

Dried-out soil takes its toll on tracks, impacting services

August 30, 2022



Major changes to train services on the West of England main line west of Salisbury have had to be made after a four-mile long speed restriction was put in place between Gillingham and Tisbury, in Dorset and Wiltshire.

The South of England has endured its driest July since 1936, as well as the hottest temperatures ever recorded, and the impact has now been felt on the railway.

Sections of railway built on clay-based soil, including those around Gillingham, have dried out so badly that they have shrunk, leaving the track on top uneven and dangerous to run trains at full speed.

It is likely that the speed restriction will remain in place until October, as engineers must wait for the soil to regain some of its moisture before a repair can be carried out.

Network Rail's Head of Track Engineering for Southern Region, Colum Cavanagh, said: "We call this problem Soil Moisture Deficit and although we encounter issues with it most summers, this year has been absolutely unprecedented.

“We came into the hot season with our track in the best condition it’s ever been in, and yet now – late August – the soils around Gillingham have dried so badly the track is only able to take trains running at 40mph, down from 80mph.

“Normally we would take a piece of kit called a tamper in and sort the track out, a bit like shaking a duvet and getting it flat again. This year the problem is so bad that the soil is still shrinking and it’s going to be some weeks until it has stabilised enough for us to do the work to bring line speeds back up to normal.

“We’re very grateful for everyone’s patience as we know the changes to trains must be frustrating, but the changes are there to keep everyone safe.”

Train services have had to be amended as the line is single – so no trains can pass each other – and trains are taking double the normal length of time to run between Gillingham and Tisbury.

The full revised timetable is currently being finalised and will be published later this week.

Claire Mann, SWR’s Managing Director said: “After two weeks of delays and short-notice changes to our services, this decision to introduce a revised timetable will allow us to run a resilient service and at least provide certainty to our customers in the West of England. I am sorry to all those whose journeys will be affected as we wait for weather conditions to improve so Network Rail can safely remove the speed restriction.”

Mr Cavanagh added: “Based upon a recent reconstruction of a clay embankment at Edenbridge in Kent, if we were to rebuild all 6,000 of our clay embankments with modern materials, it could cost anywhere between £15bn to £20bn and take decades to complete.

“We need to manage with what we’ve got and should summers like this one become the norm, we will need to change the way we work to reflect that. Unfortunately, the people who built the railway to Gillingham in 1859 didn’t realise the impact they would have on us 160 years later building their railways on clay soil.”