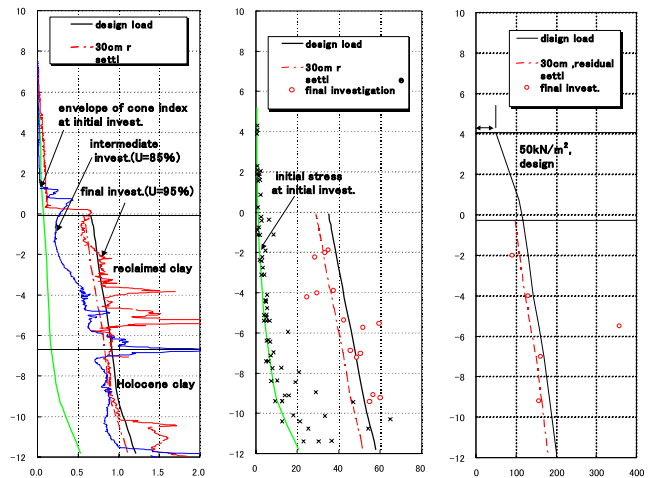
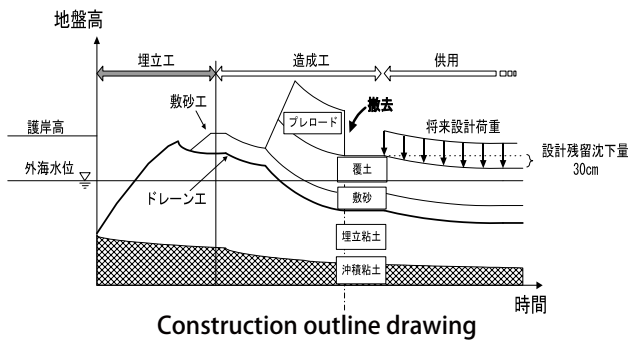


Field observation on Island City



Ordering party : Port of Hakata Development Co., Ltd.

Location : Fukuoka City, Fukuoka Prefecture

Project summary : Relocation area – 400Ha

Services : Survey and analysis

Within 10kms from Hakata Station, there is the complex facility developed to create a new urban area in harmony with natural environment, and it' s comprised of container terminal, residential houses, and research institution.

Before implementation of ground improvement and facility building, the marine land was used to be left for a long time until it gets stabilized after the landfill; however recently, in terms of economic effects, the land is developed soon after the landfill. In other words, facilities go into service soon after being constructed in sludge condition, and accurate estimate is required for settlement, speed, foundation strength, and residual settlement to advance the project according to plan.

Because the process from the landfill to facility development is specified in advance, accurate estimate is always required. Multi-layer sedimentation and centrifuge model tests are performed to reproduce and verify the results to forecast the self-weight consolidation process of dredged clay; Self-weight consolidation analysis program was developed to conduct reliable forecasting. And also, to clarify discrepancy between theory and practice, field observation is performed on settlement and water pressure in clearance to improve the accuracy of subsidence prediction. For the improvement of economy efficiency, we adopted a new electric cone penetration (CPT) test.