




















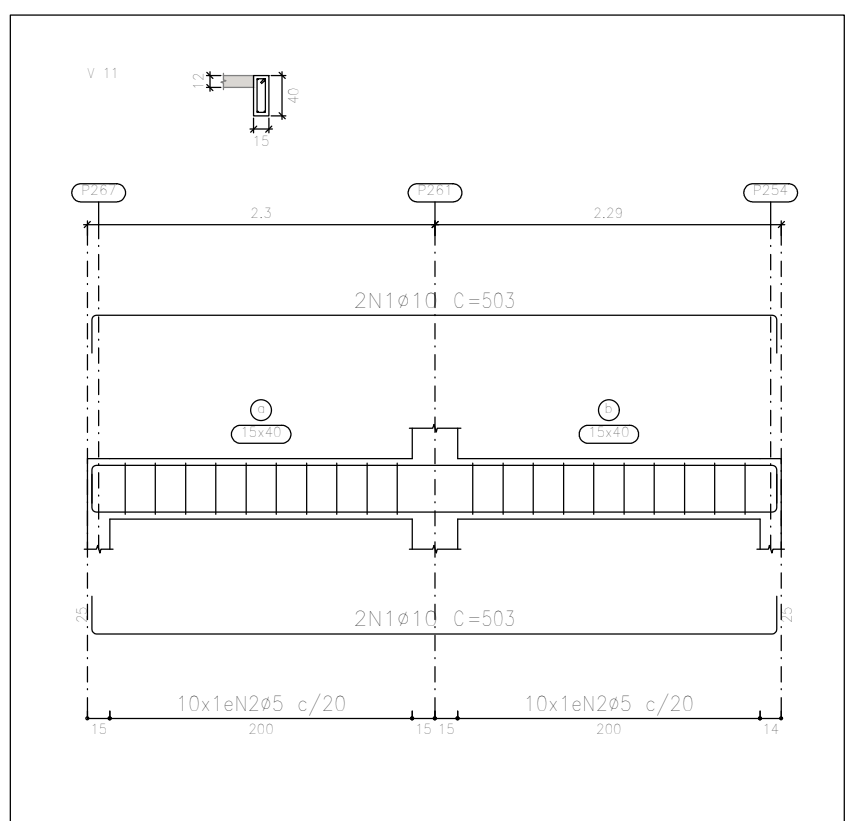
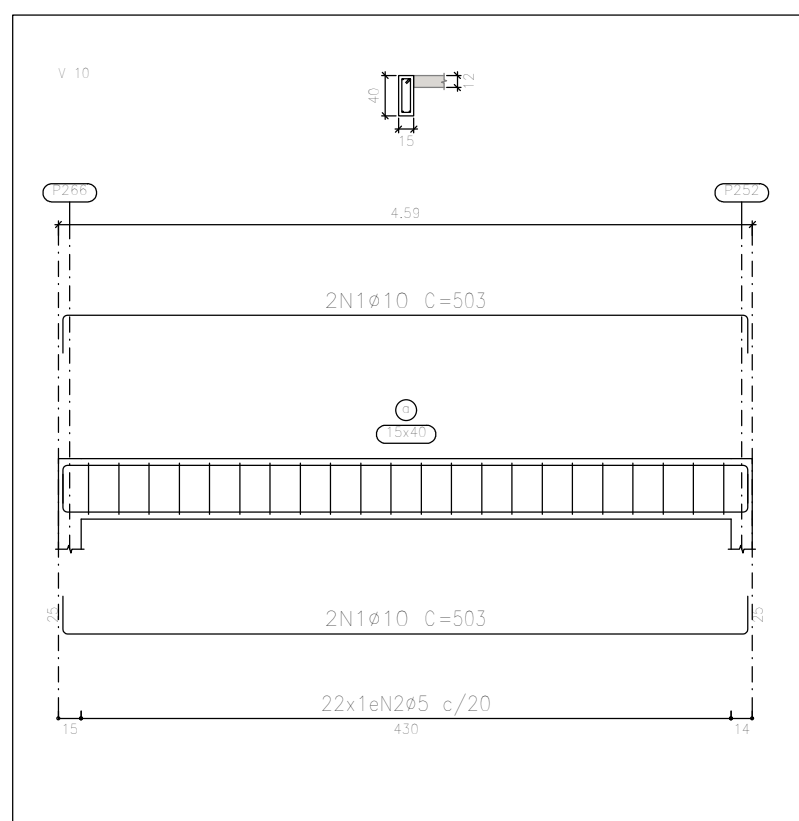
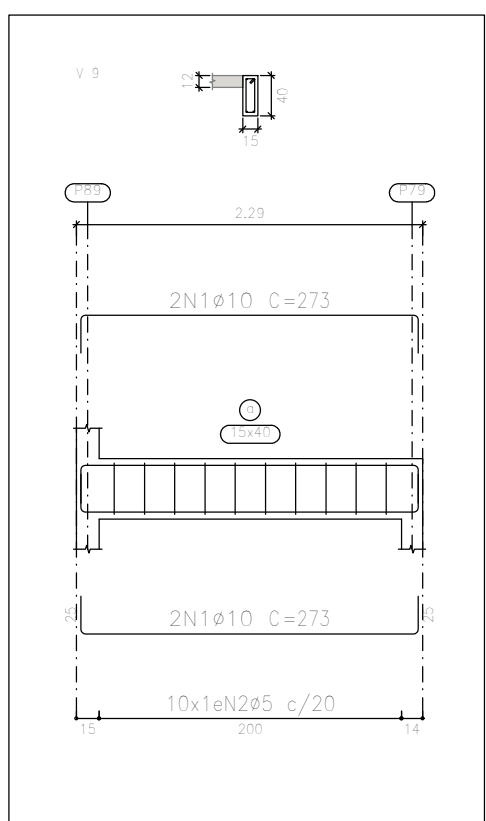


Elemento	G				Comp (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
	Pos.	Diam.	Q.	Esquema				
V 1	1	Ø10	2		610	1220	7.5	
	2	Ø10	2		606	1212	7.5	
	3	Ø5	26		94	2444		3.8
						Total+10%: 16.5		
V 2	1	Ø10	4		244	976	6.0	
	2	Ø5	7		92	644		1.0
						Total+10%: 6.6		
V 3	1	Ø10	4		601	2404	14.8	
	2	Ø5	26		94	2444		3.8
						Total+10%: 16.3		
V 4	1	Ø10	4		244	976	6.0	
	2	Ø5	8		94	752		1.2
						Total+10%: 6.6		
V 5	1	Ø10	2		285	570	3.5	
	2	Ø10	2		545	1890	11.6	
	3	Ø10	2		717	1434	8.8	
	4	Ø10	2		469	938	5.8	
	5	Ø5	52		92	4784		7.5
					Total+10%: 32.7			8.3
V 6	1	Ø10	4		947	3788	23.3	
	2	Ø5	22		92	2024		3.2
	3	Ø5	20		94	1880		3.0
					Total+10%: 25.6			6.8
V 7	1	Ø10	4		284	1136	7.0	
	2	Ø5	10		94	940		1.5
					Total+10%: 7.7			1.7
V 8	1	Ø10	4		274	1096	6.8	
	2	Ø5	10		94	940		1.5
					Total+10%: 7.5			1.7
V 9	1	Ø10	4		273	1092	6.7	
	2	Ø5	10		94	940		1.5
					Total+10%: 7.4			1.7
V 10	1	Ø10	4		503	2012	12.4	
	2	Ø5	22		94	2068		3.2
					Total+10%: 13.6			3.5
V 11	1	Ø10	4		503	2012	12.4	
	2	Ø5	20		94	1880		3.0
					Total+10%: 13.6			3.3
					Ø5:	0.0	37.8	
					Ø10:	154.1	0.0	
					Total:	154.1	37.8	

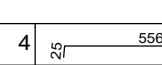

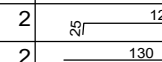

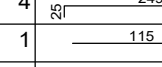

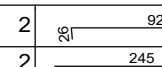
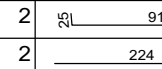
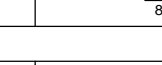
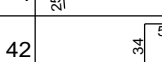
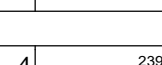

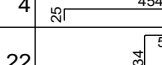
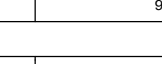
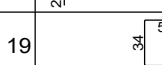
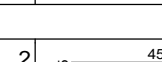

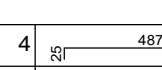
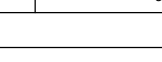

Resumo Aço Desenho de vigas	Comp. total (m)	Peso+10% (kg)	Total
CA-50 Ø10	258.3	175	175
CA-60 Ø5	241.5	42	42
Total			217

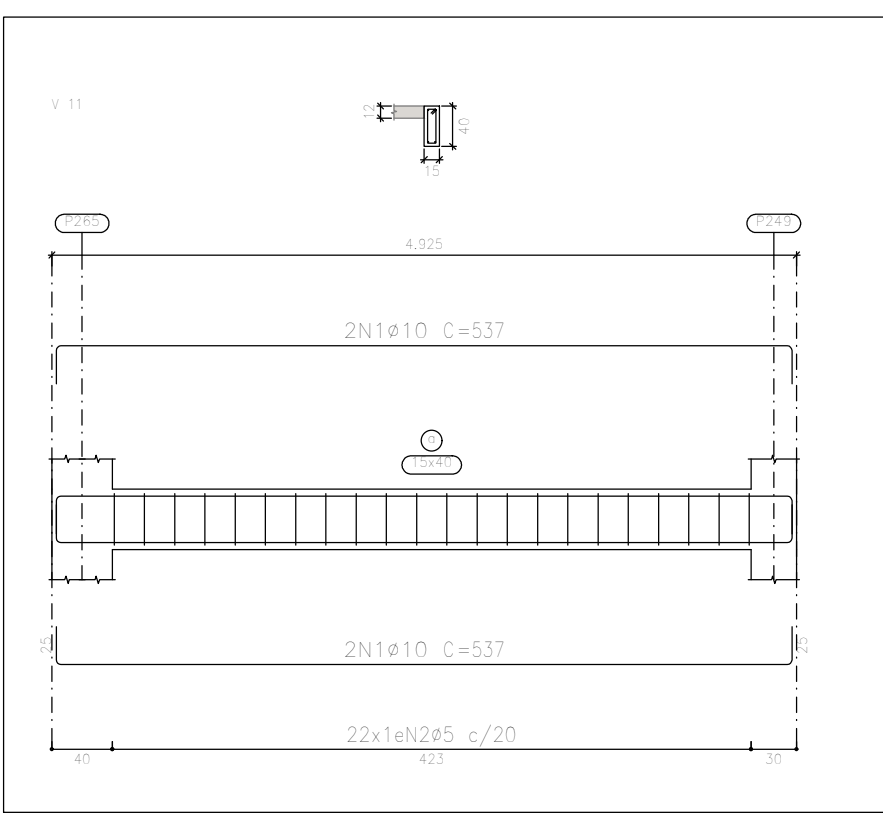
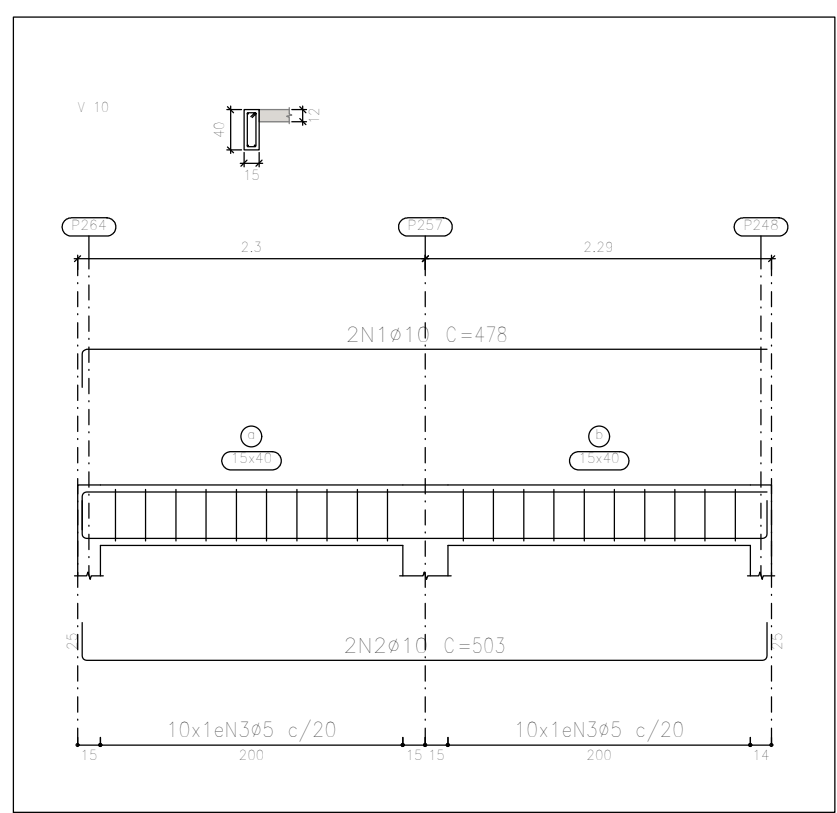
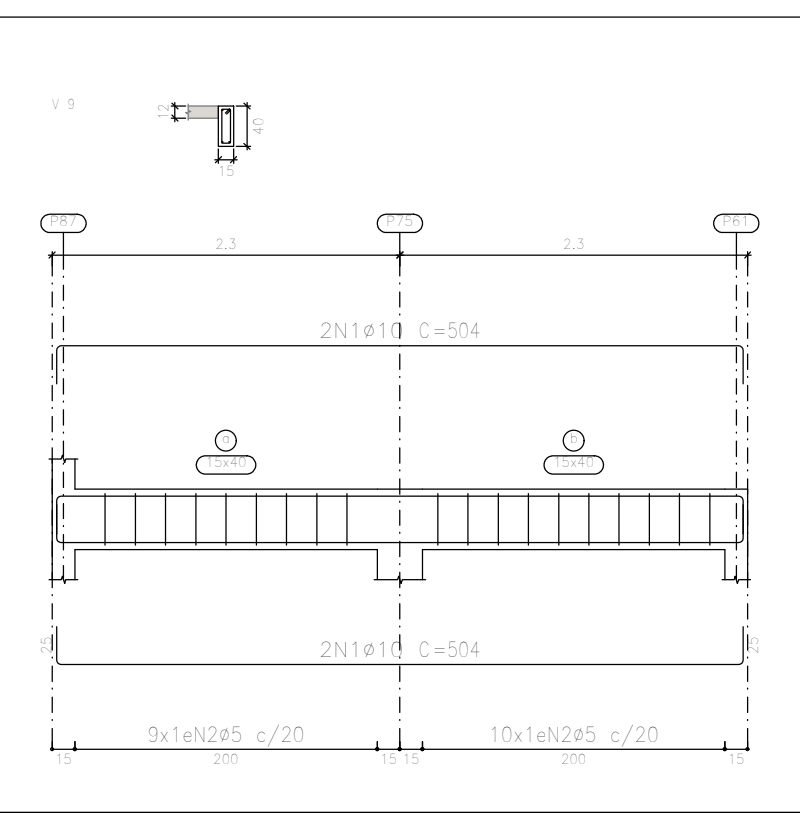
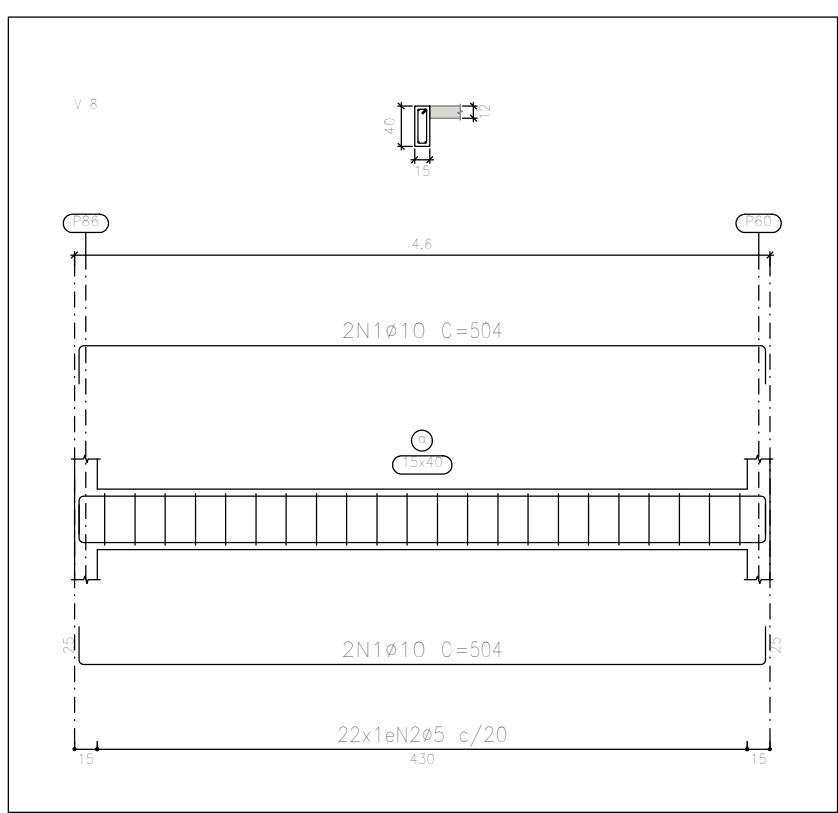
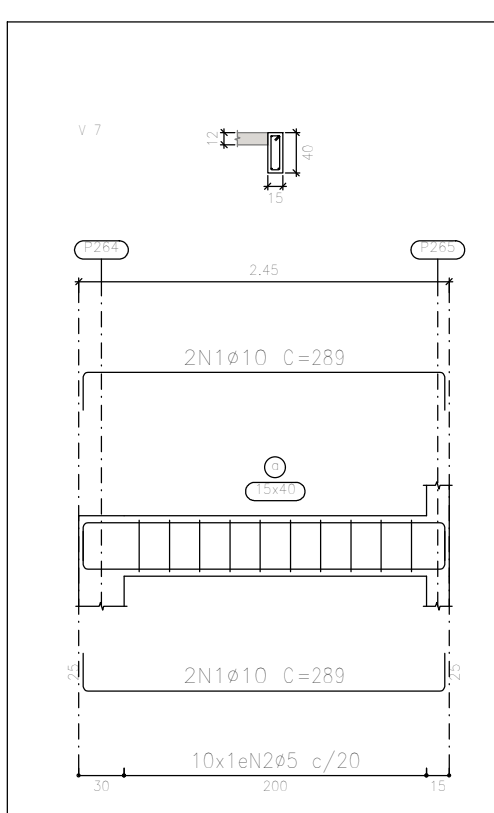
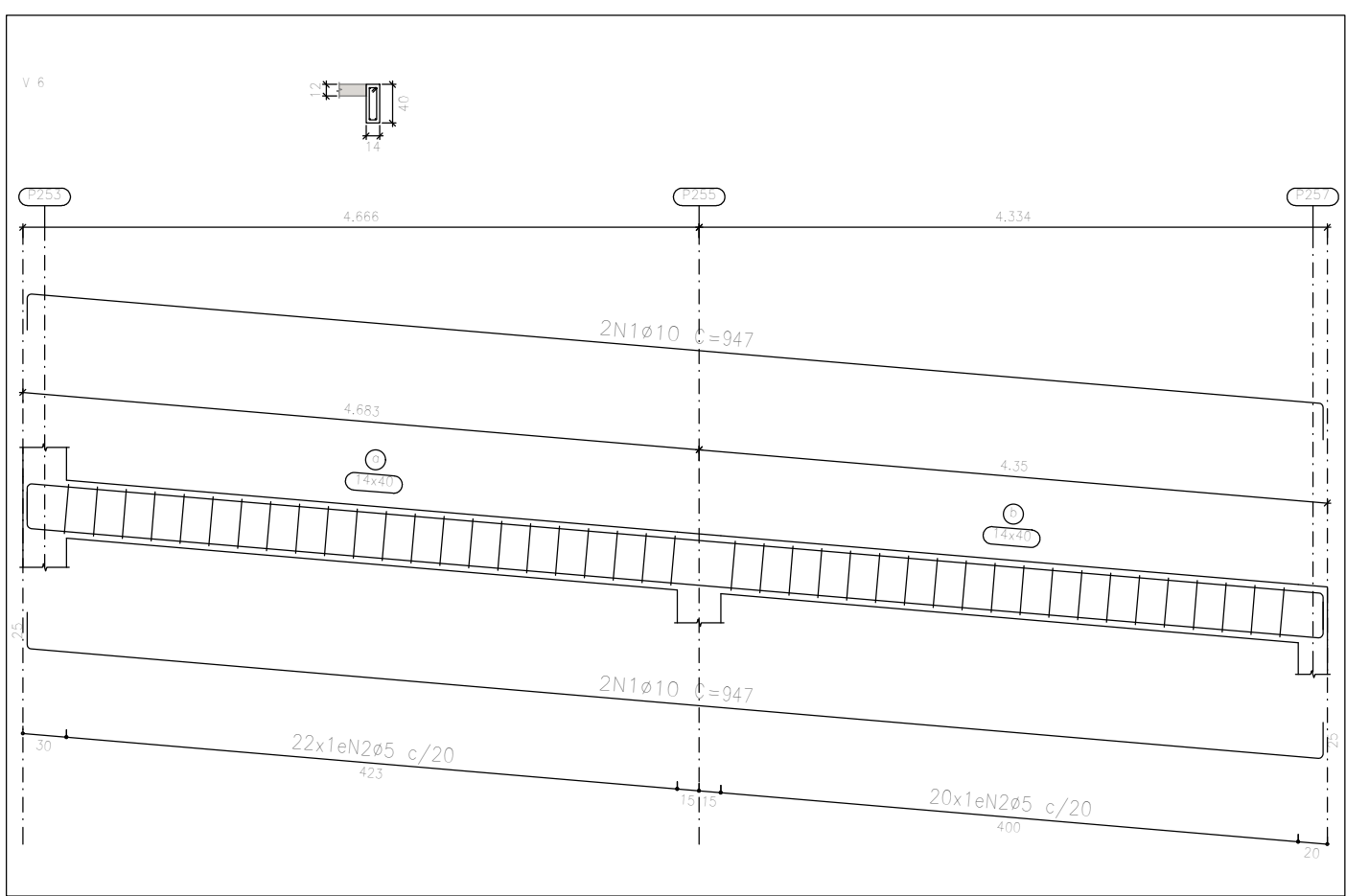
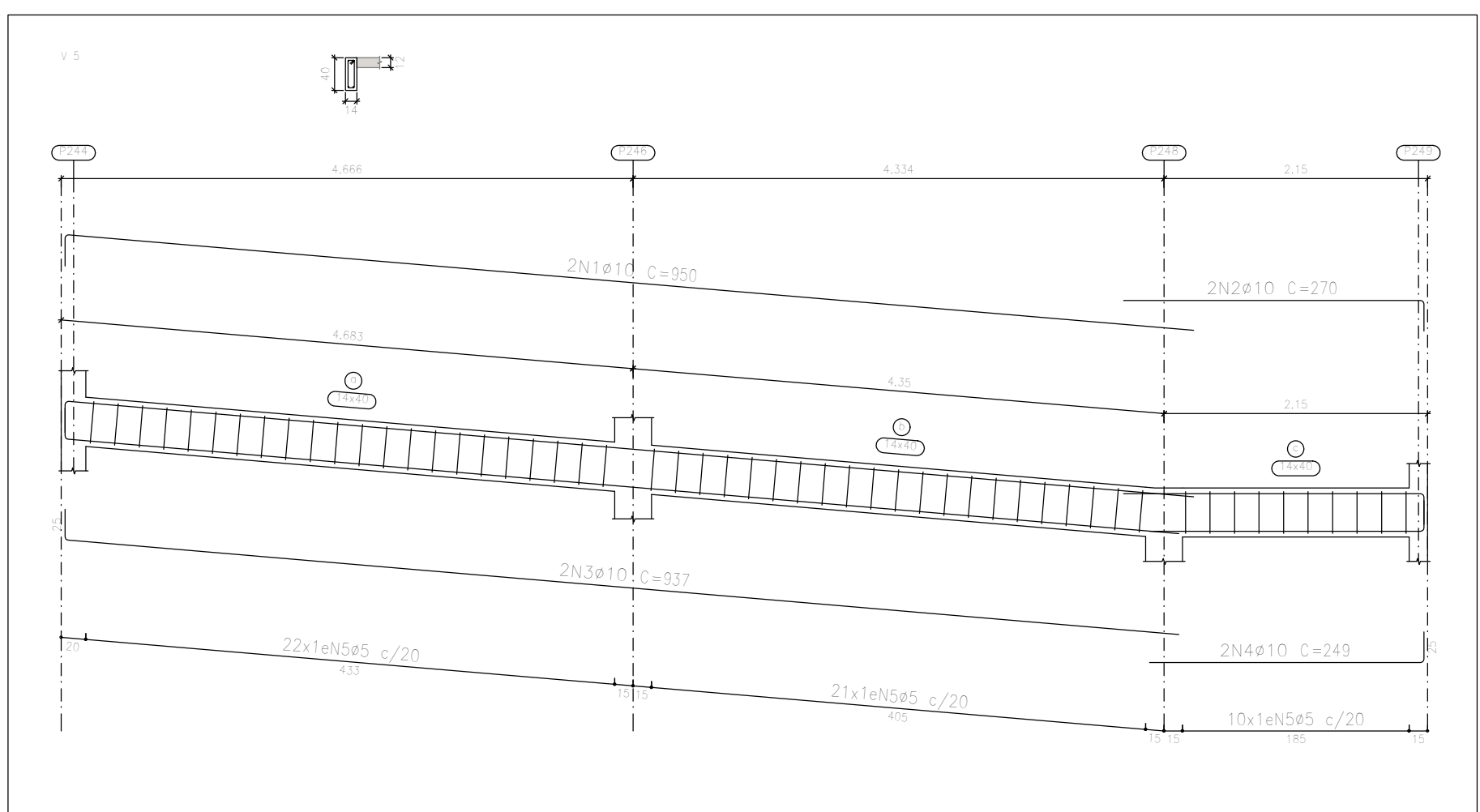
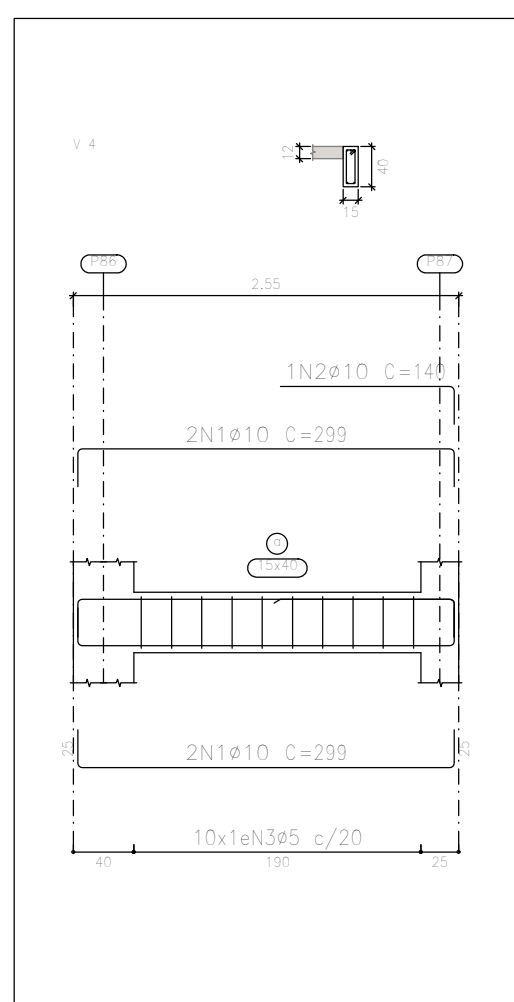
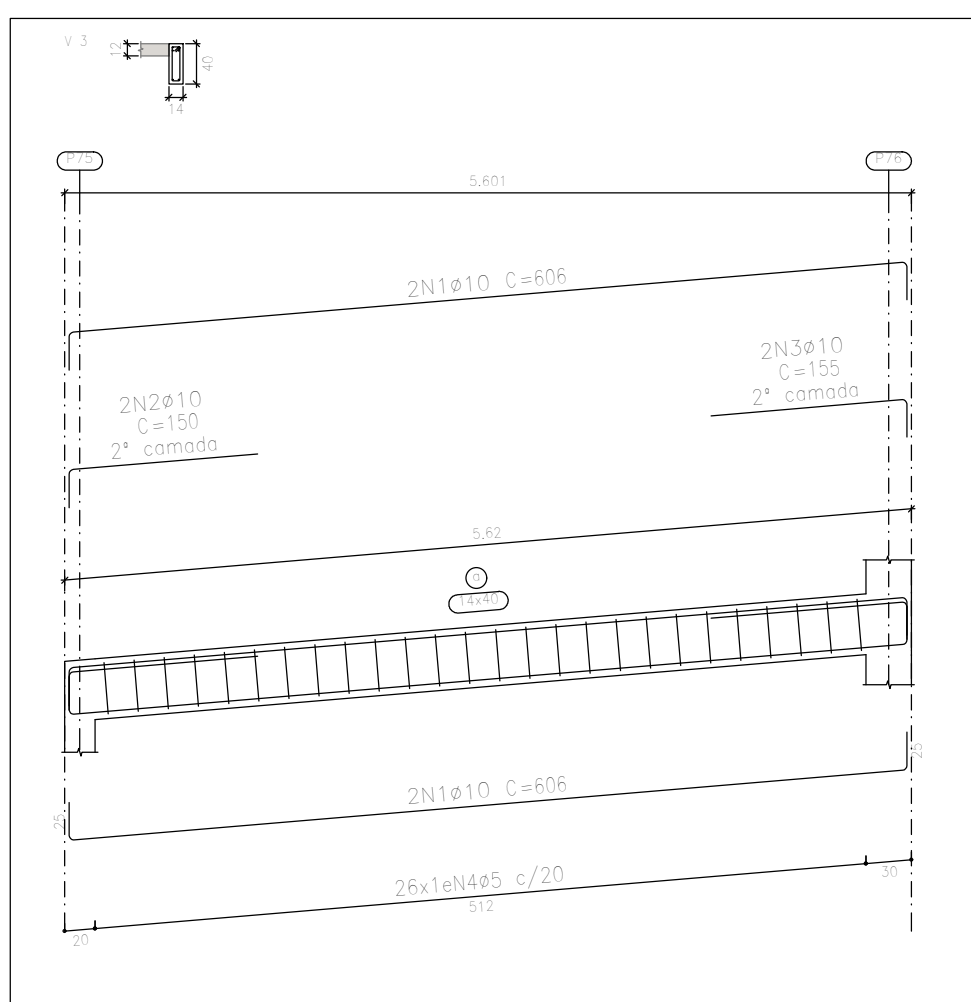
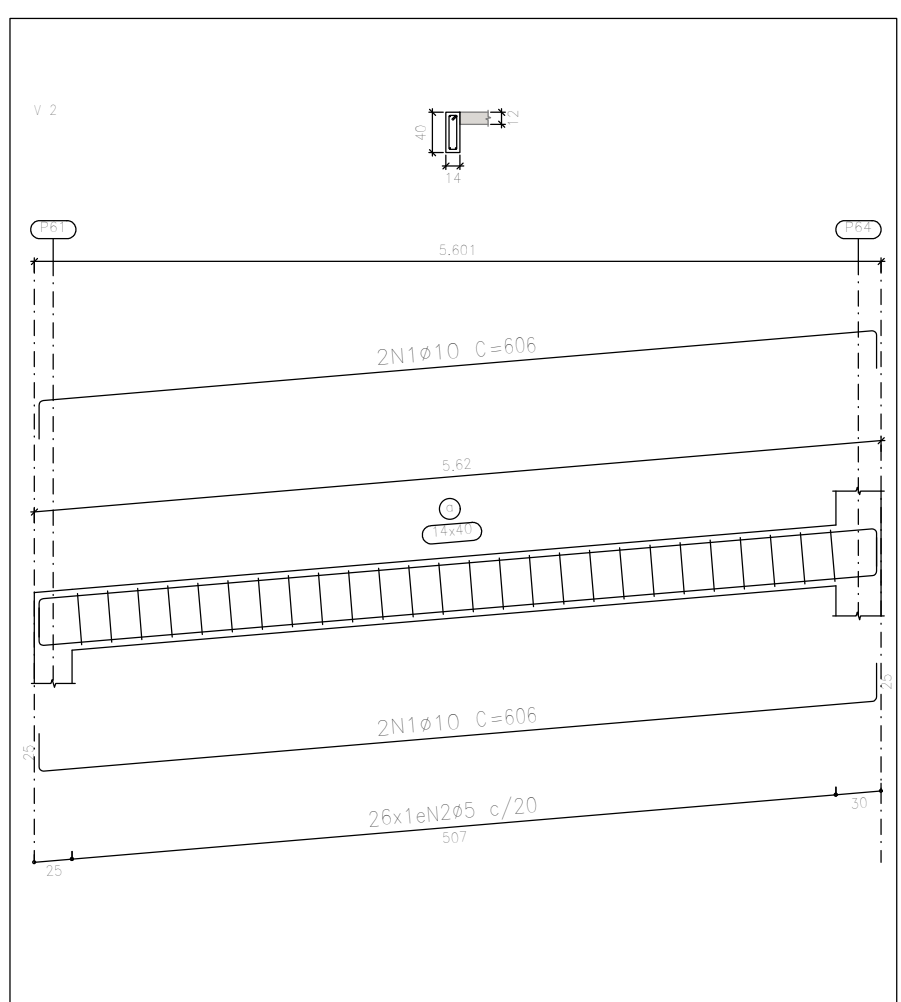
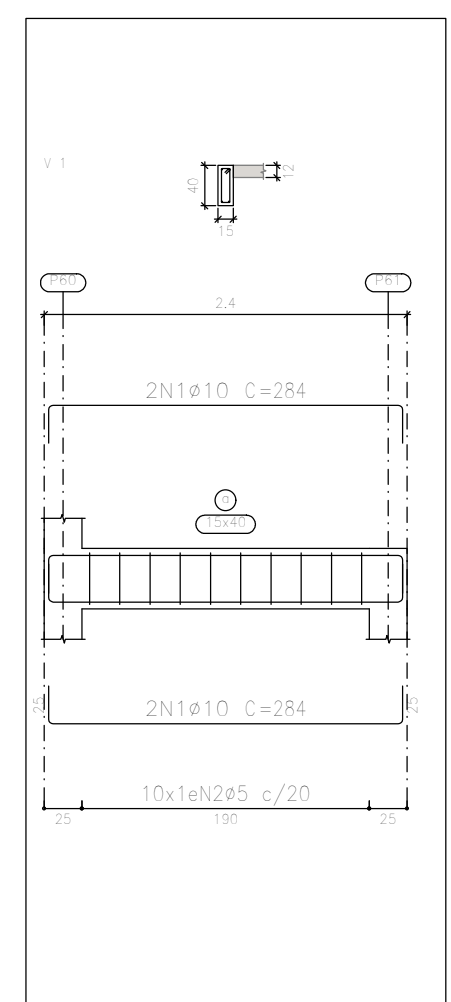
ARMAÇÃO DAS VIGAS - ELEVAÇÃO: 1.15 M
PARTE 01/01
ESCALA 1:50

ARMAÇÃO DAS VIGAS - ELEVAÇÃO: 0.40 M
PARTE 01/01
ESCALA 1:50



Resumo Aço Desenho de vigas	Comp. total (m)	Peso+10% (kg)	Total
CA-50 Ø10	227.6	154	154
CA-60 Ø5	217.4	38	38
Total			192

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 1	1	Ø10	4		284	1136	7.0	
	2	Ø5	10		94	940		1.5
	Total+10%:						7.7	1.7
V 2	1	Ø10	4		606	2424	14.9	
	2	Ø5	26		92	2392		3.8
	Total+10%:						16.4	4.7
V 3	1	Ø10	4		606	2424	14.9	
	2	Ø10	2		150	300	1.8	
	3	Ø10	2		155	310	1.9	
	4	Ø5	26		92	2392		3.8
Total+10%:						20.5		4.2
V 4	1	Ø10	4		299	1196	7.4	
	2	Ø10	1		140	140	0.9	
	3	Ø5	10		94	940		1.5
Total+10%:						9.1		1.7
V 5	1	Ø10	2		950	1900	11.7	
	2	Ø10	2		270	540	3.3	
	3	Ø10	2		937	1874	11.5	
	4	Ø10	2		249	498	3.1	
	5	Ø5	53		92	4876		7.7
Total+10%:						32.6		8.5
V 6	1	Ø10	4		947	3788	23.3	
	2	Ø5	42		92	3864		6.1
	Total+10%:						25.6	
V 7	1	Ø10	4		289	1156	7.1	
	2	Ø5	10		94	940		1.5
	Total+10%:						7.8	
V 8	1	Ø10	4		504	2016	12.4	
	2	Ø5	22		94	2068		3.2
	Total+10%:						13.6	
V 9	1	Ø10	4		504	2016	12.4	
	2	Ø5	19		94	1786		2.8
	Total+10%:						13.6	
V 10	1	Ø10	2		478	956	5.9	
	2	Ø10	2		503	1006	6.2	
	3	Ø5	20		94	1880		3.0
	Total+10%:						13.3	
V 11	1	Ø10	4		537	2148	13.2	
	2	Ø5	22		94	2068		3.2
	Total+10%:						14.5	
						Ø5:	0.0	42.1
						Ø10:	174.7	0.0
						Total:	174.7	42.1



OBSERVAÇÕES

CONSERVAÇÕES GERAIS:

- 1- DIMENSÕES EM MILÍMETROS, NUNCA EM METROS, EXCETO ONDE INDICADO O CONTRÁRIO.
- 2- ACOMPANHAR FOLHA -IMPR- COM FATOR DE REDUÇÃO 1/40 - 1/8" E MOEDA DE 1 CÉNTIMO (EU) E 28.000 MPa PARA TODOS ELEMENTOS.
- 3- DEFORMA COM RESSACAMENTO NUNCA ANTES DO 15º DIA ACOMPANHADA DE RESULTADOS DE ENSAIO.
- 4- A SOLUÇÃO DOS CARREGAMENTOS PODERÁ SER LIBERADA APÓS 12 DIAS, DATA DA CONCRETAGEM OU MEDIANTE ANÁLISE DOS RESULTADOS DE ENSAIO;
- 5- AGRESSIVIDADE AMBIENTAL (V), OBRIGATORIO RESPEITAR OS CORREIMENTOS DAS ARMADURAS, VIGAS, PILARES E ELEMENTOS EM CONTA COM O SOLO C=3 CM. LAJES C=2,5CM.
- 6- FUNDAÇÃO EM CONTA COM O SOLO, DEVERÃO SER IMPERMEABILIZADAS COM EMULSÃO ASFÁLTICA A BASE DE ÁGUA CONFORME A NBR 15575-4.
- 7- E- IMPORTANTE A CURA UNIDA DO CONCRETO POR 7 DIAS.
- 8- NENHUM FURTO OU ABERTURA EM VIGAS, PODERÃO SER FEITOS, SEM A PREVISÃO PREVIAMENTE PEL RESPONSÁVEL TECNICO DO PROJETO;
- 9- O ENLACE DE DIMENSIONAMENTO DE ACORDO COM O RELATÓRIO DE SONDADEMO FORNECIDO PELA EMPRESA PROJETO ENGENHARIA.
- 10- O ENLACE DE DIMENSIONAMENTO DE ACORDO COM O RELATÓRIO DE SONDADEMO MANUTENÇÃO DE 2 CM. ATÉ 100 CM DE GRAU DE CONTA COM O SOLO, DEVERÃO SER IMPERMEABILIZADAS COM EMULSÃO ASFÁLTICA A BASE DE ÁGUA CONFORME A NBR 15575-4.
- 11- O MÍNIMO DE 90% ENERGIAMENTO NA ORDEM DE COMPACTAÇÃO, E DESVIO DE UMIDADE MÁXIMA DE 2%, AJUSTO A FASE COM LARGURA DE 1,0 M A COMPACTAÇÃO DEVERÁ SER PROCESSADA ATRAVÉS DO USO DE PLACAS VIBRADORAS OU SAPOS MECÂNICOS, PARA EVITAR DANO À PROXIMIDADE DO CONCRETO DEVIDO.

REVISÃO	DESCRIÇÃO	TIPO	ELABORADO	VERIFICADO	DATA
00	EMISSION INICIAL	EXE	LBVM	FML	27/03/2022
01	REVISÃO 01	B	PhCA	ENC	05/10/2022

TIPOS DE EMIÇÃO	ATP - ANTEPROJETO BSC - BÁSICO EXE - EXECUTIVO	APV - APROVADO PCT - P/ CONSTRUÇÃO ASB - "AS BUILT"	CNC - CANCELADO
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PROJETA
ENGENHARIA

PROJETA CONSULTORIA E SERVIÇOS

ALAMEDA OSCAR NIEMAYER, Nº500, SALAS 503 E 507 – VALE DO SERENO
NOVA LIMA-MG – CEP.: 34.006-056
TEL.: (31) 3347-4405 / (31) 3347-7079 / (31) 3571-1920
EMAIL: contato@projetaengenharia.com.br


 REALIZAÇÃO:
PREFEITURA MUNICIPAL DE
CONGONHAS
 RUA PRESIDENTE JUSCELINO KUBISCHKE, Nº135 – CENTRO
 CONGONHAS-MG – CEP.: 36.415-1000
 TEL.: (31) 3731-1300

PROJETO ESTRUTURAL DA NOVA ESCOLA FORTUNATA

RUA TRÊS, S/Nº, BAIRRO PASCHOAL VARTULI, CONGONHAS-MG - CEP. 36415-000

PROJETO ESTRUTURAL

AUTORIA DO PROJETO

CONTRATANTE DO PROJETO

DANILO VITOR
SILVA
CREA - 201381/D

RESPONSÁVEL DA CONTRATANTE

DATA:
OUTUBRO/2020

ESCALA:
INDICADA

TÍTULO DOS DESENHOS:
ARMAÇÃO DAS VIGAS - ELEVÇÃO: 0.40 M PARTE 01/0
ARMAÇÃO DAS VIGAS - ELEVÇÃO: 1.15 M PARTE 01/0

PRANCHA: 18/

DIREITOS AUTORAIS RESERVADOS; PROIBIDO REPRODUÇÃO, DIVULGAÇÃO OU ALTERAÇÃO SEM ORDEM EXPRESSA DO AUTOR.	TÍTULO DOS DESENHOS: PRJEXE-EST-CGN-ENF-0101-EDIFICAÇÃO-REV01
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PROJETA - A1 ALONGADO