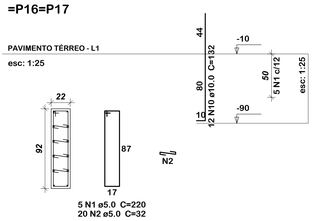
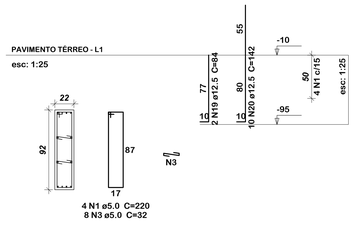
P1=P3=P4=P5=P6=P7 =P11=P12=P13=P14=P15 =P16=P17



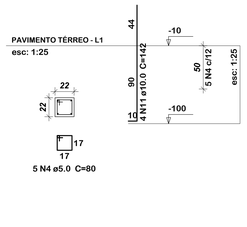
5 N1 ø5.0 C=220
20 N2 ø5.0 C=32

P10



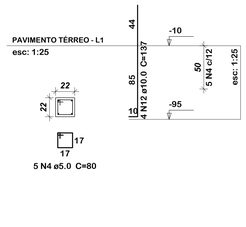
4 N1 ø5.0 C=220
8 N3 ø5.0 C=32

P18=P29=P39=P63=P64



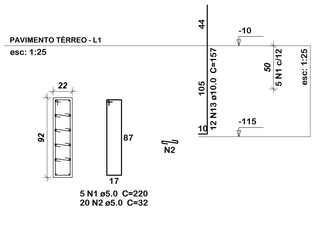
5 N4 ø5.0 C=80

P19



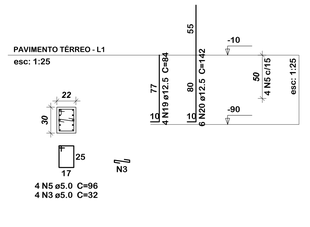
5 N4 ø5.0 C=80

P2



5 N1 ø5.0 C=220
20 N2 ø5.0 C=32

P20



4 N5 ø5.0 C=96
4 N3 ø5.0 C=32

Relação do aço Espera dos Pilares

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	84	220	18480
	2	5.0	405	32	12960
	3	5.0	28	32	896
	4	5.0	44	80	3520
	5	5.0	47	96	4512
	6	5.0	109	116	12644
	7	5.0	36	82	2952
	8	5.0	10	25	250
	9	5.0	13	25	325
CA50	10	10.0	186	132	24552
	11	10.0	104	142	14768
	12	10.0	10	137	1370
	13	10.0	12	157	1884
	14	10.0	8	147	1176
	15	10.0	4	100	400
	16	10.0	4	95	380
	17	10.0	10	242	2420
	18	10.0	24	177	4248
	19	12.5	6	84	504
	20	12.5	44	142	6248
	21	12.5	14	94	1316
	22	12.5	28	152	4256
	23	12.5	6	89	534
	24	12.5	26	147	3822
	25	12.5	2	194	388
	26	12.5	4	252	1008
	27	16.0	8	166	1328

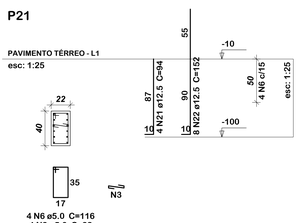
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO (kg)
CA50	10.0	512	315.7
	12.5	180.8	174.1
	16.0	13.3	21
CA60	5.0	565.4	87.1

PESO TOTAL (kg)

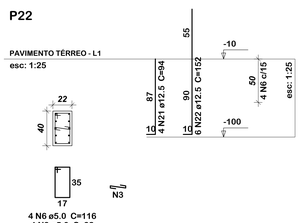
CA50	510.7
CA60	87.1

P21



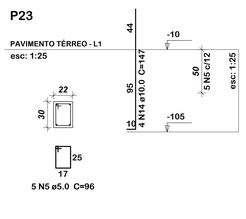
4 N6 ø5.0 C=116
4 N3 ø5.0 C=32

P22



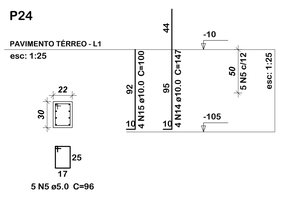
4 N6 ø5.0 C=116
4 N3 ø5.0 C=32

P23



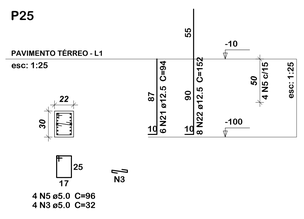
5 N5 ø5.0 C=96

P24



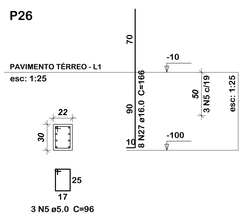
5 N5 ø5.0 C=96

P25



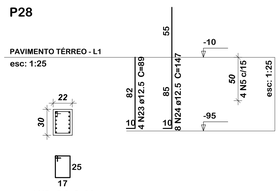
4 N5 ø5.0 C=96
4 N3 ø5.0 C=32

P26



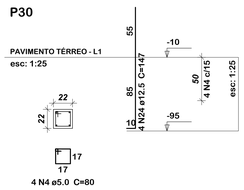
3 N5 ø5.0 C=96

P28



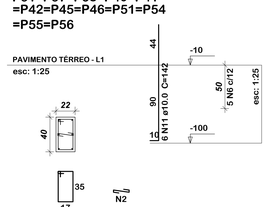
4 N5 ø5.0 C=96

P30



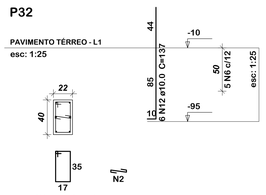
4 N4 ø5.0 C=80

P31=P37=P38=P40=P41 =P42=P45=P46=P51=P54 =P55=P56



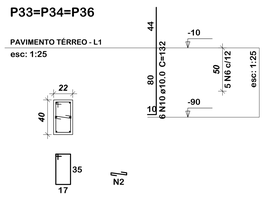
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5 N2 ø5.0 C=32

P32



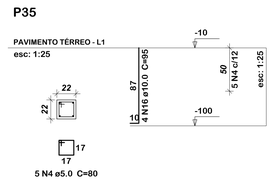
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5 N2 ø5.0 C=32

P33=P34=P36



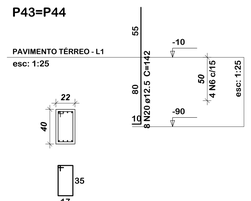
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5 N2 ø5.0 C=32

P35



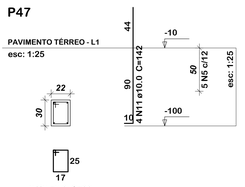
5 N4 ø5.0 C=80

P43=P44



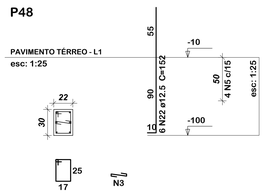
4 N6 ø5.0 C=116

P47



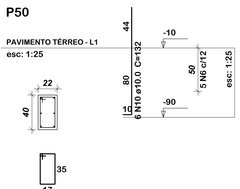
5 N5 ø5.0 C=96

P48



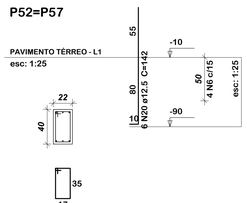
4 N5 ø5.0 C=96
4 N3 ø5.0 C=32

P50



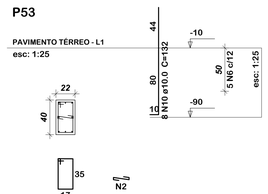
5 N6 ø5.0 C=116

P52=P57



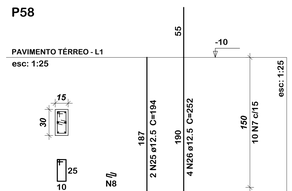
4 N6 ø5.0 C=116

P53



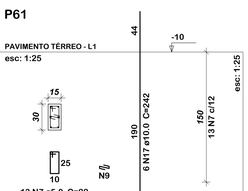
5 N6 ø5.0 C=116
5 N2 ø5.0 C=32

P58



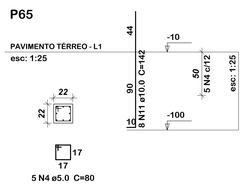
10 N7 ø5.0 C=82
10 N8 ø5.0 C=25

P61



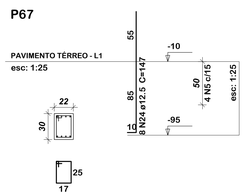
13 N7 ø5.0 C=82
13 N9 ø5.0 C=25

P65



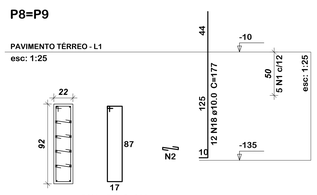
5 N4 ø5.0 C=80

P67



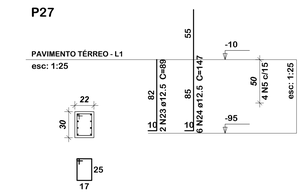
4 N5 ø5.0 C=96

P8=P9



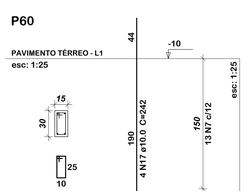
5 N1 ø5.0 C=220
20 N2 ø5.0 C=32

P27



4 N5 ø5.0 C=96

P60



13 N7 ø5.0 C=82

MINISTÉRIO DA EDUCAÇÃO
UNIVERSIDADE FEDERAL DE LAVRAS

EMPRESA:
AS BUILT ENGENHARIA DE PROJETOS LTDA
CNPJ: 09.480.531/0001-01

PROJETO:
TÍTULO: PROJETO ESTRUTURAL DBI
CONTEÚDO: ESPERA DOS PILARES
AUTOR DO PROJETO: CARLOS HENRIQUE DE SOUZA GONCALVES ENGENHEIRO CIVIL - CREA-PR 78820
EXECUÇÃO DE OBRA:

DATA:	REVISÃO DATA:	PROJETO:
12/2014	-	EXECUTIVO
ESCALA:	ÁREA: (m²)	FOLHA:
INDICADA	1.859,96	EST 03 /20