BN Projetos

CEMITÉRIO MURO

PRESIDENTE VENCESLAU - SP
PROJETO ESTRUTURAL COMERCIAL

BN Projetos

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Projeto Estrutural
Resumo Geral da Obra

Obra: CONSTRUÇÃO COMERCIAL
Resp. Técnico: ENGº. FABRÍCIO BAGLI

QUANTITATIVOS DA OBRA:

1-RESUMO FUNDAÇÃO

Fundação – Estacas e Blocos de Fundação

Elemento	Formas (m²)	Volume (m³)	Barras (kg)
Estacas		*3.89	57
Blocos	7.68	0.77	90
Total	7.68	4.66	147

*Volume estimado de concreto

2-RESUMO PAVIMENTOS

Baldrame - Superfície total: 4.33 m2

Elemento	Formas (m2)	Volume (m3)	Barras (kg)
Vigas: fundo	3.60	1.21	69
Forma lateral	14.34		
Total	17.94	1.21	69
Índices (por m2)	4.143	0.279	15.93

Respaldo - Superfície total: 4.33 m2

Elemento	Formas (m2)	Volume (m3)	Barras (kg)
Vigas: fundo	3.60	1.22	70
Forma lateral	14.34		
Pilares (Sup. Formas)	28.44	1.80	132
Total	46.38	3.02	202
Índices (por m2)	10.711	0.697	46.65

Total obra - Superfície total: 8.66 m2

Elemento	Formas (m2)	Volume (m3)	Barras (kg)
Vigas: fundo	7.20	2.43	139
Forma lateral	28.68		
Pilares (Sup. Formas)	28.44	1.80	132
Total	62.32	4.23	271
Índices (por m2)	7.196	0.488	31.29

RESUMO GERAL DE AÇO
(Total + 10%)

209	5,0mm (kg)	6,3mm (kg)	8,0mm (kg)	10,0mm (kg)	12,5mm (kg)	16,0mm (kg)	20,0mm (kg)	25,0 mm (kg)	Total do Item
Estacas	10	-	47	-	-	-	-	-	**57**
Blocos	5	39	-	46	-	-	-	-	**90**
Pilares	42	-	-	90	-	-	-	-	**132**
Vigas	42	-	97	-	-	-	-	-	**139**
Lajes maciças	-	-	-	-	-	-	-	-	**-**
Lajes Pré	-	-	-	-	-	-	-	-	**-**
Escadas	-	-	-	-	-	-	-	-	**-**
Totais	**99**	**39**	**144**	**136**	**-**	**-**	**-**	**-**	**418**

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ESTACAS

DETALHES E ARMADURAS

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TÍTULO
DETALHAMENTO DAS ESTACAS DA FUNDAÇÃO

PROJ.	FCK	AÇO	ESCALA	DATA	FOLHA
LUANA R.	20 MPa	CA-50	S/ESCALA	NOV/2025	EST-01/02

TABELA DE AÇO

NUM.	QUANT.	BITOLA	COMP.	USO	TIPO	A	B
1	36	8,0mm	300	ESTACAS	RETO	0	0

TABELA DE AÇO

NUM.	QUANT.	BITOLA	COMP.	USO	TIPO	A	B
2	108	5,0mm	55	ESTACAS	ESTR	15	15

CONSUMO GERAL DE AÇO

BITOLA	COMPR(m)	kg/m	TOT(kg)+10%
4,2mm	0.00	0,109	0.0
5,0mm	59.40	0,154	10.1
6,3mm	0.00	0,245	0.0
8,0mm	108.00	0,395	46.9
10,0mm	0.00	0,617	0.0
12,5mm	0.00	0,963	0.0
16,0mm	0.00	1,578	0.0
20,0mm	0.00	2,466	0.0
25,0mm	0.00	3,853	0.0
32,0mm	0.00	6,313	0.0
40,0mm	0.00	9,865	0.0
TOTAL + 10% (kg)			57.0

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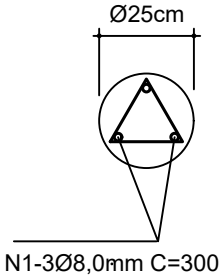
TÍTULO
DETALHAMENTO DAS ESTACAS DA FUNDAÇÃO

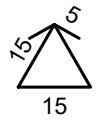
PROJ.	FCK	AÇO	ESCALA	DATA	FOLHA
LUANA R.	20 MPa	CA-50	S/ESCALA	NOV/2025	EST-02/02

DETALHE DAS ESTACAS Ø25

12x

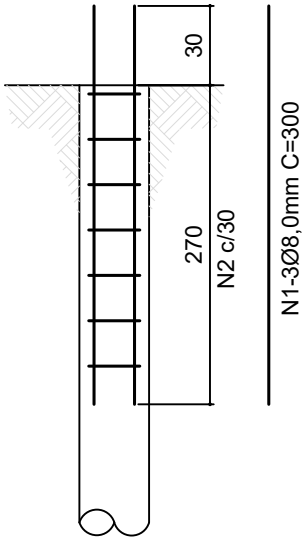


N1-3Ø8,0mm C=300



ESTRIBOS

N2-9Ø5,0mm c/30 C=55



ESTACA ESCAVADA MOLDADA "IN LOCO"
DIÂMETRO DE 25cm P/ 15Tf.

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BLOCOS DE FUNDAÇÃO

DETALHES E ARMADURAS

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TÍTULO
DETALHES DOS BLOCOS DE FUNDAÇÃO

PROJ.	FCK	AÇO	ESCALA	DATA	FOLHA
LUANA R.	20 MPa	CA-50	1:25	NOV/2025	BLO-01/03

TABELA DE AÇO

NUM.	QUANT.	BITOLA	COMP.	USO	TIPO	A	B
1	24	6,3mm	133	P1	ESTR	30	30
2	24	6,3mm	136	P1	ESTR	31	30
3	24	6,3mm	138	P1	ESTR	31	31
4	24	5,0mm	96	P1	ESTR	22	22
5	32	10,0mm	140	P1	'L'	30	0

TABELA DE AÇO

NUM.	QUANT.	BITOLA	COMP.	USO	TIPO	A	B
6	12	6,3mm	133	P7	ESTR	30	30
7	12	6,3mm	136	P7	ESTR	31	30
8	12	6,3mm	138	P7	ESTR	31	31
9	12	5,0mm	64	P7	ESTR	14	14
10	16	10,0mm	140	P7	'L'	30	0

CONSUMO GERAL DE AÇO

BITOLA	COMPR(m)	kg/m	TOT(kg)+10%
4,2mm	0.00	0,109	0.0
5,0mm	30.72	0,154	5.2
6,3mm	146.52	0,245	39.5
8,0mm	0.00	0,395	0.0
10,0mm	67.20	0,617	45.6
12,5mm	0.00	0,963	0.0
16,0mm	0.00	1,578	0.0
20,0mm	0.00	2,466	0.0
25,0mm	0.00	3,853	0.0
32,0mm	0.00	6,313	0.0
40,0mm	0.00	9,865	0.0
TOTAL + 10% (kg)			90.3

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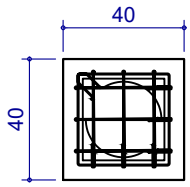
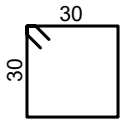
TÍTULO
DETALHES DOS BLOCOS DE FUNDAÇÃO - P1(x8)

PROJ.	FCK	AÇO	ESCALA	DATA	FOLHA
LUANA R.	20 MPa	CA-50	1:25	NOV/2025	BLO-02/03

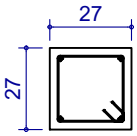
DETALHE DO BLOCO
P1, P2, P3, P4, P5, P6, P11 e P12

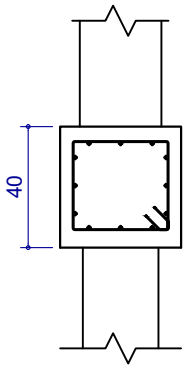


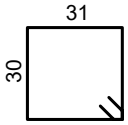
PLANTA DO BLOCO



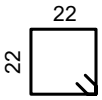
N1-3Ø6,3mm C=133
ARMADURA DE PELE







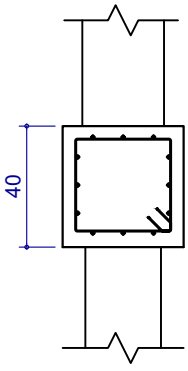
N2-3Ø6,3mm C=136

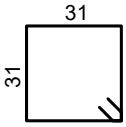


N4-3Ø5,0mm C=96



ARRANQUES DO PILAR





N3-3Ø6,3mm C=138

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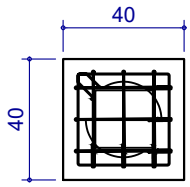
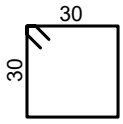
TÍTULO: DETALHES DOS BLOCOS DE FUNDAÇÃO - P1(x4)

PROJ.	FCK	AÇO	ESCALA	DATA	FOLHA
LUANA R.	20 MPa	CA-50	1:25	NOV/2025	BLO-03/03

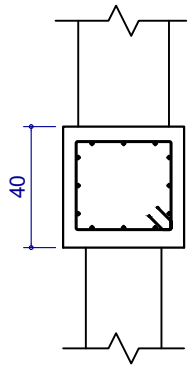
DETALHE DO BLOCO
P7, P8, P9 e P10

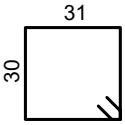


PLANTA DO BLOCO

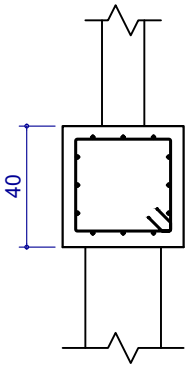


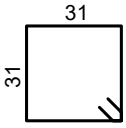
N6-3Ø6,3mm C=133
ARMADURA DE PELE



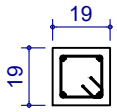


N7-3Ø6,3mm C=136





N8-3Ø6,3mm C=138





N9-3Ø5,0mm C=64



ARRANQUES DO PILAR

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PILARES

DETALHES E ARMADURAS

BN PROJETOS E ASSOCIADOS

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CONSTRUÇÃO DE CEMITÉRIO MUNICIPAL

TÍTULO
PILARES QUE SUPORTAM O MURO

PROJ.	FCK	AÇO	ESCALA	DATA	FOLHA
LUANA R.	25 MPa	CA-50	1:50/1:25	NOV/2025	PIL01-01/03

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P1=P4	1	Ø10	4	348	348	1392	8.6	
	2	Ø5	29	22 / 5 / 22	97	2813		4.4
						Total+10%:	9.5	4.8
						(x2):	19.0	9.6
P2=P3	3	Ø10	4	447 / 18	465	1860	11.5	
	4	Ø5	37	22 / 5 / 22	97	3589		5.6
						Total+10%:	12.7	6.2
						(x2):	25.4	12.4
P5=P6	5	Ø10	4	248	248	992	6.1	
	6	Ø5	21	22 / 5 / 22	97	2037		3.2
						Total+10%:	6.7	3.5
						(x2):	13.4	7.0
P7=P8=P9=P10	7	Ø10	4	198	198	792	4.9	
	8	Ø5	17	14 / 5 / 14	65	1105		1.7
						Total+10%:	5.4	1.9
						(x4):	21.6	7.6
P11=P12	9	Ø10	4	198	198	792	4.9	
	10	Ø5	17	22 / 5 / 22	97	1649		2.6
						Total+10%:	5.4	2.9
						(x2):	10.8	5.8
						Ø5:	0.0	42.4
						Ø10:	90.2	0.0
						Total:	90.2	42.4

Resumo Aço Pilares	Comp. total (m)	Peso+10% (kg)	Total
CA-50 Ø10	132.4	90	90
CA-60 Ø5	246.0	42	42
Total			132

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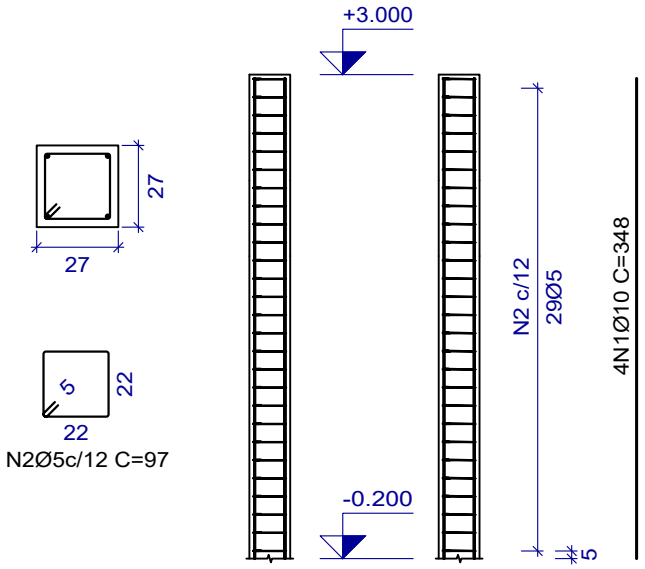
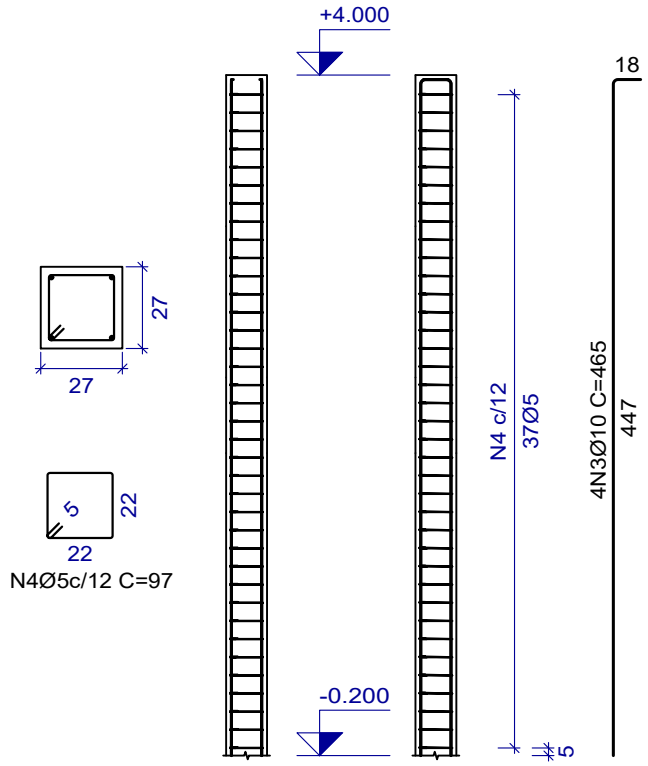
TÍTULO: PILARES QUE SUPORTAM O MURO

PROJ.	FCK	AÇO	ESCALA	DATA	FOLHA
LUANA R.	25 MPa	CA-50	1:50/1:25	NOV/2025	PIL01-02/03

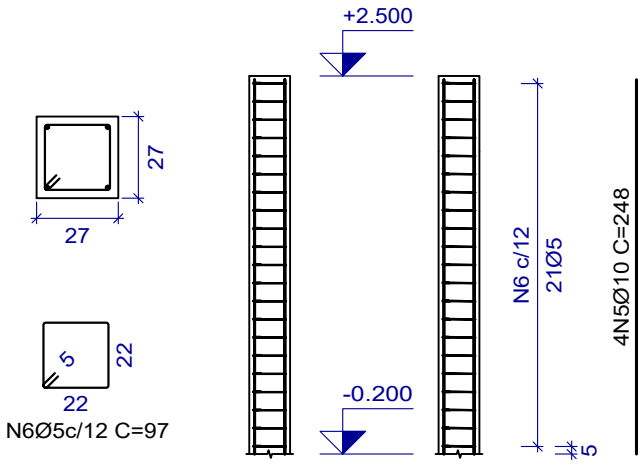
P1eP4



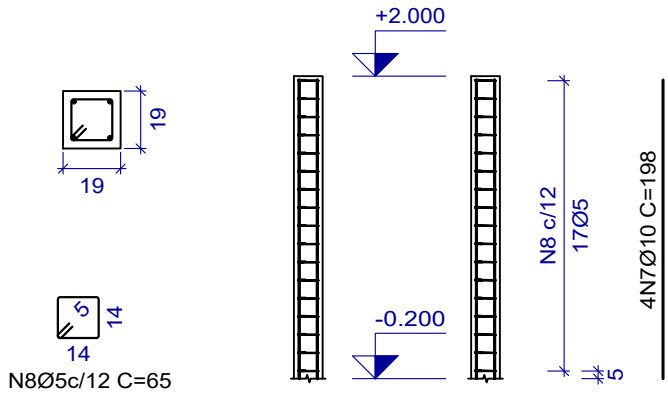
P2eP3



P5 eP6



P7,P8,P9eP10



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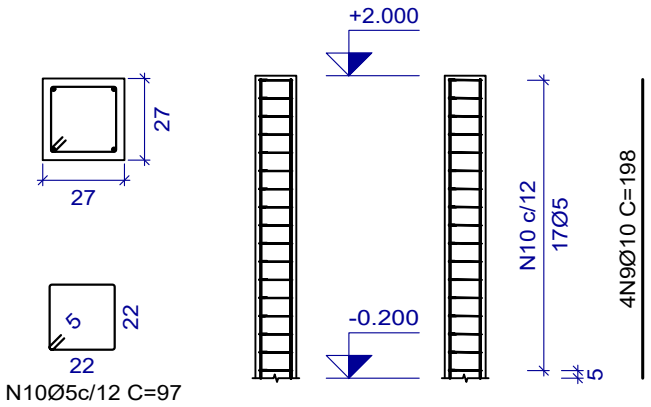
CONSTRUÇÃO DE CEMITÉRIO MUNICIPAL

TÍTULO
PILARES QUE SUPORTAM O MURO

PROJ.	FCK	AÇO	ESCALA	DATA	FOLHA
LUANA R.	25 MPa	CA-50	1:50/1:25	NOV/2025	PIL01-03/03

P11eP12



N10Ø5c/12 C=97

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VIGAS

DETALHES E ARMADURAS

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TÍTULO: VIGAS BALDRAME

PROJ.	FCK	AÇO	ESCALA	DATA	FOLHA
LUANA R.	30 MPa	CA-50	1:50/1:25	NOV/2025	VIG01-01/02

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 1=V 2	1	Ø8	4	10 — 352 — 10	373	1492	5.9	
	2	Ø5	19	25 × 5 / 9	76	1444		2.3
					Total+10%:		6.5	2.5
					(x2):		13.0	5.0
V 3=V 4	3	Ø8	2	15 — 292 — 15	322	644	2.5	
	4	Ø8	2	10 — 292 — 10	313	626	2.5	
	5	Ø5	18	25 × 5 / 14	86	1548		2.4
					Total+10%:		5.5	2.6
					(x2):		11.0	5.2
V 5	6	Ø8	2	13 — 672 — 13	697	1394	5.5	
	7	Ø8	2	10 — 672 — 10	693	1386	5.5	
	8	Ø5	40	25 × 5 / 9	76	3040		4.8
					Total+10%:		12.1	5.3
V 6	9	Ø8	2	13 — 672 — 13	697	1394	5.5	
	10	Ø8	2	10 — 672 — 10	693	1386	5.5	
	11	Ø5	40	25 × 5 / 9	76	3040		4.8
					Total+10%:		12.1	5.3
					Ø5:		0.0	20.8
					Ø8:		48.2	0.0
					Total:		48.2	20.8

Resumo Aço Desenho de vigas		Comp. total (m)	Peso+10% (kg)	Total
CA-50	Ø8	110.8	48	48
CA-60	Ø5	120.6	21	21
Total				69

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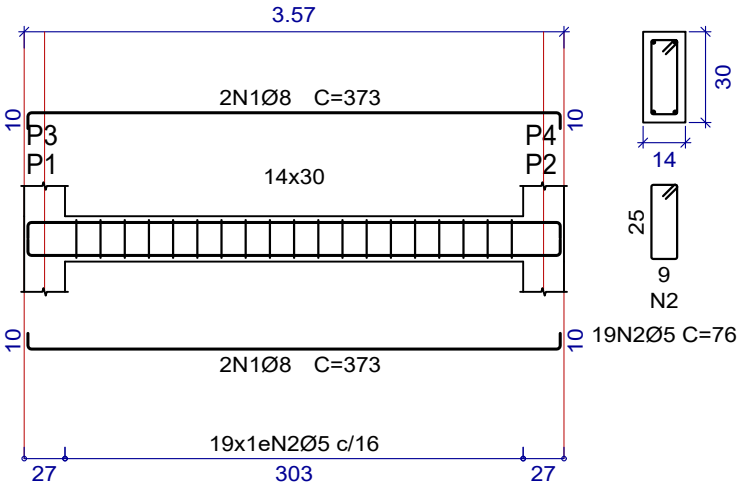
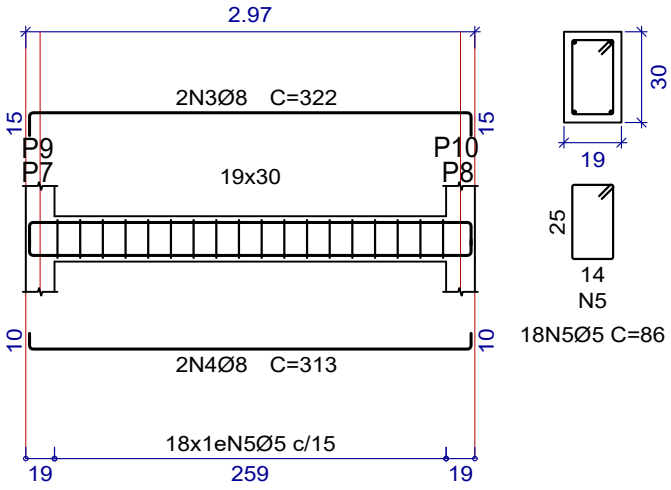
TÍTULO: VIGAS BALDRAME

PROJ.	FCK	AÇO	ESCALA	DATA	FOLHA
LUANA R.	30 MPa	CA-50	1:50/1:25	NOV/2025	VIG01-02/02

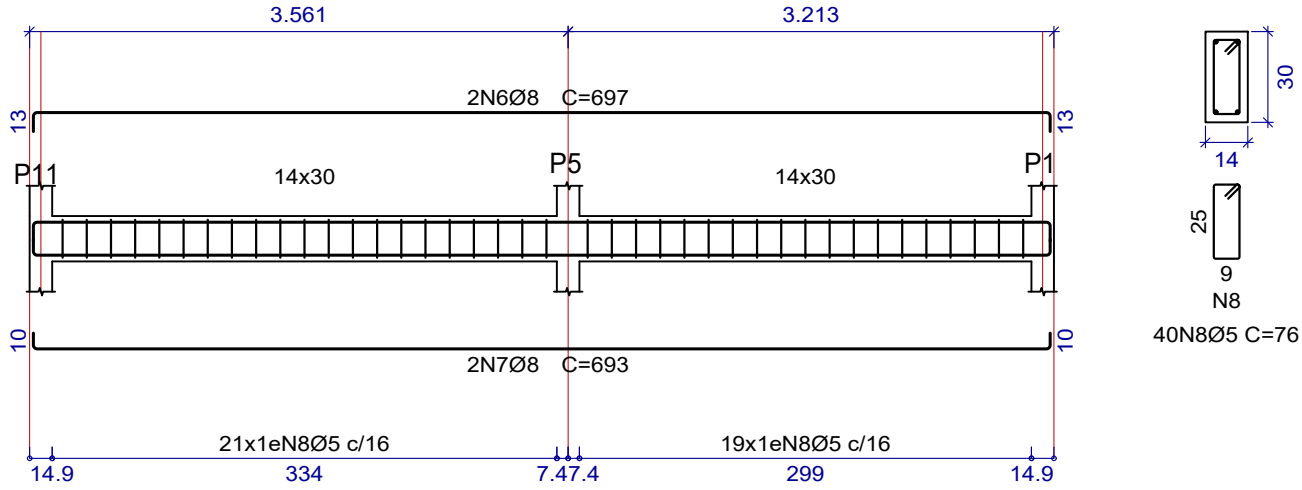
V1 V2



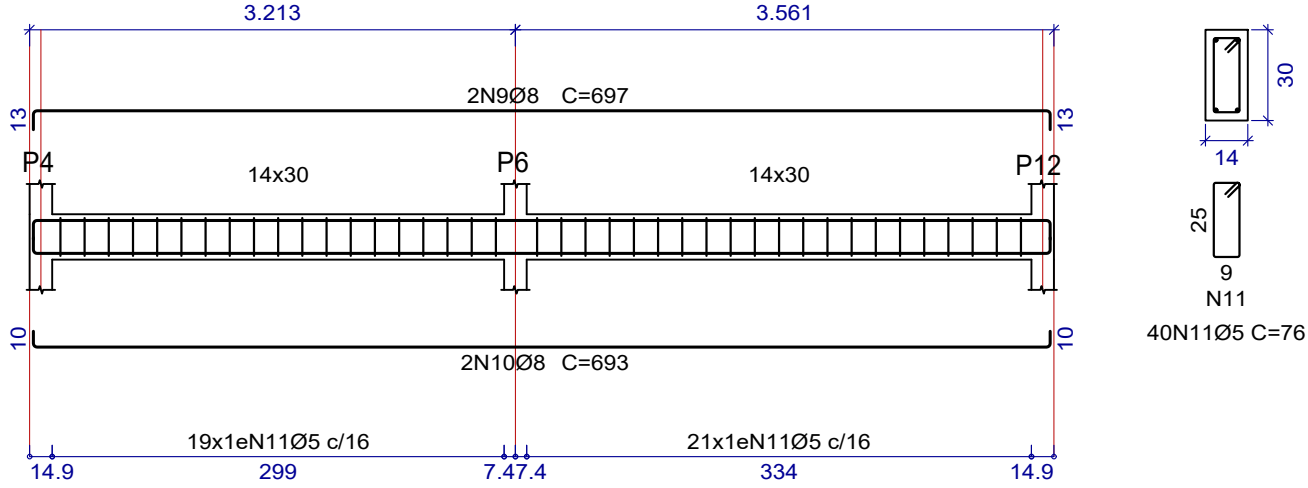
V3 V4



V5



V6



BN PROJETOS E ASSOCIADOS

OBRA: CONSTRUÇÃO DE CEMITÉRIO MUNICIPAL

TÍTULO: VIGAS RESPALDO

PROJ.	FCK	AÇO	ESCALA	DATA	FOLHA
LUANA R.	30 MPa	CA-50	1:50/1:25	NOV/2025	VIG02-01/02

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 1	1	Ø8	4	10 — 352 — 10	373	1492	5.9	
	2	Ø5	19	25 / 5 / 9	76	1444		2.3
						Total+10%:	6.5	2.5
V 2	3	Ø8	4	10 — 352 — 10	373	1492	5.9	
	4	Ø5	19	25 / 5 / 9	76	1444		2.3
						Total+10%:	6.5	2.5
V 3=V 4	5	Ø8	4	10 — 292 — 10	313	1252	4.9	
	6	Ø5	18	25 / 5 / 14	86	1548		2.4
						Total+10%:	5.4	2.6
						(x2):	10.8	5.2
V 5=V 8	7	Ø8	4	10 — 359 — 10	379	1516	6.0	
	8	Ø5	21	25 / 5 / 9	76	1596		2.5
						Total+10%:	6.6	2.8
						(x2):	13.2	5.6
V 6=V 7	9	Ø8	4	10 — 324 — 10	345	1380	5.4	
	10	Ø5	19	25 / 5 / 9	76	1444		2.3
						Total+10%:	5.9	2.5
						(x2):	11.8	5.0
						Ø5:	0.0	20.8
						Ø8:	48.8	0.0
						Total:	48.8	20.8

Resumo Aço Desenho de vigas		Comp. total (m)	Peso+10% (kg)	Total
CA-50	Ø8	112.8	49	49
CA-60	Ø5	120.6	21	21
Total				70

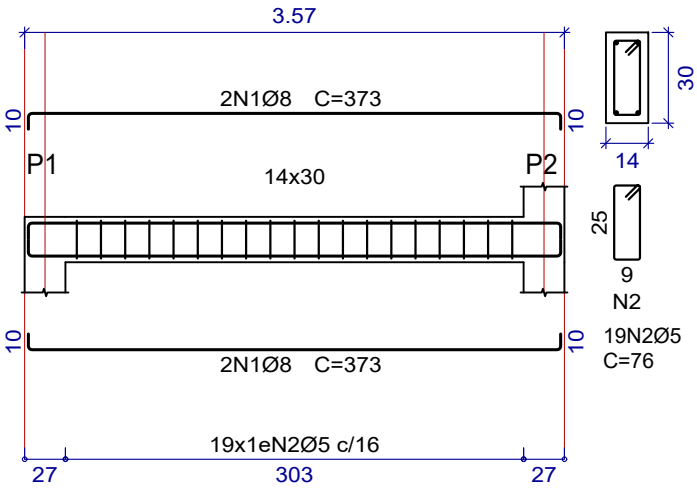
BN PROJETOS E ASSOCIADOS

OBRA: CONSTRUÇÃO DE CEMITÉRIO MUNICIPAL

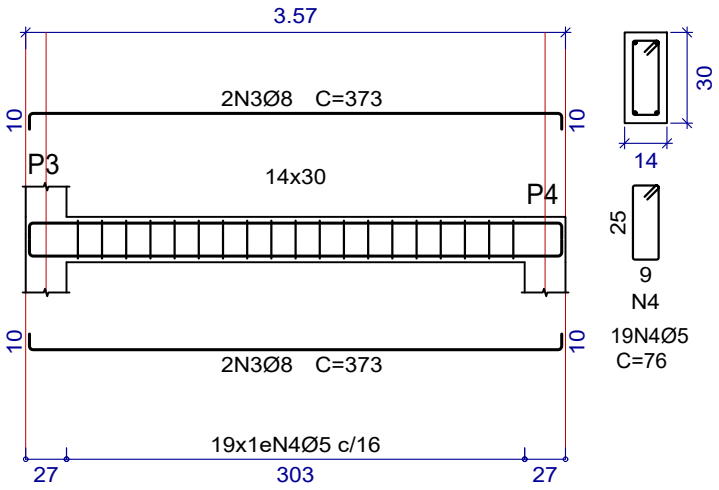
TÍTULO: VIGAS RESPALDO

PROJ.	FCK	AÇO	ESCALA	DATA	FOLHA
LUANA R.	30 MPa	CA-50	1:50/1:25	NOV/2025	VIG02-02/02

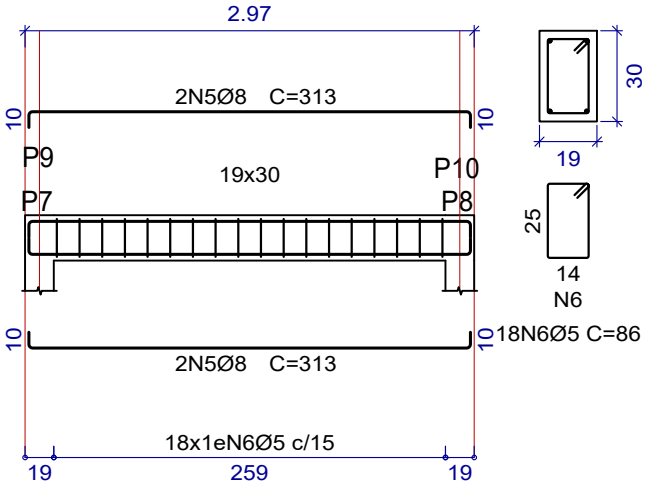
V1



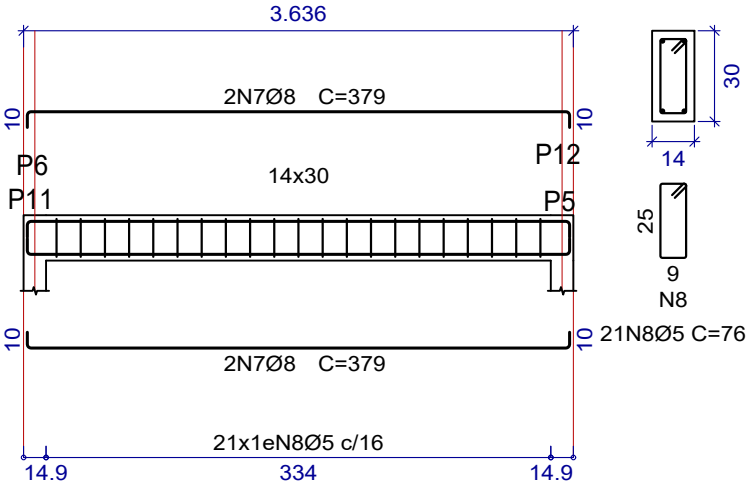
V2



V3 V4



V5 V8



V6 V7

