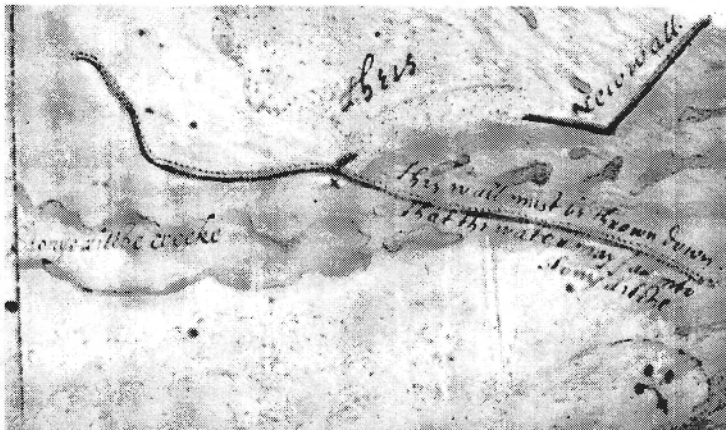


## ELIZABETHAN FLOOD DEFENCES ON ORFORD NESS

The maps of Orford Ness, mainly by John Norden, chosen for inclusion in the volume presented to the Cambridge geographer, Professor James Steers, did not include the subject of this article: an extensively annotated map of about 2.4 km of the Ness entitled *THE MEANE TO PRESERVE Lanterne marshes from the over flowing of the Sea.*<sup>1</sup>

John Norden (1548-1625) was a leading surveyor in the country and the first to insert roads on English maps.<sup>2</sup> Early in 1600, the year in which he was appointed Senior Surveyor of Crown Woods, he embarked upon a two-year survey of Michael Stanhope's Suffolk estate. This extended from Wilford Bridge to Orford and had a circuit of thirty five miles. The area represented by the map printed on p2 lies within Sheets XXI and XXIII of the survey volumes.<sup>3</sup>

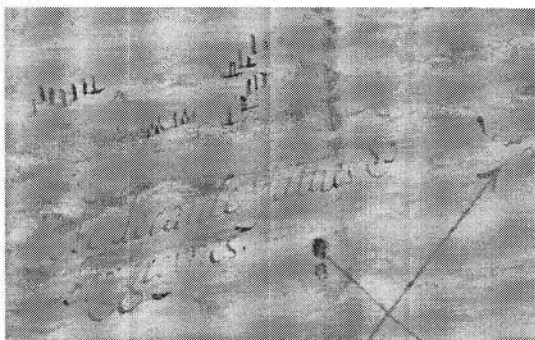
For the previous sixty years at least Orford Ness had been under threat from the sea; the mouth had retreated leaving less room for vessels to fish within the Haven<sup>4</sup>. However, this map, dated March 1600, depicts a crisis of a different magnitude; the sea had actually broken through Lantern marshes and an area of about 36 acres (14.5 ha) had been lost, '*This grounde .... muste become Salte marshe or of the nature of Salte ..... when the Breaches are out[?] of the wall because everye tyde will overflowe it*'. Moreover the adjacent marshes were now at risk, namely, Lytherdownes, Sometime Holmes and Gurlinges to the south of the breach, and Tilletes plus another unnamed marsh to the north, '*drowned when the water overflowing is*'. Norden's most important observation, namely that the east and north-east winds are most dangerous when they are very high and coincide with a spring tide, is a combination to which meteorologists are alert today.



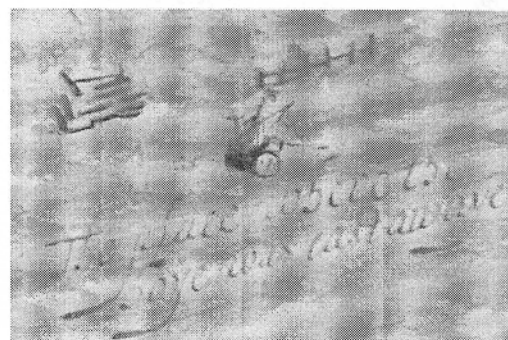
Detail showing an existing wall blocking the seaward end of Stony Creek with the recommendation that it should be demolished to allow the sea to enter it

Now aged about 52, the experienced surveyor can be pictured on the windswept shingle that March surveying the disaster, no doubt caused by exceptional conditions the previous month. He marked a 1.6 km stretch at risk with two crosses. In addition his map depicts another area about 190 m wide further south where two separate dunes of shingle have been cast on to the marshes.<sup>5</sup> Here the sea has broken through and is now separated from *Stonye ditche creeke* by an existing sea defence. He therefore recommends '*This wall must be thrown down that the water may fall into Stony ditche*'

Of particular interest is the information that the marshes are defended on the seaward side by old and '*new intended*' walls. From the stumps of walls running seawards it is clear that between the marks there had been considerable land loss. In the area where the breach has occurred six separate groups of groyne are shown labelled '*the decaide futtics and hog groyne*', and a box contains the note, '*The sea beateth between theis two marks + but especially about ye futtics*'



The area of the breach showing earlier sea defences



A wrecked hoy