## Mid Wales Regional Committee Mid 03-02 (p4)

Date: 17 May 2002

Time: 10.30-1.30pm

Venue: Neaudd Pendre, Tywyn

#### TYWYN COASTAL PROTECTION SCHEME

Summary of the present situation to be presented to the Mid Wales Regional Committee by Bob Daimond, Surveyor, Gwynedd Council

#### 1. BACKGROUND

- 1.1 In order to assist Committee members in understanding the present situation regarding the coast protection scheme in Tywyn, the history of the present defences and the current proposals is summarised here.
- 1.2 The wall between Warwick Place and Neptune Road was built in the middle of the nineteenth century. Tywyn itself was more than a kilometre from the sea at this time. The Victorian Promenade was built in 1889 and again, this was more of an amenity rather than a sea wall and it is likely that the sea did not reach the wall at all during the first thirty years of its life.

- 1.3 By 1900 the Sandilands Esplanade had been built to the north of Sandilands Road. This collapsed into the sea in 1935 as a result of a storm. There was a series of problems with all of the walls between 1935 and 1950 therefore by 1951 all of the walls were supported by steel piles and concrete steps as can be seen today.
- 1.4 About the end of the 1950s the wall at Neptune Hall collapsed and there was significant erosion as a result. The promenade was extended to the north and to the south in a number of schemes during the 60s and 70s. As part of these works the timber groynes were erected which have by now reached the end of their life.
- 1.5 I should emphasise the fact that the sea has moved nearer to the land over the hundred and fifty years since the first wall was built. Indeed there is firm evidence to show that the beach by Warwick Place has been lowered by 3 metres over the last 100 years.
- 1.6 The problem of the sea overtopping the wall is increasing from year to year and flooding of the properties behind the wall is occurring more often. If no work at all is done the properties and the promenade will suffer more flooding more often and ultimately the existing walls will be undermined by the sea.
- 1.7 Erosion by the sea of the whole coast between Afon Dysynni and Afon Dyfi is an ongoing and unavoidable process. Over a period therefore there will be a need for more and more work to construct defences or to maintain the existing structures to hold the sea away from the properties which are on the seashore.
- 1.8 The current situation in Tywyn is that there is not a beach at all in front of the promenade for a significant part of the tidal pattern. When the tide is fully out there is an attractive beach which is mainly sand with some shingle and cobble in places, and for the rest of the time the sea covers the beach and moves up the concrete steps. With a high tide the sea reaches the top of the wall and waves go over the top of the wall and across the promenade and in major storms the situation is much worse and dangerous.

#### 2. RESPONSIBILITIES

- 2.1 As local authority Gwynedd Council has powers to undertake coast protection works. This is not a duty but a permissive power.
- 2.2 As the authority which is responsible for the existing walls and defences and the promenade, Gwynedd Council has responsibility to maintain the present structures in a safe condition.

- 2.3 Gwynedd Council does not have responsibility for the railway embankment to the north of Tywyn as this is the responsibility of Railtrack. The Council does not have direct responsibility either for the Penllyn coastline to the south of Tywyn where the Environment Agency have the principal responsibility nor for the coastline of the Aberdyfi Golf Club.
- 2.4 It may be that the background paper to the Committee by the Assembly officers clarifies the situation concerning the approval for schemes under the Coast Protection Act and the system of grants for schemes of this sort by the Assembly to Unitary Councils. In case it does not, it is as well to summarise the situation. Unitary Authorities and any other party may not undertake works of this nature without the approval of the Assembly (previously the Welsh Office). Having approved the works the Assembly will normally fund major schemes through a Coast Protection Act Grant and Supplementary Credit Approval. The proportion of the cost which is funded by grant and Supplementary Credit Approval depends on the size of the scheme and the historical expenditure of the Council. In this case Gwynedd Council would expect to receive 75% of the cost through grant and 25% as Supplementary Credit Approval.

#### 3. THE LAST DECADE

- 3.1 As a result of the Meirionnydd Coastal Management Study in 1993 the length of coast between Afon Dyfi and Afon Dysynni was identified as being in need of attention.
- 3.2 In November 1995 a scheme was submitted to the Welsh Office by the Meirionnydd District Council. This was a strategic scheme which included lengths of coastline which were the responsibility of the Council, Railtrack, the Environment Agency and the Golf Club. The scheme was submitted with the agreement of the other bodies on the basis of co-operation and in the spirit of the then inclusive and strategic Government policy.
- 3.3 This scheme was not approved by the Welsh Office and the Council responded to a number of requests from the Welsh Office for more information, for further details, and explanations for a period of eighteen months.
- 3.4 In the hope of moving the project forward in April 1997 the Council agreed with a suggestion from the Welsh Office to commission a "Second Opinion" on the proposed scheme by an independent consultant.
- 3.5 The draft report on the "Second Opinion" was received in November 1998.

The core of the report was that the proposed scheme (especially the "fishtail groynes") was not suitable for this coastline and that each length of the coastline should be considered on its own merit. The cost benefit ratios were also unacceptable.

- 3.6 A meeting was held in March 1999 between officers of the Welsh Office, the author of the "Second Opinion" officers of the Council and the Council's consultants to discuss the report. It was confirmed in this meeting that a scheme with "fishtail groynes" would not be accepted by the Welsh Office and that the Council must make bids in the future on the basis of separate parts of the coastline with each one demonstrating sufficient benefits to achieve the Government's normal threshold. It was also confirmed that Welsh Office money (through Coast Protection Grant) would only be available for the minimum necessary works to solve the problems.
- 3.7 A report was made to the appropriate Committee of the Council on the situation and it was formally resolved to abandon the original scheme and to develop a scheme or schemes which would solve the main problems which were the direct responsibility of the Council in a manner which would be acceptable to the Welsh Office.
- 3.8 This decision meant that the Department's staff and its consultants were required to develop a scheme based on rock armour, repairing the present wall and building a wall on top of the defences to prevent flooding. A series of tests were carried out in the H.R. Wallingford laboratory to develop the most effective possible scheme.
- 3.9 The result of this work is the present scheme. The scheme was presented to Tywyn Town Council on 11 July 2001 and they supported the scheme. During the following weeks strong objections were made by some local people and various reports appeared in the local press regularly. A petition was organised with 8,000 signatures against the Scheme. A public exhibition was held of the scheme in Tywyn on 8 August 2001. A Special meeting of Tywyn Town Council was held on 29 August 2001 when it was decided to withdraw the Town Council's support for the present scheme.
- 3.10 A meeting was held between officers of the Council and representatives of the objectors on 13 December 2001. During that meeting it became clear that the objectors did not fully understand the scope of the present scheme nor did they fully appreciate the effect of the original scheme.
- 3.11 In a meeting in Tywyn on 19 April 2002 under the Chairmanship of the Town

Council there was an opportunity for the various parties – that is members of the Town Council, Lord Elis-Thomas, local members of Gwynedd Council, representatives of the Tywyn and Aberdyfi Coast Protection Group, officers of the Council, Dr. Phil Barber (the Council's consultant) and Mr. Tom Coates (author of the "Second Opinion") to discuss the situation.

3.12 One result of this meeting was that everyone agreed that the proposed work in front of Bryn y Môr was both necessary and acceptable. There was not agreement on the situation in front of the Victorian Promenade. It was agreed for representatives of the Tywyn and Aberdyfi Coast Protection Group to meet with Dr. Barber and Council officers again in order to discuss in more detail the options along the promenade length.

### 4. CONCLUSION

- 4.1 Although the wording of the Assembly's policy has not changed there is a wide opinion that the way in which the policy is implemented has changed during the 1990's. This understanding was confirmed by Mr. Coates, Dr.Barber and Lord Elis-Thomas on 19 April 2002.
- 4.2 The sea has moved towards Tywyn over the last hundred and fifty years and during the last century the beach has been lowered by about 3 metres.
- 4.3 It is not practical in technical or financial terms to restore the beach to the same level as it was in 1900. Since the meeting on 19 April 2002 Mr. Coates has written to the Council saying that to re-establish a sandy beach would cost well over £20M with an annual cost of over £1M to maintain it thereafter.
- 4.4 The present scheme which is proposed by the Council does not affect the beach as much as the objectors think.
- 4.5 If rock armour is not used on the beach in front of the present wall the sea will overtop the wall more often and the threat of floods to properties will increase.
- 4.6 The "original scheme" was too ambitious and unfortunately has raised the expectations of local people and visitors over and above that which it is possible to provide.

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