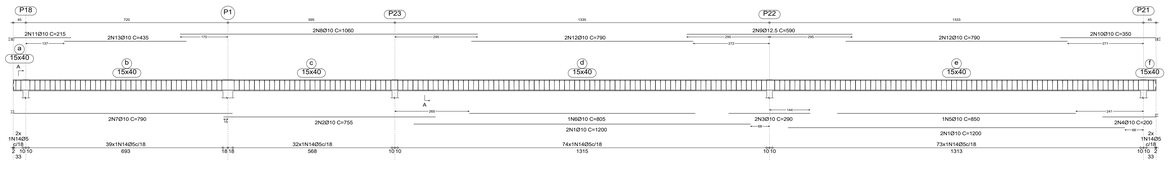
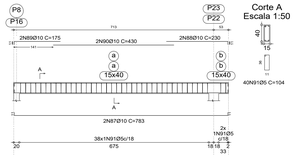
ARMAÇÃO DAS VIGAS NÍVEL +3.70

ESC. 1:75

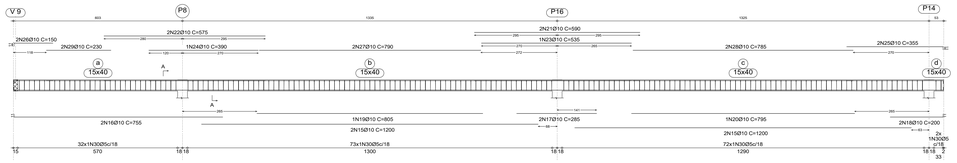
V 1
Escala 1:75



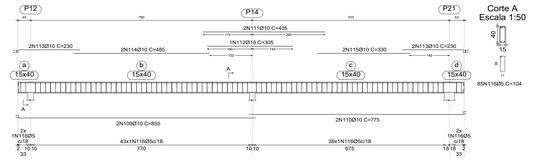
V 12
V 15
Escala 1:75



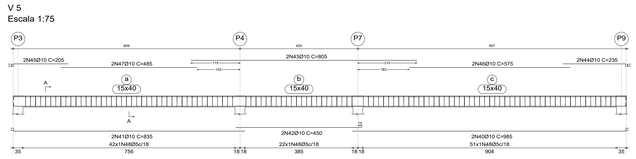
V 2
Escala 1:75



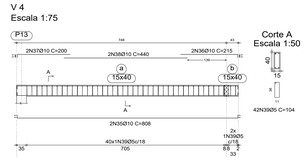
V 18
Escala 1:75



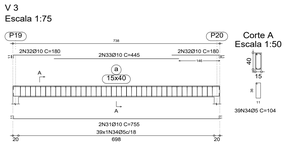
V 5
Escala 1:75



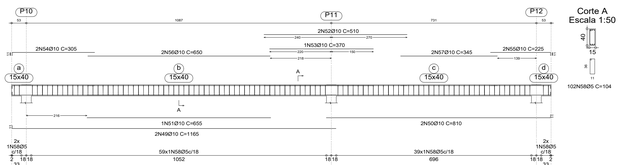
V 4
Escala 1:75



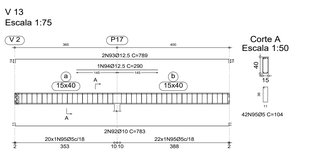
V 3
Escala 1:75



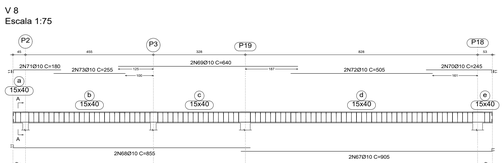
V 6
Escala 1:75



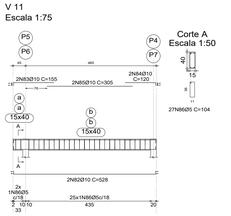
V 13
Escala 1:75



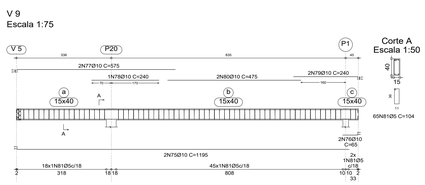
V 8
Escala 1:75



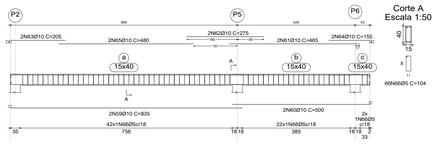
V 10
V 11
Escala 1:75



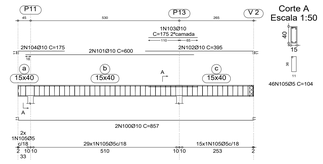
V 9
Escala 1:75



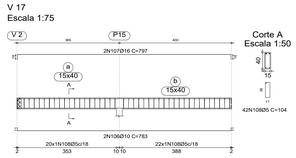
V 7
Escala 1:75



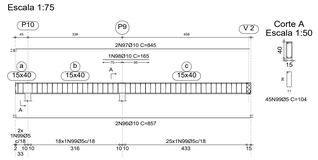
V 16
Escala 1:75



V 17
Escala 1:75



V 14
Escala 1:75



Resumo Aço NÍVEL +3.70 Vigas	Comp. total (m)	Peso+10% (kg)	Total
CA-50 Ø10	1063.6	721	
Ø12.5	30.5	32	
Ø16	15.9	28	781
CA-60 Ø5	1367.6	236	236
Total			1017

Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 1	1	Ø10	4		1200		1200	4800	29.6	
	2	Ø10	2		755		755	1510	9.3	
	3	Ø10	2		290		290	580	3.6	
	4	Ø10	2		189	11	200	400	2.5	
	5	Ø10	1		850		850	850	5.2	
	6	Ø10	1		805		805	805	5.0	
	7	Ø10	1	11	779		790	1580	9.7	
	8	Ø10	2		1060		1060	2120	13.1	
	9	Ø12.5	2		590		590	1180	11.4	
	10	Ø10	2		339	11	350	700	4.3	
	11	Ø10	2	11	204		215	430	2.6	
	12	Ø10	4		790		790	3160	19.5	
	13	Ø10	2		435		435	870	5.4	
	14	Ø5	222				104	23088		36.2
							Total+10%	133.3		39.8
V 2	15	Ø10	4		1200		1200	4800	29.6	
	16	Ø10	2	11	744		755	1510	9.3	
	17	Ø10	2		285		285	570	3.5	
	18	Ø10	2		189	11	200	400	2.5	
	19	Ø10	1		805		805	805	5.0	
	20	Ø10	1		795		795	795	4.9	
	21	Ø10	2		590		590	1180	7.3	
	22	Ø10	2		575		575	1150	7.1	
	23	Ø10	1		535		535	535	3.3	
	24	Ø10	1		390		390	390	2.4	
	25	Ø10	2		344	11	355	710	4.4	
	26	Ø10	2	11	139		150	300	1.8	
	27	Ø10	2		790		790	1580	9.7	
	28	Ø10	2		785		785	1570	9.7	
	29	Ø10	2		230		230	460	2.8	
	30	Ø5	179				104	18616		29.2
							Total+10%	113.6	32.1	
V 3	31	Ø10	2	11	733	11	755	1510	9.3	
	32	Ø10	4	11	169		180	720	4.4	
	33	Ø10	2		445		445	890	5.5	
	34	Ø5	39				104	4056		6.4
							Total+10%	21.1	7.0	
V 4	35	Ø10	2	11	786	11	808	1616	10.0	
	36	Ø10	2		204	11	215	430	2.6	
	37	Ø10	2	11	189		200	400	2.5	
	38	Ø10	2		440		440	880	5.4	
	39	Ø5	42				104	4368		6.9
							Total+10%	22.6	7.6	
V 5	40	Ø10	2		974	11	985	1970	12.1	
	41	Ø10	2	11	824		835	1670	10.3	
	42	Ø10	2		450		450	900	5.5	
	43	Ø10	2		805		805	1610	9.9	
	44	Ø10	2	11	224	11	235	470	2.9	
	45	Ø10	2	11	194		205	410	2.5	
	46	Ø10	2		575		575	1150	7.1	
	47	Ø10	2		485		485	970	6.0	
	48	Ø5	115				104	11960		18.8
							Total+10%	61.9	20.7	
V 6	49	Ø10	2	11	1154		1165	2330	14.4	
	50	Ø10	2		799	11	810	1620	10.0	
	51	Ø10	1		655		655	655	4.0	
	52	Ø10	2		510		510	1020	6.3	
	53	Ø10	1		370		370	370	2.3	
	54	Ø10	2	11	294		305	610	3.8	
	55	Ø10	2		214	11	225	450	2.8	
	56	Ø10	2		650		650	1300	8.0	
	57	Ø10	2		345		345	690	4.3	
	58	Ø5	102				104	10608		16.7
							Total+10%	61.5	18.4	
V 7	59	Ø10	2	11	824		835	1670	10.3	
	60	Ø10	2		489	11	500	1000	6.2	
	61	Ø10	2		465		465	930	5.7	
	62	Ø10	2		275		275	550	3.4	
	63	Ø10	2	11	194		205	410	2.5	
	64	Ø10	2		144	11	155	310	1.9	
	65	Ø10	2		480		480	960	5.9	
	66	Ø5	66				104	6864		10.8
							Total+10%	39.5	11.9	
V 8	67	Ø10	2		894	11	905	1810	11.2	
	68	Ø10	2	11	844		855	1710	10.5	
	69	Ø10	2		640		640	1280	7.9	
	70	Ø10	2	11	234	11	245	490	3.0	
	71	Ø10	2	11	169		180	360	2.2	
	72	Ø10	2		505		505	1010	6.2	
	73	Ø10	2		255		255	510	3.1	
	74	Ø5	91				104	9464		14.9
							Total+10%	48.5	16.4	
V 9	75	Ø10	2	11	1184		1195	2390	14.7	
	76	Ø10	2		54	11	65	130	0.8	
	77	Ø10	2	11	564		575	1150	7.1	
	78	Ø10	2		240		240	480	1.5	
	79	Ø10	2		229	11	240	480	3.0	
	80	Ø10	2		475		475	950	5.9	
	81	Ø5	65				104	6760		10.6
							Total+10%	36.3	11.7	
V 10=V 11	82	Ø10	2	11	506	11	528	1056	6.5	
	83	Ø10	2	11	144		155	310	1.9	
	84	Ø10	2		109	11	120	240	1.5	
	85	Ø10	2		305		305	610	3.8	
	86	Ø5	27				104	2808		4.4
							Total+10%	15.1	4.8	
							(x2)	30.2	9.6	
V 12=V 15	87	Ø10	2	11	761	11	783	1566	9.7	
	88	Ø10	2		219	11	230	460	2.8	
	89	Ø10	2	11	164		175	350	2.2	
	90	Ø10	2		430		430	860	5.3	
	91	Ø5	40				104	4160		6.5
							Total+10%	22.0	7.2	
							(x2)	44.0	14.4	
V 13	92	Ø10	2	11	761	11	783	1566	9.7	
	93	Ø12.5	2	14	761	14	789	1578	15.2	
	94	Ø12.5	1		290		290	290	2.8	
	95	Ø5	42				104	4368		6.9
							Total+10%	30.5	7.6	
V 14	96	Ø10	2	11	835	11	857	1714	10.6	
	97	Ø10	2	11	834		845	1690	10.4	
	98	Ø10	1		165		165	165	1.0	
	99	Ø5	45				104	4680		7.3
							Total+10%	24.2	8.0	
V 16	100	Ø10	2	11	835	11	857	1714	10.6	
	101	Ø10	2		600		600	1200	7.4	
	102	Ø10	2		384	11	395	790	4.9	
	103	Ø10	1		175		175	175	1.1	
	104	Ø10	2	11	164		175	350	2.2	
	105	Ø5	46				104	4784		7.5
							Total+10%	28.8	8.3	
V 17	106	Ø10	2	11	761	11	783	1566	9.7	
	107	Ø16	2	18	761	18	797	1594	25.2	
	108	Ø5	42				104	4368		6.9
							Total+10%	38.4	7.6	
V 18	109	Ø10	2	11	844		855	1710	10.5	
	110	Ø10	2		764	11	775	1550	9.6	
	111	Ø10	2		435		435	870	5.4	
	112	Ø10	1		305		305	305	1.9	
	113	Ø10	4	11	219		230	920	5.7	
	114	Ø10	2		485		485	970	6.0	
	115	Ø10	2		330		330	660	4.1	
	116	Ø5	85				104	8840		13.9
							Total+10%	47.5	15.3	
							Ø5:	0.0	236.4	
							Ø10:	721.9	0.0	
							Ø12.5:	32.3	0.0	
							Ø16:	27.7	0.0	
							Total:	781.9	236.4	

APROVADO POR:

PREFEITURA MUNICIPAL DE CASTANHAL
Secretaria Municipal de Obras
Obra aprovada confere Art. 6º da Lei nº 09/77 de 02/06/1977.

Valter Costa e Silva
Secretário Municipal de Obras e Urbanismo
Prefeitura de Castanhal

PREFEITURA MUNICIPAL DE CASTANHAL
CNPJ: 05.121.991/0001-84
END.: Av. Barão do Rio Branco, 2232
CEP:68743-050 - CASTANHAL/PA
FONE: (91) 3721-2109

PREFEITO: Paulo Sérgio Rodrigues Titan

SECRETÁRIA DE PLANEJAMENTO: Rione Heringer

AUTOR DO PROJETO: RAFAEL RODRIGUES DE SOUSA CAVALCANTE:9237 6410282
Assinado de forma digital por RAFAEL RODRIGUES DE SOUSA CAVALCANTE:92376410282 Dados: 2022.03.14 10:06:03 -03'00'
CARIMBO

PROPONENTE: PREFEITURA MUNICIPAL DE CASTANHAL/PA
CNPJ: 05.121.991/0001-84
END.: Av. BARÃO DO RIO BRANCO, 2232 - BAIRRO CENTRO
CEP:68.743-050 - CASTANHAL/PA - FONE: (91)3722-1527

ESTRUTURAL

PROJETO/UNIDADE/LOCALIZAÇÃO:
CONSTRUÇÃO DA CRECHE CRIANÇA ESPERANÇA
END.: PASSGEM 15 DE NOVEMBRO, S/Nº, BAIRRO SALGADINHO

CONTEÚDO: **ARMAÇÃO DAS VIGAS NÍVEL +3.70**

PRANCHA: 09/10

DADOS DA INTERVENÇÃO: Área Construída = 590.82 m²

ESCALA: INDICADA | DATA: MAR/2022 | OBSERVAÇÃO:

SILVIO ROBERTO MONTEIRO DOS SANTOS:43152090234

Assinado de forma digital por SILVIO ROBERTO MONTEIRO DOS SANTOS:43152090234
Dados: 2023.12.20 13:12:17 -03'00'