

# Sidmouth Coastal Scheme

## *The Beach Management Plan*

The Sidmouth and East Beach Management Plan (BMP) detailed how the beach and coastal frontage should be managed to maintain flood protection to communities whilst protecting the beach amenity and the local environment.

The BMP undertook extensive analysis of monitoring data. This included

- History of flooding and defences
- Land, utility and asset ownership searches
- Review of other local plans affecting these works
- Wave and water level climates
- Sediment transport rates and mechanisms
- Climate change
- Cliff erosion
- Influence of cliff on the river defences
- Environmental characteristics
- Previous design of existing elements of the Coastal Defences
- Condition assessment of existing structures
- Calculation of overtopping
- Beach profile and levels
- Maintenance regime
- Identification of issues in each frontage area.
- Investigation and appraisal of options
- Selection of Preferred option.

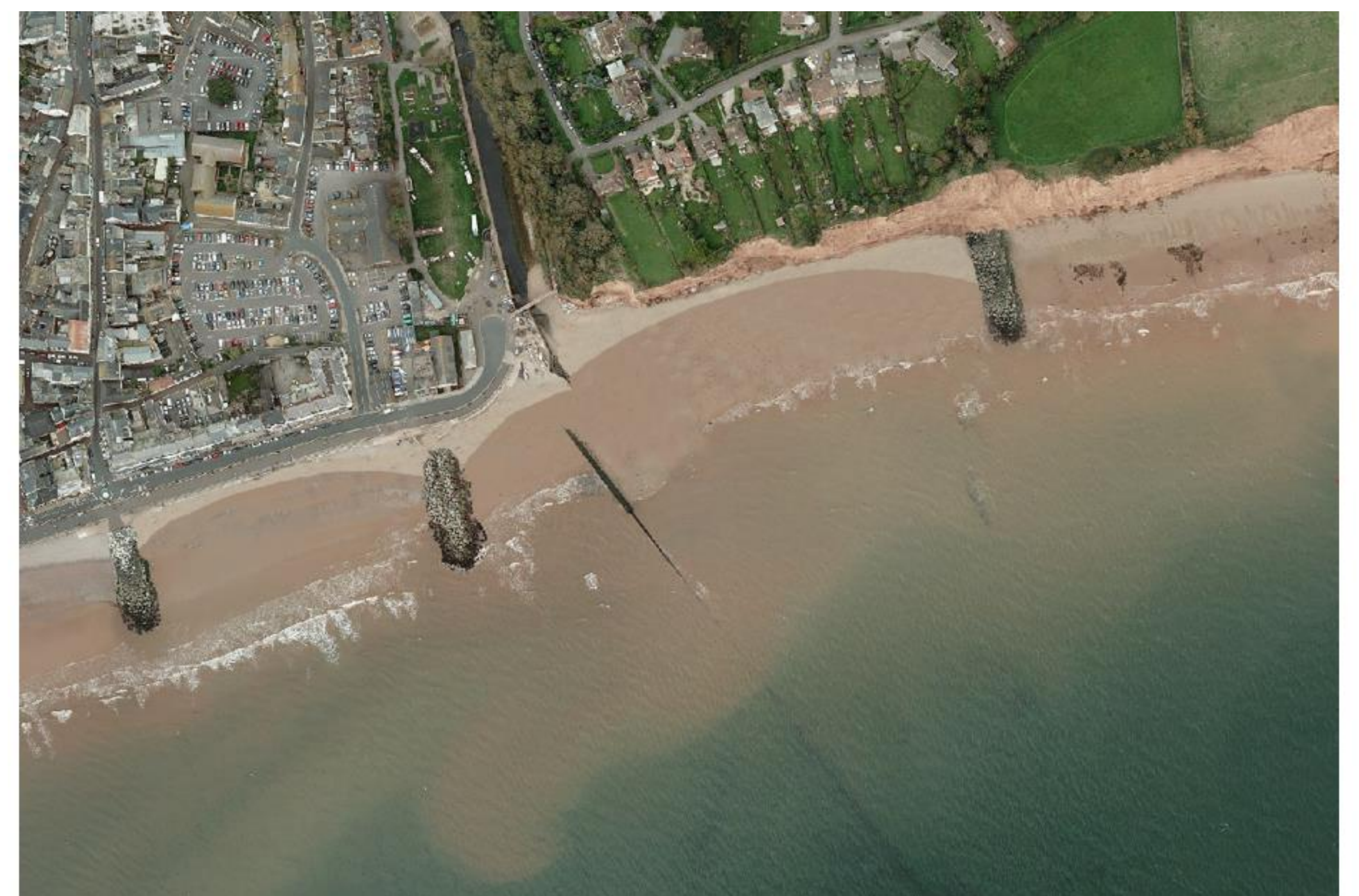


## Options Appraisal

The Sidmouth coastline was divided into four separate frontages allowing the options to be assessed in terms of their effectiveness and viability in each specific environment.

The coastal frontage varies from the unconstrained beach at Jacobs Ladder, rock revetments at Chit Rocks to limit erosion, to the offshore breakwaters creating sheltered waves and bigger beach behind; and rock Groynes at the town beach, to the River Sid training wall and cliffs at East Beach.

A long list of options were assessed within the BMP with consideration for the technical, environmental and economic factors. This was reduced to a practical short list. Public consultation and sensitivity testing were also conducted to gauge feedback from each of the short-listed schemes.



## The Preferred Option

The preferred option considered the various risks and pressures facing the different parts of the coastal frontage, such as overtopping, outflanking, erosion and sediment loss as well as aspects such as affordability, buildability and impact on the environment.

The preferred option for each frontage was agreed as the following:

- **Frontage A: Maintain Chit Rocks Revetment and clear promenade**
- **Frontage B: Renourish the shingle beach and provide protective wall**
- **Frontage C: Restoration and maintenance to the River Sid flood wall and repairs to the Training Wall**
- **Frontage D: Build Rock groynes and beach to reduce cliff erosion**

This is considered to be the most suitable option given the requirements to balance the technical implementation, environmental acceptability and the economic case. Other options assessed did not meet the overall need of the scheme.

