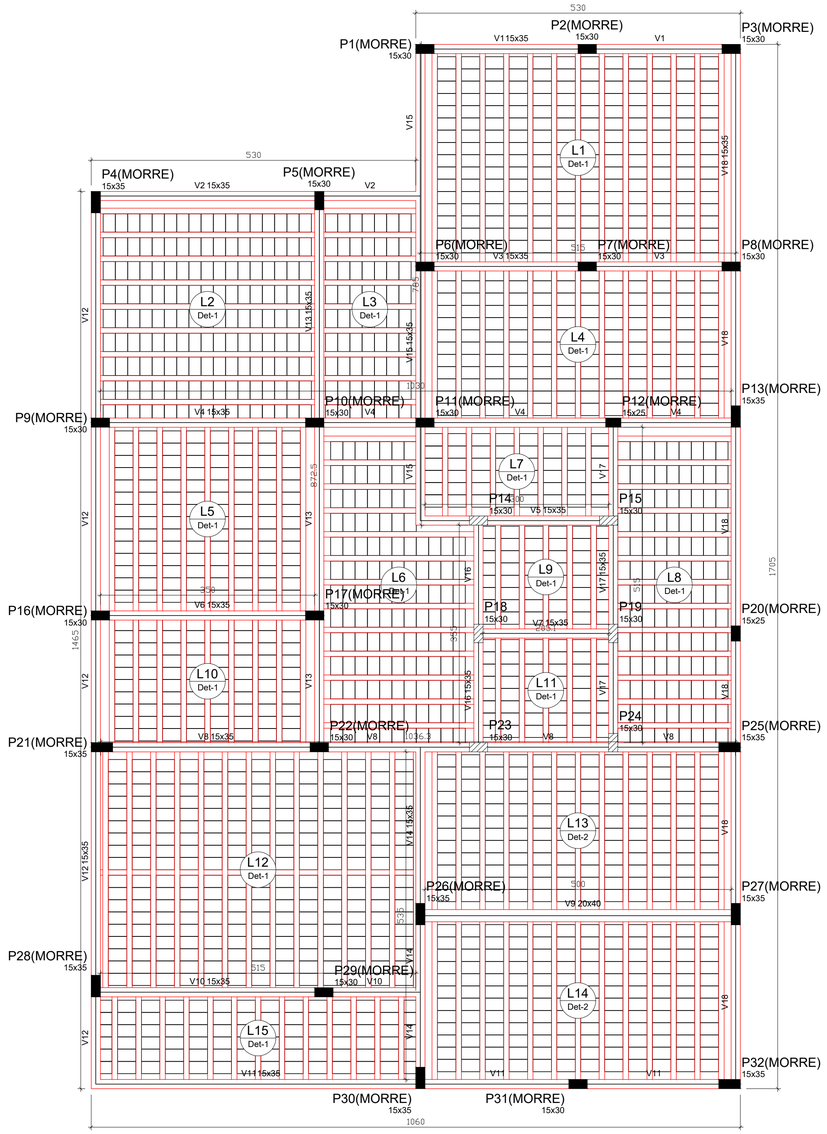


Forma do pavimento
Cobertura
escala 1:50

Vigas			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
V1	15x35	0	290
V2	15x35	0	290
V3	15x35	0	290
V4	15x35	0	290
V5	15x35	0	290
V6	15x35	0	290
V7	15x35	0	290
V8	15x35	0	290
V9	20x40	0	290
V10	15x35	0	290
V11	15x35	0	290
V12	15x35	0	290
V13	15x35	0	290
V14	15x35	0	290
V15	15x35	0	290
V16	15x35	0	290
V17	15x35	0	290
V18	15x35	0	290

Blocos de enchimento						
Detalhe	Tipo	Nome	Dimensões(cm)			Quantidade
			hb	bx	by	
1/2	Lajota cerâmica	B8/30/20	8	30	20	1738

Lajes								
Nome	Tipo	Dados				Sobrecarga (kgf/m²)		
		Altura (cm)	Elevação (cm)	Nível (cm)	Peso próprio (kgf/m²)	Adicional	Acidental	Localizada
L1	Treliçada 1D	13	0	290	282	50	150	-
L2	Treliçada 1D	13	0	290	282	50	150	-
L3	Treliçada 1D	13	0	290	282	50	150	-
L4	Treliçada 1D	13	0	290	282	50	150	-
L5	Treliçada 1D	13	0	290	282	50	150	-
L6	Treliçada 1D	13	0	290	282	50	150	-
L7	Treliçada 1D	13	0	290	282	50	150	-
L8	Treliçada 1D	13	0	290	282	50	150	-
L9	Treliçada 1D	13	0	290	282	50	150	-
L10	Treliçada 1D	13	0	290	282	50	150	-
L11	Treliçada 1D	13	0	290	282	50	150	-
L12	Treliçada 1D	13	0	290	283	50	150	-
L13	Treliçada 1D	15	0	290	332	50	150	-
L14	Treliçada 1D	15	0	290	332	50	150	-
L15	Treliçada 1D	13	0	290	282	50	150	-

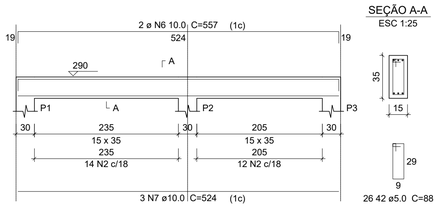
Características dos materiais	
fck (kgf/cm²)	Ecs (kgf/cm²)
250	238000

Pilares			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
P1	15 x 30	0	290
P2	15 x 30	0	290
P3	15 x 30	0	290
P4	15 x 35	0	290
P5	15 x 30	0	290
P6	15 x 30	0	290
P7	15 x 30	0	290
P8	15 x 30	0	290
P9	15 x 30	0	290
P10	15 x 30	0	290
P11	15 x 30	0	290
P12	15 x 25	0	290
P13	15 x 35	0	290
P14	15 x 30	0	290
P15	15 x 30	0	290
P16	15 x 30	0	290
P17	15 x 30	0	290
P18	15 x 30	0	290
P19	15 x 30	0	290
P20	15 x 25	0	290
P21	15 x 35	0	290
P22	15 x 30	0	290
P23	15 x 30	0	290
P24	15 x 30	0	290
P25	15 x 35	0	290
P26	15 x 35	0	290
P27	15 x 35	0	290
P28	15 x 35	0	290
P29	15 x 30	0	290
P30	15 x 35	0	290
P31	15 x 30	0	290
P32	15 x 35	0	290

Legenda dos Pilares
Pilar que morre
Pilar que passa
Pilar que nasce
Pilar com mudança de seção

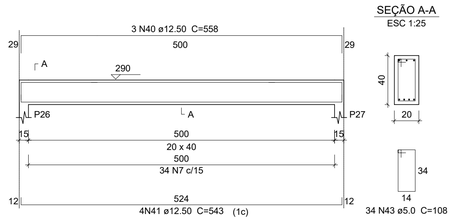
V1 a V18 (menos V9)

ESC 1:50

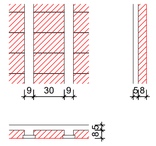


V9

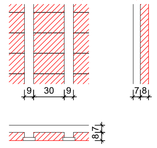
ESC 1:50



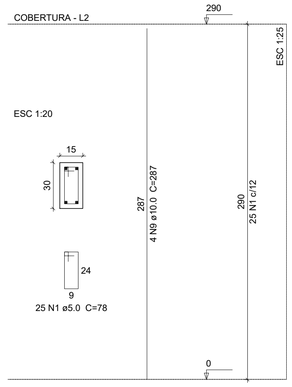
Detalhe 1 (esc. 1:30)



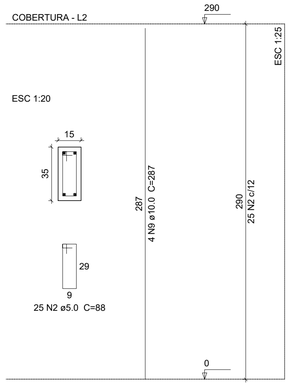
Detalhe 2 (esc. 1:30)



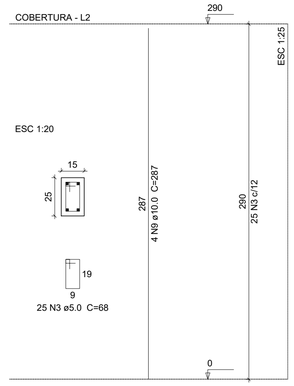
P1=P2=P3=P5=P6=P7=P8=P9=P10=P11=P16=P17 =P22=P29=P31



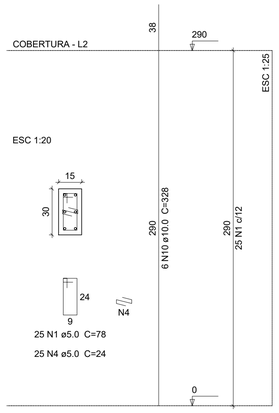
P4=P13=P21=P25=P30=P32



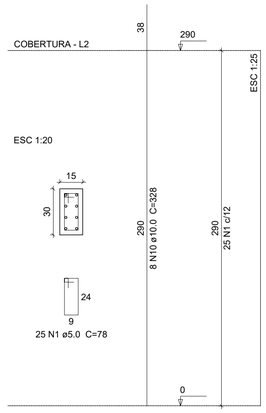
P12=P20



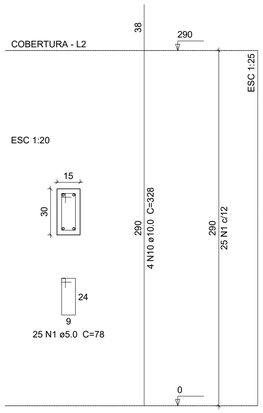
P14



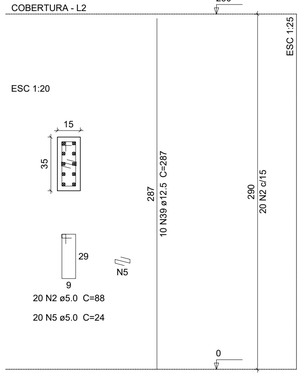
P15



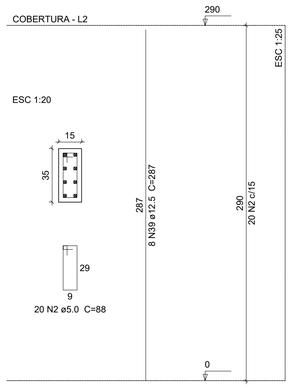
P18=P19=P23=P24



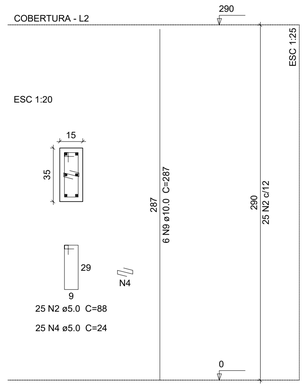
P26



P27



P28



Relação do aço

V1,V2,V3,V4,V5,V6,V7,V8,V9,V10,V11,V12,V13,V14,V15, V16,V17 e V18

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	100	78	7800
	2	5.0	90	88	7920
	3	5.0	25	68	1700
CA50	4	5.0	50	24	1200
	5	5.0	20	24	480
	6	10.0	2	123,22	246,44
	7	10.0	3	123,22	369,66
	9	10.0	18	287	5166
	10	10.0	18	328	5904
	39	12.5	18	287	5166
	40	12.5	3	558	1674
	41	12.5	4	543	2172
	42	5.0	685	88	60280
	43	5.0	34	108	3672

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	10.0	995.44	614.19
	12.5	89,80	86.47
CA60	5.0	1295.32	199.48
PESO TOTAL			
CA50	700.66		
CA60	199.48		

Vol. de concreto total (C-25) = 10.88 m³
Área de forma total = 38.35 m²

PREFEITURA MUNICIPAL DE PINHAL GRANDE - RS

OBRA
CONSTRUÇÃO DO NOVO CRAS

ENDEREÇO
Rua 15 de Novembro, Bairro Limeira, Pinhal Grande (RS)

PLANTA DE FORMAS, VIGAS E LAJE COBERTURA

PREFEITO MUNICIPAL
LUCAS MICHELON

RESPONSÁVEL TÉCNICO
Engenheira Civil Kelli Manfio - CREA RS230615

DATA	ESCALA	ÁREA	PRANCHA	DESENHO
agosto/ 2023	Indicada	168,00m²	03/04	