

Infrastructure News

7B points Part 2

The project to relay the critical 7B points at the south end of the platforms at Sheffield Park was, due to time constraints, split into two parts. Part 1, during which the centre section of 7B points had its timbers replaced, was [reported here \(November 2018\)](#). The report which follows, originally covering only the second and third days of Part 2, but has now been edited to include Jon Goff's earlier report covering the first day of the work. It thus covers all of Part 2 of the 7B relaying, as undertaken in a week in early March 2019, before the full weekday running season began.

The old softwood timbers were life expired and so are the timbers under the crossing nose. Therefore we are correcting this before the full weekday running season begins. In addition to replacing life-expired timbers under the crossing nose, we lifted and put in drainage for the 60' panel from road 1 which has been slowly sinking into the mud. The pictures below show the progress at the end of the first day with the rails pulled out and the base under the crossing nose almost dug out. The first picture was taken standing on the section renewed in November.



Unfortunately an old monument had to come out as two 20' long timbers that need to be replaced were sitting one on either side of it.



By the end of day two the cause of the drainage problem under the track leading from platform I to the points crossing had been discovered. The decision to take out the 60' panel on day one was proven to be a wise one as it unveiled a problem with the main water pipe that runs from the water tower to the water cranes on the two platforms.

This piece of track keeps sinking into the mud and has had extra ballast and tamping carried out on it several times to keep it stable. Consequently a lot of reusable ballast was scraped off the top after the rails and sleepers had been removed. It was washed with the aid of the water crane and piled up where the crossing nose would be. The track bed was scraped down to the correct level carefully as the existence of the old cast iron pipe was known. One of the joints was found to be leaking which explains why this track bed is always wet. This joint is directly below the west rail with the sleeper did not have much clearance to the pipe as it had sunk so much.

Luckily there is a drainage pipe running past already buried below the track bed, therefore a small drainage trench and pipe were installed it connecting to the leak to the remove the flowing water. The position was marked with a white spray on the adjacent rail. This has shown us the condition of the pipe and we now know that we will have to get a liner installed within the pipe in the near future. This picture also shows how little ballast is under the sleepers on the adjacent track. The sleepers are almost sitting on the bottom of the track bed where there should have been several inches of ballast on top the original chalk membrane. It therefore also show us another dig out task required in the not too distant future.



Scraping out the ballast and mud.



Leaking pipe found and marked.

All the exposed track bed was covered with our usual sandwich of Terram/plastic DPC/Terram to stop more water soaking into the ground. The washed ballast was spread out and more fresh ballast added up to bottom of sleeper level. It was smoothed and rolled down flat and all the sleepers for the 60' panel laid out. With a bit of **very** clever digger driving, the two bullhead rails were dropped straight in place within the rail chairs in seconds! This normally takes a lot of fiddling, especially on a curve. The panel was then finished off ready for the crossing panel.

The replacement timbers for the crossing were laid out including the 20' timbers which pass under the adjacent track and the rails placed on top. The assortment of fishplates were then put back so that the S&T could get all the track circuits and signal wires reconnected. This left is with over 100 hole to drill in the timbers for the chair screws after carefully aligning and gauging the rails correctly to within 1mm.

By the end of day three it had all been completed with the exception of ballasting and tamping which will probably be done (initially) with a shovel.



New modern membrane.



All connected by the end of day three.