

Appendix C Photographs



Aerial view of part of the Sandsend Road frontage. Sandsend village is visible to right of photograph with the A174 road running part way up the coastal slope. The existing revetment is clearly visible, with a large localised failure visible towards the left of the photograph.

Management Unit 4CD

	
<p>Gabion baskets at western extent of study area, in front of Sandsend Cafe (May 2011)</p>	<p>Transition between concrete revetment and gabion baskets (September 2010)</p>
	
<p>Existing concrete revetment to west of Sandsend Cafe, which is the property visible at left of photograph. The access steps to beach at far left of photograph are the same steps as those shown above (November 2011)</p>	<p>Existing concrete revetment and slipway, which will be the termination point for the new revetment (November 2011)</p>
	
<p>Example of surface damage to concrete revetment (May 2011)</p>	<p>Concrete revetment looking west showing access steps, note first 3 concrete steps only visible above sand (May 2011)</p>



Same location as previous photograph showing sudden loss of beach material, note 6 concrete steps now visible plus drop from last step to beach level. Also visible is a toe failure at the bottom of the photo that was not present in May 2011 (September 2011)



Same location as previous photographs, large collapse has occurred since September 2011 beach lowering event (October 2011)

Management Unit 5

	
<p>Concrete revetment showing evidence of different stages of repair following many different incidents of failure and damage (November 2011)</p>	<p>Example of lamination failure of surface of concrete revetment in large sheets (September 2010)</p>
	
<p>Example of failure of revetment and potential public safety issues associates with large sections of revetment failing suddenly (September 2010)</p>	<p>Example of damage caused to concrete revetment by drainage (September 2010)</p>
	
<p>Example of toe failure exposing black blast furnace waste material that the fill material beneath the concrete is comprised of (September 2010)</p>	<p>Example of damaged section of revetment showing lamination failure of concrete surface (November 2011)</p>



Example of damaged section of revetment in close proximity to recent repair work (May 2011)



Sudden beach loss event has exposed the toe of the revetment showing various stages of previous repairs and the bedrock is also exposed on the beach (September 2011)



Example of toe failure of concrete revetment following beach lowering event in previous month, bedrock outcrops visible on beach below revetment (October 2011)



Same location as previous photograph showing beach levels have returned to a higher level; illustrating the large variability in the beach levels at Sandsend and the rapidity of change (November 2011)



Transition from concrete revetment to failed timber pile section (September 2010)



Failed timber pile section of defence at approach to Raithwaite Ravine (May 2011)



View of upper coastal slope looking west showing instability (May 2011)



View of upper coastal slope looking east showing instability. Area of drainage recently installed visible at far left of photograph (September 2010)



Localised drainage installed by NYCC has failed (May 2011)

Management Unit 6



Raithwaite Ravine, showing the embankment carrying the A174 constructed in the 1920s (July 2011)



Culvert outfall for Newholm Beck through the A174 embankment at Raithwaite Ravine (July 2011)



View looking west across Raithwaite Ravine along the alignment of the old railway viaduct with Newholm Beck in the centre. Some of the historic assets are visible; remnants of the foundations of the railway viaduct still present on sides of ravine, and Defence of Britain assets present in base of ravine. Failed timber piles at eastern end of MU5 defences visible at approach to Raithwaite Ravine, with the end of the concrete revetment just visible (May 2011)

Management Unit 7A



View of eastern corner of Raithwaite Ravine with the same remnant of concrete revetment that used to protect the old railway line visible at edge of each photograph. Relict structures from the old railway viaduct are visible in the photograph on the right (July 2011)



View looking eastwards along MU7A showing historically protected cliff with evidence of previous (now obsolete) coastal defence assets; concrete slabs to left of photograph (July 2011)