EASTBOURNE BOROUGH COUNCIL

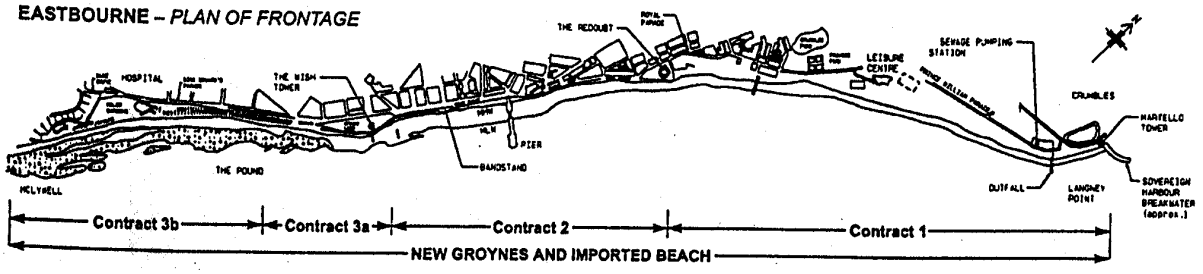
COAST PROTECTION SCHEME

Late 1990s

INFORMATION PACK

The proposed Coast Protection Scheme on Eastbourne seafront had been widely covered in the local and national media. Genuine concern about the future of the environment may have led to emotive statements about the source of the materials to be used.
The purpose of this pack is to set out the Borough Council's plans in a simple and factual way.

- Our coastal defences need urgent improvement. We plan to spend over £20m on rebuilding them, to last well into the next century.
- Some suggest that we should use concrete, steel, plastic and other materials.
- Others suggest that oak should be used.
- Consulting Engineers, who have spent four years looking at the scheme, believe the best choice is a tropical hardwood.



WHY IS THE SCHEME NECESSARY?

+ Eastbourne is protected from the sea by its shingle beaches. The power of the waves is used up in moving this shingle. Shingle is a naturally occurring material carried by the sea from the south west and deposited on our beach.
+ For many years timber groynes have slowed down the passage of the shingle as it is was washed along the seashore. This has ensured that we always have sufficiently wide beaches to be effective.
+ Now the natural supply of shingle has diminished. There is not enough left on the beach to absorb the impact of stormy seas.
+ Heavy storms over the last 20 years, especially of the winter of 1 989/90 have washed away the shingle. As a result the groynes have gradually collapsed and exposed the foundations of the sea wall.

URGENT ACTION IS NEEDED TO STOP THIS DAMAGE AND TO REMOVE THE THREAT OF FLOODING TO LOW LYING AREAS OF THE TOWN.

What has been considered?

+ In 1990 the Council appointed Posford Duvivier, Consulting Engineers of international repute, to study the situation and to recommend a coast protection strategy which will keep Eastbourne safe well into the next century.

Posford's engineers and environmental scientists considered several methods to achieve this:

(i) Continue to maintain the existing system of groynes.
This is no longer a feasable technical option.

(ii) Build offshore breakwaters from rock and import shingle to build up beaches. *This is a high cost option with accompanying ecological damage to Holywell Reef.*

(iii) Build large rock groynes with smaller, intermediate timber groynes and import shingle.
Substantial visual impact and environmental implications.

(iv) Build large concrete groynes with smaller, intermediate timber groynes and import shingle.
Technically inefficient and substantial visual impact.

(v) Build larger, more massive timber groynes and import shingle. *Preferred option.*

(vi) Import shingle and include continuous mechanical movement of large volumes of shingle along the seafront.
Major losses of natural shingle resource, technically nonviable and high environmental cost.

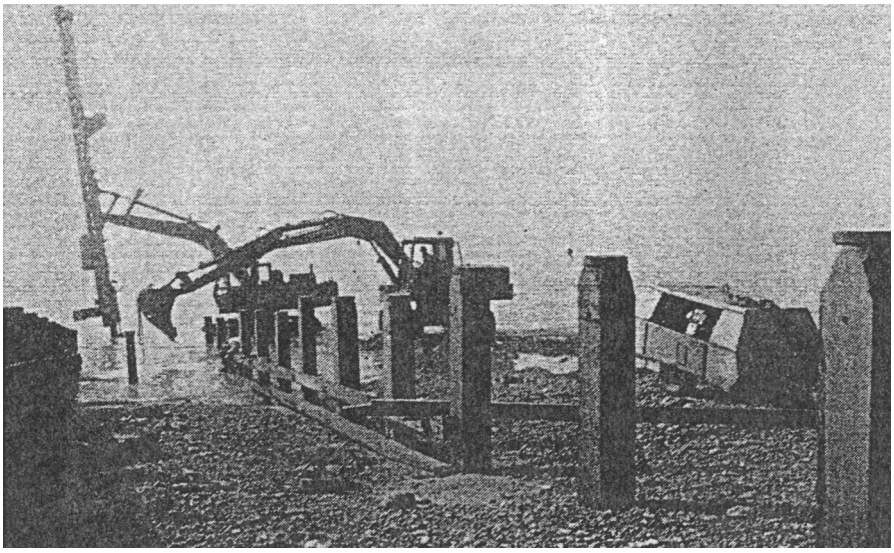
(vii) Improve the sea wall to withstand the forces of the sea.
Substantial visual impact and loss of beach for tourism.

ON BALANCE IT WAS DECIDED THAT BUILDING BIGGER TIMBER GROYNES AND IMPORTING SHINGLE WAS THE BEST OPTION ON ENVIRONMENTAL, ENGINEERING AND COST GROUNDS.

WHAT ARE THE PROPOSALS?

+ The scheme includes building timber groynes, putting shingle on the beach and repairs to the seawall.
+ The old, relatively small groynes only worked while there was a natural supply of shingle from the south west.
+ The new groynes must be stronger to hold the 600,000 cubic metres of new shingle to be placed along the sea front.
+ There must be no risk of groyne planks being carried off in storms so that more shingle, which is already a 'diminishing resource', is lost.
+ Scientists from Hydraulic Research at Wallingford carried out tests with models of Eastbourne's shore line to make sure that the sea would not go over the top of the proposed defences.
+ The groynes will be larger than the present ones , and designed to stand up to the rise in sea levels and heavier storms predicted in the future.

THE COUNCIL HAS SPECIFIED THAT ALL TIMBER USED IN THE WORK WILL BE FROM A WELL MANAGED SOURCE.



GREENHEART GROYNE UNDER CONSTRUCTION AT HYTHE

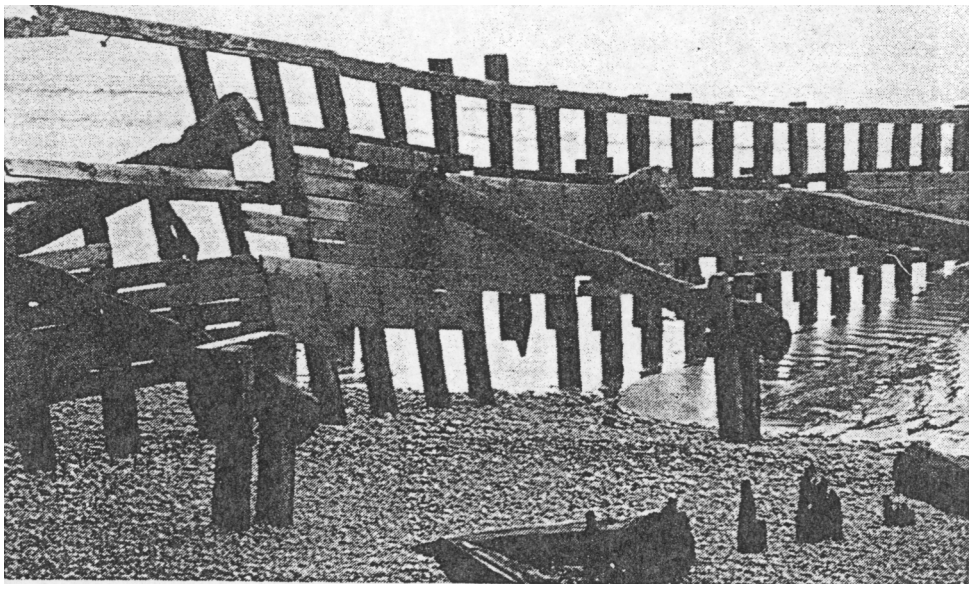
WHICH IS THE BEST TIMBER FOR GROYNE CONSTRUCTION?

+ Research shows that on technical grounds tropical hardwoods are the most suitable for groynes. Greenheart is considered to be one of the best and structures built from it need hardly any maintenance. It is hard, durable, resistant to rot, abrasion and attack by marine woodworm.

+ On environmental grounds, Greenheart lasts up to twice as long as oak, meaning that for oak there would need to be a further replacement of another 600Gm^3 of wood, in say, twenty years. Greenheart has been used around our coasts for many years at places including Bexhill, Hythe and Bognor Regis.

+ Alternative designs using alternative materials have been submitted by tenderers for consideration.
+ The Leader of the Council invited anybody interested to submit evidence and researched suggestions as to the type of timber to be used. These suggestions will be carefully considered when the tenders are evaluated.
+ The choice of timber will be evaluated by the Ministry of Agriculture, Fisheries and Food, who will pay for 75% of the work.

IT IS NOT OUR INTENTION TO IMPROVE EASTBOURNE'S ENVIRONMENT TO THE DETRIMENT OF OTHERS.



COLLAPSED OAK GROYNE

WILL EASTBOURNE'S PROPOSALS DESTROY A TROPICAL RAINFOREST?

NO. WE BELIEVE THAT BY IMPORTING TIMBER FROM A WELL-MANAGED SOURCE, EASTBOURNE WILL ACTIVELY BE HELPING TO CONSERVE THE RAIN FOREST.

+ Greenheart grows mainly in Guyana. The forests there provide a source of income to local people. This ensures that the forests are looked after. If the wood is not sold, then people could clear the forest and use the land for something else. The World Bank, the Overseas Development Administration and the London Economics Centre, all agree with this.
+ It is vital to get timber from a "well managed" source. This means one in which logging and other forestry operations are properly controlled. Our experts have investigated sources in Guyana.
+ The operator which our experts are considering, Demerara Timber Ltd., has its own Green Charter. It is approved as well managed by independent forestry inspectors, SGS Forestry. The inspectors say that only around 3 trees are taken out of an area the size of a football field, once every twenty years. New young trees are regrowing all the time.
+ The World Wide Fund for Nature's Own newsletter (February 1995) states that 17 different forest areas in the world, have been verified as well managed. These include DTL's greenheart operation in Guyana.

IS THERE CERTIFICATION OF TIMBER SOURCES?

+ Forest certification is a complicated and difficult area. The current situation is that the World Wide Fund for Nature (WWF) has set up the Forestry Stewardship Council (FSC) as an independent body to accredit certifiers.
+ FSC have set out princples for those wishing to be awarded their accreditation.
+ S.G.S. Forestry are expecting to become one of the companies accredited by FSC.
+ DTL introduced their Green Charter before the requirements for FSC registration were finalised.
+ Except on a tiny scale there are no forests currently certified by the FSC producing timber suitable for the scheme. This applies equally to tropical hardwoods or European alternatives including oak.

WHO HAS BEEN CONSULTED ON THE TIMBER ISSUE

World Wide Fund for Nature
Timber Trades Federation
Overseas Development Administration
Edingburgh Centre for Tropical Forests
S.G.S. Forestry
Soils Association
Natural Resource Institute
U.K. Tropical Forum?
Forestry Commission
Aitken & Howard
Wiltshire Timbers Ltd
Atkin & Cripps
Demerara Timbers Ltd
Willems Trading Co
Ecological Trading Co
Ministry of Agriculture, Fisheries and Food Marine Environmental Protection Unit
Building Research Establishment
Timber Research and Development Association
Oxford Forestry Institute
Forests Forever
The World Bank
Woodworkers Association for Rainforest Protection
The Government of Guyana
Friends of the Earth