	Health & Safety - Designer's Hazard Record	
	Project Title Isles of Scilly Flood Defence and Dune Management Project – Porth Loo	Project Code UA008878-ARC-XX-XX-HS-CE-0261-P2

Assessment Coverage:

The installation of a 110m rock armour revetment along the northern half of Porth Loo beach

1. Scope of Commission and Assessment of Coverage:

The embankment along the northern half of Porth Loo beach is susceptible to erosion and overtopping during storm events. The loss of the embankment would lead to undermining of the road; would increase coastal flooding risk to properties and the boat yard as well increase the vulnerability of Lower Moors SSSI to saline intrusion.

Modelling of the water levels and wave environment has been undertaken for the Isles of Scilly to identify the 1 in 200-yr return events for Porth Loo beach. The modelling results have been utilised in the design of the rock armour revetment and the production of design drawings accordingly.

2. Brief Description of the Works:

1. Carry out a walkover of the site and conduct a visual inspection of the existing conditions along the beach.
2. Design of a rock revetment, to provide protection for a 1:200-yr joint probability event.
3. Installation of new rock armour in accordance with the design to provide protection for the existing embankment

3. Key Risk Reduction measures taken during design process:

1. Hazard markers added to drawings to identify know utility services or other known hazards.

4. Significant Project Specific Hazards Remaining:

- A. Working adjacent to water. Risk that access or egress could be cut off. Working in an exposed location which could expose works area to wave/storm events.
- B. Soft & unstable ground. Risk excavations within tidal zone could flood and become unstable. Beach material likely to contain soft spots that could cause issues for machinery, especially during high tides.
- C. Public Beach. Risk of public entering the works area
- D. Services. There is an existing outfall located on the beach which is believed to be discontinued but unconfirmed.
- E. Unstable armour stone. Risk rocks may be unstable when initial placed. Rocks should be placed by a machine and their stability ensured before operative's approach
- F! Porth Loo SSSI. Cliff and foreshore designated a Site of Special Scientific Interest. Works shall not impact upon designation.

5. Specific Construction Requirements

1. Site access and works will be tide dependant and should be via the slipway in the boat yard (subject to approval).


2. Neither machinery or foot traffic is to pass over the existing embankment to avoid further degradation.
3. At no time are the works to affect the ability for stop logs to be deployed across the slipway when required.

6. Means by which significant hazards conveyed to contractors and others:


1. Hazard markers added to drawings



Date of Review

Assessed by:

Name G. McDonnell Signature  Date 27/09/17

Reviewed by:

Name Ian Cooke Signature  Date 27/09/2017

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Ref	Activity & Hazard	Level of Risk (optional)	Design Input to Eliminate or Reduce Hazards, and Hazards Remaining	Residual Hazard?
A	Working adjacent to water – machinery could be cut off & possibility of inundation of the site due to wave action		This is an unavoidable consequence of the works and contractor is to mitigate the associated risks.	Yes
B	Soft & unstable ground – risk of machinery overturning		This is an unavoidable consequence of the works and contractor is to mitigate the associated risks	Yes
C	Public beach – risk of public entering the works area.		This is an unavoidable consequence of the works and contractor is to mitigate the associated risks.	Yes
D	Services – existing manholes on the beach. Other services may be present.		This is an unavoidable consequence of the works and contractor is to mitigate the associated risks.	Yes
E	Unstable rock armour – rocks may be unstable when initial placed. Rocks should be placed by a machine and their stability ensured before operative's approach.		This is an unavoidable consequence of the works and contractor is to mitigate the associated risk.	Yes
F	Porth Loo SSSI- Works shall not impact upon designation		This is an unavoidable consequence of the works and contractor is to mitigate the associated risk.	Yes