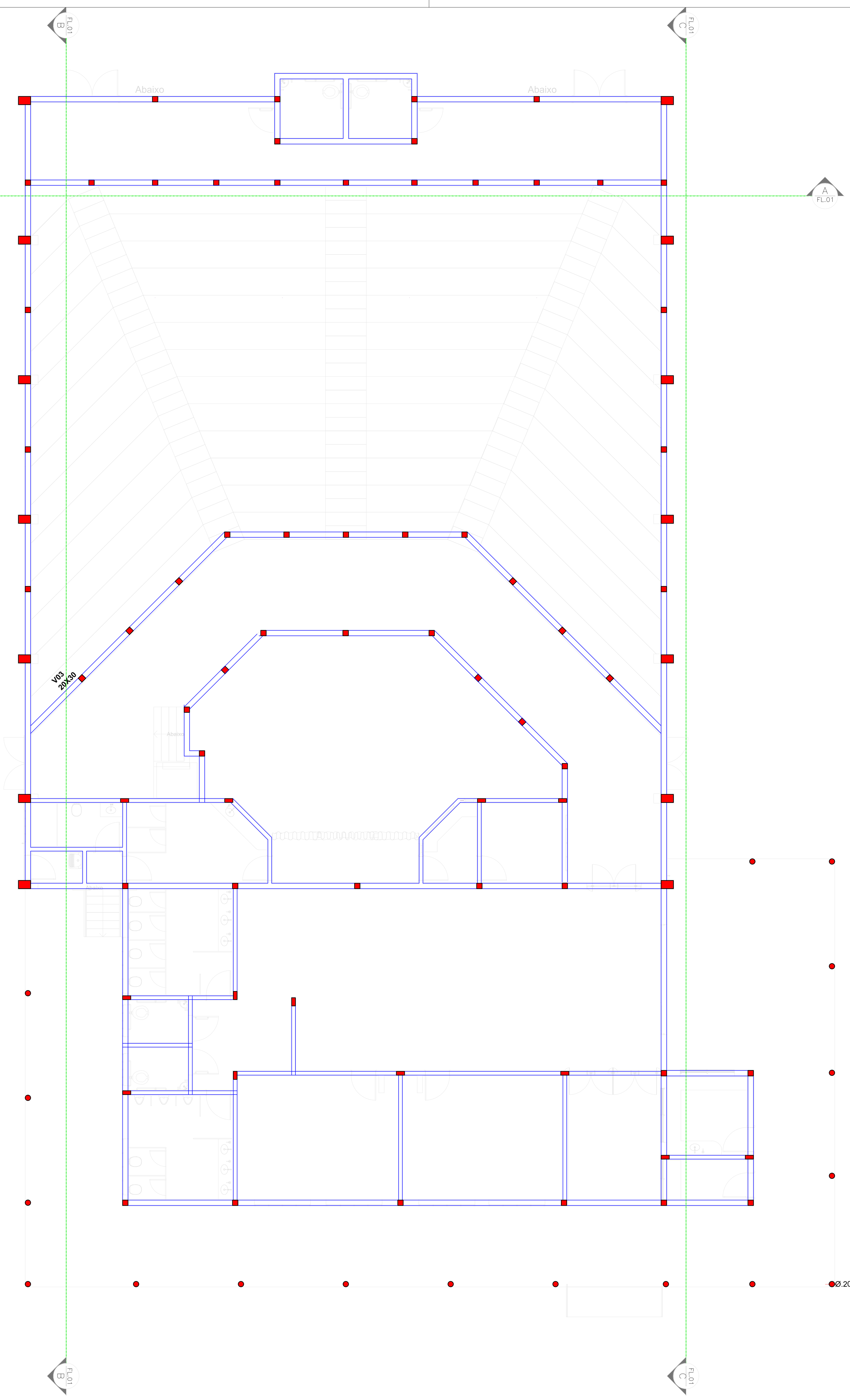
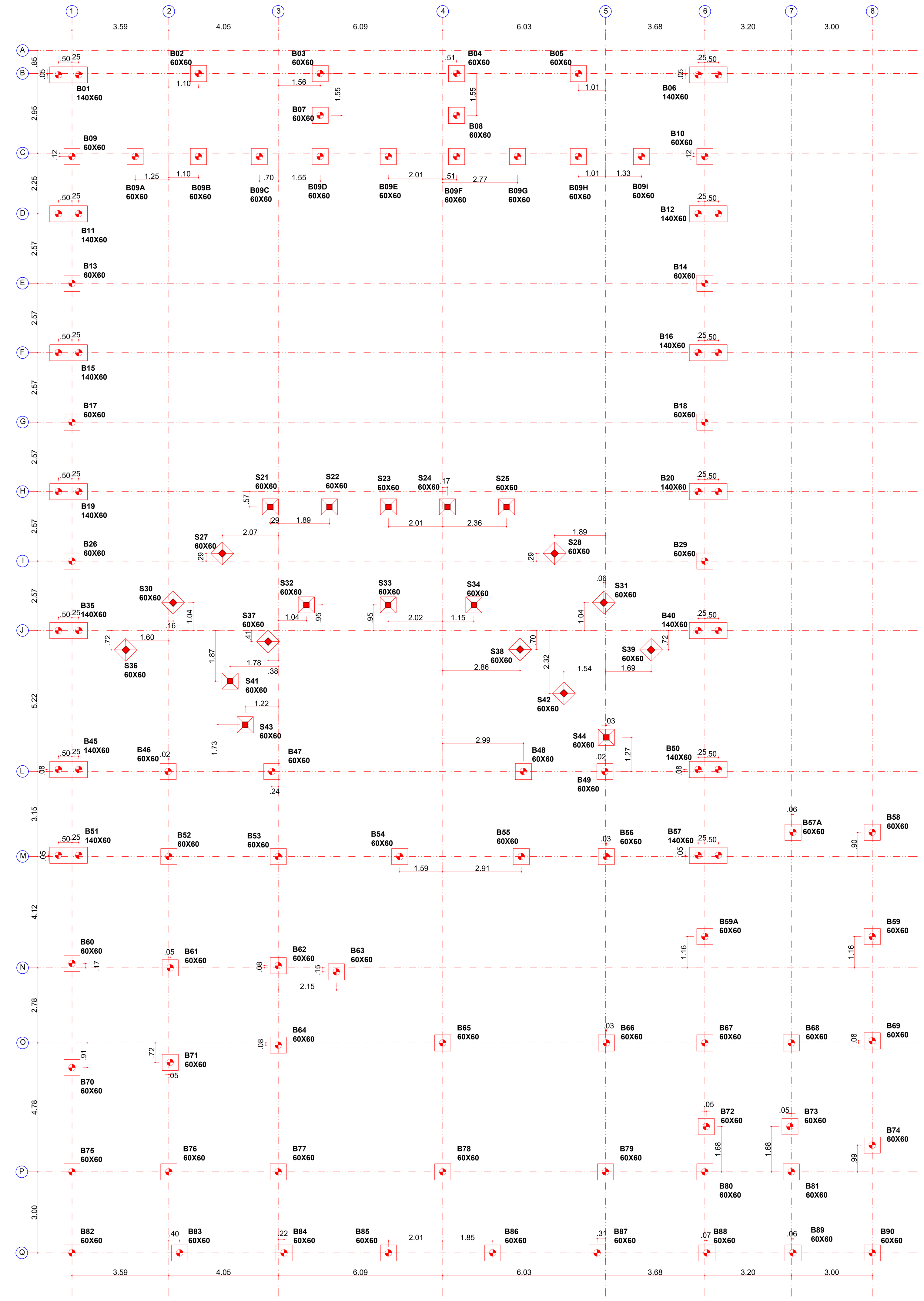
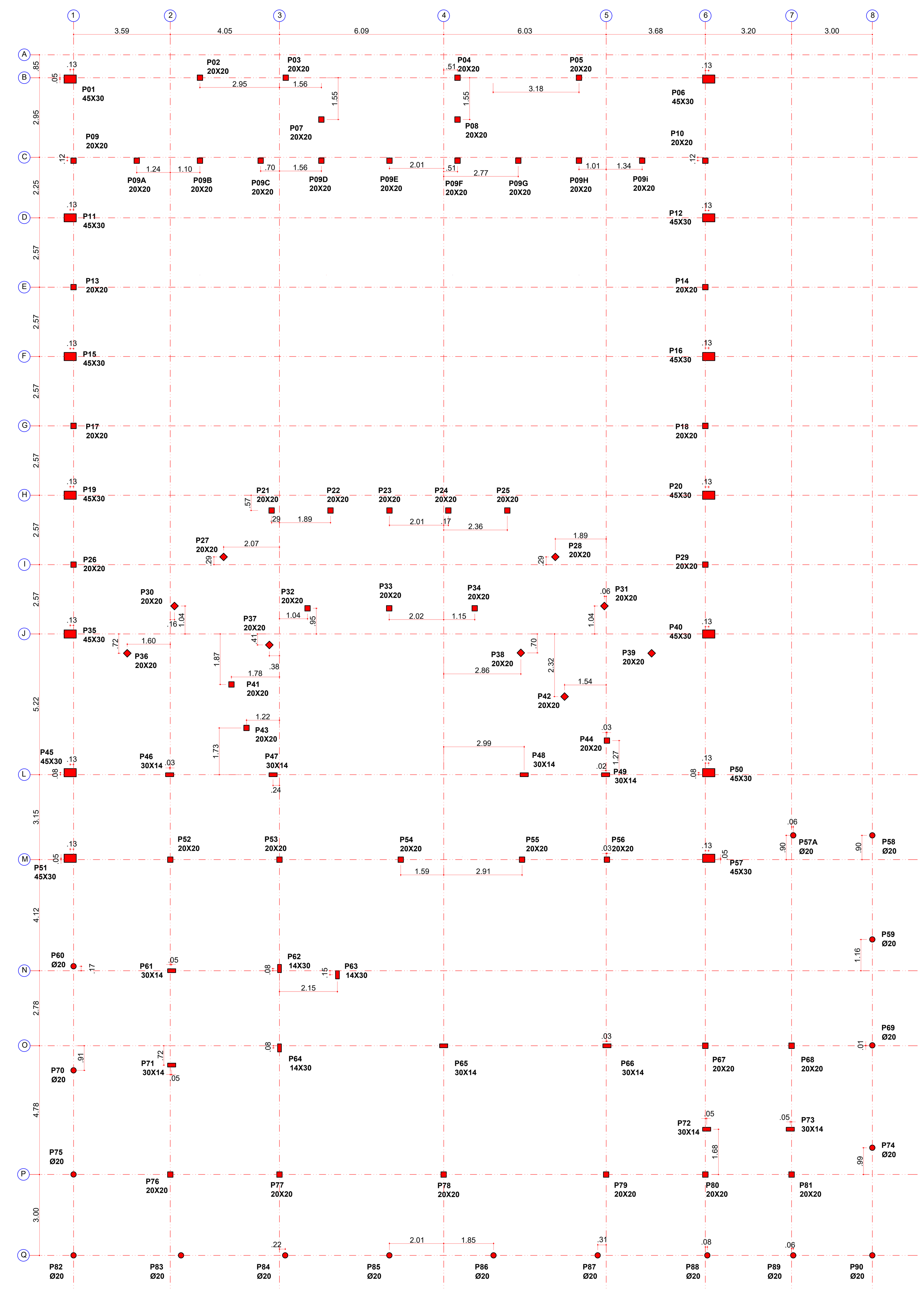


LAYOUT COM A ESTRUTURA
ESCALA 1:100



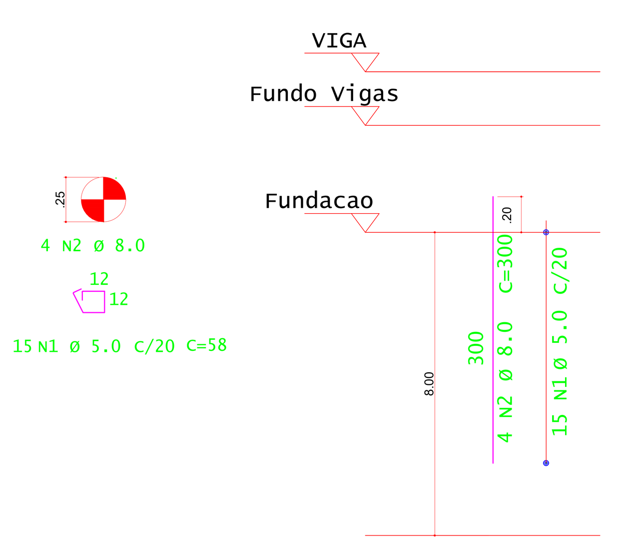
PLANTA FORMA - LOCAÇÃO ESTACAS - GERAL
ESCALA 1:100



PLANTA FORMA - LOCAÇÃO PILARES - GERAL
ESCALA 1:100

ESTACA ESCAVADA DE 8,00 METROS

BLOCOS DE 2 ESTACAS = 14 UNID.
BLOCOS DE 1 ESTACA = 67 UNID.



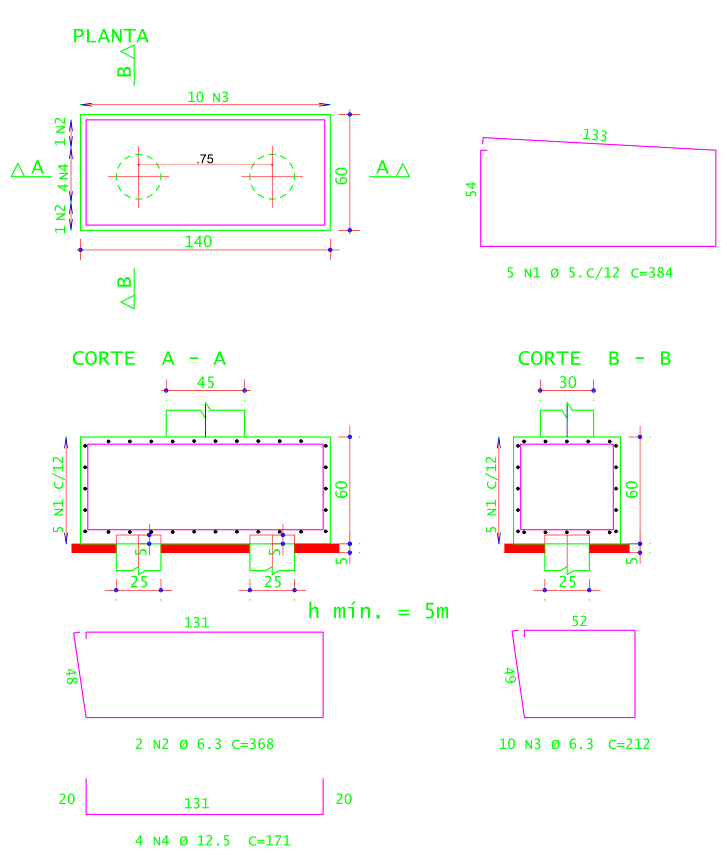
DETALHES DAS ESTACAS
ESCALA 1:25

BROCAS ESCAVADAS				
Simbologia	Ø (m)	Prof. (m)	Quantidade	Profundidade total (m)
	0,25	8,00	95	760

VOLUME DE CONCRETO - ESTACAS fck 20MPa = 41,04 M³

B1=B6=B11=B12=B15=B16=B19=B20 =B35=B40=B45=B50=B51=B57 (14x)

(ESCALA 1:25)



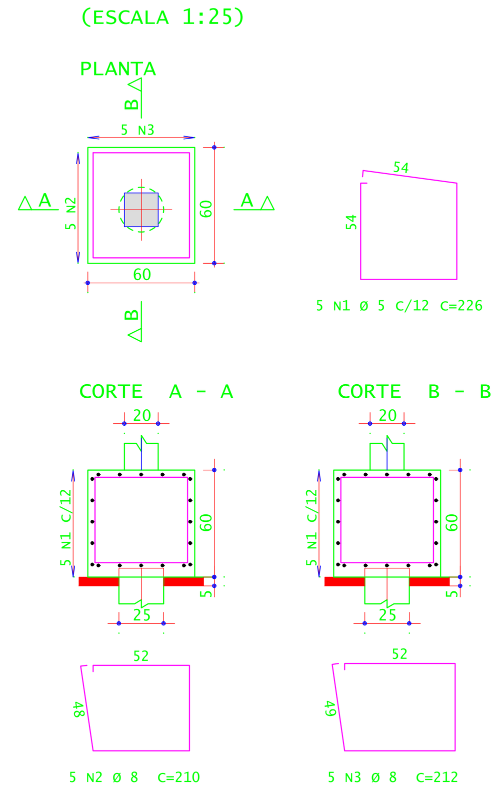
AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
B1=B6=B11=B12=B15=B16=B19=B20 =B35=B40=B45=B50=B51=B57 (14x)					
60A	1	5	70	384	26880
50A	2	6.3	28	368	10304
	3	6.3	140	212	29680
	4	12.5	56	171	9576

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
60A	5	268,80	45,54
50A	6.3	399,84	107,76
	12.5	95,76	101,44
Peso Total	60A =		45,54 kg
Peso Total	50A =		209,20 kg

VOLUME DE CONCRETO MAGRO = 0,90 M³
VOLUME DE CONCRETO fck 30MPa = 7,40 M³
ÁREA DE FORMA = 33,6 M²

B2=B3=B4=B5=B7=B8=B9=B9A=B9B=B9C=B9D=B9E=B9F=B9G =B9H=B9i=B10=B13=B14=B17=B18=B26=B29=B46=B47=B48 =B49=B52=B53=B54=B55=B56=B57A=B58=B59=B59A=B60= B61=B62=B63=B64=B65=B66=B67=B68=B69=B70=B71=B72= B73=B74=B75=B76=B77=B78=B79=B80=B81=B82=B83=B84= B85=B86=B87=B88=B89=B90 (67X)

(ESCALA 1:25)

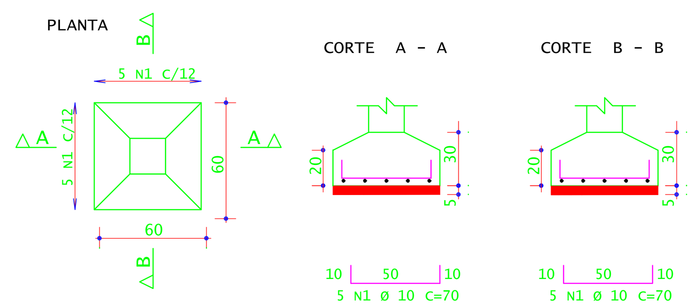


AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
B2=B3=B4=B5=B7=B8=B9=B9A=B9B=B9C=B9D=B9E=B9F=B9G =B9H=B9i=B10=B13=B14=B17=B18=B26=B29=B46=B47=B48 =B49=B52=B53=B54=B55=B56=B57A=B58=B59=B59A=B60= B61=B62=B63=B64=B65=B66=B67=B68=B69=B70=B71=B72= B73=B74=B75=B76=B77=B78=B79=B80=B81=B82=B83=B84= B85=B86=B87=B88=B89=B90 (67X)					
60A	1	5	335	226	75710
50A	2	8	335	210	70350
50A	3	8	335	212	71020

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
60A	5	757,10	128,25
50A	8	1.413,70	614,25
Peso Total	60A =		128,25 kg
Peso Total	50A =		614,25 kg

VOLUME DE CONCRETO MAGRO = 1,25 M³
VOLUME DE CONCRETO fck 30MPa = 15,19 M³
ÁREA DE FORMA = 96,48 M²

S21=S22=S23=S24=S25=S27=S28=S30=S31=S32= S33=S34=S36=S37=S38=S39=S41=S42=S43=S44 (20X)



DETALHES DA SAPATA
ESCALA 1:25

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
S21=S22=S23=S24=S25=S27=S28=S30=S31=S32= S33=S34=S36=S37=S38=S39=S41=S42=S43=S44 (20X)					
50A	1	10	200	70	14000

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
50A	10	140,00	95,02
Peso Total	50A =		95,02 kg

VOLUME DE CONCRETO MAGRO = 0,55 M³
VOLUME DE CONCRETO fck 30MPa = 2,05 M³
ÁREA DE FORMA = 10,0 M²

COTA DE ARRASAMENTO DAS ESTACAS	
DESCRIÇÃO	COTA (M)
B1=B2=B3=B4=B5=B6=B7=B8	3,2000
B9=B10	1,5500
B11=B12	0,8500
B9A=B9i	0,2500
B13=B14	-0,05
B9b=B9c=B9d=B9e=B9f=B9g=B9h=B15=B16=B17=B18=B19= B20=B26=B29=B35=B40=B45=B46=B47=B48=B49=B50 =B51=B52=B53=B54=B55=B56=B57=B58=B59=B59A=B 60=B61=B62=B63=B64=B65=B66=B67=B68=B69=B70= B71=B72=B73=B74=B75=B76=B77=B78=B79=B80=B81 =B82=B83=B84=B85=B86=B87=B88=B89=B90	-1,0500

COTA DE DFUNDO DAS SAPATAS	
DESCRIÇÃO	COTA (M)
S21=S22=S23=S24=S25=S27=S28=S30= S31=S32=S33=S34=S36=S37=S38=S39= S41=S42=S43=S44	- 0,75

INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)
LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES
TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO
LUIZ FLAVIO REIS FERNANDES:05706221669 Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES:05706221669 Dados: 2022.10.26 15:25:21 -03'00'
IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL LUIZ FLÁVIO REIS FERNANDES

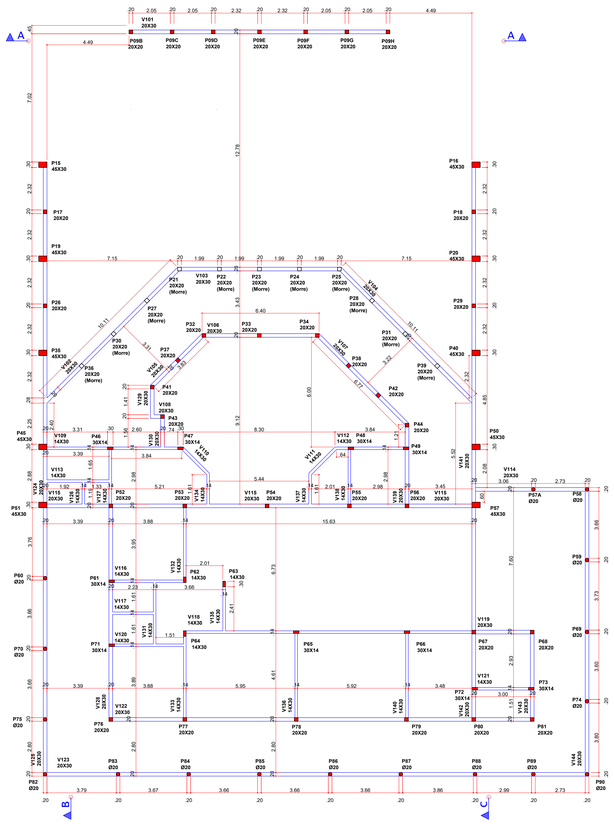
ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634 Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634 Dados: 2022.10.25 11:04:21 -03'00'
ENGº. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557
DESENHO: LEANDRO DE OLIVEIRA
MATHEUS HENRIQUE FRANCO LOPES

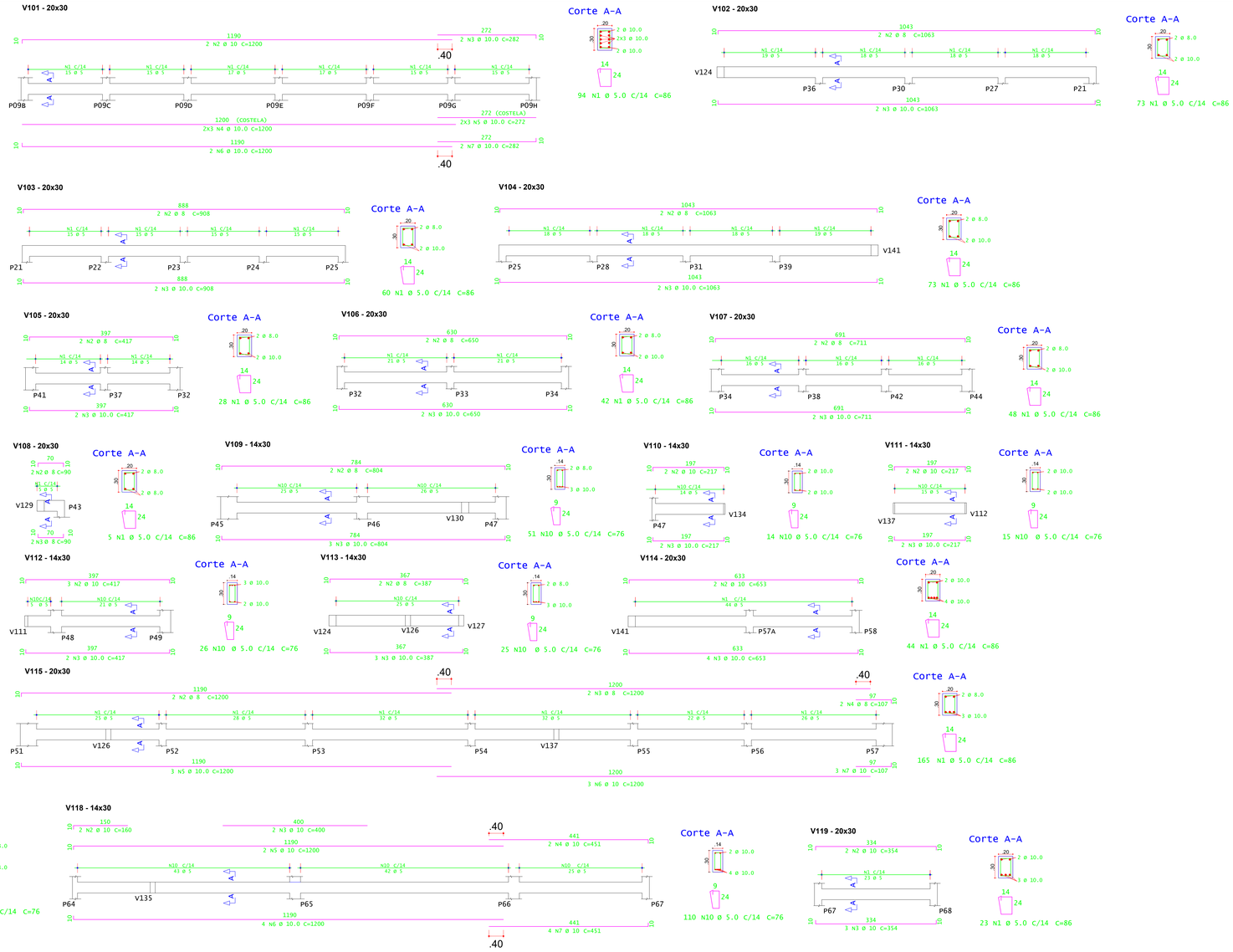
QUADRO RESUMO DE ÁREAS:
TERRENO PARTE B:....................................99,41667 (ha)
MATRÍCULA DO IMÓVEL: ....19.490 FICHA 1
LIVRO Nº02 - REGISTRO GERAL
SERVIÇO REGISTRAL IMOBILIÁRIO DE OURO FINO/MG
ÁREA A CONSTRUIR: .... 1.143,00 m²

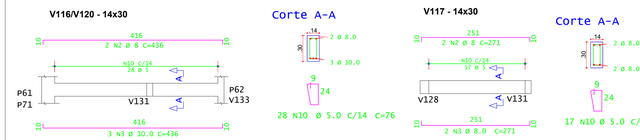
CARIMBOS:

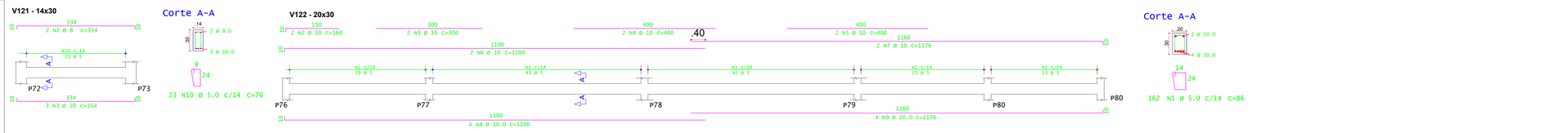
DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
17/10/2022	01	INDICADAS	METROS	01/16

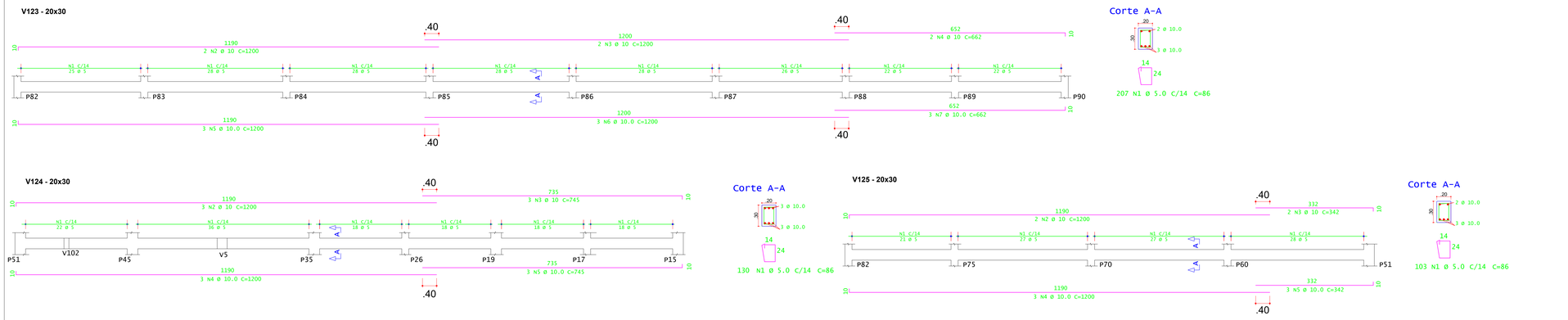


PLANTA FORMA - VIGAS BALDRAMES (NÍVEL - 0,20)
ESCALA 1:100









INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)

LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES

TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO: LUIZ FLAVIO REIS FERNANDES:05706221669 — Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES:05706221669 Dados: 2022.10.25 15:36:43 -03'00'
IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL LUIZ FLÁVIO REIS FERNANDES

ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634 — Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634 Dados: 2022.10.25 11:06:43 -03'00'
ENG°. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557

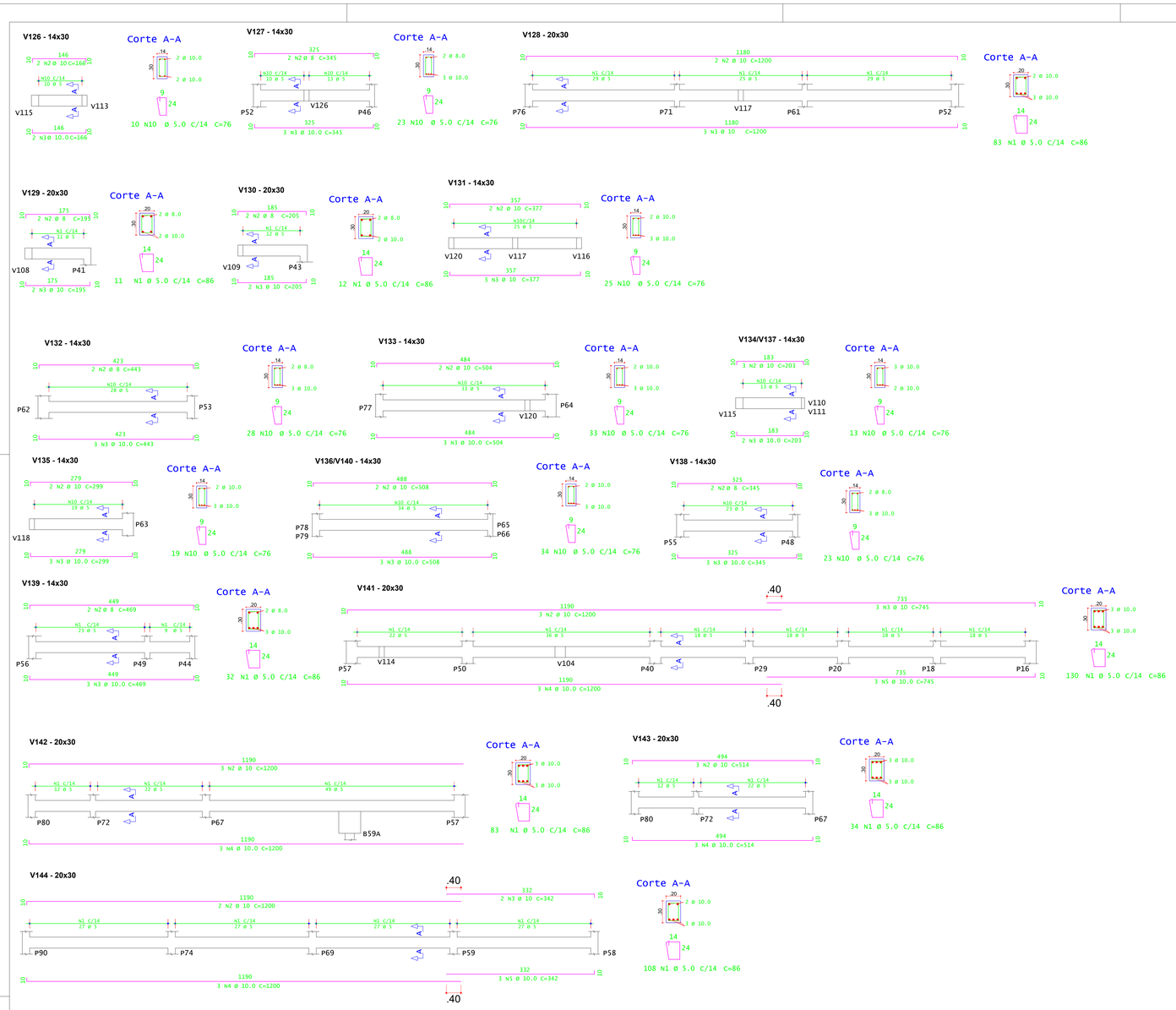
DESENHO: LEANDRO DE OLIVEIRA
MATHEUS HENRIQUE FRANCO LOPES

QUADRO RESUMO DE ÁREAS:
TERRENO PARTE B:.....99.41667 (ha)
MATRÍCULA DO IMÓVEL:.....19.490 FICHA 1
LIVRO Nº02 - REGISTRO GERAL
SERVIÇO REGISTRAL IMOBILIÁRIO DE OURO FINO/MG

ÁREA A CONSTRUIR: ..... 1.143,00 m²

CARIMBOS:

DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
17/10/2022	01	INDICADAS	METROS	02/16



VOLUME DE CONCRETO - VIGAS fck 30MPa = 18,93 M³

ÁREA DE FORMAS - 205,88 M²

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
V101 (X1)					
60A	1	5.0	94	86	8084
50A	2	10.0	2	1200	2400
	3	10.0	1	282	564
	4	10.0	3	1200	7200
	5	10.0	3	272	1632
	6	10.0	3	1200	2400
	7	10.0	3	282	564
V102 (X1)					
60A	1	5.0	73	86	6278
50A	2	8.0	2	1063	2126
	3	10.0	2	1063	2126
V103 (X1)					
60A	1	5.0	60	86	5160
50A	2	8.0	2	908	1816
	3	10.0	2	908	1816
V104 (X1)					
60A	1	5.0	73	86	6278
50A	2	8.0	2	1063	2126
	3	10.0	2	1063	2126
V105 (X1)					
60A	1	5.0	28	86	2408
50A	2	8.0	2	417	834
	3	10.0	2	417	834
V106 (X1)					
60A	1	5.0	42	86	3612
50A	2	8.0	2	650	1300
	3	10.0	2	650	1300
V107 (X1)					
60A	1	5.0	48	86	4128
50A	2	8.0	2	711	1422
	3	10.0	2	711	1422
V108 (X1)					
60A	1	5.0	5	86	430
50A	2	8.0	2	90	180
	3	8.0	2	90	180
V109 (X1)					
60A	10	5.0	51	76	3876
50A	2	8.0	2	804	1608
	3	10.0	2	804	2412
V110 (X1)					
60A	10	5.0	14	76	1064
50A	2	10.0	2	217	434
	3	10.0	2	217	434
V111 (X1)					
60A	10	5.0	15	76	1140
50A	2	10.0	2	217	434
	3	10.0	2	217	434
V112 (X1)					
60A	10	5.0	26	76	1976
50A	2	10.0	3	417	1251
	3	10.0	2	417	834
V113 (X1)					
60A	10	5.0	25	76	1900
50A	2	8.0	2	387	774
	3	10.0	3	387	1161
V113 (X1)					
60A	10	5.0	25	76	1900
50A	2	8.0	2	387	774
	3	10.0	3	387	1161
V114 (X1)					
60A	1	5.0	44	86	3784
50A	2	10.0	2	653	1306
	3	10.0	3	653	2612
V115 (X1)					
60A	1	5.0	165	86	14190
50A	2	8.0	2	1200	2400
	3	8.0	2	1200	2400
	4	8.0	2	107	214
	5	10.0	3	1200	3600
	6	10.0	3	1200	3600
	7	10.0	3	107	321
V116=V120 (X2)					
60A	10	5.0	56	76	4256
50A	2	8.0	4	436	1744
	3	10.0	6	436	2616
V117 (X1)					
60A	10	5.0	17	76	1292
50A	2	8.0	2	271	542
	3	8.0	2	271	542
V118 (X1)					
60A	10	5.0	110	76	8360
50A	2	10.0	2	160	320
	3	10.0	2	400	800
	4	10.0	2	451	902
	5	10.0	2	1200	2400
	6	10.0	4	1200	4800
	7	10.0	4	451	1804
V119 (X1)					
60A	1	5.0	23	86	1978
50A	2	10.0	2	354	708
	3	10.0	3	354	1062
V121 (X1)					
60A	10	5.0	23	76	1748
50A	2	8.0	2	354	708
	3	10.0	3	354	1062
V122 (X1)					
60A	1	5.0	162	86	13932
50A	2	10.0	2	160	320
	3	10.0	2	300	600
	4	10.0	2	400	800
	5	10.0	2	400	800
	6	10.0	2	1200	2400
	7	10.0	2	1176	2352
	8	10.0	4	1200	4800
	9	10.0	4	1176	4704

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
V123 (X1)					
60A	1	5.0	207	86	17802
50A	2	10.0	2	1200	2400
	3	10.0	2	1200	2400
	4	10.0	2	662	1324
	5	10.0	3	1200	3600
	6	10.0	3	1200	3600
	7	10.0	3	662	1986
V124 (X1)					
60A	1	5.0	130	86	11180
50A	2	10.0	3	1200	3600
	3	10.0	3	745	2235
	4	10.0	3	1200	3600
	5	10.0	3	745	2235
V125 (X1)					
60A	1	5.0	103	86	8858
50A	2	10.0	2	1200	2400
	3	10.0	2	342	684
	4	10.0	3	1200	3600
	5	10.0	3	342	1026
V126 (X1)					
60A	10	5.0	10	76	760
50A	2	10.0	2	166	332
	3	10.0	2	166	332
V127 (X1)					
60A	10	5.0	23	76	1748
50A	2	8.0	2	345	690
	3	10.0	3	345	1035
V128 (X1)					
60A	1	5.0	83	86	7138
50A	2	10.0	2	1200	2400
	3	10.0	3	1200	3600
V129 (X1)					
60A	1	5.0	11	86	946
50A	2	8.0	2	195	390
	3	10.0	2	195	390
V130 (X1)					
60A	1	5.0	12	86	1032
50A	2	8.0	2	205	410
	3	10.0	2	205	410
V131 (X1)					
60A	10	5.0	25	76	1900
50A	2	10.0	2	377	754
	3	10.0	3	377	1131
V132 (X1)					
60A	10	5.0	28	76	2128
50A	2	8.0	2	443	886
	3	10.0	3	443	1329
V133 (X1)					
60A	10	5.0	33	76	2508
50A	2	10.0	2	504	1008
	3	10.0	3	504	1512
V134=V137 (X2)					
60A	10	5.0	26	76	1976
50A	2	10.0	6	203	1218
	3	10.0	4	203	812
V135 (X1)					
60A	10	5.0	19	76	1444
50A	2	10.0	2	299	598
	3	10.0	3	299	897
V136=V140 (X2)					
60A	10	5.0	68	76	5168
50A	2	10.0	4	508	2032
	3	10.0	6	508	3048
V138 (X1)					
60A	10	5.0	23	76	1748
50A	2	8.0	2	345	690
	3	10.0	3	345	1035
V139 (X1)					
60A	1	5.0	32	86	2752
50A	2	8.0	2	469	938
	3	10.0	3	469	1407
V141 (X1)					
60A	1	5.0	130	86	11180
50A	2	10.0	3	1200	3600
	3	10.0	3	745	2235
	4	10.0	3	1200	3600
	5	10.0	3	745	2235
V142 (X1)					
60A	1	5.0	83	86	7138
50A	2	10.0	3	1200	3600
	3	10.0	3	1200	3600
V143 (X1)					
60A	1	5.0	34	86	2924
50A	2	10.0	3	514	1542
	3	10.0	3	514	1542
V144 (X1)					
60A	1	5.0	108	86	9288
50A	2	10.0	2	1200	2400
	3	10.0	2	342	684
	4	10.0	3	1200	3600
	3	10.0	3	342	1026

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
60A	5.0	1954,92	331,16
50A	8.0	249,20	108,28
	10.0	1661,01	1127,33
Peso Total	60A =		331,16 kg
Peso Total	50A =		1235,60 kg

INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)

LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES

TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO
LUIZ FLAVIO REIS FERNANDES0570 6221669
Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES0570622166 9 Dados: 2022.10.26 15:38:17 -03'00'
IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL LUIZ FLÁVIO REIS FERNANDES

ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634
Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634 Dados: 2022.10.25 11:09:35 -03'00'
ENGº. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557

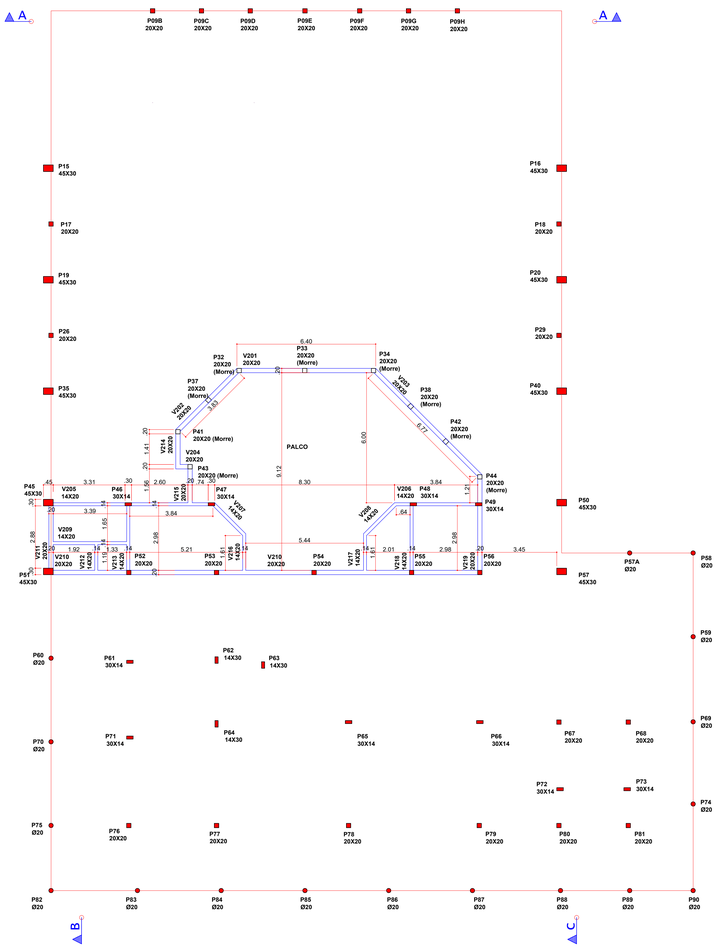
DESENHO: LEANDRO DE OLIVEIRA
MATHEUS HENRIQUE FRANCO LOPES

QUADRO RESUMO DE ÁREAS:
TERRENO PARTE B: ..... 99,41667 (ha)
MATRÍCULA DO IMÓVEL: ..... 19.490 FICHA 1
LIVRO Nº02 - REGISTRO GERAL
SERVIÇO REGISTRAL IMOBILIÁRIO DE OURO FINO/MG

ÁREA A CONSTRUIR: ..... 1.143,00 m²

CARIMBOS:

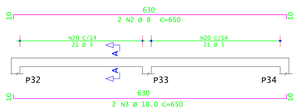
DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
17/10/2022	01	INDICADAS	METROS	03/16



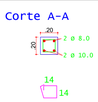
PLANTA FORMA - VIGAS BALDRAMES (NÍVEL + 0,92)

ESCALA 1:100

V201 - 20x20

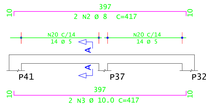


Corte A-A



42 N20 Ø 5.0 C/14 C=66

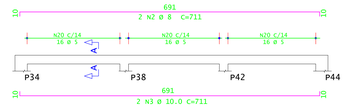
V202 - 20x20



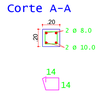
Corte A-A

28 N20 Ø 5.0 C/14 C=66

V203 - 20x20

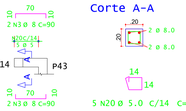


Corte A-A



48 N20 Ø 5.0 C/14 C=66

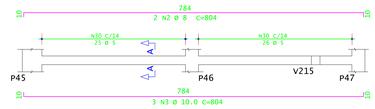
V204 - 20x20



Corte A-A

5 N20 Ø 5.0 C/14 C=66

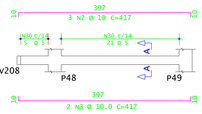
V205 - 14x20



Corte A-A

51 N30 Ø 5.0 C/14 C=56

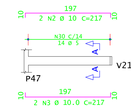
V206 - 14x20



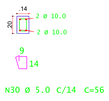
Corte A-A

26 N30 Ø 5.0 C/14 C=56

V207 - 14x20

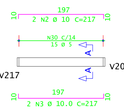


Corte A-A



14 N30 Ø 5.0 C/14 C=56

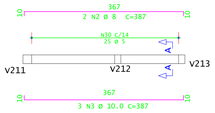
V208 - 14x20



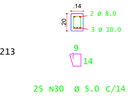
Corte A-A

15 N30 Ø 5.0 C/14 C=56

V209 - 14x20

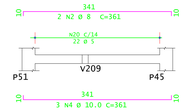


Corte A-A



25 N30 Ø 5.0 C/14 C=56

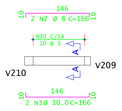
V211 - 20x20



Corte A-A

22 N20 Ø 5.0 C/14 C=66

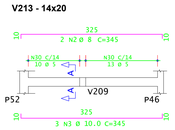
V212 - 14x20



Corte A-A

10 N30 Ø 5.0 C/14 C=56

V213 - 14x20

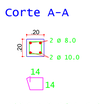


Corte A-A

23 N30 Ø 5.0 C/14 C=56

V214 - 20x20

Corte A-A



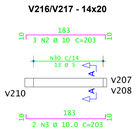
11 N20 Ø 5.0 C/14 C=66

V215 - 20x20

Corte A-A

12 N20 Ø 5.0 C/14 C=66

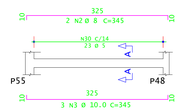
V216/V217 - 14x20



Corte A-A

13 N30 Ø 5.0 C/14 C=56

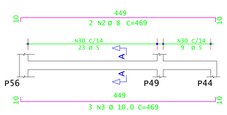
V218 - 14x20



Corte A-A

23 N30 Ø 5.0 C/14 C=56

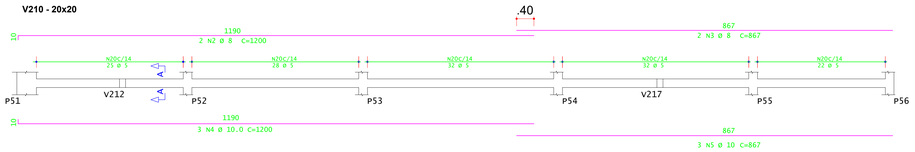
V219 - 14x20



Corte A-A

23 N30 Ø 5.0 C/14 C=56

V210 - 20x20



Corte A-A

139 N20 Ø 5.0 C/14 C=66

VOLUME DE CONCRETO - VIGAS fck 30MPa = 2,74 M³

ÁREA DE FORMAS - 33,90 M²

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
v201 (X1)					
60A	20	5.0	42	66	2772
50A	2	8.0	2	650	1300
	3	10.0	2	650	1300
v202 (X1)					
60A	20	5.0	28	66	1848
50A	2	8.0	2	417	834
	3	10.0	2	417	834
v203 (X1)					
60A	20	5.0	48	66	3168
50A	2	8.0	2	711	1422
	3	10.0	2	711	1422
v204 (X1)					
60A	20	5.0	5	66	330
50A	2	8.0	2	90	180
	3	8.0	2	90	180
v205 (X1)					
60A	30	5.0	51	56	2856
50A	2	8.0	2	804	1608
	3	10.0	3	804	2412
v206 (X1)					
60A	30	5.0	26	56	1456
50A	2	10.0	3	417	1251
	3	10.0	2	417	834
v207 (X1)					
60A	30	5.0	14	56	784
50A	2	10.0	2	217	434
	3	10.0	2	217	434
v208 (X1)					
60A	30	5.0	15	56	840
50A	2	10.0	2	217	434
	3	10.0	2	217	434
v209 (X1)					
60A	30	5.0	25	56	1400
50A	2	8.0	2	387	774
	3	10.0	3	387	1161
v210 (X1)					
60A	20	5.0	139	66	9174
50A	2	8.0	2	1200	2400
	3	8.0	2	867	1734
	4	10.0	3	1200	3600
	5	10.0	3	867	2601
v211 (X1)					
60A	20	5.0	22	66	1452
50A	2	8.0	2	361	722
	3	10.0	3	361	1083
v212 (X1)					
60A	30	5.0	10	56	560
50A	2	8.0	2	166	332
	3	10.0	2	166	332
v213 (X1)					
60A	30	5.0	23	56	1288
50A	2	8.0	2	345	690
	3	10.0	3	345	1035
v214 (X1)					
60A	20	5.0	11	66	726
50A	2	8.0	2	195	390
	3	10.0	2	195	390
v215 (X1)					
60A	20	5.0	12	66	792
50A	2	8.0	2	205	410
	3	10.0	2	205	410
v216=v217 (X2)					
60A	30	5.0	26	56	1456
50A	2	10.0	6	203	1218
	3	10.0	4	203	812
v218 (X1)					
60A	30	5.0	23	56	1288
50A	2	8.0	2	345	690
	3	10.0	3	345	1035
v219 (X1)					
60A	30	5.0	32	56	1792
50A	2	8.0	2	469	938
	3	10.0	3	469	1407

RESUMO DE AÇO

AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
60A	5.0	339,82	57,57
50A	8.0	146,04	63,45
	10.0	248,73	168,81
Peso Total	60A =		57,57 kg
Peso Total	50A =		232,27 kg

INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)

LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES

TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO: LUIZ FLAVIO REIS FERNANDES:05706221669 — Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES:05706221669 Dados: 2022.10.26 15:26:10 -03'00'
IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL LUIZ FLÁVIO REIS FERNANDES

ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634 — Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634 Dados: 2022.10.25 11:11:56 -03'00'
ENGº. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557

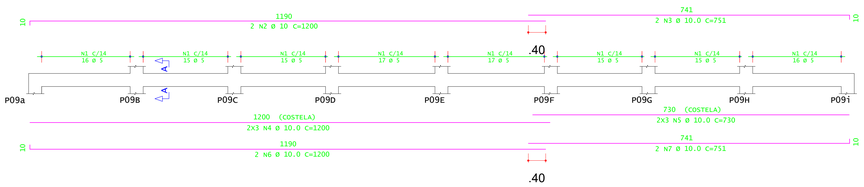
DESENHO: LEANDRO DE OLIVEIRA
MATHEUS HENRIQUE FRANCO LOPES

QUADRO RESUMO DE ÁREAS:
TERRENO PARTE B: ..... 99.41667 (ha)
MATRÍCULA DO IMÓVEL: ..... 19.490 FICHA 1
LIVRO Nº02 - REGISTRO GERAL
SERVIÇO REGISTRAL IMOBILIÁRIO DE OURO FINO/MG
ÁREA A CONSTRUIR: ..... 1.143,00 m²

CARIMBOS:

DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
17/10/2022	01	INDICADAS	METROS	04/16

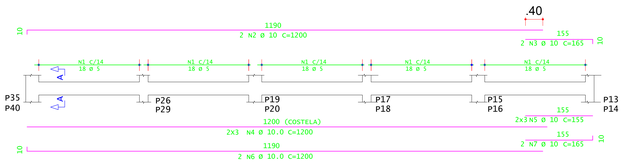
V301 - 20x30



Corte A-A

126 N1 Ø 5.0 C/14 C=86

V302 = V303 - 20x30



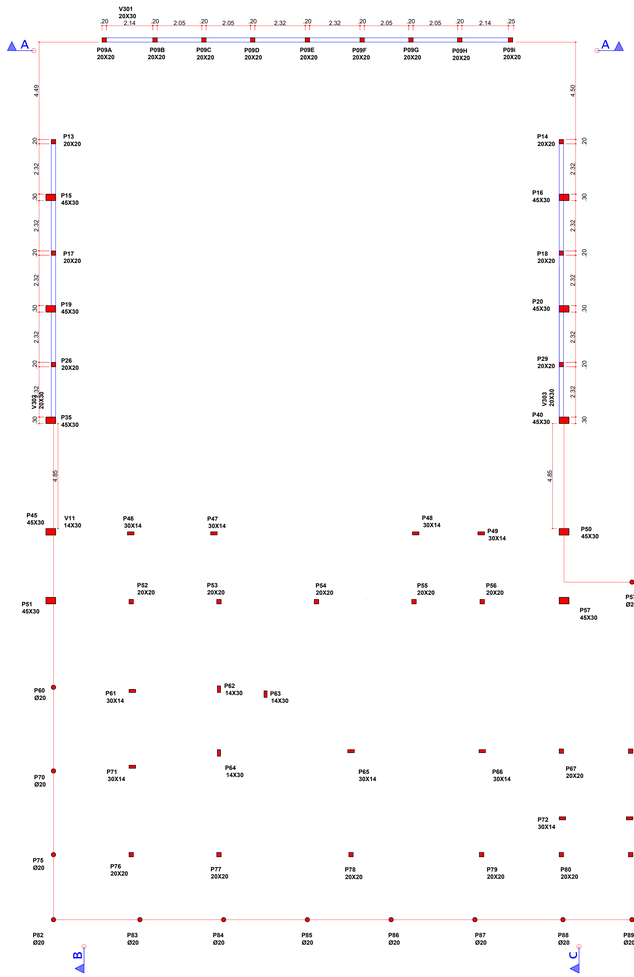
Corte A-A

90 N1 Ø 5.0 C/14 C=86

VOLUME DE CONCRETO - VIGAS fck 30MPa = 2,72 M³
ÁREA DE FORMAS - 27,16 M²

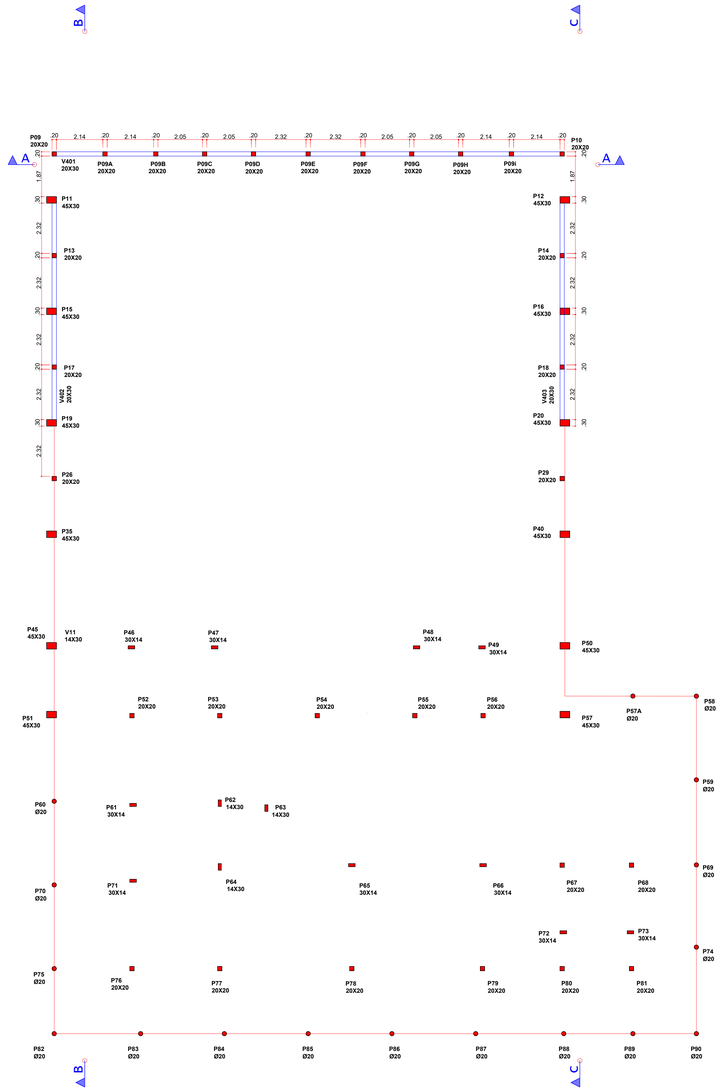
AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
v301 (X1)					
60A	1	5.0	126	86	10836
50A	2	10.0	2	1200	2400
	3	10.0	2	751	1502
	4	10.0	6	1200	7200
	5	10.0	6	730	4380
	6	10.0	2	1200	2400
	7	10.0	2	751	1502
v302 = V303 (X2)					
60A	1	5.0	144	86	12384
50A	2	10.0	4	1200	4800
	3	10.0	4	165	660
	4	10.0	12	1200	14400
	5	10.0	12	155	1860
	6	10.0	4	1200	4800
	7	10.0	4	165	660

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
60A	5.0	263,16	44,58
50A	10.0	465,64	316,03
Peso Total		60A =	44,58 kg
Peso Total		50A =	316,03 kg



PLANTA FORMA - VIGAS (NÍVEL + 1,10)

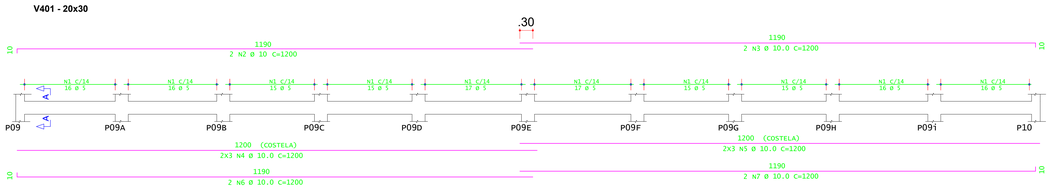
ESCALA 1:100



PLANTA FORMA - VIGAS (NÍVEL + 2,40)

ESCALA 1:100

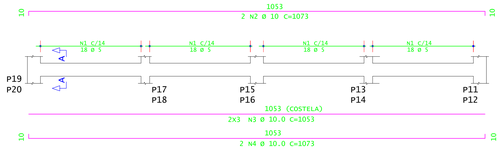
V401 - 20x30



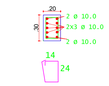
Corte A-A

173 N1 Ø 5.0 C/14 C=86

V402 / V403 - 20x30



Corte A-A



72 N1 Ø 5.0 C/14 C=86

VOLUME DE CONCRETO - VIGAS fck 30MPa = 2,69 M³
ÁREA DE FORMAS - 26,88 M²

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
v401 (X1)					
60A	1	5.0	173	86	14878
50A	2	10.0	2	1200	2400
	3	10.0	2	1200	2400
	4	10.0	6	1200	7200
	5	10.0	6	1200	2400
	6	10.0	2	1200	2400
	7	10.0	2	1200	2400
v402 = V403 (X2)					
60A	1	5.0	144	86	12384
50A	2	10.0	4	1073	4292
	3	10.0	12	1053	12636
	4	10.0	4	1073	4292

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
60A	5.0	272,62	46,18
50A	10.0	452,20	306,91
Peso Total		60A =	46,18 kg
Peso Total		50A =	306,91 kg

INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)

LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES

TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO: LUIZ FLAVIO REIS FERNANDES:05706221669 — Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES:05706221669 Dados: 2022.10.26 11:40:58 -03'00'
IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL LUIZ FLÁVIO REIS FERNANDES

ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634 — Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634 Dados: 2022.10.25 11:13:52 -03'00'
ENGº. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557

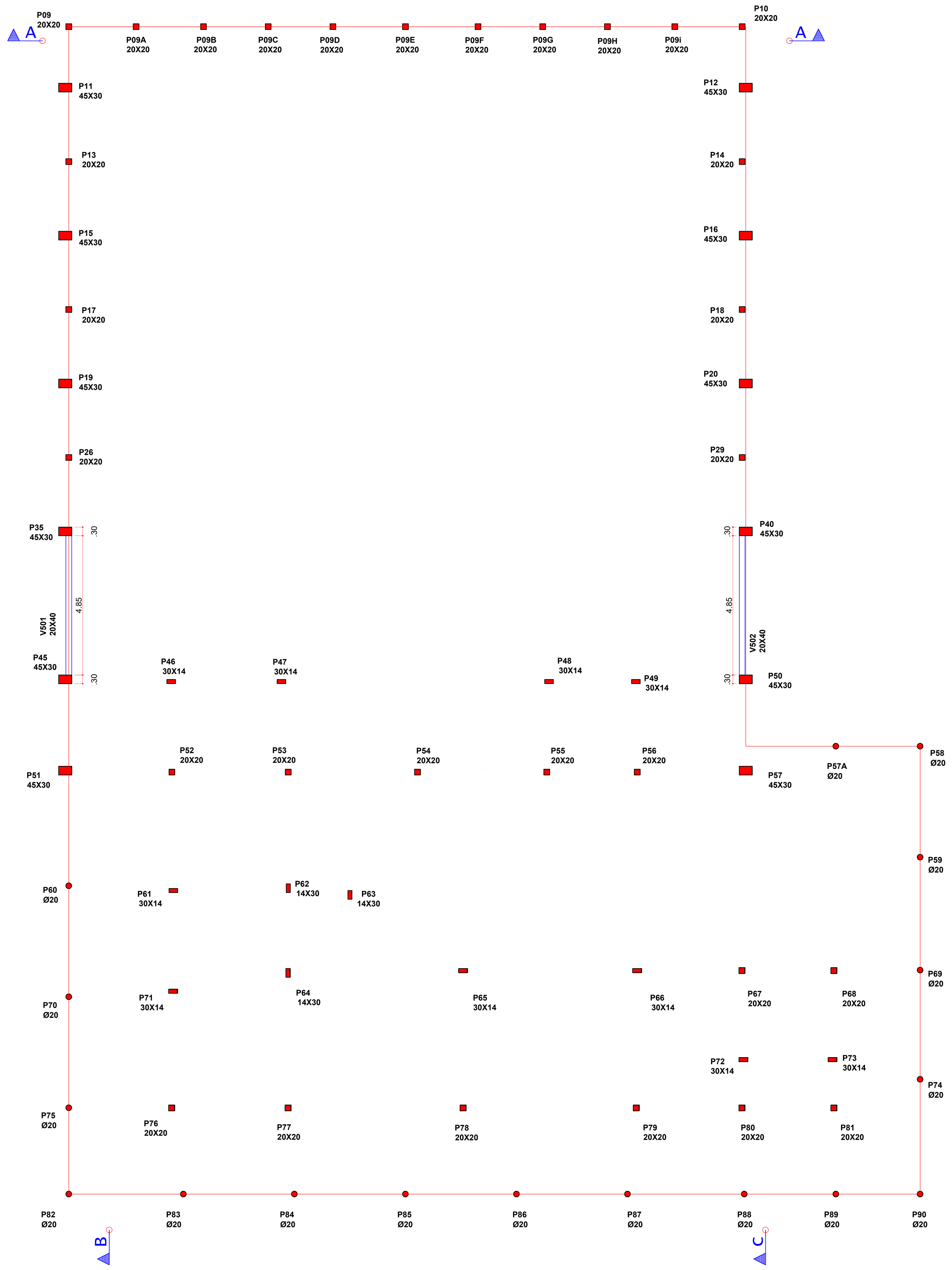
DESENHO: LEANDRO DE OLIVEIRA
MATHEUS HENRIQUE FRANCO LOPES

QUADRO RESUMO DE ÁREAS:
TERRENO PARTE B: ..... 99,41667 (ha)
MATRÍCULA DO IMÓVEL: ..... 19.490 FICHA 1
LIVRO Nº02 - REGISTRO GERAL
SERVIÇO REGISTRAL IMOBILIÁRIO DE OURO FINO/MG

ÁREA A CONSTRUIR: ..... 1.143,00 m²

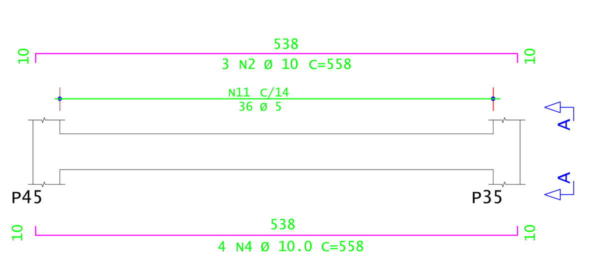
CARIMBOS:

DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
17/10/2022	01	INDICADAS	METROS	05/16

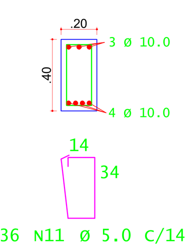


PLANTA FORMA - VIGAS (NÍVEL + 2,80)
ESCALA 1:100

V501 / V502 - 20x40



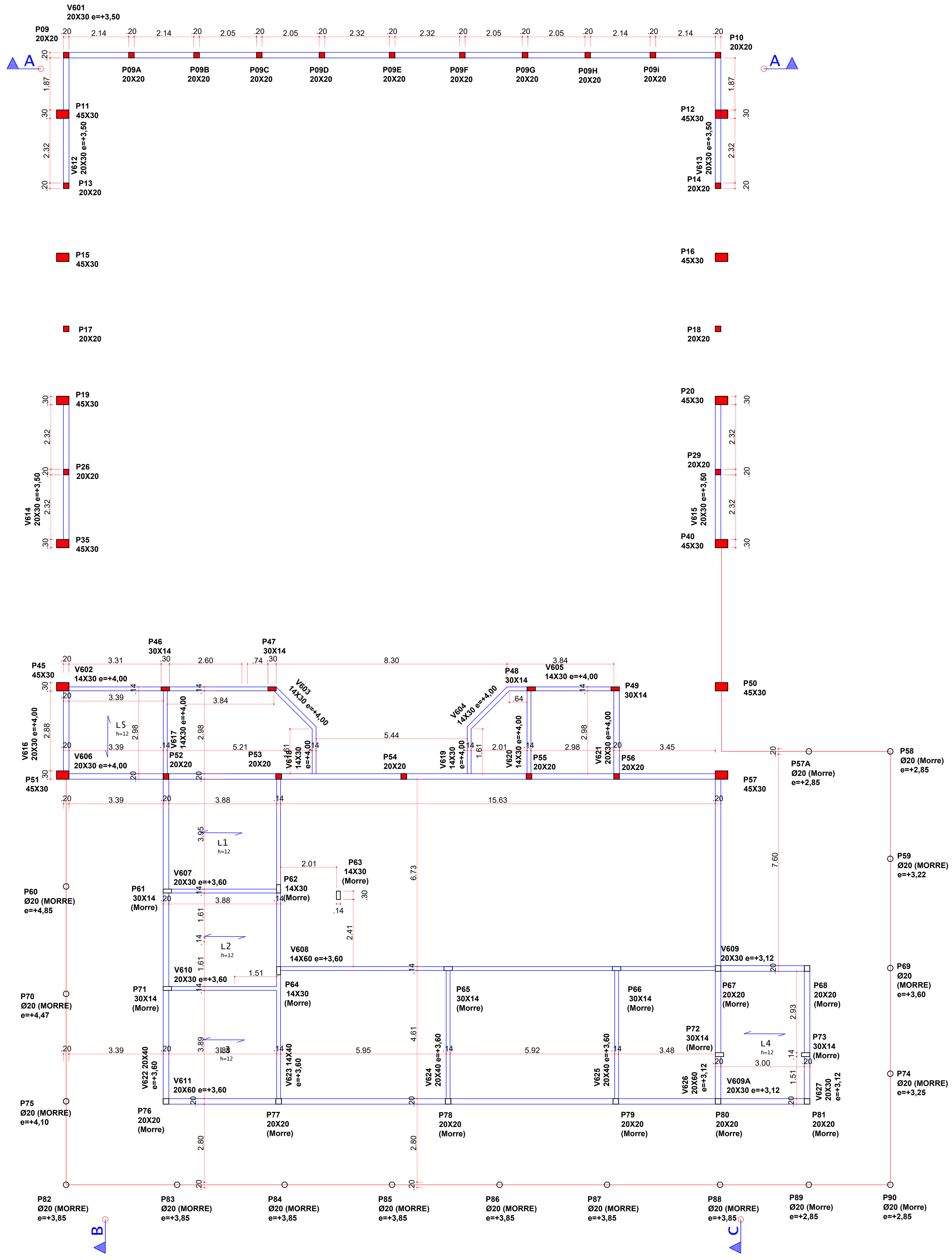
Corte A-A



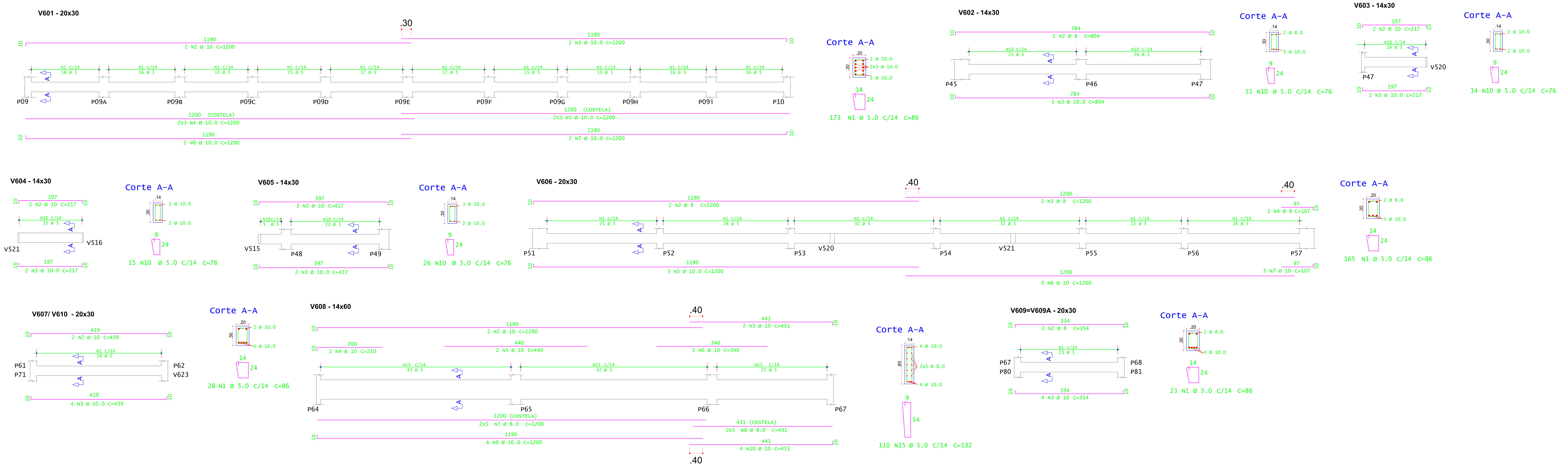
VOLUME DE CONCRETO - VIGAS fck 30MPa = 0,90 M³
ÁREA DE FORMAS - 8,71 M²

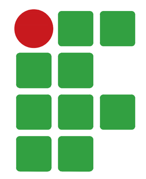
AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
V501=V502 (X2)					
60A	1	5.0	72	106	7632
50A	2	10.0	6	558	3348
	3	10.0	8	558	3348

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
60A	5.0	76,32	12,93
50A	10.0	78,12	53,02
Peso Total	60A =		12,93 kg
Peso Total	50A =		53,02 kg



PLANTA FORMA - VIGAS (NÍVEIS VARIADOS)
ESCALA 1:100





INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)

LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES

TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO
LUIZ FLAVIO REIS FERNANDES:05706221669
Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES:05706221669 Dados: 2022.10.26 15:41:49 -03'00'
IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL LUIZ FLÁVIO REIS FERNANDES

ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634
Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634 Dados: 2022.10.25 11:17:02 -03'00'
ENGº. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557
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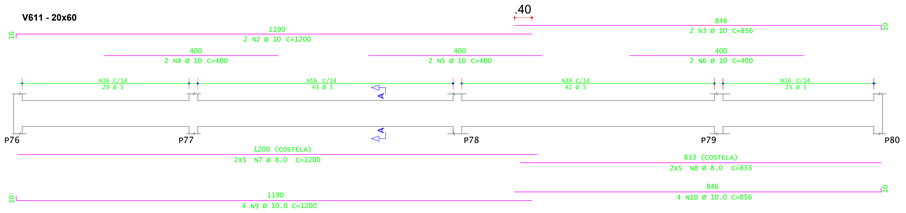
ÁREA A CONSTRUIR: .... 1.143,00 m²

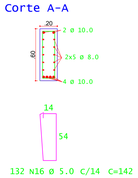
CARIMBOS:

DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
17/10/2022	01	INDICADAS	METROS	06/16

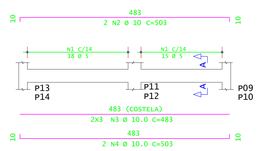
V611 - 20x60



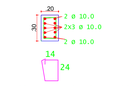
Corte A-A



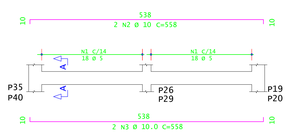
V612 / V613 - 20x30



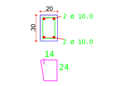
Corte A-A



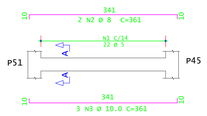
V614 / V615 - 20x30



Corte A-A

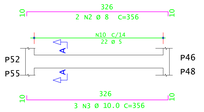


V616 - 20x30

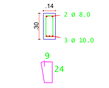


Corte A-A

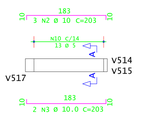
V617 / V620 - 14x30



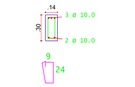
Corte A-A



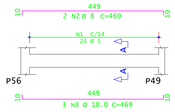
V618 / V619 - 14x30



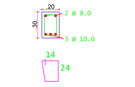
Corte A-A



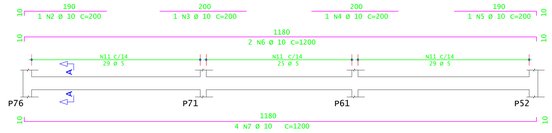
V621 - 20x30



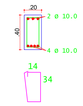
Corte A-A



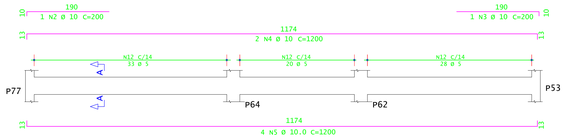
V622 - 20x40



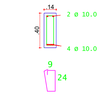
Corte A-A



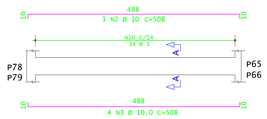
V623 - 14x40



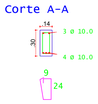
Corte A-A



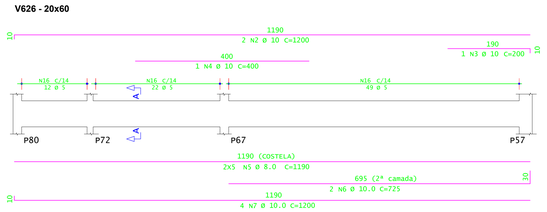
V624/V625 - 14x40



Corte A-A

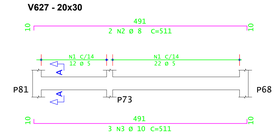


V626 - 20x60

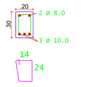


Corte A-A

V627 - 20x30



Corte A-A



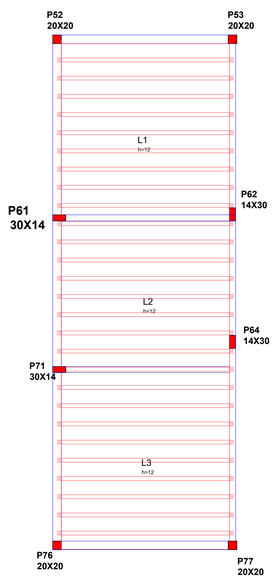
VOLUME DE CONCRETO - VIGAS fck 30MPa = 14,20 M³

ÁREA DE FORMAS - 157,58 M²

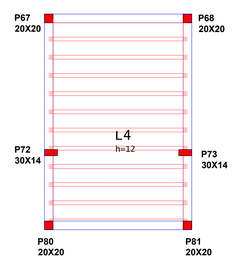
AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
V601 (X1)					
60A	1	5.0	173	86	14878
50A	2	10.0	2	1200	2400
	3	10.0	2	1200	2400
	4	10.0	6	1200	7200
	5	10.0	6	1200	7200
	6	10.0	2	1200	2400
	7	10.0	2	1200	2400
V602 (X1)					
60A	10	5.0	51	76	3876
50A	2	8.0	2	804	1608
	3	10.0	3	804	2412
V603 (X1)					
60A	10	5.0	14	76	1064
50A	2	10.0	2	217	434
	3	10.0	3	217	434
V604 (X1)					
60A	10	5.0	15	76	1140
50A	2	10.0	2	217	434
	3	10.0	2	217	434
V605 (X1)					
60A	10	5.0	26	76	1976
50A	2	10.0	3	417	1251
	3	10.0	2	417	834
V606 (X1)					
60A	1	5.0	165	86	14190
50A	2	8.0	2	1200	2400
	3	8.0	2	1200	2400
	4	8.0	2	107	214
	5	10.0	3	1200	3600
	6	10.0	3	1200	3600
	7	10.0	3	107	321
V607=v610 (X2)					
60A	1	5.0	56	86	4816
50A	2	10.0	4	439	1756
	3	10.0	8	439	3512
V608 (X1)					
60A	15	5.0	110	132	14520
50A	2	10.0	2	1200	2400
	3	10.0	2	451	902
	4	10.0	2	210	420
	5	10.0	2	440	880
	6	10.0	2	340	680
	7	8.0	10	1200	12000
	8	8.0	10	431	4310
	9	10.0	4	1200	4800
	10	10.0	4	451	1804
V609=v609A (X2)					
60A	1	5.0	46	86	3956
50A	2	8.0	4	354	1416
	3	10.0	8	354	2832
V611 (X1)					
60A	16	5.0	132	142	18744
50A	2	10.0	2	1200	2400
	3	10.0	2	856	1712
	4	10.0	2	400	800
	5	10.0	2	400	800
	6	10.0	2	400	800
	7	8.0	10	1200	12000
	8	8.0	10	833	8330
	9	10.0	4	1200	4800
	10	10.0	4	856	3424

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
V612=v613 (X2)					
60A	1	5.0	66	86	5676
50A	2	10.0	4	503	2012
	3	10.0	12	483	5796
	4	10.0	4	503	2012
V614=v615 (X2)					
60A	1	5.0	72	86	6192
50A	2	10.0	4	558	2232
	3	10.0	4	558	2232
V616 (X1)					
60A	1	5.0	22	86	1892
50A	2	8.0	2	361	722
	3	10.0	3	361	1083
V617=v620 (X2)					
60A	10	5.0	44	76	3344
50A	2	8.0	4	356	1424
	3	10.0	6	356	2136
V618=v619 (X2)					
60A	10	5.0	26	76	1976
50A	2	10.0	6	203	1218
	3	10.0	4	203	812
V621 (X1)					
60A	1	5.0	23	86	1978
50A	2	8.0	2	469	938
	3	10.0	3	469	1407
V622 (X1)					
60A	11	5.0	83	106	8798
50A	2	10.0	1	200	200
	3	10.0	1	200	200
	4	10.0	1	200	200
	5	10.0	1	200	200
	6	10.0	2	1200	2400
	7	10.0	4	1200	4800
V623 (X1)					
60A	12	5.0	81	106	8586
50A	2	10.0	1	200	200
	3	10.0	1	200	200
	4	10.0	2	1200	2400
	5	10.0	4	1200	4800
V624=v625 (X2)					
60A	10	5.0	68	76	5168
50A	2	10.0	6	508	3048
	3	10.0	8	508	4064
V626 (X1)					
60A	16	5.0	83	142	11786
50A	2	10.0	2	1200	2400
	3	10.0	1	200	200
	4	10.0	1	400	400
	5	8.0	10	1190	11900
	6	10.0	2	725	1450
	7	10.0	4	1200	4800
V627 (X1)					
60A	1	5.0	34	86	2924
50A	2	8.0	2	511	1022
	3	10.0	3	511	1533

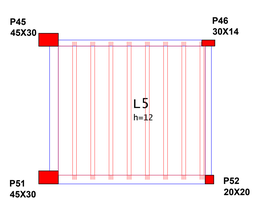
RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
60A	5.0	1374,80	232,89
50A	8.0	606,84	263,67
	10.0	1269,11	861,34
Peso Total	60A =		232,89 kg
Peso Total	50A =		1125,02 kg



PLANTA FORMA - LAJES (NÍVEL + 3,60)
ESCALA 1:50



PLANTA FORMA - LAJES (NÍVEL + 3,12)
ESCALA 1:50



PLANTA FORMA - LAJES (NÍVEL + 4,00)
ESCALA 1:50

Projeto de fabricação de vigotas treliçadas

SEM ESCALA

VT1A L1 10 Unidades	1 N1 TR08644 - 408 10 — 388 — 10 1 N5 Ø 10.0 - C=408
VT2A L2 09 Unidades	1 N2 TR08644 - 408 10 — 388 — 10 1 N6 Ø 10.0 - C=408
VT3A L3 09 Unidades	1 N3 TR08644 - 408 10 — 388 — 10 1 N7 Ø 10.0 - C=408
VT4A L4 09 Unidades	1 N4 TR08644 - 320 10 — 300 — 10 1 N8 Ø 8.0 - C=320

AÇO	POS	Desc.	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
Lajes					
	1	TR08644	8	318	2544

RESUMO DE AÇO		
AÇO	COMPR (m)	PESO (kg)
TR08644	25,44	18,70
Peso Total	TR08644 =	18,70 kg

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
ADICIONAIS					
50A	2	8.0	8	318	2544

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
50A	8.0	25,44	11,05
Peso Total	50A =		11,05 kg

Projeto de fabricação de vigotas treliçadas

SEM ESCALA

VT5A L5 8 Unidades	1 N1 TR08644 - 318 10 — 298 — 10 1 N2 Ø 8.0 - C=318

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
Lajes					
	1	TR08644	10	408	4080
	2	TR08644	9	408	3672
	3	TR08644	9	408	3672
	4	TR08644	9	320	2880

RESUMO DE AÇO		
AÇO	COMPR (m)	PESO (kg)
TR08644	143,04	105,13
Peso Total	TR08644 =	105,13 kg

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
ADICIONAIS					
50A	5	10.0	10	408	4080
	6	10.0	9	408	3672
	7	10.0	9	408	3672
	8	8.0	9	320	2880

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
50A	8.0	28,80	12,51
	10.0	114,24	77,53
Peso Total	50A =		90,04 kg

INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)

LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES

TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO: LUIZ FLAVIO REIS FERNANDES:05706227669 — Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES:05706227669 Dados: 2022.10.26 11:24:23 -03'00'
IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL LUIZ FLÁVIO REIS FERNANDES

ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634 — Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634 Dados: 2022.10.25 11:19:59 -03'00'
ENGº. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557

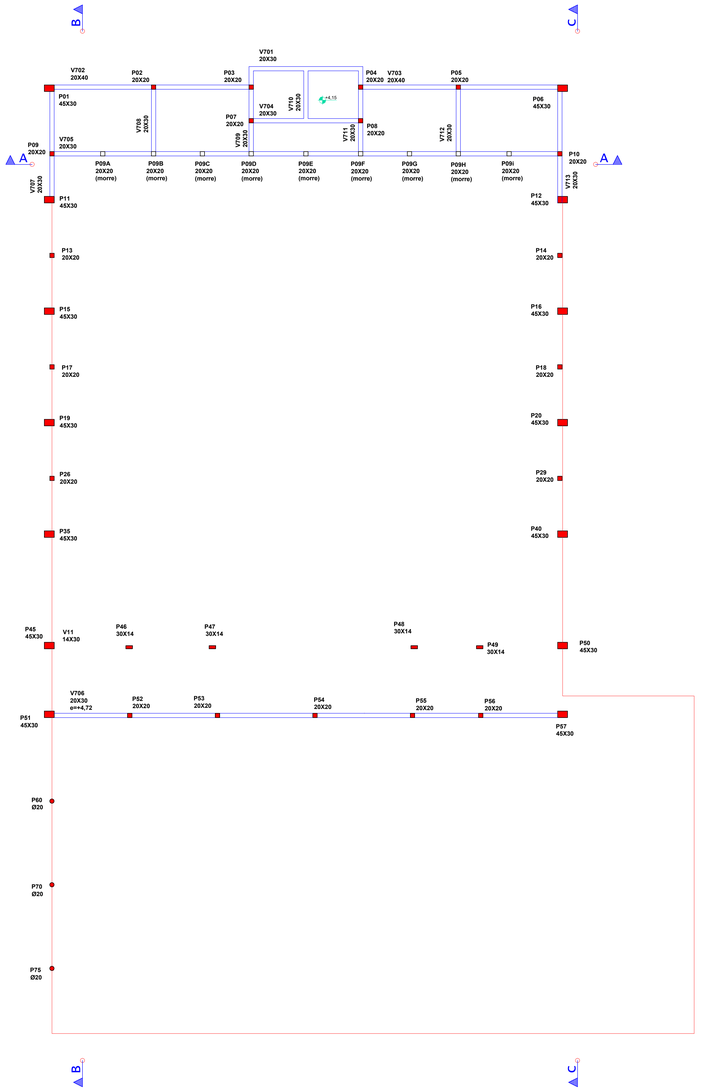
DESENHO: LEANDRO DE OLIVEIRA
MATHEUS HENRIQUE FRANCO LOPES

QUADRO RESUMO DE ÁREAS:
TERRENO PARTE B:.....99,41667 (ha)
MATRÍCULA DO IMÓVEL: .....19.490 FICHA 1
LIVRO Nº02 - REGISTRO GERAL
SERVIÇO REGISTRAL IMOBILIÁRIO DE OURO FINO/MG

ÁREA A CONSTRUIR: ..... 1.143,00 m²

CARIMBOS:

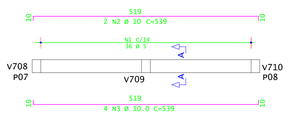
DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
17/10/2022	01	INDICADAS	METROS	07/16



PLANTA FORMA - VIGAS (NÍVEL + 4,15 e 4,72)

ESCALA 1:100

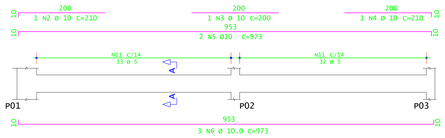
V701=V704 - 20x30



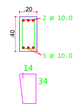
Corte A-A

36 N1 Ø 5.0 C/14 C=86

V702 - 20x40

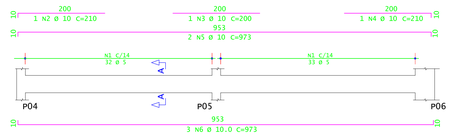


Corte A-A



65 N11 Ø 5.0 C/14 C=106

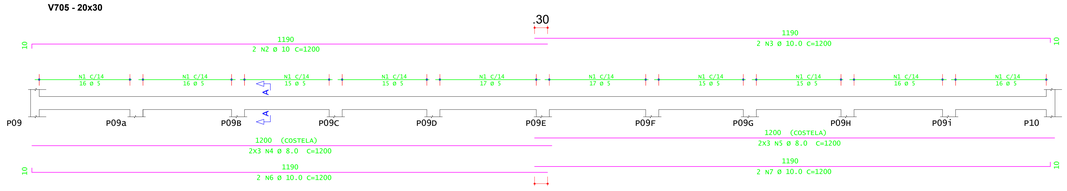
V703 - 20x40



Corte A-A

65 N11 Ø 5.0 C/14 C=106

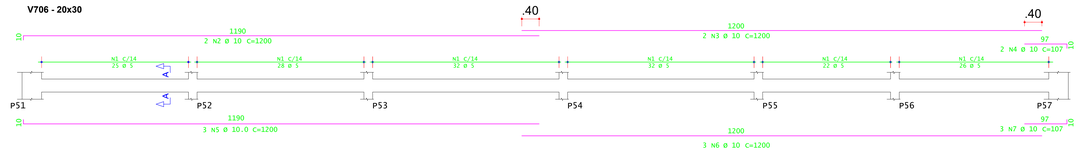
V705 - 20x30



Corte A-A

158 N1 Ø 5.0 C/14 C=86

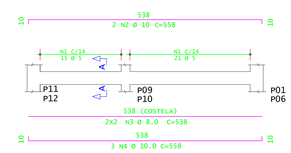
V706 - 20x30



Corte A-A

165 N1 Ø 5.0 C/14 C=86

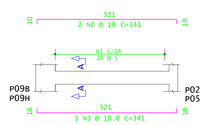
V707 / V713 - 20x30



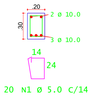
Corte A-A

36 N1 Ø 5.0 C/14 C=86

V708 / V712 - 20x30

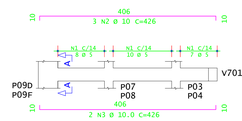


Corte A-A



20 N1 Ø 5.0 C/14 C=86

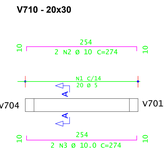
V709 / V711 - 20x30



Corte A-A

25 N1 Ø 5.0 C/14 C=86

V710 - 20x30



Corte A-A

20 N1 Ø 5.0 C/14 C=86

VOLUME DE CONCRETO - VIGAS fck 30MPa = 6,73 M³

ÁREA DE FORMAS - 67,34 M²

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
V701=V704 (X2)					
60A	1	5.0	72	86	6192
50A	2	10.0	4	539	2156
	3	10.0	8	539	4312
V702 (X1)					
60A	11	5.0	65	106	6890
50A	2	10.0	1	210	210
	3	10.0	1	200	200
	4	10.0	1	210	210
	5	10.0	2	973	1946
	6	10.0	3	973	2919
V703 (X1)					
60A	11	5.0	65	106	6890
50A	2	10.0	1	210	210
	3	10.0	1	200	200
	4	10.0	1	210	210
	5	10.0	2	973	1946
	6	10.0	3	973	2919
V705 (X1)					
60A	1	5.0	158	86	13588
50A	2	10.0	2	1200	2400
	3	10.0	2	1200	2400
	4	8.0	6	1200	7200
	5	8.0	6	1200	7200
	6	10.0	2	1200	2400
	7	10.0	2	1200	2400
V706 (X1)					
60A	1	5.0	165	86	14190
50A	2	10.0	2	1200	2400
	3	10.0	2	1200	2400
	4	10.0	2	107	214
	5	10.0	3	1200	3600
	6	10.0	3	1200	3600
	7	10.0	3	107	321
V707=V713 (X2)					
60A	1	5.0	72	86	6192
50A	2	10.0	4	558	2232
	3	8.0	8	538	4304
	4	10.0	6	558	3348
V708=V712 (X2)					
60A	1	5.0	40	86	3440
50A	2	10.0	4	341	1364
	3	10.0	6	341	2046
V709=V711 (X2)					
60A	1	5.0	50	86	4300
50A	2	10.0	6	426	2556
	3	10.0	4	426	1704
V710 (X1)					
60A	1	5.0	20	86	1720
50A	2	10.0	2	274	548
	3	10.0	2	274	548

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
60A	5.0	634,02	107,40
50A	8.0	187,04	81,27
	10.0	539,19	365,95
Peso Total	60A =		107,40 kg
Peso Total	50A =		447,22 kg

INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)

LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES

TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO
LUIZ FLAVIO REIS FERNANDES:05706221669
Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES:05706221669
Dados: 2022.10.26 17:13:00 -03'00'
IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL LUIZ FLÁVIO REIS FERNANDES

ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634
Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634
Dados: 2022.10.25 11:22:18 -03'00'
ENG°. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557

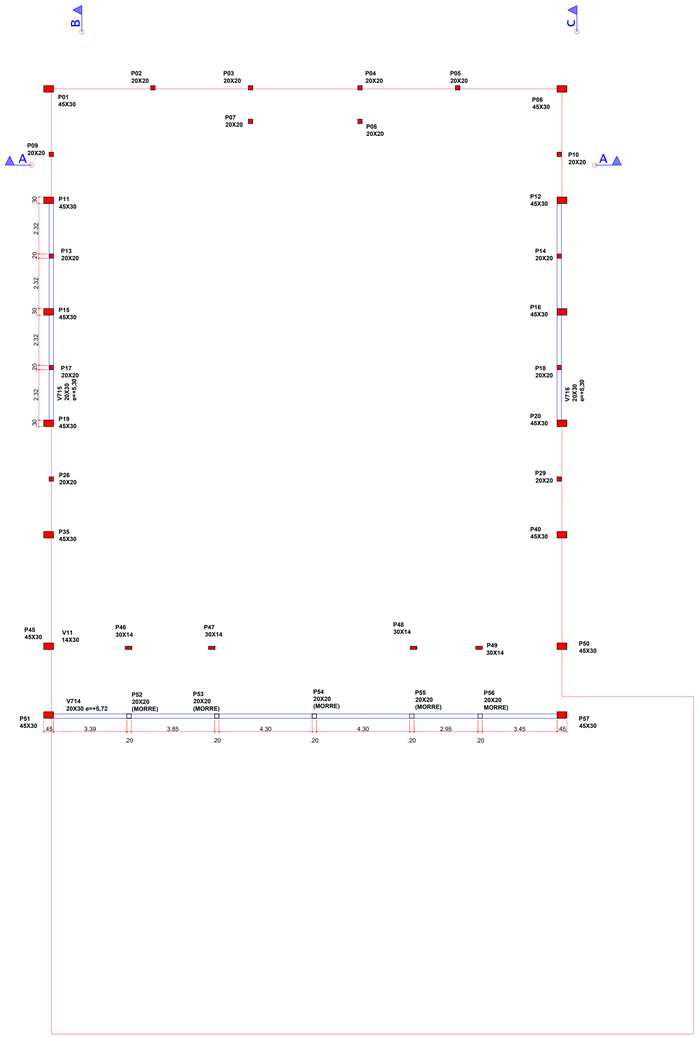
DESENHO: LEANDRO DE OLIVEIRA
MATHEUS HENRIQUE FRANCO LOPES

QUADRO RESUMO DE ÁREAS:
TERRENO PARTE B:.....99,41667 (ha)
MATRÍCULA DO IMÓVEL: .....19.480 FICHA 1
LIVRO Nº02 - REGISTRO GERAL
SERVIÇO REGISTRAL IMOBILIÁRIO DE OURO FINO/MG

ÁREA A CONSTRUIR: ..... 1.143,00 m²

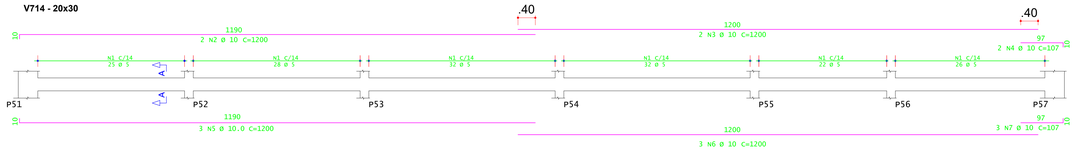
CARIMBOS:

DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
17/10/2022	01	INDICADAS	METROS	08/16

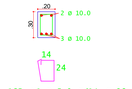


PLANTA FORMA - VIGAS (NÍVEL + 5,30 e 5,72)
ESCALA 1:100

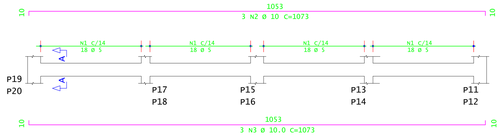
V714 - 20x30



Corte A-A



V715 / V716 - 20x30

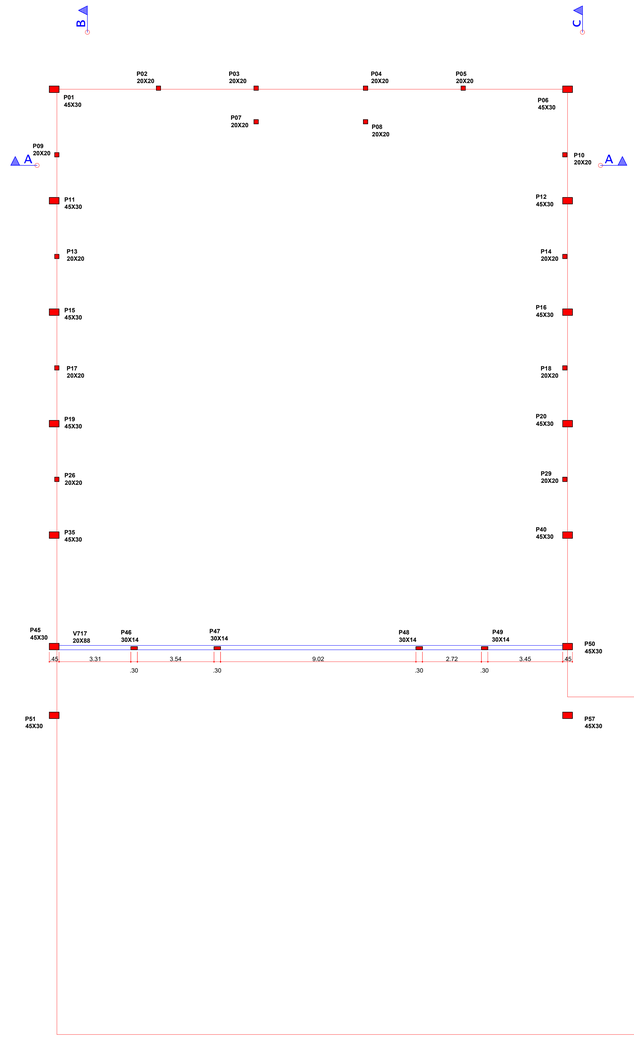


Corte A-A

VOLUME DE CONCRETO - VIGAS fck 30MPa = 2,72 M³
ÁREA DE FORMAS - 27,20 M²

AÇO		POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
V714 (X1)						
	60A	1	5.0	165	86	14190
	50A	2	10.0	2	1200	2400
		3	10.0	2	1200	2400
		4	10.0	2	107	214
		5	10.0	3	1200	3600
		6	10.0	3	1200	3600
		7	10.0	3	107	321
V715=V716 (X2)						
	60A	1	5.0	144	86	12384
	50A	2	10.0	6	1073	6438
		3	10.0	6	1073	6438

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
60A	5.0	265,74	45,02
50A	10.0	254,11	172,46
Peso Total		60A =	45,02 Kg
Peso Total		50A =	172,46 Kg



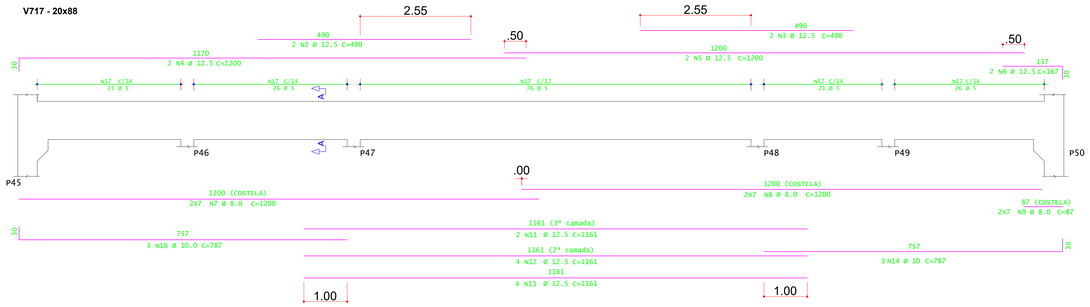
PLANTA FORMA - VIGAS (NÍVEL + 6,76)
ESCALA 1:100

VOLUME DE CONCRETO - VIGAS fck 30MPa = 4,25 M³
ÁREA DE FORMAS - 42,46 M²

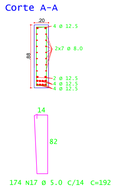
AÇO		POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
V714 (X1)						
	60A	1	5.0	174	192	33408
	50A	2	12.5	2	490	980
		3	12.5	2	490	980
		4	12.5	2	1200	2400
		5	12.5	3	1200	3600
		6	12.5	3	167	501
		7	8.0	14	1200	16800
		8	8.0	14	1200	16800
		9	8.0	14	87	1218
		10	12.5	3	787	2361
		11	12.5	2	1161	2322
		12	12.5	4	1161	4644
		13	12.5	4	1161	4644
		14	12.5	3	787	2361

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
60A	5.0	357,69	60,59
50A	8.0	348,18	151,28
	12.5	247,93	262,63
Peso Total		60A =	60,59 Kg
Peso Total		50A =	413,92 Kg

V717 - 20x88



Corte A-A



INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)

LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES

TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO
LUIZ FLAVIO REIS FERNANDES:05700221669
Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES:05700221669 Dados: 2022.10.17 14:52 -03'00'
IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL LUIZ FLÁVIO REIS FERNANDES

ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634
Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634 Dados: 2022.10.25 11:24:27 -03'00'
ENG°. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557

DESENHO: LEANDRO DE OLIVEIRA
MATHEUS HENRIQUE FRANCO LOPES

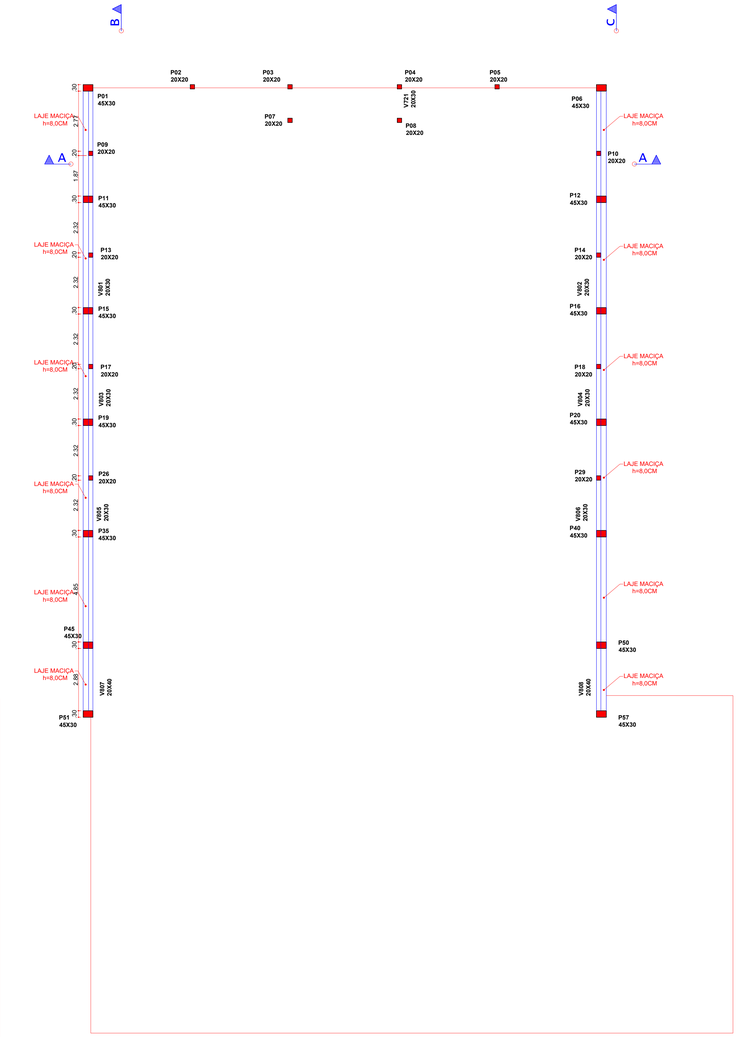
QUADRO RESUMO DE ÁREAS:
TERRENO PARTE B:.....99.41667 (ha)
MATRÍCULA DO IMÓVEL:.....19.490 FICHA 1
LIVRO Nº02 - REGISTRO GERAL
SERVIÇO REGISTRAL IMOBILIÁRIO DE OURO FINO/MG

ÁREA A CONSTRUIR: ..... 1.143,00 m²

CARIMBOS:

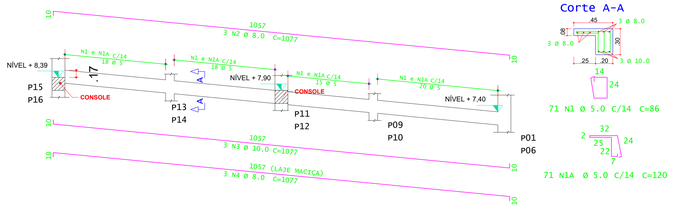
DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
17/10/2022	01	INDICADAS	METROS	09/16

PLANTA FORMA - VIGAS (NÍVEL + 7,20)
ESCALA 1:100



PLANTA FORMA - VIGAS E LAJES PLATIBANDA (NÍVEIS VARIADOS)
ESCALA 1:100

V801 = V802 - 20x30

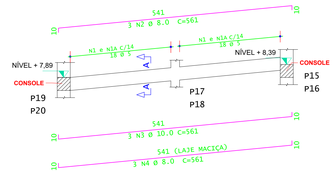


Corte A-A

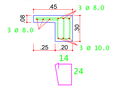
71 N1 Ø 5.0 C/14 C=86

71 N1A Ø 5.0 C/14 C=120

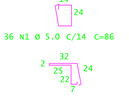
V803 = V804 - 20x30



Corte A-A

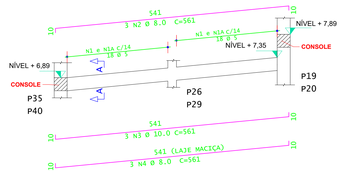


36 N1 Ø 5.0 C/14 C=86

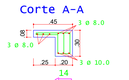


36 N1A Ø 5.0 C/14 C=120

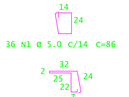
V805 = V806 - 20x30



Corte A-A

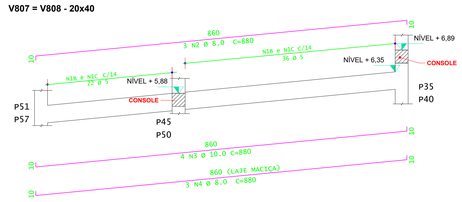


36 N1 Ø 5.0 C/14 C=86

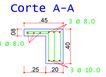


36 N1A Ø 5.0 C/14 C=120

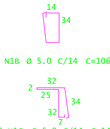
V807 = V808 - 20x40



Corte A-A



58 N1B Ø 5.0 C/14 C=106



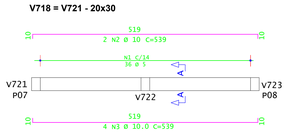
58 N1C Ø 5.0 C/14 C=140

VOLUME DE CONCRETO - VIGAS fck 30MPa = 3,63 M³
ÁREA DE FORMAS - 29,01 M²

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
V801=V802 (X2)					
60A	1	5.0	142	86	12212
50A	1A	5.0	142	120	17040
	2	8.0	6	1077	6462
	3	10.0	6	1077	6462
	4	8.0	6	1077	6462
V803=V804 (X2)					
60A	1	5.0	72	86	6192
50A	1A	5.0	72	120	8640
	2	8.0	6	561	3366
	3	10.0	6	561	3366
	4	8.0	6	561	3366
V805=V806 (X2)					
60A	1	5.0	72	86	6192
50A	1A	5.0	72	120	8640
	2	8.0	6	561	3366
	3	10.0	6	561	3366
	4	8.0	6	561	3366
V807=V808 (X2)					
60A	1	5.0	116	86	9976
50A	1A	5.0	116	120	13920
	2	8.0	6	880	5280
	3	10.0	8	880	7040
	4	8.0	6	880	5280

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
60A	5.0	950,24	160,97
50A	8.0	369,48	160,54
	10.0	202,34	137,33
Peso Total		60A =	160,97 kg
Peso Total		50A =	297,87 kg

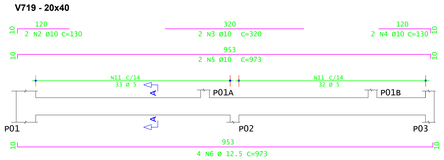
V718 = V721 - 20x30



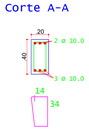
Corte A-A

36 N1 Ø 5.0 C/14 C=86

V719 - 20x40

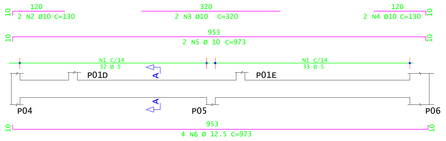


Corte A-A

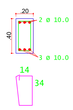


65 N11 Ø 5.0 C/14 C=106

V720 - 20x40

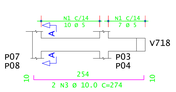


Corte A-A



65 N11 Ø 5.0 C/14 C=106

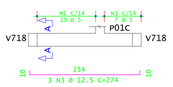
V722 / V724- 20x30



Corte A-A

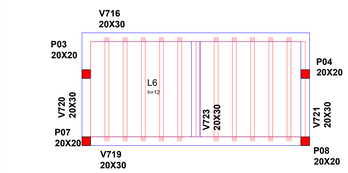
17 N1 Ø 5.0 C/14 C=86

V723- 20x30



Corte A-A

17 N1 Ø 5.0 C/14 C=86

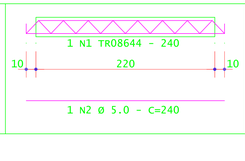


PLANTA FORMA - LAJES (NÍVEL + 7,20)
ESCALA 1:50

Projeto de fabricação de vigotas treliçadas

SEM ESCALA

VT6A
L6
11 Unidades



AÇO	POS	Desc.	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
Lajes					
	1	TR08644	11	240	2640

RESUMO DE AÇO		
AÇO	COMPR (m)	PESO (kg)
TR08644	26,40	19,40
Peso Total	TR08644 =	19,40 kg

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
ADICIONAIS					
60A	2	5.0	11	240	2640

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
60A	5.0	26,40	4,50
Peso Total		50A =	4,50 kg

VOLUME DE CONCRETO - VIGAS fck 30MPa = 2,54 M³
ÁREA DE FORMAS - 25,43 M²

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
V718=V721 (X2)					
60A	1	5.0	72	86	6192
50A	2	10.0	4	539	2156
	3	10.0	8	539	4312
V719 (X1)					
60A	1	5.0	65	106	6890
50A	2	10.0	2	130	260
	3	10.0	2	320	640
	4	10.0	2	130	260
	5	10.0	2	973	1946
	6	12.5	4	973	3892
V720 (X1)					
60A	1	5.0	65	106	6890
50A	2	10.0	2	130	260
	3	10.0	2	320	640
	4	10.0	2	130	260
	5	10.0	2	973	1946
	6	12.5	4	973	3892
V722=724 (X2)					
60A	1	5.0	34	86	2924
50A	2	12.5	6	274	1644
	3	10.0	4	274	1096
V723 (X1)					
60A	1	5.0	17	86	1462
50A	2	10.0	2	274	548
	3	12.5	3	274	822

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
60A	5.0	243,58	41,26
50A	10.0	143,24	97,22
	12.5	86,06	91,16
Peso Total		60A =	41,26 kg
Peso Total		50A =	188,38 kg

INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)

LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES

TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO
LUIZ FLAVIO REIS FERNANDES:05706221669
Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES:05706221669 Dados: 2022.10.26 11:15:44 -03'00'
IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL LUIZ FLÁVIO REIS FERNANDES

ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634
Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634 Dados: 2022.10.25 11:26:57 -03'00'
ENGº. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557

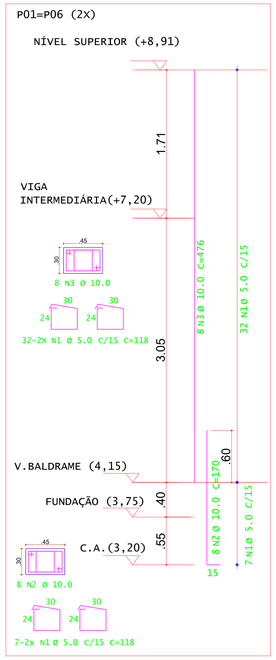
DESENHO: LEANDRO DE OLIVEIRA
MATHEUS HENRIQUE FRANCO LOPES

QUADRO RESUMO DE ÁREAS:
TERRENO PARTE B:.....99,41667 (ha)
MATRÍCULA DO IMÓVEL:.....19.490 FICHA 1
LIVRO Nº02 - REGISTRO GERAL
SERVIÇO REGISTRAL IMOBILIÁRIO DE OURO FINO/MG

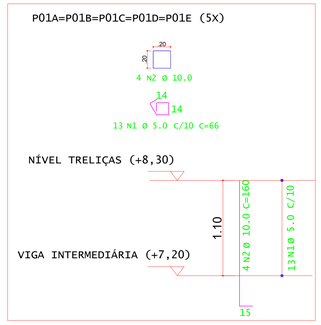
ÁREA A CONSTRUIR: ..... 1.143,00 m²

CARIMBOS:

DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
17/10/2022	01	INDICADAS	METROS	10/16



DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
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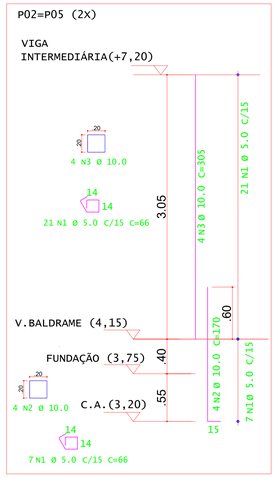

DETALHES DOS PILARES
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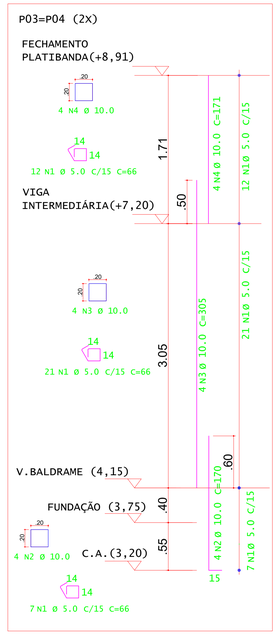
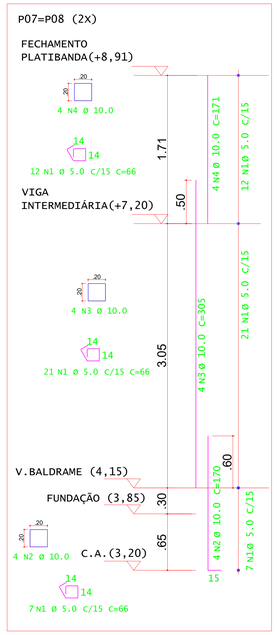
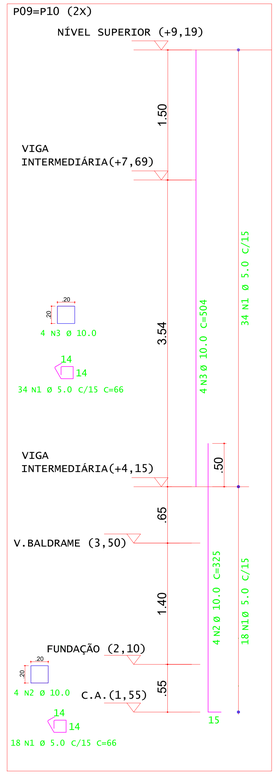


DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
ESCALA 1:25



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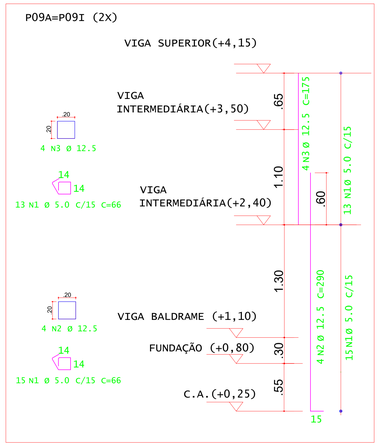
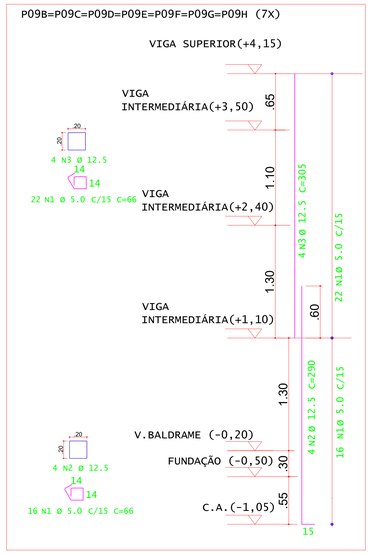
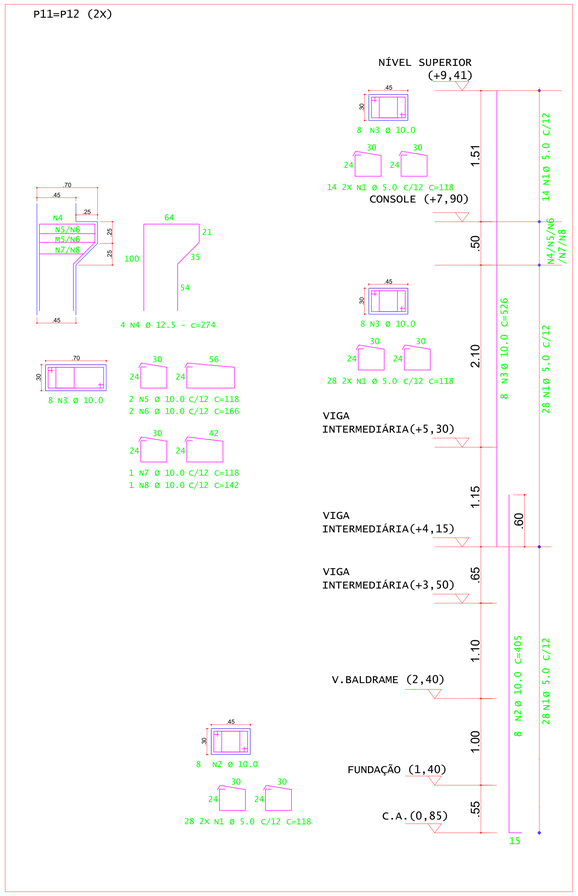


DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
ESCALA 1:25

CONVENÇÕES

- Pilar que morre
- Pilar que nasce / passa
- Pilar com mudança de seção

PARÂMETROS

CONCRETO: INDICADO

AÇO(S) : CA-50 e CA-60

COBRIMENTO DAS ARMADURAS: VIGA / CINTA = 2.50 cm
PILAR = 2.50/3.00 cm
LAJE = 2.50 cm

OBSERVAÇÕES INICIAIS

1 - A taxa do solo foi fornecida em ensaio de sondagem;
2 - A execução da estrutura deve obedecer as recomendações da NBR - 6118;
3 - As cotas e níveis devem ser conferidos pelas plantas estruturais e afins;
4 - Confirmar, com o fabricante de concreto, a disponibilidade, dois dias antes da concretagem;
5 - Para concreto confeccionado na obra, utilizar a betoneira;
6 - Antes da execução da estrutura, as formas e a locação devem ser validadas pelo engenheiro construtor;
7 - As dúvidas projetuais para melhor execução, serão esclarecidas pelo engenheiro projetista;
8 - Acompanhar cuidadosamente a cura do concreto, principalmente nos primeiros sete dias, umedecendo adequadamente as peças concretadas.

INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)

LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES

TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO: LUIZ FLAVIO REIS FERNANDES:05706221669 — Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES:05706221669 Dados: 2022.10.26 17:16:41 -03'00'
IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL LUIZ FLÁVIO REIS FERNANDES

ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634 — Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634 Dados: 2022.10.25 11:29:15 -03'00'
ENG°. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557

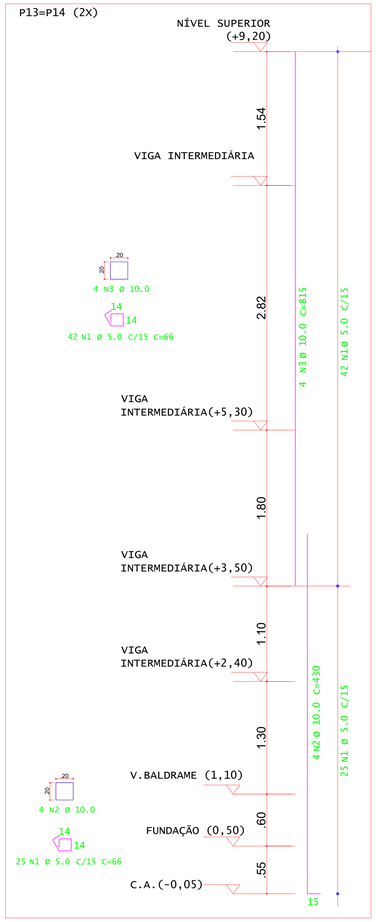
DESENHO: LEANDRO DE OLIVEIRA
MATHEUS HENRIQUE FRANCO LOPES

QUADRO RESUMO DE ÁREAS:
TERRENO PARTE B:.....99.41667 (ha)
MATRÍCULA DO IMÓVEL: .....19.490 FICHA 1
LIVRO Nº02 - REGISTRO GERAL
SERVIÇO REGISTRAL IMOBILIÁRIO DE OURO FINO/MG

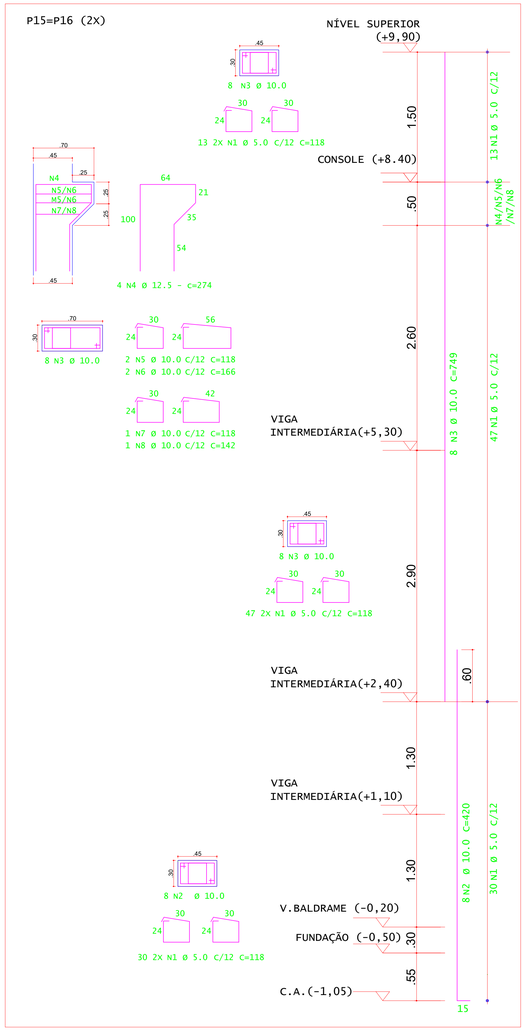
ÁREA A CONSTRUIR: ..... 1.143,00 m²

CARIMBOS:

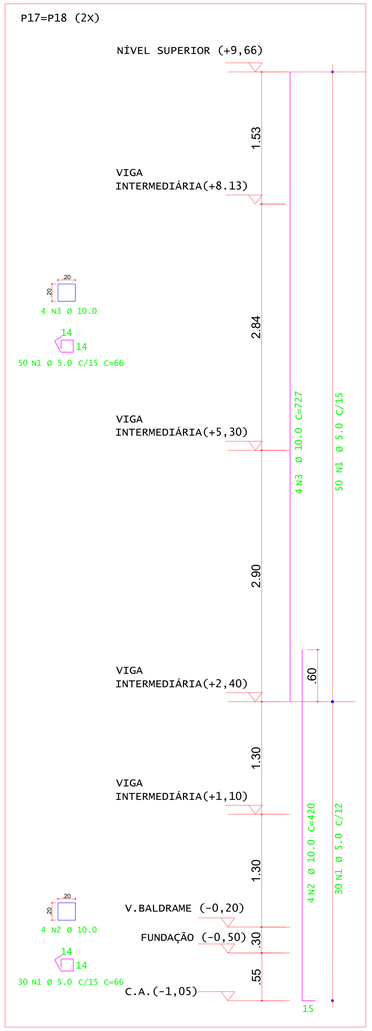
DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
17/10/2022	01	INDICADAS	METROS	11/16



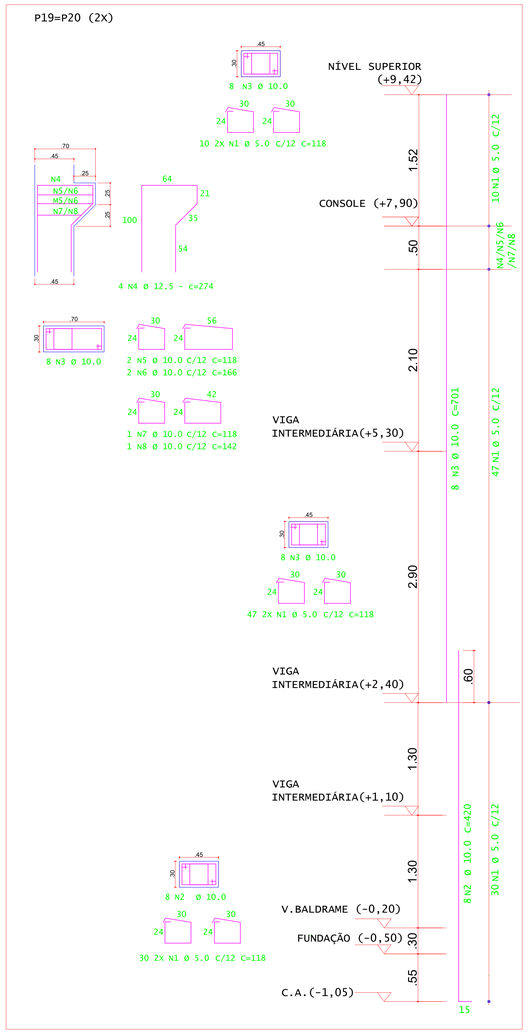
DETALHES DOS PILARES
ESCALA 1:25



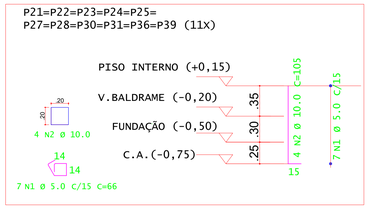
DETALHES DOS PILARES
ESCALA 1:25



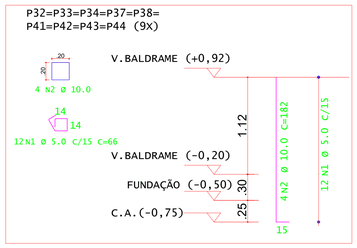
DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
ESCALA 1:25

INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)

LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES

TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO
LUIZ FLAVIO REIS FERNANDES:05706221669
Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES:05706221669 Dados: 2022.10.25 17:17:44 -03'00'
IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL LUIZ FLÁVIO REIS FERNANDES

ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634
Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634 Dados: 2022.10.25 11:31:24 -03'00'
ENG°. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557

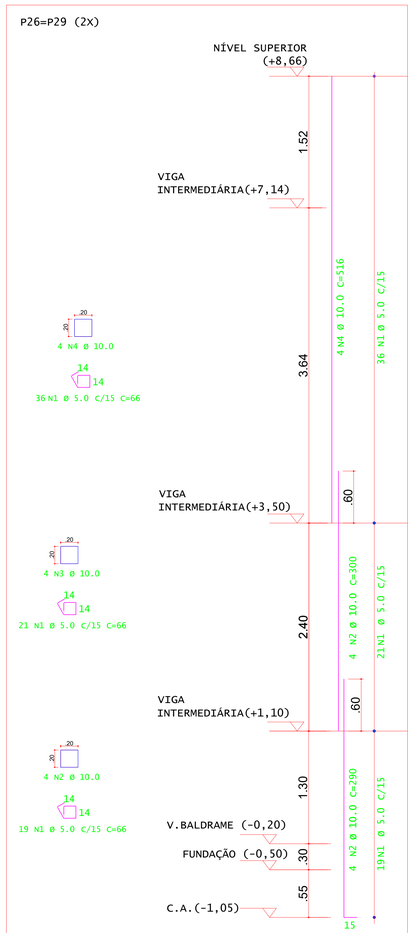
DESENHO: LEANDRO DE OLIVEIRA
MATHEUS HENRIQUE FRANCO LOPES

QUADRO RESUMO DE ÁREAS:
TERRENO PARTE B:.....99,41667 (ha)
MATRÍCULA DO IMÓVEL:.....19.490 FICHA 1
LIVRO Nº02 - REGISTRO GERAL
SERVIÇO REGISTRAL IMOBILIÁRIO DE OURO FINO/MG

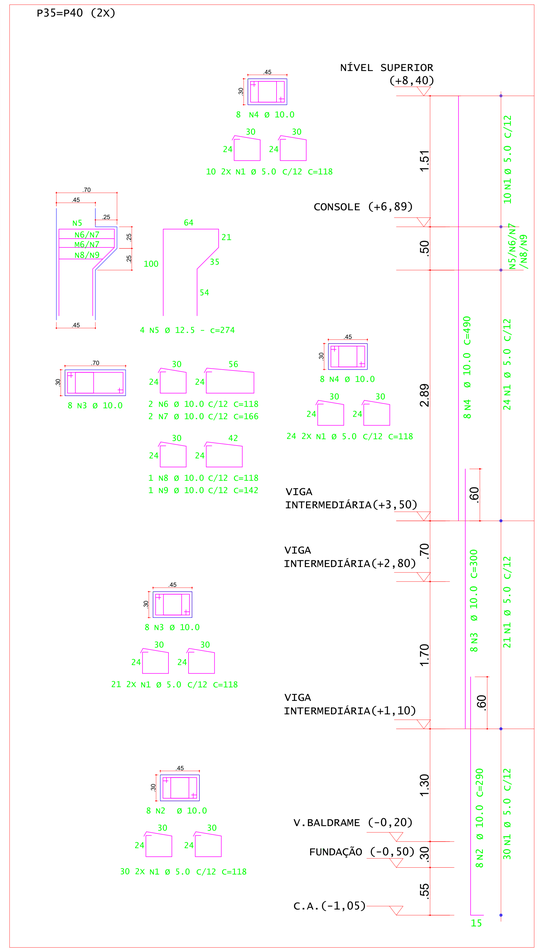
ÁREA A CONSTRUIR: ..... 1.143,00 m²

CARIMBOS:

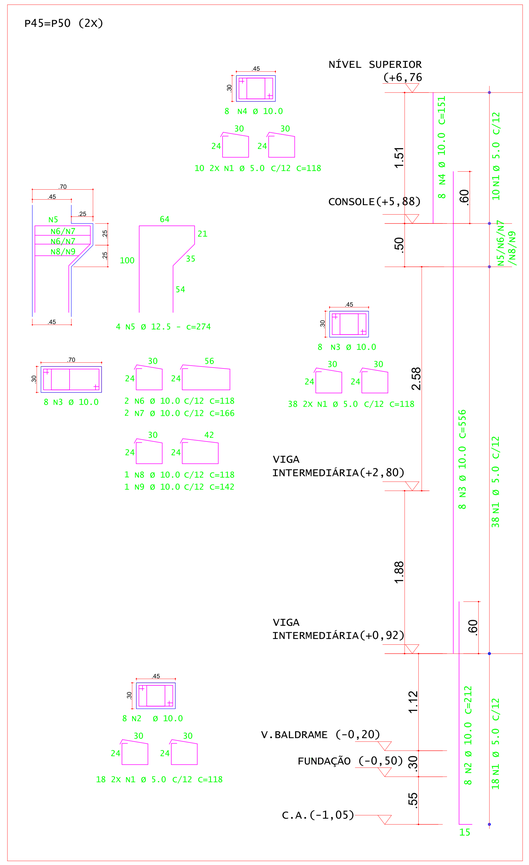
DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
17/10/2022	01	INDICADAS	METROS	12/16



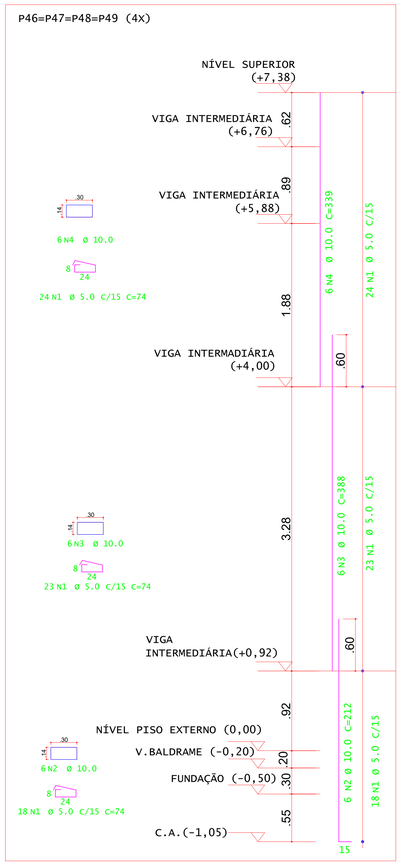
DETALHES DOS PILARES
ESCALA 1:25



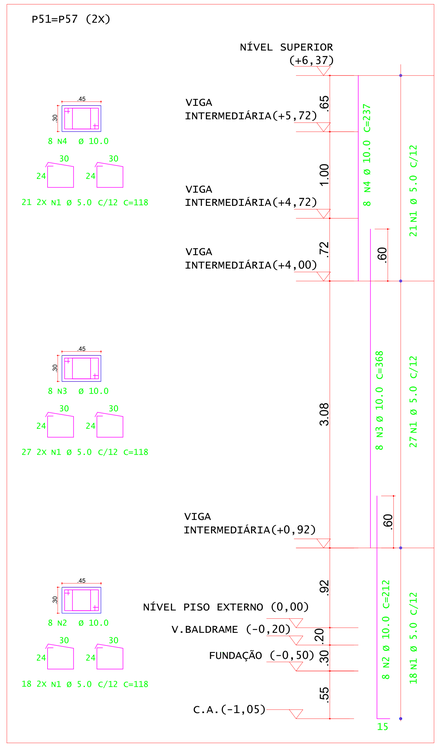
DETALHES DOS PILARES
ESCALA 1:25



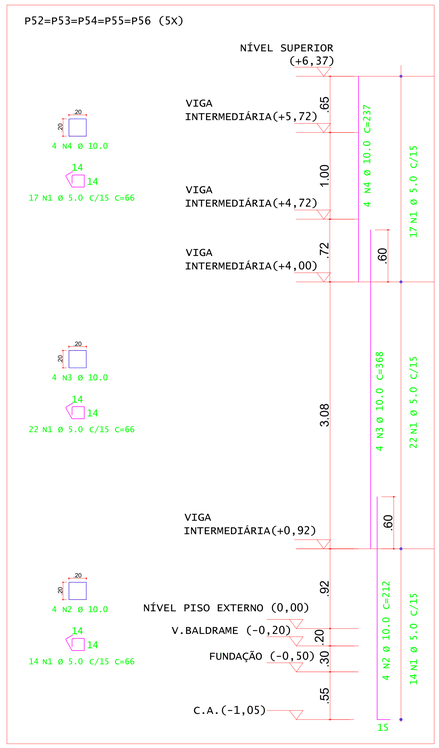
DETALHES DOS PILARES
ESCALA 1:25



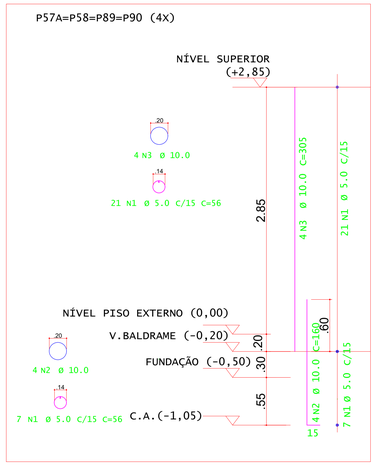
DETALHES DOS PILARES
ESCALA 1:25



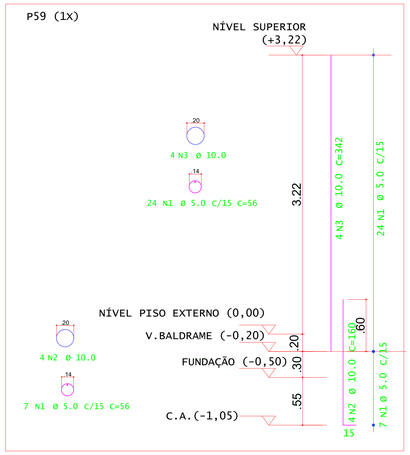
DETALHES DOS PILARES
ESCALA 1:25



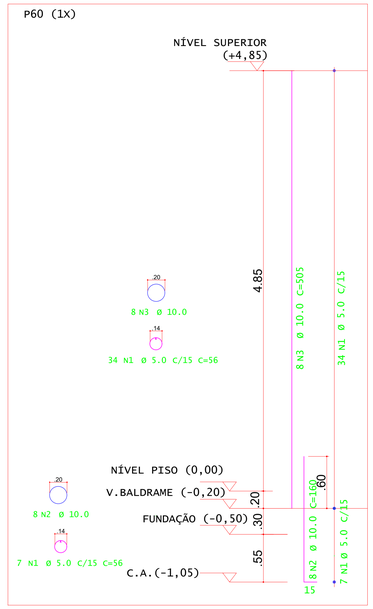
DETALHES DOS PILARES
ESCALA 1:25



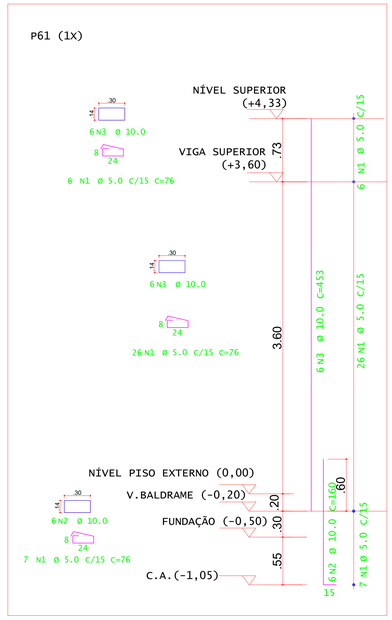
DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
ESCALA 1:25

INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)

LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES

TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO
LUIZ FLAVIO REIS FERNANDES:05170623721669
Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES:05170623721669 Dados: 2022.10.25 11:36:17 -03'00'
IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL LUIZ FLÁVIO REIS FERNANDES

ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634
Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634 Dados: 2022.10.25 11:33:25 -03'00'
ENGº. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557

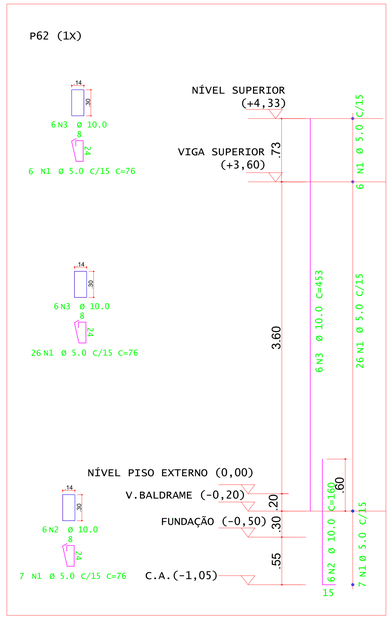
DESENHO: LEANDRO DE OLIVEIRA
MATHEUS HENRIQUE FRANCO LOPES

QUADRO RESUMO DE ÁREAS:
TERRENO PARTE B:.....99,41667 (ha)
MATRÍCULA DO IMÓVEL:.....19.490 FICHA 1
LIVRO Nº02 - REGISTRO GERAL
SERVIÇO REGISTRAL IMOBILIÁRIO DE OURO FINO/MG

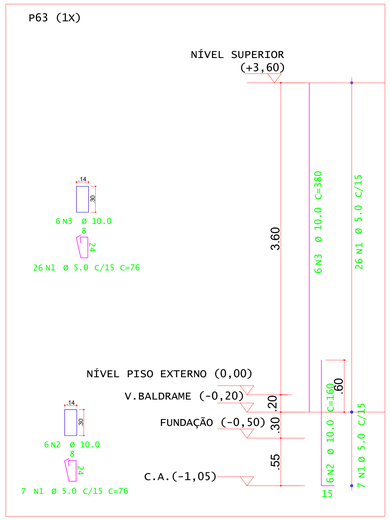
ÁREA A CONSTRUIR: ..... 1.143,00 m²

CARIMBOS:

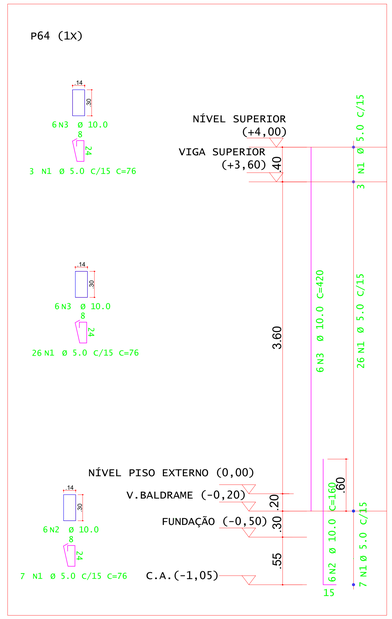
DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
17/10/2022	01	INDICADAS	METROS	13/16



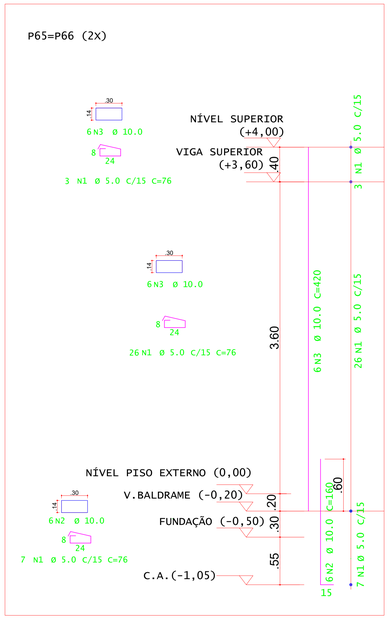
DETALHES DOS PILARES
ESCALA 1:25



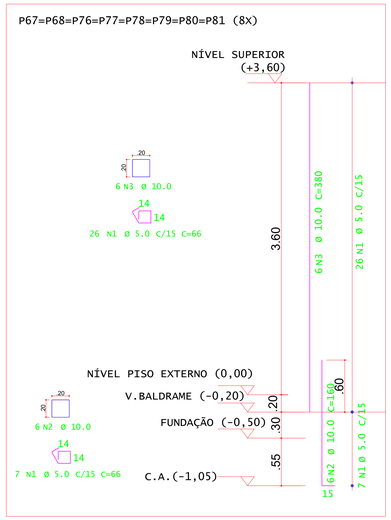
DETALHES DOS PILARES
ESCALA 1:25



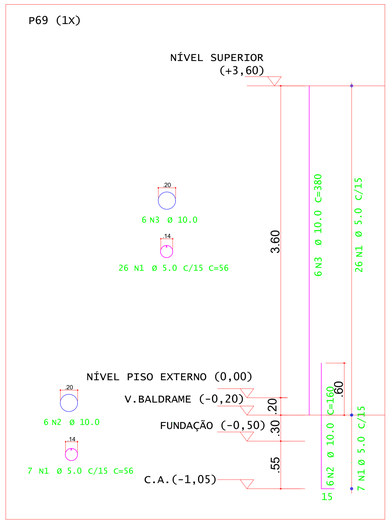
DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
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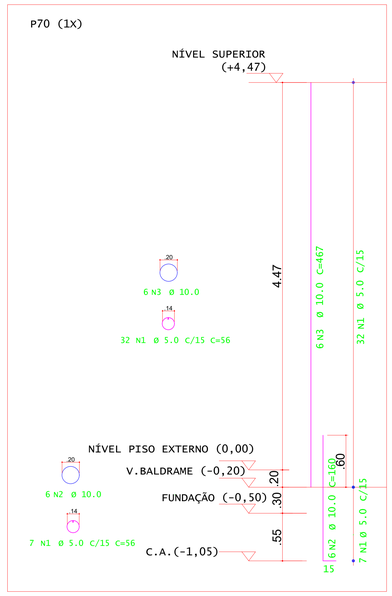
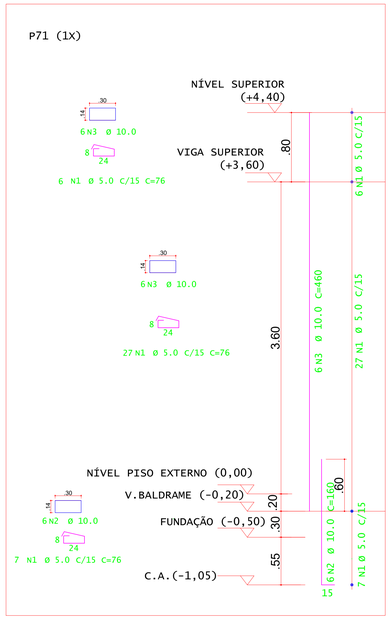
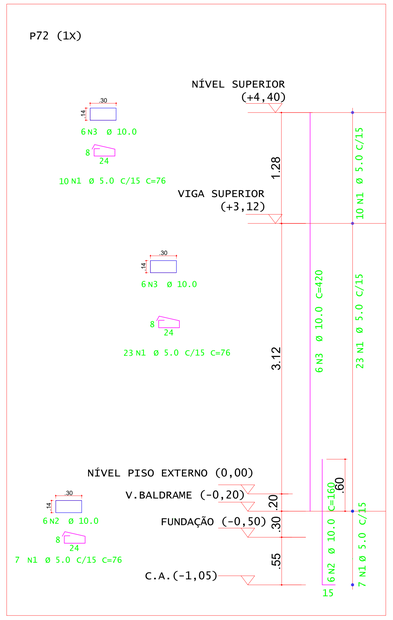


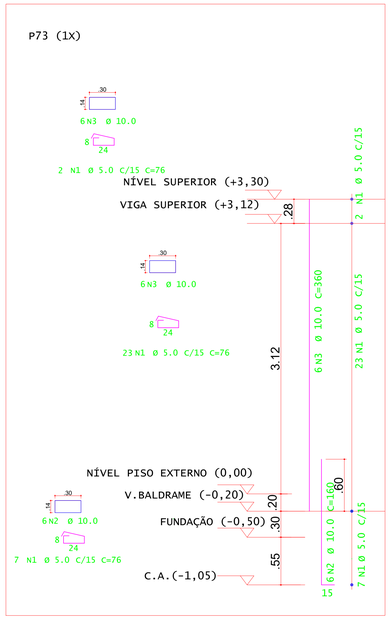
DETALHES DOS PILARES
ESCALA 1:25



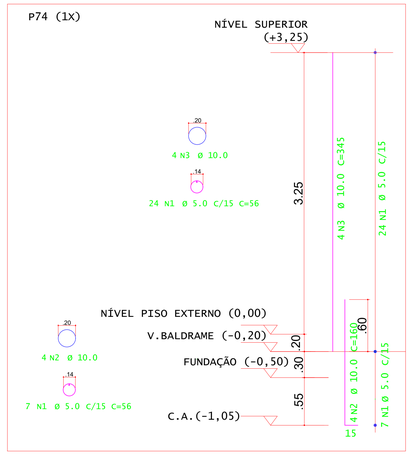
DETALHES DOS PILARES
ESCALA 1:25



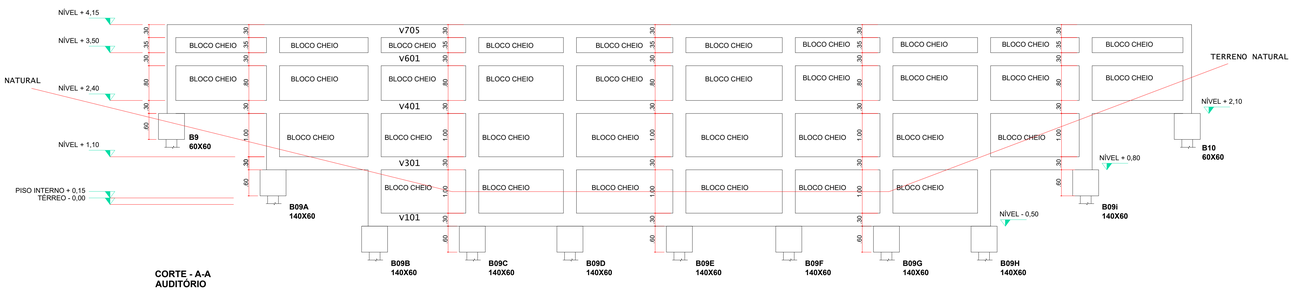
DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
ESCALA 1:25



CORTE - A-A
AUDITÓRIO

INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)

LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES

TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO
LUIZ FLAVIO REIS FERNANDES:05170621669
Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES:05170621669 Dados: 2022.10.28 17:15:25 -03'00'
IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL LUIZ FLÁVIO REIS FERNANDES

ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634
Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634 Dados: 2022.10.25 11:36:18 -03'00'
ENGº. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557

DESENHO: LEANDRO DE OLIVEIRA
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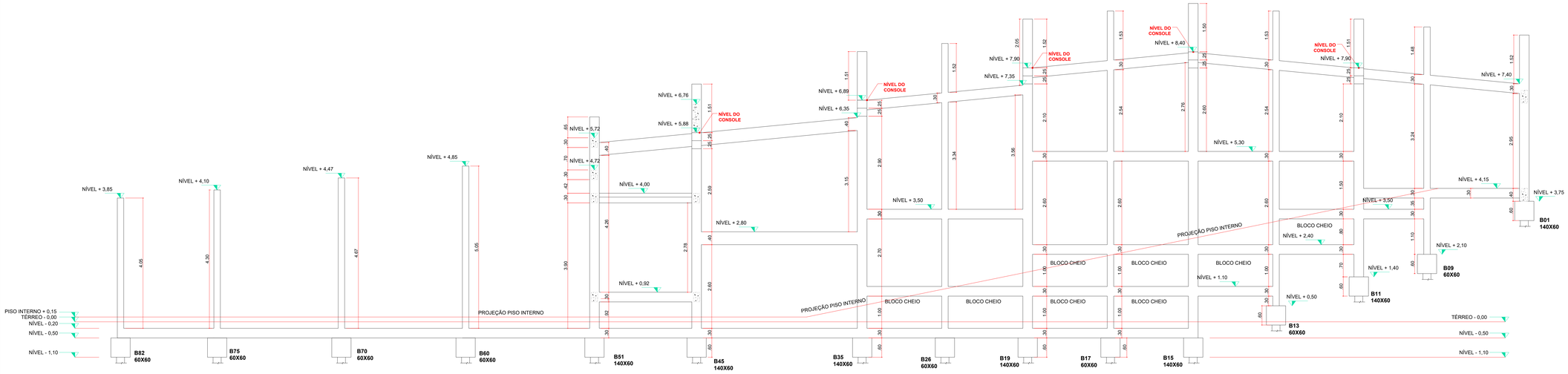
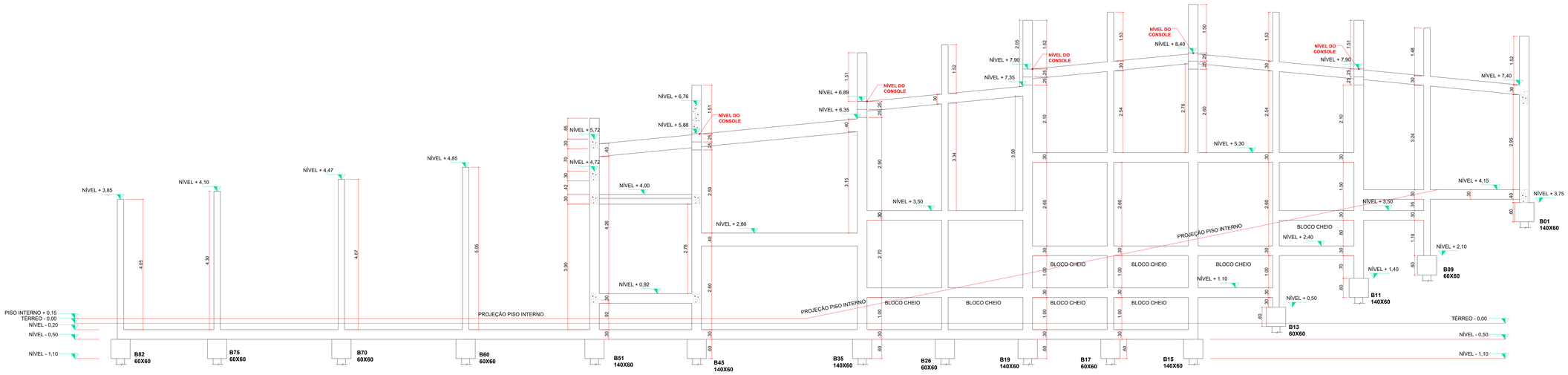
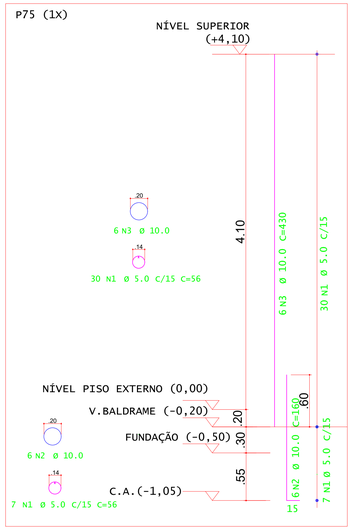
DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
17/10/2022	01	INDICADAS	METROS	14/16



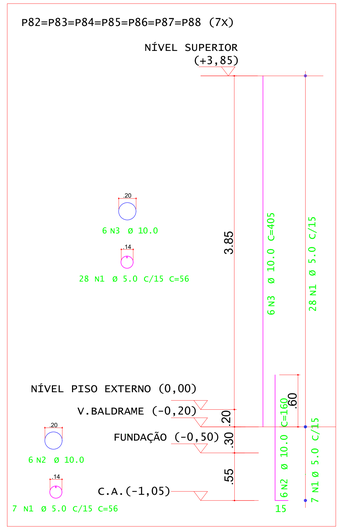
CORTE - B-B
AUDITÓRIO
ESCALA 1:50



CORTE - B-B
AUDITÓRIO
ESCALA 1:50



DETALHES DOS PILARES
ESCALA 1:25



DETALHES DOS PILARES
ESCALA 1:25

VOLUME DE CONCRETO - PILARES fck 30MPa = 31,35 M³
ÁREA DE FORMAS - 465,23 M²

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
P01=P06 (X2)					
60A	1	5.0	156	118	18408
50A	2	10.0	16	170	2720
	2	10.0	16	476	7616
P01A=P01B=P01C=P01D=P01E (X5)					
60A	1	5.0	65	66	4290
50A	2	10.0	20	160	3200
P02=P05 (X2)					
60A	1	5.0	56	66	3696
50A	2	10.0	8	170	1360
	3	10.0	8	305	2440
P03=P04 (X2)					
50A	1	5.0	80	66	5280
	2	10.0	8	170	1360
	3	10.0	8	305	2440
	4	10.0	8	171	1368
P07=P08 (X2)					
50A	1	5.0	80	66	5280
	2	10.0	8	170	1360
	3	10.0	8	305	2440
	4	10.0	8	171	1368
P09=P10 (X2)					
60A	1	5.0	104	66	6864
50A	2	10.0	8	325	2600
	3	10.0	8	504	4032
P09A=P09I (X2)					
60A	1	5.0	36	66	2376
50A	2	12.5	8	290	2320
	3	12.5	8	175	1400
P09B=P09C=P09D=P09E=P09F=P09G=P09H (X7)					
60A	1	5.0	266	66	17556
50A	2	12.5	28	290	8120
	3	12.5	28	305	8540
P11=P12 (X2)					
60A	1	5.0	280	118	33040
50A	2	10.0	16	405	6480
	3	10.0	16	526	8416
	4	12.5	8	274	2192
	5	10.0	4	118	472
	6	10.0	4	166	664
	7	10.0	2	118	236
	8	10.0	2	142	284

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
P13=P14(X2)					
60A	1	5.0	134	66	8844
50A	2	10.0	8	430	3440
	3	10.0	8	815	6520
P15=P16 (X2)					
60A	1	5.0	360	118	42480
50A	2	10.0	16	420	6720
	3	10.0	16	749	11984
	4	12.5	8	274	2192
	5	10.0	4	118	472
	6	10.0	4	166	664
	7	10.0	2	118	236
	8	10.0	2	142	284
P17=P18 (X2)					
60A	1	5.0	160	66	10560
50A	2	10.0	8	420	3360
	3	10.0	8	727	5816
P19=P20 (X2)					
60A	1	5.0	348	118	41064
50A	2	10.0	16	420	6720
	3	10.0	16	701	11216
	4	12.5	8	274	2192
	5	10.0	4	118	472
	6	10.0	4	166	664
	7	10.0	2	118	236
	8	10.0	2	142	284
P21=P22=P23=P24=P25=P27=P28=P30=P31=P36=P39 (X11)					
60A	1	5.0	77	66	5082
50A	2	10.0	44	105	4620
P26=P29 (X2)					
60A	1	5.0	152	66	10032
50A	2	10.0	8	290	2320
	3	10.0	8	300	2400
	4	10.0	8	516	4128
P32=P33=P34=P37=P38=P41=P42=P43=P44 (X9)					
60A	1	5.0	108	66	7128
50A	2	10.0	36	182	6552
P35=P40 (X2)					
60A	1	5.0	340	118	40120
50A	2	10.0	16	290	4640
	3	10.0	16	300	4800
	4	10.0	16	490	7840
	5	12.5	8	274	2192
	6	10.0	4	118	472
	7	10.0	4	166	664
	8	10.0	2	118	236
	9	10.0	2	142	284

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
P45=P50 (X2)					
60A	1	5.0	264	118	31152
50A	2	10.0	16	212	3392
	3	10.0	16	556	8896
	4	10.0	16	151	2416
	5	12.5	8	274	2192
	6	10.0	4	118	472
	7	10.0	4	166	664
	8	10.0	2	118	236
	9	10.0	2	142	284
P46=P47=P48=P49 (X4)					
60A	1	5.0	260	74	19240
50A	2	10.0	24	212	5088
	3	10.0	24	388	9312
	4	10.0	24	339	8136
P51=P57 (X2)					
60A	1	5.0	264	118	31152
50A	2	10.0	16	212	3392
	3	10.0	16	368	5888
	4	10.0	16	237	3792
P52=P53=P54=P55=P56 (X5)					
60A	1	5.0	265	66	17490
50A	2	10.0	20	212	4240
	3	10.0	20	368	7360
	4	10.0	20	237	4740
P57A=P58=P89=P90 (X4)					
60A	1	5.0	112	56	6272
50A	2	10.0	16	160	2560
	3	10.0	16	305	4880
P59 (X1)					
60A	1	5.0	31	56	1736
50A	2	10.0	4	160	640
	3	10.0	4	342	1368
P60 (X1)					
60A	1	5.0	41	56	2296
50A	2	10.0	8	160	1280
	3	10.0	8	505	4040
P61 (X1)					
60A	1	5.0	39	76	2964
50A	2	10.0	6	160	960
	3	10.0	6	453	2718
P62 (X1)					
60A	1	5.0	39	76	2964
50A	2	10.0	6	160	960
	3	10.0	6	453	2718

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
P63 (X1)					
60A	1	5.0	33	76	2508
50A	2	10.0	6	160	960
	3	10.0	6	380	2280
P64 (X1)					
60A	1	5.0	36	76	2736
50A	2	10.0	6	160	960
	3	10.0	6	420	2520
P65=P66 (X2)					
60A	1	5.0	72	76	5472
50A	2	10.0	12	160	1920
	3	10.0	12	420	5040
P67=P68=P76=P77=P78=P79=P80=P81 (X8)					
60A	1	5.0	264	66	17424
50A	2	10.0	48	160	7680
	3	10.0	48	380	18240
P69 (X1)					
60A	1	5.0	33	56	1848
50A	2	10.0	6	160	960
	3	10.0	6	380	2280
P70 (X1)					
60A	1	5.0	39	56	2184
50A	2	10.0	6	160	960
	3	10.0	6	467	2802
P71 (X1)					
60A	1	5.0	40	76	3040
50A	2	10.0	6	160	960
	3	10.0	6	460	2760
P72 (X1)					
60A	1	5.0	40	76	3040
50A	2	10.0	6	160	960
	3	10.0	6	420	2520
P73 (X1)					
60A	1	5.0	32	76	2432
50A	2	10.0	6	160	960
	3	10.0	6	360	2160
P74 (X1)					
60A	1	5.0	31	56	1736
50A	2	10.0	4	160	640
	3	10.0	4	345	1380

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
P75 (X1)					
60A	1	5.0	37	56	2072
50A	2	10.0	6	160	960
	3	10.0	6	430	2580
P82=P83=P84=P85=P86=P87=P88 (X7)					
60A	1	5.0	245	56	13720
50A	2	10.0	42	160	6720
	3	10.0	42	405	17010

RESUMO DE AÇO			
AÇO	BIT (mm)	COMPR (m)	PESO C/10% (kg)
60A	5.0	4818,83	816,31
50A	10.0	3255,44	2209,47
	12.5	313,40	331,98
Peso Total	60A =		816,31 kg
Peso Total	50A =		2.541,45 kg

INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)

LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES

TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO: LUIZ FLAVIO REIS FERNANDES:05706221669 — Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES:05706221669 Dados: 2022.10.24 17:20:01 -03'00'

IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL: LUIZ FLÁVIO REIS FERNANDES

ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634 — Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634 Dados: 2022.10.25 11:38:21 -03'00'
ENGº. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557

DESENHO: LEANDRO DE OLIVEIRA
MATHEUS HENRIQUE FRANCO LOPES

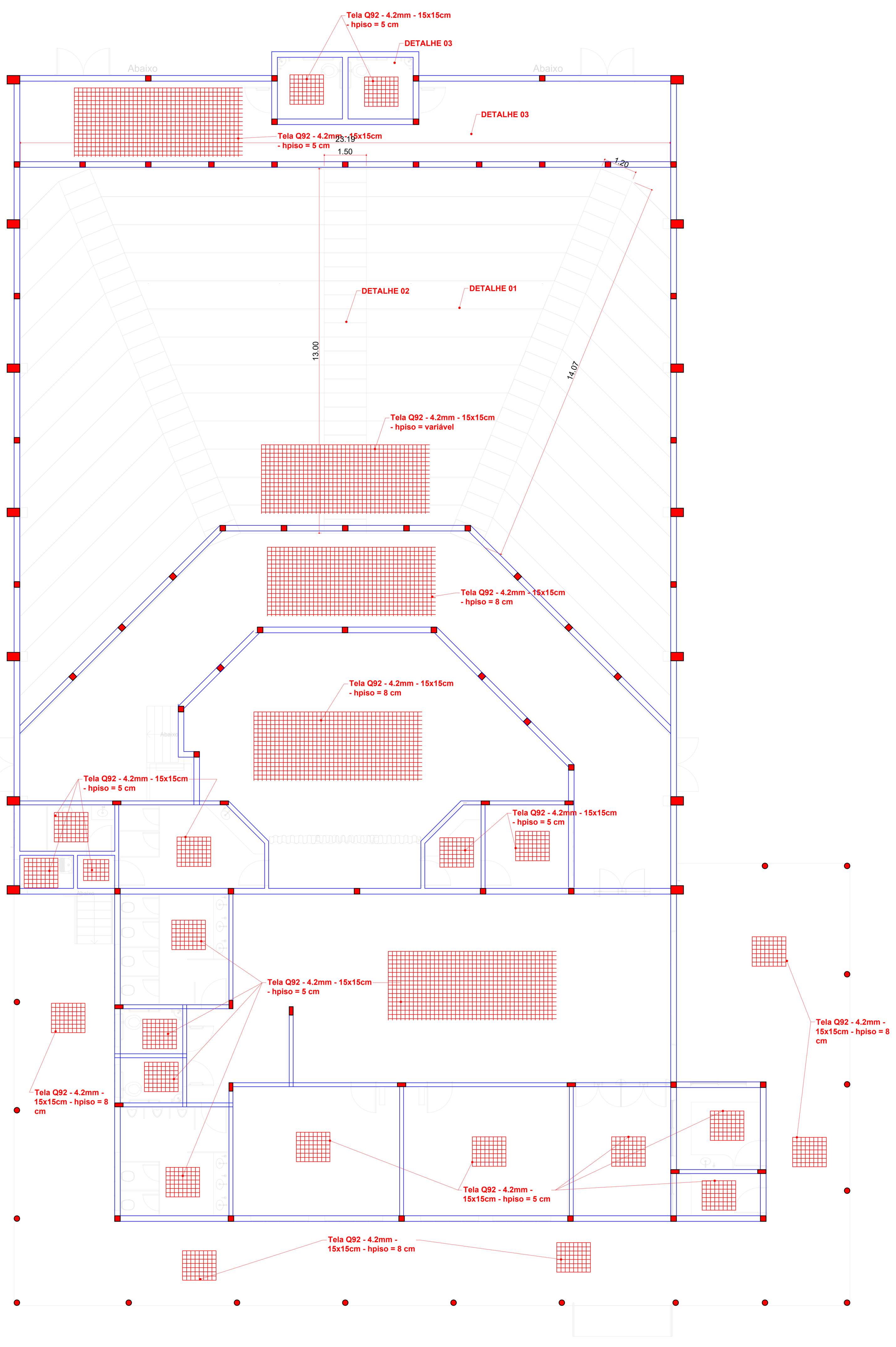
QUADRO RESUMO DE ÁREAS:

TERRENO PARTE B:.....99,41667 (ha)
MATRÍCULA DO IMÓVEL: .....19.490 FICHA 1
LIVRO Nº02 - REGISTRO GERAL
SERVIÇO REGISTRAL IMOBILIÁRIO DE OURO FINO/MG

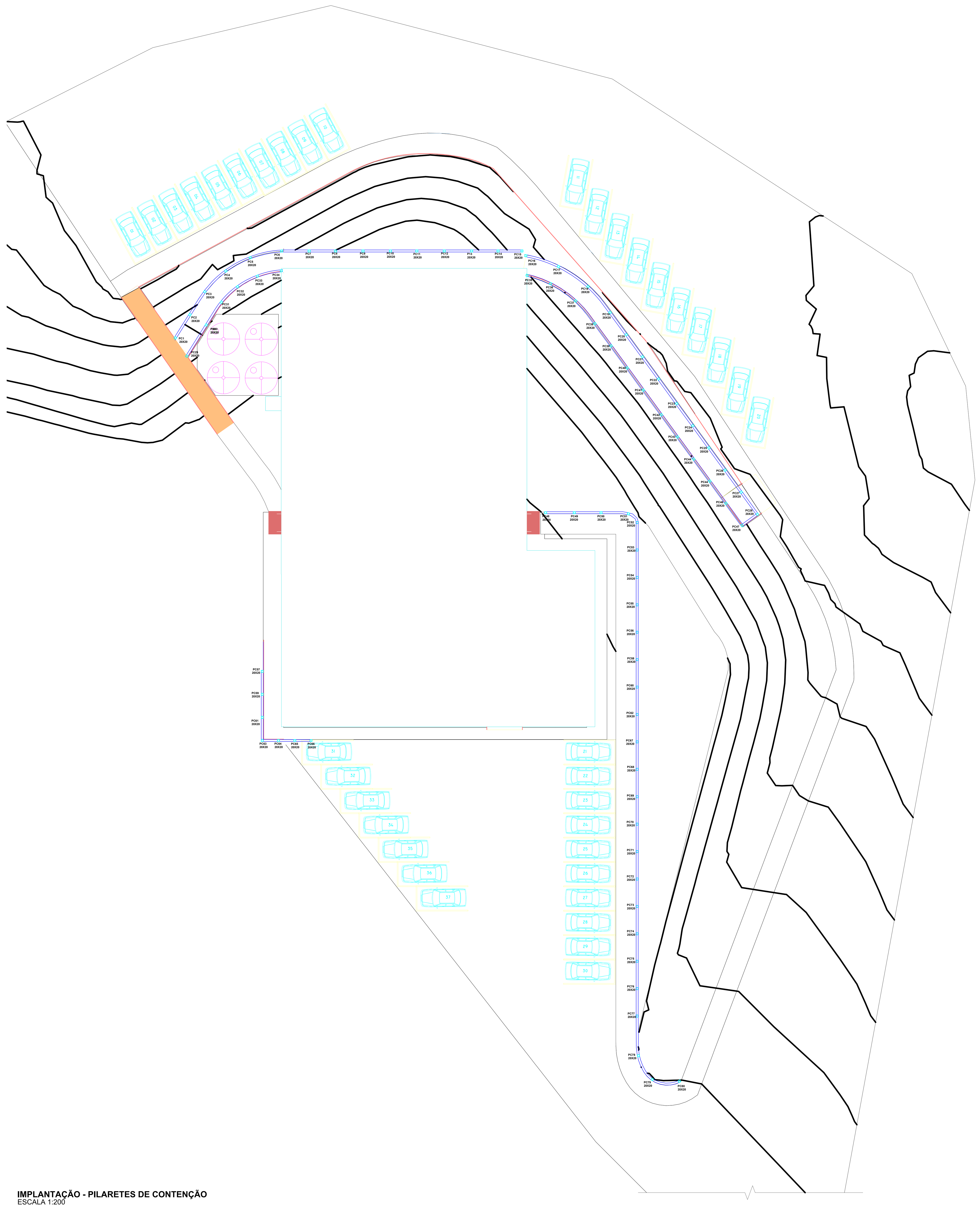
ÁREA A CONSTRUIR: ..... 1.143,00 m²

CARIMBOS:

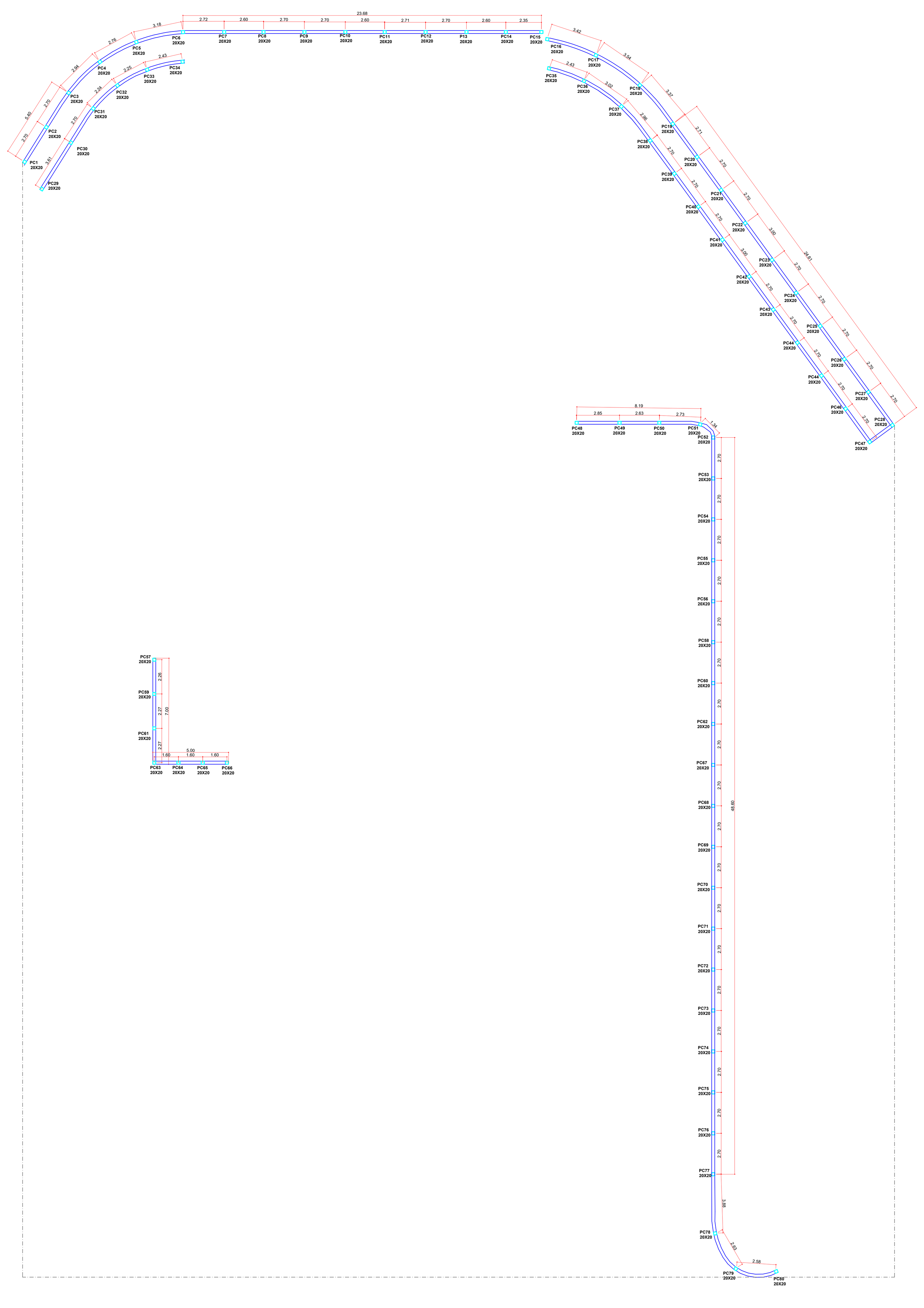
DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
17/10/2022	01	INDICADAS	METROS	15/16



PISO DE CONCRETO ARMADO
ESCALA 1:100

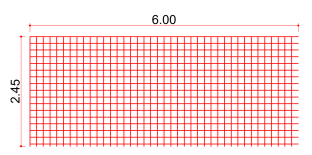


IMPLANTAÇÃO - PILARETES DE CONTENÇÃO
ESCALA 1:200



PLANTA FORMA - LOCAÇÃO PILARETES - GERAL
ESCALA 1:200

Armadura positiva 92 Telas eletrosoldada (Q 92) - Diâmetro 4,2 mm - Espaçamento 15x15 cm.



RELAÇÃO DE MATERIAIS DO PISO CONCRETO ARMADO

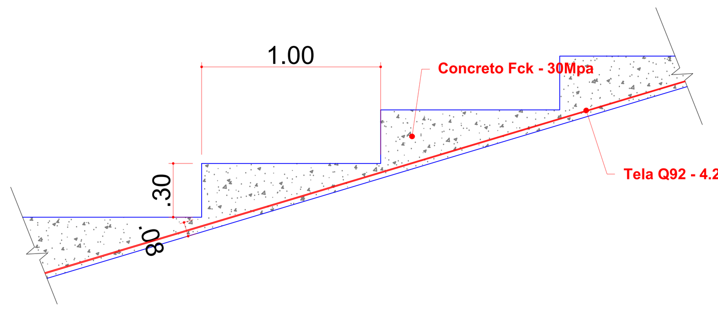
Área de piso desempenado - = 1.120,95 m².

Tela Q 92 - 4.2mm - 2,45 x 6,0m (15X15cm) = 92 Unidades.

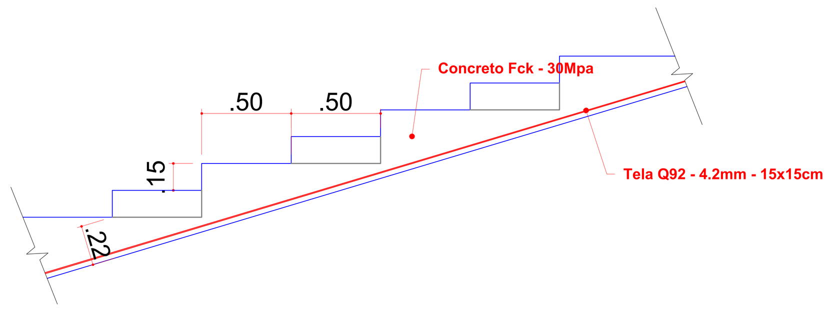
Volume de concreto (Fck 30 MPa) c/+5%= 131,70 m³

Lona preta (+10%) = 1.233,04 m².

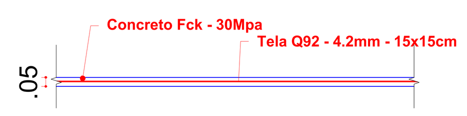
Recobrir as telas em um espaço de 10 cm.



DETALHE 01 - PISO SOB AS POLTRONAS
ESCALA 1:25



DETALHE 02 - ESCADAS
ESCALA 1:25



DETALHE 03 - OUTROS AMBIENTES
ESCALA 1:25

OBSERVAÇÕES:

1- A Resistência do concreto a compressão será de 30 MPa

2- O lançamento e o adensamento do concreto obedecerá a NBR 6118:2014

3- A cura do concreto a obedecerá a NBR 6118:2014

4- Após aterro e compactação deverá ser executado um lastro de concreto com espessura de 5cm.

5- Alterações no projeto e na execução serão permitidas somente com autorização por escrito do projetista.

Relação do aço - Bases do Reservatório

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA50	1	10.0	25	840	21000
	2	10.0	10	800	8000
	3	10.0	8	VAR.	16235
	4	10.0	23	VAR.	15580

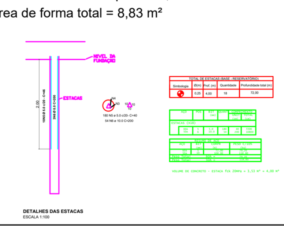
Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 %(UNIT) (kg)
CA50	10.0	608,15	668,97

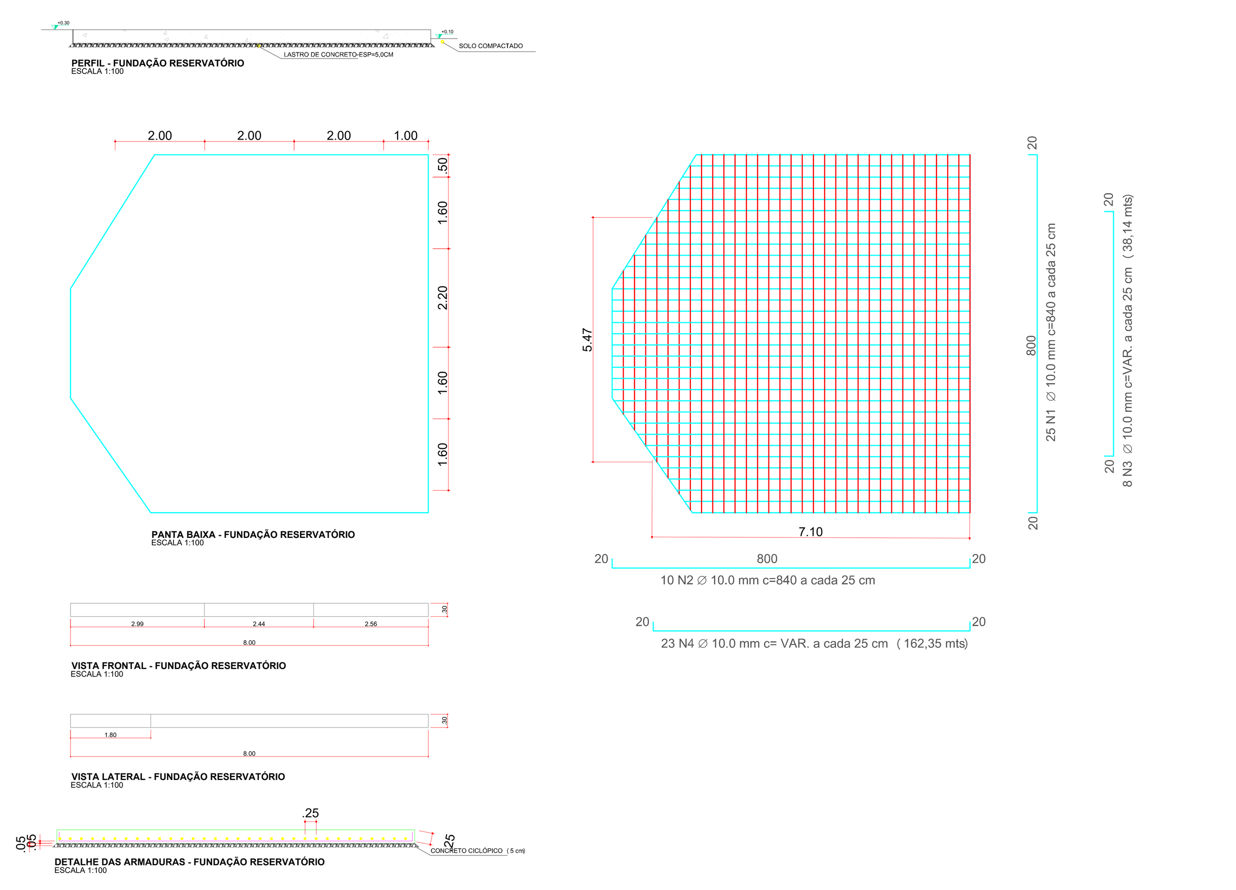
Vol. de concreto total = 18,00 m³

Vol. de concreto ciclópico = 3,00 m³

Área de forma total = 8,83 m²



DETALHES DAS ESTACAS



INSTITUTO FEDERAL
Sul de Minas Gerais
Campus Inconfidentes

PROJETO

OBRA: AUDITÓRIO (400 lugares)

LOCAL: FAZENDA ESCOLA - CAMPUS INCONFIDENTES

TIPO: ESTRUTURA EM CONCRETO ARMADO

PROPRIETÁRIO: LUIZ FLAVIO REIS FERNANDES:05706221669 — Assinado de forma digital por LUIZ FLAVIO REIS FERNANDES:05706221669 Dados: 2022.10.26 17:20:44 -03'00'

IFSULDEMINAS CAMPUS INCONFIDENTES
DIRETOR GERAL LUIZ FLÁVIO REIS FERNANDES

ENDEREÇO OBRA:
Fazenda Escola
Rua Sargento Mor Toledo Piza, Nº 01
Inconfidentes / MG- CEP: 37.576-000

RESPONSÁVEL TÉCNICO:
PAULO ROBERTO DE OLIVEIRA:46134670634 — Assinado de forma digital por PAULO ROBERTO DE OLIVEIRA:46134670634 Dados: 2022.10.25 11:40:34 -03'00'

ENGº. CIVIL PAULO ROBERTO DE OLIVEIRA
CREA - MG 29.949/D - MAT. SIAPE 2056557

DESENHO: LEANDRO DE OLIVEIRA
MATHEUS HENRIQUE FRANCO LOPES

QUADRO RESUMO DE ÁREAS:

TERRENO PARTE B:....................................99,41667 (ha)
MATRÍCULA DO IMÓVEL: ....19.490 FICHA 1
LIVRO Nº02 - REGISTRO GERAL
SERVIÇO REGISTRAL IMOBILIÁRIO DE OURO FINO/MG

ÁREA A CONSTRUIR: .... 1.143,00 m²

CARIMBOS:

DATA:	REVISÃO:	ESCALAS:	UNIDADE:	FOLHA:
20/10/2022	01	INDICADAS	METROS	16/16