

# Problems associated with the installation of prebored precast piles

1), 1), 2), 1)

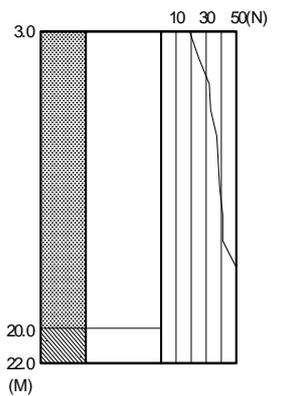
1.

1990 가 . 가 SIP 가 SAIP SIP SAIP 가

2.

SIP ( , , 1993/ , 1994/ , 1995) . SAIP 가 SIP 1 15 1 15

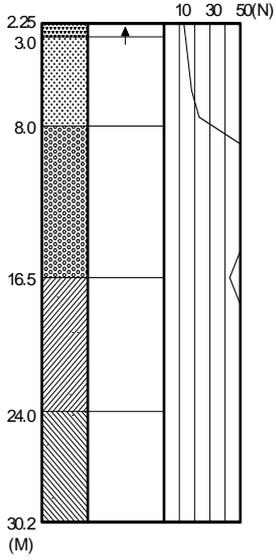
1 SIP (ø 400 mm PC , = 55 ton)



1 (A)

	L(m)	Q <sub>s</sub> (t)	f <sub>s</sub> (t/m <sup>2</sup> )	Q <sub>b</sub> (t)	Q <sub>u</sub> (t)	Q <sub>a</sub> (t)
A1	8.1	32.0	2.96	48.0	80.0	39.4
A2	7.9	69.8	6.54	138.7	208.5	90.0
A3	8.1	41.0	3.88	83.0	124.0	59.2
A4	8.9	47.3	4.04	77.5	124.7	56.5
A5	8.3	60.0	5.55	83.0	143.0	65.8
A6	8.0	73.0	6.91	96.0	169.0	82.6
A7	8.0	40.9	3.92	99.8	140.7	70.4
A8	8.2	43.7	4.04	73.5	117.3	58.7
A9	8.2	68.0	6.29	69.0	137.0	68.5
A10	8.4	31.0	3.69	67.0	98.0	49.0
A11	8.4	61.0	5.93	52.0	113.0	56.5
A12	7.6	52.3	5.94	95.5	147.7	73.9
A13	7.5	33.0	3.36	81.9	114.9	54.4
A14	7.5	20.0	2.04	100.0	120.0	55.4
A15	7.1	69.3	7.26	71.4	140.7	70.4

2



2 SAIP

(ø 400 mm PHC , = 80 ton)

	L(m)	Q <sub>s</sub> (t)	f <sub>s</sub> (t/m <sup>2</sup> )	Q <sub>b</sub> (t)	Q <sub>u</sub> (t)	Q <sub>a</sub> (t)
B1	18.8	162.6	7.19	87.1	249.7	124.0
B2	20.2	190.0	7.45	60.0	250.0	125.0
B3	19.0	157.4	6.74	112.3	269.6	135.0
B4	19.6	75.3	2.97	106.4	181.7	74.0
B5	21.8	63.0	2.26	174.0	237.0	88.0
B6	22.0	94.0	3.36	122.0	216.0	104.0
B7	21.8	38.9	1.40	134.8	173.8	60.0
B8	21.6	164.8	5.91	124.8	289.6	144.0

2 (B)

1 2

A1 A10

A14

B4 B7

B2

B5

(N )

가

3.

가

(N , )

가

)

(

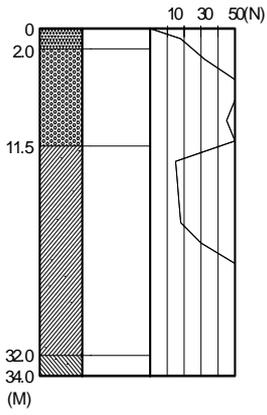
+

가

가

3.1

3 SIP  $\varnothing$  400 mm PHC 70 ton 가 가



	L(m)	Q <sub>s</sub> (t)	f <sub>s</sub> (t/m <sup>2</sup> )	Q <sub>b</sub> (t)	Q <sub>u</sub> (t)	Q <sub>a</sub> (t)
C1	13.5	32.0	1.79	34.0	66.0	33.0
C2	10.8	36.9	2.88	66.8	103.6	45.0
C3	10.7	39.1	3.03	24.1	63.1	29.0
C4	10.5	31.0	2.46	39.9	70.9	35.4
C5	10.1	34.9	2.62	30.9	65.8	26.5

C5	10.1	148.0	11.21	37.0	185.0	92.5
----	------	-------	-------	------	-------	------

3 (C)

N

3.2

[ + + ] slurry 가

, gel slurry

가 (中破)

가

가

가

3.3

CPT q<sub>c</sub>

. Van Impe(1996)

( : 2 ) .  
가 가 가  
( , ) 가

(PDA)

PDA  
PDA

4.

가 , ( ) 가  
가 가  
PDA

PDA

5.

1. , (1993), "SIP", , , 1993 , pp. 91-115.
2. , , , , (1995), " , " , '95 가 , pp. -1 -10.
3. , , , (1994), " , " , , '94 가 , pp. 79-86.
4. Van Impe(1996), "Deep foundations on screw piles", , , pp. 111-151.