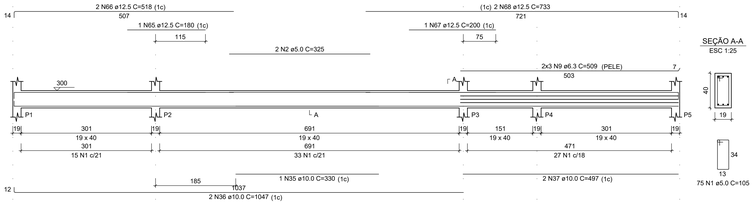
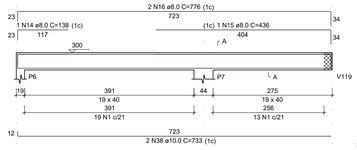
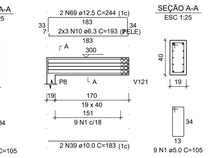
V101
ESC 1:50



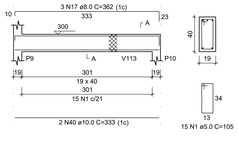
V102
ESC 1:50



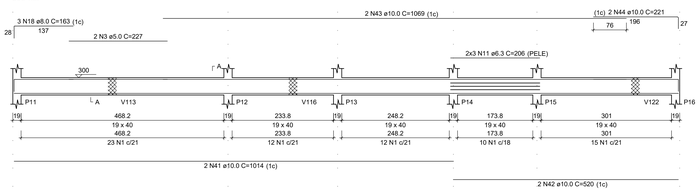
V103
ESC 1:50



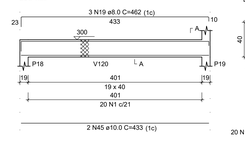
V104
ESC 1:50



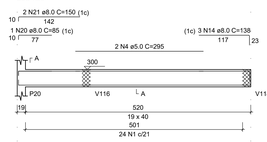
V105
ESC 1:50



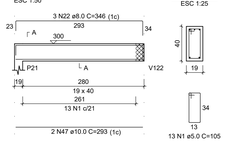
V106
ESC 1:50



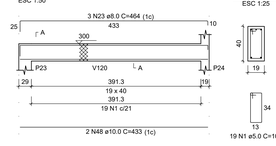
V107
ESC 1:50



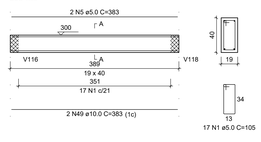
V108
ESC 1:50



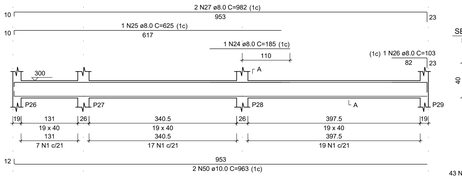
V109
ESC 1:50



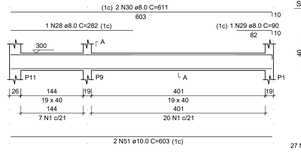
V110
ESC 1:50



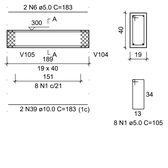
V111
ESC 1:50



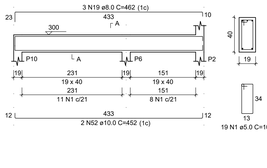
V112
ESC 1:50



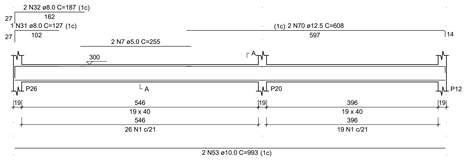
V113
ESC 1:50



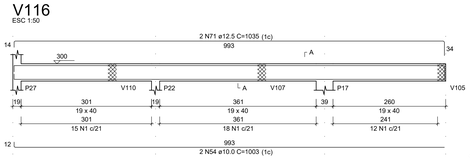
V114
ESC 1:50



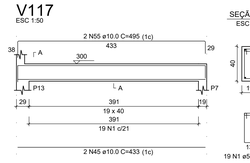
V115
ESC 1:50



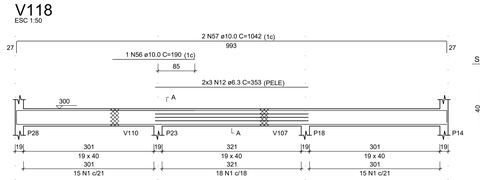
V116
ESC 1:50



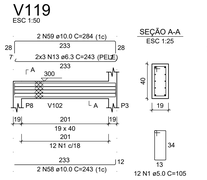
V117
ESC 1:50



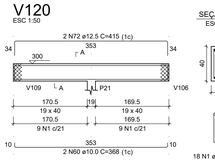
V118
ESC 1:50



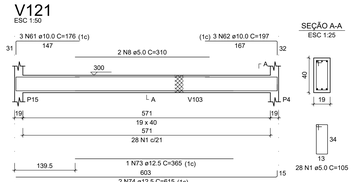
V119
ESC 1:50



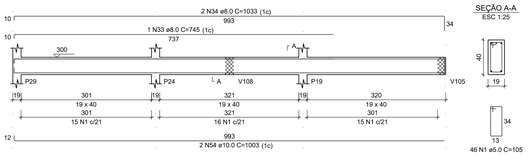
V120
ESC 1:50



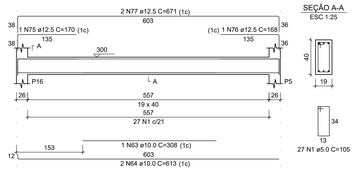
V121
ESC 1:50



V122
ESC 1:50



V123
ESC 1:50



RELAÇÃO DO AÇO

V101	V102	V103
V104	V105	V106
V107	V108	V109
V110	V111	V112
V113	V114	V115
V116	V117	V118
V119	V120	V121
V122	V123	

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	681	105	71505
	2	5.0	2	325	650
	3	5.0	2	327	654
	4	5.0	2	295	590
	5	5.0	2	380	760
	6	5.0	2	183	366
	7	5.0	2	255	510
	8	5.0	2	310	620
CA50	9	6.3	6	509	3054
	10	6.3	6	193	1158
	11	6.3	6	206	1236
	12	6.3	6	353	2118
	13	6.3	6	243	1458
	14	8.0	4	138	552
	15	8.0	1	436	436
	16	8.0	2	776	1552
	17	8.0	3	362	1086
	18	8.0	3	163	489
	19	8.0	6	462	2772
	20	8.0	1	85	85
	21	8.0	2	150	300
	22	8.0	3	346	1038
	23	8.0	3	464	1392
	24	8.0	1	185	185
	25	8.0	1	625	625
	26	8.0	1	103	103
	27	8.0	2	982	1964
	28	8.0	1	282	282
	29	8.0	1	90	90
	30	8.0	2	611	1222
	31	8.0	1	127	127
	32	8.0	2	187	374
	33	8.0	1	745	745
	34	8.0	2	1033	2066
	35	10.0	1	330	330
	36	10.0	2	1047	2094
	37	10.0	2	497	994
	38	10.0	2	733	1466
	39	10.0	4	183	732
	40	10.0	2	333	666
	41	10.0	2	1014	2028
	42	10.0	2	520	1040
	43	10.0	2	1069	2138
	44	10.0	2	221	442
	45	10.0	4	433	1732
	46	10.0	2	543	1086
	47	10.0	2	293	586
	48	10.0	2	433	866
	49	10.0	2	383	766
	50	10.0	2	963	1926
	51	10.0	2	603	1206
	52	10.0	2	452	904
	53	10.0	2	993	1986
	54	10.0	6	1003	6018
	55	10.0	2	495	990
	56	10.0	1	190	190
	57	10.0	2	1042	2084
	58	10.0	2	243	486
	59	10.0	2	284	568
	60	10.0	2	368	736
	61	10.0	3	176	528
	62	10.0	3	197	591
	63	10.0	1	208	208
	64	12.5	2	615	1230
	65	12.5	1	180	180
	66	12.5	2	518	1036
	67	12.5	1	200	200
	68	12.5	2	733	1466
	69	12.5	2	244	488
	70	12.5	2	608	1216
	71	12.5	2	1035	2070
	72	12.5	2	415	830
	73	12.5	1	365	365
	74	12.5	2	615	1230
	75	12.5	1	170	170
	76	12.5	1	168	168
	77	12.5	2	671	1342

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	90.2	24.3
	8.0	174.8	75.9
	10.0	367.1	249
	12.5	107.6	114
CA60	5.0	754.6	127.9
PESO TOTAL (kg)			
CA50	463.2		
CA60	127.9		

Volume de concreto (C-25) = 10.36 m³
Área de forma = 107.21 m²

TRMUNCHEN ENGENHARIA
trmunchen@outlook.com (51) 9 9509 6182

OBRA:
NOVA SEDE DEFESA CIVÍL E CORPO DE BOMBEIROS

ÁREA A CONSTRUIR:
644,46 m²

LOCAL:
Rua Firmino Britz, S/N
Centro - Feliz

EQUIPE TÉCNICA:
TRMUNCHEN ENGENHARIA

PROPRIETÁRIO:
MUNICÍPIO DE FELIZ
CNPJ: 87.938.330/0001-39

RESP. TÉCNICO - ENGENHEIRO CIVIL:
TIAGO RODRIGO MÜNCHEN
CREA/RS: 251585

CONTEÚDO:
VIGAS COBERTURA

PROJETO:
PROJETO ESTRUTURAL

ESCALA: INDICADA | DESENHISTA: TIAGO RODRIGO MÜNCHEN | DATA: JUL/2026 | FOLHA: 07/ 18

DIREITOS AUTORAIS RESERVADOS. PROIBIDA A REPRODUÇÃO TOTAL OU PARCIAL.