

## **Appendix 5: Friends of Shoebury Common's Technical Review of Black & Veatch's Technical Review of Friends of Shoebury Common Alternative Proposal**

### **Technical Review September 2013 – Southend Council:**

***Introduction** – Black & Veatch produced this report but they will not accept responsibility for it's contents and is not guaranteed.*

***2.1** – 5.80 AOD is required to give a flood protection of 1 in 200 (0.5% AEP) whereas at Hinguar School planning application the same AOD was shown at a 1 in 1,000 (0.1%) risk. Why the difference.*

***2.2.1** – Sand has been mechanically removed from this beach & Thorpe Bay Yacht Club beach to reduce beach levels and improve the beaches at Chalkwell. This makes the topographic survey low. We attach pictures to assist*

***2.2.2** – The introduction of 6 new beach access steps for the disabled is just to increase overall costs for this scheme. The Council's preferred option1 is also using 5.8 AOD and will raise the existing access by identical amount, but have not included disabled access in their costs.*

***2.2.3** – The existing East & West sea walls have a residual life of 15 – 30 years. Shoebury Common wall was built in the 60's, whereas the West is only "fair" and was built much earlier. Wave pressure would be considerably more at the West end with a beachside wall at over 2.5 metres high against Shoebury Common wall, which are only 0.6 metres high. In the preferred option, they can build a new sea wall (West of the Common) in front of the existing, but at Shoebury Common the council say they will have to beach re-charge to protect the existing wall.*

***2.2.4** – A question was raised at the consultation meeting as to how the Council were going to drain the water in the preferred option and the Council said this was not designed yet, but would "possibly" be with pumps? The Common is a great flood plain and all the water from the promenade drains onto the common. Once the promenade is raised by 550mm (22"), it will still drain back onto the flood plain, as happens at present. The only costs shown against drains, is the repair to the existing drains, as detailed by Black & Veatch, in their cost breakdown given to us.*

***2.2.5** – We were told during consultation that the drawings for this wall could not be found, but when we were given a copy by B&V, the situation changed. Common sense tells us that there is greater chance of a wall 2.0 / 2.7 metres high (above the beach) collapsing (West end), than on the Common where only the top of any wave surge that would have an effect. The Council can build a new 1.6 metre high wall, opposite Maplin Way, in front of the existing sea wall, without any structural changes to the existing older sea wall. Could this just be a "technical" blanket?*

***2.2.6** – Why is a beach re-charges just required along Shoebury Common, but is not required once you pass beach hut 401 Westward, where as we have said, the wall is much higher and at greater risk of collapsing under pressure? The council have already admitted that if the preferred option is to work, then the front line sea wall must be protected, but this is covered in a separate budget. Should this cost not be included in the costs now? In the BERA alternative scheme, they have included a beach re-charge, but have also included a rock groyne to reduce wave pressure and to protect sand drift (West to East). Although groynes are included in our costs, NO GROYNES were included in the huge beach re-charge in 2002 from the Pier to the Halfway House Southend. We know from other schemes that they are important, but they can be omitted when it suits the Council.*

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*2.2.7 – There are around 400 beach huts, 166 of which are on the common, but only 132 are effected and need to be raised around 550mm (22”). We had already approached a specialist company and although some huts are old, they were confident that they could be easily lifted using jacks, rather than by crane, which they said would be expensive. The huts would be lifted on jacks and moved north; ready to be replaced back on the new foundations once the work was complete. We were surprised how reasonable the cost would be. They have moved 700-year-old churches, so moving a wooden hut was an easy task. We have full backing from 95% of the hut owners, although there are a few we have been unable to contact. The council survey forms show 100% against the preferred option.*

*2.2.8 – It is worth mentioning that despite offering to meet the council and discuss our proposals, no agreement was ever reached. There is NO water or electrical services at any of the beach huts. Some have a gas supply, so it should be easy to work out that the vertical inlet pipe to the gas metre needs extending by around 600mm. We have a cost around 25% of the cost allowed by the council. Transco are the only people allowed to extend their inlet services.*

*2.2.9 – We have never professed to be experts, but the Council have moved these shelters before. Again we have a company that would undertake this work, using the existing shelters at a fraction of the cost allowed.*

*2.2.10 – The simple sketches submitted to the council clearly showed the new wall just in front of the existing, which would reduce the promenade by around 500mm (20”) We have never had this point raised before, but it would be a simple task of moving the huts back 500mm Northwards on the new bases, thus leaving the promenade width the same as existing.*

*2.2.11 – Again this is such an unfair technical criticism, although I am sure if we were asked, we could find the answer. However, I know from Leitrim Avenue and the Common, that even after a huge weather storm, like we had in August, the water soaks through the sandy soil within minutes, leaving a firm hard standing, as it has on the Common car park. If the underlying strata were London Clay, then surely this would hold the water and not act as a flood plain. The report from the soil at the Cliffs slippage showed to be mostly London Clay, which the Council are placing onto the Common, two metre high on the embankments and 1.2 metre over the whole grassed car park, until all of the soil is used. We are talking about 550mm (22”).*

*2.2.12 – Again we made it very clear that the slipway crest is 700mm below the MOD wall at 5.80 AOD. The slipway needs increasing in height by 700mm, with a 2-metre depth flat section (beachside), to allow the cars to access the beach. At present, because the ramp is peaked, the cars get stuck with their trailers. We had approached all interested parties, before submitting our brief proposals.*

*2.2.13 – Access to Uncle Toms is presently by concrete steps down. There is a slope both sides, which are used by disabled persons. Raising the beach huts and promenade by 550mm (22”) was another 5 steps and the incline was well within the disabled guidelines. We had designed with Peter Grubb (Uncle Tom's) a design for this area, which included flower beds and a centre access, which we feel would have improved health & safety, but have never been asked for any detail.*

*4.1.1 – We only showed one floodgate at Thorpe Bay Yacht Club, but were also in discussion with the Club about trying to raise their boat ramp, with a raised “calming bump” across the main road to reduce car speeds. However, although we knew the promenade was going to be raised by 550mm at Shoebury Common, this would be*

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*lower as the main Thorpe Esplanade went uphill. If it was reduced to 300mm at this point, then we may not even need a floodgate.*

*There is no reason to replace the existing shelters. We also never asked for lighting as the promenade would not change, unlike the increased risk of crime, with the preferred option, where lighting was essential. With the amount and weight of construction material being moved greatly reduced, onsite & pre-construction works should be considerably less than the preferred option, but we have no details of the cost breakdown for the councils scheme*

*4.1.2 – Cost breakdowns shown on this report are totally different to the breakdown given to us in April. Again it is unfair to include £245,448 in our costs for repairing the existing sea wall, when this figure is covered in a separate budget in the preferred option. £115,388 should be removed from our costs. Access between huts and into the car park etc, will be done with concrete / asphalt, to provide disabled access from the rear car park, between each hut, to the promenade. Asphalt will also be used in the car park. Why have they therefore included £533,122 for soil, we never asked for. There is no surface water drainage on the promenade or behind the beach huts, so why is £76,923 allowed for drainage. Nothing would change from as existing. It is very strange how our net construction costs at £2,608,467 becomes £8,565,852 as a total scheme value, an increase of £5,957,385 or 228% on cost. Place this against the preferred option at £4,600,000 net construction costs against £7,300,000 as a total scheme cost, an increase of £2,700,00 or 59% on costs.*

*5 – Having spent a considerable amount of time, effort and being given free technical support from professional people & local companies, we take great exception to the conclusion notes. The council drawings placed on display at Shoebury library was an embarrassment, but we have never made this public or tried to gain “cheap” political points. Richard Atkins will confirm that you could not even read the graphics on the council drawings and any attempt to enlarge on the website, left blurred vision. The sectional views were also very misleading, showing the beach huts in clear view from the road with a 2 metre high wall and with the road being 1.8 metres lower than the promenade; it would be impossible to see the hut at all. Some of the pedestrians had bowler hat attire. Nobody knew that the car park was going to be raised by around 1.2 1.3 metres. Our drawing depicted both schemes to show the public exactly what would be seen, with horizon lines to show the angles involved. They were bright, colourful and at least displayed people in beachwear. According to the public, the only thing wrong with our drawings was that they showed the Council lacked technical support. This was a similar comment made at the two public consultation meetings. Having paid out over £100,000 to Black & Veatch in consultation fees to July 2013, to expect an organisation such as ours, to produce detailed construction drawings at no cost is disgusting. Considering, our design and detailed drawings have the backing of at least 83% of those involved is a tribute we are proud of. Having read this report, even our supporters know more about our scheme than the council, despite having simple sketches with written descriptions. However, although our scheme was not included at the consultation meetings or the online survey, it is nice to know that with the growing support, they felt the need to try and destroy any credibility it had*

*Peter Lovett*