

Appendix

Partial Skirted Footing Test
with Diameter Footing 75 mm

PARTIAL SKIRTED FOOTING TEST, DIAMETER 75 MM

Diameter 75mm: (D75: L75)

No.	Beban (kN)	Penurunan (mm)						Rata-rata
		Penurunan Kiri			Penurunan Kanan			
1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.40	-265.00	-2.65	-2.65	-273.00	-2.73	-2.73	-2.69
3	0.90	-240.00	-2.40	-5.05	-248.00	-2.48	-5.21	-5.13
4	1.00	-210.00	-2.10	-7.15	-221.00	-2.21	-7.42	-7.29
5	1.30	-198.00	-1.98	-9.13	-200.00	-2.00	-9.42	-9.28
6	1.60	-180.00	-1.80	-10.93	-189.00	-1.89	-11.31	-11.12
7	1.90	-160.00	-1.60	-12.53	-161.00	-1.61	-12.92	-12.73
8	2.40	-110.00	-1.10	-13.63	-149.00	-1.49	-14.41	-14.02
9	2.70	-100.00	-1.00	-14.63	-126.00	-1.26	-15.67	-15.15
10	2.90	-105.00	-1.05	-15.68	-100.00	-1.00	-16.67	-16.18
11	3.30	-98.00	-0.98	-16.66	-97.00	-0.97	-17.64	-17.15
12	3.60	-70.00	-0.70	-17.36	-85.00	-0.85	-18.49	-17.93
13	3.80	-80.00	-0.80	-18.16	-80.00	-0.80	-19.29	-18.73
14	3.90	-81.00	-0.81	-18.97	-87.00	-0.87	-20.16	-19.57
15	4.00	-80.00	-0.80	-19.77	-80.00	-0.80	-20.96	-20.37
16	4.10	-78.00	-0.78	-20.55	-78.00	-0.78	-21.74	-21.15
17	4.30	-65.00	-0.65	-21.20	-66.00	-0.66	-22.40	-21.80
18	4.40	-60.00	-0.60	-21.80	-58.00	-0.58	-22.98	-22.39

No.	Beban (kN)	Penurunan (mm)						Rata-rata
		Penurunan Kiri			Penurunan Kanan			
1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1.40	-200.00	-2.00	-2.00	-198.00	-1.98	-1.98	-1.99
3	1.90	-180.00	-1.80	-3.80	-173.00	-1.73	-3.71	-3.76
4	2.00	-160.00	-1.60	-5.40	-163.00	-1.63	-5.34	-5.37
5	2.10	-150.00	-1.50	-6.90	-147.00	-1.47	-6.81	-6.86
6	2.30	-135.00	-1.35	-8.25	-120.00	-1.20	-8.01	-8.13
7	2.50	-120.00	-1.20	-9.45	-118.00	-1.18	-9.19	-9.32
8	2.70	-110.00	-1.10	-10.55	-115.00	-1.15	-10.34	-10.45
9	3.00	-98.00	-0.98	-11.53	-95.00	-0.95	-11.29	-11.41
10	3.10	-86.00	-0.86	-12.39	-80.00	-0.80	-12.09	-12.24
11	3.30	-80.00	-0.80	-13.19	-80.00	-0.80	-12.89	-13.04
12	3.40	-70.00	-0.70	-13.89	-71.00	-0.71	-13.60	-13.75
13	3.60	-60.00	-0.60	-14.49	-60.00	-0.60	-14.20	-14.35
14	3.80	-65.00	-0.65	-15.14	-65.00	-0.65	-14.85	-15.00
15	3.90	-67.00	-0.67	-15.81	-70.00	-0.70	-15.55	-15.68
16	3.80	-65.00	-0.65	-16.46	-65.00	-0.65	-16.20	-16.33
17	3.90	-65.00	-0.65	-17.11	-65.00	-0.65	-16.85	-16.98
18	4.00	-60.00	-0.60	-17.71	-60.00	-0.60	-17.45	-17.58
19	4.10	-50.00	-0.50	-18.21	-50.00	-0.50	-17.95	-18.08
20	4.20	-50.00	-0.50	-18.71	-50.00	-0.50	-18.45	-18.58
21	4.30	-50.00	-0.50	-19.21	-50.00	-0.50	-18.95	-19.08
22	4.40	-50.00	-0.50	-19.71	-50.00	-0.50	-19.45	-19.58
23	4.50	-40.00	-0.40	-20.11	-40.00	-0.40	-19.85	-19.98
24	4.60	-45.00	-0.45	-20.56	-45.00	-0.45	-20.30	-20.43

No.	Beban (kN)	Penurunan (mm)						Raa-rata
		Penurunan Kiri			Penurunan Kanan			
1	0	0	0	0	0	0	0	0.00
2	2.20	-197.00	-1.97	-1.97	-194.00	-1.94	-1.94	-1.96
3	2.30	-183.00	-1.83	-3.80	-184.00	-1.84	-3.78	-3.79
4	2.40	-150.00	-1.50	-5.30	-150.00	-1.50	-5.28	-5.29
5	2.60	-112.00	-1.12	-6.42	-150.00	-1.50	-6.78	-6.60
6	2.70	-100.00	-1.00	-7.42	-117.00	-1.17	-7.95	-7.69
7	2.80	-93.00	-0.93	-8.35	-95.00	-0.95	-8.90	-8.63
8	2.90	-90.00	-0.90	-9.25	-93.00	-0.93	-9.83	-9.54
9	2.90	-81.00	-0.81	-10.06	-85.00	-0.85	-10.68	-10.37
10	3.30	-77.00	-0.77	-10.83	-80.00	-0.80	-11.48	-11.16
11	3.40	-63.00	-0.63	-11.46	-75.00	-0.75	-12.23	-11.85
12	3.50	-58.00	-0.58	-12.04	-71.00	-0.71	-12.94	-12.49
13	3.80	-55.00	-0.55	-12.59	-63.00	-0.63	-13.57	-13.08
14	3.90	-52.00	-0.52	-13.11	-59.00	-0.59	-14.16	-13.64
15	4.10	-48.00	-0.48	-13.59	-48.00	-0.48	-14.64	-14.12
16	4.00	-45.00	-0.45	-14.04	-45.00	-0.45	-15.09	-14.57
17	4.10	-40.00	-0.40	-14.44	-40.00	-0.40	-15.49	-14.97
18	4.20	-35.00	-0.35	-14.79	-35.00	-0.35	-15.84	-15.32
19	4.30	-35.00	-0.35	-15.14	-35.00	-0.35	-16.19	-15.67
20	4.40	-35.00	-0.35	-15.49	-35.00	-0.35	-16.54	-16.02
21	4.50	-30.00	-0.30	-15.79	-30.00	-0.30	-16.84	-16.32
22	4.60	-30.00	-0.30	-16.09	-30.00	-0.30	-17.14	-16.62
23	4.70	-35.00	-0.35	-16.44	-35.00	-0.35	-17.49	-16.97
24	4.80	-30.00	-0.30	-16.74	-30.00	-0.30	-17.79	-17.27
25	4.80	-30.00	-0.30	-17.04	-30.00	-0.30	-18.09	-17.57
26	4.90	-30.00	-0.30	-17.34	-30.00	-0.30	-18.39	-17.87
27	5.00	-35.00	-0.35	-17.69	-35.00	-0.35	-18.74	-18.22

Partial Skirted Footing Test
with Diameter Footing 100 mm

PARTIAL SKIRTED FOOTING TEST, DIAMETER 100 MM

Diameter 100mm: (D100 : L75)

No.	Beban (kN)	Penurunan (mm)						Rata-rata
		Penurunan Kiri			Penurunan Kanan			
1	0	0	0	0	0	0	0	0.00
2	1.00	-220.00	-2.20	-2.20	-237.00	-2.37	-2.37	-2.29
3	1.30	-199.00	-1.99	-4.19	-210.00	-2.10	-4.47	-4.33
4	1.50	-178.00	-1.78	-5.97	-198.00	-1.98	-6.45	-6.21
5	1.70	-160.00	-1.60	-7.57	-184.00	-1.84	-8.29	-7.93
6	1.90	-145.00	-1.45	-9.02	-155.00	-1.55	-9.84	-9.43
7	2.00	-119.00	-1.19	-10.21	-129.00	-1.29	-11.13	-10.67
8	2.10	-100.00	-1.00	-11.21	-110.00	-1.10	-12.23	-11.72
9	2.30	-95.00	-0.95	-12.16	-100.00	-1.00	-13.23	-12.70
10	2.50	-80.00	-0.80	-12.96	-94.00	-0.94	-14.17	-13.57
11	2.70	-77.00	-0.77	-13.73	-89.00	-0.89	-15.06	-14.40
12	2.90	-63.00	-0.63	-14.36	-87.00	-0.87	-15.93	-15.15
13	3.00	-50.00	-0.50	-14.86	-50.00	-0.50	-16.43	-15.65
14	3.30	-48.00	-0.48	-15.34	-35.00	-0.35	-16.78	-16.06
15	3.50	-40.00	-0.40	-15.74	-30.00	-0.30	-17.08	-16.41
16	3.70	-33.00	-0.33	-16.07	-28.00	-0.28	-17.36	-16.72
17	3.90	-25.00	-0.25	-16.32	-26.00	-0.26	-17.62	-16.97
18	4.00	-25.00	-0.25	-16.57	-25.00	-0.25	-17.87	-17.22
19	4.20	-30.00	-0.30	-16.87	-30.00	-0.30	-18.17	-17.52
20	4.40	-30.00	-0.30	-17.17	-30.00	-0.30	-18.47	-17.82
21	4.60	-30.00	-0.30	-17.47	-30.00	-0.30	-18.77	-18.12
22	4.80	-30.00	-0.30	-17.77	-30.00	-0.30	-19.07	-18.42
23	4.90	-28.00	-0.28	-18.05	-28.00	-0.28	-19.35	-18.70
24	4.90	-25.00	-0.25	-18.30	-25.00	-0.25	-19.60	-18.95
25	5.00	-30.00	-0.30	-18.60	-30.00	-0.30	-19.90	-19.25
26	5.10	-30.00	-0.30	-18.90	-30.00	-0.30	-20.20	-19.55
27	5.10	-25.00	-0.25	-19.15	-25.00	-0.25	-20.45	-19.80

No.	Beban (kN)	Penurunan (mm)						
		Penurunan Kiri			Penurunan Kanan			Rata-rata
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1.50	-170.00	-1.70	-1.70	-171.00	-1.71	-1.71	-1.71
3	1.80	-171.00	-1.71	-3.41	-168.00	-1.68	-3.39	-3.40
4	1.70	-167.00	-1.67	-5.08	-163.00	-1.63	-5.02	-5.05
5	1.90	-142.00	-1.42	-6.50	-140.00	-1.40	-6.42	-6.46
6	2.00	-120.00	-1.20	-7.70	-122.00	-1.22	-7.64	-7.67
7	2.10	-100.00	-1.00	-8.70	-110.00	-1.10	-8.74	-8.72
8	2.40	-95.00	-0.95	-9.65	-100.00	-1.00	-9.74	-9.70
9	2.60	-90.00	-0.90	-10.55	-93.00	-0.93	-10.67	-10.61
10	2.70	-87.00	-0.87	-11.42	-87.00	-0.87	-11.54	-11.48
11	2.90	-85.00	-0.85	-12.27	-85.00	-0.85	-12.39	-12.33
12	3.10	-79.00	-0.79	-13.06	-79.00	-0.79	-13.18	-13.12
13	3.30	-70.00	-0.70	-13.76	-70.00	-0.70	-13.88	-13.82
14	3.50	-64.00	-0.64	-14.40	-64.00	-0.64	-14.52	-14.46
15	3.80	-57.00	-0.57	-14.97	-57.00	-0.57	-15.09	-15.03
16	3.90	-45.00	-0.45	-15.42	-45.00	-0.45	-15.54	-15.48
17	4.00	-35.00	-0.35	-15.77	-35.00	-0.35	-15.89	-15.83
18	4.10	-30.00	-0.30	-16.07	-30.00	-0.30	-16.19	-16.13
19	4.30	-25.00	-0.25	-16.32	-25.00	-0.25	-16.44	-16.38
20	4.50	-30.00	-0.30	-16.62	-30.00	-0.30	-16.74	-16.68
21	4.70	-25.00	-0.25	-16.87	-25.00	-0.25	-16.99	-16.93
22	4.90	-35.00	-0.35	-17.22	-35.00	-0.35	-17.34	-17.28
23	5.00	-30.00	-0.30	-17.52	-30.00	-0.30	-17.64	-17.58
24	5.30	-25.00	-0.25	-17.77	-25.00	-0.25	-17.89	-17.83

No.	Beban (kN)	Penurunan (mm)						Rata-rata
		Penurunan Kiri			Penurunan Kanan			
1	0	0	0	0	0	0	0	0
2	2.40	-165.00	-1.65	-1.65	-170.00	-1.70	-1.70	-1.68
3	2.70	-148.00	-1.48	-3.13	-153.00	-1.53	-3.23	-3.18
4	2.90	-137.00	-1.37	-4.50	-142.00	-1.42	-4.65	-4.58
5	3.00	-110.00	-1.10	-5.60	-100.00	-1.00	-5.65	-5.63
6	3.60	-98.00	-0.98	-6.58	-94.00	-0.94	-6.59	-6.59
7	3.70	-82.00	-0.82	-7.40	-82.00	-0.82	-7.41	-7.41
8	3.80	-73.00	-0.73	-8.13	-73.00	-0.73	-8.14	-8.14
9	3.90	-60.00	-0.60	-8.73	-60.00	-0.60	-8.74	-8.74
10	4.10	-50.00	-0.50	-9.23	-50.00	-0.50	-9.24	-9.24
11	4.40	-45.00	-0.45	-9.68	-45.00	-0.45	-9.69	-9.69
12	4.50	-40.00	-0.40	-10.08	-40.00	-0.40	-10.09	-10.09
13	4.60	-45.00	-0.45	-10.53	-45.00	-0.45	-10.54	-10.54
14	4.70	-40.00	-0.40	-10.93	-40.00	-0.40	-10.94	-10.94
15	4.80	-30.00	-0.30	-11.23	-30.00	-0.30	-11.24	-11.24
16	4.90	-30.00	-0.30	-11.53	-30.00	-0.30	-11.54	-11.54
17	5.00	-30.00	-0.30	-11.83	-30.00	-0.30	-11.84	-11.84
18	5.10	-30.00	-0.30	-12.13	-30.00	-0.30	-12.14	-12.14
19	5.30	-30.00	-0.30	-12.43	-30.00	-0.30	-12.44	-12.44
20	5.50	-30.00	-0.30	-12.73	-30.00	-0.30	-12.74	-12.74

Partial Skirted Footing Test
with Diameter Footing 150 mm

PARTIAL SKIRTED FOOTING TEST, DIAMETER 150 MM

Diameter 150mm: (D150 : L75)

No.	Beban (kN)	Penurunan (mm)						Rata-rata
		Penurunan Kiri			Penurunan Kanan			
1	0.00	0	0	0	0.00	0	0	0.00
2	3.70	-77.00	-0.77	-0.77	-80.00	-0.80	-0.80	-0.79
3	4.00	-75.00	-0.75	-1.52	-76.00	-0.76	-1.56	-1.54
4	4.10	-71.00	-0.71	-2.23	-72.00	-0.72	-2.28	-2.26
5	4.70	-71.00	-0.71	-2.94	-70.00	-0.70	-2.98	-2.96
6	5.00	-63.00	-0.63	-3.57	-65.00	-0.65	-3.63	-3.60
7	5.10	-60.00	-0.60	-4.17	-63.00	-0.63	-4.26	-4.22
8	6.20	-57.00	-0.57	-4.74	-60.00	-0.60	-4.86	-4.80
9	6.70	-53.00	-0.53	-5.27	-56.00	-0.56	-5.42	-5.35
10	6.90	-49.00	-0.49	-5.76	-55.00	-0.55	-5.97	-5.87
11	7.00	-45.00	-0.45	-6.21	-53.00	-0.53	-6.50	-6.36
12	7.40	-41.00	-0.41	-6.62	-45.00	-0.45	-6.95	-6.79
13	7.60	-39.00	-0.39	-7.01	-40.00	-0.40	-7.35	-7.18
14	7.70	-35.00	-0.35	-7.36	-35.00	-0.35	-7.70	-7.53
15	8.10	-31.00	-0.31	-7.67	-33.00	-0.33	-8.03	-7.85
16	8.10	-31.00	-0.31	-7.98	-33.00	-0.33	-8.36	-8.17
17	8.60	-30.00	-0.30	-8.28	-30.00	-0.30	-8.66	-8.47
18	9.90	-30.00	-0.30	-8.58	-30.00	-0.30	-8.96	-8.77

No.	Beban (kN)	Penurunan (mm)						Rata-rata
		Penurunan Kiri			Penurunan Kanan			
1	0.00	0	0	0	0	0	0	0.00
2	5.50	-57.00	-0.57	-0.57	-55.00	-0.55	-0.55	-0.56
3	6.00	-50.00	-0.50	-1.07	-50.00	-0.50	-1.05	-1.06
4	6.40	-45.00	-0.45	-1.52	-45.00	-0.45	-1.50	-1.51
5	6.70	-46.00	-0.46	-1.98	-46.00	-0.46	-1.96	-1.97
6	6.80	-45.00	-0.45	-2.43	-45.00	-0.45	-2.41	-2.42
7	7.00	-43.00	-0.43	-2.86	-43.00	-0.43	-2.84	-2.85
8	7.20	-40.00	-0.40	-3.26	-40.00	-0.40	-3.24	-3.25
9	7.40	-36.00	-0.36	-3.62	-36.00	-0.36	-3.60	-3.61
10	7.70	-30.00	-0.30	-3.92	-30.00	-0.30	-3.90	-3.91
11	7.90	-33.00	-0.33	-4.25	-33.00	-0.33	-4.23	-4.24
12	8.40	-30.00	-0.30	-4.55	-30.00	-0.30	-4.53	-4.54
13	8.80	-30.00	-0.30	-4.85	-30.00	-0.30	-4.83	-4.84
14	9.10	-30.00	-0.30	-5.15	-30.00	-0.30	-5.13	-5.14
15	9.50	-30.00	-0.30	-5.45	-30.00	-0.30	-5.43	-5.44
16	9.70	-35.00	-0.35	-5.80	-35.00	-0.35	-5.78	-5.79
17	9.90	-35.00	-0.35	-6.15	-35.00	-0.35	-6.13	-6.14
18	10.10	-35.00	-0.35	-6.50	-35.00	-0.35	-6.48	-6.49
19	10.60	-35.00	-0.35	-6.85	-35.00	-0.35	-6.83	-6.84
20	10.80	-35.00	-0.35	-7.20	-35.00	-0.35	-7.18	-7.19
21	10.90	-35.00	-0.35	-7.55	-35.00	-0.35	-7.53	-7.54
22	11.00	-35.00	-0.35	-7.90	-35.00	-0.35	-7.88	-7.89
23	11.10	-35.00	-0.35	-8.25	-35.00	-0.35	-8.23	-8.24
24	11.30	-35.00	-0.35	-8.60	-35.00	-0.35	-8.58	-8.59

No.	Beban (kN)	Penurunan (mm)						Rata-rata
		Penurunan Kiri			Penurunan Kanan			
1	0	0	0	0	0	0	0	0.00
2	7.90	-28.00	-0.28	-0.28	-30.00	-0.30	-0.30	-0.29
3	8.00	-25.00	-0.25	-0.53	-27.00	-0.27	-0.57	-0.55
4	8.20	-25.00	-0.25	-0.78	-23.00	-0.23	-0.80	-0.79
5	8.40	-35.00	-0.35	-1.13	-35.00	-0.35	-1.15	-1.14
6	8.70	-25.00	-0.25	-1.38	-25.00	-0.25	-1.40	-1.39
7	8.90	-30.00	-0.30	-1.68	-28.00	-0.28	-1.68	-1.68
8	9.30	-30.00	-0.30	-1.98	-30.00	-0.30	-1.98	-1.98
9	9.50	-32.00	-0.32	-2.30	-30.00	-0.30	-2.28	-2.29
10	9.70	-32.00	-0.32	-2.62	-32.00	-0.32	-2.60	-2.61
11	9.90	-35.00	-0.35	-2.97	-35.00	-0.35	-2.95	-2.96
12	10.00	-35.00	-0.35	-3.32	-35.00	-0.35	-3.30	-3.31
13	10.20	-30.00	-0.30	-3.62	-30.00	-0.30	-3.60	-3.61
14	10.40	-35.00	-0.35	-3.97	-35.00	-0.35	-3.95	-3.96
15	10.60	-30.00	-0.30	-4.27	-30.00	-0.30	-4.25	-4.26
16	10.90	-35.00	-0.35	-4.62	-35.00	-0.35	-4.60	-4.61
17	11.10	-30.00	-0.30	-4.92	-30.00	-0.30	-4.90	-4.91
18	11.50	-35.00	-0.35	-5.27	-35.00	-0.35	-5.25	-5.26
19	11.80	-30.00	-0.30	-5.57	-30.00	-0.30	-5.55	-5.56
20	11.90	-30.00	-0.30	-5.87	-30.00	-0.30	-5.85	-5.86
21	11.90	-30.00	-0.30	-6.17	-30.00	-0.30	-6.15	-6.16
22	12.00	-28.00	-0.28	-6.45	-28.00	-0.28	-6.43	-6.44
23	12.50	-28.00	-0.28	-6.73	-28.00	-0.28	-6.71	-6.72
24	12.90	-28.00	-0.28	-7.01	-28.00	-0.28	-6.99	-7.00
25	13.00	-27.00	-0.27	-7.28	-27.00	-0.27	-7.26	-7.27
26	13.00	-25.00	-0.25	-7.53	-25.00	-0.25	-7.51	-7.52
27	12.80	-23.00	-0.23	-7.76	-23.00	-0.23	-7.74	-7.75

Appendix 4 :
Documentation of Research



Figure A.1. Partial Skirted footing models

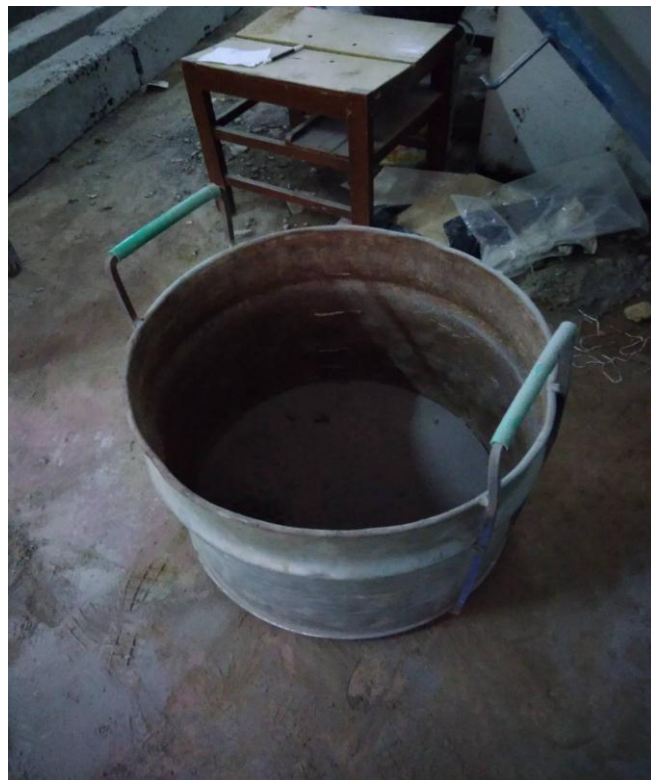


Figure A.2. Soil bin, height 500 mm, diameter 600 mm



Figure A.3. Piston, attached below the Hydraulic loading machine



Figure A.4. Setup of testing procedures



Figure A.5. Digital device for reading the load



Figure A.6. Hydraulic pump, for giving the load to Hydraulic Loading Machine