



# PATTANAKARN U-TURN UNDERPASS

## Civil Works

### Object

Construction of an U-turn underpass for Pattanakarn Road.

### Project Description

700m long U-turn underpass for Pattanakarn Road at highway interchange.

### Type of Work

Foundation piling, retaining walls for the underpass and concrete road pavement.

### Owner

The Bangkok Metropolitan Authority.

### Designer

The Bangkok Metropolitan Authority.

### Project Schedule

2002-2003

### Construction Method

- Excavation with sheet pile and circular steel casing using bottom up construction method to  $-7.0\text{m}$ .

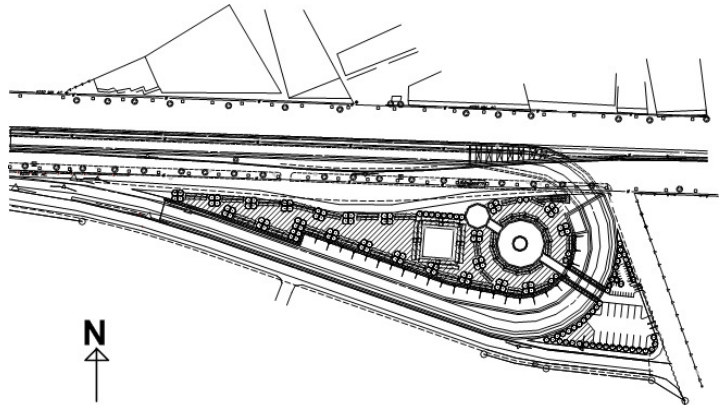
### Construction Details

Foundation bored pile: 1,680 ( $\phi 0.35\text{m} \times 21.0\text{m}$ )  
81 ( $\phi 0.5\text{m} \times 21.0\text{m}$ )

### Subsoil Conditions

Soft clay:	0.0-13.0m
Medium clay:	13.0-15.0m
Stiff clay:	15.0-19.0m
Dense sand:	19.0-32.0m
Hard clay:	32.0-39.0m
Very dense sand:	39.0-41.0m

### REFERENCES:



Layout of the underpass.



Excavation with braced sheet pile for construction of base slab and retaining walls.



Completed Pathanakarn U-turn Underpass