

MEMORIAL DE C.

DADOS DE AUXÍLIO

TIPO	FRANKI
SEÇÃO	CIRCULAR
Φ (cm)	35
Área da ponta (m²)	0,09621
Área lateral tot (m²)	4,39823
Comp. Estaca (m)	4
E (MPa)	2,8E+07
Nk (tf)	50

RESULTADOS

Rec. Elástico (cm)	0,13673
Rec. do solo (cm)	14,3857
RT (cm)	14,5224

FÓRMULAS PRINCIPAIS

AOKI-VELLOSO

$$R_p = (K.N_{spt}/F_1) \cdot A_p$$

$$RI = (\alpha \cdot K \cdot NI / F2) \cdot AI$$

$$R_t = R_p + R_l$$

DECOURT-QUARESMA

$$R_p = (\alpha.c.N_p) \cdot A_p$$

$$RI = (\beta \cdot 10 \cdot (NI/3 + 1)) \cdot AI$$

$$R_t = R_p + R_l$$

NÍVEL DA PONTA	COTA (m)	NSPT	DESCRIÇÃO GERAL DO SOLO		AOKI-VE		
					α (%)	K (MPa)	F1 (P)
INÍCIO PONTA	0	1	ARGILA	ARENOSO(A)	2,4	0,35	2,5
	-1	2	ARGILA	ARENOSO(A)	2,4	0,35	2,5
	-2	2	ARGILA	ARENOSO(A)	2,4	0,35	2,5
	-3	3	ARGILA	ARENOSO(A)	2,4	0,35	2,5
	-4	4	ARGILA	ARENOSO(A)	2,4	0,35	2,5
	-5	6	SILTE	ARENOSO(A)	2,2	0,55	2,5
	-6	5	SILTE	ARENOSO(A)	2,2	0,55	2,5
	-7	6	SILTE	ARENOSO(A)	2,2	0,55	2,5
	-8	5	SILTE	ARENOSO(A)	2,2	0,55	2,5
	-9	8	SILTE	ARENOSO(A)	2,2	0,55	2,5
	-10	11	SILTE	ARENOSO(A)	2,2	0,55	2,5
	-11	15	SILTE	ARENOSO(A)	2,2	0,55	2,5
	-12	30	SILTE	ARENOSO(A)	2,2	0,55	2,5
	-13	30	SILTE	ARENOSO(A)	2,2	0,55	2,5
	-14	32	SILTE	ARENOSO(A)	2,2	0,55	2,5
	-15	35	SILTE	ARENOSO(A)	2,2	0,55	2,5
	-16	1	SILTE	ARENOSO(A)	2,2	0,55	2,5
	-17	1	SILTE	ARENOSO(A)	2,2	0,55	2,5
	-18	1	SILTE	ARENOSO(A)	2,2	0,55	2,5
	-19	1	SILTE	ARENOSO(A)	2,2	0,55	2,5
	-20	1	SILTE	PURO(A)	3	0,4	2,5

ÁLCULO DA CAPACIDADE DE CARGA DAS ESTACAS

DESCRIÇÃO DAS CAMADAS DO SOLO

FLOSO			DECOURT-QUAREMAS					RECALQUES				
F2 (L)	Rp (tf)	RI (tf)	C (KPa)	α	β	Rp (tf)	RI (tf)	RI (tf)	CP (tf)	RE (mm)	φo	B (m)
5	1,3469579	0,1847	260	1	1	3,7522397	1,46607657	0	50	0,278405	2	0
5	2,6939157	0,3695	260	1	1	4,1691553	1,83259571	0,3694513	49,63055	0,276348	2	0
5	2,6939157	0,3695	260	1	1	5,8368174	1,83259571	0,3694513	49,2611	0,274291	2	0
5	4,0408736	0,5542	260	1	1	7,5044795	2,19911486	0,5541769	48,70692	0,271205	2	0
5	5,3878314	0,7389	260	1	1	10,839804	2,565634	0,7389026	47,96802	0,267091	2	0,35
5	12,699888	1,5966	400	1	1	19,242255	3,29867229	0	47,96802	0	2	0,85
5	10,58324	1,3305	400	1	1	21,807889	2,93215314	0	47,96802	0	2	2,35
5	12,699888	1,5966	400	1	1	20,525072	3,29867229	0	47,96802	0	2	3,85
5	10,58324	1,3305	400	1	1	24,373523	2,93215314	0	47,96802	0	2	5,35
5	16,933184	2,1287	400	1	1	30,787608	4,03171057	0	47,96802	0	2	6,85
5	23,283129	2,927	400	1	1	43,615778	5,131268	0	47,96802	0	2	8,35
5	31,749721	3,9914	400	1	1	71,837752	6,59734457	0	47,96802	0	1	10,35
5	63,499442	7,9828	400	1	1	96,211275	6,59734457	0	47,96802	0	1	12,35
5	63,499442	7,9828	400	1	1	118,01916	6,59734457	0	47,96802	0	1	14,35
5	67,732738	8,515	400	1	1	124,43325	6,59734457	0	47,96802	0	1	16,35
5	74,082682	9,3133	400	1	1	87,231556	6,59734457	0	47,96802	0	1	18,35
5	2,1166481	0,2661	400	1	1	47,464229	1,46607657	0	47,96802	0	2	19,85
5	2,1166481	0,2661	400	1	1	3,848451	1,46607657	0	47,96802	0	2	21,35
5	2,1166481	0,2661	400	1	1	3,848451	1,46607657	0	47,96802	0	2	22,85
5	2,1166481	0,2661	400	1	1	3,848451	1,46607657	0	47,96802	0	2	24,35
5	1,5393804	0,2639	200	1	1	1,9242255	1,46607657	0	47,96802	0	2	25,85

ΔP (tf/m²)	Ead (tf/m²)	RS (mm)
0	50	0
0	100	0
0	100	0
0	150	0
0	200	0
66,3917202	900	110,652867
8,68592447	750	17,3718489
3,23616245	900	5,39360408
1,67588498	750	3,35176996
1,0222818	1200	1,27785225
0,68798477	1815	0,56858245
0,44778658	2475	0,27138581
0,31449798	4950	0,09530242
0,23294209	4950	0,07058851
0,17943876	5280	0,05097692
0,14245564	5775	0,03700146
0,12173929	150	1,21739286
0,10523398	150	1,05233984
0,09187119	150	0,91871195
0,08090099	150	0,80900991
0,0717845	150	0,717845