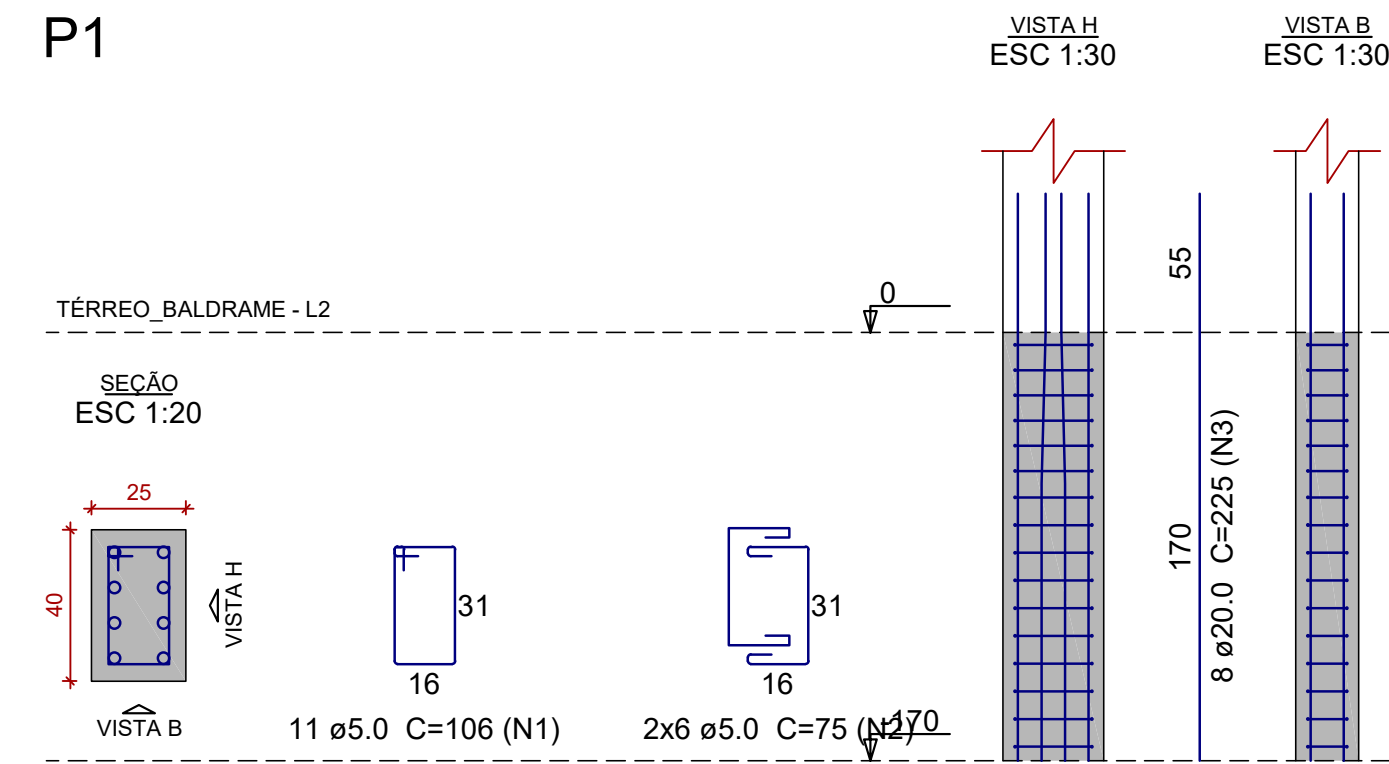
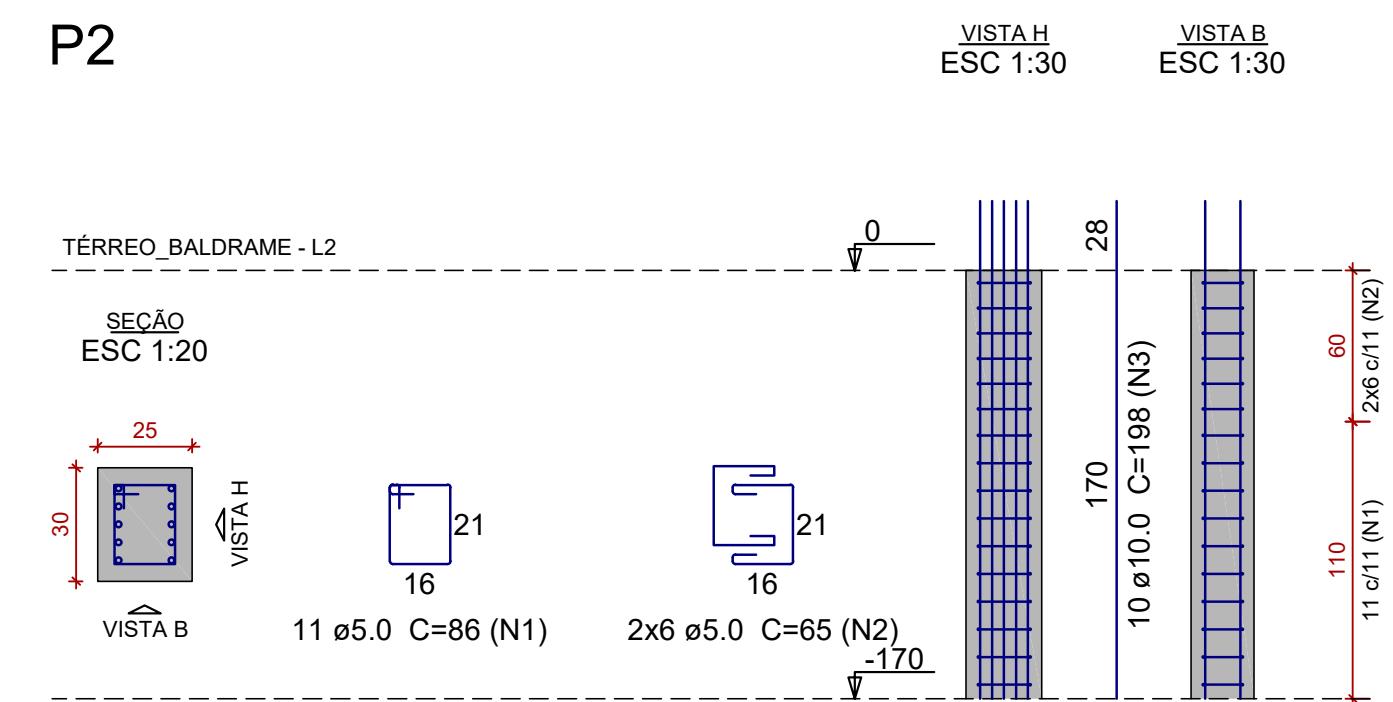


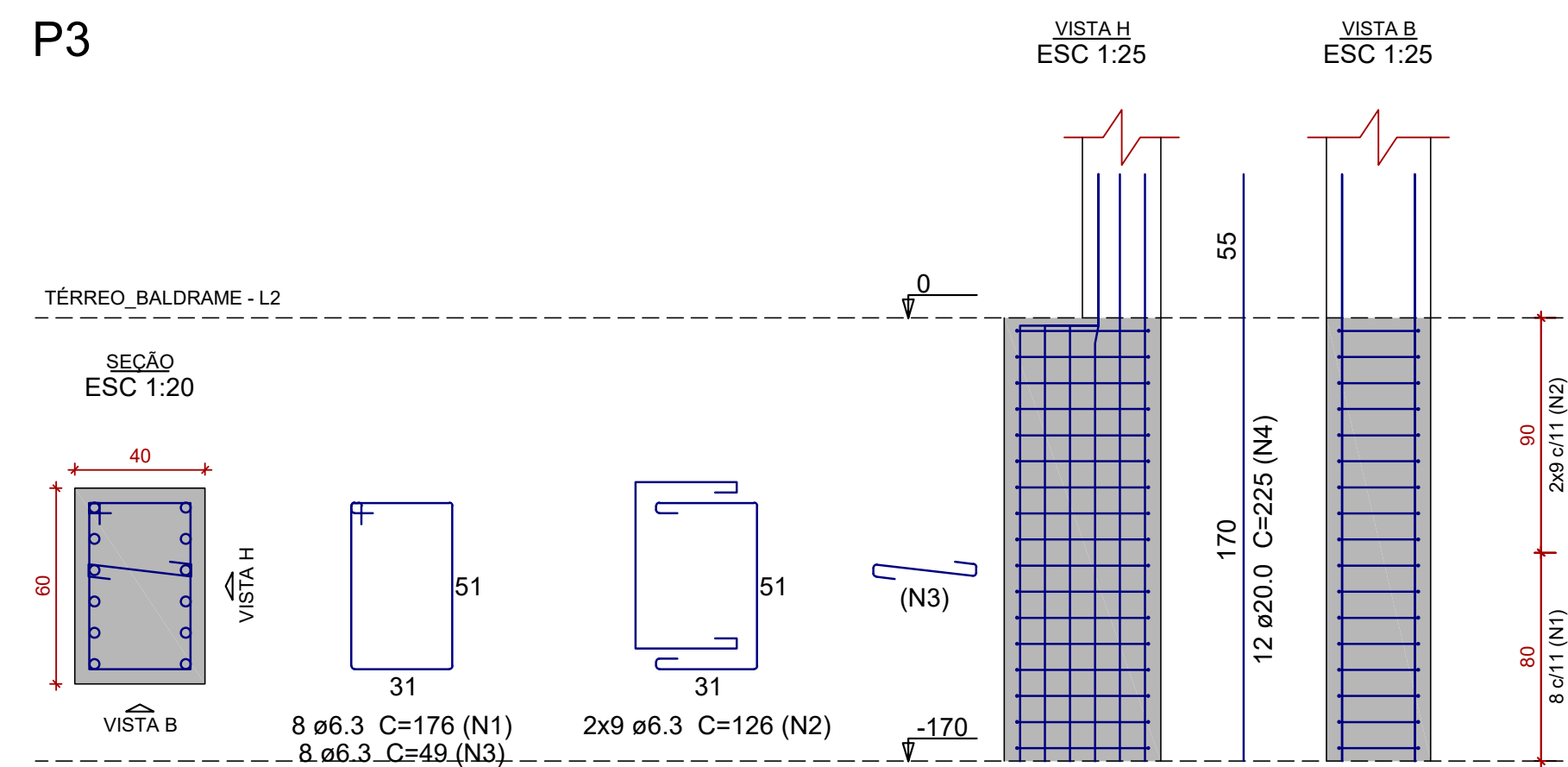
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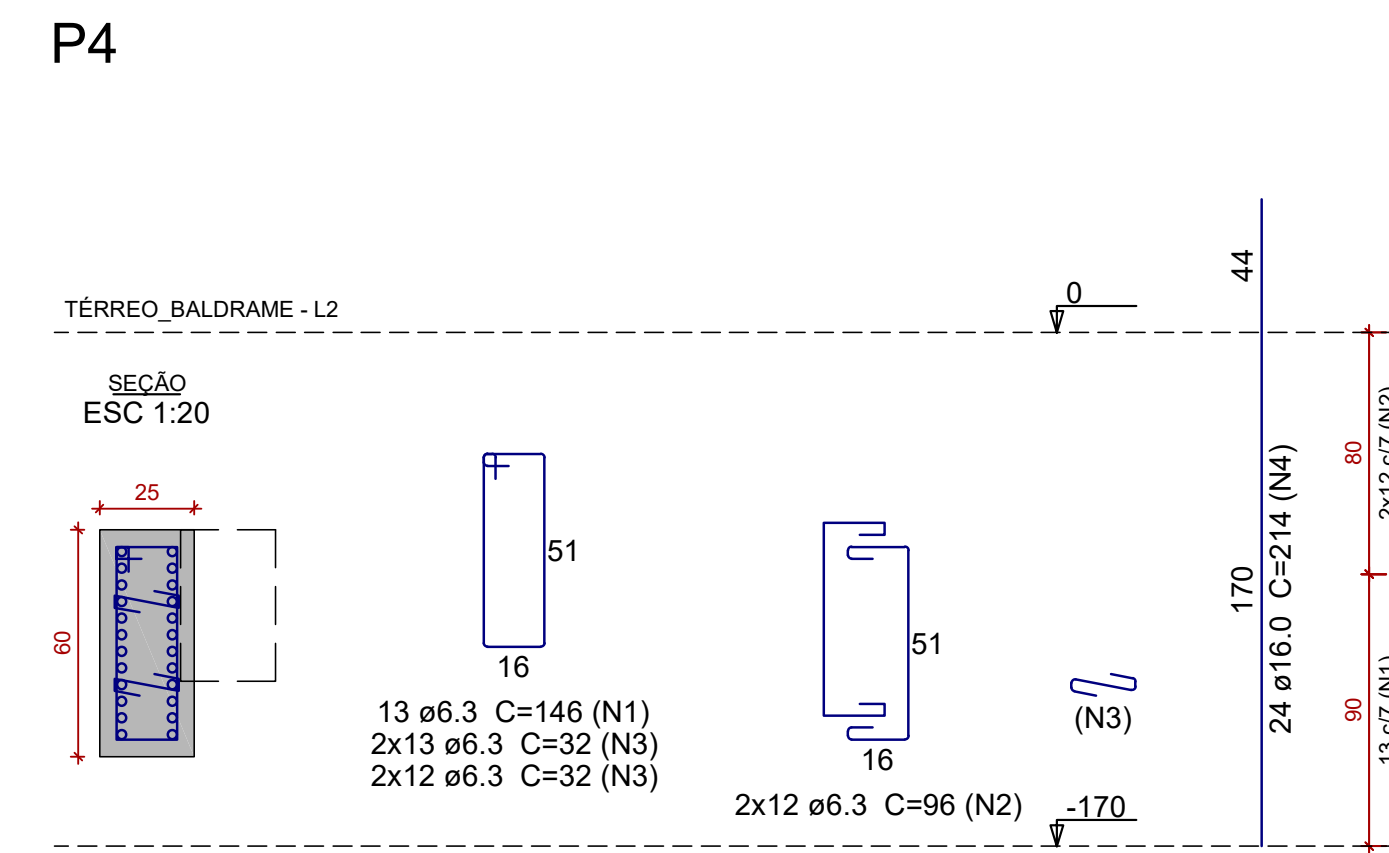
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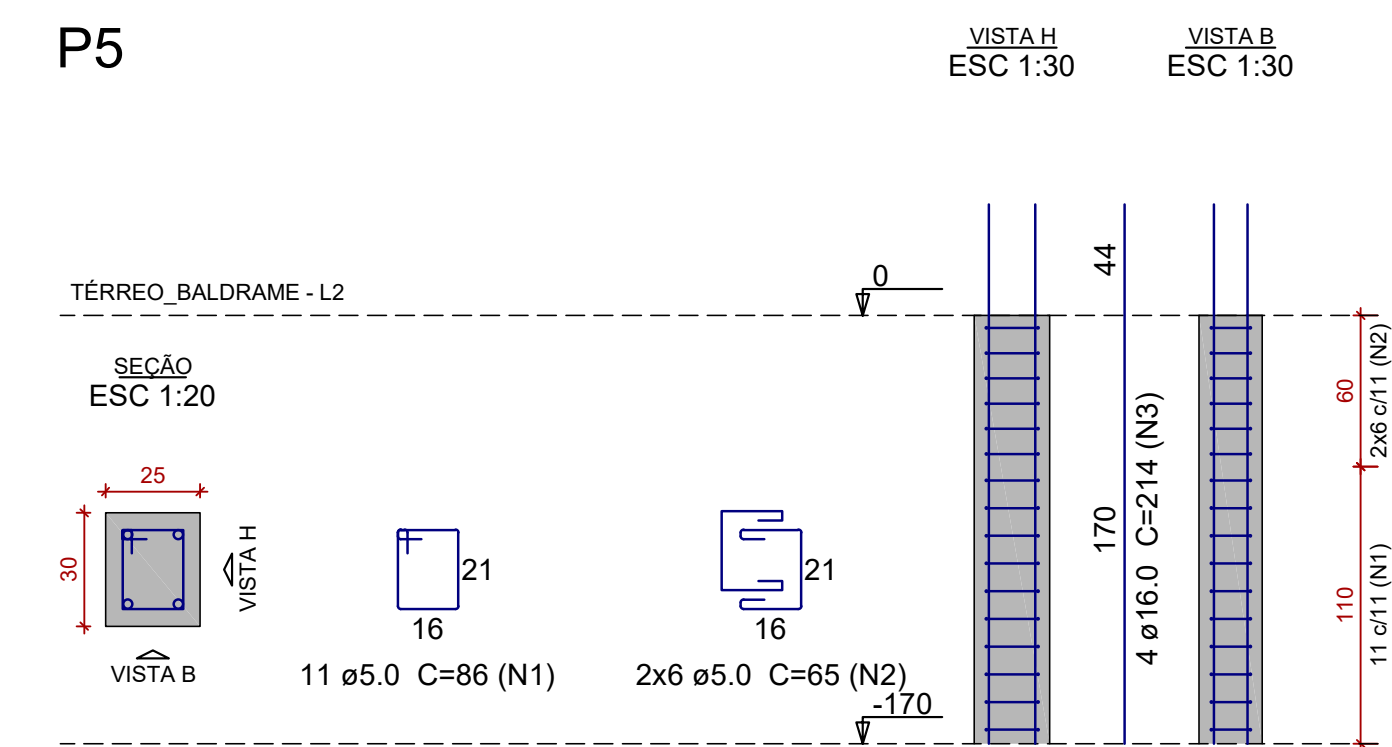
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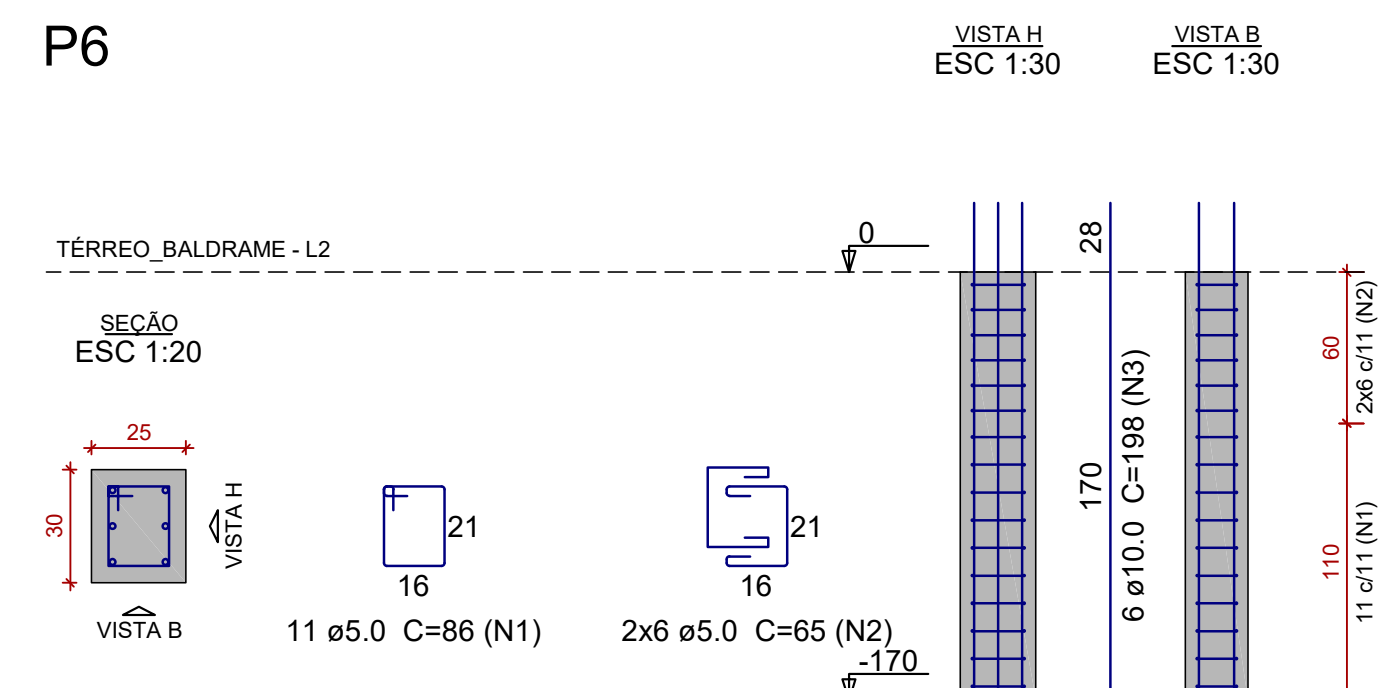
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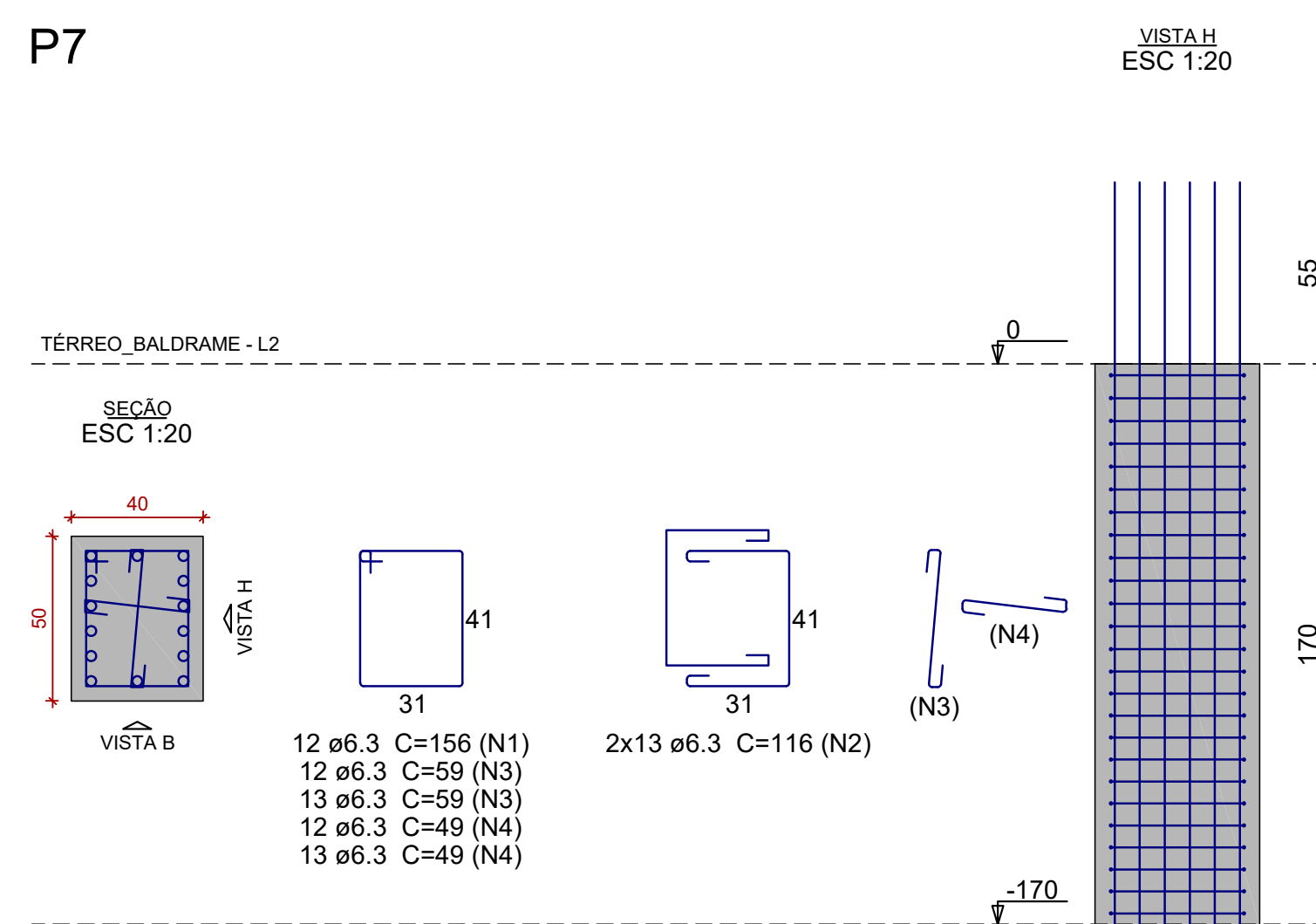
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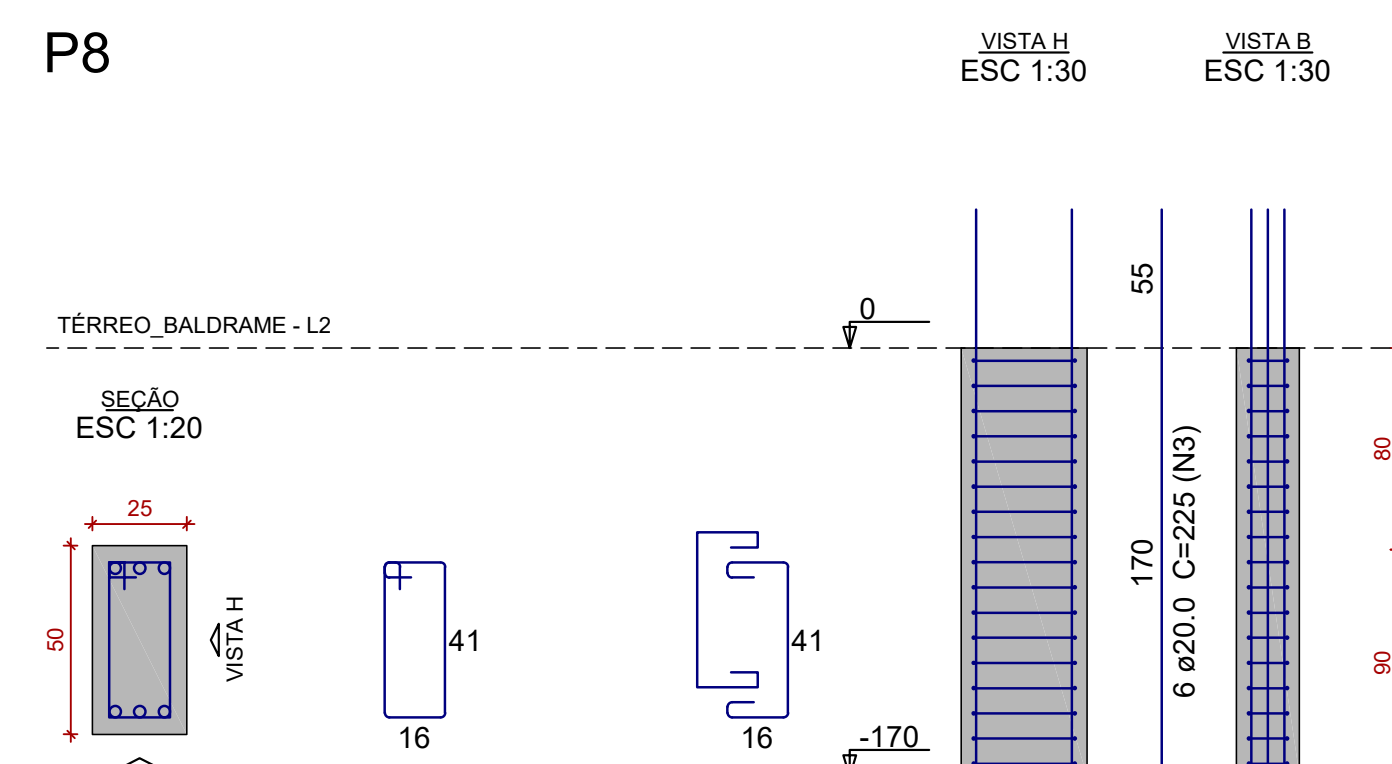
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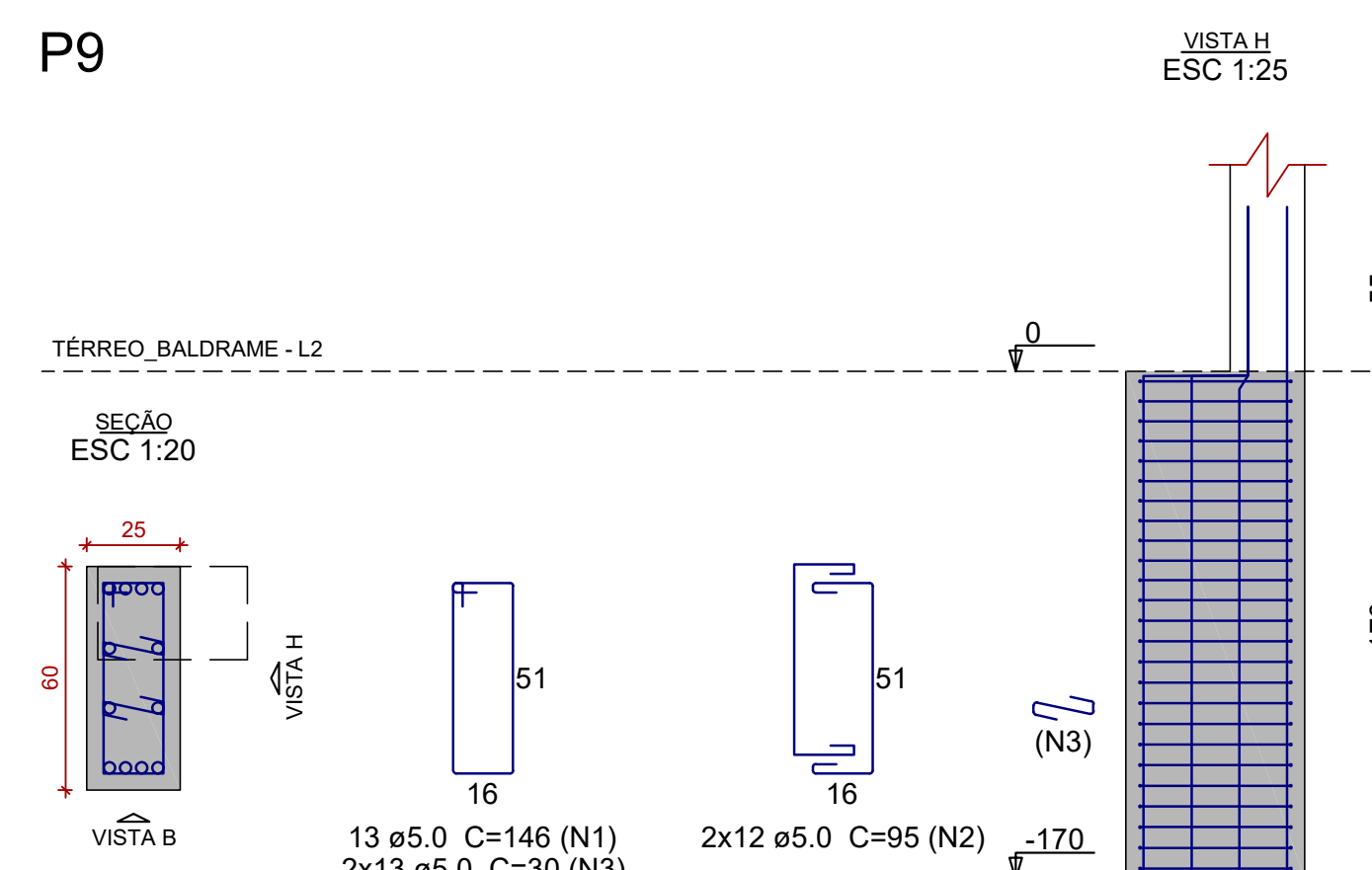
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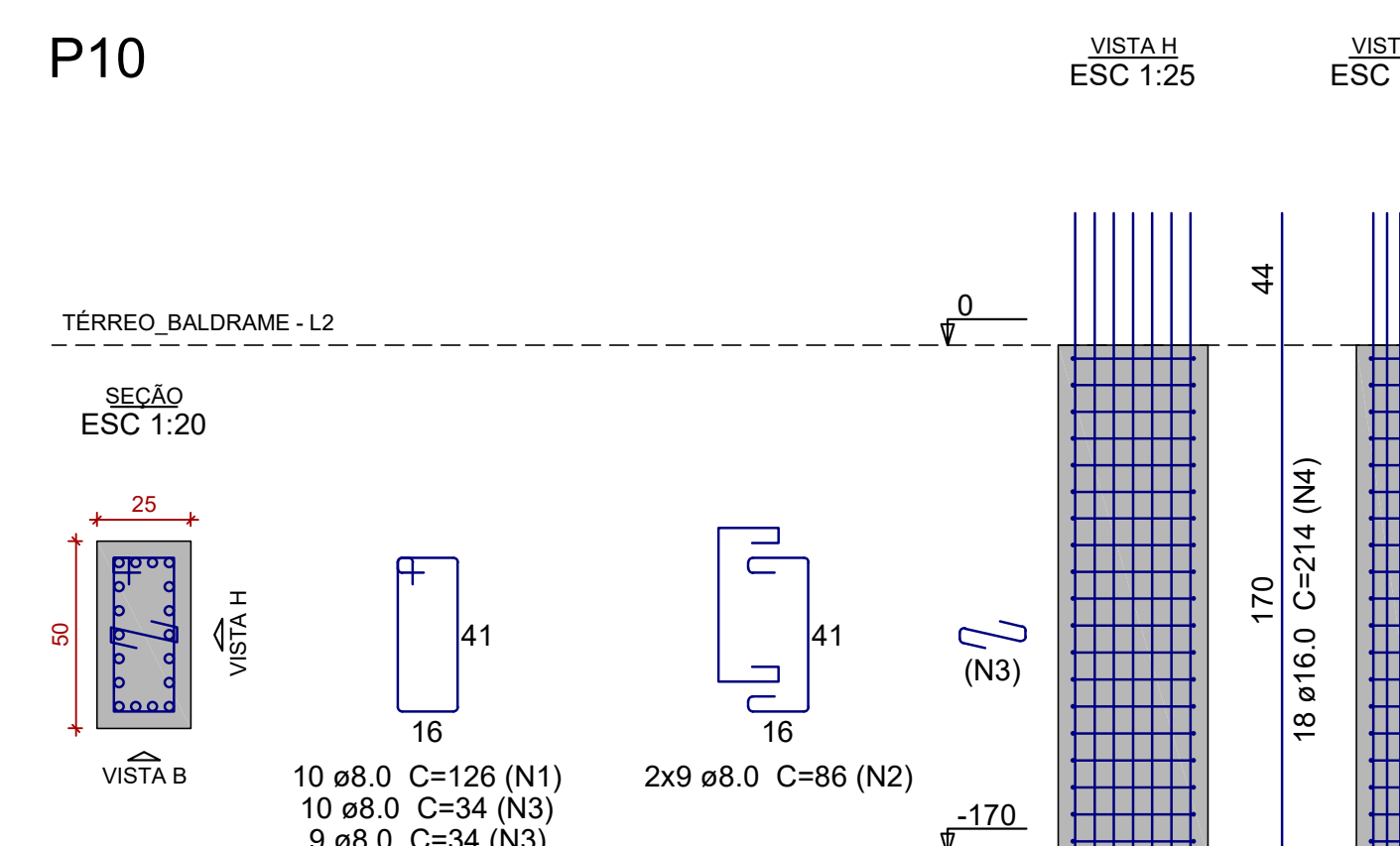
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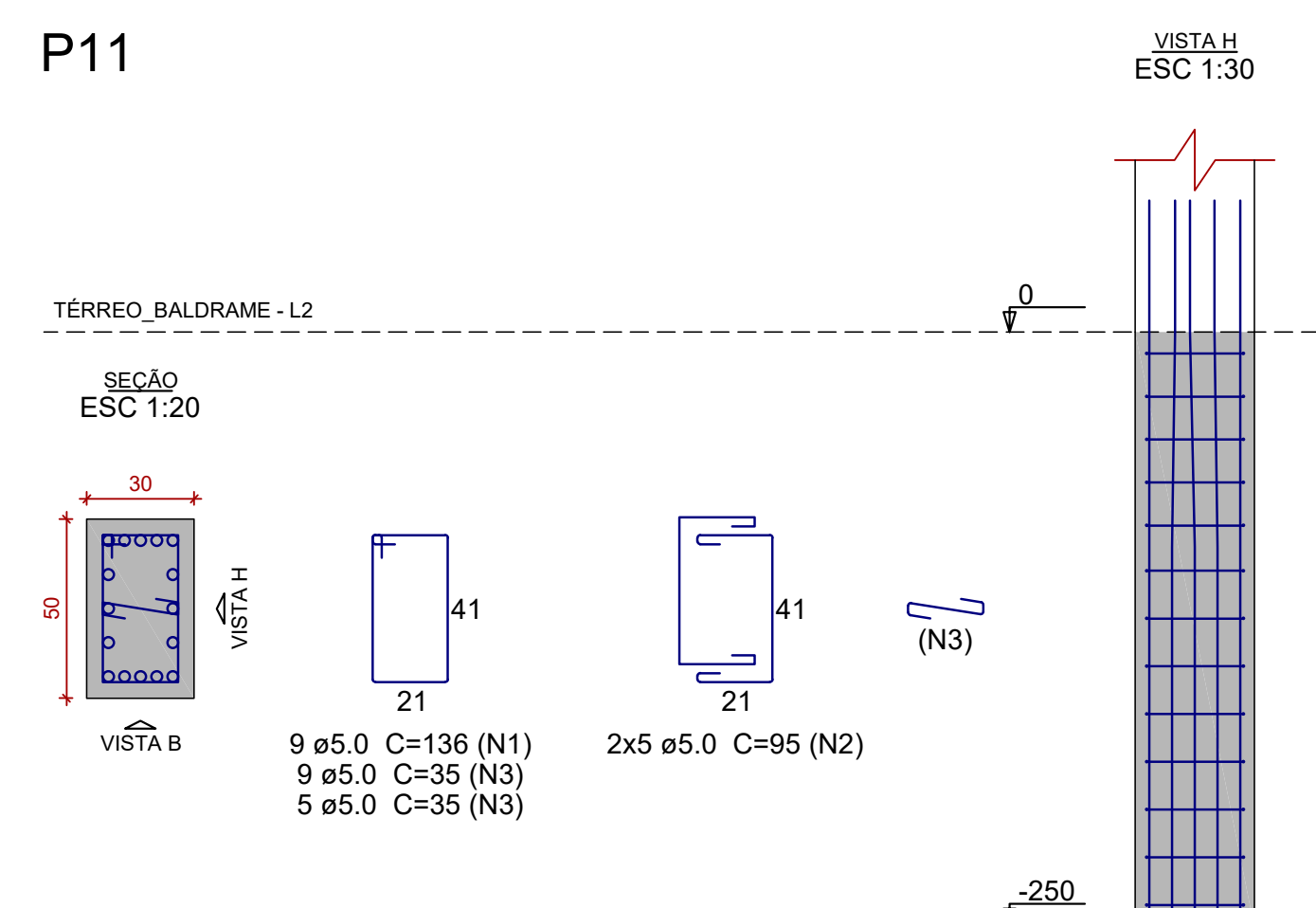
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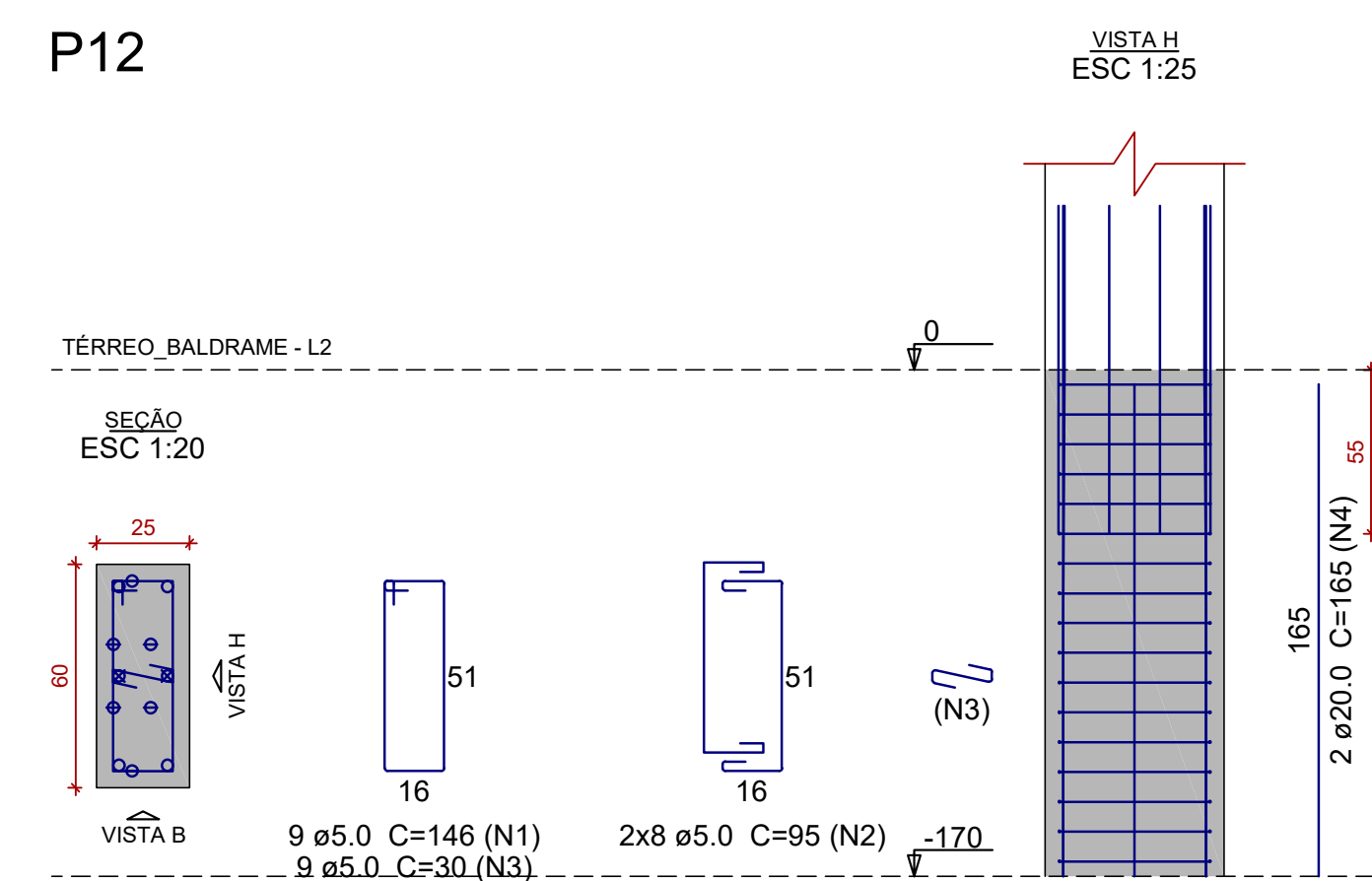
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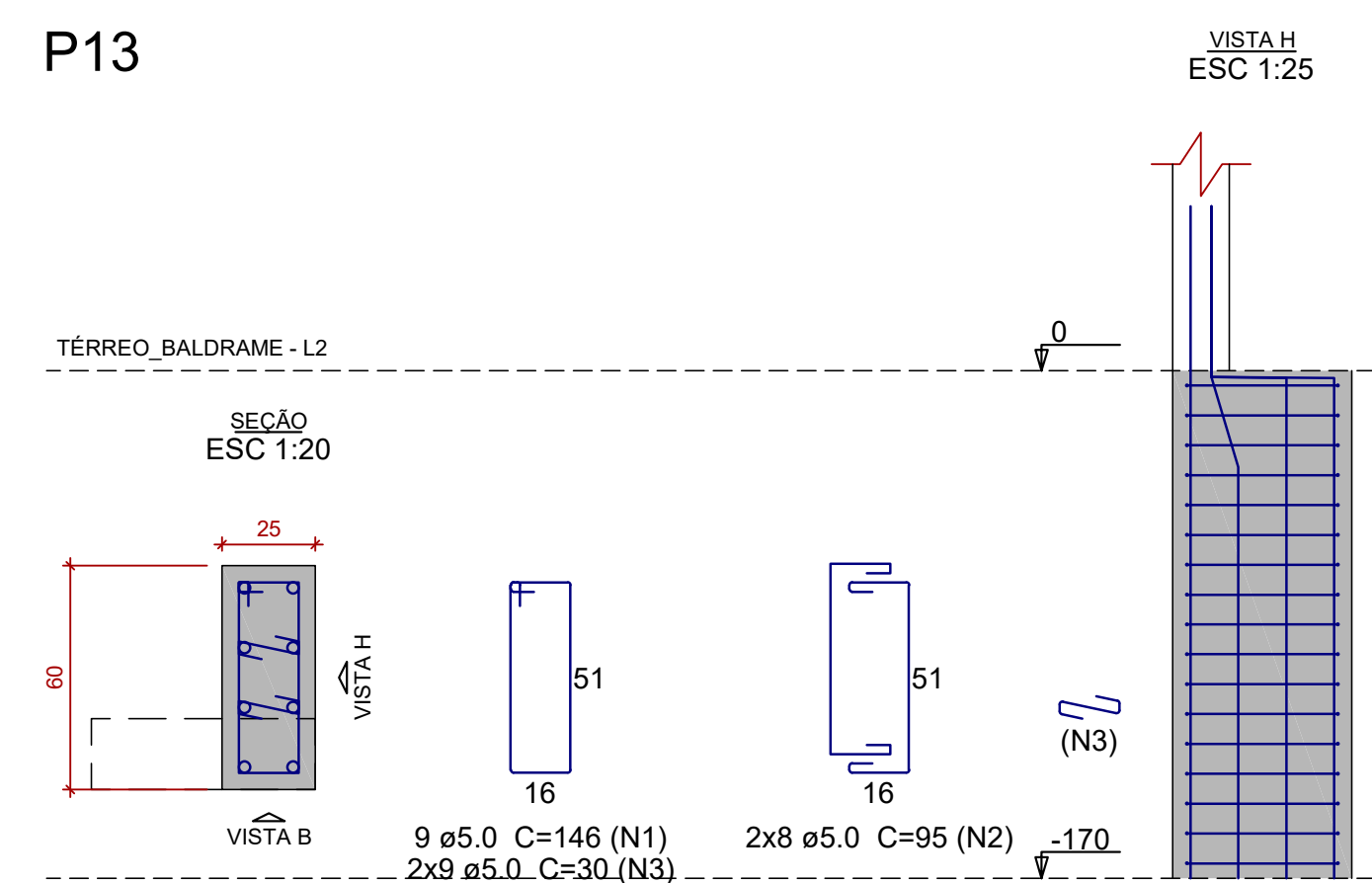
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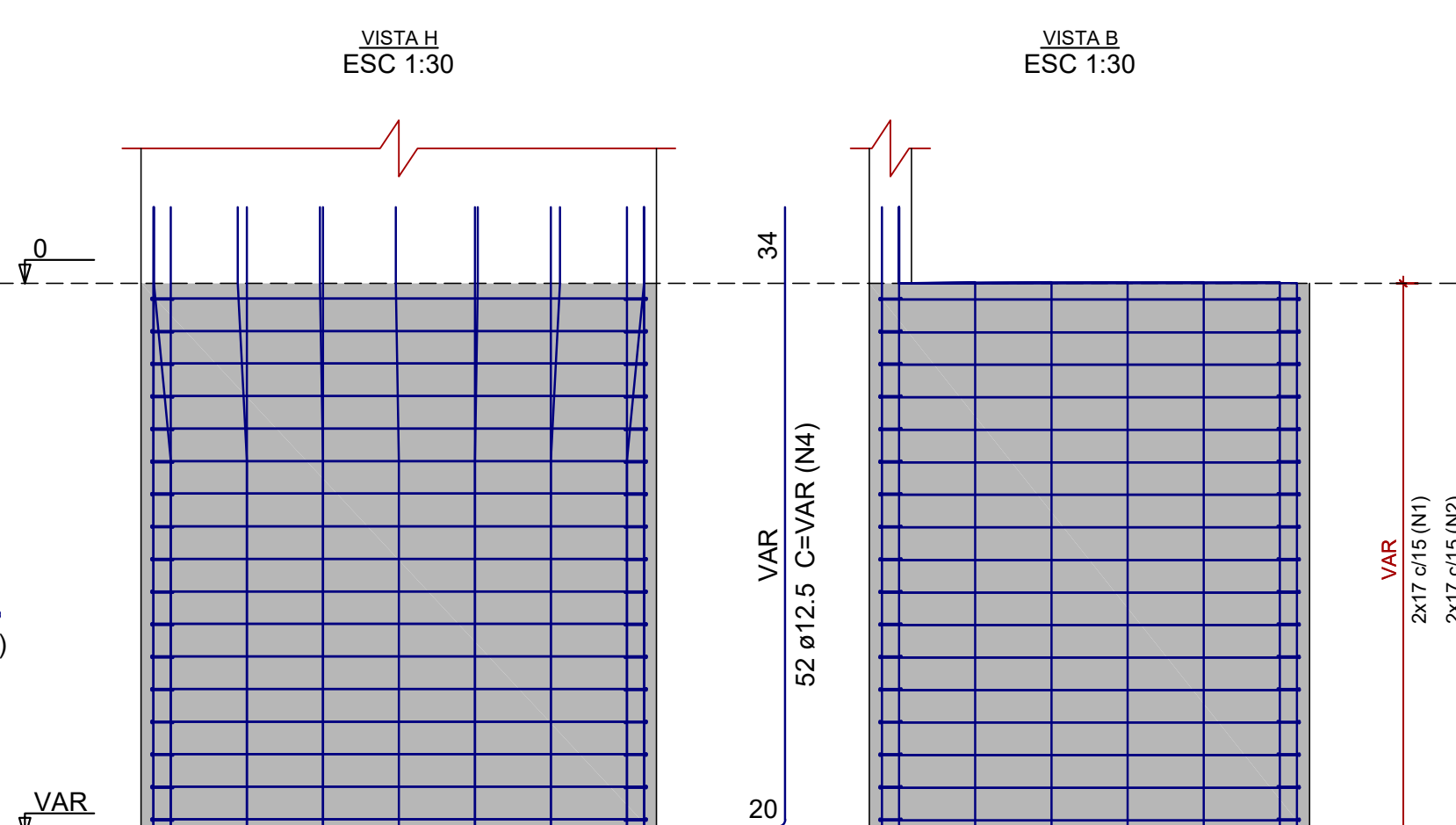
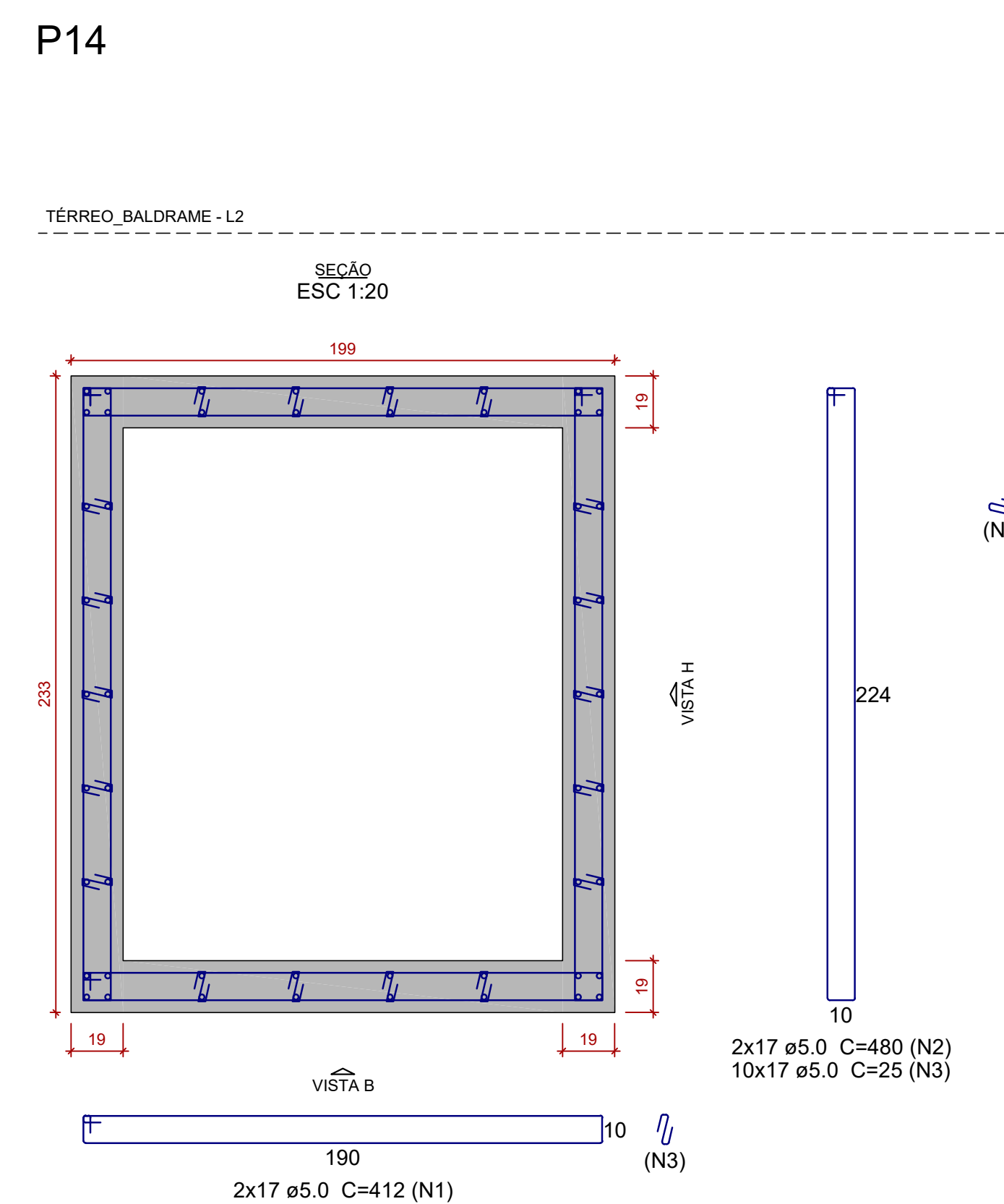
P12



P13



P14



Relação do aço

ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
P1	CA60	1	5.0	11	106	1166
	CA60	2	5.0	12	75	900
	CA50	3	20.0	8	225	1800
P2	CA60	1	5.0	11	86	946
	CA60	2	5.0	12	65	780
	CA50	3	10.0	10	198	1980
P3	CA50	1	6.3	8	176	1408
	CA50	2	6.3	18	126	2268
	CA50	3	6.3	17	49	833
P4	CA50	4	20.0	12	225	2700
	CA50	1	6.3	13	146	1898
	CA50	2	6.3	24	96	2304
P5	CA50	3	6.3	50	32	1600
	CA50	4	16.0	24	214	5136
	CA60	1	5.0	11	86	946
P6	CA60	1	5.0	11	86	946
	CA60	2	5.0	12	65	780
	CA50	3	10.0	6	198	1188
P7	CA50	1	6.3	12	156	1872
	CA50	2	6.3	26	116	3016
	CA50	3	6.3	25	59	1475
P8	CA50	4	6.3	25	49	1225
	CA50	5	20.0	14	225	3150
	CA50	1	8.0	10	126	1260
P9	CA50	2	8.0	18	86	1548
	CA50	3	20.0	6	225	1350
	CA60	1	5.0	13	146	1898
P10	CA60	2	5.0	24	95	2280
	CA60	3	5.0	30	30	1500
	CA50	4	20.0	12	225	2700
P11	CA50	1	8.0	10	126	1260
	CA50	2	8.0	18	86	1548
	CA50	3	8.0	19	34	646
P12	CA50	4	16.0	18	214	3852
	CA60	1	5.0	9	136	1224
	CA60	2	5.0	10	95	950
P13	CA60	3	5.0	14	35	490
	CA50	4	20.0	16	315	5040
	CA60	1	5.0	9	146	1314
P14	CA60	2	5.0	16	95	1520
	CA60	3	5.0	17	30	510
	CA50	4	20.0	2	165	330
P15	CA50	5	20.0	6	110	660
	CA50	6	20.0	4	225	900
	CA60	1	5.0	9	146	1314
P16	CA60	2	5.0	16	95	1520
	CA60	3	5.0	34	30	1020
	CA50	4	20.0	8	225	1800
P17	CA60	1	5.0	34	412	14008
	CA60	2	5.0	34	480	16320
	CA60	3	5.0	306	25	7650
P18	CA50	4	12.5	52	VAR	VAR
	CA60	5	5.0	52	VAR	VAR

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10% (Barra)	UNIT	PESO + 10% (kg)
CA50	6.3	179	17	12 m	48.2
	8.0	62.7	6	12 m	27.2
	10.0	31.7	3	12 m	21.5
	12.5	154.5	15	12 m	163.7
	16.0	98.5	10	12 m	170.9
CA60	20.0	204.3	19	12 m	554.2
	5.0	607.7	56	12 m	103
PESO TOTAL (kg)					
CA50					985.6
CA60					103

Volume de concreto (C=40) = 6.86 m³
Área de forma = 56.54 m²

Nº	Comentário	Data	Autor

PROJETO EXECUTIVO

VERSÃO DE REFERÊNCIA UTILIZADA NA ELABORAÇÃO DESTA PRANCHA				
ARQUITETURA	ESTRUTURAL	ELÉTRICO	HIROSSANITÁRIO	GÁS
Anteprojeto3	REV00			

PROJETO ESTRUTURAL - ARMADURAS

TÉRREO

UNOPAR URUGUAIANA

PROJETO: Benvegno Engenharia

RESP. TÉCNICO PROJETO: Allan V. Benvegno

EXECUÇÃO: 5

PROPRIETÁRIO: 5

COLABORADOR: 7

DESENHO: ALL DATA: 15/01/2018 REVISÃO: <> ESCALA: Indicada

FOLHA: 7 / 61