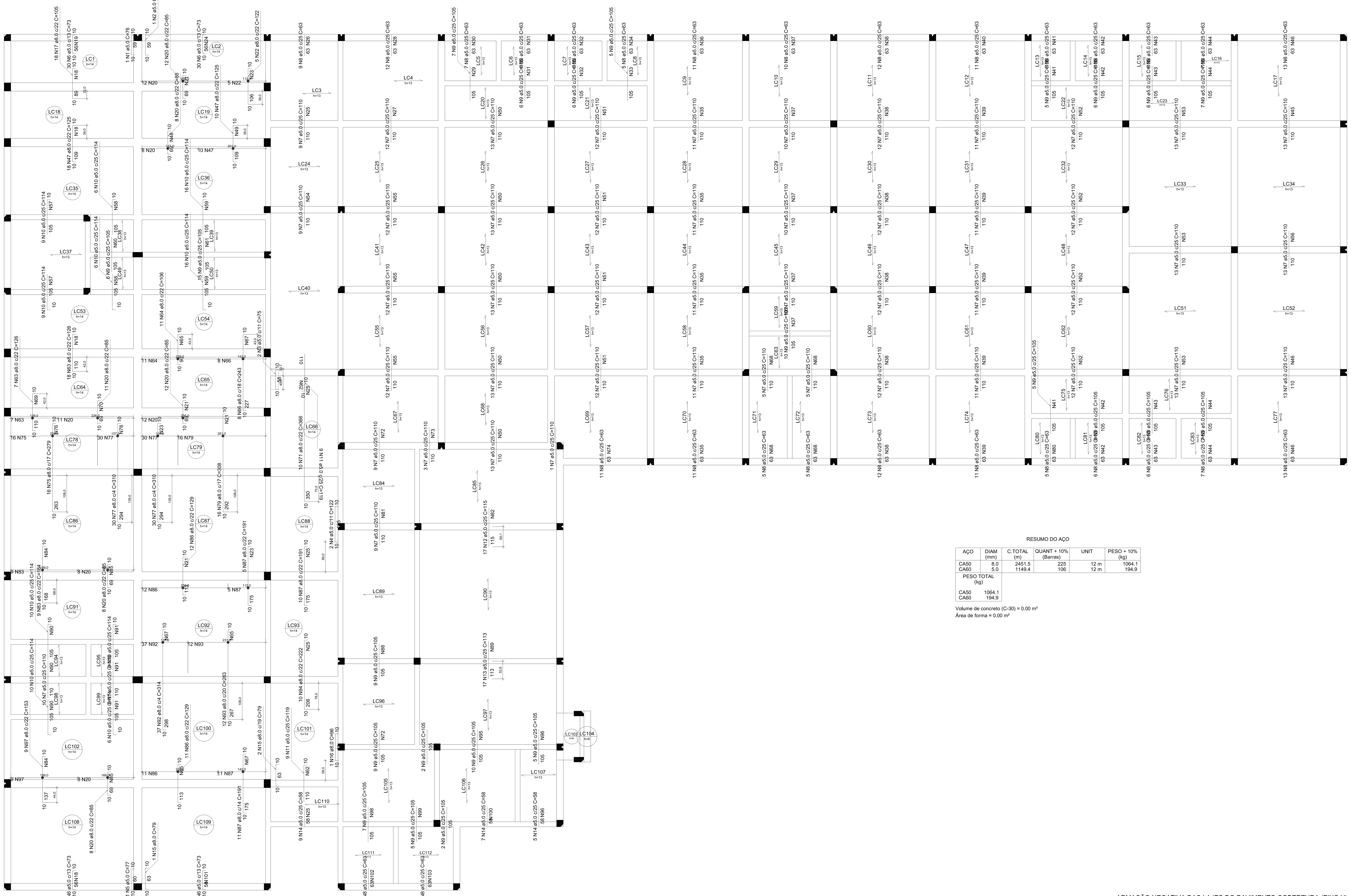

ARMAÇÃO NEGATIVA DAS LAJES DO PAVIMENTO COBERTURA (EIXO Y)
escala 1:50

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10% (Barras)	UNIT	PESO + 10% (kg)
CA50	8.0	2451.5	225	12 m	1064.1
CA60	5.0	1149.4	106	12 m	194.9

PESO TOTAL (kg)	
CA50	1064.1
CA60	194.9

Volume de concreto (C-30) = 0.00 m³
Área de forma = 0.00 m²

Ferros de distribuição

Ferro	Armadura de distribuição
N17	4 N18 ø8.0 c/25 C=388
N6	3 N19 ø8.0 c/25 C=388
N20	3 N21 ø8.0 c/25 C=269
N22	5 N23 ø8.0 c/25 C=119
N6	3 N24 ø8.0 c/25 C=386
N7	5 N25 ø8.0 c/25 C=215
N8	3 N26 ø8.0 c/25 C=220
N7	5 N27 ø8.0 c/25 C=301
N8	3 N28 ø8.0 c/25 C=298
N9	5 N29 ø8.0 c/25 C=170
N8	3 N30 ø8.0 c/25 C=171
N8	3 N31 ø8.0 c/25 C=156
N9	5 N31 ø8.0 c/25 C=156
N8	3 N32 ø8.0 c/25 C=159
N9	5 N32 ø8.0 c/25 C=159
N9	5 N33 ø8.0 c/25 C=137
N8	3 N34 ø8.0 c/25 C=137
N7	5 N35 ø8.0 c/25 C=283
N8	3 N36 ø8.0 c/25 C=283
N7	5 N37 ø8.0 c/25 C=262
N8	3 N37 ø8.0 c/25 C=262
N7	5 N38 ø8.0 c/25 C=294
N8	3 N38 ø8.0 c/25 C=294
N7	5 N39 ø8.0 c/25 C=285
N8	3 N40 ø8.0 c/25 C=284
N9	5 N41 ø8.0 c/25 C=133
N8	3 N41 ø8.0 c/25 C=133
N8	3 N42 ø8.0 c/25 C=158
N9	5 N42 ø8.0 c/25 C=158
N9	5 N43 ø8.0 c/25 C=157
N8	3 N43 ø8.0 c/25 C=157
N9	5 N44 ø8.0 c/25 C=166
N8	3 N44 ø8.0 c/25 C=166
N7	5 N45 ø8.0 c/25 C=325
N8	3 N46 ø8.0 c/25 C=325
N47	5 N18 ø8.0 c/25 C=388
N20	3 N48 ø8.0 c/25 C=179
N47	5 N49 ø8.0 c/25 C=209
N7	5 N50 ø8.0 c/25 C=326
N7	5 N51 ø8.0 c/25 C=296
N7	5 N52 ø8.0 c/25 C=291
N7	5 N53 ø8.0 c/25 C=324
N7	5 N54 ø8.0 c/25 C=220
N7	5 N55 ø8.0 c/25 C=298
N7	5 N50 ø8.0 c/25 C=326
N7	5 N51 ø8.0 c/25 C=296
N7	5 N35 ø8.0 c/25 C=283
N7	5 N37 ø8.0 c/25 C=262
N7	5 N38 ø8.0 c/25 C=294
N7	5 N39 ø8.0 c/25 C=285
N7	5 N52 ø8.0 c/25 C=291
N7	5 N53 ø8.0 c/25 C=324
N7	5 N56 ø8.0 c/25 C=325
N10	5 N57 ø8.0 c/25 C=237
N10	5 N58 ø8.0 c/25 C=151
N10	5 N59 ø8.0 c/25 C=388
N10	5 N57 ø8.0 c/25 C=237
N9	5 N60 ø8.0 c/25 C=143
N9	5 N61 ø8.0 c/25 C=379
N11	5 N62 ø8.0 c/25 C=218
N7	5 N55 ø8.0 c/25 C=298
N7	5 N50 ø8.0 c/25 C=326
N7	5 N51 ø8.0 c/25 C=296
N7	5 N35 ø8.0 c/25 C=283
N7	5 N37 ø8.0 c/25 C=262
N7	5 N38 ø8.0 c/25 C=294
N7	5 N39 ø8.0 c/25 C=285
N7	5 N52 ø8.0 c/25 C=291
N10	5 N58 ø8.0 c/25 C=151
N10	5 N59 ø8.0 c/25 C=388
N7	5 N53 ø8.0 c/25 C=324
N7	5 N46 ø8.0 c/25 C=325
N63	5 N18 ø8.0 c/25 C=388
N64	4 N65 ø8.0 c/25 C=239
N66	9 N67 ø8.0 c/25 C=149
N7	5 N55 ø8.0 c/25 C=298
N7	5 N50 ø8.0 c/25 C=326
N7	5 N51 ø8.0 c/25 C=296
N7	5 N35 ø8.0 c/25 C=283
N9	5 N37 ø8.0 c/25 C=262
N7	5 N38 ø8.0 c/25 C=294
N7	5 N39 ø8.0 c/25 C=285
N7	5 N52 ø8.0 c/25 C=291
N7	5 N68 ø8.0 c/25 C=131
N7	5 N68 ø8.0 c/25 C=131
N63	5 N69 ø8.0 c/25 C=149
N20	3 N70 ø8.0 c/25 C=239
N20	3 N21 ø8.0 c/25 C=269
N71	14 N25 ø8.0 c/25 C=215
N7	5 N72 ø8.0 c/25 C=226
N7	5 N73 ø8.0 c/25 C=73
N7	5 N50 ø8.0 c/25 C=326
N8	3 N74 ø8.0 c/25 C=270
N8	3 N35 ø8.0 c/25 C=283
N8	3 N68 ø8.0 c/25 C=131
N8	3 N68 ø8.0 c/25 C=131
N8	3 N38 ø8.0 c/25 C=294
N8	3 N39 ø8.0 c/25 C=285
N9	5 N41 ø8.0 c/25 C=133
N9	5 N42 ø8.0 c/25 C=158
N9	5 N43 ø8.0 c/25 C=157
N9	5 N44 ø8.0 c/25 C=166
N8	3 N46 ø8.0 c/25 C=325
N75	11 N76 ø8.0 c/25 C=268
N77	15 N78 ø8.0 c/20 C=119
N77	15 N23 ø8.0 c/20 C=119
N79	12 N21 ø8.0 c/25 C=269
N8	3 N80 ø8.0 c/25 C=133
N8	3 N42 ø8.0 c/25 C=158
N8	3 N43 ø8.0 c/25 C=157
N8	3 N44 ø8.0 c/25 C=166
N7	5 N81 ø8.0 c/25 C=228
N12	5 N82 ø8.0 c/25 C=423
N83	7 N84 ø8.0 c/25 C=209
N20	3 N85 ø8.0 c/25 C=179
N86	5 N21 ø8.0 c/25 C=269
N87	7 N23 ø8.0 c/25 C=119
N87	7 N25 ø8.0 c/25 C=215
N9	5 N88 ø8.0 c/25 C=226
N13	5 N89 ø8.0 c/25 C=425
N10	5 N90 ø8.0 c/25 C=241
N10	5 N91 ø8.0 c/25 C=147
N92	15 N67 ø8.0 c/20 C=149
N93	11 N65 ø8.0 c/25 C=239
N94	9 N25 ø8.0 c/25 C=215
N7	5 N90 ø8.0 c/25 C=241
N7	5 N91 ø8.0 c/25 C=147
N9	5 N72 ø8.0 c/25 C=226
N9	5 N95 ø8.0 c/25 C=240
N9	5 N96 ø8.0 c/25 C=126
N10	5 N90 ø8.0 c/25 C=241
N10	5 N91 ø8.0 c/25 C=147
N86	5 N65 ø8.0 c/25 C=239
N87	7 N67 ø8.0 c/25 C=149
N11	5 N62 ø8.0 c/25 C=218
N97	6 N84 ø8.0 c/25 C=209
N20	3 N85 ø8.0 c/25 C=179
N9	5 N98 ø8.0 c/25 C=165
N9	5 N99 ø8.0 c/25 C=123
N14	3 N100 ø8.0 c/25 C=182
N14	3 N96 ø8.0 c/25 C=126
N6	3 N18 ø8.0 c/25 C=388
N6	3 N101 ø8.0 c/25 C=386
N14	3 N25 ø8.0 c/25 C=215
N8	3 N102 ø8.0 c/25 C=162
N8	3 N103 ø8.0 c/25 C=181

RELAÇÃO DO AÇO

Negativos Y

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	1	76	76
	2	5.0	1	76	76
	3	5.0	2	75	150
	4	5.0	2	122	244
	5	5.0	1	77	77
	6	5.0	120	73	8760
	7	5.0	519	110	57090
	8	5.0	231	63	14553
	9	5.0	152	105	15960
	10	5.0	94	114	10716
	11	5.0	18	119	2142
	12	5.0	17	115	1955
	13	5.0	17	113	1921
	14	5.0	21	58	1218
CA50	15	8.0	3	79	237
	16	8.0	1	96	96
	17	8.0	18	105	1890
	18	8.0	17	388	6596
	19	8.0	3	388	1164
	20	8.0	59	85	5015
	21	8.0	23	269	6187
	22	8.0	5	122	610
	23	8.0	27	119	3213
	24	8.0	3	386	1158
	25	8.0	38	215	8170
	26	8.0	3	220	660
	27	8.0	5	301	1505
	28	8.0	3	298	894
	29	8.0	5	170	850
	30	8.0	3	171	513
	31	8.0	8	156	1248
	32	8.0	8	159	1272
	33	8.0	5	137	685
	34	8.0	3	137	411
	35	8.0	23	283	6509
	36	8.0	3	283	849
	37	8.0	23	262	6026
	38	8.0	26	294	7644
	39	8.0	23	285	6555
	40	8.0	3	284	852
	41	8.0	13	133	1729
	42	8.0	16	158	2528
	43	8.0	16	157	2512
	44	8.0	16	166	2656
	45	8.0	5	325	1625
	46	8.0	11	325	3575
	47	8.0	28	125	3500
	48	8.0	3	179	537
	49	8.0	5	209	1045
	50	8.0	25	326	8150
	51	8.0	20	296	5920
	52	8.0	20	291	5820
	53	8.0	15	324	4860
	54	8.0	5	220	1100
	55	8.0	15	298	4470
	56	8.0	5	325	1625
	57	8.0	10	237	2370
	58	8.0	10	151	1510
	59	8.0	10	388	3880
	60	8.0	5	143	715
	61	8.0	5	379	1895
	62	8.0	10	218	2180
	63	8.0	25	126	3150
	64	8.0	11	106	1166
	65	8.0	20	239	4780
	66	8.0	8	243	1944
	67	8.0	31	149	4619
	68	8.0	16	131	2096
	69	8.0	5	149	745
	70	8.0	3	239	717
	71	8.0	10	366	3660
	72	8.0	10	226	2260
	73	8.0	5	73	365
	74	8.0	3	270	810
	75	8.0	16	279	4464
	76	8.0	11	268	2948
	77	8.0	60	310	18600
	78	8.0	15	119	1785
	79	8.0	16	308	4928
	80	8.0	3	133	399
	81	8.0	5	228	1140
	82	8.0	5	423	2115
	83	8.0	9	184	1656
	84	8.0	13	209	2717
	85	8.0	6	179	1074
	86	8.0	23	129	2967
	87	8.0	26	191	4966
	88	8.0	5	226	1130
	89	8.0	5	425	2125
	90	8.0	15	241	3615
	91	8.0	15	147	2205
	92	8.0	37	314	11618
	93	8.0	12	283	3396
	94	8.0	10	222	2220
	95	8.0	5	240	1200
	96	8.0	8	126	1008
	97	8.0	9	153	1377
	98	8.0	5	165	825
	99	8.0	5	123	615
	100	8.0	3	182	546
	101	8.0	3	386	1158
	102	8.0	3	162	486
	103	8.0	3	181	543

REVISÃO	DATA	ALTERAÇÃO	RESPONSÁVEL

CREA/RS226430

HUX ENGENHARIA LTDA

Responsável Técnico
Humberto Luiz de Carvalho Enchaki CREA/RS 089568-D
Avenida Assis Brasil nº 3532/615 Bairro Lindoia Porto Alegre RS 91010-003
Fone: (51)984245083 (51)985355083 email: humbertohux@gmail.com

Obra: EMEI CARNIEL

ÁREA TOTAL DO PROJETO: 819,80m²

PRANCHA: 20/20

Localização: Rua Roca Sales nº 400

CIDADE: GRAMADO - RS

Projeto: PROJETO ESTRUTURAL

ARQUIVO DWG: EST20-20-Planta De Laje Cobertura Negativa No Eixo Y Rev03.dwg

Conteudo: PLANTA BAIXA - ARMADURA NEGATIVA COBERTURA EIXO Y

OBSERVAÇÕES:

ESCALA: 1:50

Responsável Técnico:
Eng.Humberto Luiz de Carvalho Enchaki CREA 089568-D

DATA: JAN/2019

Proprietário:
Prefeitura Municipal de Gramado

DESENHO: FELIPE