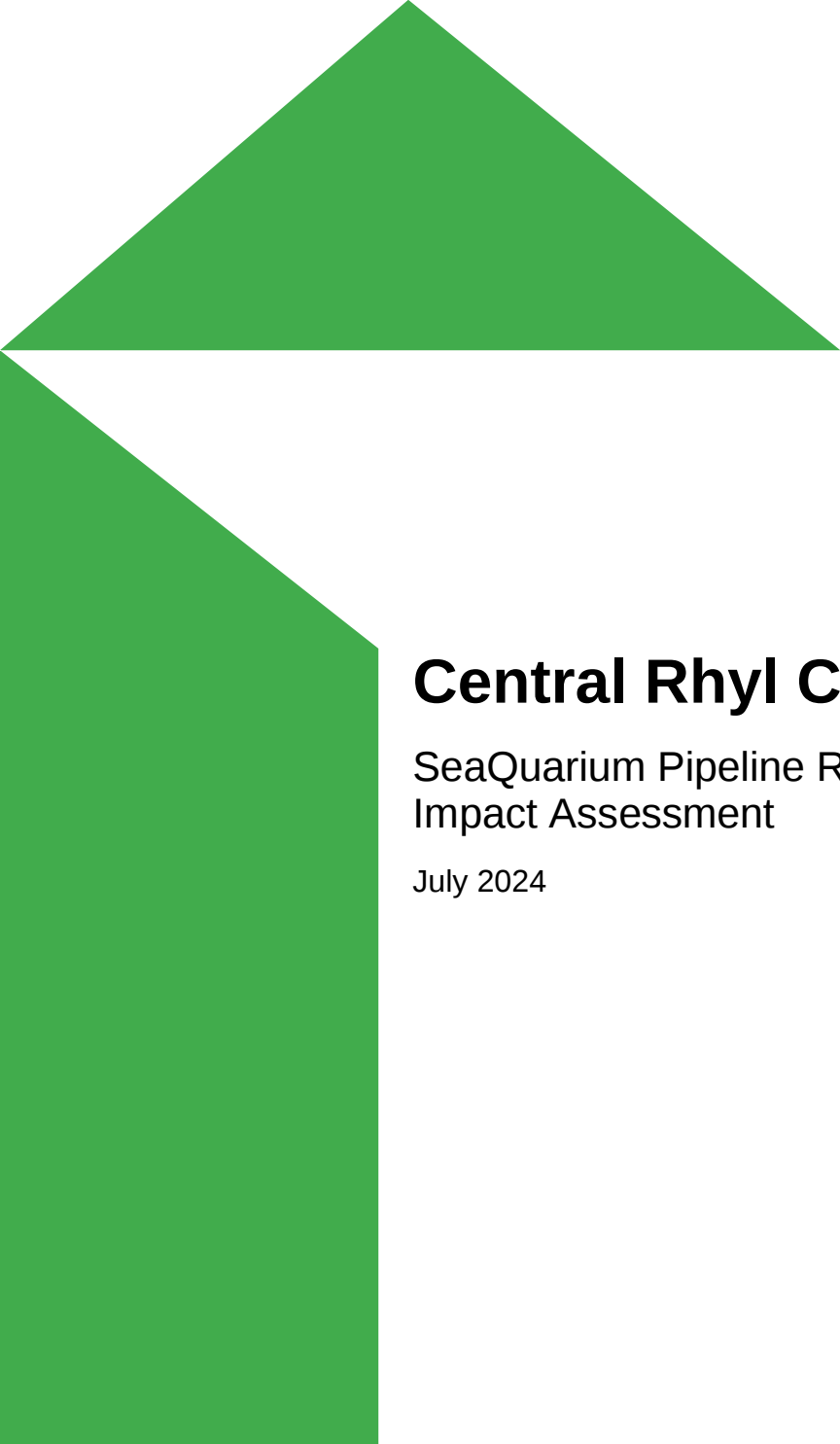




Central Rhyl Coastal Defences

SeaQuarium Pipeline Removal Environmental
Impact Assessment

July 2024

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Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
P01	19 July 24	C Williams	M Phillips	N M Price	First issue for BB comment

Document reference: 100420823 | CR-MMD-00-XX-RP-EN-3104 | P01

Information class: Standard

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1 Background

Balfour Beatty Civil Engineering Limited (BB) on behalf Denbighshire County Council are currently constructing flood defences at Rhyl as part of the Central Rhyl Coastal Defences Scheme (herein referred to as “the Scheme”. The Scheme is subject to a Band 3 Marine License (Reference: CML2152). During the construction of the Scheme the Rhyl SeaQuarium on the seafront closed, and its seawater supply pipeline, located within the Rhyl beach and promenade, has become redundant as a result. Denbighshire County Council, as the landowner, has made the decision to remove the redundant pipeline from the beach entirely.

Part of the seawater supply pipeline (nearshore extent) is within the area of the Scheme's red line boundary, and as confirmed by Natural Resources Wales (NRW) its removal is covered by Scheme's Band 3 Marine Licence (CML2152). This section of the pipeline has been removed under the provisions of that licence. An application for a Band 2 Marine Licence to NRW to remove the remainder of the pipeline has been made.

This report considers whether or not the proposed works to remove the remaining SeaQuarium seawater supply pipeline from Rhyl beach constitutes Environmental Impact Assessment (EIA) development under the provisions of the Marine Works (Environmental Impact Assessment) Regulations 2007¹ (the ‘EIA Regulations’) as amended by the 2017 Amendment Regulations². Regulation 8(1) requires the Appropriate Authority to determine whether or not a Schedule A2 project requires an EIA if it concludes that the project is likely to have significant effects on the environment having regard to the criteria set out in Schedule 1 of the EIA Regulations 2007. Regulation 10(2) of the EIA Regulations 2007 allows the Appropriate Authority to determine that an environmental impact assessment is not required if it is satisfied that assessment of any effects on the environment is being carried out by another consenting body and that such assessment is sufficient to meet the requirements of the EIA Regulations. The only environmental effects anticipated from this project relate to disturbance of birds within the Liverpool Bay Special Protection Area. A Habitats Regulations Assessment (CR-MMD-00-XX-RP-EN-3106) has been prepared which assesses this impact and proposes mitigation to remove the potential for significant effects. As such it is considered that this project does not require further EIA.

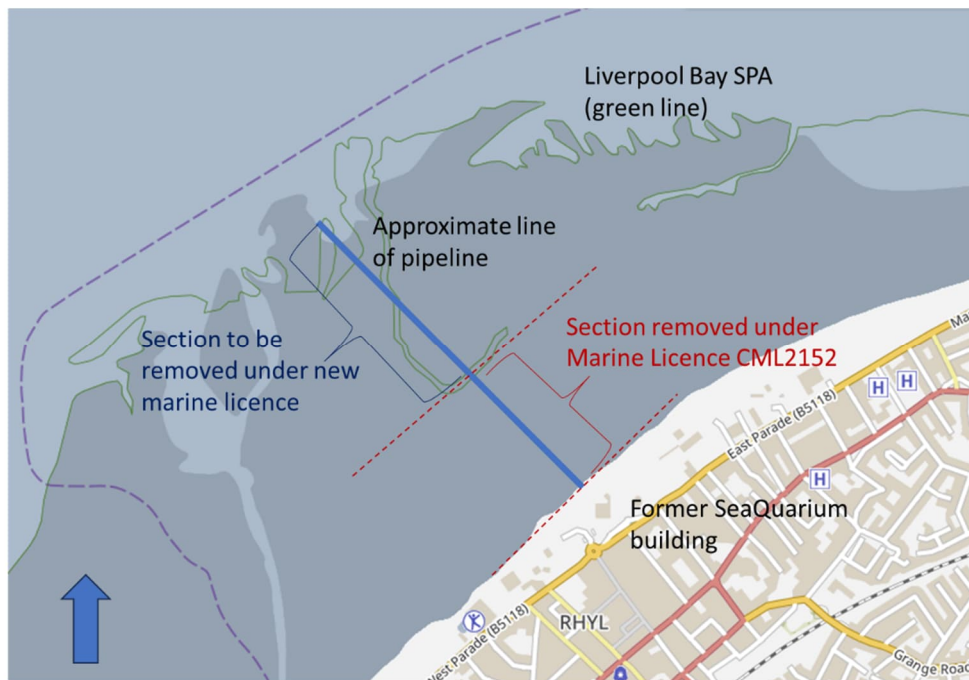
1.1 Location

The seawater supply pipeline runs across the Rhyl beach from the existing promenade to the mean low water mark (approximate Ordnance Survey Grid Reference 300700,381790 to 299950,382570). Figure 1.1 shows the location of the seawater supply pipeline.

¹ The Marine Works (Environmental Impact Assessment) Regulations 2007 No. 1518

² The Marine Works (Environmental Impact Assessment) (Amendment) Regulations 2017 No. 588

Figure 1.1: Pipeline Location



(Source: Ordnance Survey Crown Copyright and database rights 2021)

1.2 Proposed works

The works to be undertaken comprise removal of part of the existing seawater supply pipeline, herein referred to as the Project.

2 EIA Screening

Schedule A1 of the EIA Regulations sets out those developments for which an EIA is mandatory. This project is not listed in Schedule A1.

Schedule A2 of the EIA Regulations lists those developments which will require an EIA if it is likely to have a significant effect on the environment due to its size, nature and / or location. Schedule A2 lists 87 different types of development; with '58. Urban Development Projects' considered the closest to the SeaQuarium development.

Schedule 2 of the EIA Regulations provides details of the selection criteria for screening Schedule A2 developments. Although not all of the criteria will be relevant in every case; three broad criteria are identified which must be considered:

- **Characteristics of the project** – with particular regard to its size, cumulation with other development, use of natural resources, production of waste, pollution and nuisance, the risk of accidents and risks to human health);
- **Location of the Project** – with regard to existing land use, capacity of the natural environment to absorb further development, environmental sensitivity of the location; and
- **Type and characteristics of the potential impact** – the likely significant effects (e.g. its magnitude, probability and duration, frequency and reversibility).

A screening matrix has been completed which is presented in Appendix A setting out the significance of likely impacts.

2.1 Characteristics of the Project

The removal of the seawater supply pipeline is likely to take one week accordingly to BB, allowing for working at low tide. This will present a visual intrusion to the beach visible to beach users; however, the duration of the project is not considered to be significant in terms of any loss of amenity caused by the visual intrusion. The work will be carried out in a small part of the beach which is extensive and so no loss of amenity with regards beach usage is anticipated.

No natural resources will be used once the pipeline has been removed. There will be some insignificant use of fuel for the construction vehicles used. The beach profile will be restored to pre-construction conditions and levels. The incoming tide will smooth over the sand.

The pipeline itself will be classified as waste and is likely to require disposal. A 500m length of polyethylene pipe is not considered to present an unusual or significant burden on the local waste management capacity. It may be possible to recycle the pipework, depending on its condition.

The removal of the pipeline itself will eliminate a source of potential pollution from the marine environment. The plastic pipe, if it remained, would likely be damaged by beach traffic or wave action over time and would present an injury hazard to beach users and create marine pollution.

There should be no significant risk from pollution once appropriate mitigation is applied, all machinery used will be maintained and clean prior to entry into the intertidal area. All refuelling will be undertaken within the main works compound for the flood defence work located away from the beach. A spill kit will be available at the work site and any sand contaminated by an oil or fuel leak would be removed by the excavator immediately.

There are no risks to human health arising from the removal of the pipework.

An ecological walkover of the pipeline route has been undertaken to inform this assessment. The area comprises undulating sandy beach. There are no outcrops of the underlying solid strata or any reefs present which could provide noteworthy ecological habitat. The project extent does impinge on the Liverpool Bay Special Protection Area, the boundary of which is formed by the mean low water mark. This area is designated for a number of overwintering birds which use the area for foraging and resting. A Habitats Regulations Assessment report has been prepared which sets out the likely significant effects and mitigation measures proposed. With these mitigation measures in place, there is considered to be no significant effects.

The pipeline is buried at a shallow depth in the sand and will be pulled out using a 21t excavator with only minor excavations anticipated, therefore no archaeological impact is anticipated. There are a number of wrecks marked in the area with the Good Intent (lost 1869) and the William Henry (lost 1895) being closest to the pipeline alignment. Coflein notes that for both of these wrecks "Archaeological remains associated with the loss of this vessel are not confirmed as present at this location but may be in the vicinity." Given the shallow excavations to remove the pipeline, disturbance of any remaining material from these or other wrecks which may have been moved by tide action from the wreck sites is not anticipated.

2.2 Location of the Project

The pipeline crosses the intertidal beach as far as the mean low water mark over a distance of approximately 1km. The upper 500m has been removed already. The seaward end of the pipeline is within the Liverpool Bay Special Protection Area, an area designated for its overwintering birds. The beach is a popular tourist destination and is regularly used by members of the public to exercise.

There will be no further development arising from this project, which will in fact reduce development by removing the redundant pipeline.

2.3 Type and characteristics of the potential impact

As discussed above, the loss of amenity value from the beach during the period of time machinery is present is not considered significant due to the short time period and limited areal extent of the work compared to the large area of beach available for recreation.

Removing the pipeline will improve the amenity of the beach. The pipeline lies over the sand in places presenting a hazard to beach users. Leaving the pipeline in-situ presents a risk of it being damaged, causing litter within the marine environment. Removing it presents a benefit.

The removal operation itself will cause disturbance to birds using the intertidal area, which is a Special Area of Conservation. The significance of this effect has been assessed in a Habitats Regulations Assessment as required under the Habitats Regulations.

3 Conclusion

Based on the evaluation set out within this report, it is considered that the only potentially significant impact arising from this project is disturbance of birds using the intertidal area and the offshore area close to the beach. This impact has been assessed in detail in a Habitats Regulations Assessment which has set out mitigation measures designed to reduce impacts as far as reasonably practicable. It is our understanding that an EIA is not required for this project because the potentially significant environmental effects can be adequately managed through the Habitats Regulations Assessment.

A. Screening Matrix

Screening Criteria Question	Response		Significant Effect Likely?	
Natural Resources				
1.1 Will construction, operation or decommissioning of the project involve actions which will cause physical changes in the topography of the area?	No	There will be no changes to the beach profile	No	
1.2 Will construction or operation of the project use natural resources above or below ground such as land, soil, water, materials/minerals or energy which are non-renewable or in short supply?	No	Insignificant amount of diesel to be used for vehicles	No	
1.3 Are there any areas on/around the location which contain important, high quality or scarce resources which could be affected by the project, e.g. forestry, agriculture, water/coastal, fisheries, minerals?	No	The work area is a beach – no resources present and no impact on water resource	No	
Waste				
2.1 Will the project produce solid wastes during construction or operation or decommissioning?	Yes	The pipeline once removed is likely to be waste	No	The disposal of the pipe will not cause a significant environmental effect on the region's waste management capacity. The waste pipe will be segregated and disposed to a permitted transfer station. It may be possible to recycle the material.
Pollution and Nuisance				
3.1 Will the project release pollutants or any hazardous, toxic or noxious substances to air?	Yes	Vehicle exhausts	No	The limited number of vehicles required, and the short duration of the project will not generate significant pollution from vehicle exhausts
3.2 Will the project cause noise and vibration or release of light, heat, energy or electromagnetic radiation?	Yes	Vehicles will generate noise	No	The limited number of vehicles required, and the short duration of the project will not generate significant pollution from noise.
3.3 Will the project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	Yes	There is potential (if unmitigated) for vehicles to leak oil and fuel whilst on the beach	No	All vehicles will be inspected prior to each shift and any signs of leaks for hoses fixed. Refuelling and maintenance will be undertaken in the site compound located off the beach. The

Screening Criteria Question	Response		Significant Effect Likely?	
				methods statement for the works will include a spill response plan.
3.4 Are there any areas on or around the location which are already subject to pollution or environmental damage, e.g. where existing legal environmental standards are exceeded, which could be affected by the project?	No	The project is located on a beach with no evidence of pollution	No	
Population and Human Health				
4.1 Will there be any risk of major accidents (including those caused by climate change, in accordance with scientific knowledge) during construction, operation or decommissioning?	No	This is a minor demolition activity	No	Good practice construction site safety controls will be used to mitigate the risk of impact.
4.2 Will the project present a risk to the population (having regard to population density) and their human health during construction, operation or decommissioning? (for example due to water contamination or air pollution)	No	Any spillages of fuel or oils would be cleared immediately. The public will be excluded for the immediate vicinity during the works	No	Good practice construction site environmental management will be used to mitigate the risk of impact.
Water Resources				
5.1 Are there any water resources including surface waters, e.g. rivers, lakes/ponds, coastal or underground waters on or around the location which could be affected by the project, particularly in terms of their volume and flood risk?	No	The project will have no effect on the coastal waters	No	No change in flood risk as a result of the scheme. If bad weather / high tide / storm surge are considered likely during the works all plant and materials will be removed from the area, reducing the risk to negligible.
Biodiversity (Species and Habitats)				
6.1 Are there any protected areas which are designated or classified for their terrestrial, avian and marine ecological value, or any non-designated / non-classified areas which are important or sensitive for reasons of their terrestrial, avian and marine ecological value, located on or around the location and which could be affected by the project? (e.g. wetlands, watercourses or other water-bodies, the coastal zone, mountains, forests or woodlands, undesignated nature reserves or parks. (Where designated indicate level of designation (international, national, regional or local))).	Yes	The work area impinges on the Liverpool Bay Special Protection Area	No	A Habitats Regulations Assessment has been undertaken which identifies potential adverse effects on the designated features of the Liverpool Bay SPA. Mitigation measures are proposed which reduce the severity of those impacts to negligible.
6.2 Could any protected, important or sensitive species of flora or fauna which use areas on or around the site, e.g. for breeding, nesting, foraging, resting, over-wintering, or migration, be affected by the project?	Yes	The intertidal area is used by over wintering birds	No	

Screening Criteria Question	Response		Significant Effect Likely?	
Townscape, Seascape and Visual				
7.1 Are there any areas or features on or around the location which are protected for their landscape and scenic value, and/or any non-designated / non-classified areas or features of high landscape or scenic value on or around the location which could be affected by the project? Where designated indicate level of designation (international, national, regional or local).	No	The project is within the North Wales Coast National Landscape Area. The nearest registered landscape of outstanding or special interest is 9km inland (Lower Elwy Valley).	No	The project is relatively small scale and very short term with no permanent visual effects.
7.2 Is the project in a location where it is likely to be highly visible to many people? (If so, from where, what direction, and what distance?)	Yes	The activity will be visible to beach users and people walking along the Promenade as well as occupants of sea front buildings. The work site is 500m to 1km from the Promenade.	No	The activity will be limited in extent over a short duration with no lasting effect from any viewpoint.
Cultural Heritage/ Archaeology				
8.1 Are there any areas or features which are protected for their cultural heritage or archaeological value, or any non-designated / classified areas and/or features of cultural heritage or archaeological importance on or around the location which could be affected by the project (including potential impacts on setting, and views to, from and within)? Where designated indicate level of designation (international, national, regional or local).	Yes	The pipeline route passes close to several known shipwrecks. There are no exposures of the underlying soil/superficial deposits which could provide archaeological information.	No	The wrecks are all some distance away from the pipeline and are likely to have broken up to a large extent through wave action. There are no visual indications of any wreck material being present. The excavations for the pipeline will be shallow (<1m) within beach sand subject to disturbance during each tidal cycle, so will not disturb buried archaeological artefacts and will not disturb any material buried at depth.
Transport and Access				
9.1 Are there any routes on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the project?	Yes	Access to the work site will be via existing ramps used by the public to access the beach	No	The scale of the project is limited in duration and will occupy a small part of the large beach. Interactions with other beach users will be managed to avoid conflicts.
9.2 Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?	No	There will be no more than 3 vehicles working on this project	No	Small number of vehicles (3) no significant effect likely.
Land use				
10.1 Are there existing land uses or community facilities on or around the location which could be affected by the project? E.g. housing, densely populated areas, industry / commerce, farm/agricultural holdings, forestry, tourism,	Yes	The project work area is on a beach used for recreation	No	The work area is limited to a small part of a large beach. There will be ample free space for other users. The project is limited in duration.

Screening Criteria Question	Response		Significant Effect Likely?	
mining, quarrying, facilities relating to health, education, places of worship, leisure /sports / recreation				
10.2 Are there any plans for future land uses on or around the location which could be affected by the project?	No	The area will remain a beach	No	The works are temporary, the beach profile will be restored. No significant effects likely.
Land stability and Climate				
11.1 Is the location susceptible to earthquakes, subsidence, landslides, erosion, or extreme /adverse climatic conditions, e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?	No	The area is within the intertidal nearshore environment	No	Work will be undertaken during low tide. Once the pipe is removed the beach profile will be restored. Any adverse weather forecast will result in the area of works being vacated (including any plant / machinery) and therefore no likely significant effect.
Cumulative Effects				
12.1 Could this project together with existing and/or approved development result in cumulation of impacts together during the construction/operation phase?	Yes	This project will be undertaken at the same time as the Rhyl Central flood defences are being built	No	This project is spatially separate from the flood defence project and will be undertaken over a short time period.
Transboundary Effects				
13.1 Is the project likely to lead to transboundary effects?	No		No	

