



East West Rail Project, UK



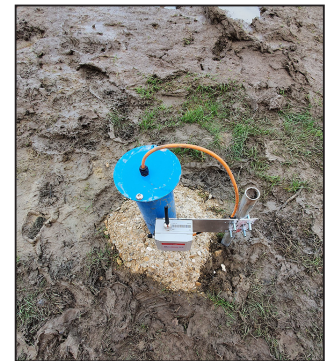
PROJECT SUMMARY

PROJECT NAME: Network Rail's upgrade of the line between Bicester, Bedford, Aylesbury and Milton Keynes

PROJECT DATE: February 2020

CLIENT: CC Ground Investigations Ltd

CONTRACTOR : Network Rail



OVERVIEW

The East West Rail project will provide new journey opportunities between central, southern and western England.

The development – in two phases – will introduce direct rail passenger services between Bedford and Oxford, Milton Keynes and Oxford, and Milton Keynes and London Marylebone via Aylesbury.

Phase 2 of the Western Section sees the upgrade and reconstruction of existing but no longer in use sections of line that link Bedford with Bicester, and Milton Keynes with Aylesbury.

This improvement project will mean that passengers and freight services can make the journey between Bedford on the Midland Mainline and Bicester on the Chiltern Mainline without needing to travel via London. It will also link Milton Keynes on the West Coast Mainline with London Marylebone on the Chiltern Mainline via Aylesbury.

MONITORING

Six piezometers were installed in boreholes – three at the top of the embankment & three at the base.

Geosense engineers provided two days training on setting up the Wi-SOS Gateway & single channel VW Nodes, using the G-log App to connect the Nodes to the Gateway.

The Wi-SOS Gateway was set up for each borehole – Setting up the engineering units by in-putting the base readings & selecting the correct calculation & renaming each borehole so they are easily identifiable when logging onto the Gateway to view the data.

The Wi-SOS wireless system could then be accessed remotely meaning no need to travel to site to download the data.

The client was happy with the ease of the Wi-SOS setup and would be happy to use the system for future projects.

PRODUCTS USED

VWP-3000 Standard piezometer

Used to monitor pore water pressure.

Wi-SOS 480 VW Single Channel Node

Logger for wireless connection of the vibrating wire piezometer to the Gateway.

Wi-SOS 480 Gateway with sim card & solar panel kit

Central data acquisition logger fitted with SIM card to provide GPRS connection for remote access via web browser.