Object
Underground car park with disable access, natural light and ventilation for the Bangkok Metropolitan Authority. Large open space and garden on the roof top.

Project Description
Cantilever diaphragm wall with buttress for earth retaining structure.
2 level basements for car parking.
Roof top garden and an underpass access to the City Hall.

Type of Work
Foundation Piling, Diaphragm Walling, Deep Excavation, Civil Construction.

Owner
The Bangkok Metropolitan Authority.

Designer
The Bangkok Metropolitan Authority.

Project Schedule
2000-2003

Construction Method
- Braced Excavation with diaphragm Wall using observational method.
- 2 level Cross-lot strutting and geotechnical instrumentation.

Construction Details
Foundation bored pile: 728 (ø0.6mx22m)
Diaphragm Wall: 5,304sq.m. (0.6m thick, 16.0m deep)
Basement floor area: 18,552sq.m.
Landscaping: 10,936sq.m.

Subsoil Conditions
Soft clay: 0.0-9.0m
Medium clay: 9.0-12.0m
Stiff clay: 12.0-26.0m
Dense sand: 26.0m-

REFERENCES: