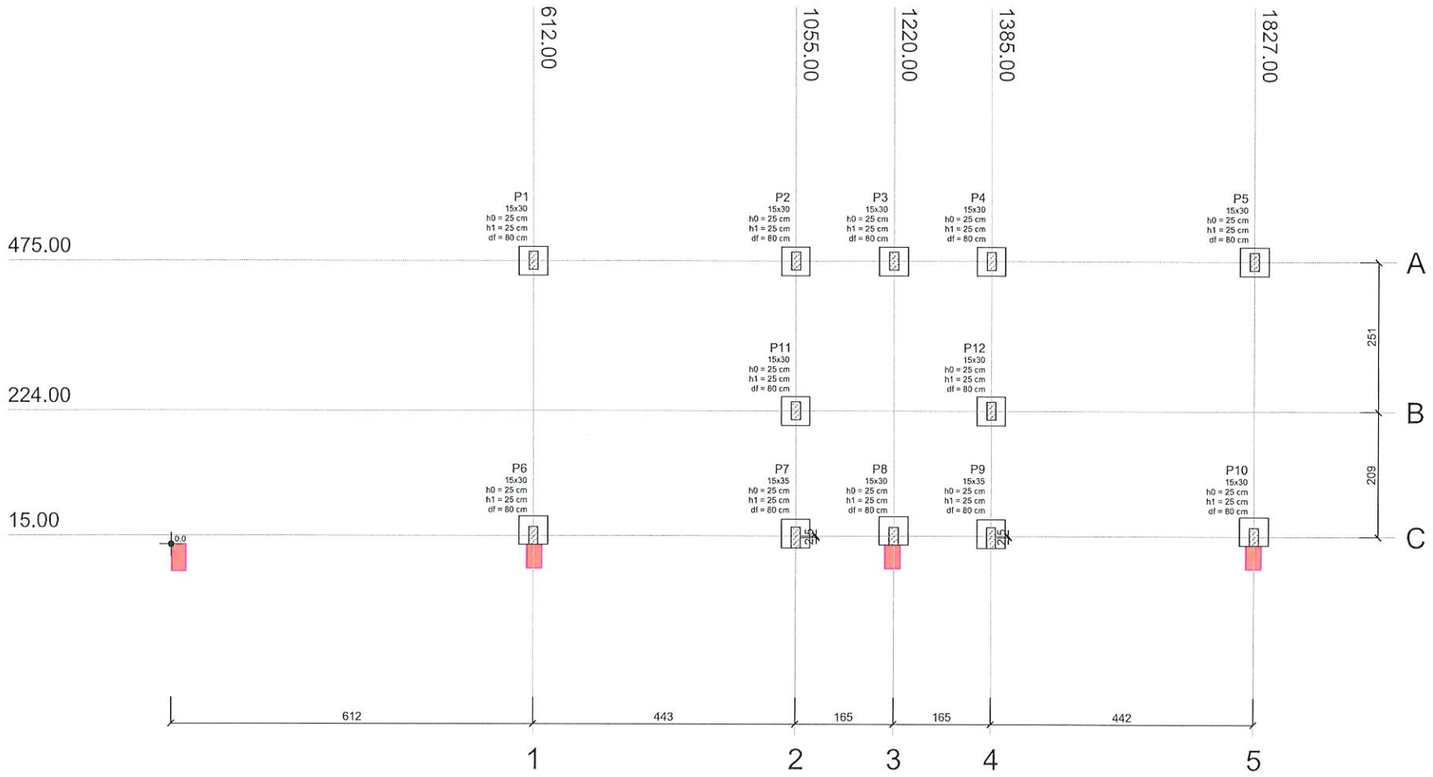
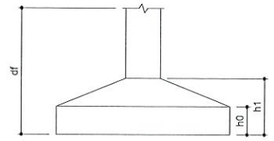


PLANTA DE LOCAÇÃO SAPATAS E PILARES
ESCALA 1:50

Pilar				Fundação				
Nome	Seção (cm)	X (cm)	Y (cm)	Lado B (cm)	Lado H (cm)	h0 / ha (cm)	h1 / hb (cm)	df (cm)
P1	15x30	612.00	475.00	60	60	25	25	80
P2	15x30	1055.00	475.00	60	60	25	25	80
P3	15x30	1220.00	475.00	60	60	25	25	80
P4	15x30	1385.00	475.00	60	60	25	25	80
P5	15x30	1827.00	475.00	60	60	25	25	80
P6	15x30	612.00	15.00	60	60	25	25	80
P7	15x35	1055.00	12.50	60	60	25	25	80
P8	15x30	1220.00	15.00	60	60	25	25	80
P9	15x35	1385.00	12.50	60	60	25	25	80
P10	15x30	1827.00	15.00	60	60	25	25	80
P11	15x30	1055.00	224.00	60	60	25	25	80
P12	15x30	1385.00	224.00	60	60	25	25	80



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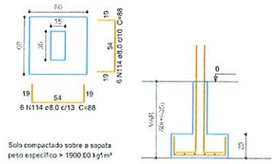

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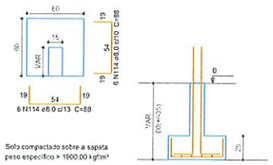

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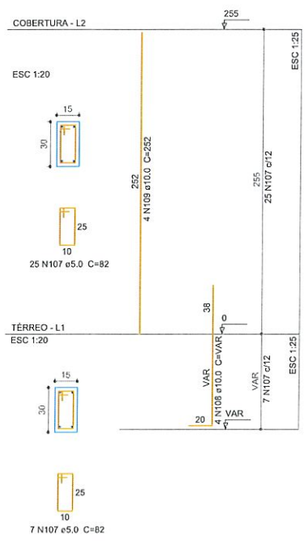

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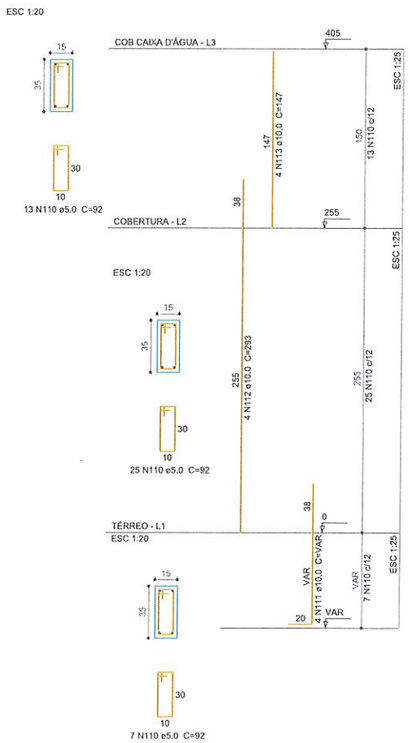

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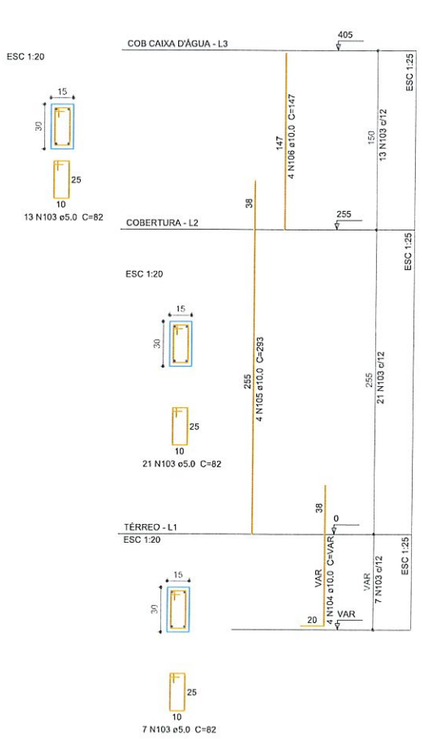


ELEMENTO	AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
P1	CA60	107	5.0	32	82	2624
	CA50	108	10.0	4	138	552
	CA50	109	10.0	4	252	1008
P2	CA60	107	5.0	32	82	2624
	CA50	108	10.0	4	138	552
	CA50	109	10.0	4	252	1008
P3	CA60	107	5.0	32	82	2624
	CA50	108	10.0	4	138	552
	CA50	109	10.0	4	252	1008
P4	CA60	107	5.0	32	82	2624
	CA50	108	10.0	4	138	552
	CA50	109	10.0	4	252	1008
P5	CA60	107	5.0	32	82	2624
	CA50	108	10.0	4	138	552
	CA50	109	10.0	4	252	1008
P6	CA60	107	5.0	32	82	2624
	CA50	108	10.0	4	138	552
	CA50	109	10.0	4	252	1008
P7	CA60	110	5.0	45	92	4140
	CA50	111	10.0	4	138	552
	CA50	112	10.0	4	293	1172
	CA50	113	10.0	4	147	588
P8	CA60	107	5.0	32	82	2624
	CA50	108	10.0	4	138	552
	CA50	109	10.0	4	252	1008
P9	CA60	110	5.0	45	92	4140
	CA50	111	10.0	4	138	552
	CA50	112	10.0	4	293	1172
	CA50	113	10.0	4	147	588
P10	CA60	107	5.0	32	82	2624
	CA50	108	10.0	4	138	552
	CA50	109	10.0	4	252	1008
P11	CA60	103	5.0	45	82	3690
	CA50	104	10.0	4	138	552
	CA50	105	10.0	4	293	1172
	CA50	106	10.0	4	147	588
P12	CA60	103	5.0	45	82	3690
	CA50	104	10.0	4	138	552
	CA50	105	10.0	4	293	1172
	CA50	106	10.0	4	147	588

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	10.0	216.7	138.3
CA60	5.0	366.5	62.1
PESO TOTAL			
CA50	138.3		
CA60	62.1		

Vol. de concreto total (C-25) = 2.16 m³
Área de forma total = 42.6 m²

Relação do aço

ELEMENTO	AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
S1	CA50	114	8.0	12	88	1056
S2	CA50	114	8.0	12	88	1056
S3	CA50	114	8.0	12	88	1056
S4	CA50	114	8.0	12	88	1056
S5	CA50	114	8.0	12	88	1056
S6	CA50	114	8.0	12	88	1056
S7	CA50	114	8.0	12	88	1056
S8	CA50	114	8.0	12	88	1056
S9	CA50	114	8.0	12	88	1056
S10	CA50	114	8.0	12	88	1056
S11	CA50	114	8.0	12	88	1056
S12	CA50	114	8.0	12	88	1056

Resumo do aço

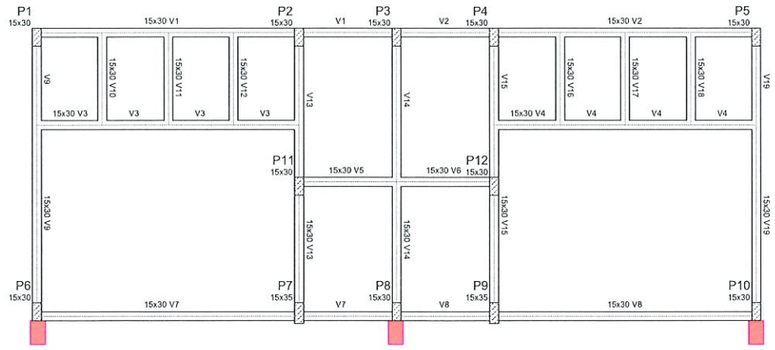
AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	126.7	54.4
PESO TOTAL			
CA50	54.4		

Vol. de concreto total (C-25) = 1.08 m³
Área de forma total = 7.2 m²

MUNICÍPIO DE PATO BRANCO
Secretaria de Engenharia e Obras
Rua Caramuru, 271 - Centro
Fone/Fax (46) 3223-2509
engenharia@patobranco.pr.gov.br

PROJETO: PROJETO ESTRUTURAL
PRANCHA: 01/04
CONTRATANTE: PREFEITURA MUNICIPAL DE PATO BRANCO
REFERÊNCIA: REFORMA GINÁSIO BAIRRO SÃO JOÃO
ESCALA INDICADA
DATA: MAI/2022
ESPECIFICAÇÃO: PLANTA DE LOCAÇÃO DE PILARES E SAPATAS, DETALHAMENTO SAPATAS, DETALHAMENTOS PILARES
DESENHO: JORGE
AUTORES DO PROJETO: Jorge Eduardo Chioqueta — ENGENHEIRO CREA-PR 125.426/D

Município de Pato Branco
JORGE EDUARDO CHIOQUETA
Engenheiro Civil/Crea Pr 125426/D
Port. 402/2013 de 26/04/2013

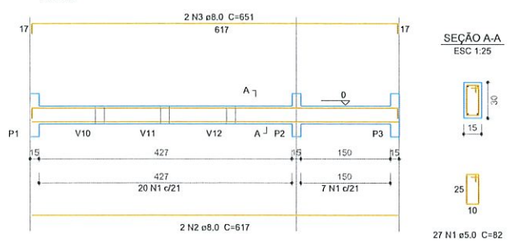


FORMA TÉRREO
ESCALA 1:50

Vigas			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
V1	15x30	0	0
V2	15x30	0	0
V3	15x30	0	0
V4	15x30	0	0
V5	15x30	0	0
V6	15x30	0	0
V7	15x30	0	0
V8	15x30	0	0
V9	15x30	0	0
V10	15x30	0	0
V11	15x30	0	0
V12	15x30	0	0
V13	15x30	0	0
V14	15x30	0	0
V15	15x30	0	0
V16	15x30	0	0
V17	15x30	0	0
V18	15x30	0	0
V19	15x30	0	0

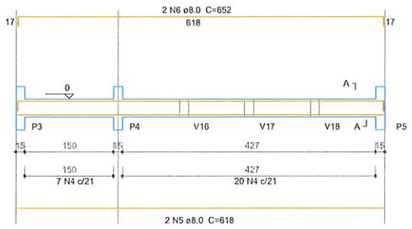
Características dos materiais	
fck (kgf/cm²)	Ecs (kgf/cm²)
250	238000

V1
ESC 1:50

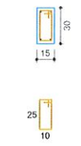


SEÇÃO A-A
ESC 1:25

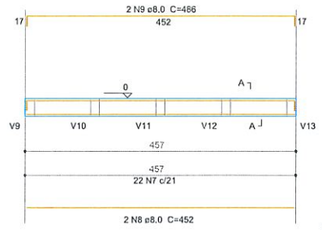
V2
ESC 1:50



SEÇÃO A-A
ESC 1:25

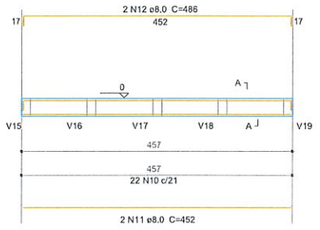


V3
ESC 1:50

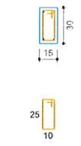


SEÇÃO A-A
ESC 1:25

V4
ESC 1:50



SEÇÃO A-A
ESC 1:25



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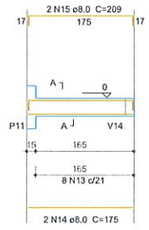
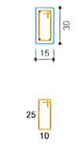
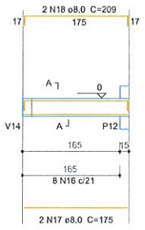
ESC 1:50



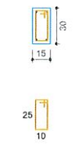
SEÇÃO A-A
ESC 1:25



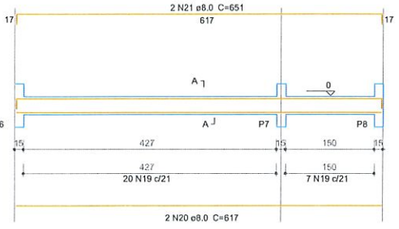
V6
ESC 1:50



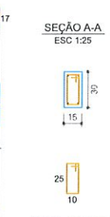
SEÇÃO A-A
ESC 1:25



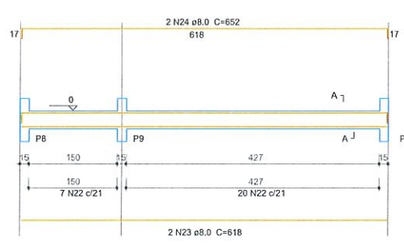
V7
ESC 1:50



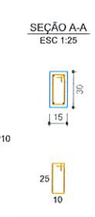
SEÇÃO A-A
ESC 1:25



V8
ESC 1:50



SEÇÃO A-A
ESC 1:25



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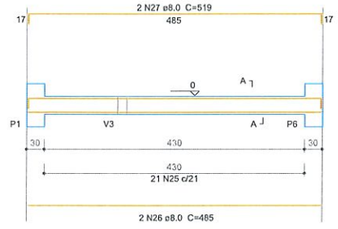
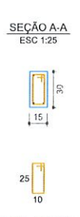
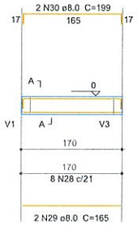
ESC 1:50



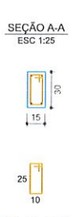
SEÇÃO A-A
ESC 1:25



V10
ESC 1:50



SEÇÃO A-A
ESC 1:25



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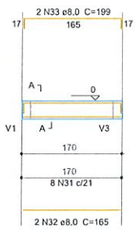
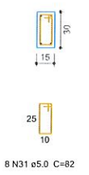


SEÇÃO A-A
ESC 1:25



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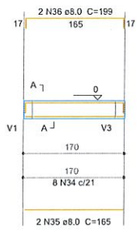
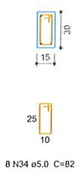


SEÇÃO A-A
ESC 1:25



V13
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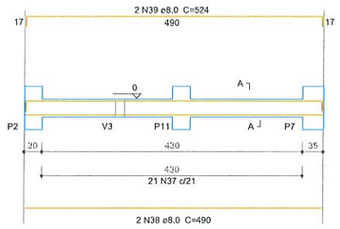
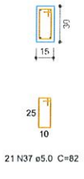
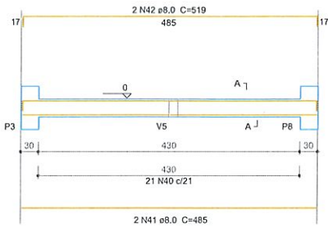


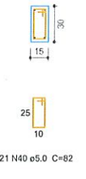
SEÇÃO A-A
ESC 1:25



V14
ESC 1:50



SEÇÃO A-A
ESC 1:25



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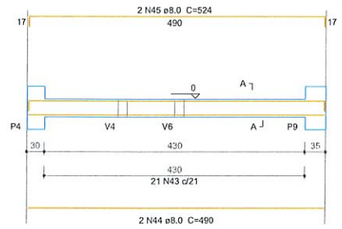
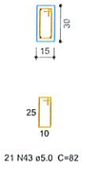
ESC 1:50



SEÇÃO A-A
ESC 1:25



V16
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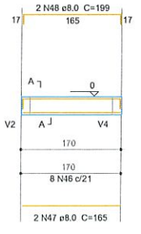
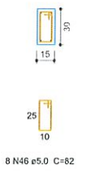


SEÇÃO A-A
ESC 1:25



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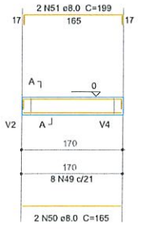
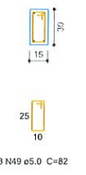


SEÇÃO A-A
ESC 1:25



V18
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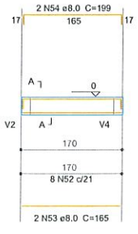
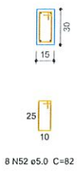
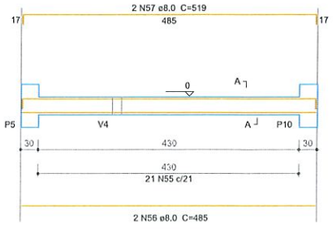


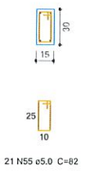
SEÇÃO A-A
ESC 1:25



V19
ESC 1:50



SEÇÃO A-A
ESC 1:25



Relação do aço

ELEMENTO	AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
V1	CA60	1	5.0	27	82	2214
	CA50	2	8.0	2	617	1234
	CA50	3	8.0	2	651	1302
V2	CA60	4	5.0	27	82	2214
	CA50	5	8.0	2	618	1236
	CA50	6	8.0	2	652	1304
V3	CA60	7	5.0	22	82	1804
	CA50	8	8.0	2	452	904
	CA50	9	8.0	2	486	972
V4	CA60	10	5.0	22	82	1804
	CA50	11	8.0	2	452	904
	CA50	12	8.0	2	486	972
V5	CA60	13	5.0	8	82	656
	CA50	14	8.0	2	175	350
	CA50	15	8.0	2	209	418
V6	CA60	16	5.0	8	82	656
	CA50	17	8.0	2	175	350
	CA50	18	8.0	2	209	418
V7	CA60	19	5.0	27	82	2214
	CA50	20	8.0	2	617	1234
	CA50	21	8.0	2	651	1302
V8	CA60	22	5.0	27	82	2214
	CA50	23	8.0	2	618	1236
	CA50	24	8.0	2	652	1304
V9	CA60	25	5.0	21	82	1722
	CA50	26	8.0	2	485	970
	CA50	27	8.0	2	519	1038
V10	CA60	28	5.0	8	82	656
	CA50	29	8.0	2	165	330
	CA50	30	8.0	2	199	398
V11	CA60	31	5.0	8	82	656
	CA50	32	8.0	2	165	330
	CA50	33	8.0	2	199	398
V12	CA60	34	5.0	8	82	656
	CA50	35	8.0	2	165	330
	CA50	36	8.0	2	199	398
V13	CA60	37	5.0	21	82	1722
	CA50	38	8.0	2	490	980
	CA50	39	8.0	2	524	1048
V14	CA60	40	5.0	21	82	1722
	CA50	41	8.0	2	485	970
	CA50	42	8.0	2	519	1038
V15	CA60	43	5.0	21	82	1722
	CA50	44	8.0	2	490	980
	CA50	45	8.0	2	524	1048
V16	CA60	46	5.0	8	82	656
	CA50	47	8.0	2	165	330
	CA50	48	8.0	2	199	398
V17	CA60	49	5.0	8	82	656
	CA50	50	8.0	2	165	330
	CA50	51	8.0	2	199	398
V18	CA60	52	5.0	8	82	656
	CA50	53	8.0	2	165	330
	CA50	54	8.0	2	199	398
V19	CA60	55	5.0	21	82	1722
	CA50	56	8.0	2	485	970
	CA50	57	8.0	2	519	1038

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	298.8	128.2
CA60	5.0	263.2	44.6
PESO TOTAL			
CA50	128.2		
CA60	44.6		

Vol. de concreto total (C-25) = 3.04 m³
Área de forma total = 40.51 m²

MUNICÍPIO DE PATO BRANCO
Secretaria de Engenharia e Obras
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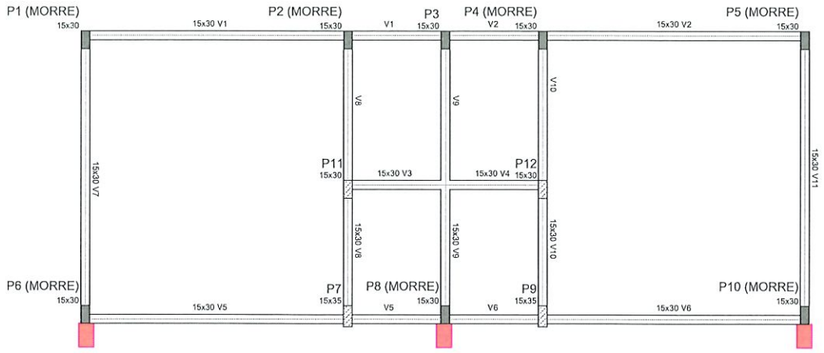
PROJETO: PROJETO ESTRUTURAL
FOLHA: 02/04
CONTRATANTE: PREFEITURA MUNICIPAL DE PATO BRANCO
REFERÊNCIA: REFORMA GINÁSIO BAIRRO SÃO JOÃO
ESCALA INDICADA
DATA: MAI/2022
ENDEREÇO: FORMA TÉRREO, DETALHAMENTO VIGAS TÉRREO
DESENHO: JORGE
RESPONSÁVEL TÉCNICO: Jorge Eduardo Chioqueta
ENGENHEIRO CREA/PR 125426/D

Município de Pato Branco
JORGE EDUARDO CHIOQUETA
Engenheiro Civil/Crea Pr 125426/D
Port. 402/2013 de 26/04/2013

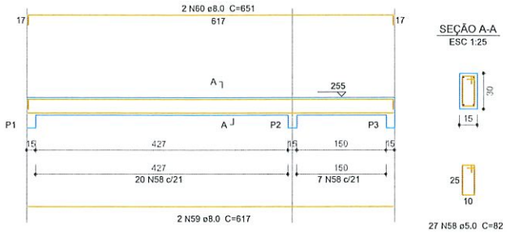


FORMA COBERTURA
ESCALA 1:50

Vigas			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
V1	15x30	0	255
V2	15x30	0	255
V3	15x30	0	255
V4	15x30	0	255
V5	15x30	0	255
V6	15x30	0	255
V7	15x30	0	255
V8	15x30	0	255
V9	15x30	0	255
V10	15x30	0	255
V11	15x30	0	255

Caracteristicas dos materiais	
fck (kgf/cm²)	Ecs (kgf/cm²)
250	238000

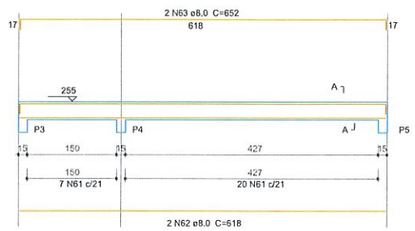
V1
ESC 1:50



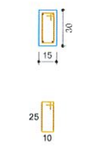
SEÇÃO A-A
ESC 1:25

27 N58 ø5.0 C=82

V2
ESC 1:50

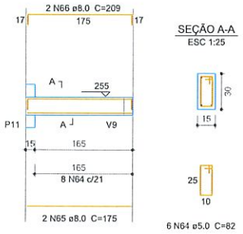


SEÇÃO A-A
ESC 1:25



27 N61 ø5.0 C=82

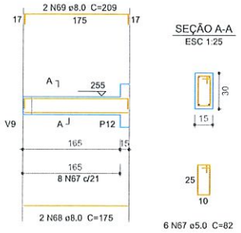
V3
ESC 1:50



SEÇÃO A-A
ESC 1:25

6 N64 ø5.0 C=82

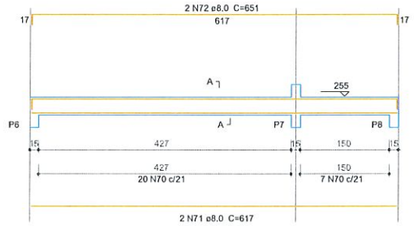
V4
ESC 1:50



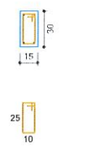
SEÇÃO A-A
ESC 1:25

6 N67 ø5.0 C=82

V5
ESC 1:50



SEÇÃO A-A
ESC 1:25

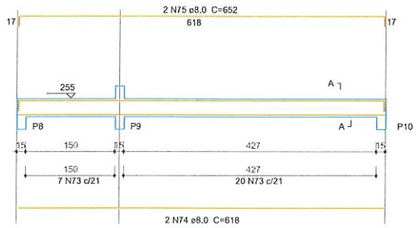


27 N70 ø5.0 C=82

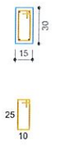
Relação do aço

ELEMENTO	AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
V1	CA60	58	5.0	27	82	2214
	CA50	59	8.0	2	617	1234
	CA50	60	8.0	2	651	1302
V2	CA60	61	5.0	27	82	2214
	CA50	62	8.0	2	618	1236
	CA50	63	8.0	2	652	1304
V3	CA60	64	5.0	8	82	656
	CA50	65	8.0	2	175	350
	CA50	66	8.0	2	209	418
V4	CA60	67	5.0	8	82	656
	CA50	68	8.0	2	175	350
	CA50	69	8.0	2	209	418
V5	CA60	70	5.0	27	82	2214
	CA50	71	8.0	2	617	1234
	CA50	72	8.0	2	651	1302
V6	CA60	73	5.0	27	82	2214
	CA50	74	8.0	2	618	1236
	CA50	75	8.0	2	652	1304
V7	CA60	76	5.0	21	82	1722
	CA50	77	8.0	2	485	970
	CA50	78	8.0	2	519	1038
V8	CA60	79	5.0	21	82	1722
	CA50	80	8.0	2	490	980
	CA50	81	8.0	2	524	1048
V9	CA60	82	5.0	21	82	1722
	CA50	83	8.0	2	485	970
	CA50	84	8.0	2	519	1038
V10	CA60	85	5.0	21	82	1722
	CA50	86	8.0	2	490	980
	CA50	87	8.0	2	524	1048
V11	CA60	88	5.0	21	82	1722
	CA50	89	8.0	2	485	970
	CA50	90	8.0	2	519	1038

V6
ESC 1:50

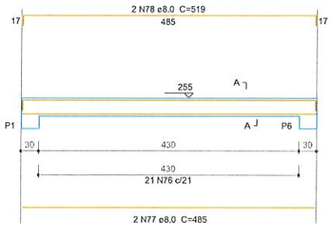


SEÇÃO A-A
ESC 1:25



27 N73 ø5.0 C=82

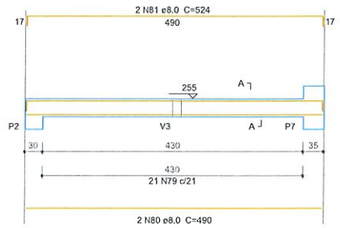
V7
ESC 1:50



SEÇÃO A-A
ESC 1:25

21 N76 ø5.0 C=82

V8
ESC 1:50



SEÇÃO A-A
ESC 1:25

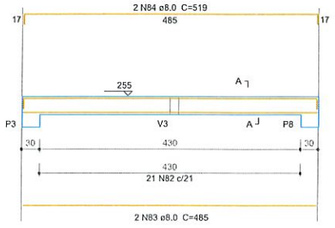
21 N79 ø5.0 C=82

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	217.7	93.4
CA60	5.0	187.8	31.8
PESO TOTAL			
CA50	93.4		
CA60	31.8		

Vol. de concreto total (C-25) = 2.17 m³
Área de forma total = 36.14 m²

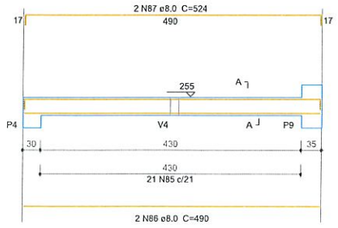
V9
ESC 1:50



SEÇÃO A-A
ESC 1:25

21 N82 ø5.0 C=82

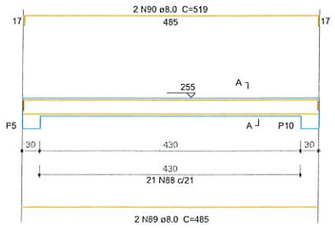
V10
ESC 1:50



SEÇÃO A-A
ESC 1:25

21 N85 ø5.0 C=82

V11
ESC 1:50



SEÇÃO A-A
ESC 1:25

21 N88 ø5.0 C=82

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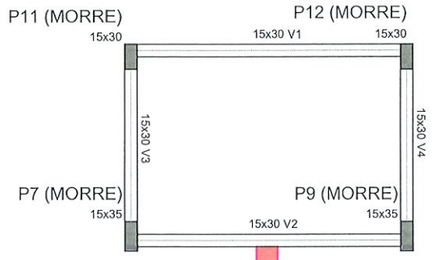
engenharia@patobranco.pr.gov.br

PROJETO: PROJETO ESTRUTURAL
FOLHA Nº: 03/04
CONTRATANTE: PREFEITURA MUNICIPAL DE PATO BRANCO
REFERÊNCIA: REFORMA GINÁSIO BAIRRO SÃO JOÃO
ESCALA: INDICADA
DATA: FAL/2002
ESPECIFICAÇÃO: FORMA COBERTURA, DETALHAMENTO VIGAS COBERTURA
DESENHO: JORGE
ARQUIVO DO PROJETO:
RESPONSÁVEL TÉCNICO: Jorge Eduardo Chioqueta
ENGENHEIRO CREA/PR 125426/D

Município de Pato Branco
JORGE EDUARDO CHIOQUETA
Engenheiro Civil/Crea Pr 125426/D
Port. 402/2013 de 26/04/2013

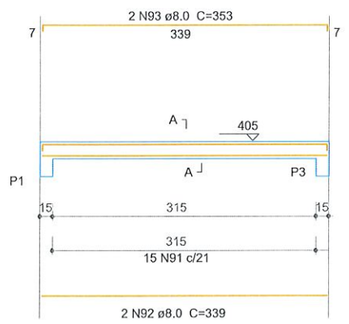


Vigas			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
V1	15x30	0	405
V2	15x30	0	405
V3	15x30	0	405
V4	15x30	0	405

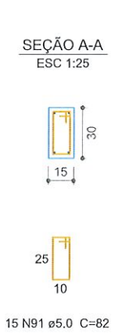
Características dos materiais	
fck (kgf/cm²)	Ecs (kgf/cm²)
250	238000

FORMA COB CAIXA D'ÁGUA
ESCALA 1:50

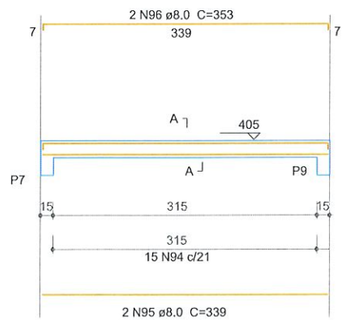
V1
ESC 1:50



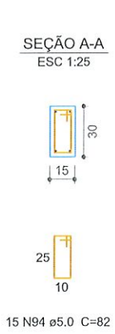
SEÇÃO A-A
ESC 1:25



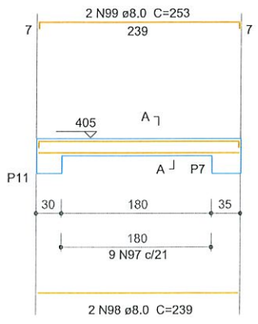
V2
ESC 1:50



SEÇÃO A-A
ESC 1:25

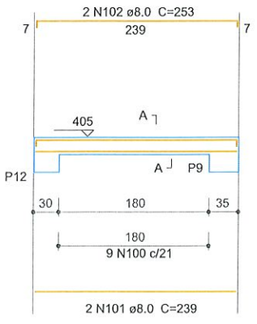


V3
ESC 1:50

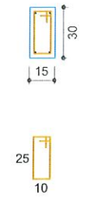


SEÇÃO A-A
ESC 1:25

V4
ESC 1:50



SEÇÃO A-A
ESC 1:25



Relação do aço

ELEMENTO	AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
V1	CA60	91	5.0	15	82	1230
	CA50	92	8.0	2	339	678
	CA50	93	8.0	2	353	706
V2	CA60	94	5.0	15	82	1230
	CA50	95	8.0	2	339	678
	CA50	96	8.0	2	353	706
V3	CA60	97	5.0	9	82	738
	CA50	98	8.0	2	239	478
	CA50	99	8.0	2	253	506
V4	CA60	100	5.0	9	82	738
	CA50	101	8.0	2	239	478
	CA50	102	8.0	2	253	738

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	47.4	20.3
CA60	5.0	39.4	6.7

PESO TOTAL	
CA50	20.3
CA60	6.7

Vol. de concreto total (C-25) = 0.53 m³
Área de forma total = 8.85 m²

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PROJETO: PROJETO ESTRUTURAL
FRANCHA: 04/04
CONTRATANTE: PREFEITURA MUNICIPAL DE PATO BRANCO
REFERÊNCIA: REFORMA GINÁSIO BAIRRO SÃO JOÃO
ESCALA: INDICADA
DATA: MAI/2022
ESPECIFICAÇÃO: FORMA COB CAIXA D'ÁGUA, DETALHAMENTO VIGAS COB CAIXA D'ÁGUA
DESENHO: JORGE
RESPONSÁVEL PELO PROJETO: Município de Pato Branco JORGE EDUARDO CHIOQUETA Engenheiro Civil/Crea Pr 125426/D Port. 402/2013 de 26/04/2013 — Jorge Eduardo Chioquetta — ENGENHEIRO CREA-PR 125.426/D