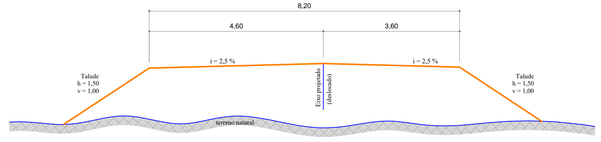
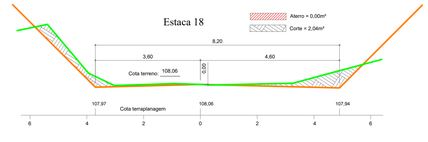


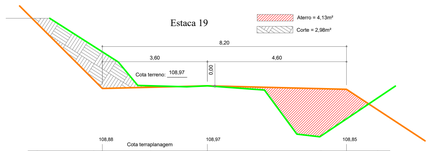
CORTE - SEÇÃO TIPO DE TERRAPLANAGEM _____ esc 1:50

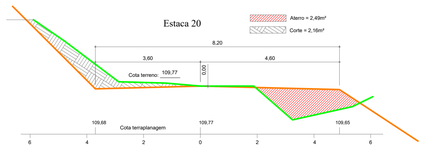


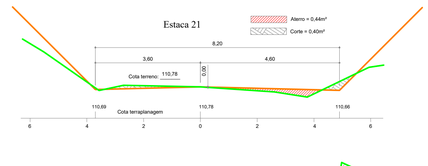
ATERRO - SEÇÃO TIPO DE TERRAPLANAGEM _____ esc 1:50

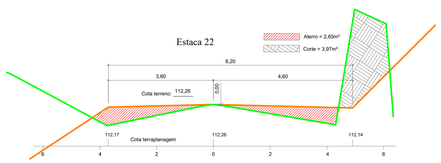
SEÇÃO TRANSVERSAL ___ esc 1:75
- LARGURA PISTA = 8,00m
Estaca 00 até Estaca 41+15,00m

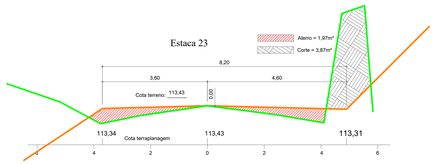


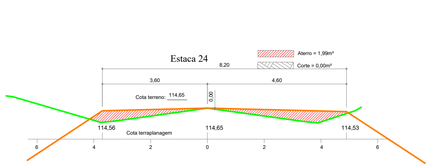


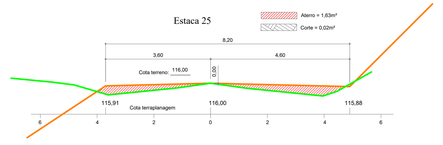


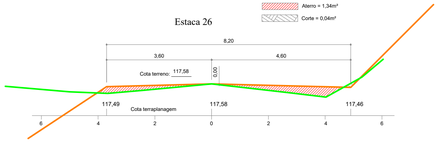


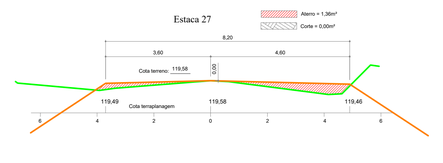


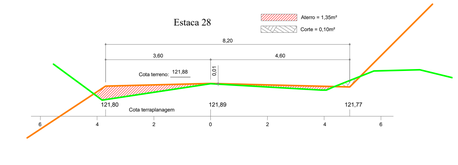


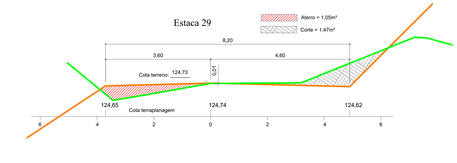


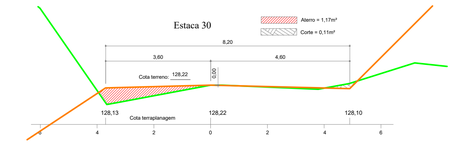


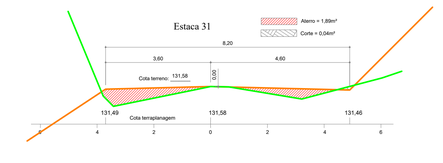












Estaca	Cota Terreno	Cota Terraplan	Cota Bordo esq	Cota Bordo dir	Área Corte (m²)	Área Aterro (m²)	Distância (m)	Vol Corte (m³)	Vol Aterro (m³)	Vol Corte acum (m³)	Vol Aterro acum (m³)
0	92,08	92,08	91,99	91,96	0,07	0,20	-	-	-	-	-
1	92,73	92,72	92,63	92,60	0,43	0,16	20,00	5,00	3,60	5,00	3,60
2	93,23	93,23	93,14	93,11	0,21	0,67	20,00	6,40	8,30	11,40	11,90
3	93,74	93,74	93,65	93,62	0,30	1,29	20,00	5,10	19,60	16,50	31,50
4	94,22	94,23	94,14	94,11	0,03	0,90	20,00	3,30	21,90	19,80	53,40
5	94,71	94,71	94,62	94,59	0,24	0,65	20,00	2,70	15,50	22,50	68,90
6	95,26	95,26	95,17	95,14	0,12	0,42	20,00	3,60	10,70	26,10	79,60
7	95,85	95,85	95,76	95,73	0,21	0,22	20,00	3,30	6,40	29,40	86,00
8	96,52	96,52	96,43	96,40	0,87	0,12	20,00	10,80	3,40	40,20	89,40
9	97,67	97,67	97,58	97,55	2,73	0,62	20,00	36,00	7,40	76,20	96,80
10	99,36	99,37	99,28	99,25	4,45	0,52	20,00	71,80	11,40	148,00	108,20
11	101,49	101,49	101,40	101,37	5,08	0,66	20,00	95,30	11,80	243,30	120,00
12	103,48	103,48	103,39	103,36	2,62	0,65	20,00	77,00	13,10	320,30	133,10
13	104,85	104,84	104,75	104,72	0,53	0,38	20,00	31,50	10,30	351,80	143,40
14	105,46	105,46	105,37	105,34	0,82	0,51	20,00	13,50	8,90	365,30	152,30
15	106,25	106,25	106,16	106,13	0,01	1,08	20,00	8,30	15,90	373,60	168,20
16	106,91	106,91	106,82	106,79	0,02	1,08	20,00	0,30	21,60	373,90	189,80
17	107,48	107,48	107,39	107,36	7,41	0,14	20,00	74,30	12,20	448,20	202,00
18	108,06	108,06	107,97	107,94	2,04	-	20,00	94,50	1,40	542,70	203,40
19	108,97	108,97	108,88	108,85	2,98	4,13	20,00	50,20	41,30	592,90	244,70
20	109,77	109,77	109,68	109,65	2,16	2,49	20,00	51,40	66,20	644,30	310,90
21	110,78	110,78	110,69	110,66	0,40	0,44	20,00	25,60	29,30	669,90	340,20
22	112,26	112,26	112,17	112,14	3,97	2,65	20,00	43,70	30,90	713,60	371,10
23	113,43	113,43	113,34	113,31	3,87	1,97	20,00	78,40	46,20	792,00	417,30
24	114,65	114,65	114,56	114,53	-	1,99	20,00	38,70	39,60	830,70	456,90
25	116,00	116,00	115,91	115,88	0,02	1,63	20,00	0,20	36,20	830,90	493,10
26	117,58	117,58	117,49	117,46	0,04	1,34	20,00	0,60	29,70	831,50	522,80
27	119,58	119,58	119,49	119,46	-	1,36	20,00	0,40	27,00	831,90	549,80
28	121,88	121,89	121,80	121,77	0,10	1,35	20,00	1,00	27,10	832,90	576,90
29	124,73	124,74	124,65	124,62	1,47	1,05	20,00	15,70	24,00	848,60	600,90
30	128,22	128,22	128,13	128,10	0,11	1,17	20,00	15,80	22,20	864,40	623,10
31	131,58	131,58	131,49	131,46	0,04	1,89	20,00	1,50	30,60	865,90	653,70

Reserva Técnica

ART nº _____

1ª revisão: _____/20___

ESTADO DE SANTA CATARINA
PREFEITURA MUNICIPAL

Cocal do Sul

Projeto
PAVIM ASFÁLTICA - TERRAPLANAGEM

Folha
1 de 3

Proprietário
PREFEITURA MUNICIPAL DE COCAL DO SUL

Data
JUN 2025

Local
Rod. Municipal Linha Ferreira Pontes
Linha Ferreira Pontes - Cocal do sul/SC

Escala
1 : 100

Conteúdo
Terraplanagem:
Seções Transversais - Volumes de Cortes e Aterros

Área
Área Pavimento: 13.992,00 m²

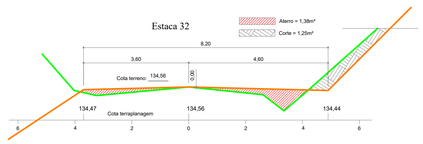
Responsável Técnico

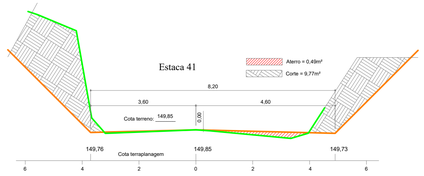
LEONARDO DE BONNA
- Engenheiro Civil
- CREA/SC 019.003-8

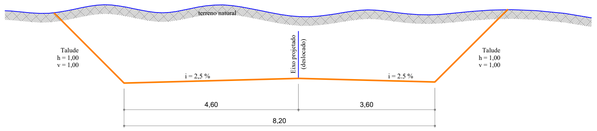
Assinado de forma digital por LEONARDO DE BONNA:37724479968
DN: c=BR, ou=ICP Brasil, ou=VideoConferencia, ou=01505371000102, ou=Secretaria da Receita Federal do Brasil - RFB, ou=RFB e-CPF A1, ou=(em branco), cn=LEONARDO DE BONNA:37724479968
Dados: 2025.09.02 11:13:11 -03'00'

Projeto 0(xx) 48 999 93 3065
Leonardo de Bonna

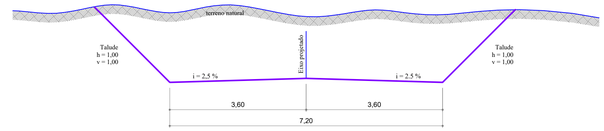
Desenho 0(xx) 48 999 93 3065
Leonardo de Bonna







CORTE - SEÇÃO TIPO DE TERRAPLANAGEM



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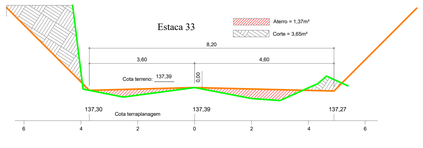
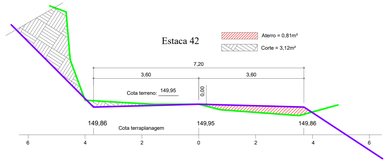
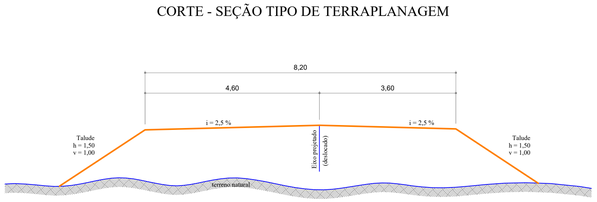
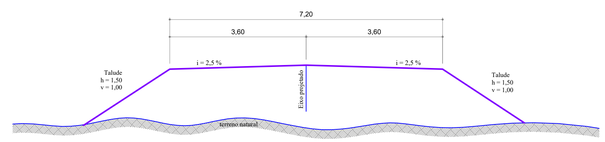






ATERRO - SEÇÃO TIPO DE TERRAPLANAGEM



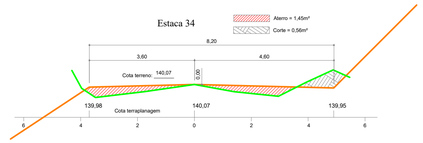
ATERRO - SEÇÃO TIPO DE TERRAPLANAGEM

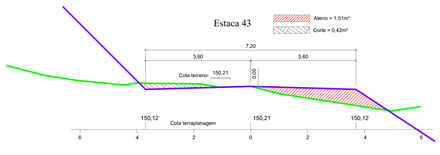
SEÇÃO TRANSVERSAL ___ esc 1:75
- LARGURA PISTA = 8,00m

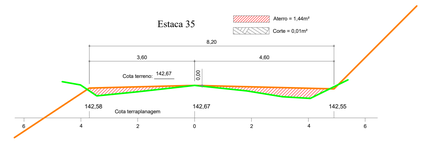
Estaca 00 até Estaca 41+15,00m

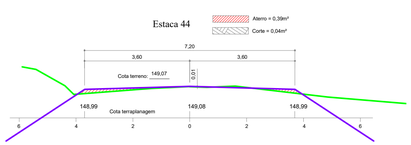
SEÇÃO TRANSVERSAL ___ esc 1:75
- LARGURA PISTA = 7,00m

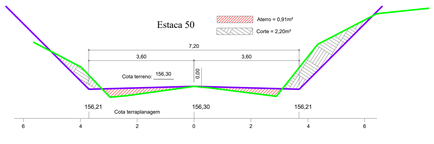
Estaca 41+15,00m até Estaca 94

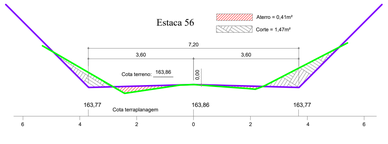




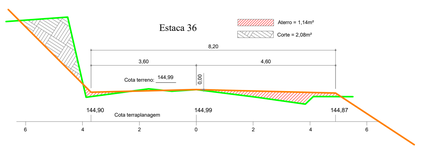


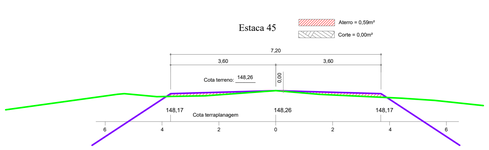


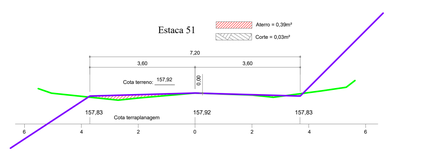


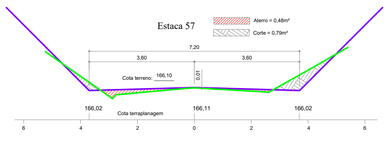


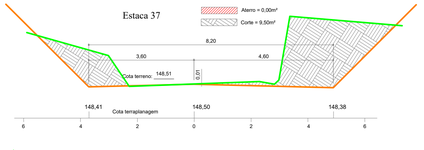
Estaca	Cota Terreno	Cota Terraplan	Cota Bordo esq	Cota Bordo dir	Área Corte (m²)	Área Aterro (m²)	Distância (m)	Vol Corte (m³)	Vol Aterro (m³)	Vol Corte acum (m³)	Vol Aterro acum (m³)
32	134,56	134,56	134,47	134,44	1,25	1,38	20,00	12,90	32,70	878,80	686,40
33	137,39	137,39	137,30	137,27	3,65	1,37	20,00	49,00	27,50	927,80	713,90
34	140,07	140,07	139,98	139,95	0,56	1,45	20,00	42,10	28,20	969,90	742,10
35	142,67	142,67	142,58	142,55	0,01	1,44	20,00	5,70	28,90	975,60	771,00
36	144,99	144,99	144,90	144,87	2,08	1,14	20,00	20,90	25,80	996,50	796,80
37	148,51	148,50	148,41	148,38	9,50	-	20,00	115,80	11,40	1.112,30	808,20
38	149,26	149,23	149,14	149,11	-	0,79	20,00	95,00	7,90	1.207,30	816,10
39	149,32	149,24	149,15	149,12	8,60	0,42	20,00	86,00	12,10	1.293,30	828,20
40	149,52	149,52	149,43	149,40	11,05	0,49	20,00	196,50	9,10	1.489,80	837,30
41	149,85	149,85	149,76	149,73	9,77	0,49	20,00	208,20	9,80	1.698,00	847,10
42	149,95	149,95	149,86	149,86	3,12	0,81	20,00	128,90	13,00	1.826,90	860,10
43	150,21	150,21	150,12	150,12	0,42	1,51	20,00	35,40	23,20	1.862,30	883,30
44	149,07	149,08	148,99	148,99	0,04	0,39	20,00	4,60	19,00	1.866,90	902,30
45	148,26	148,26	148,17	148,17	-	0,59	20,00	0,40	9,80	1.867,30	912,10
46	148,33	148,33	148,24	148,24	-	0,68	20,00	-	12,70	1.867,30	924,80
47	149,63	149,63	149,54	149,54	-	1,85	20,00	-	25,30	1.867,30	950,10
48	151,67	151,67	151,58	151,58	0,59	0,59	20,00	5,90	24,40	1.873,20	974,50
49	154,29	154,29	154,20	154,20	3,08	0,66	20,00	36,70	12,50	1.909,90	987,00
50	156,30	156,30	156,21	156,21	2,20	0,91	20,00	52,80	15,70	1.962,70	1.002,70
51	157,92	157,92	157,83	157,83	0,03	0,39	20,00	22,30	13,00	1.985,00	1.015,70
52	158,84	158,84	158,75	158,75	0,42	0,59	20,00	4,50	10,80	1.989,50	1.026,50
53	159,84	159,84	159,75	159,75	0,01	0,74	20,00	4,30	14,30	1.993,80	1.040,80
54	160,89	160,89	160,80	160,80	1,48	0,49	20,00	14,90	12,30	2.008,70	1.053,10
55	162,14	162,14	162,05	162,05	1,47	0,23	20,00	29,50	7,20	2.038,20	1.060,30
56	163,86	163,86	163,77	163,77	1,47	0,41	20,00	29,40	6,40	2.067,60	1.066,70
57	166,10	166,11	166,02	166,02	0,79	0,48	20,00	22,60	8,90	2.090,20	1.075,60
58	169,09	169,09	169,00	169,00	0,14	1,16	20,00	9,30	16,40	2.099,50	1.092,00
59	172,09	172,09	172,00	172,00	-	1,62	20,00	1,40	27,80	2.100,90	1.119,80
60	174,72	174,72	174,63	174,63	-	1,48	20,00	-	31,00	2.100,90	1.150,80
61	176,94	176,94	176,85	176,85	0,04	0,97	20,00	0,40	24,50	2.101,30	1.175,30

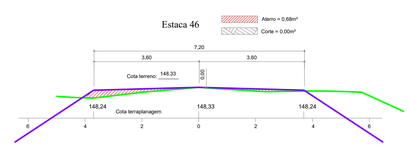


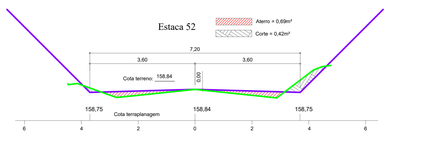


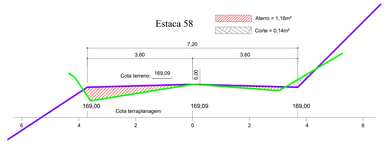


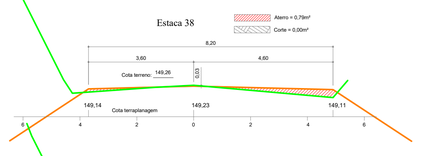


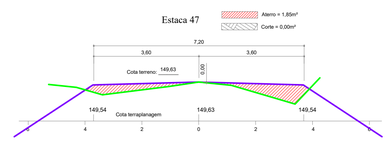


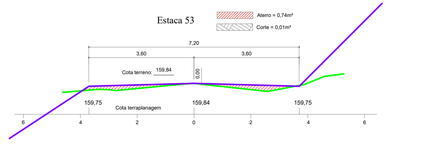


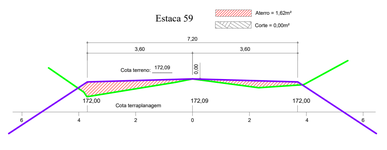


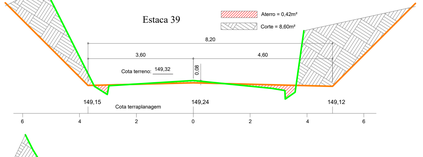


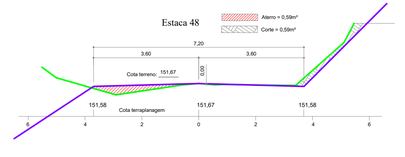


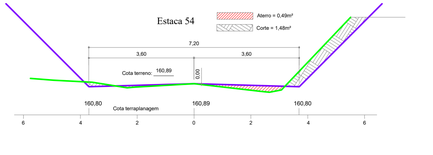


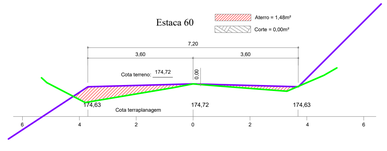


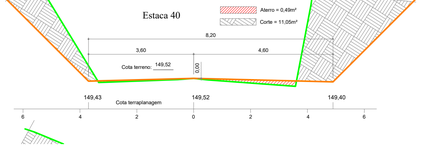


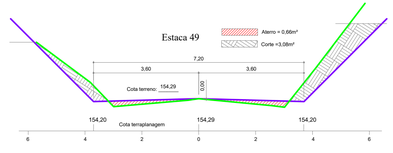


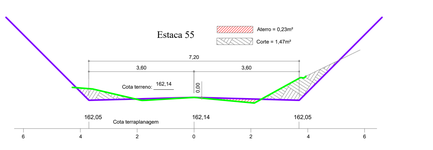


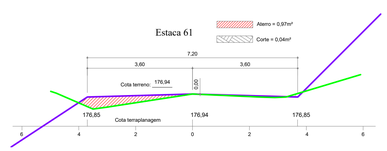












Reserva Técnica

ART nº _____

1ª revisão: _____/20___

ESTADO DE SANTA CATARINA
PREFEITURA MUNICIPAL

Cocal do Sul

Projeto
PAVIM ASFÁLTICA - TERRAPLANAGEM

Folha
2 de 3

Proprietário
PREFEITURA MUNICIPAL DE COCAL DO SUL

Data
JUN 2025

Local
Rod. Municipal Linha Ferreira Pontes
Linha Ferreira Pontes - Cocal do sul/SC

Escala
1 : 100

Conteúdo
Terraplanagem:
Seções Transversais - Volumes de Cortes e Aterros

Área
Área Pavimento: 13.992,00 m²

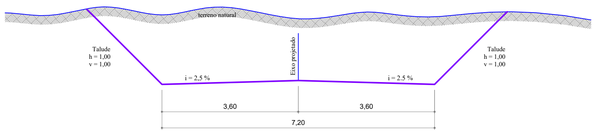
Responsável Técnico

LEONARDO DE BONNA
- Engenheiro Civil
- CREA/SC 019.003-8

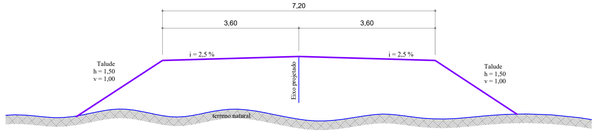
Assinado de forma digital por LEONARDO DE BONNA:37724479968
DN: c=BR, o=ICP-Brasil, ou=VideoConferencia, ou=01506371000102, ou=Secretaria da Receita Federal do Brasil - RFB, ou=RFB e-CPF A1, ou=(em branco), cn=LEONARDO DE BONNA:37724479968
Dados: 2025.09.02 11:13:44 -03'00'

Projeto 0(xx) 48 999 93 3065
Leonardo de Bonna

Desenho 0(xx) 48 999 93 3065
Leonardo de Bonna

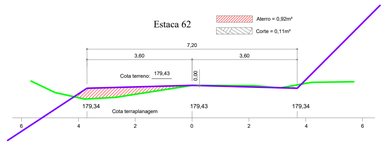


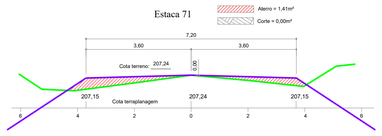
CORTE - SEÇÃO TIPO DE TERRAPLANAGEM _____ esc 1:50

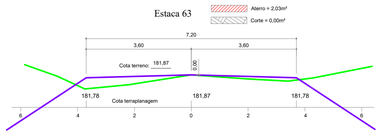


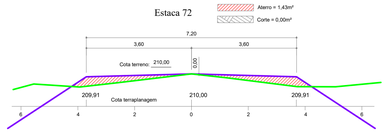
ATERRO - SEÇÃO TIPO DE TERRAPLANAGEM _____ esc 1:50

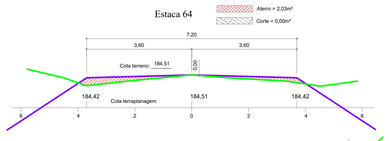
SEÇÃO TRANSVERSAL ___ esc 1:75
- LARGURA PISTA = 7,00m
Estaca 41+15,00m até Estaca 94

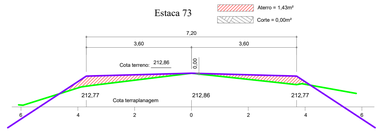


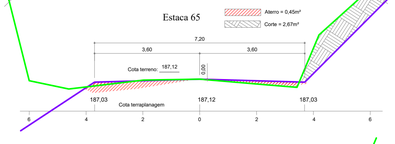


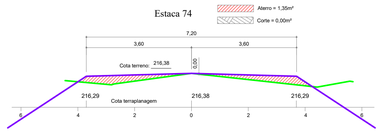


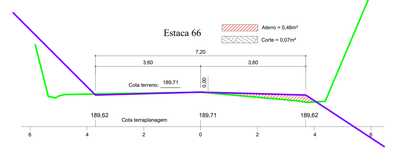


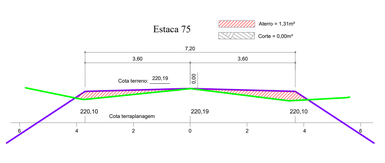


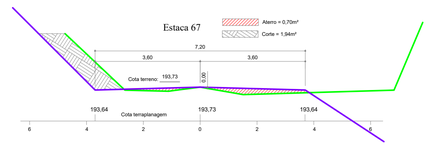


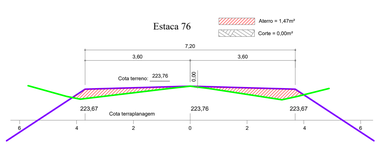


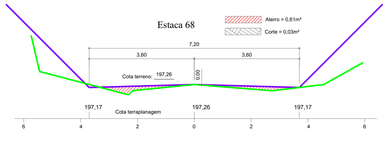


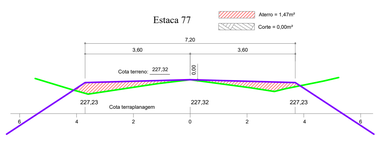


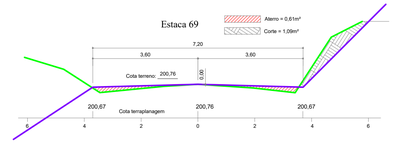


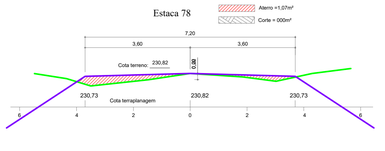


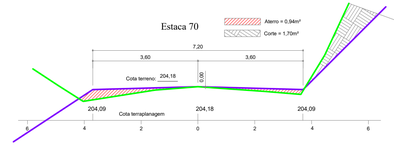


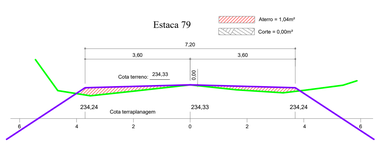


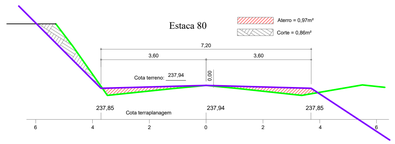


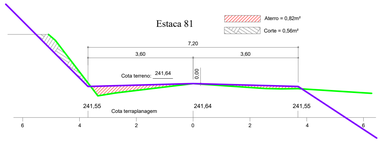


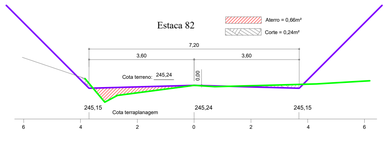


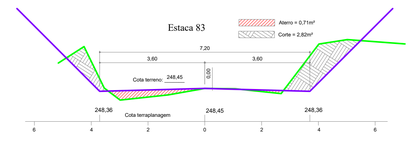


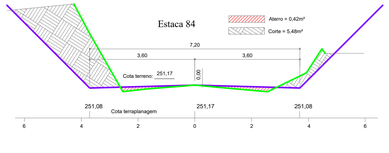


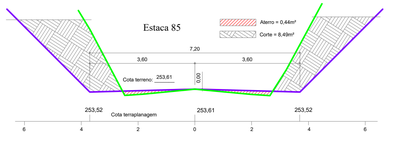


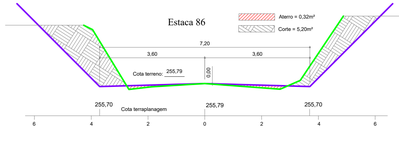


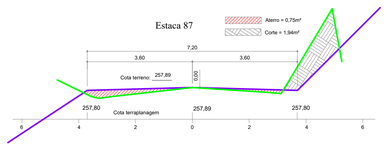


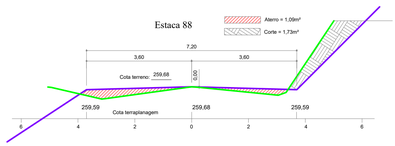


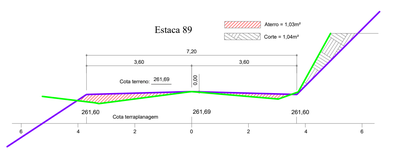


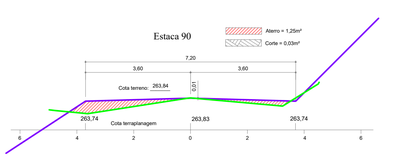


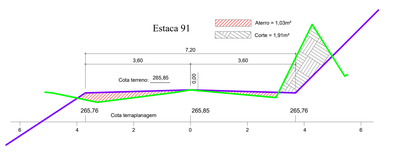


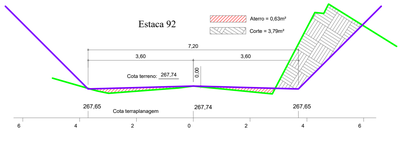


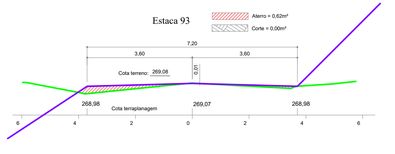


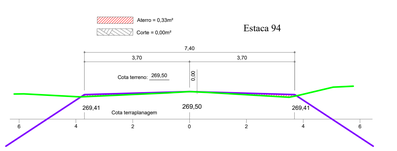












Estaca	Cota Terreno	Cota Terraplan	Cota Bordo esq	Cota Bordo dir	Área Corte (m²)	Área Aterro (m²)	Distância (m)	Vol Corte (m³)	Vol Aterro (m³)	Vol Corte acum (m³)	Vol Aterro acum (m³)
62	179,43	179,43	179,34	179,34	0,11	0,92	20,00	1,50	18,90	2.102,80	1.194,20
63	181,87	181,87	181,78	181,78	-	2,03	20,00	1,10	29,50	2.103,90	1.223,70
64	184,51	184,51	184,42	184,42	-	2,03	20,00	-	40,60	2.103,90	1.264,30
65	187,12	187,12	187,03	187,03	2,67	0,45	20,00	26,70	24,80	2.130,60	1.289,10
66	189,71	189,71	189,62	189,62	0,07	0,48	20,00	27,40	9,30	2.158,00	1.298,40
67	193,73	193,73	193,64	193,64	1,94	0,70	20,00	20,10	11,80	2.178,10	1.310,20
68	197,26	197,26	197,17	197,17	0,03	0,61	20,00	19,70	13,10	2.197,80	1.323,30
69	200,76	200,76	200,67	200,67	1,09	0,61	20,00	11,20	12,20	2.209,00	1.335,50
70	204,18	204,18	204,09	204,09	1,70	0,94	20,00	27,90	15,50	2.236,90	1.351,00
71	207,24	207,24	207,15	207,15	-	1,41	20,00	17,00	23,50	2.253,90	1.374,50
72	210,00	210,00	209,91	209,91	-	1,43	20,00	-	28,40	2.253,90	1.402,90
73	212,86	212,86	212,77	212,77	-	1,43	20,00	-	28,60	2.253,90	1.431,50
74	216,38	216,38	216,29	216,29	-	1,35	20,00	-	27,80	2.253,90	1.459,30
75	220,19	220,19	220,10	220,10	-	1,31	20,00	-	26,60	2.253,90	1.485,90
76	223,76	223,76	223,67	223,67	-	1,47	20,00	-	27,80	2.253,90	1.513,70
77	227,32	227,32	227,23	227,23	-	1,47	20,00	-	29,40	2.253,90	1.543,10
78	230,82	230,82	230,73	230,73	-	1,07	20,00	-	25,40	2.253,90	1.568,50
79	234,33	234,33	234,24	234,24	-	1,04	20,00	-	21,10	2.253,90	1.589,60
80	237,94	237,94	237,85	237,85	0,86	0,97	20,00	8,60	20,10	2.262,50	1.609,70
81	241,64	241,64	241,55	241,55	0,56	0,82	20,00	14,20	17,90	2.276,70	1.627,60
82	245,24	245,24	245,15	245,15	0,24	0,66	20,00	8,00	14,80	2.284,70	1.642,40
83	248,45	248,45	248,36	248,36	2,82	0,71	20,00	30,60	13,70	2.315,30	1.656,10
84	251,17	251,17	251,08	251,08	5,48	0,42	20,00	83,00	11,30	2.398,30	1.667,40
85	253,61	253,61	253,52	253,52	8,49	0,44	20,00	139,70	8,60	2.538,00	1.676,00
86	255,79	255,79	255,70	255,70	5,20	0,32	20,00	136,90	7,60	2.674,90	1.683,60
87	257,89	257,89	257,80	257,80	1,94	0,75	20,00	71,40	10,70	2.746,30	1.694,30
88	259,68	259,68	259,59	259,59	1,73	1,09	20,00	36,70	18,40	2.783,00	1.712,70
89	261,69	261,69	261,60	261,60	1,04	1,03	20,00	27,70	21,20	2.810,70	1.733,90
90	263,84	263,83	263,74	263,74	0,03	1,25	20,00	10,70	22,80	2.821,40	1.756,70
91	265,85	265,85	265,76	265,76	1,91	1,03	20,00	19,40	22,80	2.840,80	1.779,50
92	267,74	267,74	267,65	267,65	3,79	0,63	20,00	57,00	16,60	2.897,80	1.796,10
93	269,08	269,07	268,98	268,98	-	0,62	20,00	37,90	12,50	2.935,70	1.808,60
94	269,50	269,50	269,41	269,41	-	0,33	20,00	9,50	9,50	2.935,70	1.818,10

Volume Total de Corte=	2.935,70	m³
Volume Total de Aterro=	1.818,10	m³
Volume de Bota-fora=	1.117,60	m³

Reserva Técnica

ART nº _____

1ª revisão: _____/20___

ESTADO DE SANTA CATARINA
PREFEITURA MUNICIPAL

Cocal do Sul

Projeto
PAVIM ASFÁLTICA - TERRAPLANAGEM

Folha
3 de 3

Proprietário
PREFEITURA MUNICIPAL DE COCAL DO SUL

Data
JUN 2025

Local
Rod. Municipal Linha Ferreira Pontes
Linha Ferreira Pontes - Cocal do sul/SC

Escala
1 : 100

Conteúdo
Terraplanagem:
Seções Transversais - Volumes de Cortes e Aterros

Área
Área Pavimento: 13.992,00 m²

Responsável Técnico

LEONARDO DE BONNA
- Engenheiro Civil
- CREA/SC 019.003-8

Assinado de forma digital por LEONARDO DE BONNA:37724479968
DN: c=BR, o=ICP Brasil, ou=VideoConferencia, ou=01506371000102, ou=Secretaria da Receita Federal do Brasil - RFB, ou=RFB e-CPF A1, ou=(em branco), cn=LEONARDO DE BONNA:37724479968
Dados: 2025.09.02 11:14:11 -03'00'

Projeto 0(xx) 48 999 93 3065
Leonardo de Bonna

Desenho 0(xx) 48 999 93 3065
Leonardo de Bonna