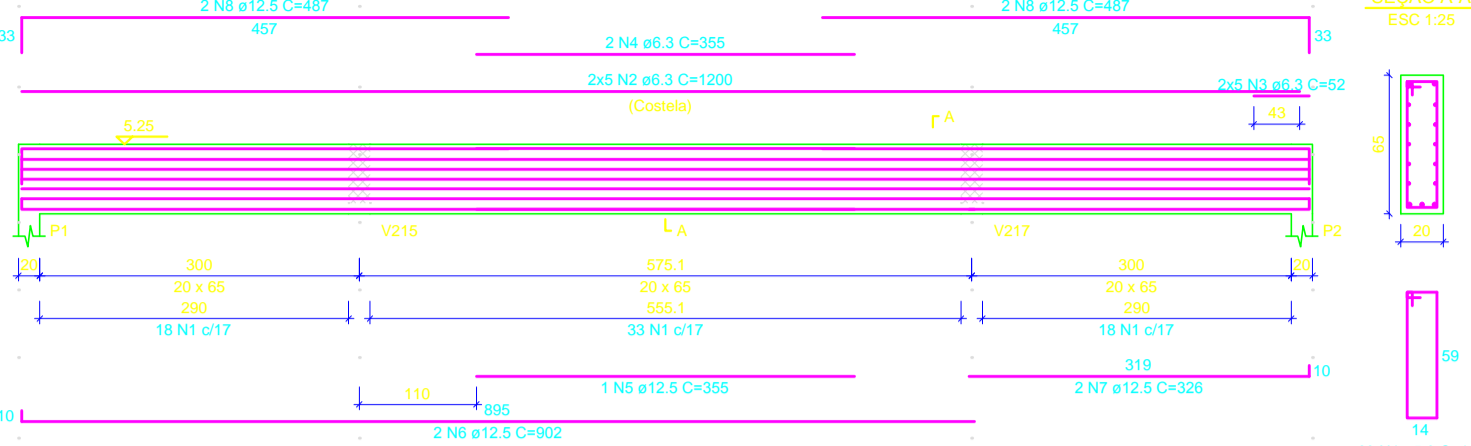


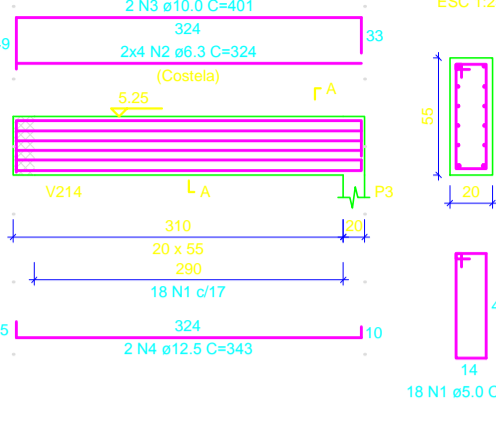
V201

ESC 1:50



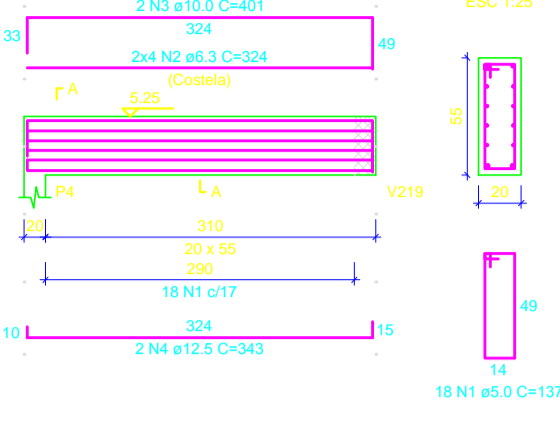
V202

ESC 1:50



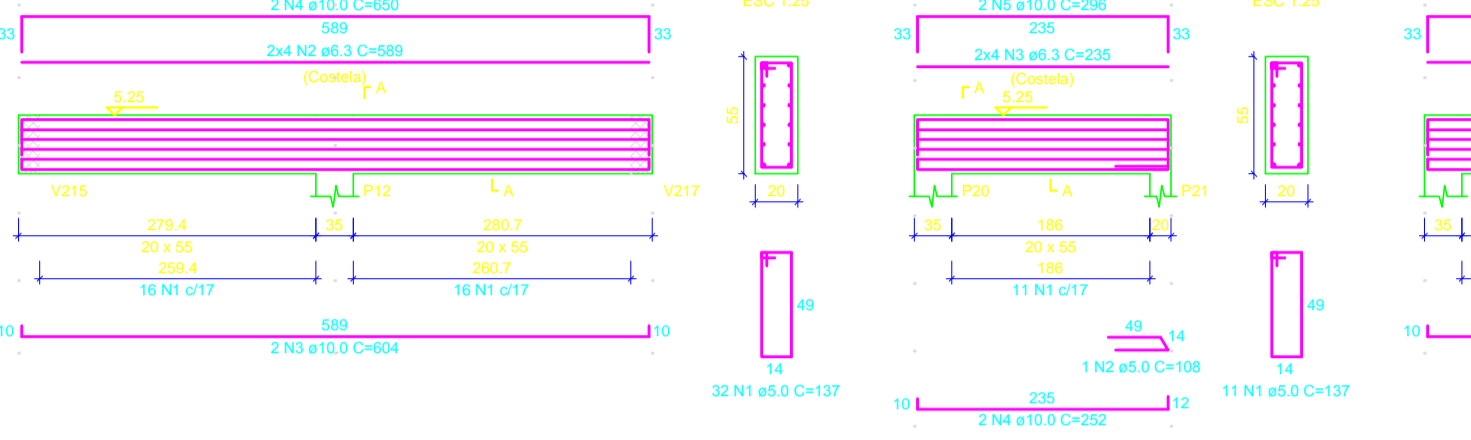
V203

ESC 1:50



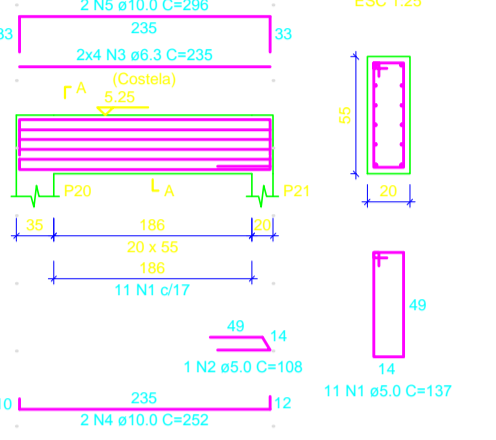
V204

ESC 1:50



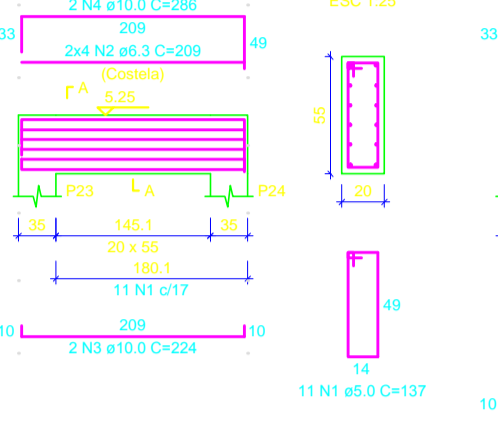
V205

ESC 1:50



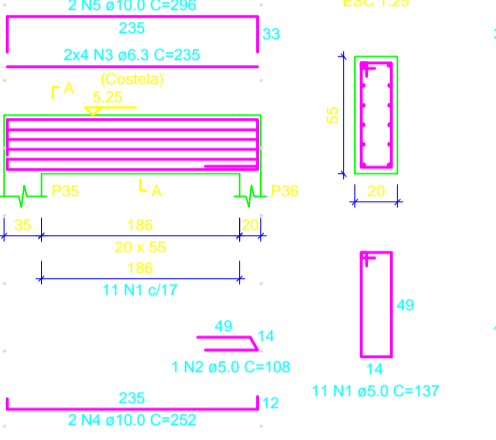
V206

ESC 1:50



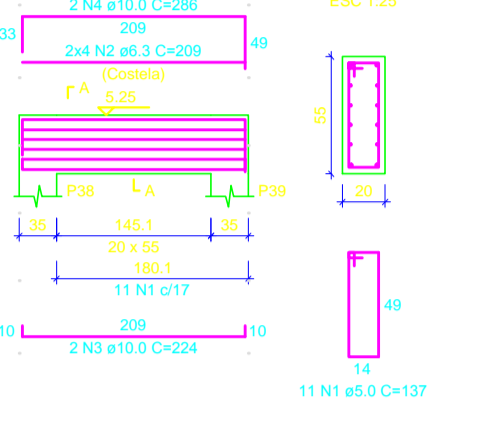
V207

ESC 1:50



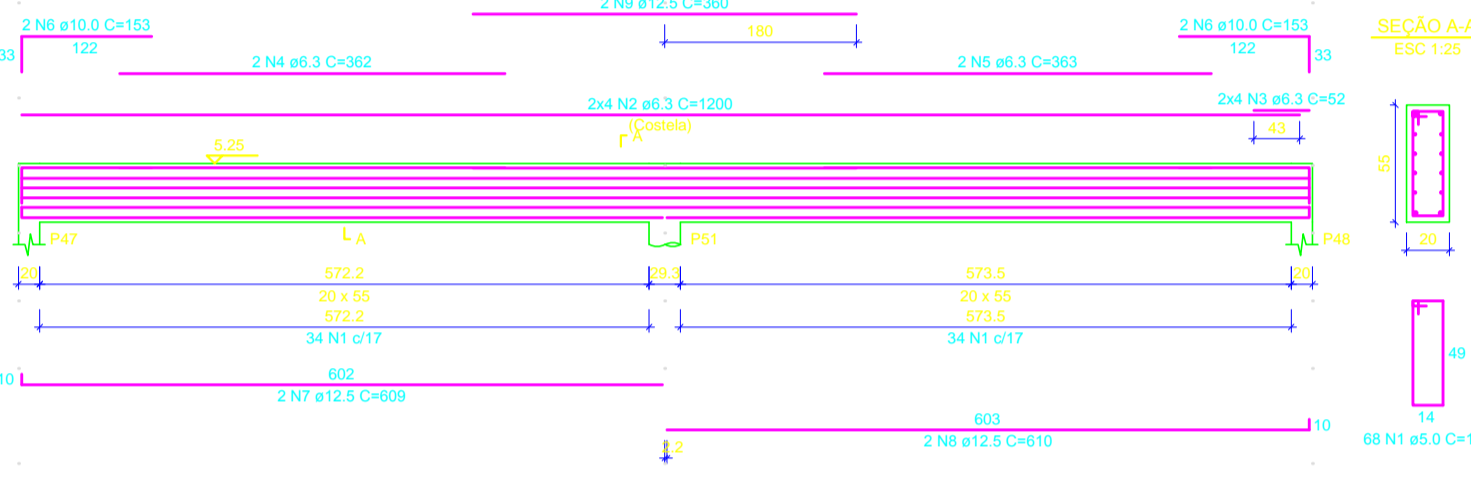
V208

ESC 1:50



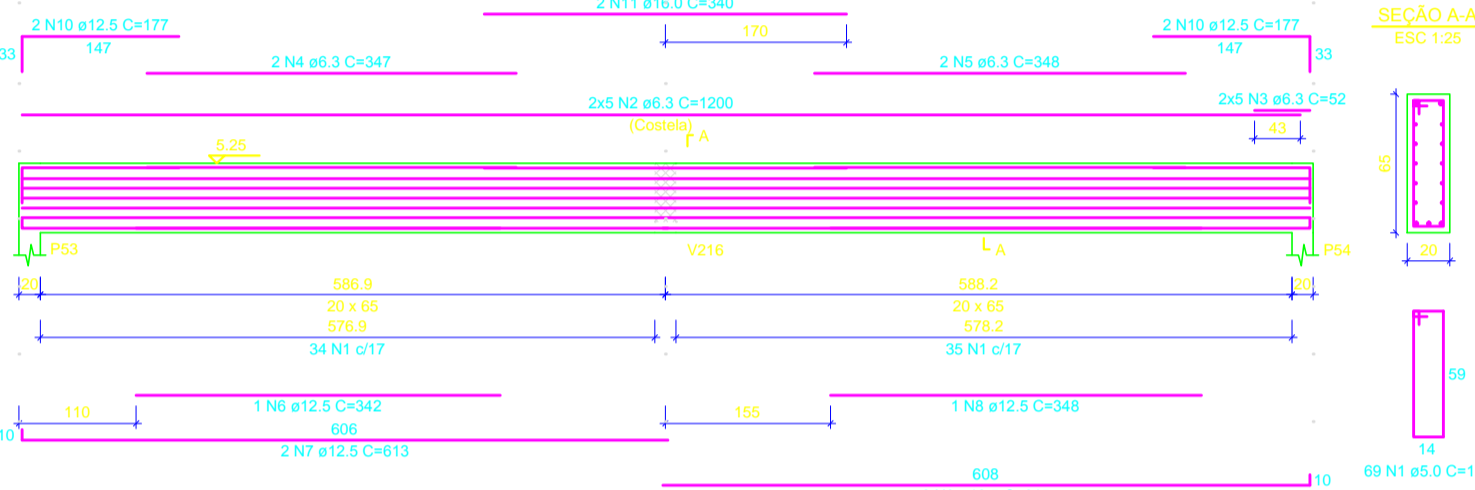
V209

ESC 1:50



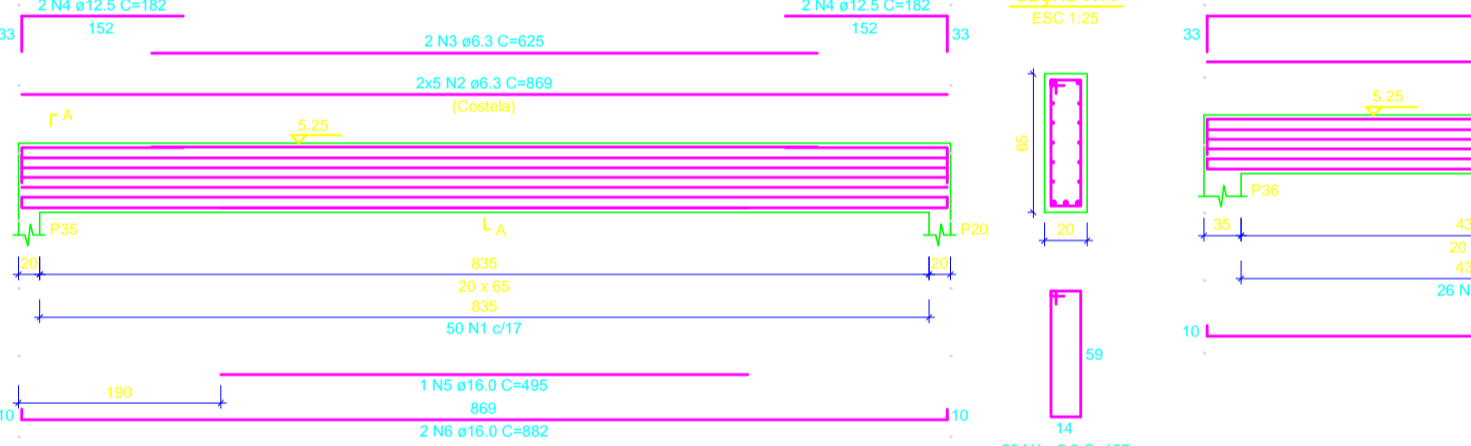
V210

ESC 1:50



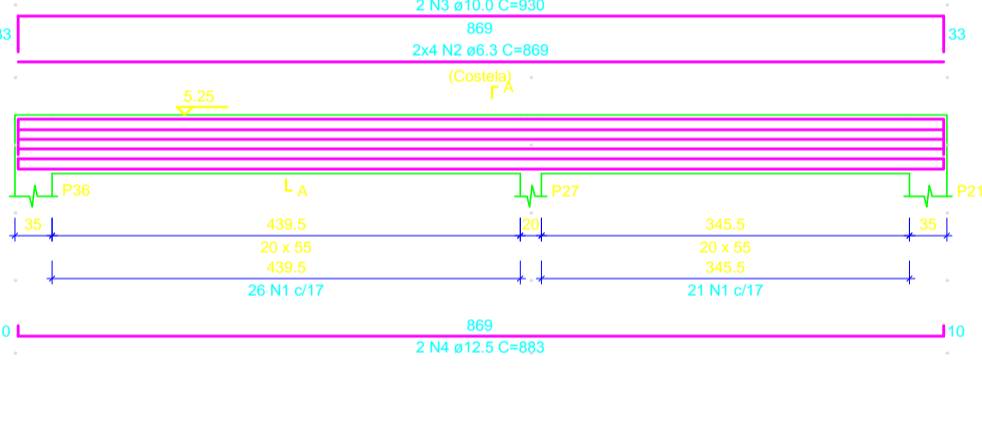
V211

ESC 1:50



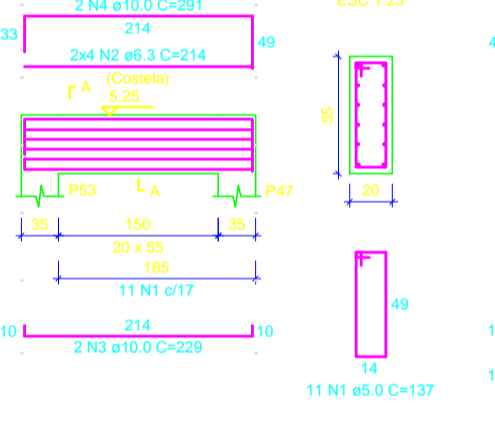
V212

ESC 1:50



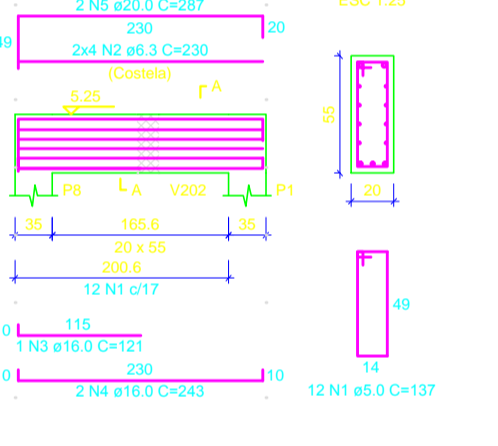
V213

ESC 1:50



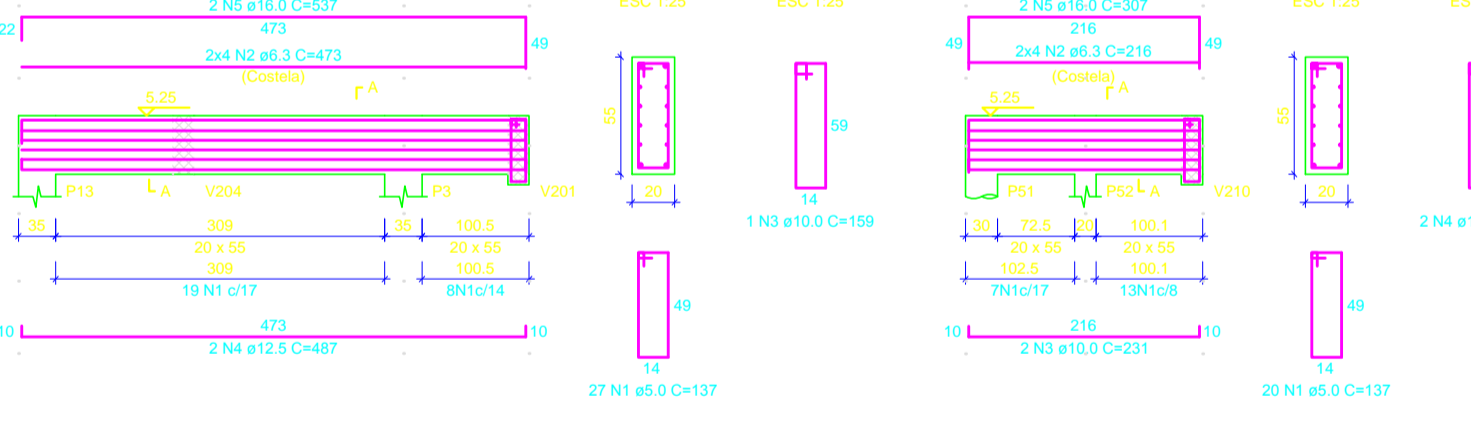
V214

ESC 1:50



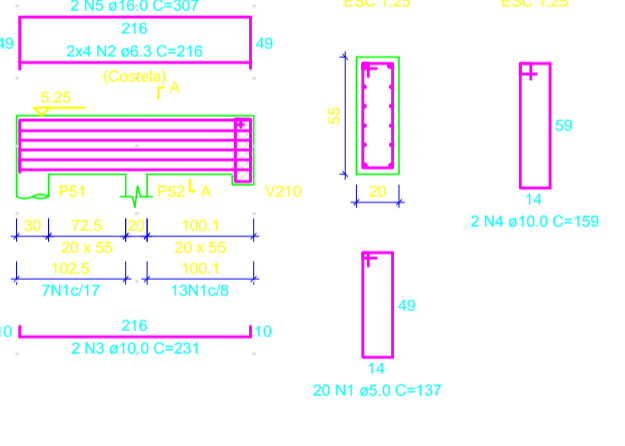
V215

ESC 1:50



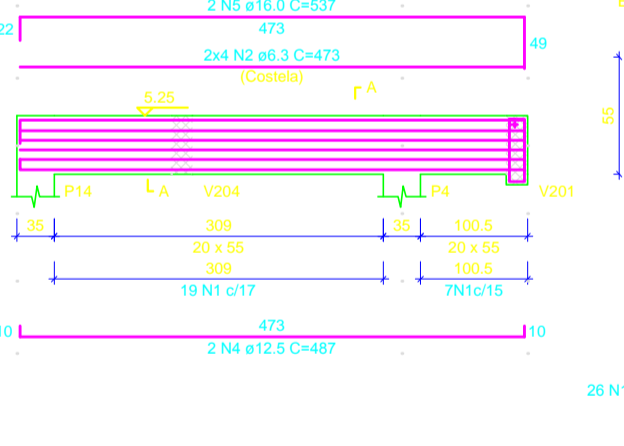
V216

ESC 1:50



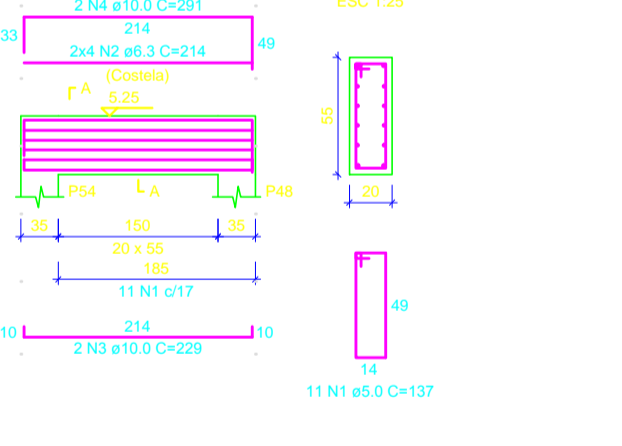
V217

ESC 1:50



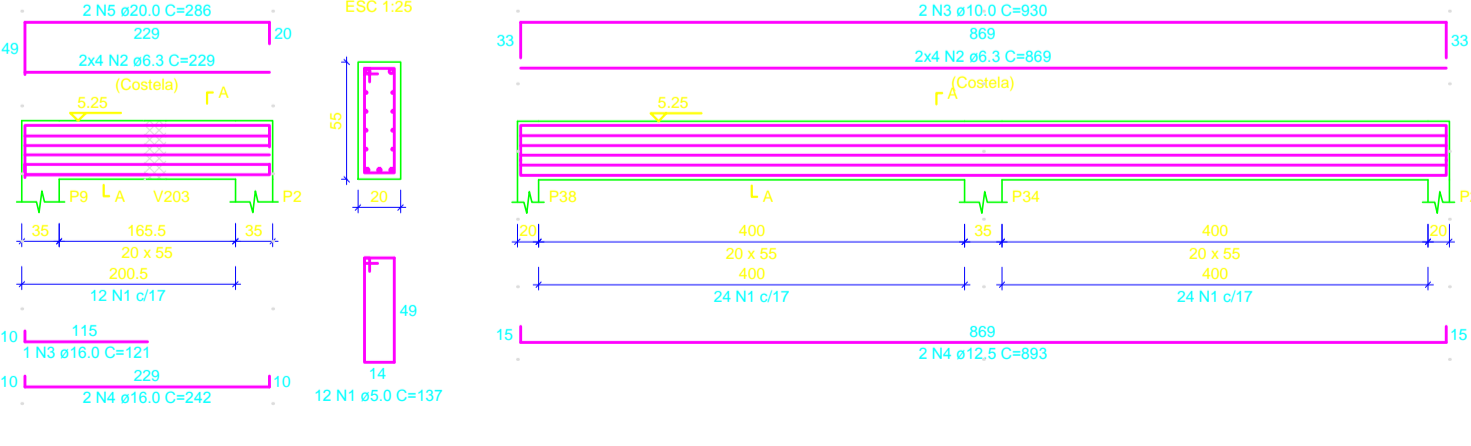
V218

ESC 1:50



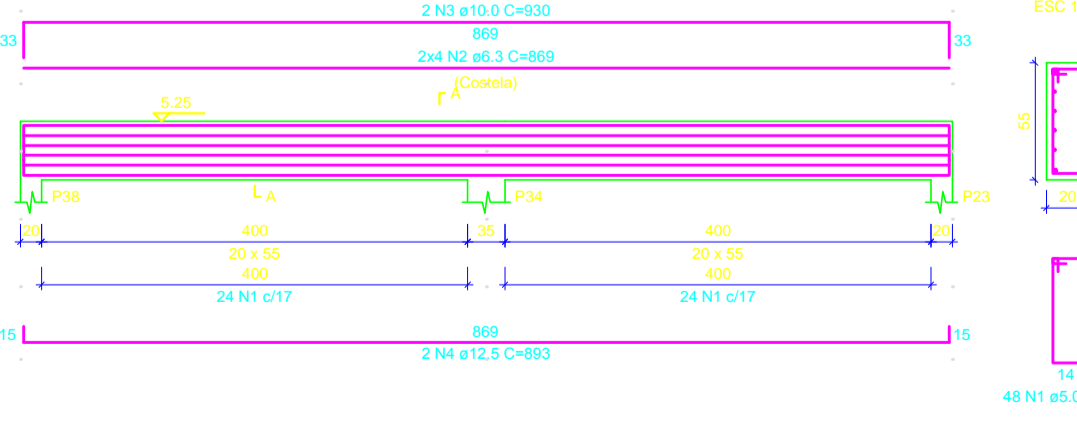
V219

ESC 1:50



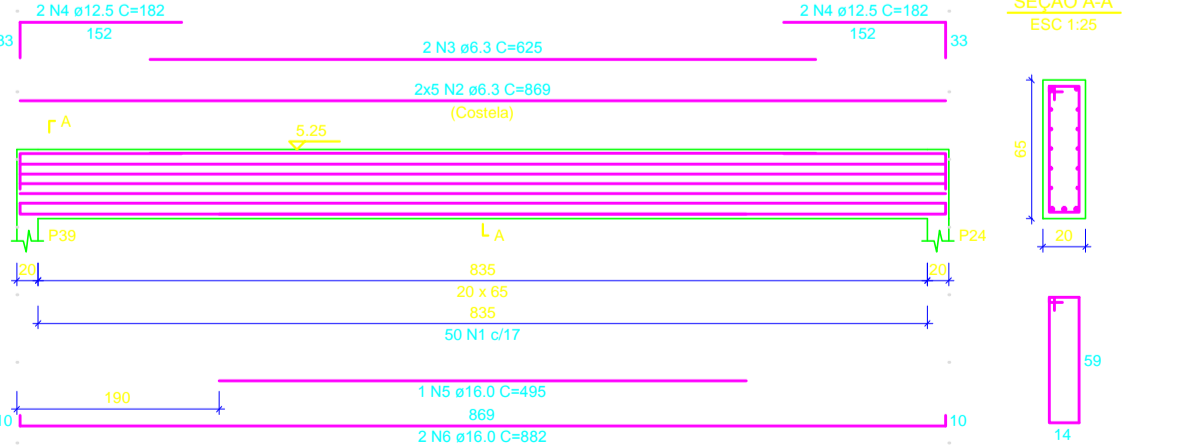
V220

ESC 1:50



V221

ESC 1:50



RELAÇÃO DO AÇO

ELEMENTO	AÇO	N	DIAM (mm)	C.TOTAL (m)	C.UNIT (cm)	C.TOTAL (cm)
V219	CASO	1	5.0	12	137	1644
	CASO	2	6.3	8	229	1832
	CASO	3	10.0	1	121	121
	CASO	4	16.0	2	242	484
	CASO	5	20.0	2	286	572
V220	CASO	1	5.0	46	137	6276
	CASO	2	6.3	8	229	1832
	CASO	3	10.0	2	242	484
	CASO	4	12.5	2	286	572
	CASO	5	16.0	2	330	660
V221	CASO	1	5.0	50	137	6850
	CASO	2	6.3	10	286	2860
	CASO	3	6.3	2	625	1250
	CASO	4	12.5	4	152	728
	CASO	5	16.0	2	182	364

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CASO	6.3	187.2	45.8
	10.0	18.6	11.5
	12.5	25.1	24.2
	16.0	28.8	45.2
	20.0	5.7	14.1
CASO TOTAL			100.7
PESO TOTAL (kg)			140.8
CASO	24.0		24.0

Volume de concreto (C=30) = 2.36 m³
Área de forma = 27.56 m²

RELAÇÃO DO AÇO

ELEMENTO	AÇO	N	DIAM (mm)	C.UNIT (cm)	C.TOTAL (cm)
V201	CASO	1	5.0	69	157
	CASO	2	6.3	10	1200
	CASO	3	6.3	10	52
	CASO	4	12.5	2	355
	CASO	5	12.5	2	802
	CASO	6	12.5	2	326
	CASO	7	12.5	2	326
	CASO	8	12.5	2	326
V202	CASO	1	5.0	18	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	401
	CASO	4	12.5	2	343
	CASO	5	10.0	2	401
	CASO	6	6.3	8	229
	CASO	7	10.0	2	401
	CASO	8	6.3	8	229
V203	CASO	1	5.0	32	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	401
	CASO	4	12.5	2	343
	CASO	5	10.0	2	401
	CASO	6	6.3	8	229
	CASO	7	10.0	2	401
	CASO	8	6.3	8	229
V204	CASO	1	5.0	11	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	296
	CASO	4	10.0	2	296
	CASO	5	10.0	2	296
	CASO	6	6.3	8	229
	CASO	7	10.0	2	296
	CASO	8	6.3	8	229
V205	CASO	1	5.0	11	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	296
	CASO	4	10.0	2	296
	CASO	5	10.0	2	296
	CASO	6	6.3	8	229
	CASO	7	10.0	2	296
	CASO	8	6.3	8	229
V206	CASO	1	5.0	11	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	296
	CASO	4	10.0	2	296
	CASO	5	10.0	2	296
	CASO	6	6.3	8	229
	CASO	7	10.0	2	296
	CASO	8	6.3	8	229
V207	CASO	1	5.0	11	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	296
	CASO	4	10.0	2	296
	CASO	5	10.0	2	296
	CASO	6	6.3	8	229
	CASO	7	10.0	2	296
	CASO	8	6.3	8	229
V208	CASO	1	5.0	11	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	296
	CASO	4	10.0	2	296
	CASO	5	10.0	2	296
	CASO	6	6.3	8	229
	CASO	7	10.0	2	296
	CASO	8	6.3	8	229
V209	CASO	1	5.0	66	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	296
	CASO	4	10.0	2	296
	CASO	5	10.0	2	296
	CASO	6	6.3	8	229
	CASO	7	10.0	2	296
	CASO	8	6.3	8	229
V210	CASO	1	5.0	11	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	296
	CASO	4	10.0	2	296
	CASO	5	10.0	2	296
	CASO	6	6.3	8	229
	CASO	7	10.0	2	296
	CASO	8	6.3	8	229
V211	CASO	1	5.0	50	157
	CASO	2	6.3	10	860
	CASO	3	6.3	2	625
	CASO	4	12.5	4	152
	CASO	5	16.0	1	485
	CASO	6	16.0	2	852
	CASO	7	16.0	2	852
	CASO	8	16.0	2	852
V212	CASO	1	5.0	47	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	330
	CASO	4	12.5	2	330
	CASO	5	10.0	2	296
	CASO	6	6.3	8	229
	CASO	7	10.0	2	296
	CASO	8	6.3	8	229
V213	CASO	1	5.0	11	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	296
	CASO	4	10.0	2	296
	CASO	5	10.0	2	296
	CASO	6	6.3	8	229
	CASO	7	10.0	2	296
	CASO	8	6.3	8	229
V214	CASO	1	5.0	12	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	296
	CASO	4	10.0	2	296
	CASO	5	10.0	2	296
	CASO	6	6.3	8	229
	CASO	7	10.0	2	296
	CASO	8	6.3	8	229
V215	CASO	1	5.0	27	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	296
	CASO	4	10.0	2	296
	CASO	5	10.0	2	296
	CASO	6	6.3	8	229
	CASO	7	10.0	2	296
	CASO	8	6.3	8	229
V216	CASO	1	5.0	20	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	296
	CASO	4	10.0	2	296
	CASO	5	10.0	2	296
	CASO	6	6.3	8	229
	CASO	7	10.0	2	296
	CASO	8	6.3	8	229
V217	CASO	1	5.0	20	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	296
	CASO	4	10.0	2	296
	CASO	5	10.0	2	296
	CASO	6	6.3	8	229
	CASO	7	10.0	2	296
	CASO	8	6.3	8	229
V218	CASO	1	5.0	11	137
	CASO	2	6.3	8	229
	CASO	3	10.0	2	296
	CASO	4	10.0	2	296
	CASO	5	10.0	2	296
	CASO	6	6.3	8	229
	CASO	7	10.0	2	296
	CASO	8	6.3	8	229