

Tidenham, Stroath and Woolaston

Existing defences and probability of flooding

At Tidenham, Stroath and Woolaston there are no formal tidal flood defences. The raised railway embankment limits the extent of tidal flooding, although some flooding of agricultural land occurs through culverts under the railway during high tides. The railway line itself has a 1 in 100 chance of tidal flooding in any year.

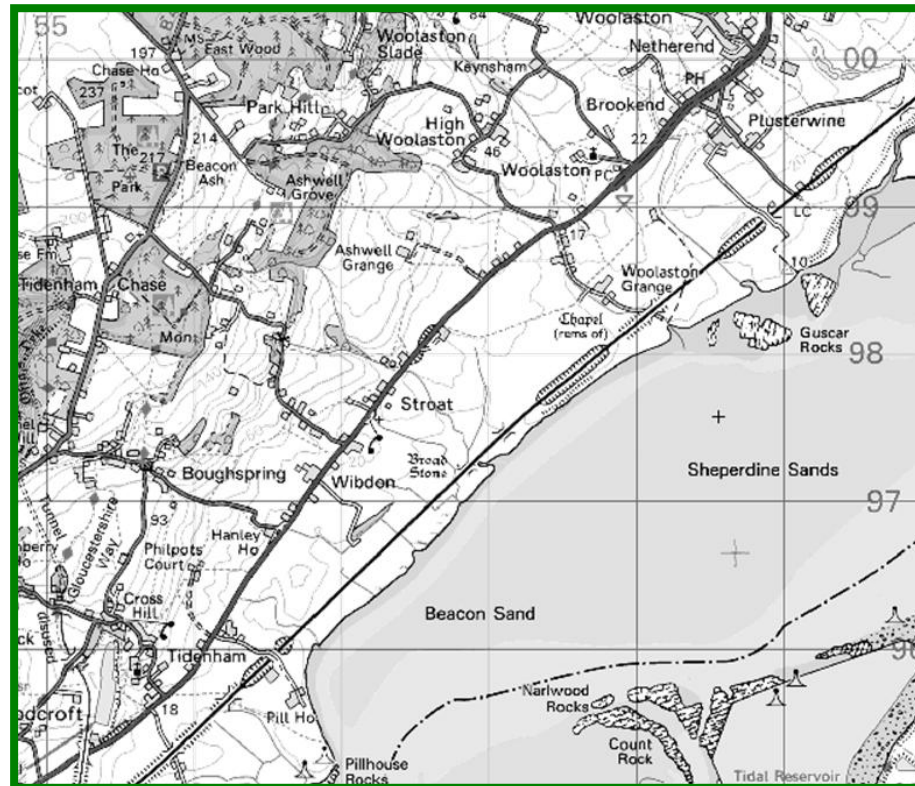
Although extreme storms may cause short term disruption to the line, it should be technically possible to maintain the railway line in its current position well into the long term.

Tidal flaps covering culverts through the railway originally functioned to prevent tidal flows beyond the railway. The flaps are at or near the end of their functional lives and are largely ineffective.

Sea level rise note

The UKCP09 medium emissions scenario projects approximate sea level rises of 0.1m by 2030, 0.3m by 2060, and 0.7m by 2110.

Currently sea level is rising at about 2 to 2.5mm a year. If this rate were to continue then sea level rise would be less than the amount projected by the UKCP09 medium emissions scenario.



What can be done now and in the future?

The railway line is an important transport link, wholly in the control of Network Rail. As sea level rises Network Rail may need to increase maintenance on the rail embankment.

The EA cannot justify expenditure of public funds to replace the tide flaps on the culverts under the railway as the cost would be more than the economic benefits of reducing flood risk to small areas of agricultural grazing land.

How these options were reached

No properties are at significant risk in this area and there are no formal defences; the raised railway embankment limits the extent of tidal flooding and is maintained by Network Rail.