to the
  existing sheet pile section during construction and any other areas used for site
  compound or access.
- Piling gate—This will need to be designed by a qualified temporary works designer.
   The temporary works will be required to prevent damage to the existing pier during the piling works. Welding will likely be required for the implementation of the piling gate.



Thus, welding would need to be included in both the temporary works design for the piling gate and addressed in the relevant and required Health and safety documentation and certification, including being undertaken by a certified welder.

Further temporary works may be required based on the Contractor's proposed methodology, i.e. landside or waterside construction. Any temporary works required for the proposed methodology foreseen by the Contractor will need to be accompanied by temporary works designs undertaken by a suitably qualified designer, as well as accompanied by relevant testing, Health and safety documentation and certification, be undertaken by suitably qualified personnel, and any other supporting documentation required for the design.

The Contractor will be required to design and construct all temporary works, as required, to a high standard and with consideration for their impact on the environment and neighbouring areas. Appropriate permits and approvals may also be required before these works can be carried out.

#### [3.5] Vibration Monitoring

A variety of the plant will be in use, such as excavators, lifting equipment, dumper trucks, compressors, and generators. Vehicular movements to and from the site will use the existing local road network towards the harbour.

Due to the nature of the activities undertaken on a construction site, there is potential for generating increased noise levels. The potential for vibration at neighbouring buildings and residential dwellings for this project is limited to demolition works of the existing seawall, installation of the new sheet piles, reclamation, dredging and HGV movements. The proposed works are, however, unlikely to result in significant vibration at local residences from on-site construction activities due to the separation distances. A vibration monitoring campaign during construction will be mandatory for the Contractor. Should the Contractor find that the construction works are exceeding the vibrational capacity, the Contractor shall stop the works immediately and inform the Engineer of the exceedance to enable appropriate adjustments to mitigate the impact.

Some additional possible mitigation measures to consider to be implemented Contractor during the construction phase are as follows:

- Pre-Breaking Assessment: Assess the surrounding structures before construction.
   Identify any weak points or areas of concern that may require special attention during the breaking process.
- Protective Barriers: Install protective barriers, such as geotextile or rubber mats, between the breaking equipment and the pier structure. These barriers help absorb vibrations and protect the structure from direct impact.
- Sequential Breaking: Breaking the wall and deck into smaller sections helps distribute the impact and reduces the potential for high-intensity vibrations.

#### [3.5.1] Codes, Standards and Guidelines

While the specific standards and guidelines for similar projects in Ireland may vary depending on the scope and location of the project, some of the key standards and guidelines that contractors may need to adhere to include:

Environmental Protection Agency (EPA) Guidelines



- The Planning and Development Act
- The Foreshore Act
- Environmental Impact Assessment (EIA) Directive
- Habitats Directive and Birds Directive
- Waste Management Acts and Regulations
- Construction Industry Federation (CIF) Guidelines
- Safety, Health and Welfare at Work Act
- National Parks and Wildlife Service (NPWS) Guidelines
- Marine Strategy Framework Directive
- Strategic Environmental Assessment (SEA) Directive
- Natura 2000 Network Guidelines
- European Union (EIA) (Foreshore) Regulations
- Local Development Plans and County Development Plans
- Coastal Zone Management Guidelines
- National Biodiversity Action Plan
- Water Framework Directive

#### [3.6] Site Restrictions

- The Contractor must be aware that the works will involve working within an intertidal zone, be subject to tide and wave action, and must schedule works accordingly.
   Adequate planning and actioning of any appropriate precautions must be undertaken before the commencement of the works.
- The Contractor must be aware that the existing sheet pile section of the pier is restricted from loading.
- The Contractor is to provide details of the suitable plant to undertake the works. The Contractor must confirm the plant's suitability to operate in areas affected by tide and wave actions. All plant is required to be clean on arrival at the site.
- The Contractor must be aware that they will be working in a live harbour environment and will, therefore, need to cordon off any landside site compound facilities and access points for the duration of the works. The Contractor will also need to coordinate with the Harbour Master to ensure vessel traffic does not impede on construction works and vice versa.
- Dust control measures should be employed for activities that generate high dust levels.
   The work areas should be appropriately screened to prevent dust migration to areas outside the work area. The Contractor must ensure the premises or parked cars are not affected by dust generated by the works.
- The successful Contractor must prepare a comprehensive Method Statement outlining proposals for access and delivery of materials to the site, any cranage of heavy materials, and storage of materials on-site.
- A comprehensive Method Statement will also be required to complete work in areas which interact with residents, the public, and road users.



- The above method statements include details on how the Contractor intends to prevent damage to fences, gates, walls, roads, or paved areas and other site features to remain in position during the execution of the Works. The Contractor is to bear the cost of repairing any damage arising from the execution of the Work.
- The Contractor must provide the Contractor's welfare provisions such as toilet and canteen facilities, office accommodation, meeting room, etc.
- The route used to transport goods or equipment to a specific site must be considered. Planning the plant delivery and route is essential, considering potential obstacles hindering or impeding transportation.
- The Contractor shall be required to determine the exact location of any local services within the construction area and not explicitly taken from any drawings or site logs, as the accuracy of these cannot be determined.
- The Contractor shall be required to maintain clear communication lines with the Harbour Master. This shall include daily consultations informing the Harbour Master of the ongoing operations.

#### [3.7] Plant

It is envisaged that the following plant will be mobilised to the site:

- 30-tonne excavator
- Jack-up Barge
- Pile driving rig
- 32-tonne tipper truck
- Concrete truck
- 5t roller
- Mobile Crane
- Other minor plant

The plant will be transported by road to the site. The plant and machinery shall be checked to ensure that they are in good working condition and comply with relevant safety and environmental regulations. Personnel involved in mobilising the plant and machinery shall be trained and provided with personal protective equipment (PPE). The plant and machinery shall be positioned in designated areas that do not obstruct the existing quay or cause any safety hazards.

#### [3.8] Proposed Works

The pier structure will consist of two parallel rows of sheet piles adequately tied back with tie rods. The material dredged will be used as fill between the sheet piles and the reclamation back of the quay. The top layer of fill will be selected engineered fill. The pier structure will be capped with a concrete deck.

Prior to any dredging activities, a sheet piled retaining wall with concrete capping beam will be constructed along the southern face of the existing concrete slipway, located on the southern side of the existing pier. The wall will provide a temporary support to the slipway, preventing undermining during dredging activities, and continual support permanently thereafter.



#### [3.8.1] General

- Establish the site compound and storage areas.
- Erect all site notices.
- Secure site boundaries with temporary fencing.
- Establish the compound at the end of the masonry section of the pier or the Contractor's preferred location. The finalised location is to be agreed upon between the client and the Contractor before construction.
- Installation of silt curtains surrounding the site.

#### [3.8.2] Demolition

The proposed entrance to the new development will be located to the RHS of the existing pier entrance. As such, it will be necessary to demolish a small section of the existing stone wall at this location, approximately 11.3m in length.

#### [3.8.3] Dredging

As indicated on the drawings, an excavator will be used to create a dredge pocket. The dredging operation will either be conducted in the dry during low water or supported by a barge when the site is inundated with water.

If suitable, the dredged/excavated material will be used as fill material for the new pier extension. Furthermore, the area behind the pier will also be reclaimed using the dredged material. The excavator will either dump the dredged material directly between the sheet piles or load it onto tipper trucks for transportation. When the site is inundated, a hopper barge may be required to load and transport the material. Approximately 3,500m³ of material will be dredged.

If suitable, it is not anticipated there will be any excess dredge material, however, if it is found to be unsuitable for use as fill, it will be transported and disposed of at a suitable landside facility. The dredge material will first be stored in a bunded area and allowed to dry prior to transportation.

#### [3.8.4] Pier Construction

The following sequence describes the construction of the Pier:

- Sheet piles for both the proposed development and retaining wall will be driven into the seabed as shown on the drawings, using an excavator or crane fitted with a vibratory pile hammer (or similar).
- The sheet piled tie-back system will be installed, which will consist of a series of tierods and waling beams.
- The pier will be filled with material either from the dredging operation or selected fill imported from commercial sources.
- The area behind the pier will also be reclaimed using the dredged material.
- The fill will be compacted in layers (approximately 300mm) using a 5t roller (or similar).



- Selected engineering fill will be used in the top 800mm (min) to create a base layer for the concrete slab.
- The selected fill will be compacted in layers (approximately 300mm) using a 5t roller (or similar).
- A reinforced concrete capping slab will be constructed on top of the sheet piles and engineered fill. This will involve installing rebar cages, shuttering, and concrete casting.
- In unison, a new capping beam to fix the head of the sheet piled retaining wall to the foundation of the existing concrete slipway will be constructed.
- A sea wall on the southern face of the east-west extension will be constructed on top
  of the capping beam.
- Quayside services such as lighting and utilities shall be installed in accordance with relevant standards and regulations.
- Along the southern face of the structure, a rock armour revetment will be formed for scour protection, protecting the structure from tidal erosion.



### [4] References

- [1] BSI Standards, BS 5228-1: Code of practice for noise and vibration control on construction and open sites Noise, 2009.
- [2] European Union, "European Communities (Protection Of Workers) (Exposure To Noise) Regulations," 1990.
- [3] BSI Standards, "BS 5228-2: Code Of Practice for Noise and Vibration Control on Construction and Open Sites," 2009.
- [4] Department of Arts, Heritage, and the Gaeltacht, "Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters," 2014.





**Appendix C: Photomontages** 

Planning Report











**Appendix D: Drawings** 

# PORT PIER - EXTENSION WORKS

# **CLIENT:**



**CONSULTANT:** 



GENERAL NOT	ſΕ
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	DRAWING LIST		
DRAWING NO.	DRAWING TITLE	SHEET NO.	SIZE
CM1379-MA-DR-00001	COVER PAGE	1 of 1	А3
CM1379-MA-DR-00002	DRAWING INDEX	1 of 1	А3
CM1379-MA-DR-01000	10,560 SITE LAYOUT MAP	1 of 1	А3
CM1379-MA-DR-01001	SITE LOCATION MAP	1 of 1	А3
CM1379-MA-DR-01002	SITE LOCATION PLAN	1 of 1	А3
CM1379-MA-DR-01003	EXISTING SITE LAYOUT	1 of 1	А3
CM1379-MA-DR-01004	DEMOLITION PLAN	1 of 1	А3
CM1379-MA-DR-01005	CONSTRUCTION SEQUENCE	1 of 1	А3
CM1379-MA-DR-01100	PROPOSED SITE LAYOUT	1 of 1	А3
CM1379-MA-DR-01101	PROPOSED SECTIONS	1 of 1	А3
CM1379-MA-DR-01102	PROPOSED ELEVATIONS	1 of 1	А3

₹ev	Date	Description	Ву	Chk	Арр
P01	01.10.24	PLANNING APPLICATION	ALC	DC	SG
<sup>2</sup> 02	14.10.24	PLANNING APPLICATION	ALC	SG	SG



CLIENT



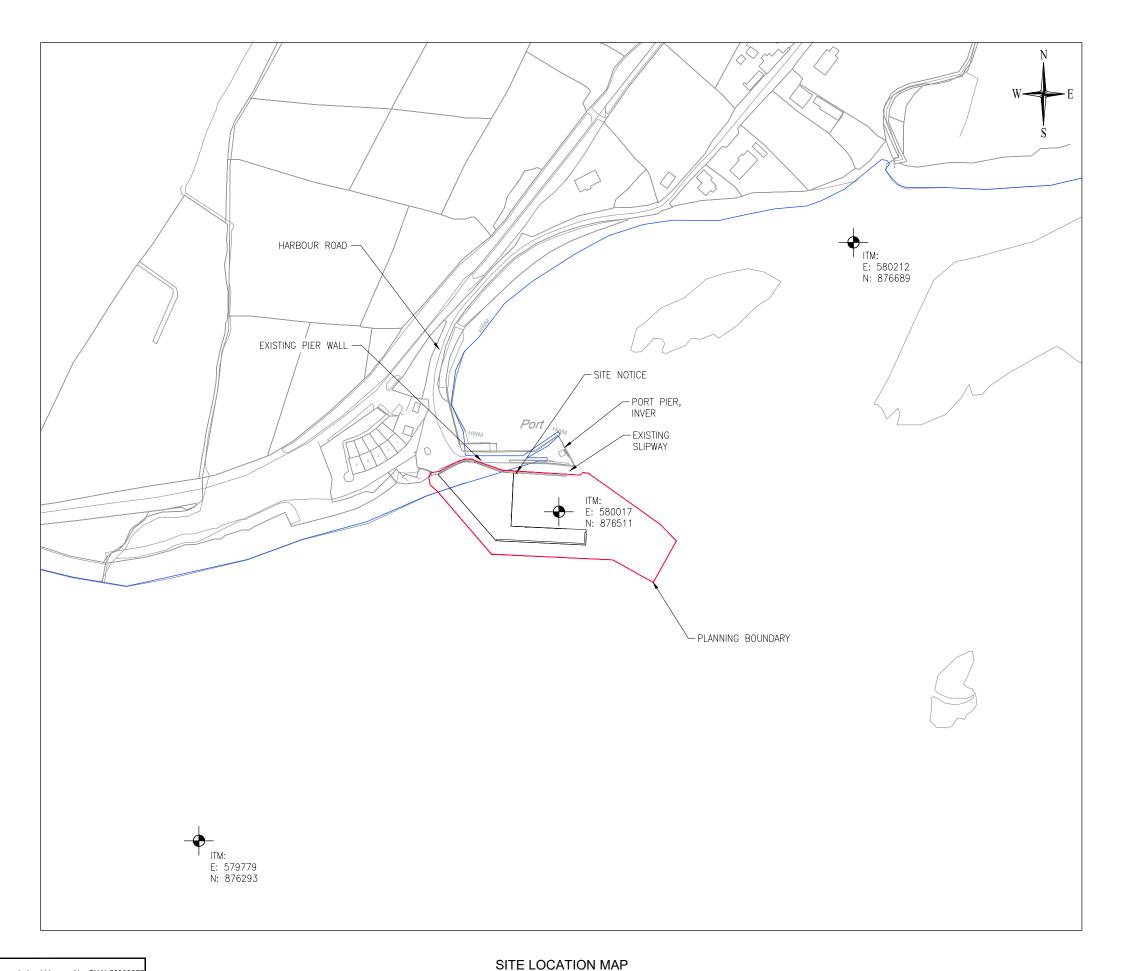
PROJECT

PORT PIER - EXTENSION WORKS

DRAWING TITLE

DRAWING INDEX

status PL	ANNING APP	LICATION	1	SUITABILITY —	
Date: 20.09.24	Scale: AS SHOWN	Drawn: ALC	Chk: DC	App: SG	
Project No:	Drg. No:	•		Rev:	
CM1379	CM1379-I	MA-DR-	00002	P01	



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#### LEGEND:

PLANNING BOUNDARY

HIGH WATER MARK

x SITE NOTICE

SCALE 1:5,000

MAP SHEETS: 0558, 0559

ITM CENTREPOINT CO-ORDINATES: 580017 E, 876511 N

DEVELOPMENT ADDRESS: PORT PIER, INVER Co. DONEGAL

PLANNING AREA = 0.74 Hectares

P03	19.03.25	PLANNING APPLICATION	ALC	DM	SG
P02	14.10.24	PLANNING APPLICATION	ALC	SG	SG
P01	01.10.24	PLANNING APPLICATION	ALC	DC	SG
Rev	Date	Description	Ву	Chk	Арр



CLIENT



PORT PIER - EXTENSION WORKS

DRAWING TITLE

SITE LOCATION MAP

STATUS PL	ANNING APP	LICATION		SUITABILITY —
Date: 20.09.24	Scale: AS SHOWN	Drawn: ALC	Chk: DC	App: SG
Project No:	Drg. No:	•		Rev:
CM1379	CM1379-	MA-DR-	01001	P03

1:2,500

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SITE LOCATION PLAN 1:1,000

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#### LEGEND:

PLANNING BOUNDARY

HIGH WATER MARK



X SITE NOTICE



CONTOUR LEVEL

6.0mCD

SCALE 1:5,000

MAP SHEETS: 0558, 0559

ITM CENTREPOINT CO-ORDINATES: 580017 E, 876511 N

DEVELOPMENT ADDRESS: PORT PIER, INVER Co. DONEGAL

#### PLANNING AREA = 0.74 Hectares

9.03.25	PLANNING APPLICATION	ALC	DM	SG
14.10.24	PLANNING APPLICATION	ALC	SG	SG
01.10.24	PLANNING APPLICATION	ALC	DC	SG
Date	Description	Ву	Chk	Арр
	4.10.24 1.10.24	4.10.24 PLANNING APPLICATION 1.10.24 PLANNING APPLICATION	4.10.24 PLANNING APPLICATION ALC 1.10.24 PLANNING APPLICATION ALC	4.10.24 PLANNING APPLICATION ALC SG 1.10.24 PLANNING APPLICATION ALC DC



CLIENT

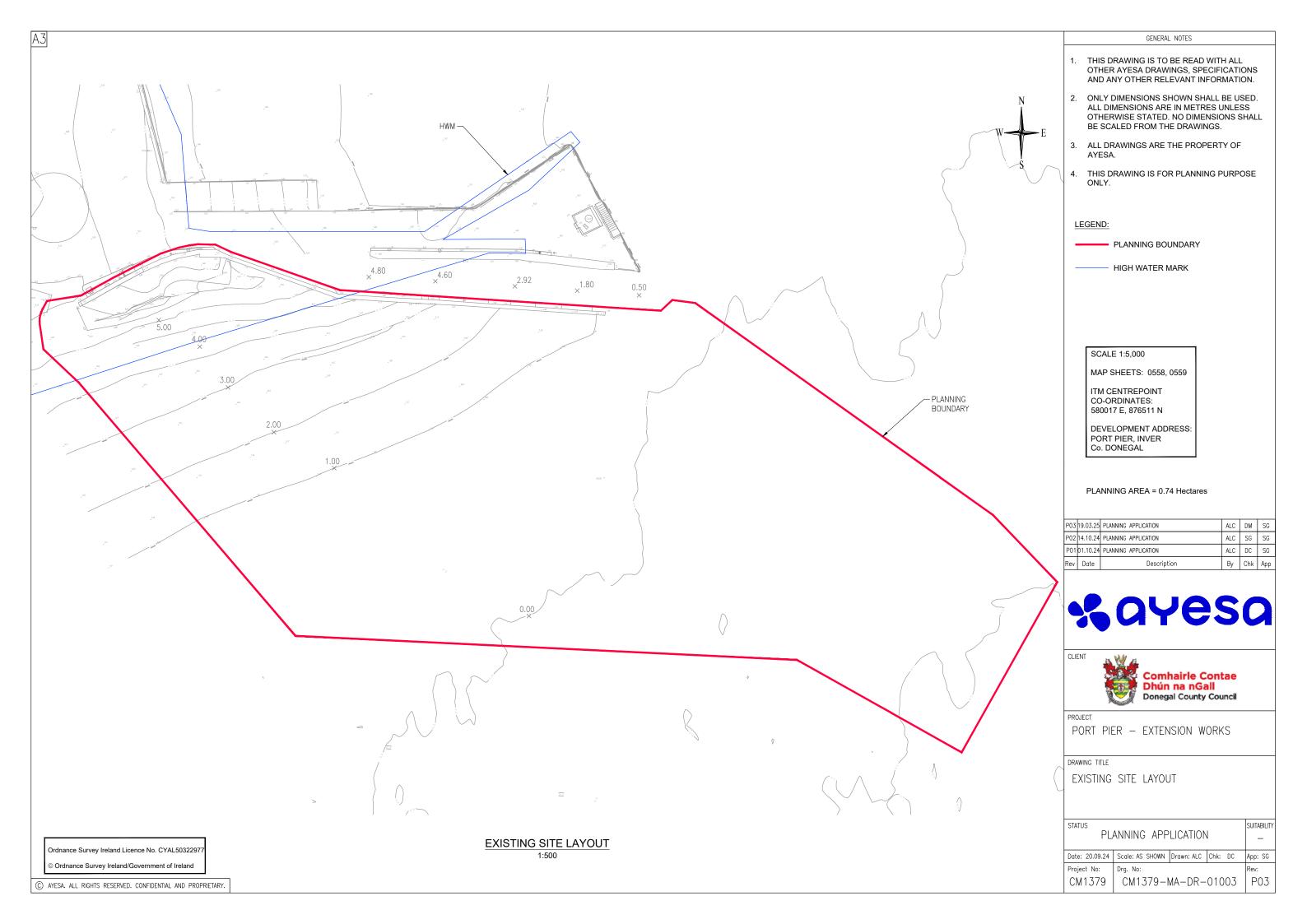


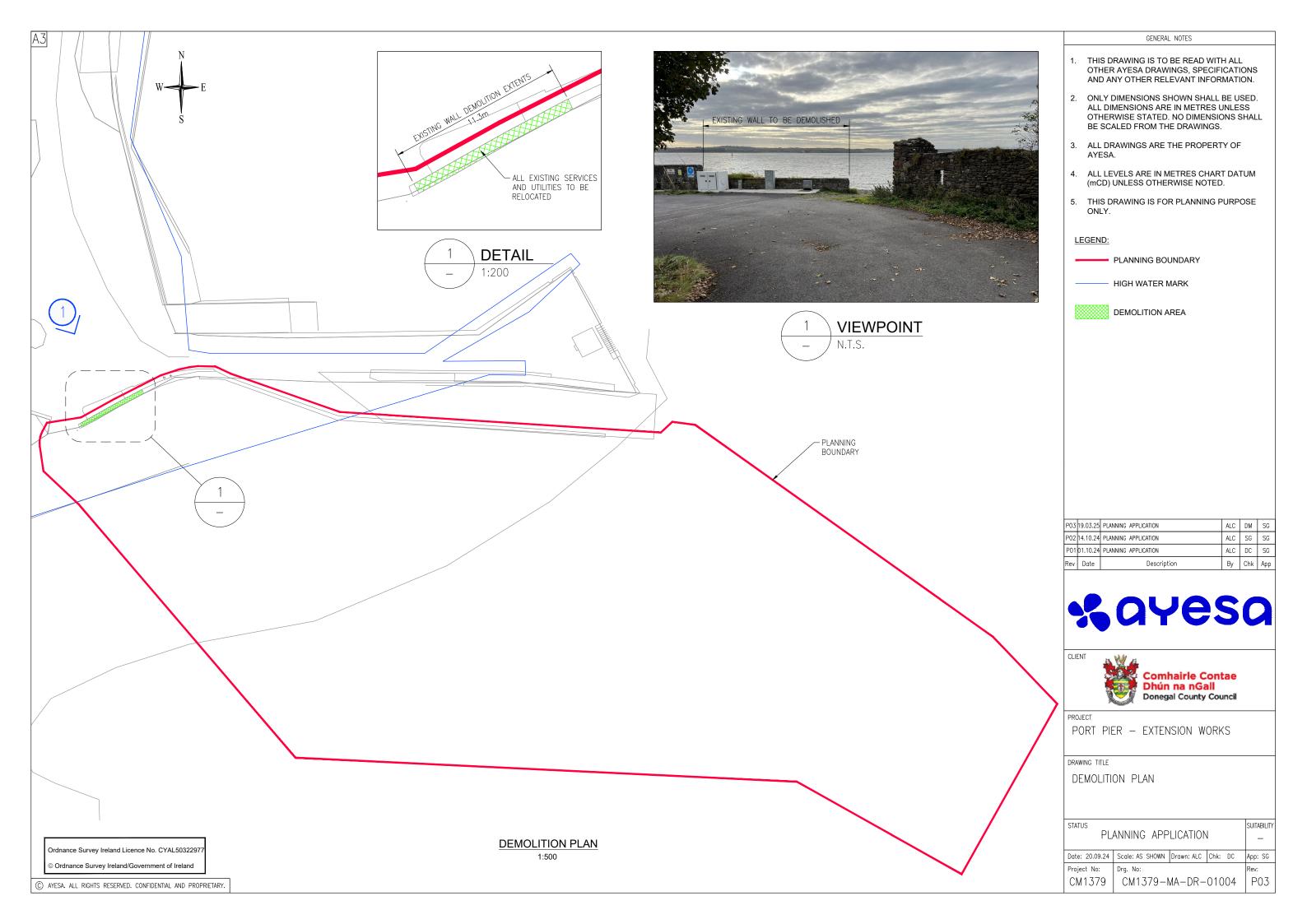
PORT PIER - EXTENSION WORKS

DRAWING TITLE

SITE LOCATION PLAN

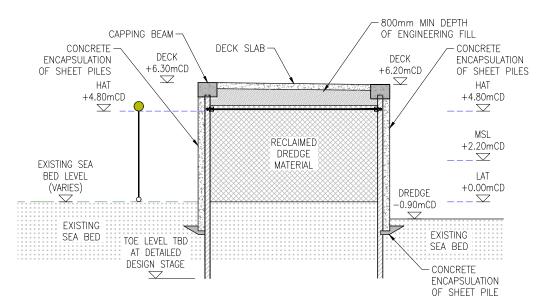
STATUS	PLANNIN	G APP	LICATION	1		SUITABILITY —
Date: 20.09.	24 Scale: AS	SHOWN	Drawn: ALC	Chk:	DC	App: SG
Project No:	Drg. No:					Rev:
CM1379	CM1379   CM1379-MA-DR-01002			P03		





#### PHASE 1:

- 1. INSTALL SILT CURTAINS.
- 2. INSTALLATION OF NEW SHEET PILES AND TIE RODS.



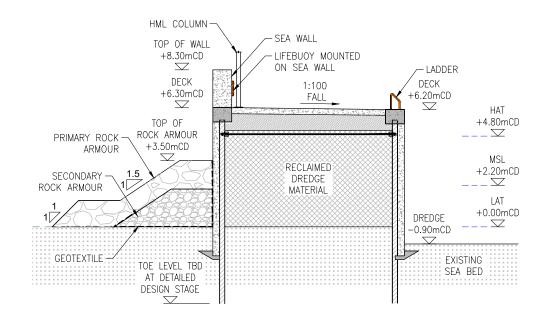
#### PHASE 3:

- CONCRETE ENCAPSULATION OF SHEET PILES AND CASTING OF CAPPING BEAM WITH CAST IN QUAY FURNITURE.
- PLACEMENT OF 800mm MIN OF SELECTED ENGINEERED FILL ON TOP OF DREDGED FILL TO CREATE BASE LAYER FOR CONCRETE DECK SLAB.

#### HAT HAT +4.80mCD +4.80mCD $\searrow$ $\searrow$ MSL RECLAIMED +2.20mCD DREDGE $\searrow$ EXISTING SEA MATERIAL BED LEVEL LAT +0.00mCD (VARIES) DREDGE -0.90mCD **EXISTING EXISTING** SEA BED TOE LEVEL TBD SEA BED AT DETAILED DESIGN STAGE

#### PHASE 2:

- 1. INSTALLATION OF SHEET PILED WALL AND CAPPING BEAM AT EXISTING PIER SLIPWAY.
- 2. DREDGE TO -0.9mCD TO CREATE BERTH POCKET.
- PLACEMENT OF DREDGE FILL MATERIAL AND COMPACTED IN LAYERS OF 300mm.



#### PHASE 4:

- CONSTRUCTION OF SEA WALL ON TOP OF CAPPING BEAM.
- CONSTRUCTION OF ROCK ARMOUR REVETMENT SCOUR PROTECTION.
- 3. INSTALLATION OF SERVICES.

#### CONSTRUCTION SEQUENCE PLAN

1:500

#### GENERAL NOTES

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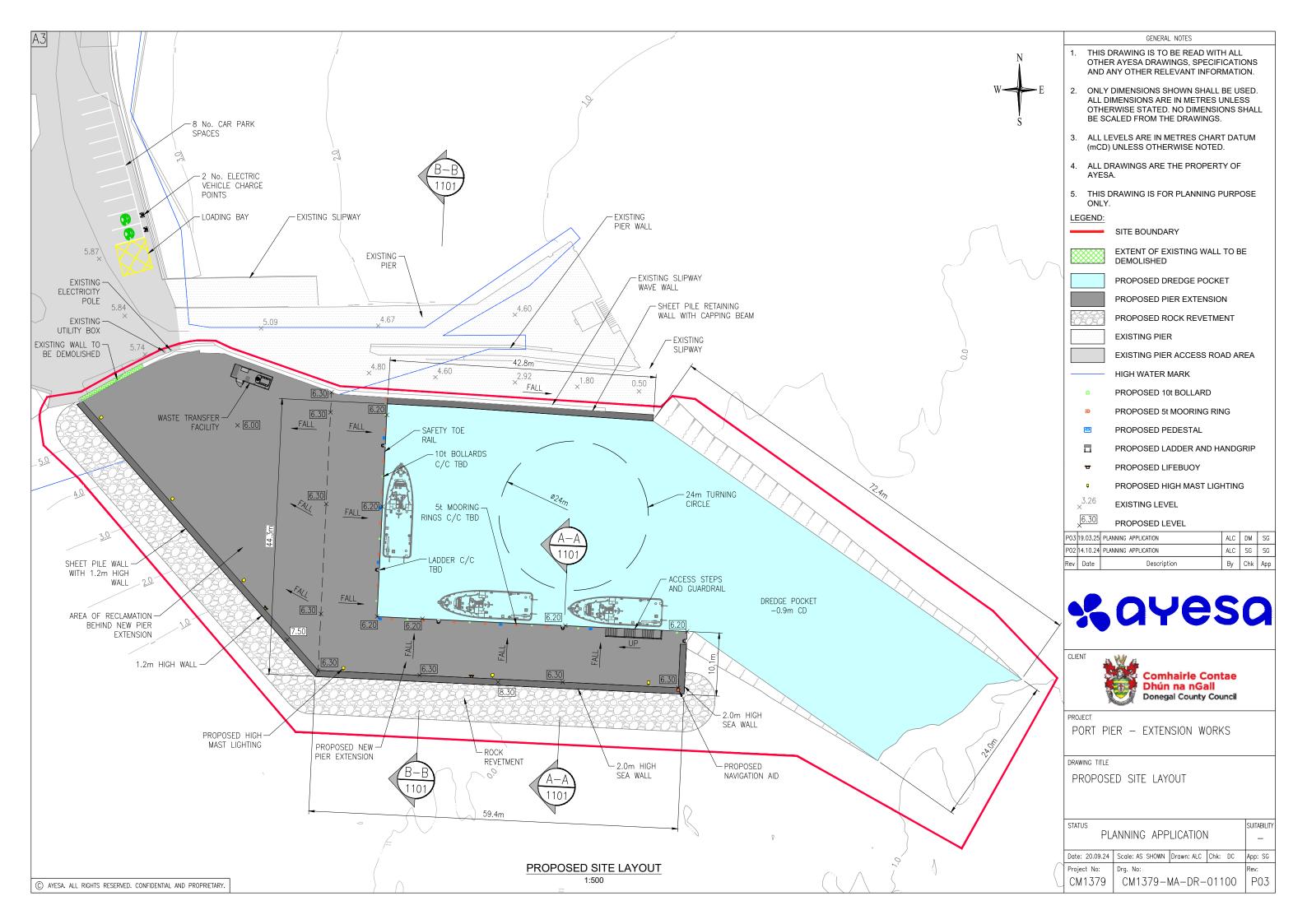
PROJECT

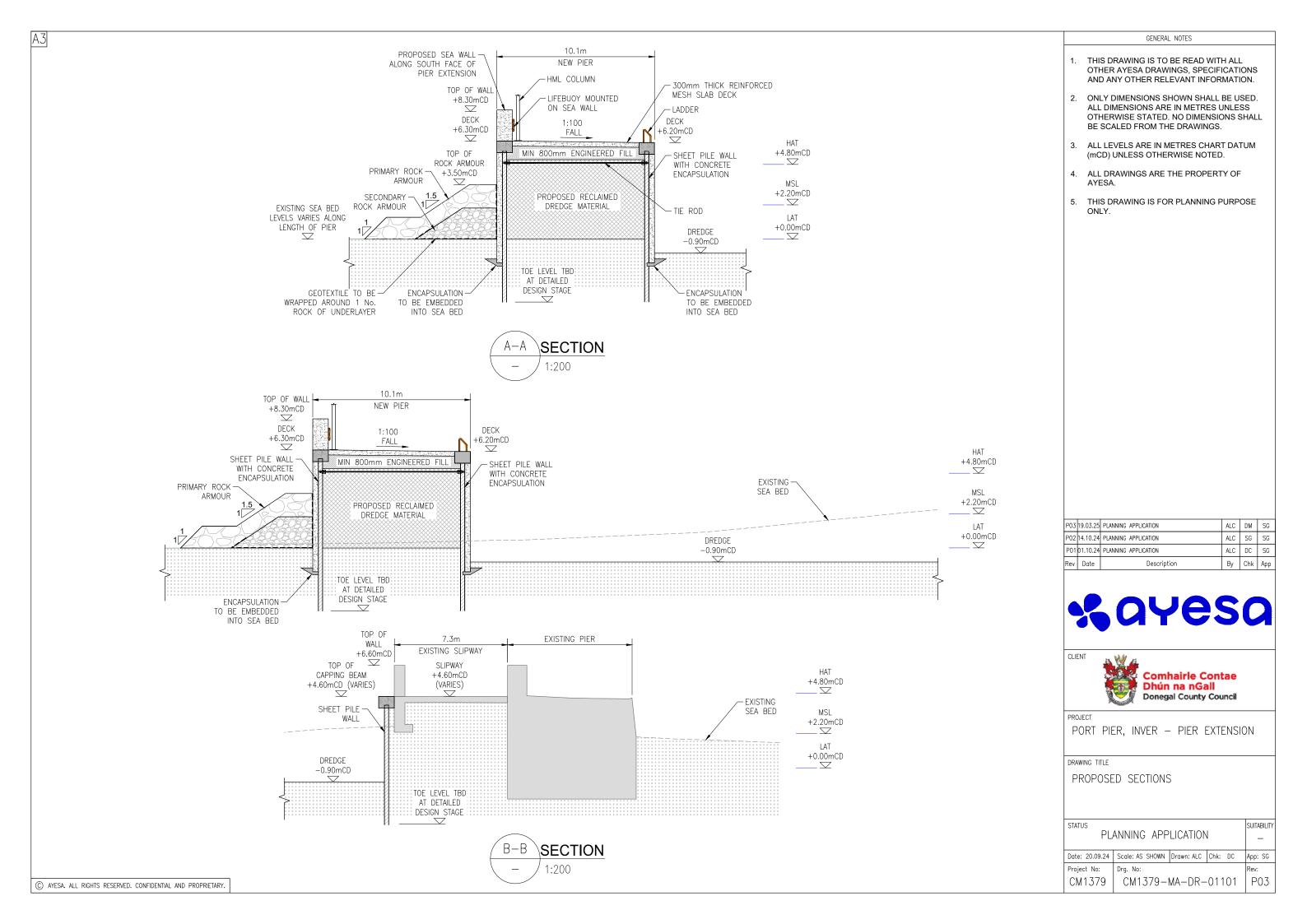
PORT PIER - EXTENSION WORKS

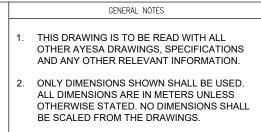
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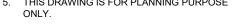




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CLIENT **Comhairle Contae** Dhún na nGall **Donegal County Council** 

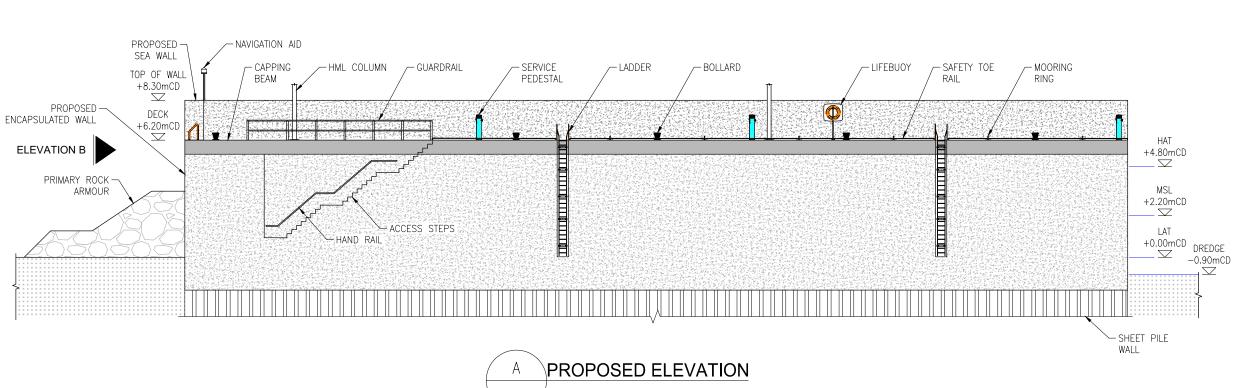
**PROJECT** 

PORT PIER, INVER - PIER EXTENSION

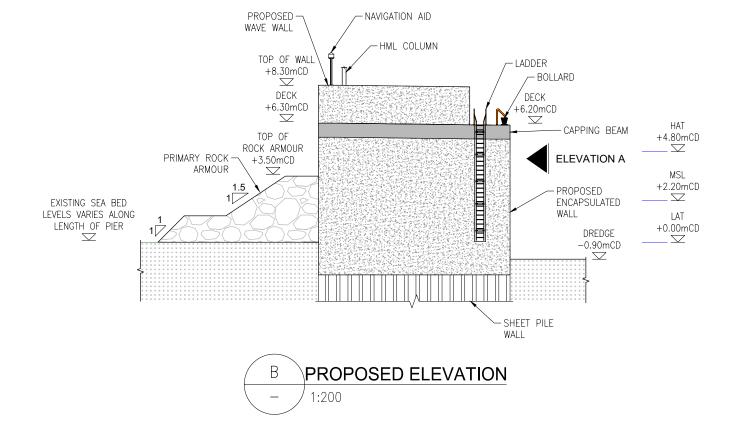
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PROPOSED ELEVATIONS

STATUS PL	SUITABILITY —			
Date: 01.10.24	Scale: AS SHOWN	Drawn: ALC	Chk: DC	App: SG
Project No:	Drg. No:	Rev:		
CM1379	CM1379-I	MA-DR-	01102	P02



NUMBER AND LOCATION OF BOLLARDS, LADDERS, LIGHTING, PEDESTALS, EMERGENCY PEDESTALS TO BE DETERMINED AT DETAIL DESIGN STAGE.



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## **PROJECT**

# Port Pier Improvement Works, Co. Donegal

**SCOPE** 

Underwater Archaeological Impact Assessment

**TOWNLANDS** 

Port

**LICENCE** 

24D0264 & 24R0539

**CLIENT** 

**AYESA** 

**AUTHOR** 

Dr Carolyn Howle Outlaw AND Dr Clara Fuquen

DATE

April 2025

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## **Abstract**

This report relates the results of an archaeological assessment of proposed improvement works at Port Pier, Co. Donegal. *Mizen Archaeology* has been engaged by *AYESA* on behalf of Donegal County Council to undertake the Underwater Archaeology Impact Assessment (UAIA).

The likelihood of the proposed works uncovering on unknown potential archaeology is considered moderate to high.

#### 1 Introduction

#### 1.1 General

This report relates the results of the Underwater Archaeology Impact Assessment (UAIA) of proposed development works of Port Pier, Co. Donegal. *Mizen Archaeology* has been engaged by *AYESA* on behalf of Donegal County Council to undertake the assessment. This includes a desktop based study and a walk-over visual survey of the area or proposed works.

#### 1.2 Conventions, Legislation and Guidelines

The Archaeological Desktop Assessment was undertaken with due regard to the following national and international protective conventions, legislation and guidelines and legislation:

- The Historic and Archaeological Heritage and Miscellaneous Provisions Bill 2023
- National Monuments Act, 1930, as amended in 1954, 1987, 1994, 2004 and 2014
- Heritage Act, 1995
- National Cultural Institutions Act, 1997
- The Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act, 1999
- Framework and Principles for the Protection of the Archaeological Heritage, 1999,
   Department of Arts, Heritage, Gaeltacht and the Islands
- Local Government (Planning and Development) Act, 2000 (as amended)
- Merchant Shipping (Salvage and Wreck) Act, 1993
- Council of Europe Convention for the Protection of the Architectural Heritage of Europe (Granada) 1985, ratified by Ireland in 1991
- Council of Europe European Convention on the Protection of the Archaeological Heritage (Valletta), 1992, ratified by Ireland in 1997
- Council of Europe's European Landscape Convention (Florence Convention), 2004
- The Burra Charter, the Australia ICOMOS Charter for Places of Cultural Significance, 1999
- UNESCO Convention concerning the Protection of World Cultural and Natural Heritage 1972,
   ratified by Ireland in 1991
- UNESCO Convention on the Protection of the Underwater Cultural Heritage, 2001, Ireland is a signatory since 2001; intends to ratify on changes if domestic law allows
- ICOMOS Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas. Paris: International Council on Monuments and Sites, 2005

In addition, the assessment took into account the following objectives from the Donegal County Development Plan 2024-2030:

#### **Objectives for the Protection of Archaeological Heritage, Sites and Monuments:**

#### AYH-O-1

To conserve and protect archaeological heritage, achieve a greater public knowledge and appreciation of archaeology, protect existing access to, and where appropriate provide new access and visitor infrastructure for, such heritage.

#### **Policies**

#### AYH-P-1

- a. Conserve and protect all forms of archaeological heritage including:
  - i. National Monuments,
  - ii. Structures on the Record of Historic Monuments (RHM),
  - iii. the Record of Monuments and Places (RMP)
  - iv. Sites and Monument Record (SMR),
  - v. Historic Graveyards and environs,
  - vi. Historic Towns,
  - vii. Historic battlefield sites,
  - viii. Unrecorded archaeology
  - ix. Industrial and post-medieval archaeology;
  - x. Underwater archaeology and
  - xi. The settings of such heritage
  - in accordance with the publication Framework and Principles for the Protection of Archaeological Heritage (DoAHGI 1999); and
- b. Conserve and Protect Zones of Archaeological Protection located in Urban areas of Ballyshannon, Donegal Town, Killybegs, Lifford, Ramelton, Rathmullan and St. Johnston as identified in the Record of Monuments and Places including requiring the carrying out of an archaeological assessment prior to the granting of permission and the undertaking of additional archaeological mitigation where required (e.g. more extensive testing, excavation or licensed archaeological monitoring) to inform the planning application or, if appropriate, the imposition of similar archaeological mitigation (more extensive testing, excavation or licensed archaeological monitoring) as conditions of planning.

The policy will be implemented save to the extent necessary to provide for strategic infrastructure projects including, but not restricted to, the TEN-T Priority Route Improvement Project, Donegal the Bridgend to County border project scheme, the Buncrana Inner Relief Road and Greenways, subject to such projects being in accordance with all relevant statutory and regulatory provisions or where no statutory or regulatory provisions apply in so far as the policy provisions can be practicably and reasonably achieved within the context of such projects.

#### AYH-P-3

Ensure that development proposals affecting archaeological heritage sites shall:

- a. Sensitively incorporate archaeological heritage Preserved In Situ in a manner which is compatible with the protection and proper management of such heritage and its setting including adequate safeguards from damage/vandalism and for public safety and suitable informational signage.
- b. Be accompanied by a long-term management plan that incorporates appropriate protections for the heritage site.
- c. Provide appropriate informational signage regarding any archaeological heritage which has been identified and Preserved by Record during the course of construction to an agreed standard with Donegal County Council and the National Monuments Service.

The policy will be implemented save to the extent necessary to provide for strategic infrastructure projects including, but not restricted to, the TEN-T Priority Route Improvement Project, Donegal, the Bridgend to County border project scheme, the Buncrana Inner Relief Road and Greenways subject to such projects being in accordance with all relevant statutory and regulatory provisions or where no statutory or regulatory provision applies in so far as the policy provisions can be practicably and reasonably achieved within the context of such projects.

## 2 Receiving Environment

#### 2.1 Site Location

The townland of Port is located on the north western shore of Inver Bay, west of Donegal Bay on the south coast of County Donegal (Figure 1). It belongs to the Parish of Inver and the barony of Banagh. Port is approximately 2km west of Inver, 14km west of Donegal, and 14km east of Killybegs. The pier is located on a former natural spit on the southern edge of the townland.



Figure 1: Site location, Port Pier, Co. Donegal.

## 2.2 Geology and Topography

Inver Bay is part of an extensive field of subglacial features, including drumlins and ribbed moraines. The ribbed moraines are formed on bedrock of Lower Carboniferous limestone (Figure 2). The cliffs on the shores of the bay are covered by glacial drift and the peninsulas and islands are formed by drumlins. These are quaternary features deposited at the base of the ice sheet during the last Ice Age (McClure et al, 2019).

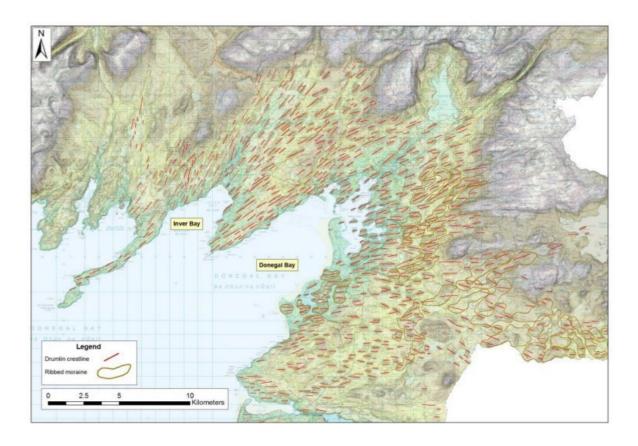


Figure 2: Drumlins and ribbed moraines in Donegal and Inver Bays. From McClure et al (2019) Geological Survey Ireland.

# 3 Scope of Works

## 3.1 Description of the Proposed Development

The proposed works on Port Pier, owned and maintained by Donegal County Council, aim to respond to the growing need to improve the pier facilities, as a result of the increase and diversification of activities taking place at this location.

Works entail the dredging of an area to the south and east of the pier, piling, and associated construction works. The extension of the pier will include two new sections covering the area shown in Figure 3:

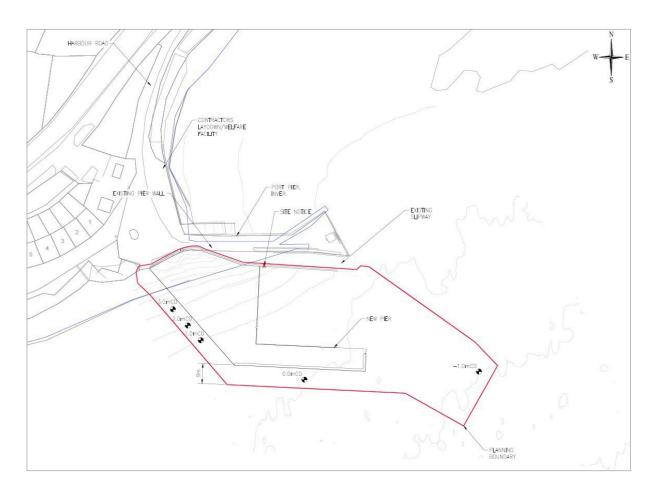


Figure 3: Proposed extension layout and site boundary to include dredging (AYESA 2025).

According to AYESA's construction method statement as quoted in the Natura Impact Statement (2024), the works will be implemented as follows:

"....The pier structure will consist of two parallel rows of sheet piles adequately tied back with tie-rods. Dredge material will be used as fill between the sheet piles. The top layer of fill will be selected engineered fill. The pier structure will be capped with a concrete deck.

*The following sequence describes the construction of the Pier:* 

- Sheet piles will be driven into the seabed as shown on the drawings, using an excavator or crane fitted with a vibratory pile hammer (or similar).
- The sheet piles tie-back system will be installed, which will consist of a series of tie-rods and waling beams.
- The pier will be filled with material either from the dredging operation or selected fill imported from commercial sources.
- The fill will be compacted in layers (approximately 300mm) using a 5t roller (or similar).
- Selected engineering fill will be used in the top 900mm, to create a base layer for the concrete slab.
- The selected fill will be compacted in layers (approximately 300mm) using a 5t roller (or similar).

- A reinforced concrete capping slab will be constructed on top of the sheet piles and engineered fill. This will involve installing rebar cages, shuttering, and concrete casting.
- Quayside services such as lighting, drainage, and utilities shall be installed in accordance with relevant standards and regulations.

A dredge pocket will be created, as indicated on the drawings, using an excavator. The dredging operation will either be conducted in the dry during low water, or a barge will be required to support the excavator when the site is inundated with water.

The dredged/excavated material will be used as fill for the new pier extension, if suitable. The excavator will either dump the dredged material directly between the sheet piles, or it will be loaded onto tipper trucks for transportation. A hopper barge may be required to load and transport the material when the site is inundated. Approximately 3500m³ of material will be dredged.

If excess dredge material is available, or if the dredge material is unsuitable for use as fill, the material will be transported and disposed of at a suitable landside facility. The dredge material will first be stored in a bunded area and allowed to dry prior to transportation...."

# 4 Methodology

#### 4.1 Aims and Objectives

The aims and objectives of the desk based assessment and walkover survey were as follows:

- To ascertain the character, condition and extent of any archaeological areas, features or objects likely to be affected by the proposed works, including any associated temporary works, and the likely impact of the proposed works on these remains;
- To accurately locate these archaeological areas, features or objects and document the findings in map form;
- To describe the same and discuss their likely provenance;
- To recommend appropriate measures for the avoidance of these remains or, where this cannot be achieved;
- To recommend measures to mitigate the impact of the works, which may include archaeological testing; and,
- To incorporate all the above into an illustrated report for the project, supported by tables or inventories, maps and photographs.

#### 4.2 Desk-based Assessment

The following sources were consulted as part of the desk-based assessment:

- The Record of Monuments and Places (RMP) compiled by the Archaeological Survey of Ireland comprises lists, classifications of monuments and maps of all recorded monuments with known locations and zones of archaeological significance. The monument records are accessible online from the National Monuments Section (NMS) of the Department of Housing, Local Government, and Heritage at www.archaeology.ie. These were used to establish the wider archaeological context of the site.
- Ordnance Survey Ireland (OSI) historic and contemporary maps were examined to measure the changing landscape of the harbour.
- The Excavations Bulletin online database (www.excavations.ie) which contains summaries of all archaeological excavations in Ireland, was consulted to review archaeological investigations done previously in the area.
- Wreck Inventory of Ireland Database (WIID) and Wreck Viewer: The information contained
  within the inventory was gathered from a broad range of cartographic, archaeological and
  documentary sources, and each entry in the Inventory gives information on the ship's name,
  type of vessel, port of origin, owner's name, cargo, date of loss and other relevant information
  where available.
- The Record of Piers and Harbours is a draft unpublished document compiled by the DAHG. It draws on various historical sources dealing with historical piers and harbour development in Ireland.
- Cartography: Several historic maps and charts were examined (see references below for a full list).
- Aerial Photography: A variety of low and high-altitude aerial photography (vertical and oblique) was examined. Infra-red aerial photos undertaken by the Marine Institute were also examined as well as the aerial orthophotos from the National Monuments web site, www.archaeology.ie (see references below for full list)
- Documentary sources: Several sources were examined (see references below for full list)

#### 4.3 Site Survey

The proposed works area at Port Pier was surveyed during a low Spring tide in September 2024. The conditions were excellent. The majority of the site falls with the inter-tidal zone and the sub-tidal area is wadable. A visual and metal detection survey was undertaken.

#### 5 Results

#### 5.1 Desk-based assessment

#### 5.1.1 Historical and Archaeological Background

#### Potential for Submerged Landscapes

Recent research in the area of Inver Bay has shown that the area was once a dry landscape rather than an inundated bay (pers. comm. Cóilín Ó Drisceoil). Brooks *et al.* (2011), as modelled by EMODnet, estimates that the shoreline near Port Pier was *c.* 1.4km further out 6000 years ago than it is today and *c.* 1.5km further out 8000 years ago. Submerged forests and peats have been recorded around the Irish coast both in intertidal coastlines and subtidal zones (Westley and Woodman, 2020: 234). Submerged peats have been dated to 13,500–5,000 cal BP (Brooks and Edwards, 2006).

While most of these landscapes have so far yielded only palaeoecological or palaeontological remains, there remains potential for the discovery of archaeological materials. Later Mesolithic wooden fish traps, for instance, were identified below sea level beneath reclaimed land at Spencer Dock, North Wall Quay, Dublin (Westley and Woodman, 2020: 236). A Late Mesolithic wooden plank has also been recorded in the Shannon Estuary and a Neolithic logboat was identified in the intertidal zone of Strangford Lough (O'Sullivan, 2001; Forsythe *et al.*, 2007). Lithic discoveries within the intertidal and subtidal zones around Ireland further support the archaeological potential of submerged landscapes. For instance, two worked flints were recovered offshore of Arklow, Co. Wicklow in 2023 (ADCO 2023).

#### Whaling at Port Pier

The townland of Port was developed by Thomas Nesbitt as a whaling plant in 1759. Nesbitt is best known as the inventor of the first swivel-gun harpoon (McGonigle, 2008: 304–5). The primary residence of the Nesbitt family was Kilmacreddon House, less than 500m northwest of the pier (McNeary, 2007: 122). In 1762, a large part of the blubber casks sent from Port to Liverpool for trying out was lost, leading to Nesbitt petitioning the House of Commons in London for the money to build the first whale-rendering facility in Ireland. This was the only shore-based whaling station ever to be built in Ireland and the only one in Europe from this period. By 1776, and perhaps as early as 1771, the whaling industry in Donegal Bay had come to an end. The buildings at Port were remodelled as salt works by this time (McGonigle, 2008: 305–6 & 310–11).

Shore-based whaling stations generally included 'a pier, warehouses, a boiler-house or try-works, a flencing plane (a flat surface where the blubber was removed from the whale carcass)—often the

seashore—and sometimes a bone-dump on nearby land' (McGonigle, 2008: 306). At Port, it is likely that the flencing plane was indeed the shoreline and that the carcasses were dumped further out into the harbour (McNeary, 2007: 120). Dumping in the harbour is supported by the whale bones found in the 'Glar hole' in 1987 to the north of the pier (McGonigle, 2001: 309). A pier was built using public grant funding in 1755 to support the whaling industry at Port (McNeary, 2007: 121). The First Edition Ordnance Survey map published in 1836 only shows a natural spit feature at the site (see Section 5.1.5). Remains of a possible earlier pier was identified during survey of the site by McGonigle to the south of the modern pier. This was of large boulder construction and may have already been in disuse by the first edition map (McGonigle, 2008: 307).

#### Salt works at Port Pier

In Post-Medieval Ireland, salt was in high demand in both domestic and commercial spheres. Salt was not only used as a food preservative, particularly for meats and fish, but was also an important resource employed in various industrial processes (Forsythe, *et al*, 2018). Irish economy relied on the export of salted beef and butter at the time of the transatlantic trade (Forsythe, *et al*, 2015).

The establishment of salt works at different locations along Irish coasts saw an expansion during the second half of the 18<sup>th</sup> century (Forsythe, *et al*, 2023) and is evident in historic cartography from the 19<sup>th</sup> century. Between 1771 and 1776, Port had switched from the whaling industry to the salt industry (McGonigle, 2008: 306). Three salt pans were mentioned in McParlan's Statistical Survey of 1802 as being near Inver and in 1836 Alexander Nimmo mentions the salt-house at Port: 'There is a salt-house here, to which two or three vessels of sixty tons come yearly' (Nimmo, 1836: 70).

The success of salt production in Ireland as a viable economic activity was mainly determined by external factors such as price fluctuations or taxation in the broader international context. The salt tax, which imposed a tax on salt making in Britain and therefore encouraged such works in Ireland, was repealed in 1825 (McGonigle, 2008:122). A few years later, the Descriptive Remarks of the Ordnance Survey Parish Namebook 1830-1840 mentions that 'in it are Salt works which was a great source of employment to the inhabitants some time ago.' The description suggests a decline in salt production by the mid-19<sup>th</sup> century.

#### 5.1.2 Archaeological Monuments

There are no sites listed on the Sites and Monuments Record (SMR) on footprint of development. The nearest sites on the protected Record of Monuments and Places (RMPs) are *c*. 1km west of the area of works. These are a church (DG098-008) and graveyard (DF098-008001) in the townland of Kilmacreddan (Table 1).

Table 1: Sites on the Record of Monuments and Places closest to the area of works.

SMR	Townland	Туре	ITM	Description (archaeology.ie)
DG098-008	Kilmacreddan	Church	578867E,	There is no trace of the church or
		(Site of)	876330N	graveyard (DG098-008001-) marked on
				the 2nd edition of the OS 6-inch maps.
				The site is located in undulating drumlin
				country in fairly good pasture. The sea
				shore is a short distance to the S.
DG098-	Kilmacreddan	Graveyard	578867E,	There is no trace of the church (DG098-
008001			876330N	008) or graveyard (DG098-008001-)
				marked on the 2nd edition of the OS 6-
				inch maps. The site is located in
				undulating drumlin country in fairly
				good pasture. The sea shore is a short
				distance to the S.

#### 5.1.3 Architectural Heritage

There are no structures listed on the National Inventory of Architectural Heritage (NIAH) or the Record of Protected Structures (RPS) for County Donegal within the footprint of the development area. The sites is also not included in an Architectural Conservation Area (ACA). The closest listed site of architectural importance is located c. 565m northwest of the proposed works in the townland of Kilmacreddan. This is a  $19^{th}$  century kiln (40909824) (Table 2).

Table 2: Structure on the Natioal Inventory of Architectural Heritage closest to the area of works.

NIAH	Name	Townland	Date	ITM	Description (buildingsofireland.ie)
40909824	Kiln	KILMACREDDAN	1860	579474E,	Freestanding single-bay lime kiln on
				876861N	circular-plan, erected c. 1860. Now out of
					use. Constructed of roughly coursed
					rubble stone masonry. Square-headed
					opening to front (west), the former oven
					aperture, having stone lintel over. Built
					into side of gently-sloping hill with
					roof/top level with land to the east
					formerly providing access to the loading
					bay to the summit. Set back from road in
					rural location to the east of Dunkineely.

#### 5.1.4 Shipwreck Inventory

Three shipwrecks have been reported in an unspecified location in Inver Bay, Co. Donegal (Table 3). This includes a schooner, a steam yacht, and a fishing boat. The schooner was lost in 1879 while the other two were lost in 1906 and 1905 respectively.

Table 3: Shipwrecks recorded near the area of works.

Wreck No.	Wreck Name	Wreck Type	Date of Loss	Place of Loss
W07130	Annie (SS)	Steam Yacht	20/08/1906	Inver Bay, Donegal Bay
W16983	Esperance	Schooner	20/10/1879	Inver Bay, Donegal Bay
W17040	Unknown	Fishing boat	07/03/1905	Inver Bay, Donegal Bay

#### 5.1.5 Previous Archaeological Investigations

An Underwater Archaeological Impact Assessment (UAIA) was previously carried out at Port Pier in 2009. This included a dive/ wade survey under licence 09D0011 with use of a metal detector under licence 09R0031. This identified 19<sup>th</sup> century and later human activity and deemed the site of moderately low archaeological potential. Due to nearby navigational hazards and the known seafaring tradition in the area, it was recommended that all groundworks be monitored (Kieran, 2009: 4). No archaeological monitoring is known from works carried out after this UAIA.

Two other nearby archaeological investigations took place in the bordering townlands of Kilmacreddan (10E0204) to the west and Fanaghans (01E0120) to the east (Appendix 1). Test-trenching was carried out in both locations. No archaeological remains were recorded at either site.

#### 5.1.6 Topographical Files of the National Museum of Ireland

The Topographical Files of the National Museum of Ireland (NMI) hold details of any artefactual material recovered from the 18th century to modern day. No finds are known from the area of the proposed works.

#### 5.1.7 Cartographic information

Richard Bartlett's *Coastal Map* labels Inver Bay, 'Whitleye Bay,' in 1602–3. A slight bulge in the shoreline is shown near the location of the natural spit of Port (Figure 4 Left). Another of Barlett's maps of the same time, *A Generalle Description of Ulster*, shows the Eany Water of Inver to the west of Donegal Bay, but does not depict the Bay (Figure 4 Right).

William McCrea surveyed the area in 1796. He clearly labels the town of Port on A Map of the County of Donegal (Figure 5). The Bay is also noted as Inver Bay at this time while Inver itself is not labelled. The preference for Port on this map may indicate how important the industry of the townland was at the end of the 18<sup>th</sup> century. At this time, the industry was focused on salt works (see Section 5.1.1).

The first detailed cartographic survey of the area was the First Edition 6-inch Ordnance Survey Map published in 1836 (Figure 6). This map clearly shows 'Old Salt Works' including six buildings near a natural spit where the modern pier is located. Two of these structures still have physical remains today. To the north in Port proper are further buildings and a 'Pound Fair Green.' The remaining area of the townland is shown as greenfields. To the west of the salt works, the grounds of Kilmacreddan House, the home of the Nesbitt family, dominate the coastline.

The Second Edition 25-inch Ordnance Survey Map published in 1902 shows a pier in the location of the modern structure (Figure 7). The larger of the salt works structures is shown as an outline rather than a functional building, but the other structures that has physical remains today is still marked as a structure. A railway line now runs roughly southwest to northeast from west of the pier through Port proper with a station located to the north of the village. The majority of the townland remains greenfield. Kilmacreddan House is still shown to the west of the pier, though the railway line separates the estate from the coastline.





Figure 4: Left: Excerpt from a facsimile of A Coastal Map of Counties Donegal etc. (1602–3) by Bartlett (1861). Right: Excerpt from a facsimile of A Generalle Description of Ulster (1602–3) by Bartlett (1861)



Figure 5: Extract from 'A map of the county of Donegal', drawn from actual survey by William McCrea 1796; 4 sheets (1801).

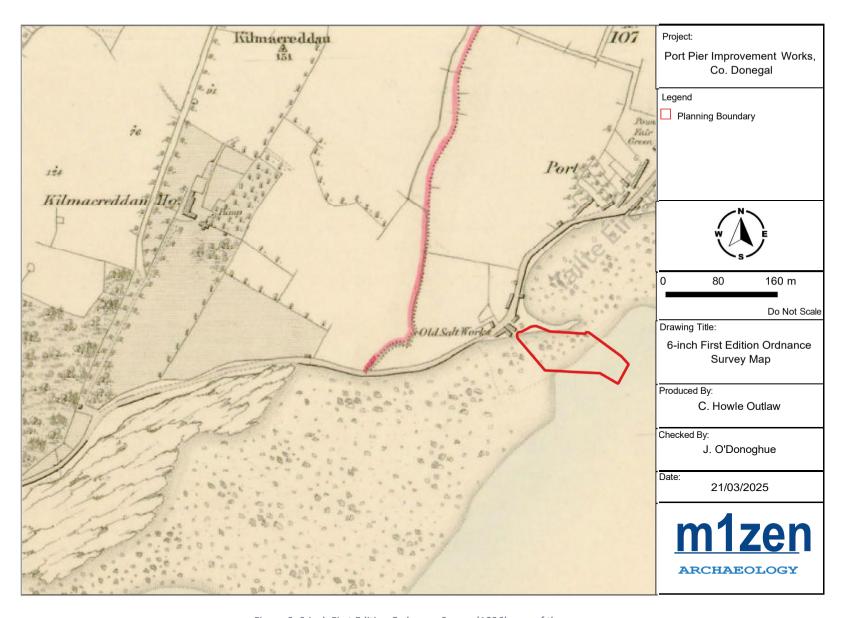


Figure 6: 6-inch First Edition Ordnance Survey (1836) map of the area.

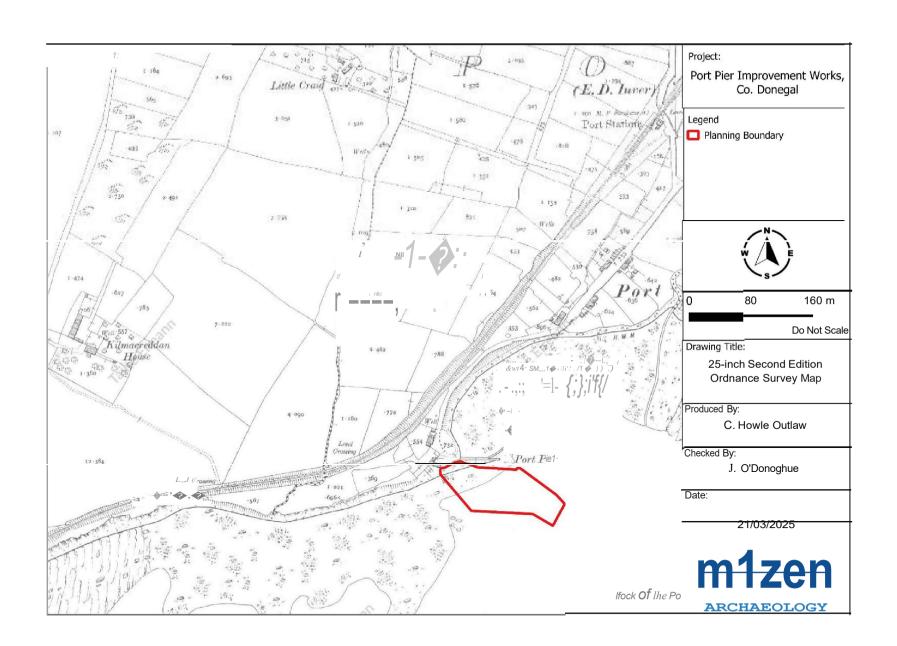


Figure 7: 25-inch Second Edition Ordnance Survey (1902) map of the area.

#### 5.2 Walk-over survey

The area of proposed works at Port Pier were inspected during a low spring tide in September. The proposed works area is bounded to the north by a recently constructed concrete slip which abuts a 19<sup>th</sup> stone pier, and to the south by a row of large boulders running perpendicular to the shoreline and serving as an erosion protection measure (Plate 2). Bounding the site to the west are the remains of the whaling station, and behind this is a holiday complex comprising a block of five 3-story houses (Plate 1). Inver Bay extends to the east of the site.

The foreshore comprises a stony beach which slopes moderately from the whaling station towards the waterline in a south-eastern direction (Plate 5). On the northern side, adjacent to the modern slipway, there is an accumulation of large, rounded boulders and stones (Plate 3). In contrast, the southern portion of the site features smaller, subangular stones and pebbles. The density of stones gradually decreases towards the low water mark. In the subtidal zone, the seabed is predominantly sandy, with small stones scattered throughout and occasional boulders present.

An alignment of intermittently-set large stone blocks were recorded imbedded in the beach matrix within the tidal zone 5m and 8m to the south of the slip. This was the stone alignment surveyed by McGonigle (see Section 5.1.1). The orientation of these stones generally corresponds with the alignment of the existing pier. The alignment stretches 25m in length and consists of stones measuring between 1 m x 1.1m to 2.1m x 0.8m. The stones protrude from the seabed by between 0.1m to 0.4m in height. An additional two stones were noted adjacent to the eastern end of the new slipway (Plate 4; Figure 8). As the stones were partially buried, the full extent and nature of the stones could not be determined but notably most of the stones exhibit squared edges along their southern sides.

A bank of stones and construction rubble, measuring up to 1.2 metres in height and approximately 2–3 metres in width, is present along the upper foreshore. This accumulation likely resulted from the construction of the concrete slipway in 2023 (Plate 6). The development of the slipway appears to have led to the removal of approximately 25 metres of the 19th-century stone pier and its adjoining stone seawall (Plate 7). The pier itself appears to have undergone multiple phases of repair, upgrading, and reconstruction over time, with later concrete additions obscuring much of the original structure (Plate 8). However, the original stonework remains visible on the north-eastern elevation.

Stone fabric is also evident in places on the southern side of the pier. It is visible on the pier deck—extending approximately 8m to the east of the recently constructed slipway entrance and 4m to the west (Plate 7). Adjacent to this exposed stonework is a parapet wall on the southern elevation of the pier, which continues as a revetment or seawall curving back along the upper foreshore towards the

former whaling station (Plate 9). This wall is constructed in snecked masonry, comprising larger cut blocks measuring up to 0.6 metres by 0.4 metres, and smaller blocks measuring approximately 0.4 metres by 0.12 metres. Three basal courses of stonework, totalling 0.9 metres in height, remain extant, and the upper sections of the wall have been supplemented with concrete blocks and poured concrete of varying height (Plate 10).

A 4.6-metre-wide gap exists between the terminus of this revetment wall and one of the structures belonging to the whaling station, which currently serves as the sole access point to the foreshore south of the pier (Plate 11).

The remains of the whaling station, situated immediately adjacent to the works area, comprise two primary buildings along with several short sections of surviving wall. The main structures include a 13-metre-long building (Building A), aligned in a northwest—southeast direction, and a second building (Building B), measuring 22 metres in length, positioned at a perpendicular angle to Building A (nomenclature after McGonigle 2008). Building A was noted to be much reduced since McGonigle's 2006 survey with most of the western half no longer extant.

During the metal detection survey, three amorphous metal objects were identified on the foreshore (Plate 12). These were possibly from a vessel and included two roughly rectangular or cylindrical objects measuring roughly 20cm long and one globular form measuring roughly 20cm long.



Plate 1: View of upper foreshore/northern side of proposed development area, taken from the east.



Plate 2: Easternmost boulder alignment forming modern erosion protection measures.



 ${\it Plate 3: View of foreshore and recently constructed slipway at northern end of proposed works area, taken from the south.}$ 



Plate 4: Possible continuation of stone alignment from the west.



Plate 5: Concrete embankment with modern tarmac.



Plate 6: Left: New slipway from the west. Right: New slipway from the east.



Plate 7: Left: View of pier taken from the north. Note the break in the wall (right) to facilitate the recently constructed slipway. Right: View of pier taken from the north. Note the break in the wall (left) to facilitate the recently constructed slipway.



Plate 8: Left: Pier structure from the west. Right: Pier structure from the east.



Plate 9: View of revetment wall, note the stone courses at base of wall. Taken from the south.

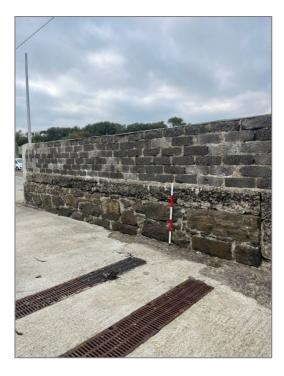


Plate 10: Possible original courses of pier wall beneath modern expansion. From the southeast.

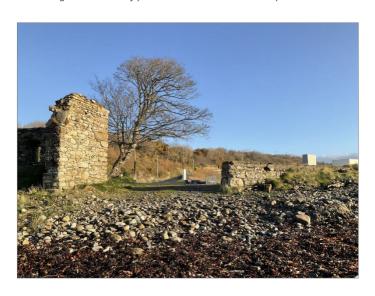


Plate 11: View of beach access taken from the east. Note the remains of whaling station/saltworks to the left and the stone wall to the right.



Plate 12: Metal objects identified on the foreshore during survey.

#### 6 Discussion

Port Pier was an important site of industrial heritage for much of the 18<sup>th</sup> and 19<sup>th</sup> centuries. Thomas Nesbitt started a whaling operation at the site in 1759. In 1762, he built Ireland's only shore-based whaling station which was, at the time, unique to Europe as a whole as pelagic whaling was the predominant form of whaling during the period. It remained a relatively successful centre for Irish whaling until sometime between 1771 and 1776. At this point, it acted primarily as a station for salt works until the mid-19<sup>th</sup> century.

The fishing and maritime industries of Port Pier would have made it a busy pier. Due to nearby hazards, it is likely that vessels coming to and from Port may have suffered damage and may have even wrecked off the coast of the pier.

Structures from these industries are still present on the site, immediately west of the area of works. Further structures are known to have been included in the industrial history of the site based on 19<sup>th</sup> century maps. While the 18<sup>th</sup> century pier from the whaling operations is not recorded cartographically, it was likely along the same natural spit formation on which the modern pier was built.

During a 2006 study of the whaling station, McMonigle recorded a stone alignment feature within the proposed works area and interpreted it as part of an earlier pier predating the 19<sup>th</sup> century stone pier.

This partially buried feature was recorded on the foreshore as part of this study but in the absence of further investigation its purpose and date cannot be determined.

The structures associated with the former whaling station, saltworks, and pier are not designated as recorded archaeological monuments, protected structures, nor are they listed on the National Inventory of Architectural Heritage. Nevertheless, they represent a significant component of Donegal's maritime heritage. In recent years, various upgrades and developments have contributed to the gradual erosion of this historic resource. Notably, there has been a visible reduction in the footprint of the whaling station building since 2007, and in 2024, a section of the stone revetment wall and pier was removed to facilitate the construction of a new slipway.



Figure 8: Locations of potential early piers/slipway structure based on surveyed stone alignments.

## 7 Potential Impacts

Given the site's considerable industrial heritage, which extended over approximately 100 years between the 18th and 19th centuries, the area is assessed as having moderate to high archaeological potential. There is a potential that previously unrecorded industrial infrastructure and associated artefacts may be encountered during proposed dredging works. Such remains may include, for instance, an artificial hardstanding potentially used for flensing activities during the period when the site functioned as a whaling station.

Excavation works may also have the potential to reveal evidence of submerged palaeolandscapes, such as buried peat deposits. There is also the potential for wreck sites to be uncovered due to the nature of the maritime industry and local hazards near Port. Further, there is the potential for waterlogged archaeological material to be uncovered which could date from any period.

An alignment of large stones is recorded for 25m on the foreshore, the purpose and date of which has not been established. In order to complete the dredging works, this potential site would be destroyed.

The 19th-century seawall/stone revetment wall situated along the upper foreshore will be demolished to facilitate access to the foreshore for dredging operations and associated construction works. An indirect impact is further predicted from site machinery passing beside the whaling station/ salt works structure. Such activity poses a risk of accidental contact with, or destabilisation of, the historic structure.

# 8 Recommended Mitigation

A number of mitigation measures are proposed in advance of development. The following is a list of recommended mitigation measures to address the potential impacts presented in Section 7.

All mitigations measures are recommendations only. The ultimate decision rests with the National Monuments Service of the Department of Housing, Local Government and Heritage in collaboration with the National Museum of Ireland.

 A full, measured and georeferenced survey of the pier and associated features should be carried out. This should include profile drawings of all 18<sup>th</sup> and 19<sup>th</sup> century structures. The potential earlier pier should be included along with the salt work buildings and the pier itself.

- Archaeological testing should be carried out to target the stone alignment located on the foreshore (Figure 8).
- Once the drawings and archaeological testing have been completed, the results shall be compiled into a final UAIA report and submitted to the National Monuments Service. The UAIA shall also make recommendations regarding results of the archaeological testing for example, if the stone alignment is determined to be of archaeological significance, it should be fully excavated under archaeological licence.
- All dredging operations and excavation works should be subject to licensed archaeological monitoring by an underwater archaeologist.
- The whaling station/salt works buildings should be fenced off prior to works commencing. All
  archaeological requirements/constraints should be outlined and addressed in the
  Construction Environmental Management Plan. Toolbox talks should be given to ensure that
  workers are aware of the features so they can be avoided.

With the implementation of the mitigation measures recommended above there will be only imperceptible to slight residual impacts on the archaeological heritage of the site as any features of significance will be preserved either in-situ or by record. All residual effects would be offset by archaeological recording to preserve disturbed features and materials by record.

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EMODnet Map Viewer: https://emodnet.ec.europa.eu/geoviewer/#!/

Excavations Bulletin: <u>www.excavations.ie</u>

Historic Environment Viewer, National Monuments Service: <a href="www.archaeology.ie">www.archaeology.ie</a>

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#### 9.3 Cartographic Sources

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A map of the county of Donegal, drawn from actual survey by William McCrea 1796; 4 sheets (1801).

# Appendix 1 – Previous Archaeological Investigations

Licence	Townland	ITM	Description (excavations.ie)
01E0120	Fanaghans	580824 877541	Testing was carried out in the townland of Fanaghans, Inver, Co. Donegal, on 17 February 2001. The proposed development entails the construction of three detached dwelling-houses and associated services and access road. The site is on a south-west-facing hillside to the west of Inver village, overlooking Inver Bay. A 'modernised' holy well is located at the foot of the hill. Excavation of eighteen test-trenches was carried out at the location of the proposed houses, access road and percolation areas. Topsoil and sod overlay a compact yellow brown sand and bedrock.  Nothing of archaeological significance was noted during the course of monitoring.
09D11; 09R31	Port	580040 877039	Consulting on behalf of Donegal County Council to carry out an underwater impact assessment on a proposed pier development and dredging scheme at Port, Inver, Co. Donegal. The underwater site survey was carried out in January 2009. It recorded that the current Inver Pier was a stone and concrete structure extending north-easterly from the shore. It was bounded immediately to the north and west by a long, sweeping sandy beach. This uniformly flat sandy substrate extended from the coastal fringe to the northern side of the pier. The seabed to the east, south and west of the pier was markedly different to the northern area. Extending south from the eastern terminus of the existing pier was a north—south-orientated pier approach channel. This exclusively sandy passage was bounded both to the east and the west by a rocky, gravel seabed which had moderate coverage of kelp.  The underwater visual survey did not record the presence of any archaeological features or deposits in the survey area.  The metal-detector survey recorded twelve metal detector contacts for the seabed area. None were archaeological.
10E0204	Kilmacreddan	579254 876875	Test-trenching took place as part of site assessment because of a supposed archaeological monument on the site. No evidence was found of the recorded monument or any archaeological remains.

