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# Cuckmere Estuary Project

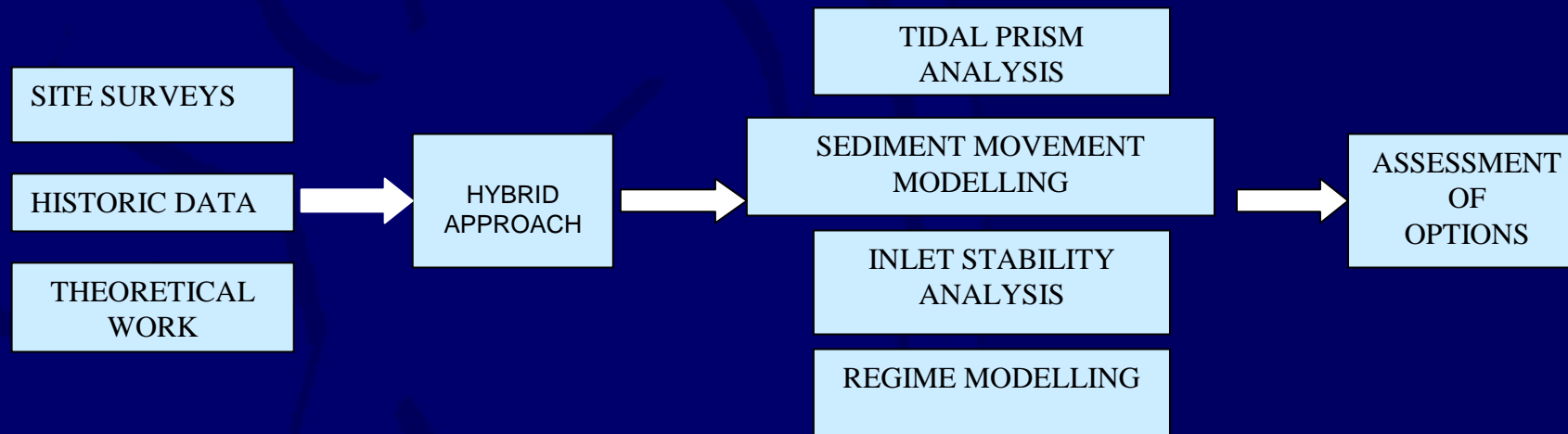
# Methodology

## FCDPAG Appraisal Process



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# Technical



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# Prediction of Extreme Wave Height at the Inshore Location

ABPmer

Dated: April 2005

Undertaken to derive inshore wave data to allow an assessment of long-shore sediment transport.

This report provides details of the wave transformation approach used and the output wave data



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# Assessment of Inlet Stability

ABPmer

Dated: April 2005

Draws together;

- 1) long-shore transport modelling; and
- 2) Inlet stability assessment (Literature Review)

Provides an understanding of the processes controlling the behaviour of the shingle ridge and how this may change under different management scenarios.



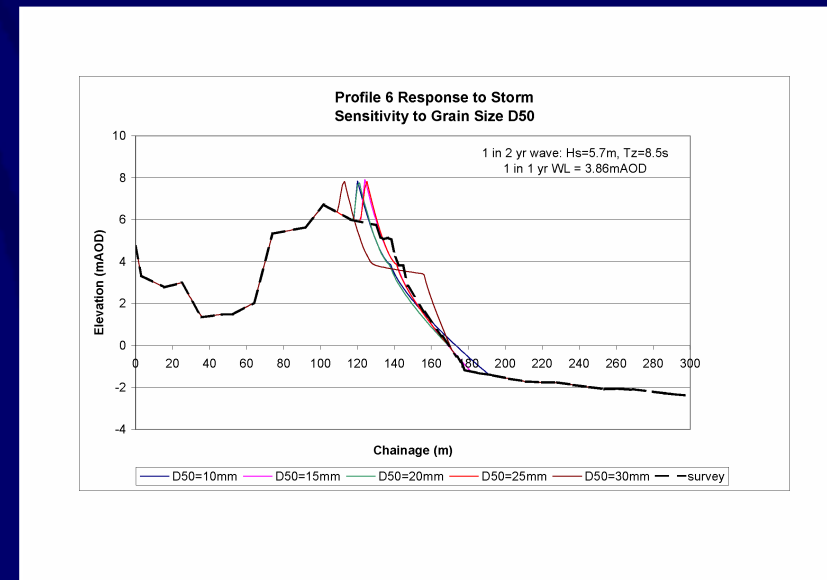
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# SHINGLE Modelling

Babtie Brown and Root (now Jacobs)  
Dated: January 2005

Application of HR Wallingford's SHINGLE model to assess the response of various sections of the beach to extreme storm conditions, to understand the likelihood of beach material rolling over beyond the existing shingle ridge.

Wave data was incorporated from ABPmers Wave transformation studies.



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## Historical Trend Analysis

Royal Haskoning & Prof John Pethick

Dated: April 2005

Historical Trend Analysis (HTA) was used to assess the morphological changes that have occurred within the Cuckmere Estuary (downstream of the Exceat Bridge - A259).

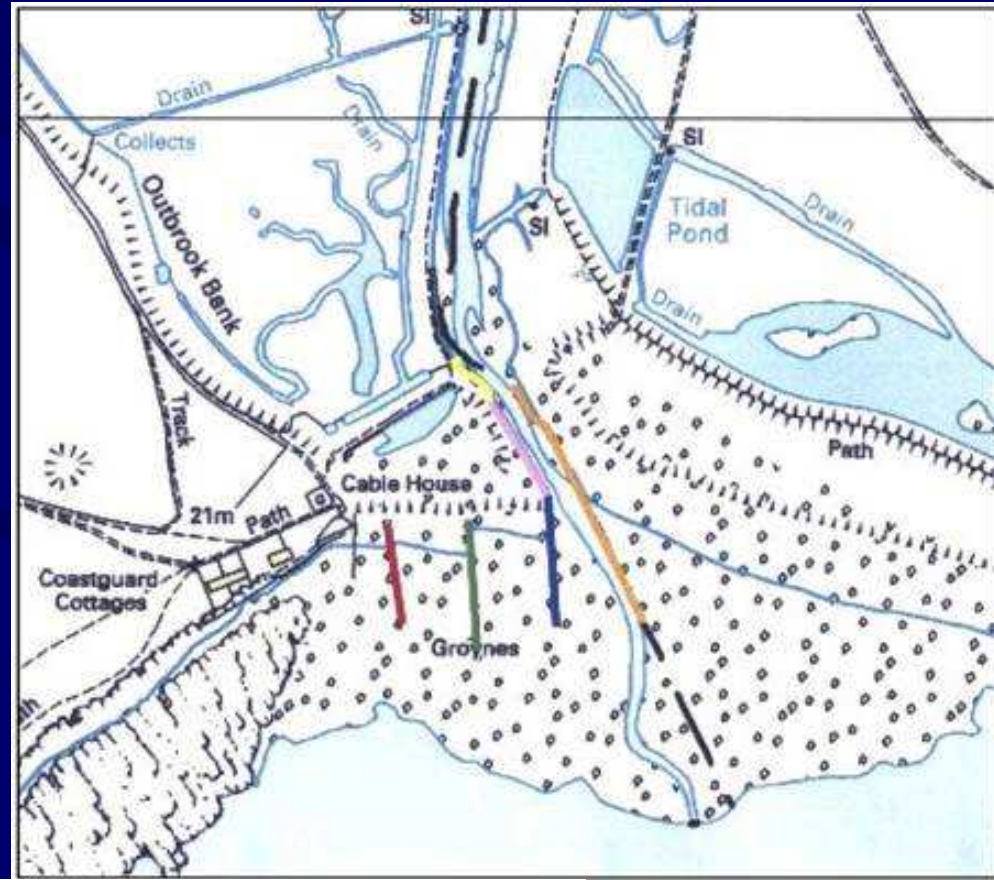
This work has been undertaken by Royal Haskoning in partnership with Professor John Pethick.



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# Historical Trend Analysis

Dates of construction and modification of structures at the mouth of the Cuckmere

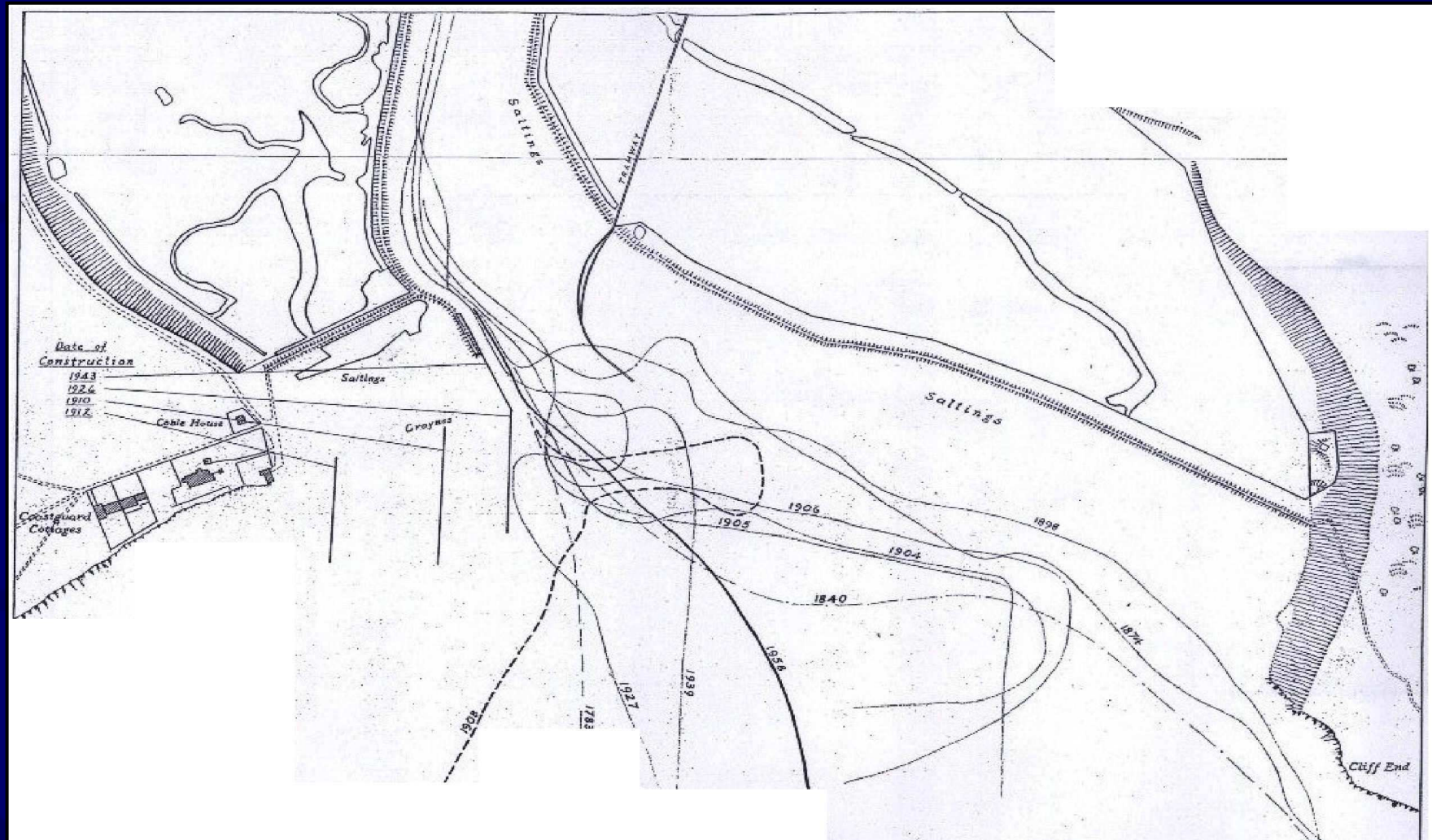


Date	Description
1910	Wooden groyne built.
1912	Wooden groyne built.
1926	Wooden groyne built in 1926. Groyne demolished and new training wall constructed in 1973.
1943	Groyne built. Training wall constructed in front of groyne in 1984.
1961	Breastwork extended and block revetment added to this section.
1971	Eastern Training wall built



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## Historical Trend Analysis



**Changes in the course of the mouth of the Cuckmere since 1783**

# Channel Regime Assessment

Royal Haskoning & Prof John Pethick

Dated: 2005

Regime Assessment considers the dimensions of the central estuarine channel which would develop if the floodplains downstream of Exceat Bridge were restored to tidal processes and draws on the findings of the Historical Trend Analysis.

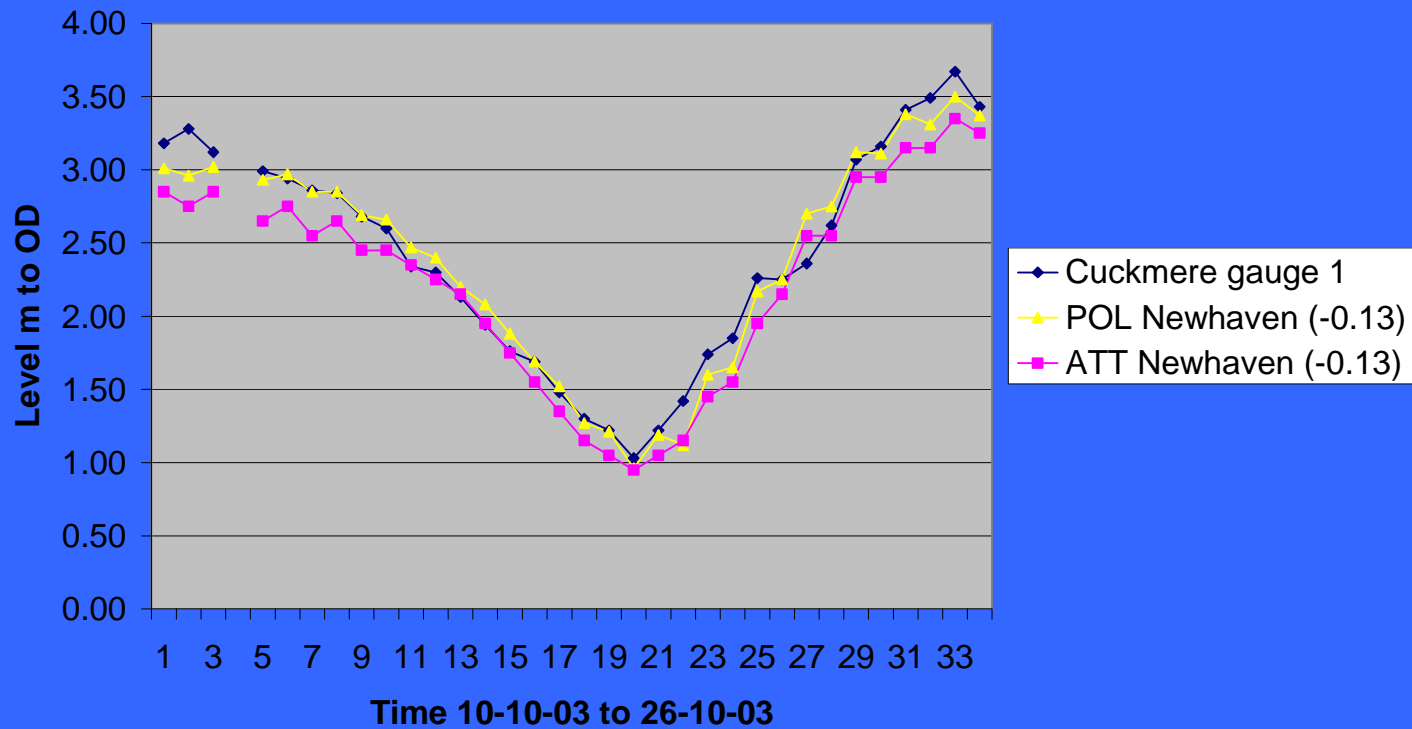
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# Tide Level Assessment

## Comparison of predicted and measured high waters



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# Any questions?



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