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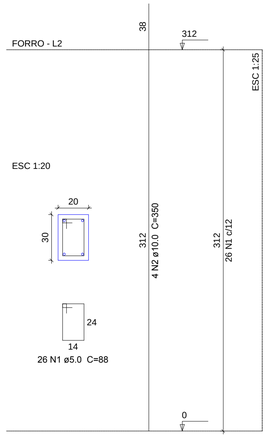

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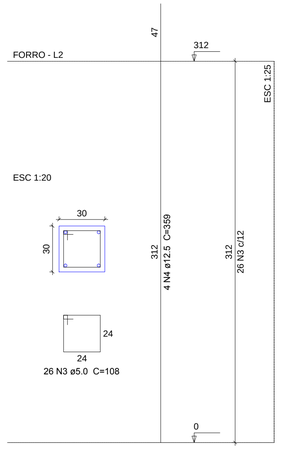

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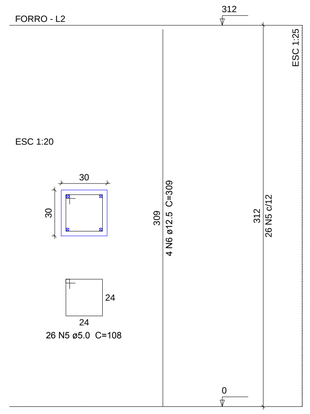
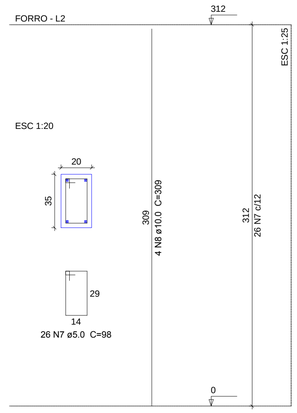


P15



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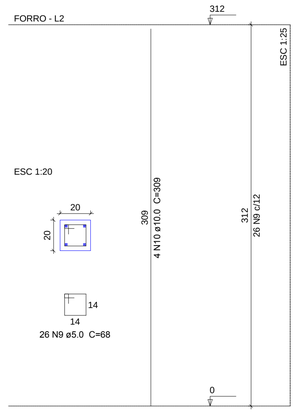
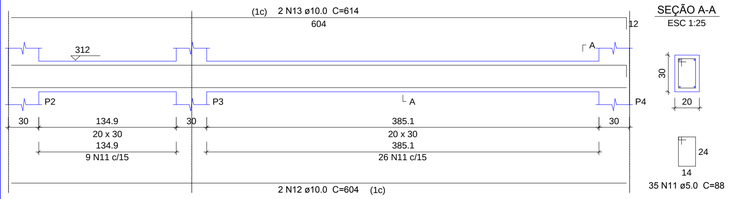
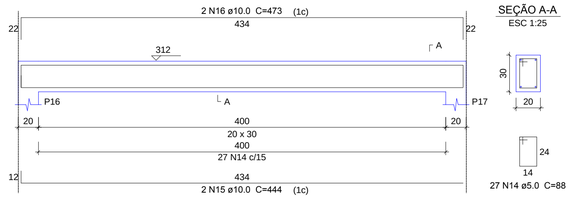


V1
ESC 1:30



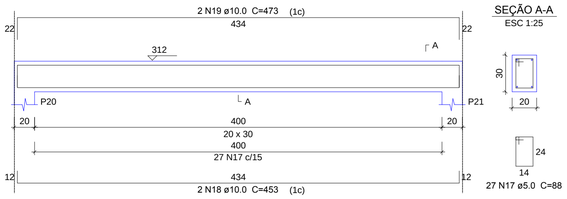
SEÇÃO A-A
ESC 1:25

V2
ESC 1:30



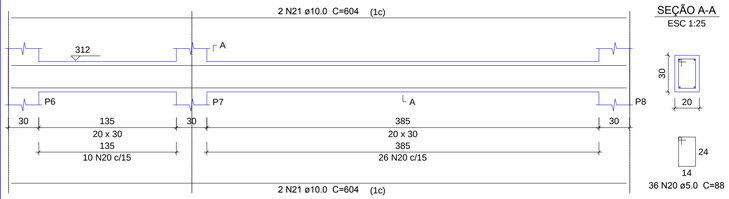
SEÇÃO A-A
ESC 1:25

V3
ESC 1:30



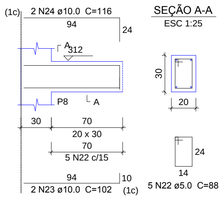
SEÇÃO A-A
ESC 1:25

V4
ESC 1:30



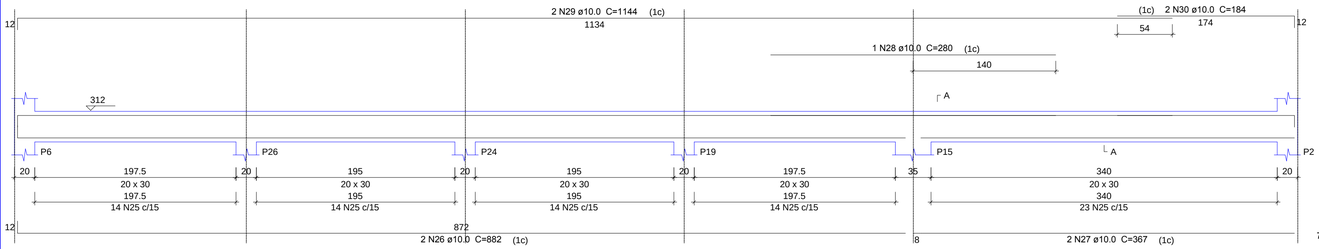
SEÇÃO A-A
ESC 1:25

V5
ESC 1:30

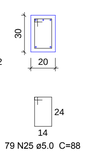


SEÇÃO A-A
ESC 1:25

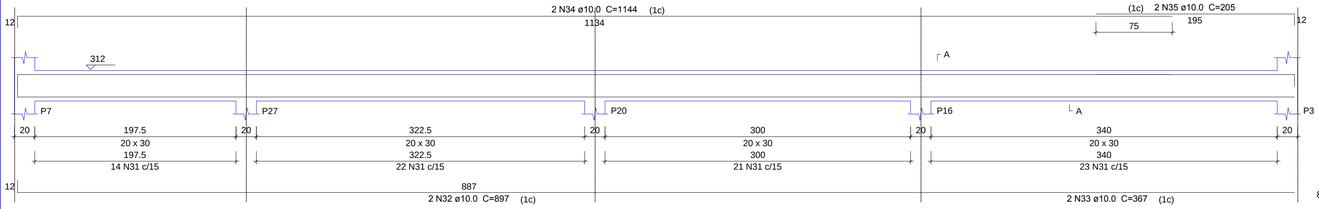
V6
ESC 1:30



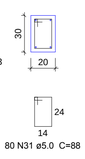
SEÇÃO A-A
ESC 1:25



V7
ESC 1:30



SEÇÃO A-A
ESC 1:25



Relação do aço

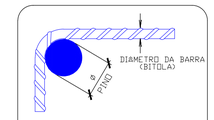
ELEMENTO	AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
12xP1	CA60	1	5.0	312	88	27456
	CA50	2	10.0	48	350	16800
5xP9	CA60	3	5.0	130	108	14040
	CA50	4	12.5	20	359	7180
6xP10	CA60	5	5.0	156	108	16848
	CA50	6	12.5	24	309	7416
P15	CA60	7	5.0	26	98	2548
	CA50	8	10.0	4	309	1236
8xP16	CA60	9	5.0	208	68	14144
	CA50	10	10.0	32	309	9888
V1	CA60	11	5.0	35	88	3080
	CA50	12	10.0	2	604	1208
	CA50	13	10.0	2	614	1228
V2	CA60	14	5.0	27	88	2376
	CA50	15	10.0	2	444	888
	CA50	16	10.0	2	473	946
V3	CA60	17	5.0	27	88	2376
	CA50	18	10.0	2	453	906
	CA50	19	10.0	2	473	946
V4	CA60	20	5.0	36	88	3168
	CA50	21	10.0	4	604	2416
V5	CA60	22	5.0	5	88	440
	CA50	23	10.0	2	102	204
	CA50	24	10.0	2	116	232
V6	CA60	25	5.0	79	88	6952
	CA50	26	10.0	2	882	1764
	CA50	27	10.0	2	367	734
	CA50	28	10.0	1	280	280
	CA50	29	10.0	2	1144	2288
	CA50	30	10.0	2	184	368
V7	CA60	31	5.0	80	88	7040
	CA50	32	10.0	2	897	1794
	CA50	33	10.0	2	367	734
	CA50	34	10.0	2	1144	2288
	CA50	35	10.0	2	205	410

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	10.0	475.6	293.2
	12.5	146	140.6
CA60	5.0	1004.7	154.9
PESO TOTAL			
CA50	433.8		
CA60	154.9		

Vol. de concreto total (C-25) = 9.38 m³
Área de forma total = 139.78 m²

PINO DE DOBRAMENTO



BITOLA (mm)	(ø)=DIAM. (mm)
ø 6.3	32
ø 8.0	40
ø 10.0	50
ø 12.5	63
ø 16.0	80
ø 20.0	160
ø 25.0	200

DOBRAS ARMS. LONGITUDINAIS

NOTAS:

DESENHO ENVIADO
DATA: 09/04/2018
☐ PARA APROVAÇÃO
☐ PARA ORÇAMENTO
■ PARA EXECUÇÃO
☐

REVISÃO	DATA	DESCRIÇÃO	DES.	VERIF.
00	23/05/2018	PARA EXECUÇÃO	GILSON	GILSON

GILSON JOSÉ GUIDOTTI Engº civil CREA 5069715818
FELIPE LUIZ MORETTI Engº civil CREA 5069737669

RESPONSÁVEL

ART Nº. _____ CPF:

Alpha & Ômega
CONSULTORIA & PROJETOS
ENG° - FELIPE LUIZ MORETTI CREA 5069737669
ENG° - GILSON JOSÉ GUIDOTTI CREA 5069715818
eng.aeo@outlook.com.br

Cliente: CODEN
Obra: ETA SANTO ANGELO - LABORATÓRO
Cidade: Nova Odessa - SP

Descrição: PROJETO EXECUTIVO
FORRO - DET. VIGAS E PILARES

des. FELIPE L.M. 25/03/2018
aprov. GILSON J.G. 25/03/2018
Projeto: CONCRETO

DESENHO Nº: A&O-011-1-EX-EC-F06-R00
rev. 00 | folha 6/9

DIREITOS AUTORAIS DE PROJETO CONFORME ART. 184 (CÓD. PENAL) LEI Nº 5988

FORMATO: A1 841X594mm