

MEMORIAL DE CÁLCULO DA CAPACIDADE DE CARGA DAS ESTACAS																											
DADOS DE AUXÍLIO				DESCRIÇÃO DAS CAMADAS DO SOLO																							
TIPO	FRANKI			NÍVEL DA PONTA	COTA (m)	NSPT	DESCRIÇÃO GERAL DO SOLO	AOKI-VELLOSO					DECOURT-QUAREMAS					RECALQUES									
SEÇÃO	CIRCULAR							α (%)	K (MPa)	F1 (P)	F2 (L)	Rp (tf)	RI (tf)	C (KPa)	α	β	Rp (tf)	RI (tf)	RI (tf)	CP (tf)	RE (mm)	φo	B (m)	ΔP (tf/m²)	Ead (tf/m²)	RS (mm)	
Φ (cm)	35			INÍCIO	0	1	ARGILA	ARENOSO(A)	2,4	0,35	2,5	5	1,3469579	0,1847	260	1	1	3,7522397	1,46607657	0	50	0,278405	2	0	0	50	0
Área da ponta (m²)	0,09621				-1	2	ARGILA	ARENOSO(A)	2,4	0,35	2,5	5	2,6939157	0,3695	260	1	1	4,1691553	1,83259571	0,3694513	49,63055	0,276348	2	0	0	100	0
Área lateral tot (m²)	3,29867			PONTA	-2	2	ARGILA	ARENOSO(A)	2,4	0,35	2,5	5	2,6939157	0,3695	260	1	1	5,8368174	1,83259571	0,3694513	49,2611	0,274291	2	0	0	100	0
Comp. Estaca (m)	3				-3	3	ARGILA	ARENOSO(A)	2,4	0,35	2,5	5	4,0408736	0,5542	260	1	1	7,5044795	2,19911486	0,5541769	48,70692	0,271205	2	0,35	0	150	0
E (MPa)	2,8E+07				-4	4	ARGILA	ARENOSO(A)	2,4	0,35	2,5	5	5,3878314	0,7389	260	1	1	10,839804	2,565634	0	48,70692	0	2	0,85	67,4144228	200	505,608171
Nk (tf)	50				-5	6	SILTE	ARENOSO(A)	2,2	0,55	2,5	5	12,699888	1,5966	400	1	1	19,242255	3,29867229	0	48,70692	0	2	2,35	8,81972304	900	14,6995384
					-6	5	SILTE	ARENOSO(A)	2,2	0,55	2,5	5	10,58324	1,3305	400	1	1	21,807889	2,93215314	0	48,70692	0	2	3,85	3,28601251	750	6,57202502
					-7	6	SILTE	ARENOSO(A)	2,2	0,55	2,5	5	12,699888	1,5966	400	1	1	20,525072	3,29867229	0	48,70692	0	2	5,35	1,70170043	900	2,83616738
					-8	5	SILTE	ARENOSO(A)	2,2	0,55	2,5	5	10,58324	1,3305	400	1	1	24,373523	2,93215314	0	48,70692	0	2	6,85	1,0380291	750	2,0760582
					-9	8	SILTE	ARENOSO(A)	2,2	0,55	2,5	5	16,933184	2,1287	400	1	1	30,787608	4,03171057	0	48,70692	0	2	8,35	0,69858253	1200	0,87322816
					-10	11	SILTE	ARENOSO(A)	2,2	0,55	2,5	5	23,283129	2,927	400	1	1	43,615778	5,131268	0	48,70692	0	2	9,85	0,50201675	1815	0,41488988
					-11	15	SILTE	ARENOSO(A)	2,2	0,55	2,5	5	31,749721	3,9914	400	1	1	71,837752	6,59734457	0	48,70692	0	1	11,85	0,3468598	2475	0,21021806
					-12	30	SILTE	ARENOSO(A)	2,2	0,55	2,5	5	63,499442	7,9828	400	1	1	96,211275	6,59734457	0	48,70692	0	1	13,85	0,25391662	4950	0,07694443
					-13	30	SILTE	ARENOSO(A)	2,2	0,55	2,5	5	63,499442	7,9828	400	1	1	118,01916	6,59734457	0	48,70692	0	1	15,85	0,19387961	4950	0,0587514
					-14	32	SILTE	ARENOSO(A)	2,2	0,55	2,5	5	67,732738	8,515	400	1	1	124,43325	6,59734457	0	48,70692	0	1	17,85	0,15286717	5280	0,04342817
					-15	35	SILTE	ARENOSO(A)	2,2	0,55	2,5	5	74,082682	9,3133	400	1	1	87,231556	6,59734457	0	48,70692	0	1	19,85	0,12361457	5775	0,03210768
					-16	1	SILTE	ARENOSO(A)	2,2	0,55	2,5	5	2,1166481	0,2661	400	1	1	47,464229	1,46607657	0	48,70692	0	2	21,35	0,10685502	150	1,06855016
					-17	1	SILTE	ARENOSO(A)	2,2	0,55	2,5	5	2,1166481	0,2661	400	1	1	3,848451	1,46607657	0	48,70692	0	2	22,85	0,09328638	150	0,93286385
					-18	1	SILTE	ARENOSO(A)	2,2	0,55	2,5	5	2,1166481	0,2661	400	1	1	3,848451	1,46607657	0	48,70692	0	2	24,35	0,0821472	150	0,82147195
					-19	1	SILTE	ARENOSO(A)	2,2	0,55	2,5	5	2,1166481	0,2661	400	1	1	3,848451	1,46607657	0	48,70692	0	2	25,85	0,07289027	150	0,72890273
				-20	1	SILTE	PURO(A)	3	0,4	2,5	5	1,5393804	0,2639	200	1	1	1,9242255	1,46607657	0	48,70692	0	2	27,35	0,06511425	150	0,65114245	
RESULTADOS																											
Rec. Elástico (cm)	0,11002																										
Rec. do solo (cm)	53,7704																										
RT (cm)	53,8805																										
FÓRMULAS PRINCIPAIS																											
AOKI-VELLOSO																											
Rp = (K.Nspt/F1) . Ap																											
RI = (α.K.NI/F2) . AI																											
Rt = Rp + RI																											
DECOURT-QUARESMA																											
Rp = (α.c.Np) . Ap																											
RI = (β.10.(NI/3 + 1)) . AI																											
Rt = Rp + RI																											