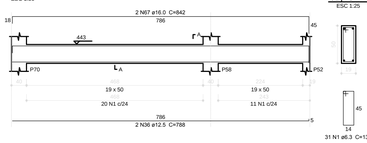
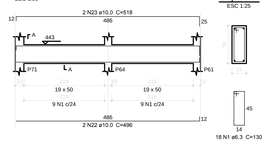
V142
ESC 1:50



SEÇÃO A-A
ESC 1:25



V143
ESC 1:50

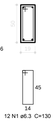


SEÇÃO A-A
ESC 1:25

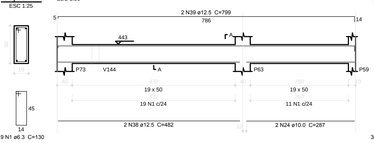
V144
ESC 1:50



SEÇÃO A-A
ESC 1:25



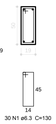
V145
ESC 1:50



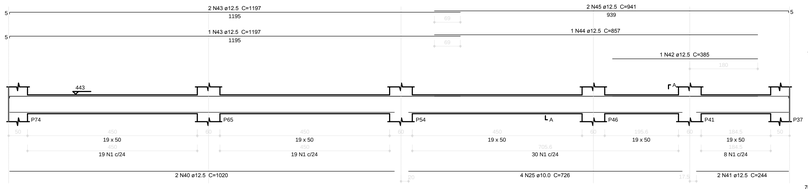
SEÇÃO A-A
ESC 1:25

V146
ESC 1:50

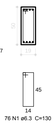
SEÇÃO A-A
ESC 1:25



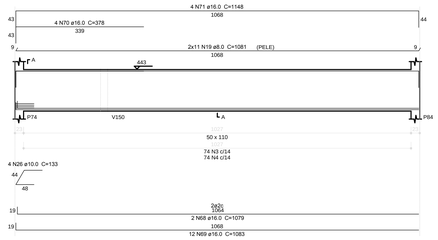
V147
ESC 1:50



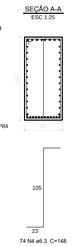
SEÇÃO A-A
ESC 1:25



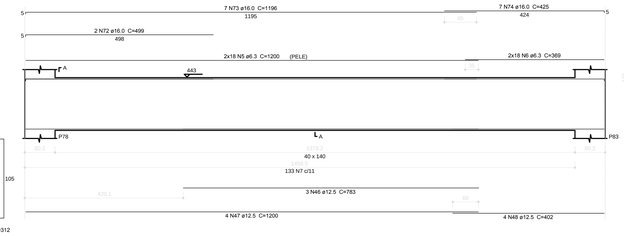
V148
ESC 1:50



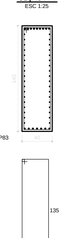
SEÇÃO A-A
ESC 1:25



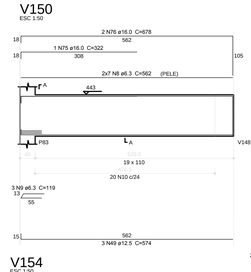
V149
ESC 1:50



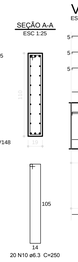
SEÇÃO A-A
ESC 1:25



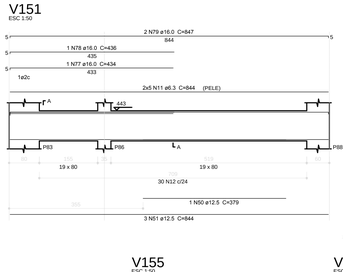
V150
ESC 1:50



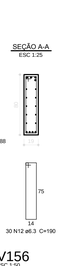
SEÇÃO A-A
ESC 1:25



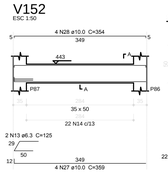
V151
ESC 1:50



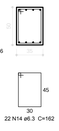
SEÇÃO A-A
ESC 1:25



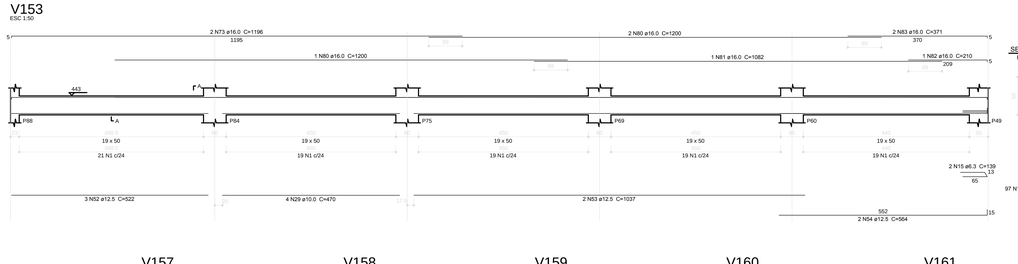
V152
ESC 1:50



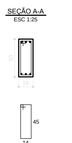
SEÇÃO A-A
ESC 1:25



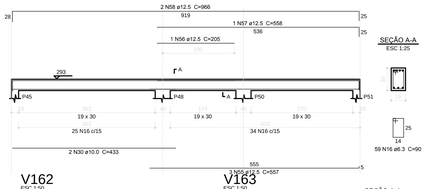
V153
ESC 1:50



SEÇÃO A-A
ESC 1:25

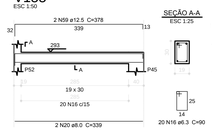


V154
ESC 1:50



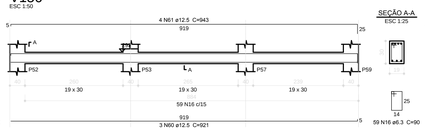
SEÇÃO A-A
ESC 1:25

V155
ESC 1:50



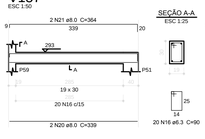
SEÇÃO A-A
ESC 1:25

V156
ESC 1:50



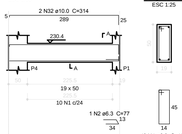
SEÇÃO A-A
ESC 1:25

V157
ESC 1:50



SEÇÃO A-A
ESC 1:25

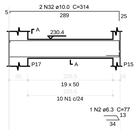
V158
ESC 1:50



SEÇÃO A-A
ESC 1:25



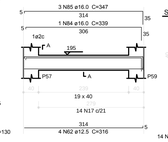
V159
ESC 1:50



SEÇÃO A-A
ESC 1:25



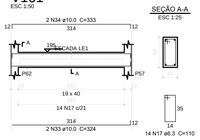
V160
ESC 1:50



SEÇÃO A-A
ESC 1:25



V161
ESC 1:50



SEÇÃO A-A
ESC 1:25

V162
ESC 1:50

SEÇÃO A-A
ESC 1:25

V163
ESC 1:50

SEÇÃO A-A
ESC 1:25

Relação do aço

V142		V143		V144	
V145		V146		V147	
V148		V149		V150	
V151		V152		V153	
V154		V155		V156	
V157		V158		V159	
V160		V161		V162	
V163					

AÇO	N	DIAM (mm)	QUANT (Barras)	UNT (cm)	C.TOTAL (cm)
CA50	1	6.3	303	130	39390
	2	6.3	3	77	231
	3	6.3	74	312	23088
	4	6.3	74	148	10952
	5	6.3	36	1200	43200
	6	6.3	36	369	13284
	7	6.3	133	352	46816
	8	6.3	14	562	7868
	9	6.3	4	119	476
	10	6.3	20	250	5000
	11	6.3	10	844	8440
	12	6.3	30	190	5700
	13	6.3	2	125	250
	14	6.3	22	162	3564
	15	6.3	2	139	278
	16	6.3	158	90	14220
	17	6.3	55	110	6050
	18	8.0	2	314	628
	19	8.0	22	1081	23782
	20	8.0	4	339	1356
	21	8.0	2	364	728
	22	10.0	4	496	1984
	23	10.0	4	518	2072
	24	10.0	2	287	574
	25	10.0	4	726	2904
	26	10.0	4	133	532
	27	10.0	4	359	1436
	28	10.0	4	354	1416
	29	10.0	4	470	1880
	30	10.0	2	433	866
	31	10.0	4	299	1196
	32	10.0	4	314	1256
	33	10.0	4	324	1296
	34	10.0	2	333	666
	35	10.0	2	326	652
	36	12.5	2	788	1576
	37	12.5	2	314	628
	38	12.5	2	482	964
	39	12.5	2	799	1598
	40	12.5	2	1020	2040
	41	12.5	2	244	488
	42	12.5	1	385	385
	43	12.5	3	1197	3591
	44	12.5	1	857	857
	45	12.5	2	941	1882
	46	12.5	3	783	2349
	47	12.5	4	1200	4800
	48	12.5	4	402	1608
	49	12.5	3	574	1722
	50	12.5	1	379	379
	51	12.5	3	844	2532
	52	12.5	3	522	1566
	53	12.5	2	1037	2074
	54	12.5	2	564	1128
	55	12.5	3	557	1671
	56	12.5	1	205	205
	57	12.5	1	558	558
	58	12.5	2	966	1932
	59	12.5	2	378	756
	60	12.5	3	921	2763
	61	12.5	4	943	3772
	62	12.5	4	316	1264
	63	12.5	2	359	718
	64	12.5	1	290	290
	65	12.5	1	252	262
	66	12.5	2	348	696
	67	16.0	2	842	1684
	68	16.0	2	1079	2158
	69	16.0	12	1083	12996
	70	16.0	4	378	1512
	71	16.0	4	1148	4592
	72	16.0	2	499	998
	73	16.0	9	1196	10764
	74	16.0	7	425	2975
	75	16.0	1	322	322
	76	16.0	2	678	1356
	77	16.0	1	434	434
	78	16.0	1	436	436
	79	16.0	2	847	1694
	80	16.0	3	1200	3600
	81	16.0	1	1082	1082
	82	16.0	1	210	210
	83	16.0	2	371	742
	84	16.0	1	339	339
	85	16.0	3	347	1041

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	2288.1	615.9
	8.0	265	115
	10.0	187.3	127
	12.5	470.6	498.6
	16.0	489.4	849.6
PESO TOTAL (kg)			

CA50 2206.1

Volume de concreto (C-40) = 27.77 m³
Área de forma = 241.39 m²

MINISTÉRIO DA EDUCAÇÃO
UNIVERSIDADE FEDERAL DE LAVRAS

TÍTULO:
PROJETO EXECUTIVO - ENGENHARIAS

CONTEÚDO:
PROJETO DE ESTRUTURA
VIGAS: V142 À V163

AUTOR DO PROJETO:
MARIUS OLIVEIRA COSTA CREA 90786/D

EXECUÇÃO DE OBRA:

APROVAÇÃO DO LAYOUT (PROF. RESPONSÁVEL):

PROJETO

DATA:	REVISÃO DATA:	PROJETO:
03/09/2018		ESTRUTURA
ESCALA: INDICADA	ÁREA: (m²) 4772,00 m²	FOLHA: 18/40