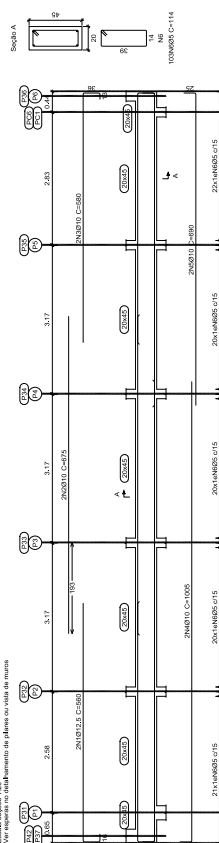
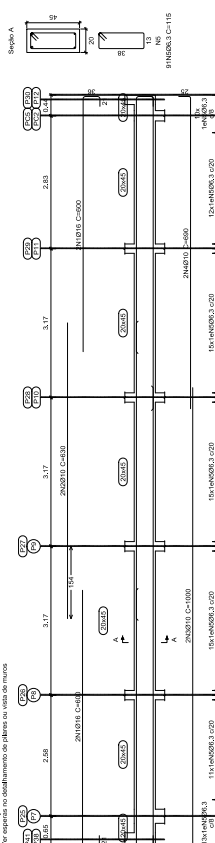


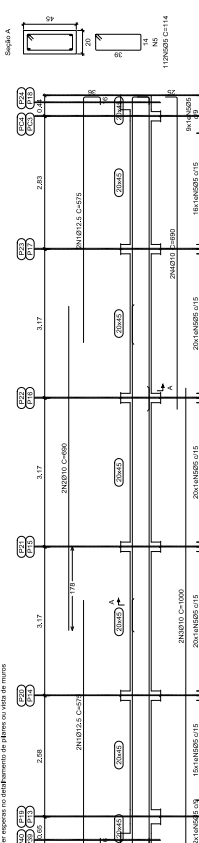
$V = 1/6$
Escala vigas 1:50
Escala seções 1:20
Verificar se há detalhamento de planos ou vista de muros



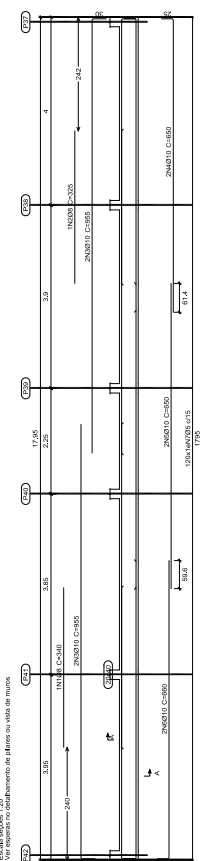
2=V 5
scala vigas 1:50
scala sezioni 1:20
per espasas no dotallamento de pilares ou vista de muros



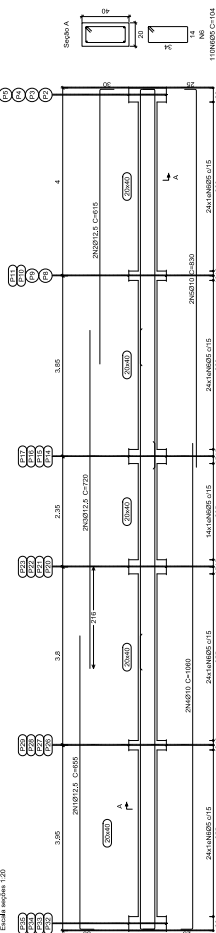
3m/4
escala vigas 1:50
escala seções 1:20
ver esperas no detalhamento de pilares ou vista de muros



V.7
Escala vigas 1:50
Escala seções 1:20
Ver espessas no detalhamento de pilares ou vista de muros

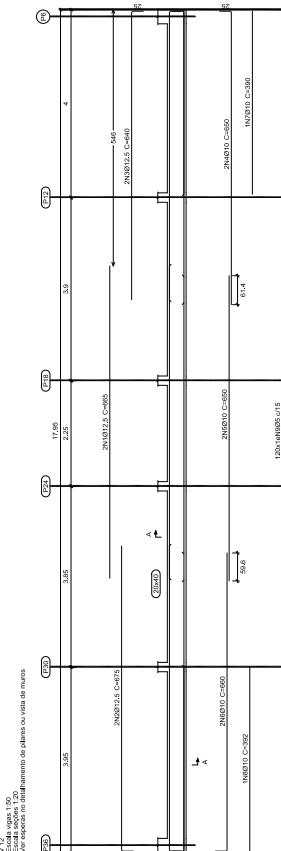


V 8mV 9mV 10mV 11
Escala véigas 1:50
Escala seções 1:20



VIGAS TÉRREO
ESCALA: 1 / 50

12
Each a year 1:50



Térreo
Desenho de vigas
Concreto: C30, usinado
Aço das barras: CA-50 e CA-60
Aço dos estribos: CA-50 e CA-60
Escala vigas 1:50
Escala seções 1:20

Resumo Aço Desenho de vigas	Comp. total (m)	Peso+10% (kg)	Total
CA-50	Ø6.3	211.1	57
	Ø8	6.7	3
	Ø10	581.6	394
	Ø12.5	267.2	283
	Ø16	48.0	83
CA-60	Ø5	1197.4	207
Total			1027

Elemento	Pos.	Quant.	Comp. Total	Comp. Total	Comp. Total
			(kg)	(kg)	(kg)
V 101.6	1	0.012	2	500	1126
	2	0.010	2	500	1105
	3	0.010	2	500	1105
	4	0.010	2	500	1105
	5	0.010	2	500	1105
	6	0.010	2	500	1105
Total 100%			6	3000	6616
V 204.9	1	0.021	4	1000	2049
	2	0.010	4	1000	1000
	3	0.010	4	1000	1000
	4	0.010	4	1000	1000
	5	0.023	9	11056	259
	6	0.010	4	1000	1000
Total 100%			25	22000	3259
V 309.4	1	0.012	4	575	2206
	2	0.010	4	500	1925
	3	0.010	4	500	1925
	4	0.010	4	500	1925
	5	0.010	4	500	1925
	6	0.015	115	142768	59
Total 100%			125	150000	2259
V 7	1	0.08	1	340	145
	2	0.010	4	500	1925
	3	0.010	4	500	1925
	4	0.010	4	500	1925
	5	0.010	4	500	1925
	6	0.010	4	500	1925
Total 100%			21	3400	1450
V 8 e 9 e 10 e 11	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 12	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 13	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 14	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 15	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 16	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 17	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 18	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 19	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 20	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 21	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 22	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 23	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 24	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 25	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 26	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 27	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 28	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 29	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 30	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 31	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 32	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 33	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 34	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 35	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 36	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 37	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 38	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 39	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 40	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 41	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 42	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 43	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 44	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 45	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3	0.012	2	500	1126
	4	0.012	2	500	1126
	5	0.012	2	500	1126
	6	0.010	2	500	1105
Total 100%			12	6000	2650
V 46	1	0.012	2	500	1126
	2	0.012	2	500	1126
	3				

CONVENÇÕES:

- DESENHO AS FORMAS ESTÃO DESENHADAS
- UNIDADES DE MEDIDA
 - PLANTA BARRA CORTE E DETALHES EM CENTÍMETROS (cm)
 - VAZOS DE DETALHAMENTOS DE VOGAS EM METROS (m)
 - COTA DE LOCAÇÃO DE PLAJARES EM CENTÍMETROS (cm)

SOBRECARGAS CONSIDERADAS: (kN/m²)

TIPO DE CARGA	VALOR	UNIDADE
CARGA PERMANENTE (G)	- ALVENARIA DE BLOCO DE CONCRETO	14,00 KN/m ²
	- ARGAMASSA DE C.A. CIMENTO E AREIA	19,00 KN/m ²
	- CONCRETO SIMPLES	24,00 KN/m ²
	- CONCRETO ARMADO	25,00 KN/m ²
	- PISO ESPECÍFICO ADJACENTE 14,00 KN/m ²	
CARGA VARIÁVEL (Q)	- PISO ESPECÍFICO ADJACENTE 19,00 KN/m ²	
	- PISO ESPECÍFICO ADJACENTE 24,00 KN/m ²	
	- PISO ESPECÍFICO ADJACENTE 25,00 KN/m ²	

CARGA ACIDENTAL (a)	CONTRATO
- TALE (SEM ACESSO A PESSOAS)	3.0 INAT
- LAJE (COM ACESSO A PESSOAS)	

NOTAS:

- 1) CONCRETO C16/16 $\geq 30,0 \text{ MPa}$ FATOR $\alpha = 0,95$ (NIT 01 CLASSE DE AGRESSIVIDADE AMBIENTAL II)
- 2) PLANAR E DE CORTA COM CONTROLO DO CONCRETO, COM VISTAS A DIMINUIR OS EFEITOS DA RETENÇÃO HUMIDIFICÁDICA
- 3) MOLAR FORMAS ANTES DE CONCRETAR
- 4) NÃO PERMITIR CONTAMINAÇÃO DAS ARMADURAS COM BARRO OU OUTRAS IMPUREZAS
- 5) COBRIMENTO DAS ARMADURAS:
 - PARA CLASSE C16/16: $\geq 25 \text{ mm}$ (para $f_{ctd} \leq 4,5 \text{ cm}$)
 - PARA CLASSE C20/20: $\geq 30 \text{ mm}$
 - PARA CLASSE C25/25: $\geq 40 \text{ mm}$

TOODAS AS MEDIDAS E NÍVEIS DEVERÃO SER CONFERIDAS NO LOCAL.

[illegible]