PLANTA DE VIGAS 2º PISO

03/06

FOLHA:

PROJETO ESTRUTURAL

ASSUNTO:

PREFEITO MUNICIPAL: _____ PABLO PE OLIVEIRA PENACHO

ESCALA: 1/50

DATA: 20/12/2011

RESP. TÉCNICO: _____ ENGENHEIRO JOÃO BATISTA DURGANTE CONCEA 42.629-RS

DESENHO: JOÃO

ENDEREÇO: AVENIDA DOS BANDEIRANTES, Nº 78 - VILA BRÁS

MODIFICAÇÃO DE PROJETO:

PROJETO DE AMPLIAÇÃO - EMEF BARÃO DE RIO BRANCO

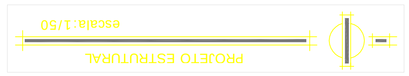
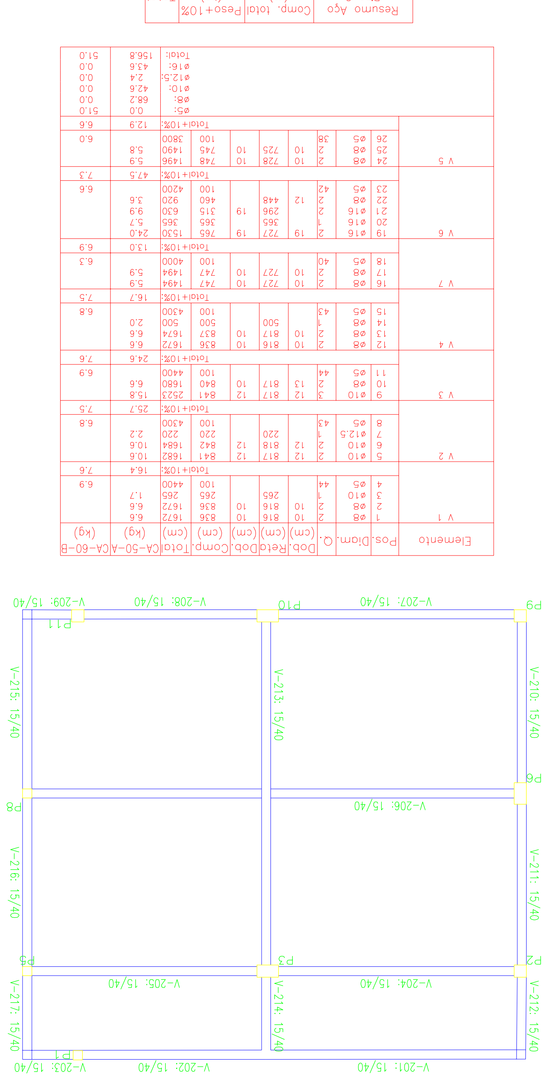
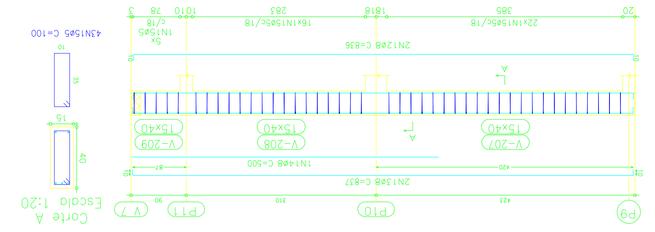
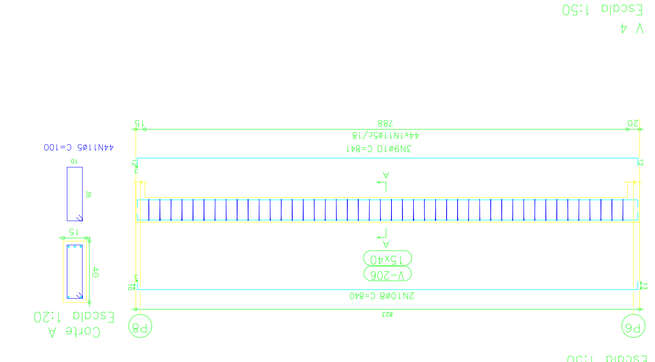
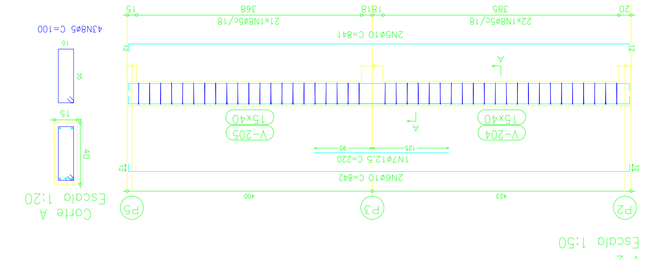
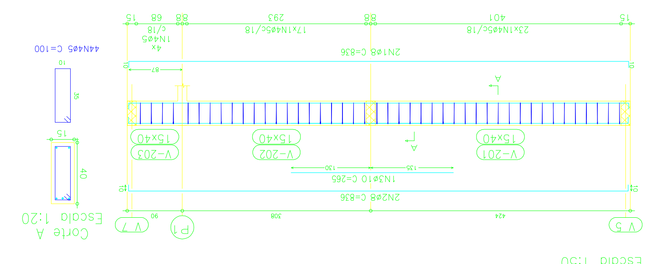
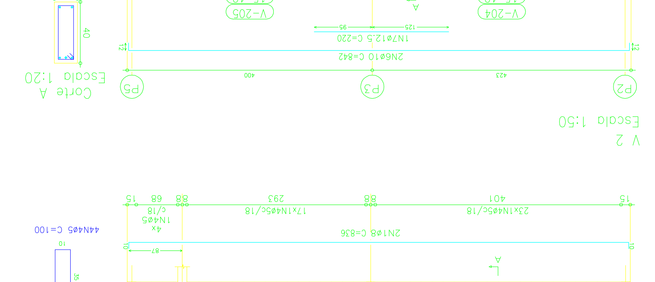
ENGENHARIA E PROJETOS LTDA

CLP ENGENHARIA E PROJETOS LTDA
CNPJ/CEA 146.504/0001-39
RUA DESPACHO SANTO, 70 - CAMPINADAS-RS
RESP. TÉC.
ENGENHEIRO JOÃO BATISTA DURGANTE COUTO -
CREA 42.629-RS
clpengenharia@gmail.com

PROJETO ESTRUTURAL

escala 1:50

Fck=18Mpa
Concreto C20, em geral
Fundação
Aço: CA-50-A e CA-60-B
Recob. vigas: 1.50
Recob. pilares: 1.20
Pilares de apoio
Pilar 2

Resumo Aço Pilar 2 Vigas	Comp. (m)	Total (kg)	Perda +10%	Total
CA-50-A ø8	157.6	63		157
ø10	61.5	43		
ø12.5	2.2	2		
ø16	25.3	44		
CA-60-B ø5	294.0	51		208

Elemento	Pos.	Diam.	C. (cm)	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
V 1	1	ø8	2	10	816	10	836	1672	6.6	
	2	ø8	2	10	816	10	836	1672	6.6	
	3	ø10	2	10	816	10	836	1672	10.4	
	4	ø5	44		265		100	4600	1.7	6.9
							10%+	16.4		7.6
V 2	5	ø10	2	12	817	12	841	1683	10.4	
	6	ø10	2	12	817	12	841	1683	10.4	
	7	ø12.5	1	12	818	12	842	1684	10.4	
	8	ø5	43		220		100	4300	2.2	6.9
							10%+	25.7		7.5
V 3	9	ø10	2	12	817	12	841	2523	15.8	
	10	ø8	2	10	817	10	840	1680	6.6	
	11	ø5	44		265		100	4600	1.7	6.9
							10%+	25.7		7.5
V 4	12	ø8	2	10	816	10	836	1672	6.6	
	13	ø8	2	10	817	10	837	1674	6.6	
	14	ø8	4		500		100	4200	2.0	6.8
	15	ø5	43							
							10%+	16.7		7.5
V 6	19	ø16	2	19	727	19	765	1530	24.0	
	20	ø16	1		365		365	365	5.7	
	21	ø16	2		296	19	315	630	9.9	
	22	ø8	2	12	446		460	920	3.6	
	23	ø5	42				100	4200		6.6
							10%+	47.5		7.3
V 5	24	ø8	2	10	728	10	748	1496	5.9	
	25	ø8	2	10	725	10	745	1490	5.8	
	26	ø5	38				100	3800		6.0
							10%+	12.9		6.6
		ø5						0.0	0.0	51.0
		ø8						682	0.0	
		ø10						42.6	0.0	
		ø12.5						2.4	0.0	
		ø16						41.6	0.0	
		Total						168	51.0