

A6 RANDALSTOWN TO CASTLEDAWSON DUALLING Final Design Ground Investigation

Project 16-0676

Client: Graham Farrans JV
Client's Representative: ROD Arup JV
Site Operations: August to November 2016

Causeway Geotech have been involved in previous phases of ground investigation for this much anticipated road upgrade, and in 2016 were again appointed, this time to undertake the Final Design Ground Investigation. The scheme involves the dualling of approximately 12km of road between the end of the M22 Motorway at Randalstown in the east, and the Castledawson roundabout in the west. The new road will be predominantly off-line, apart from at the Castledawson end where the existing road is to be widened.

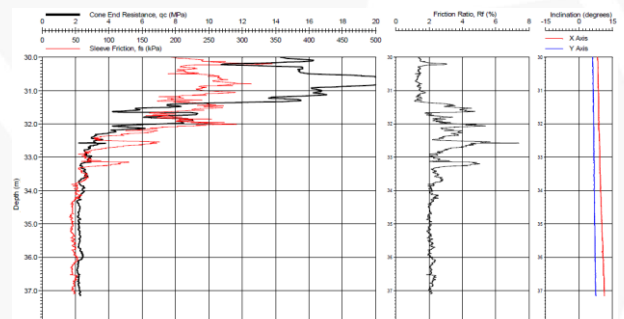
The scope of works included:

- 58 boreholes by light cable percussion boring
- 21 boreholes by rotary drilling techniques, including Symmetrix-cased full hole rotary percussive drilling, and Geobor S wireline coring
- 30 boreholes by a combination of light cable percussion boring and rotary drilling
- standpipe installations in 57 boreholes
- 3 boreholes by light percussion (dynamic sampling)
- 77 machine-excavated trial pits
- 173 dynamic probes
- 9 cone penetration tests
- variable head tests in 13 boreholes
- 15 plate load tests
- Factual ground investigation report

Site operations were carried out under the supervision of a team of Site Engineers and Geologists from Causeway Geotech who were based in Toome at the centre of the site.



Trial pit excavations: wide, shallow excavation to allow access for detailed logging in upper strata.



Static Cone Penetration Testing (In Situ Site Investigation): estimates soil behaviour plot