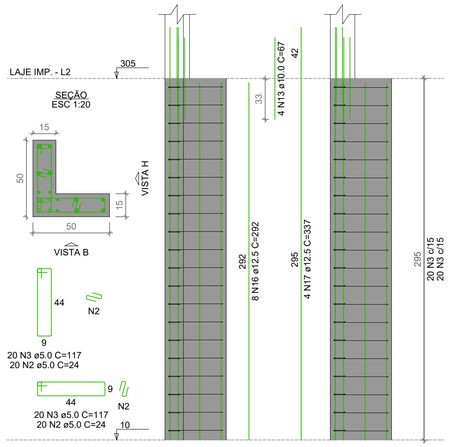
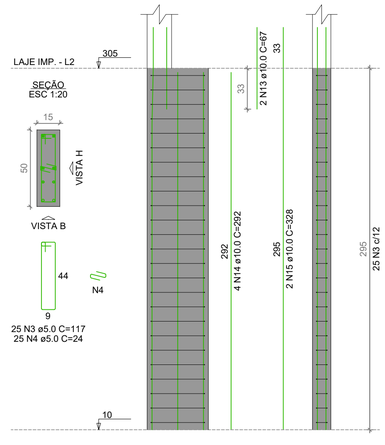
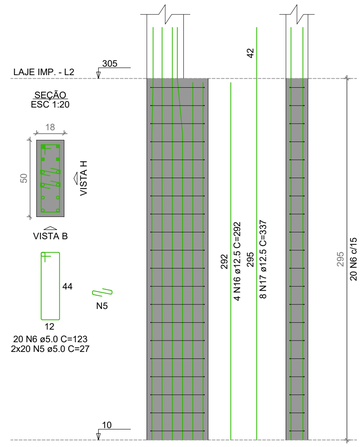
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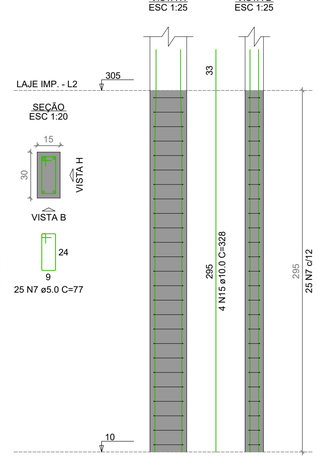
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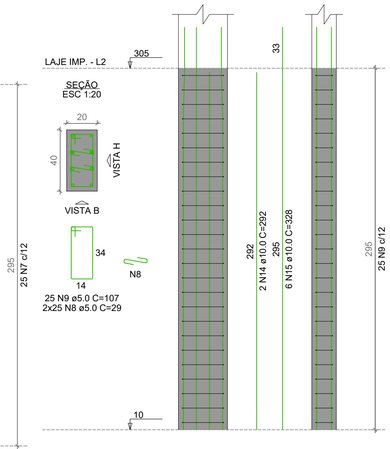
P3



P4=P8=P9=P11=P20



P5



RELAÇÃO DO AÇO

P1-L3, P1-L2, P2-L2, P3-L2, 5xP4-L2, P5-L2, 3xP6-L2, P10-L2, 3xP12-L2, P13-L2, P14-L2, P16-L2, P18-L2, P19-L2, P21-L2, P23-L2

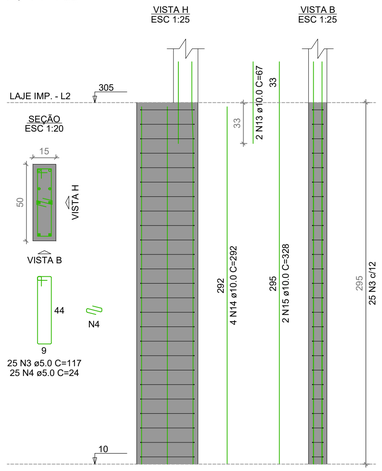
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	22	57	1254
	2	5.0	40	24	960
	3	5.0	215	117	25155
	4	5.0	200	24	4800
	5	5.0	40	27	1080
	6	5.0	45	123	5535
	7	5.0	270	77	20790
	8	5.0	75	29	2175
	9	5.0	50	107	5350
	10	5.0	25	83	2075
	11	5.0	50	27	1350
CA50	12	10.0	8	163	1304
	13	10.0	24	67	1608
	14	10.0	64	292	18688
	15	10.0	54	328	17712
	16	12.5	16	292	4672
	17	12.5	12	337	4044

RESUMO DO AÇO

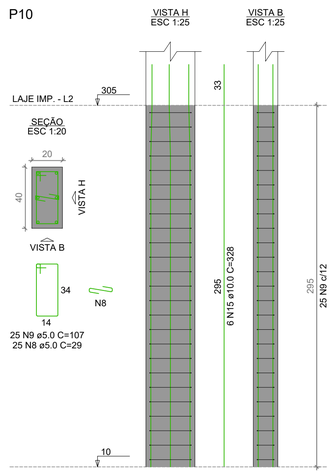
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	393.1	266.6
	12.5	87.2	92.4
CA60	5.0	705.2	119.6
PESO TOTAL (kg)			
CA50			359
CA60			119.6

Volume de concreto (C-30) = 4.53 m³
Área de forma = 79.16 m²

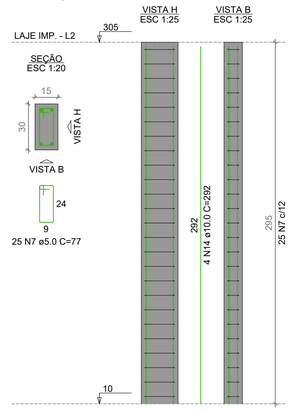
P6=P7=P22



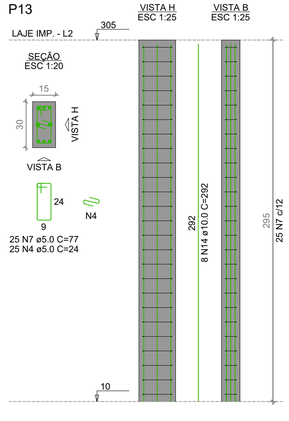
P10



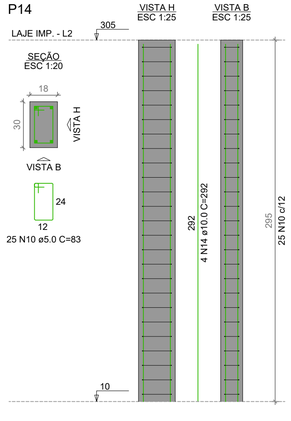
P12=P15=P17



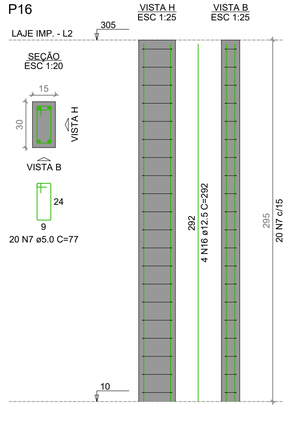
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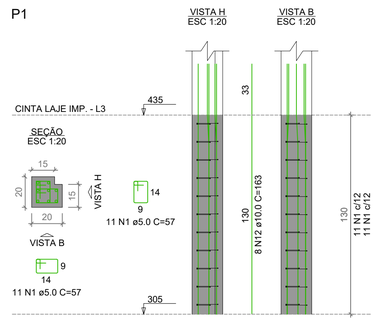
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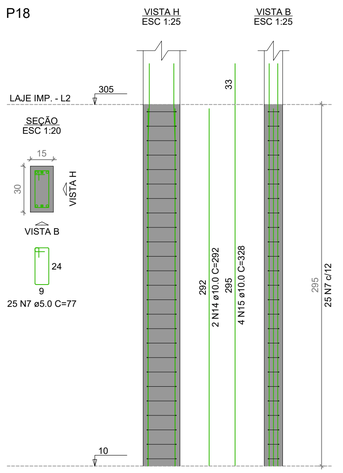
P16



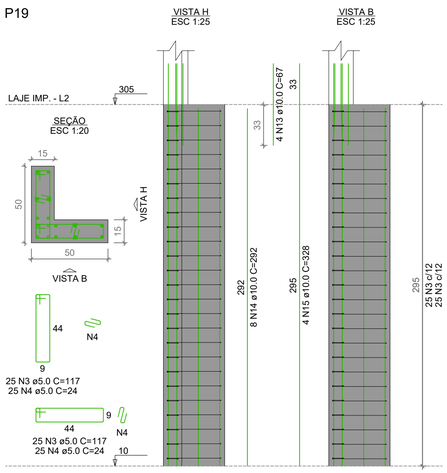
P1



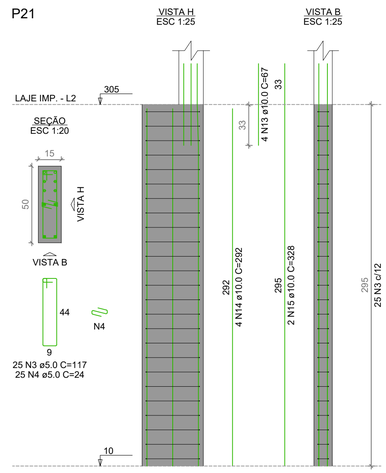
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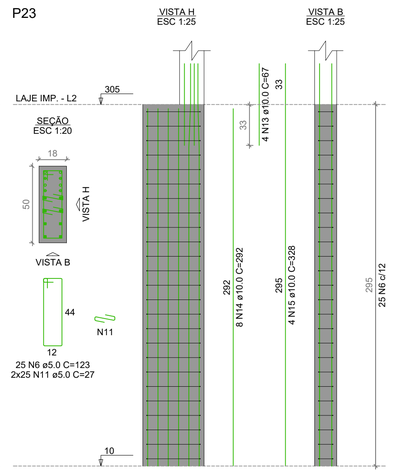
P19



P21



P23



Nº	ALTERAÇÃO/REVISÕES	REVISADO POR	DATA

INSTITUTO FEDERAL SERGIPE

AUTOR DO PROJETO:
Engº. Fredrico Damasceno Pinheiro
CREA 270082778-3

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Rua Dom José Thomaz, 194 - Bairro São José - Aracaju/SE
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PROJETO ESTRUTURAL
RESTAURANTE - CAMPUS ARACAJU/SE

CLIENTE:
INSTITUTO FEDERAL DE SERGIPE - CAMPUS ARACAJU

ENDEREÇO:
AV. ENGENHEIRO GENTIL TAVARES, 1166, GETÚLIO VARGAS, ARACAJU - SE

ESCALA: 1:100

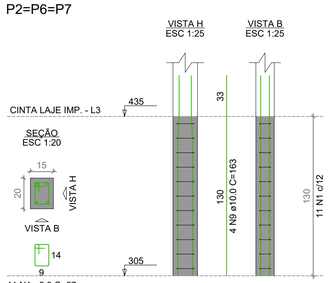
DATA: OUTUBRO/2026

PLANTA:
RESTAURANTE
ARMAÇÃO DOS PILARES 1-2

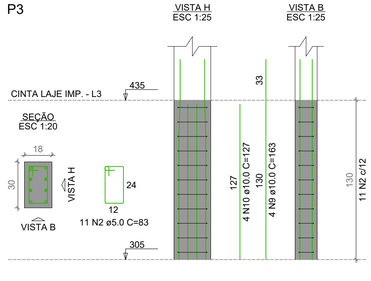
PRANCHA: 10/18

CAMPUS	OBRA	ESPECIALIDADE	FASE	SERIAL	QUANTITATIVO	REVISÃO
AJU	RES	EST	PE	010	018	R01

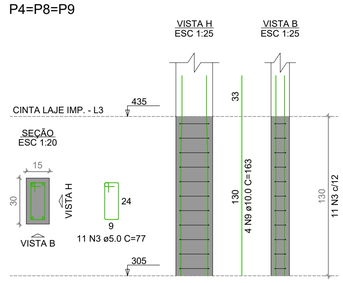
P2=P6=P7



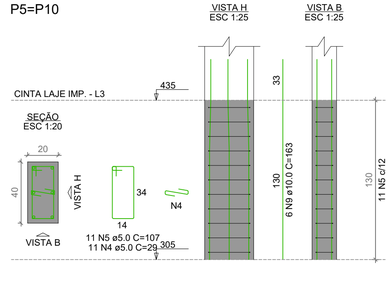
P3



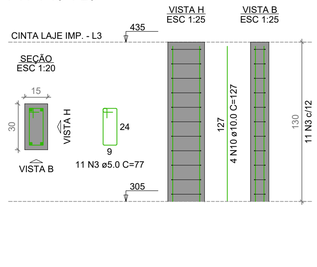
P4=P8=P9



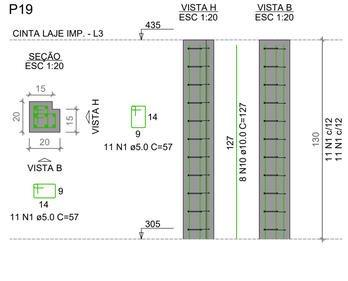
P5=P10



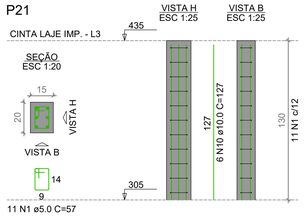
P11=P18=P20



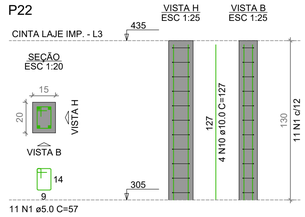
P19



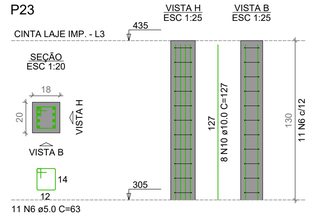
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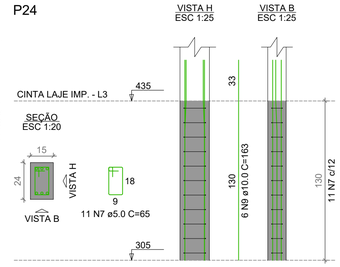
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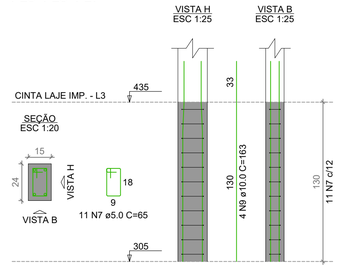
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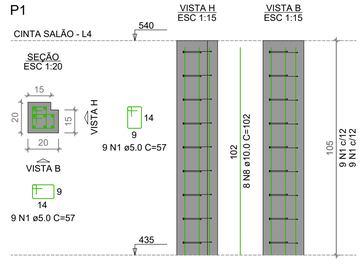
P24



P25=P26=P27



P1



P2=P6=P7

P3

P4=P8=P9

P5=P10

P24

P25=P26=P27

RELAÇÃO DO AÇO

P1-L4	3xP2-L4	3xP2-L3
P3-L4	P3-L3	3xP4-L4
3xP4-L3	2xP5-L4	2xP5-L3
3xP11-L3	P19-L3	P21-L3
P22-L3	P23-L3	P24-L4
P24-L3	3xP25-L4	3xP25-L3

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	122	57	6954
	2	5.0	20	83	1660
	3	5.0	93	77	7161
	4	5.0	40	29	1160
	5	5.0	40	107	4280
	6	5.0	11	63	693
	7	5.0	80	65	5200
CA50	8	10.0	66	102	6732
	9	10.0	58	163	9454
	10	10.0	42	127	5334

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	215.2	145.9
CA60	5.0	271.1	46
PESO TOTAL (kg)			
CA50	145.9		
CA60	46		

Volume de concreto (C-30) = 1.76 m³
Área de forma = 34.71 m²

Nº	ALTERAÇÃO/REVISÕES	REVISADO POR	DATA

INSTITUTO FEDERAL
SERGIPE

AUTOR DO PROJETO:
Engº. Fredrico Damasceno Pinheiro
CREA 270082778-3

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PROJETO ESTRUTURAL
RESTAURANTE - CAMPUS ARACAJU/SE

CLIENTE:
INSTITUTO FEDERAL DE SERGIPE - CAMPUS ARACAJU

ENDEREÇO:
AV. ENGENHEIRO GENTIL TAVARES, 1166, GETÚLIO VARGAS, ARACAJU - SE

ESCALA: 1:100

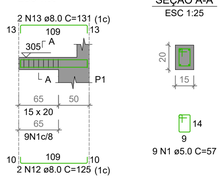
DATA: OUTUBRO/2026

PLANTA:
RESTAURANTE
ARMAÇÃO DOS PILARES 2-2

PRANCHA: 11/18

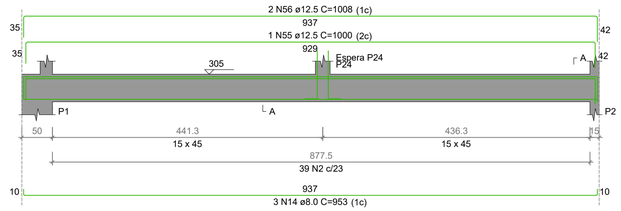
CAMPUS	OBRA	ESPECIALIDADE	FASE	SERIAL	QUANTITATIVO	REVISÃO
AJU	RES	EST	PE	011	018	R01

V1 (15 x 20)
ESC 1:50

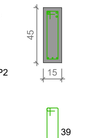


SEÇÃO A-A
ESC 1:25

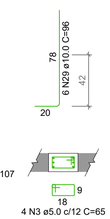
V2 (15 x 45)
ESC 1:50



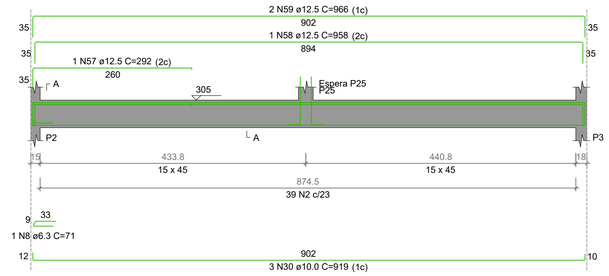
SEÇÃO A-A
ESC 1:25



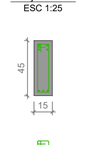
ESPERA P24
ESC 1:25



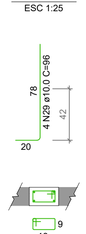
V3 (15 x 45)
ESC 1:50



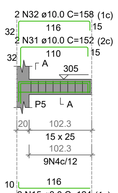
SEÇÃO A-A
ESC 1:25



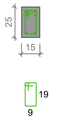
ESPERA P25
ESC 1:25



V4 (15 x 25)
ESC 1:50



SEÇÃO A-A
ESC 1:25



RELAÇÃO DO AÇO

V1	V2	V3
V4	V5	V6
V7	V8	V9
V10	V11	V12
V13	V14	V15
V16	V17	V18
V19	V20	V21
V22		

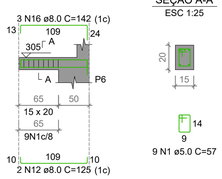
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	54	57	3078
	2	5.0	78	107	8346
	3	5.0	8	65	520
	4	5.0	9	67	603
	5	5.0	110	97	10670
	6	5.0	105	87	9135
	7	5.0	233	77	17941
CA50	8	6.3	8	71	568
	9	6.3	4	582	2328
	10	6.3	4	613	2452
	11	6.3	2	77	154
	12	8.0	10	125	1250
	13	8.0	6	131	786
	14	8.0	3	953	2859
	15	8.0	2	124	248
	16	8.0	3	142	426
	17	8.0	3	145	435
	18	8.0	2	360	720
	19	8.0	2	125	250
	20	8.0	2	131	262
	21	8.0	2	325	650
	22	8.0	2	351	702
	23	8.0	2	350	700
	24	8.0	3	490	1470
	25	8.0	1	471	471
	26	8.0	2	852	1704
	27	8.0	2	377	754
	28	8.0	2	588	1176
	29	10.0	10	96	960
	30	10.0	3	919	2757
	31	10.0	2	152	304
	32	10.0	2	158	316
	33	10.0	2	597	1194
	34	10.0	1	238	238
	35	10.0	1	630	630
	36	10.0	2	637	1274
	37	10.0	2	697	1394
	38	10.0	3	704	2112
	39	10.0	2	737	1474
	40	10.0	2	744	1488
	41	10.0	3	622	1866
	42	10.0	1	623	623
	43	10.0	2	1026	2052
	44	10.0	2	823	1646
	45	10.0	2	1057	2114
	46	10.0	1	172	172
	47	10.0	2	382	764
	48	10.0	3	633	1899
	49	10.0	3	618	1854
	50	10.0	1	514	514
	51	10.0	2	521	1042
	52	10.0	1	617	617
	53	10.0	2	885	1770
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	56	12.5	2	1008	2016
	57	12.5	1	292	292
	58	12.5	1	958	958
	59	12.5	2	966	1932
	60	12.5	1	273	273
	61	12.5	2	673	1346
	62	12.5	2	711	1422
	63	12.5	2	718	1436
	64	12.5	2	776	1552
	65	12.5	1	398	398
	66	12.5	2	401	802
	67	12.5	1	251	251
	68	12.5	1	670	670
	69	12.5	2	677	1354
	70	12.5	1	249	249
	71	12.5	1	662	662
	72	12.5	2	669	1338

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	55	14.8
	8.0	148.6	64.5
	10.0	330.4	224.1
	12.5	179.5	190.2
CA60	5.0	502.9	85.3
PESO TOTAL (kg)			
CA50	493.6		
CA60	85.3		

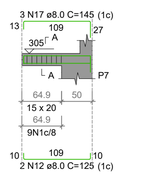
Volume de concreto (C-30) = 5.12 m³
Área de forma = 63.96 m²

V5 (15 x 20)
ESC 1:50

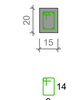


SEÇÃO A-A
ESC 1:25

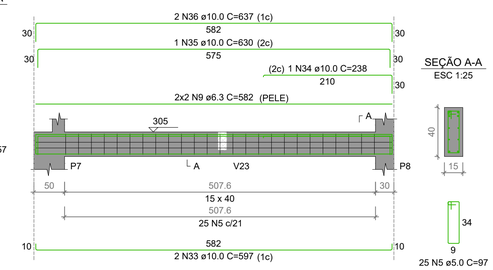
V6 (15 x 20)
ESC 1:50



SEÇÃO A-A
ESC 1:25

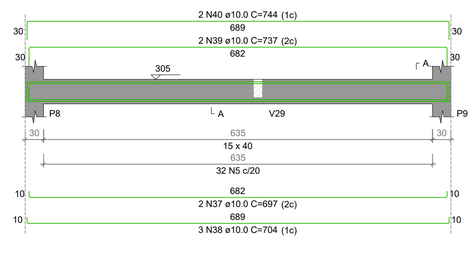


V7 (15 x 40)
ESC 1:50

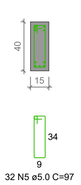


SEÇÃO A-A
ESC 1:25

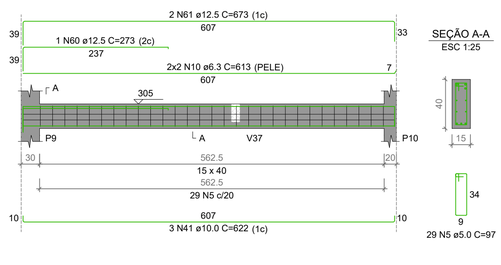
V8 (15 x 40)
ESC 1:50



SEÇÃO A-A
ESC 1:25

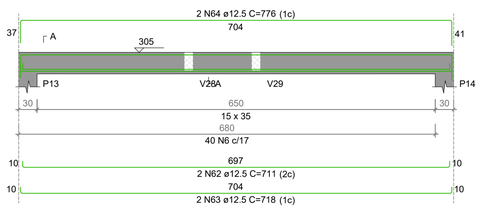


V9 (15 x 40)
ESC 1:50

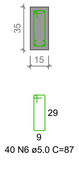


SEÇÃO A-A
ESC 1:25

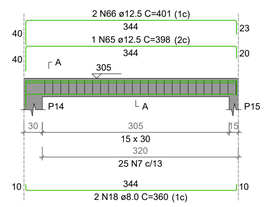
V10 (15 x 35)
ESC 1:50



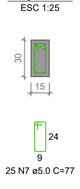
SEÇÃO A-A
ESC 1:25



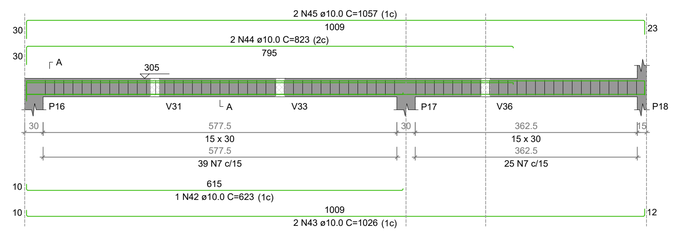
V11 (15 x 30)
ESC 1:50



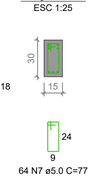
SEÇÃO A-A
ESC 1:25



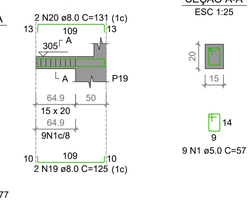
V12 (15 x 30)
ESC 1:50



SEÇÃO A-A
ESC 1:25

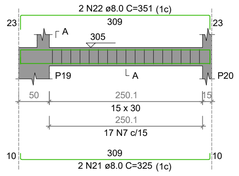


V13 (15 x 20)
ESC 1:50

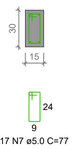


SEÇÃO A-A
ESC 1:25

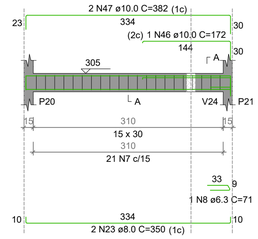
V14 (15 x 30)
ESC 1:50



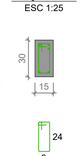
SEÇÃO A-A
ESC 1:25



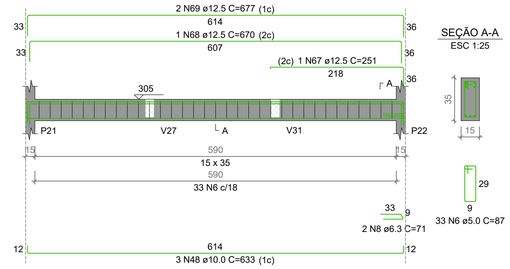
V15 (15 x 30)
ESC 1:50



SEÇÃO A-A
ESC 1:25

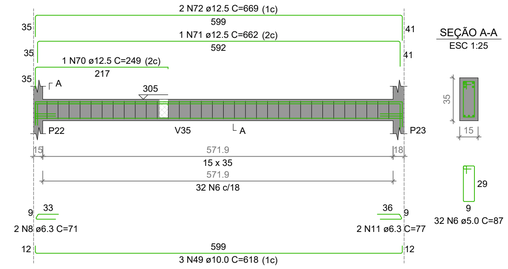


V16 (15 x 35)
ESC 1:50



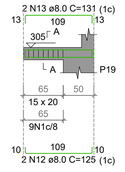
SEÇÃO A-A
ESC 1:25

V17 (15 x 35)
ESC 1:50

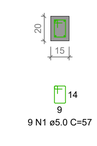


SEÇÃO A-A
ESC 1:25

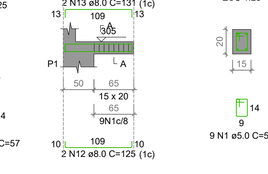
V18 (15 x 20)
ESC 1:50



SEÇÃO A-A
ESC 1:25



V22 (15 x 20)
ESC 1:50



SEÇÃO A-A
ESC 1:25

Nº	ALTERAÇÃO/REVISÕES	REVISADO POR	DATA

V19 (15 x 30)
ESC 1:50

SEÇÃO A-A
ESC 1:25

V20 (15 x 30)
ESC 1:50

SEÇÃO A-A
ESC 1:25

V21 (var)
ESC 1:50

SEÇÃO A-A
ESC 1:25

SEÇÃO B-B
ESC 1:25

INSTITUTO FEDERAL
SERGIPE

AUTOR DO PROJETO:
Engº. Fredrico Damasceno Pinheiro
CREA 270082778-3

ENGENHARIA
adengenharia.eng.br

ENDEREÇO:
Rua Dom José Thomaz, 194 - Bairro São José - Aracaju/SE
dipop@ifs.edu.br TEL: (79)3711-3139

PROJETO ESTRUTURAL
RESTAURANTE - CAMPUS ARACAJU/SE

CLIENTE:
INSTITUTO FEDERAL DE SERGIPE - CAMPUS ARACAJU

ENDEREÇO:
AV. ENGENHEIRO GENTIL TAVARES, 1166, GETÚLIO VARGAS, ARACAJU - SE

ESCALA: 1:100

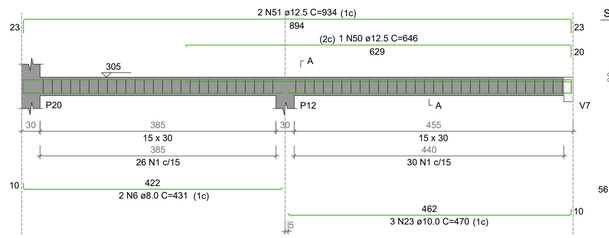
DATA: OUTUBRO/2026

PLANTA:
RESTAURANTE
ARMAÇÃO DAS VIGAS DO PAV. LAJE IMP. 1-2

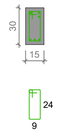
PRANCHA: 12/18

CAMPUS:	OBRA:	ESPECIALIDADE	FASE	SERIAL	QUANTITATIVO	REVISÃO
AJU	RES	EST	PE	012	018	R01

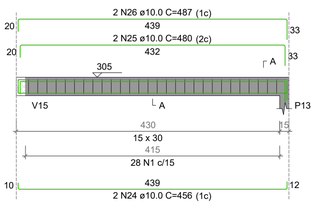
V23 (15 x 30)
ESC 1:50



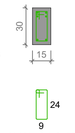
SEÇÃO A-A
ESC 1:25



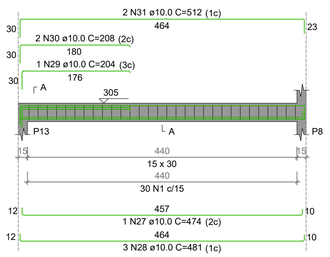
V24 (15 x 30)
ESC 1:50



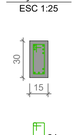
SEÇÃO A-A
ESC 1:25



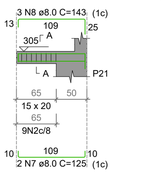
V25 (15 x 30)
ESC 1:50



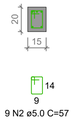
SEÇÃO A-A
ESC 1:25



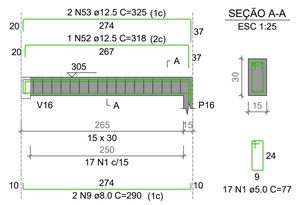
V26 (15 x 20)
ESC 1:50



SEÇÃO A-A
ESC 1:25

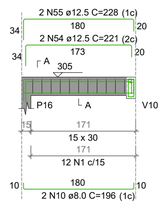


V27 (15 x 30)
ESC 1:50

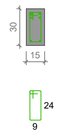


SEÇÃO A-A
ESC 1:25

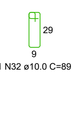
V28 (15 x 30)
ESC 1:50



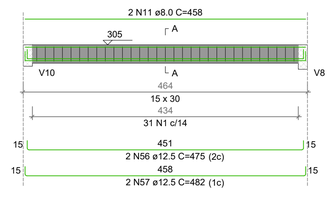
SEÇÃO A-A
ESC 1:25



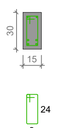
SUSPENSÃO V10
ESC 1:25



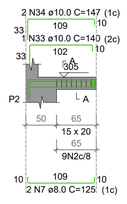
V29 (15 x 30)
ESC 1:50



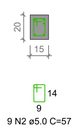
SEÇÃO A-A
ESC 1:25



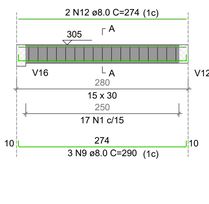
V30 (15 x 20)
ESC 1:50



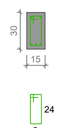
SEÇÃO A-A
ESC 1:25



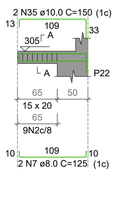
V31 (15 x 30)
ESC 1:50



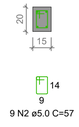
SEÇÃO A-A
ESC 1:25



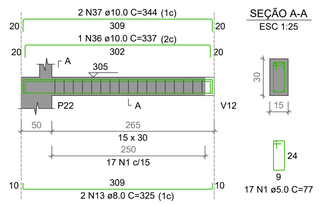
V32 (15 x 20)
ESC 1:50



SEÇÃO A-A
ESC 1:25

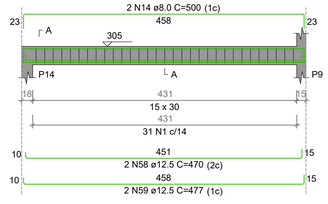


V33 (15 x 30)
ESC 1:50

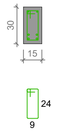


SEÇÃO A-A
ESC 1:25

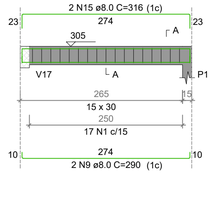
V34 (15 x 30)
ESC 1:50



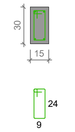
SEÇÃO A-A
ESC 1:25



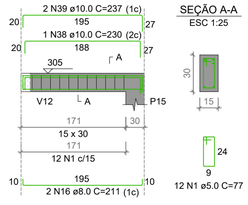
V35 (15 x 30)
ESC 1:50



SEÇÃO A-A
ESC 1:25

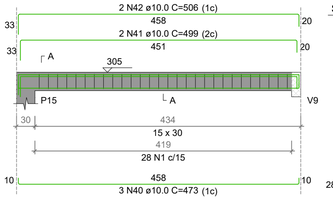


V36 (15 x 30)
ESC 1:50

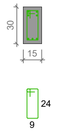


SEÇÃO A-A
ESC 1:25

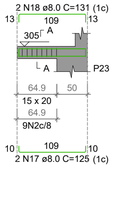
V37 (15 x 30)
ESC 1:50



SEÇÃO A-A
ESC 1:25



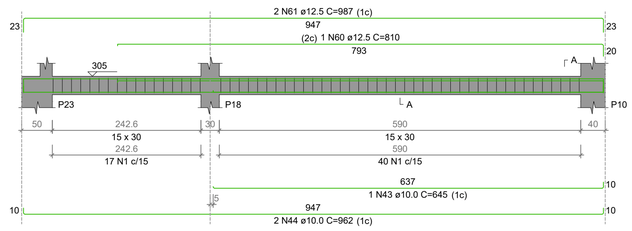
V38 (15 x 20)
ESC 1:50



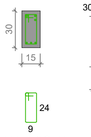
SEÇÃO A-A
ESC 1:25



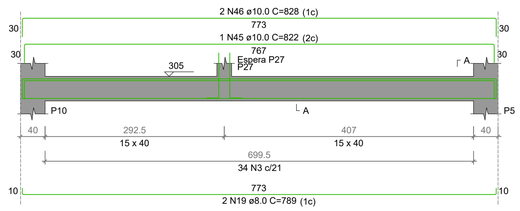
V39 (15 x 30)
ESC 1:50



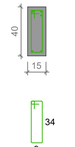
SEÇÃO A-A
ESC 1:25



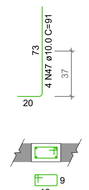
V40 (15 x 40)
ESC 1:50



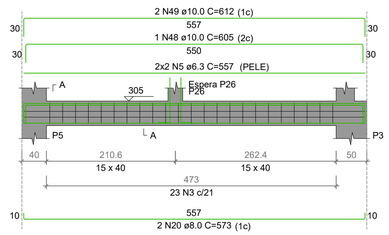
SEÇÃO A-A
ESC 1:25



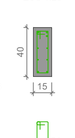
ESPERA P27
ESC 1:25



V41 (15 x 40)
ESC 1:50



SEÇÃO A-A
ESC 1:25



ESPERA P26
ESC 1:25

V42 (15 x 20)
ESC 1:50

SEÇÃO A-A
ESC 1:25

RELAÇÃO DO AÇO

V23 V24 V25
V26 V27 V28
V29 V30 V31
V32 V33 V34
V35 V36 V37
V38 V39 V40
V41 V42

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	353	77	27181
	2	5.0	47	57	2679
	3	5.0	57	97	5529
	4	5.0	8	65	520
CA50	5	6.3	4	557	2228
	6	8.0	2	431	862
	7	8.0	6	125	750
	8	8.0	3	143	429
	9	8.0	7	290	2030
	10	8.0	2	196	392
	11	8.0	2	458	916
	12	8.0	2	274	548
	13	8.0	2	325	650
	14	8.0	2	500	1000
	15	8.0	2	316	632
	16	8.0	2	211	422
	17	8.0	2	125	250
	18	8.0	2	131	262
	19	8.0	2	789	1578
	20	8.0	2	573	1146
	21	8.0	2	140	280
	22	8.0	3	146	438
	23	10.0	3	470	1410
	24	10.0	2	456	912
	25	10.0	2	480	960
	26	10.0	2	487	974
	27	10.0	1	474	474
	28	10.0	3	481	1443
	29	10.0	1	204	204
	30	10.0	2	208	416
	31	10.0	2	512	1024
	32	10.0	1	89	89
	33	10.0	1	140	140
	34	10.0	2	147	294
	35	10.0	2	150	300
	36	10.0	1	337	337
	37	10.0	2	344	688
	38	10.0	1	230	230
	39	10.0	2	237	474
	40	10.0	3	473	1419
	41	10.0	2	499	998
	42	10.0	2	506	1012
	43	10.0	1	645	645
	44	10.0	2	962	1924
	45	10.0	1	822	822
	46	10.0	2	828	1656
	47	10.0	8	91	728
	48	10.0	1	605	605
	49	10.0	2	612	1224
	50	12.5	1	646	646
	51	12.5	2	934	1868
	52	12.5	1	318	318
	53	12.5	2	325	650
	54	12.5	2	221	442
	55	12.5	2	228	456
	56	12.5	2	475	950
	57	12.5	2	482	964
	58	12.5	2	470	940
	59	12.5	2	477	954
	60	12.5	1	810	810
	61	12.5	2	987	1974

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	22.3	6
	8.0	125.9	54.6
	10.0	214	145.1
	12.5	109.7	116.3
CA60	5.0	359.1	60.9

PESO TOTAL (kg)	
CA50	322
CA60	60.9

Volume de concreto (C-30) = 3.14 m³
Área de forma = 38.11 m²

Nº	ALTERAÇÃO/REVISÕES	REVISADO POR	DATA

INSTITUTO FEDERAL
SERGIPE

AUTOR DO PROJETO:
Engº. Fredrico Damasceno Pinheiro
CREA 270082778-3

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PROJETO ESTRUTURAL
RESTAURANTE - CAMPUS ARACAJU/SE

CLIENTE:
INSTITUTO FEDERAL DE SERGIPE - CAMPUS ARACAJU

ENDEREÇO:
AV. ENGENHEIRO GENTIL TAVARES, 1166, GETÚLIO VARGAS, ARACAJU - SE

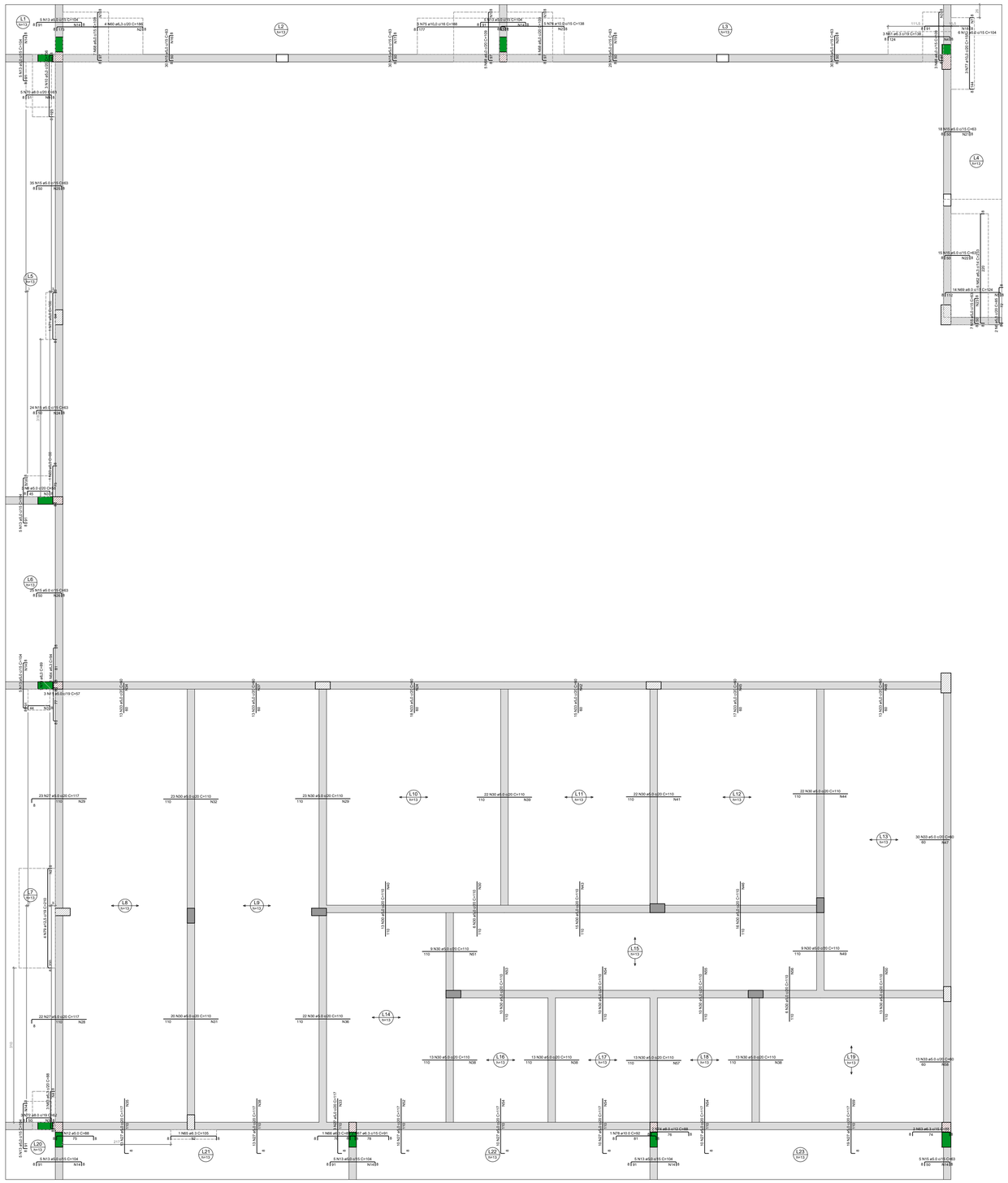
ESCALA: 1:100

DATA: OUTUBRO/2026

PRANCHA: 13/18

PLANTA:
RESTAURANTE
ARMAÇÃO DAS VIGAS DO PAV. LAJE IMP. 2-2

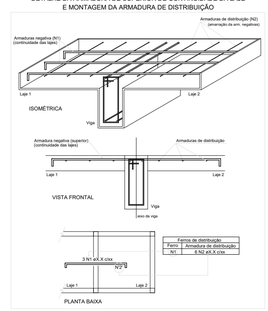
CAMPUS	OBRA	ESPECIALIDADE	FASE	SERIAL	QUANTITATIVO	REVISÃO
AJU	RES	EST	PE	013	018	R01



Armação negativa das lajes do pavimento LAJE IMP.
escala 1:50

Armaduras de distribuição	
Armadura	Armadura de distribuição
N68	5 N1 ø5.0 c/20 C=92
N68	5 N1 ø5.0 c/20 C=92
N75	9 N2 ø5.0 c/20 C=73
N60	9 N2 ø5.0 c/20 C=73
N68	5 N3 ø5.0 c/20 C=42
N68	5 N1 ø5.0 c/20 C=92
N76	7 N2 ø5.0 c/18 C=73
N61	7 N4 ø5.0 c/20 C=46
N69	6 N5 ø5.0 c/20 C=237
N77	8 N7 ø5.0 c/20 C=47
N8	3 N3 ø5.0 c/20 C=42
N70	3 N9 ø5.0 c/20 C=91
N10	7 N4 ø5.0 c/20 C=46
N72	3 N3 ø5.0 c/20 C=42
N11	3 N3 ø5.0 c/20 C=42
N63	4 N4 ø5.0 c/20 C=46
N79	14 N2 ø5.0 c/15 C=73
N13	5 N14 ø5.0 c/20 C=71
N13	5 N14 ø5.0 c/20 C=71
N13	5 N14 ø5.0 c/20 C=71
N15	3 N16 ø5.0 c/20 C=455
N15	3 N17 ø5.0 c/20 C=444
N13	5 N18 ø5.0 c/20 C=86
N15	3 N19 ø5.0 c/20 C=441
N15	3 N20 ø5.0 c/20 C=450
N15	3 N21 ø5.0 c/20 C=274
N15	3 N22 ø5.0 c/20 C=223
N15	3 N23 ø5.0 c/20 C=110
N15	3 N24 ø5.0 c/20 C=362
N15	3 N25 ø5.0 c/20 C=522
N13	5 N14 ø5.0 c/20 C=71
N15	3 N26 ø5.0 c/20 C=372
N13	5 N14 ø5.0 c/20 C=71
N27	6 N28 ø5.0 c/20 C=432
N27	6 N29 ø5.0 c/20 C=455
N13	5 N14 ø5.0 c/20 C=71
N30	6 N31 ø5.0 c/20 C=403
N30	6 N32 ø5.0 c/20 C=457
N33	3 N34 ø5.0 c/20 C=270
N27	6 N35 ø5.0 c/20 C=267
N30	6 N36 ø5.0 c/20 C=430
N30	6 N29 ø5.0 c/20 C=455
N33	3 N37 ø5.0 c/20 C=262
N27	6 N38 ø5.0 c/20 C=265
N30	6 N39 ø5.0 c/20 C=449
N33	3 N24 ø5.0 c/20 C=362
N30	6 N40 ø5.0 c/20 C=258
N30	6 N30 ø5.0 c/20 C=110
N30	6 N41 ø5.0 c/20 C=448
N33	3 N42 ø5.0 c/20 C=297
N30	6 N43 ø5.0 c/20 C=303
N30	6 N44 ø5.0 c/20 C=436
N33	3 N45 ø5.0 c/20 C=332
N30	6 N46 ø5.0 c/20 C=322
N33	3 N47 ø5.0 c/20 C=608
N33	3 N48 ø5.0 c/20 C=253
N30	6 N49 ø5.0 c/20 C=173
N30	6 N50 ø5.0 c/20 C=255
N30	6 N38 ø5.0 c/20 C=265
N30	6 N51 ø5.0 c/20 C=171
N27	6 N33 ø5.0 c/20 C=80
N27	6 N52 ø5.0 c/20 C=195
N30	6 N53 ø5.0 c/20 C=192
N30	6 N54 ø5.0 c/20 C=205
N30	6 N55 ø5.0 c/20 C=199
N30	6 N56 ø5.0 c/20 C=124
N30	6 N38 ø5.0 c/20 C=265
N27	6 N54 ø5.0 c/20 C=205
N30	6 N38 ø5.0 c/20 C=265
N27	6 N54 ø5.0 c/20 C=205
N33	3 N58 ø5.0 c/20 C=261
N27	6 N59 ø5.0 c/20 C=383
N13	5 N14 ø5.0 c/20 C=71
N13	5 N14 ø5.0 c/20 C=71
N15	3 N14 ø5.0 c/20 C=71

DETALHE DA ARMADURA DE SUPERIOR DE CONTINUIDADE DA LAJE
E MONTAGEM DA ARMADURA DE DISTRIBUIÇÃO



RELAÇÃO DO AÇO

Negativos

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	15	92	1380
	2	5.0	39	73	2847
	3	5.0	14	42	588
	4	5.0	18	46	828
	5	5.0	6	237	1422
	6	5.0	2	85	170
	7	5.0	8	47	376
	8	5.0	3	58	174
	9	5.0	3	91	273
	10	5.0	3	136	408
	11	5.0	3	57	171
	12	5.0	1	88	88
	13	5.0	51	104	5304
	14	5.0	48	71	3408
	15	5.0	248	63	15624
	16	5.0	3	455	1365
	17	5.0	3	444	1332
	18	5.0	5	86	430
	19	5.0	3	441	1323
	20	5.0	3	450	1350
	21	5.0	3	274	822
	22	5.0	3	223	669
	23	5.0	3	110	330
	24	5.0	6	362	2172
	25	5.0	3	522	1566
	26	5.0	3	372	1116
	27	5.0	133	117	15561
	28	5.0	6	432	2592
	29	5.0	12	455	5460
	30	5.0	329	110	36190
	31	5.0	6	403	2418
	32	5.0	6	457	2742
	33	5.0	138	60	8280
	34	5.0	3	270	810
	35	5.0	6	267	1602
	36	5.0	6	430	2580
	37	5.0	3	262	786
	38	5.0	24	265	6360
	39	5.0	6	449	2694
	40	5.0	6	258	1548
	41	5.0	6	448	2688
	42	5.0	3	297	891
	43	5.0	6	303	1818
	44	5.0	6	436	2616
	45	5.0	3	332	996
	46	5.0	6	322	1932
	47	5.0	3	608	1824
	48	5.0	3	253	759
	49	5.0	6	173	1038
	50	5.0	6	255	1530
	51	5.0	6	171	1026
	52	5.0	6	195	1170
	53	5.0	6	192	1152
	54	5.0	24	205	4920
	55	5.0	6	199	1194
	56	5.0	6	124	744
	57	5.0	6	267	1602
	58	5.0	3	261	783
	59	5.0	6	383	2298
CA50	60	6.3	4	186	744
	61	6.3	3	138	414
	62	6.3	6	233	1398
	63	6.3	6	88	528
	64	6.3	1	94	94
	65	6.3	1	105	105
	66	6.3	1	89	89
	67	6.3	2	91	182
	68	8.0	20	109	2180
	69	8.0	14	124	1736
	70	8.0	5	63	315
	71	8.0	1	106	106
	72	8.0	3	62	186
	73	8.0	1	89	89
	74	8.0	2	88	176
	75	10.0	5	188	940
	76	10.0	5	138	690
	77	10.0	3	155	465
	78	10.0	1	92	92
	79	12.5	4	210	840

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	35.5	9.6
	8.0	47.9	20.8
	10.0	21.9	14.8
	12.5	8.4	8.9
CA60	5.0	1661.4	281.7

PESO TOTAL (kg)	
CA50	54.1
CA60	281.7

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

Nº	ALTERAÇÃO/REVISÕES	REVISADO POR	DATA

INSTITUTO FEDERAL SERGIPE

AUTOR DO PROJETO:
Engº. Fredrico Damasceno Pinheiro
CREA 270082778-3

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PROJETO ESTRUTURAL
RESTAURANTE - CAMPUS ARACAJU/SE

CLIENTE:
INSTITUTO FEDERAL DE SERGIPE - CAMPUS ARACAJU

ENDEREÇO:
AV. ENGENHEIRO GENTIL TAVARES, 1166, GETÚLIO VARGAS, ARACAJU - SE

ESCALA: 1:100

DATA: OUTUBRO/2026

PLANTA:
RESTAURANTE
ARMAÇÃO NEGATIVA DAS LAJES PAV. LAJ IMP.

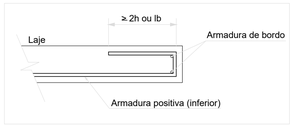
PRANCHA: 14/18

CAMPUS:	OBRA:	ESPECIALIDADE	FASE	SERIAL	QUANTITATIVO	REVISÃO
AJU	RES	EST	PE	014	018	R01



Armação positiva das lajes do pavimento LAJE IMP.
escala 1:50

DETALHE DA ARMADURA DE BORDO LIVRE DA LAJE



RELAÇÃO DO AÇO

Positivos

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	91	151	13741
	2	5.0	92	VAR	VAR
	3	5.0	28	VAR	VAR
	4	5.0	23	374	8602
	5	5.0	50	458	22900
	6	5.0	23	309	7107
	7	5.0	23	344	7912
	8	5.0	32	264	8448
	9	5.0	13	VAR	VAR
	10	5.0	22	VAR	VAR
	11	5.0	13	VAR	VAR
	12	5.0	38	VAR	VAR
	13	5.0	8	754	6032
	14	5.0	39	214	8346
	15	5.0	49	274	13426
	16	5.0	13	394	5122
	17	5.0	7	608	4256
CA50	18	6.3	145	147	21315
	19	6.3	8	110	880
	20	6.3	7	392	2744
	21	6.3	2	382	764
	22	6.3	9	905	8145
	23	6.3	2	895	1790
	24	6.3	2	600	1200
	25	8.0	88	147	12936
	26	8.0	6	913	5478
	27	8.0	2	903	1806
	28	8.0	37	149	5513
	29	8.0	5	909	4545
	30	8.0	2	899	1798
	31	8.0	7	625	4375
	32	8.0	2	615	1230
	33	8.0	8	610	4880
	34	8.0	2	600	1200
	35	10.0	5	915	4575
	36	10.0	2	903	1806
	37	10.0	7	681	4767
	38	10.0	2	638	1276
	39	10.0	2	112	224

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	368.4	99.2
	8.0	437.6	189.9
	10.0	126.5	85.8
CA60	5.0	1810.4	307

PESO TOTAL (kg)	
CA50	374.9
CA60	307

Volume de concreto (C-30) = 17.22 m³
Área de forma = 73.17 m²

Nº	ALTERAÇÃO/REVISÕES	REVISADO POR	DATA

INSTITUTO FEDERAL SERGIPE

AUTOR DO PROJETO:
Engº. Fredrico Damasceno Pinheiro
CREA 270082778-3

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PROJETO ESTRUTURAL
RESTAURANTE - CAMPUS ARACAJU/SE

CLIENTE:
INSTITUTO FEDERAL DE SERGIPE - CAMPUS ARACAJU

ENDEREÇO:
AV. ENGENHEIRO GENTIL TAVARES, 1166, GETÚLIO VARGAS, ARACAJU - SE

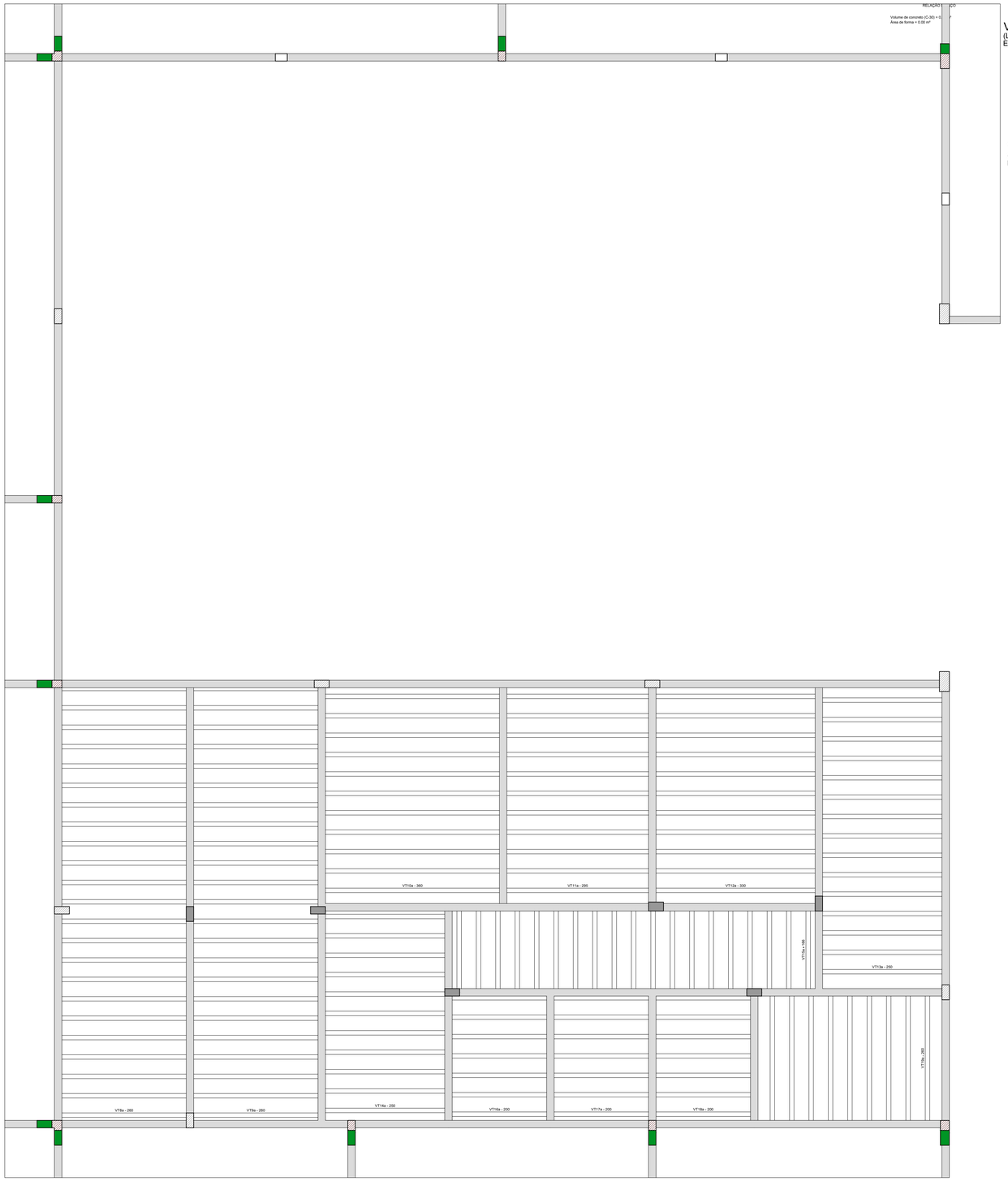
ESCALA: 1:100

DATA: OUTUBRO/2026

PLANTA:
RESTAURANTE
ARMAÇÃO POSITIVA DAS LAJES PAV. LAJ IMP.

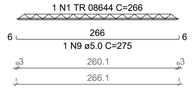
PRANCHA: 15/18

CAMPUS	OBRA	ESPECIALIDADE	FASE	SERIAL	QUANTITATIVO	REVISÃO
AJU	RES	EST	PE	015	018	R01

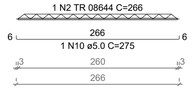


Planta de vigotas pré-moldadas
escala 1:50

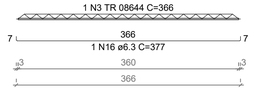
VT8a (22 unidades)
(L8)
ESC 1:50



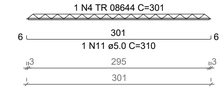
VT9a (22 unidades)
(L9)
ESC 1:50



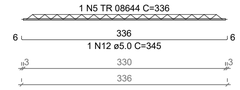
VT10a (11 unidades)
(L10)
ESC 1:50



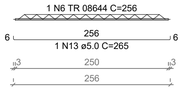
VT11a (11 unidades)
(L11)
ESC 1:50



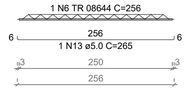
VT12a (11 unidades)
(L12)
ESC 1:50



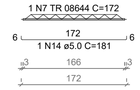
VT13a (15 unidades)
(L13)
ESC 1:50



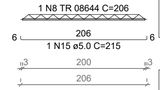
VT14a (11 unidades)
(L14)
ESC 1:50



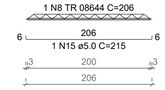
VT15a (19 unidades)
(L15)
ESC 1:50



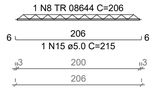
VT16a (6 unidades)
(L16)
ESC 1:50



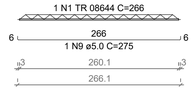
VT17a (6 unidades)
(L17)
ESC 1:50



VT18a (6 unidades)
(L18)
ESC 1:50



VT19a (9 unidades)
(L19)
ESC 1:50



RELAÇÃO DO AÇO

22xVT8a	22xVT9a	11xVT10a
11xVT11a	11xVT12a	15xVT13a
11xVT14a	19xVT15a	6xVT16a
6xVT17a	6xVT18a	9xVT19a

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	TR 08644	31	266	8246
	2	TR 08644	22	266	5852
	3	TR 08644	11	366	4026
	4	TR 08644	11	301	3311
	5	TR 08644	11	336	3696
	6	TR 08644	26	256	6656
	7	TR 08644	19	172	3268
	8	TR 08644	18	206	3708
	9	5.0	31	275	8525
	10	5.0	22	275	6050
	11	5.0	11	310	3410
	12	5.0	11	345	3795
	13	5.0	26	265	6890
	14	5.0	19	181	3439
	15	5.0	18	215	3870
CA50	16	6.3	11	377	4147

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	41.5	11.2
CA60	5.0	359.8	61
	TR 08644	387.6	313.4

PESO TOTAL (kg)	
CA50	11.2
CA60	374.4

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

Nº	ALTERAÇÃO/REVISÕES	REVISADO POR	DATA

INSTITUTO FEDERAL
SERGIPE

AUTOR DO PROJETO:
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PROJETO ESTRUTURAL
RESTAURANTE - CAMPUS ARACAJU/SE

CLIENTE:
INSTITUTO FEDERAL DE SERGIPE - CAMPUS ARACAJU

ENDEREÇO:
AV. ENGENHEIRO GENTIL TAVARES, 1166, GETÚLIO VARGAS, ARACAJU - SE

ESCALA: 1:100

DATA: OUTUBRO/2026

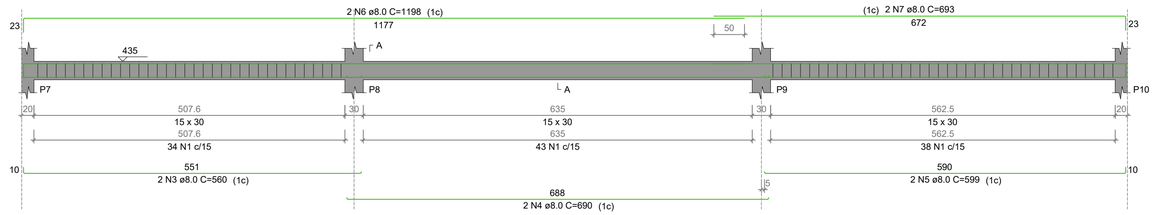
PLANTA:
RESTAURANTE
FORMA E VIGOTAS PAV. LAJ IMP.

PRANCHA: 16/18

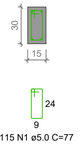
CAMPUS	OBRA	ESPECIALIDADE	FASE	SERIAL	QUANTITATIVO	REVISÃO
AJU	RES	EST	PE	0160	0180	R01

V1 (15 x 30)

ESC 1:50

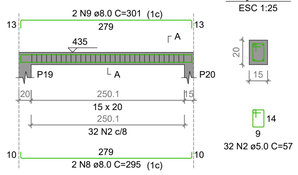


SEÇÃO A-A
ESC 1:25



V2 (15 x 20)

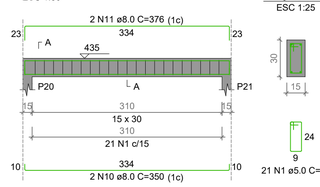
ESC 1:50



SEÇÃO A-A
ESC 1:25

V3 (15 x 30)

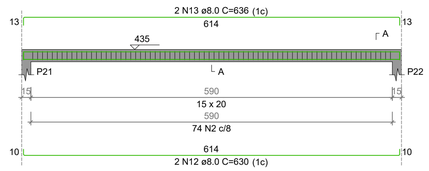
ESC 1:50



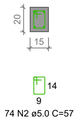
SEÇÃO A-A
ESC 1:25

V4 (15 x 20)

ESC 1:50

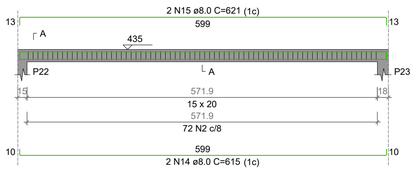


SEÇÃO A-A
ESC 1:25

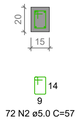


V5 (15 x 20)

ESC 1:50

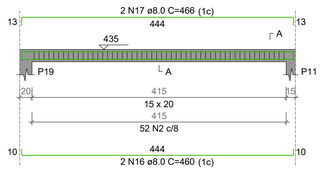


SEÇÃO A-A
ESC 1:25

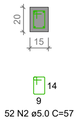


V6 (15 x 20)

ESC 1:50

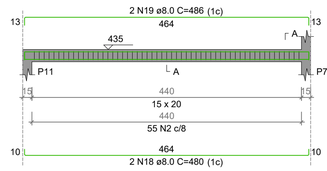


SEÇÃO A-A
ESC 1:25

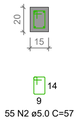


V7 (15 x 20)

ESC 1:50

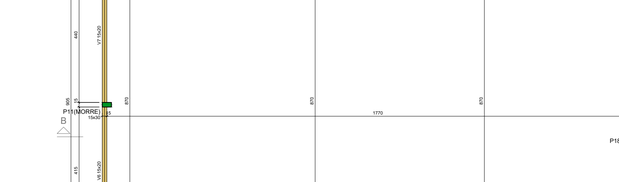


SEÇÃO A-A
ESC 1:25

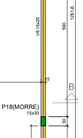


V8 (15 x 20)

ESC 1:50



SEÇÃO A-A
ESC 1:25



RELAÇÃO DO AÇO

V1 V2 V3
V4 V5 V6
V7 V8

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	136	77	10472
	2	5.0	390	57	22230
CA50	3	8.0	2	560	1120
	4	8.0	2	690	1380
	5	8.0	2	599	1198
	6	8.0	2	1198	2396
	7	8.0	2	693	1386
	8	8.0	2	295	590
	9	8.0	2	301	602
	10	8.0	2	350	700
	11	8.0	2	376	752
	12	8.0	2	630	1260
	13	8.0	2	636	1272
	14	8.0	2	615	1230
	15	8.0	2	621	1242
	16	8.0	2	460	920
	17	8.0	2	466	932
	18	8.0	2	480	960
	19	8.0	2	486	972
	20	8.0	2	933	1866
	21	8.0	2	939	1878

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	226.6	98.3
CA60	5.0	327	55.4

PESO TOTAL (kg)	
CA50	98.3
CA60	55.4

Volume de concreto (C-30) = 1.84 m³
Área de forma = 32.16 m²

Forma do pavimento CINTA LAJE IMP. (Nível 435)

escala 1:100

Vigas

Nome	Seção (cm)	Elevação (cm)	Nível (cm)
V1	15x30	0	435
V2	15x20	0	435
V3	15x30	0	435
V4	15x20	0	435
V5	15x20	0	435
V6	15x20	0	435
V7	15x20	0	435
V8	15x20	0	435

Características dos materiais

fck (kgf/cm²)	Ecs (kgf/cm²)	fct (kgf/cm²)	Abatimento (cm)
300	268384	29	5.00

Dimensão máxima do agregado = 19 mm

Pilares

Nome	Seção (cm)	Elevação (cm)	Nível (cm)
P1	L 20x20x15x15	0	435
P2	15x20	0	435
P3	18x30	0	435
P4	15x30	0	435
P5	20x40	0	435
P6	15x20	0	435
P7	15x20	0	435
P8	15x30	0	435
P9	15x30	0	435
P10	20x40	0	435
P11	15x30	0	435
P18	15x30	0	435
P19	L 20x20x15x15	0	435
P20	15x30	0	435
P21	15x20	0	435
P22	15x20	0	435
P23	18x20	0	435
P24	15x24	0	435
P25	15x24	0	435
P26	15x24	0	435
P27	15x24	0	435

Legenda dos pilares	
	Pilar que morre
	Pilar que passa

Legenda das vigas e paredes	
	Viga

Nº	ALTERAÇÃO/REVISÕES	REVISADO POR	DATA

INSTITUTO FEDERAL
SERGIPE

AUTOR DO PROJETO:
Engº. Fredrico Damasceno Pinheiro
CREA 270082778-3

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PROJETO ESTRUTURAL
RESTAURANTE - CAMPUS ARACAJU/SE

CLIENTE:
INSTITUTO FEDERAL DE SERGIPE - CAMPUS ARACAJU

ENDEREÇO:
AV. ENGENHEIRO GENTIL TAVARES, 1166, GETÚLIO VARGAS, ARACAJU - SE

ESCALA: 1:100

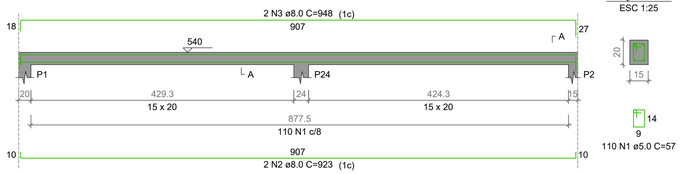
DATA: OUTUBRO/2026

PLANTA:
RESTAURANTE
FORMA E VIGAS CINTA LAJE

PRANCHA: 17/18

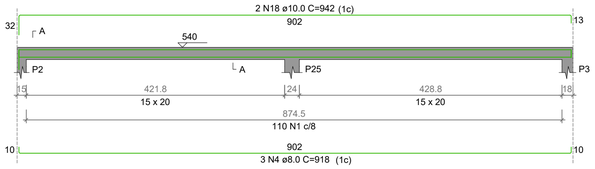
CAMPUS	OBRA	ESPECIALIDADE	FASE	SERIAL	QUANTITATIVO	REVISÃO
AJU	RES	EST	PE	017	018	R01

V1 (15 x 20)
ESC 1:50

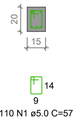


SEÇÃO A-A
ESC 1:25

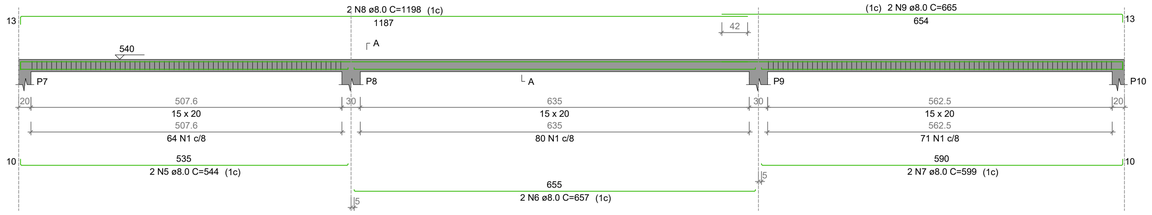
V2 (15 x 20)
ESC 1:50



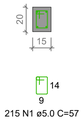
SEÇÃO A-A
ESC 1:25



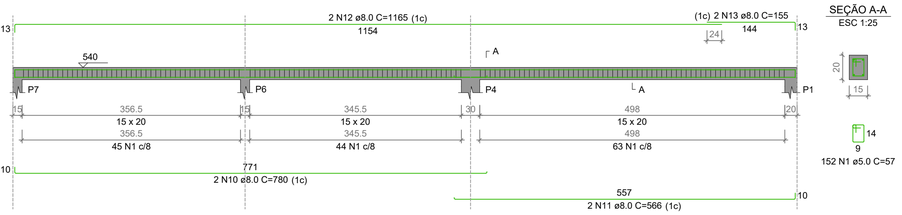
V3 (15 x 20)
ESC 1:50



SEÇÃO A-A
ESC 1:25

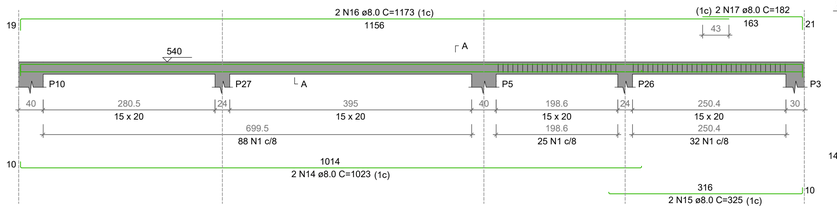


V4 (15 x 20)
ESC 1:50

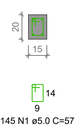


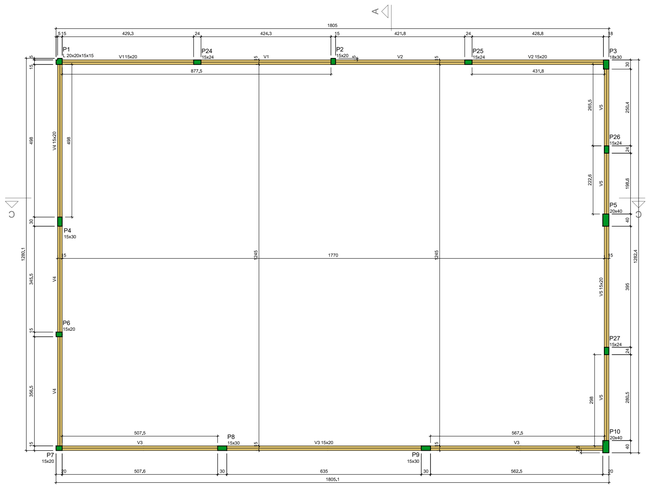
SEÇÃO A-A
ESC 1:25

V5 (15 x 20)
ESC 1:50



SEÇÃO A-A
ESC 1:25





Forma do pavimento CINTA SALÃO (Nível 540)
escala 1:100

Vigas			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
V1	15x20	0	540
V2	15x20	0	540
V3	15x20	0	540
V4	15x20	0	540
V5	15x20	0	540

Características dos materiais			
fck (kgf/cm²)	Ecs (kgf/cm²)	fct (kgf/cm²)	Abatimento (cm)
300	268384	29	5.00

Dimensão máxima do agregado = 19 mm

Pilares			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
P1	L 20x20x15x15	0	540
P2	15x20	0	540
P3	18x30	0	540
P4	15x30	0	540
P5	20x40	0	540
P6	15x20	0	540
P7	15x20	0	540
P8	15x30	0	540
P9	15x30	0	540
P10	20x40	0	540
P24	15x24	0	540
P25	15x24	0	540
P26	15x24	0	540
P27	15x24	0	540

Legenda dos pilares	
	Pilar que morre

Legenda das vigas e paredes	
	Viga

RELAÇÃO DO AÇO

V1 V2 V3 V4 V5

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	732	57	41724
CA50	2	8.0	2	923	1846
	3	8.0	2	948	1896
	4	8.0	3	918	2754
	5	8.0	2	544	1088
	6	8.0	2	657	1314
	7	8.0	2	599	1198
	8	8.0	2	1198	2396
	9	8.0	2	665	1330
	10	8.0	2	780	1560
	11	8.0	2	566	1132
	12	8.0	2	1165	2330
	13	8.0	2	155	310
	14	8.0	2	1023	2046
	15	8.0	2	325	650
	16	8.0	2	1173	2346
	17	8.0	2	182	364
	18	10.0	2	942	1884

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	245.6	106.6
	10.0	18.8	12.8
CA60	5.0	417.2	70.7

PESO TOTAL (kg)	
CA50	119.4
CA60	70.7

Volume de concreto (C-30) = 1.72 m³
Área de forma = 31.53 m²

Nº	ALTERAÇÃO/REVISÕES	REVISADO POR	DATA

INSTITUTO FEDERAL SERGIPE

AUTOR DO PROJETO:
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PROJETO ESTRUTURAL
RESTAURANTE - CAMPUS ARACAJU/SE

CLIENTE:
INSTITUTO FEDERAL DE SERGIPE - CAMPUS ARACAJU

ENDEREÇO:
AV. ENGENHEIRO GENTIL TAVARES, 1166, GETÚLIO VARGAS, ARACAJU - SE

ESCALA: 1:100

DATA: OUTUBRO/2026

PLANTA:
RESTAURANTE
FORMA E VIGAS CINTA DO SALÃO

PRANCHA: 18/18

CAMPUS	OBRA	ESPECIALIDADE	FASE	SERIAL	QUANTITATIVO	REVISÃO
AJU	RES	EST	PE	018	018	R01