

# Pudding Mill Lane Portal

**CLIENT:** Skanska UK Civil Engineering (Maple Cross)

**LOCATION:** United Kingdom

**YEAR OF COMPLETION:** 2011

Crossrail Contract C248 involved the construction on one of the route's easterly portals at Pudding Mill Lane, where the route emerged from a tunnel and transitioned onto existing NR lines. Construction of the portal was awarded to the Costain- Skanska JV in 2010 for £17m and construction was completed in 2011.

Immediately east of the tunnel portal is where the new lines run through, close to an existing DLR retaining wall and an embankment in a 'U' shaped concrete structure to transition the line from ground level down to the tunnel entrance.

We were appointed by Skanska to undertake an independent check of the untied 30m long sheet piled retaining wall that was proposed. The check was undertaken using PLAXIS which allowed accurate modelling of the ground conditions and the variability of ground water. Full LM71 rail loading was required as a surcharge.

## KEY FACTS:

- CAT III check
- Temporary works
- Embedded retaining wall
- Independent check

