

Northern line extension

Factsheet 9: Alternative construction approach for connecting the extension to the existing Northern line and stabilising the ground

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The construction of the connection between the existing Northern line and the new lines required for the extension is a complex tunnelling operation. In carrying out these works, our aim is to minimise the disruption to local residents, the local environment and the existing Northern line services as far as we reasonably can.

As part of these works it is necessary to treat the ground in order to ensure a safe tunnelling operation and not to damage adjacent buildings. Our current approach is to carry out these ground treatment works from two temporary grout shafts at Radcot Street and Harmsworth Street.

This will involve the construction of grout shafts which are holes in the ground from which grout can be pumped. They will be operated from surface-level worksites of approximately 30–35m x 6m. Further details can be found in Factsheet 1: Temporary shaft site at Radcot Street and Factsheet 2: Temporary shaft site at Harmsworth Street.

An alternative approach which we are currently exploring further is to construct underground 'gallery tunnels'. These would be tunnels of approximately 3m in diameter and built at a higher level than the new railway tunnels within London clay which provides optimum tunnelling conditions. These gallery tunnels would be used to undertake the ground treatment works instead of from the temporary shafts at Radcot Street and Harmsworth Street.

This would mean the temporary shafts would no longer be required. However, adopting this alternative construction approach would mean that more excavated materials will need to be removed from the permanent shafts at Kennington Green and Kennington Park.

Work is ongoing to determine which of these methods of construction would be the best option.

We will be seeking powers within the Transport and Works Act Order (TWAO) for both methods of construction. Details of where the proposed gallery tunnels are located can be found in the NLE plan drawings at tfl.gov.uk/nle

Have your Say

This consultation gives you the opportunity to comment before we submit our application for the TWAO needed to start construction. Visit tfl.gov.uk/nle to leave a comment or complete the feedback form. Alternatively, if you wish to receive a paper version of the feedback form please call 0843 222 1234 or email nle@tfl.gov.uk and we can arrange for one to be posted to you. The consultation will close at midnight on 30 December 2012 (extended from 16 December 2012).