

Cardiff Coastal Defences - Saltmarsh Management Plan Ground Investigation Works

Marine Licence (Activity 3)

April 2024

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Prepared for:
Cardiff Council



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Contract

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This report describes work commissioned by Cardiff Council. Jonathan Harrison and Hannah Webster of JBA Consulting carried out this work.

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Abréviations

CEMP	Construction Environmental Management Plan
EIA	Environmental Impact Assessment
SAC	Special Area of Conservation
SMP	Saltmarsh Management Plan
SSSI	Site of Special Scientific Interest
NRW	Natural Resources Wales

1 Introduction

1.1 Purpose of the Saltmarsh Management Plan

This Saltmarsh Management Plan (SMP) sets out the management approach, as agreed during consultation with Natural Resources Wales (NRW) for protection of the saltmarsh at the mouth of the Rhymney River and Severn Estuary to the east of Cardiff City Centre during the works to upgrade the flood defences at this location.

This version of the plan has been developed to protect the areas of saltmarsh during final ground investigation works prior to the main works taking place.

This management plan has been identified as essential mitigation within the Environmental Impact Assessment Report (EIA Report) and details other essential mitigation identified to avoid or minimise effects on the saltmarsh. Much of the proposed works and the surrounding saltmarsh habitat fall within the Severn Estuary Special Area of Conservation (SAC) and border the Gwent Levels Site of Special Scientific Interest (SSSI).

1.2 Aim of the Saltmarsh Management Plan

The aim of the Saltmarsh Management Plan in this phase of the works is to ensure that no works temporary or permanent take place within the saltmarsh and to protect the habitat from indirect impacts.

This will include pre- and post-construction monitoring and identify points at which intervention may be required. This plan is a live document which will be updated throughout the construction period. The plan will ensure that essential mitigation strategies required for safeguarding protected species and habitats are implemented as part of the contract.

This Management Plan will be included as an annex to the Construction Environmental Management Plan (CEMP) which will be developed by the Contractor prior to construction.

2 Summary of the Scope of Works

2.1 Site Location and Description

The proposed development comprises new fluvial and coastal flood defences along both banks of the River Rhymney on the outskirts of Cardiff from where the A4232 crosses the river down to the confluence between the river and the Severn Estuary. The defences will then extend along the Severn Estuary coastline, east and west from the River Rhymney. This area includes the DCWW Cardiff East WWTW and northwards along the eastern extent of the Lamby Way landfill site (see Figure 2-1).

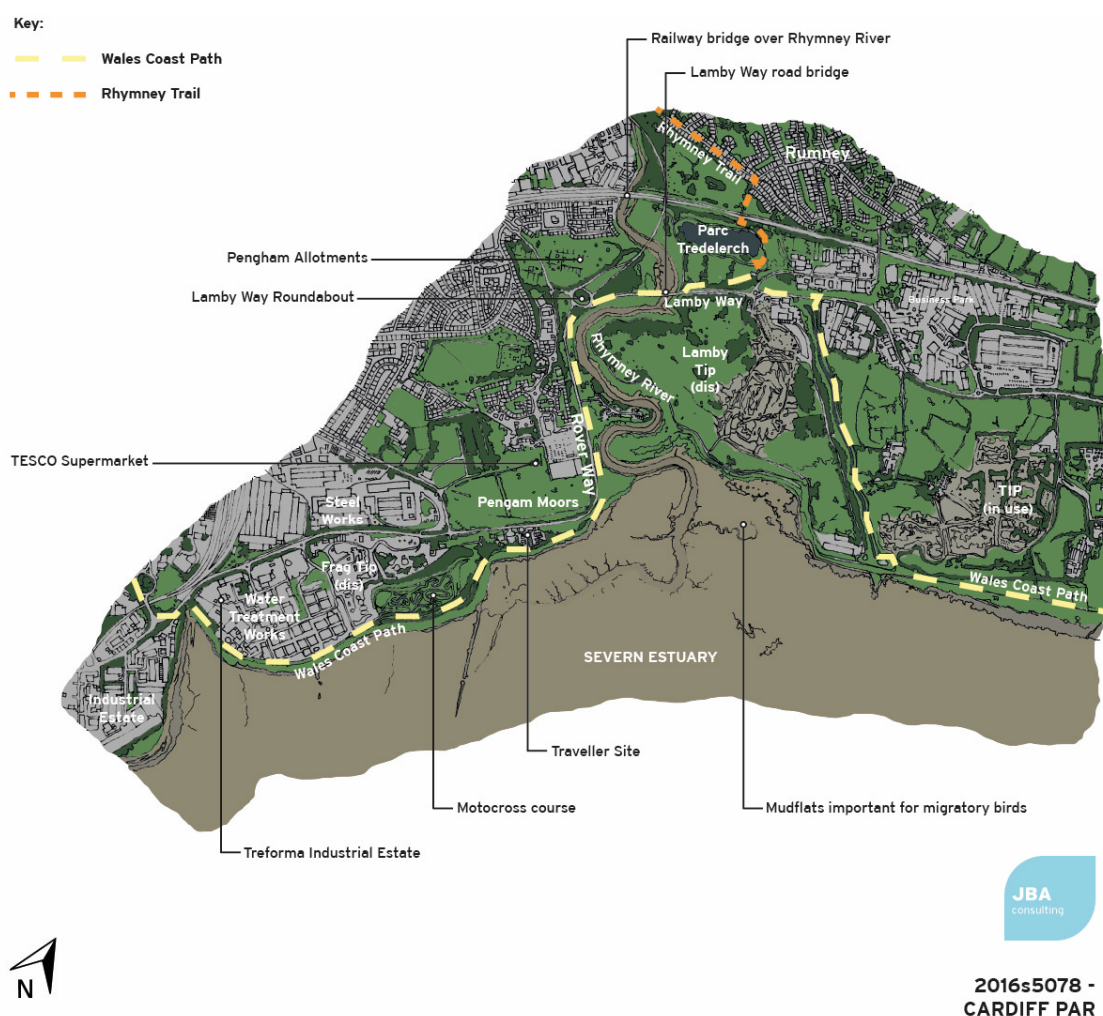


Figure 2-1. Location of Rhymney River and its confluence into the Severn Estuary with key features.

3 Pre-Construction Actions

The following conditions regarding the saltmarsh have been put in place during the planning process and the actions undertaken to date are detailed.

P1.1 - Confirm extents of valuable and sensitive saltmarsh habitat for future monitoring/ comparison. P1.2 - Conduct walkover survey to identify areas of erosion/accretion.

A site survey was undertaken on the 6th of November 2023 by Jonathan Harrison and Hannah Webster of JBA consulting and the current extent of the saltmarsh was determined. To more accurately map the western boundary of the saltmarsh Knights Brown took GPS points with the supervision of an ecologist in April 2024. This has ensured that these GI works will not require works within any saltmarsh habitat. The updated map is shown in Appendix A

P1.3 - Ensure mitigation of temporary works impacts is agreed. This should involve the production of a temporary works methods statement detailing mitigation measures for saltmarsh. This should also include details of the type of track matting to be used, the length of tracks required, and plant to be used on top of areas of saltmarsh.

These ground investigations will not require any works within the saltmarsh and as such tracking through the saltmarsh will not be required or permitted. The saltmarsh has been demarcated and the ECoW and the GI supervisor will be responsible for ensuring no works (temporary or permanent) take place within the marsh. It should be noted that it is likely that temporary tracks through the saltmarsh to facilitate the main works can be avoided and this is being developed.

P1.4 - Baseline invertebrate survey should be conducted to inform post-works monitoring – including Shrill Carder Bee.

A baseline invertebrate survey to include the Shrill Carder Bee will be completed in throughout the survey season (April - October). **No construction works which could damage the saltmarsh will be permitted prior to this initial survey taking place.** Until the survey is available the ECoW will be responsible for providing guidance on operations likely to damage the saltmarsh on case by case basis. Further surveys on the undisturbed saltmarsh will be undertaken between April and September.

P1.5 - A baseline rare plant species survey should be completed in the summer months prior to construction.

A baseline rare plant species survey will be completed in prior to any works being undertaken in the saltmarsh. **No construction works likely to damage the saltmarsh will be permitted prior to this survey taking place.**

P1.6 - Review the need for further mitigation measures in the Environmental Statement and habitat losses from temporary works should be revisited to identify further relevant actions.

A review of the Environmental Statement has been completed and no further mitigation measures have been identified.

It is intended that this document will be live throughout the construction period. It will be updated following the relevant baseline surveys and with further mitigation identified. Further enhancement measures will be included if opportunities are identified through the construction period.

4 Saltmarsh Management Plan

Table 4-1. Saltmarsh Management Plan

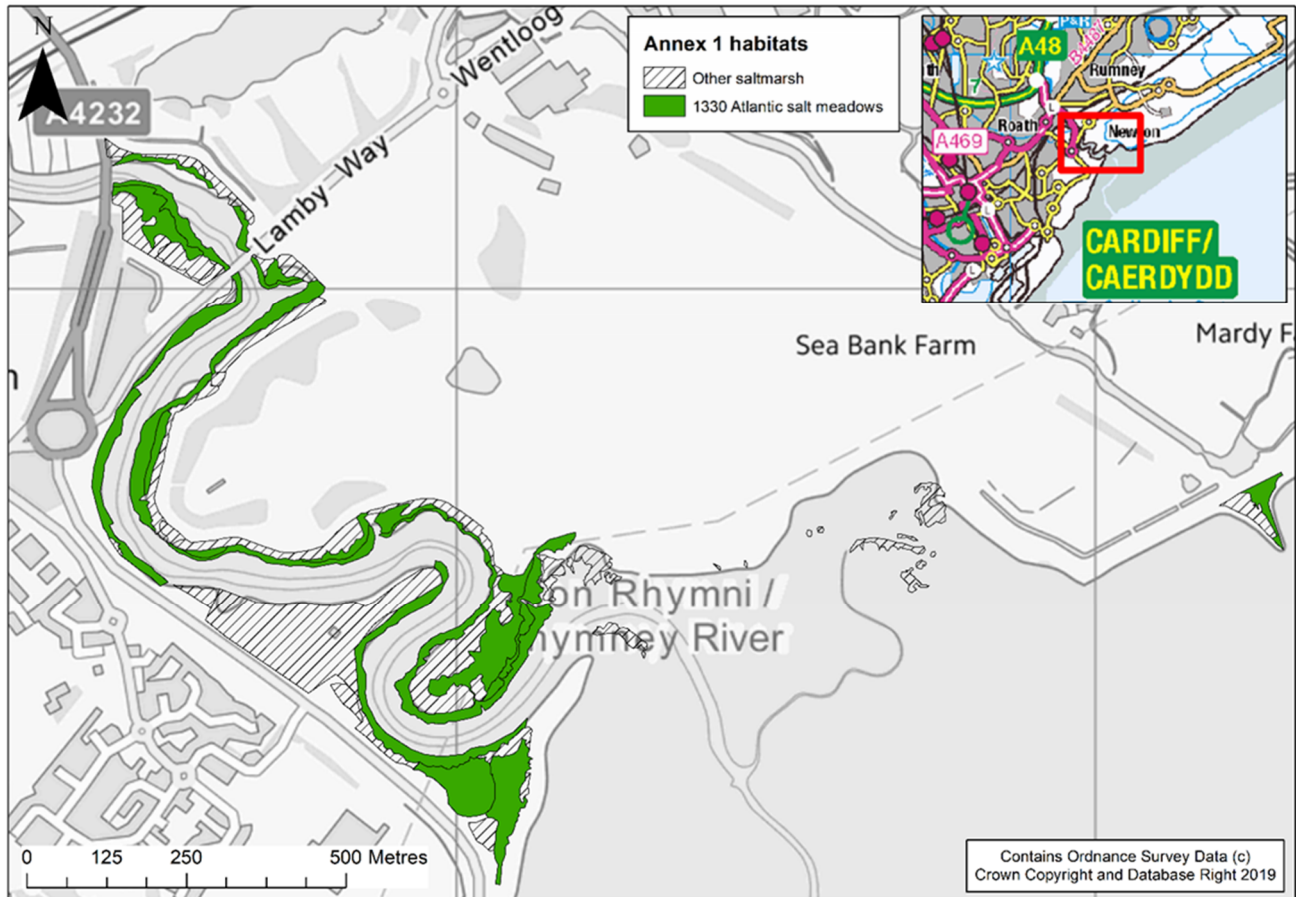
Ref.	Action	Responsibility	Ref to further information	Progress and further action	Sign off and date
Pre-Construction					
P1.1	Confirm extents of valuable and sensitive saltmarsh habitat for future monitoring/comparison.	Construction Contractor ECoW	Environmental Statement	Completed Updated 12/04/2024	6/11/23
P1.2	Conduct walkover survey to identify areas of erosion/accretion.	Construction Contractor ECoW	Environmental Statement NVC Survey		6/11/23
P1.3	Ensure mitigation of temporary works impacts is agreed. This should involve the production of a temporary works methods statement detailing mitigation measures for saltmarsh.	Construction Contractor	Environmental Statement	No GI works will take place within the saltmarsh. The saltmarsh has been demarcated and no temporary or permanent works will be permitted within the saltmarsh.	27/02/24
P1.4	Baseline invertebrate survey should be conducted to inform post-works monitoring – including Shrill Carder Bee.	Construction Contractor	Environmental Statement	Will be completed in between April and September 2024.	
P1.5	A baseline rare plant species survey should be completed in the summer months prior to construction.	Construction Contractor	Environmental Statement	Will be completed before any works likely to damage the saltmarsh are completed.	

Ref.	Action	Responsibility	Ref to further information	Progress and further action	Sign off and date
During Construction					
C1.1	Presence of a suitably qualified Ecological Clerk of Works (ECoW) is required to ensure that all mitigation measures are implemented	Construction Contractor ECoW	Environmental Statement	ECoW appointed by Cardiff Council	
C1.2	Best practice construction methods (CIRIA 2015) will be used including the use of appropriate pollution controls (i.e. Guidance for Pollution Prevention (GPPs)), such as construction drainage, a strict re-fuelling protocol and removal of all loose materials from the intertidal area	Construction Contractor	Environmental Statement		
C1.3	No works (temporary or permanent are permitted within the saltmarsh.	Construction Contractor	Environmental Statement		

Ref.	Action	Responsibility	Ref to further information	Progress and further action	Sign off and date
Post Construction (Permanent Works)					
PC1.1	Surveys of the saltmarsh plant species composition will be important to inform the restoration of the saltmarsh and to demonstrate enhancement in the areas of saltmarsh that are retained. Monitoring of rare plant species should be undertaken to inform management practices. This should take the form of a fixed-point quadrat survey to record abundance, as well as an updated NVC survey to record habitat type.	Contractor – survey subsequent two years after completion of works.	Environmental Statement		
PC1.2	Monitoring of saltmarsh post-construction to inform future management practices and enhancement opportunities. Methods and frequency of monitoring to be agreed with NRW, and would likely include surveys of accretion/erosion, grazing pressure etc.	Construction Contractor	Environmental Statement		
PC1.3	Post-construction invertebrate survey to be completed in subsequent years post-construction to inform management practices.	Construction Contractor	Environmental Statement		

A Saltmarsh Maps

A.1 Extent of Saltmarsh





LOCATION PLAN



FOOTPRINT OF ALL PERMANENT
WORKS AND PROPOSED GI LOCATIONS
SCALE 1:5000

General Notes

1. All dimensions are shown in millimetres unless otherwise stated and levels are in metres to Ordnance Datum.
2. Do not scale from drawings.
3. Works and working methods shall conform with all relevant permits and adhere to the pollution prevention guidelines.
4. Drawings shall be read in conjunction with the project specification.
5. Contains Ordnance Survey data © Crown copyright and database right 2020. Levels and contours shown on the drawings are taken from the DTM provided by Future Aerial following their Drone Survey in 2015.

LEGEND

- UPDATED SALTMARSH EXTENTS (KNIGHTS BROWN GPS LOCATED)
- EXPLORATORY POINT

SCHEDULE 2 PROPOSED ACTIVITY 3 GI WORKS

ID	Easting	Northing
PH2 A0	321606.121	175980.083
PH2 A1	321769.411	176143.737
PH2 A2	321872.798	176318.607
PH2 A3	321859.394	176456.483
PH2 TP1	321585.429	175907.239
PH2 TP2	321670.876	176043.277
PH2 TP3	321831.590	176223.008
PH2 TP4	321903.512	176396.657
PH2 TP5	321848.472	176520.456
PH2 TP6	321945.208	176702.295
PH2 TP7	322039.932	176881.289
PH2 TP8	322069.866	177092.458

Comments	
PO2	Saltmarsh colour change, legend updated, table updated, title updated
Rev:	Date: 1/10/2024 Drawn: GP Designed: JH Checked: Approved:
Comments	
PO1	Shared for information
Rev:	Date: 1/10/2024 Drawn: KR Designed: JH Checked: JH Approved: JK
Client Approval	
A - Approved	
B - Approved with Revisions	
C - Do Not Use	
Purpose of Issue	Status
For Construction	03

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CARDIFF COASTAL DEFENCES

SALTMARSH GI POINTS

for



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Scale:	Drawn: K. Ray	12/04/24
AS SHOWN @ A1	Designed: J. Harrison	12/04/24
	Checked: J. Harrison	12/04/24
	Approved: J. King	12/04/24
Digital File Name:	CCD-JBAU-XX-00-DR-EN-03-PO1-0001	
Drawing Number:	CCD-JBAU-XX-00-DR-EN-0002	Revision
		PO2

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