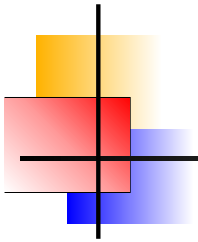


Clacton and Holland Beach Hut Association

Jeremy Shiers

27 October 2012

Holland Haven Then And Now

Kings Parade Then And Now

Walton 9 May 2012

Holland Haven 9 May 2012

Flags Cafe 9 May 2012

North Clacton Pier 9 May 2012

South Clacton Pier 9 May 2012

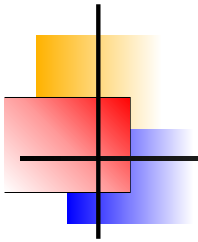
Length and Spacing Groynes

	Length	Length short	Spacing
Naze north of cafe	80		80
Naze south of cafe	116		109
Walton opposite Standley road	96		112 to 143
Walton south of Albion groyne	95		109
Frinton opposite Cliff Way	122	67	59
Frinton Whalings	120	58	58
Frinton to Holland	Effectively no breakwaters		
Holland Haven	55	31	67
Gunfleet Sailing Club	44		78

Queensway 2004

Queensway 2007

Queensway 2012



TDC Cost Of Coastal Defense Repairs

Location	Start	End	Length	Cost	£/Meter
Queensway	Feb-07	Aug-07			
Hazlemere Road	Nov-08	Jun-09	150	£1.2M	£8000
York Road	Sep-09	May-10	68		
Holland Haven	Nov-10	Jun-11	80	£1.1M	£13750
Cliff Road	Nov-11	Jun-12	230	£2.2M	£9565
Gas House Quay	Nov-11	Jun-12	230	£2.2M	£9565
Crag Walk	Jan-11	Apr-11	110	£1.2M	£10909
Cliff Parade	Oct-08	Oct-08	130		

Holland Haven 2011

bruary 10, 2011 (C)

clactonandfrintongazette.co.uk

Digger drama as hole opens in promenade

WEDGED: The scene of the accident

Picture: ADRIAN RUSHTON (C040914-31)

A LARGE digger was left balancing on a knife-edge when it slipped into a hole.

The excavator fell into the hole on Lower Promenade, Holland-on-Sea, while doing improvement work to a section of sea wall near the Gunfleet Boating Club.

John Russell, Tendring Council's assistant head of technical services, said the edge of the concrete slab the machine was running on broke off and one track slipped into the hole that appeared under the promenade.

"One of the council's officers arrived immediately after the incident," he said. "Fortunately, no one was injured and it was unforeseeable. The company's health and safety officer investigated and it has been recorded as a near miss."

Another machine had to be brought in to pull the digger out. An investigation is underway.

During the programme of work, the construction area has been closed off to the public, including the access slope. It is hoped the work will be completed this month.

TDC Money Spent Repairing Groynes

	Holland	Walton	Frinton
2004-05	£4067.40	£870.00	£1535.71
2005-06	£10253.26	£2362.00	£1048.84
2006-07	£5200.84	£1547.91	£1147.00
2007-08	£3220.27	£4076.74	£1128.37
2008-09	£4651.59	£8427.32	£1328.70
2009-10	£12249.02	£10051.88	£2434.19
2010-11		£3566.78	£759.84
2011-12		£13554.70	£1339.64
Total	£39642.38	£44457.33	£10722.29

High Tide South Pier

High Tide North Pier

High Tide Flags Cafe

High Tide Holland Haven

St Oysth

St Osyth Alan Underwood's Shop

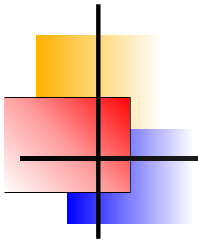
High Tide EastCliff Walton

High Tide EastCliff Walton

High Tide EastCliff Walton

High Tide EastCliff Walton

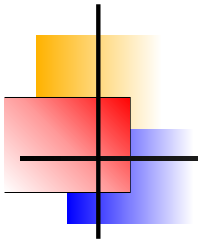
High Tide EastCliff Walton



From TDC

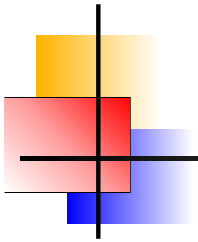
My case is from Holland Haven to Clacon Pier the groynes were never designed correctly and worse not maintained correctly.

- Too short
- Too far apart
- Too low
- Boards are not bolted on
- Have been allowed to disintegrate



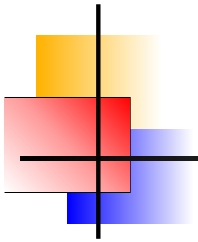
From TDC

One of the main reasons for this is that there is a 'sediment divide' at Holland with beach material being transported away from the frontage in both north east and south west directions. This is caused by the alignment of the coast at this location, the tidal and wave conditions that dominate the frontage which produce tidal currents channelled long shore by the off shore sand banks. It is estimated that this wave driven transport results in the loss of about 25000m3 of sediment each year and that the beaches are now lowering at about 150mm per year.



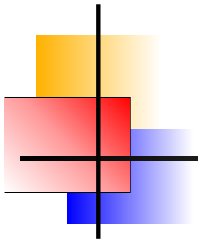
From TDC

The sediment divide that you mention in your letter is dependant on (and driven by) the changing direction of wave approach. The sediment divide is not a typical divide where material moves either direction at a point along the coastline.



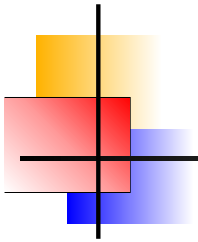
From TDC

The lowering of the beach since the 1960s has lead to increased exposure of the sea walls to wave action and this in turn is causing accelerated scour at the base of the walls. The concrete and wooden groyne systems that were intended to control long-shore movements of sediment are *NOW SET TOO HIGH*, several parts of these have either fallen over or have become unstable and have been removed for safety reasons, moreover the volumes of sediment available are insufficient to maintain a layer of sand sufficiently thick to absorb wave energy at the wall.
The remaining life of the structures is now very limited and the council has promoted a number of remedial patch and repair schemes across the frontage to try to extend the life of the most vulnerable sections of wall.



From TDC

Study work has looked at the options available to prevent a sea wall failure in the long term. Replacing the existing concrete pile and wooden boards has been considered but unfortunately this option does not work within the context of the lowered beaches. Beach recharge would be necessary and this would only be effective with such short groynes if the beach material were gravel which is less easily transported. The beaches at Brighton are an example of this.



From TDC

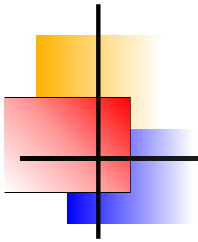
The conclusion of the consultants extensive study works is that beach recharge is needed to prevent the sea walls from being undermined.

1. With a gravel beach short groynes constructed of rock will work best to hold the beach in place.
2. With a sand beach large fishtailed groynes or off shore groynes, similar to those at Jaywick, is the best option for holding the beach in place against the seawall.

The cost of these two options is very similar and the preferred option selected was sand beaches with breakwaters.

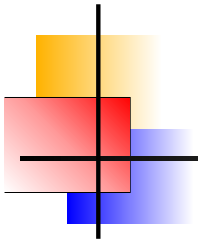
High Tide EastCliff Walton

High Tide EastCliff Walton



How Did We Get Here

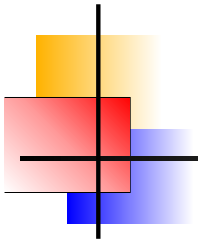
- 1992 UK Signs Habitat Directive
- 2001 DEFRA created
- 2004 Sarah Nelson Head of Flood Management writes Maintenance of Uneconomic Sea Flood Defences: A Way Forward - Dated 1 April 2004!
- 2004 David Collins and others write 'Making Space For Water'
- 2001 until 2011 DEFRA/EA only fund emergency repair work for Holland sea wall and nothing for groynes



Summary

Properly constructed groynes are essential for protecting a sea wall

- Length
- Spacing
- Must be 1 meter above spring high tide for 5 meters from sea wall



Summary

EA Anglian Eastern 12/13 published programme

- £40 million Implementation of Clacton and Holland Coastal Management Plan
- £17 million habitat creation