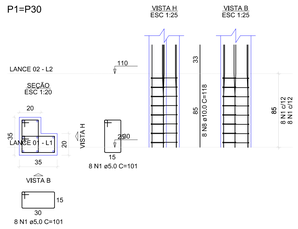
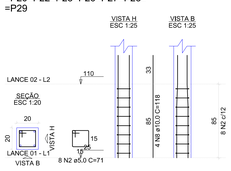
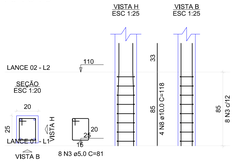
P1=P30



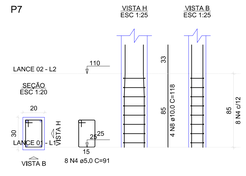
P2=P3=P4=P5=P11=P12=P13= =P14=P15=P16=P17=P18=P19= =P20=P22=P23=P26=P27=P28= =P29



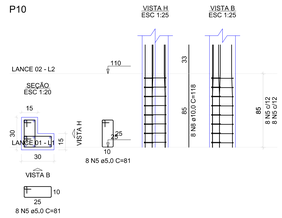
P6=P8=P9



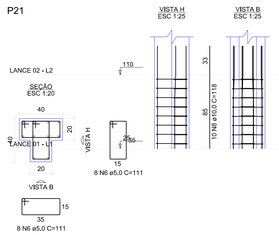
P7



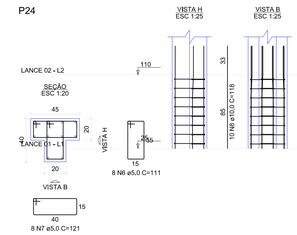
P10



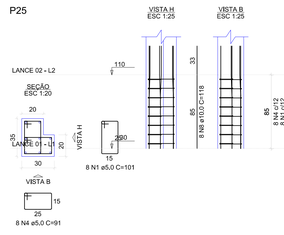
P21



P24



P25



RELAÇÃO DO AÇO

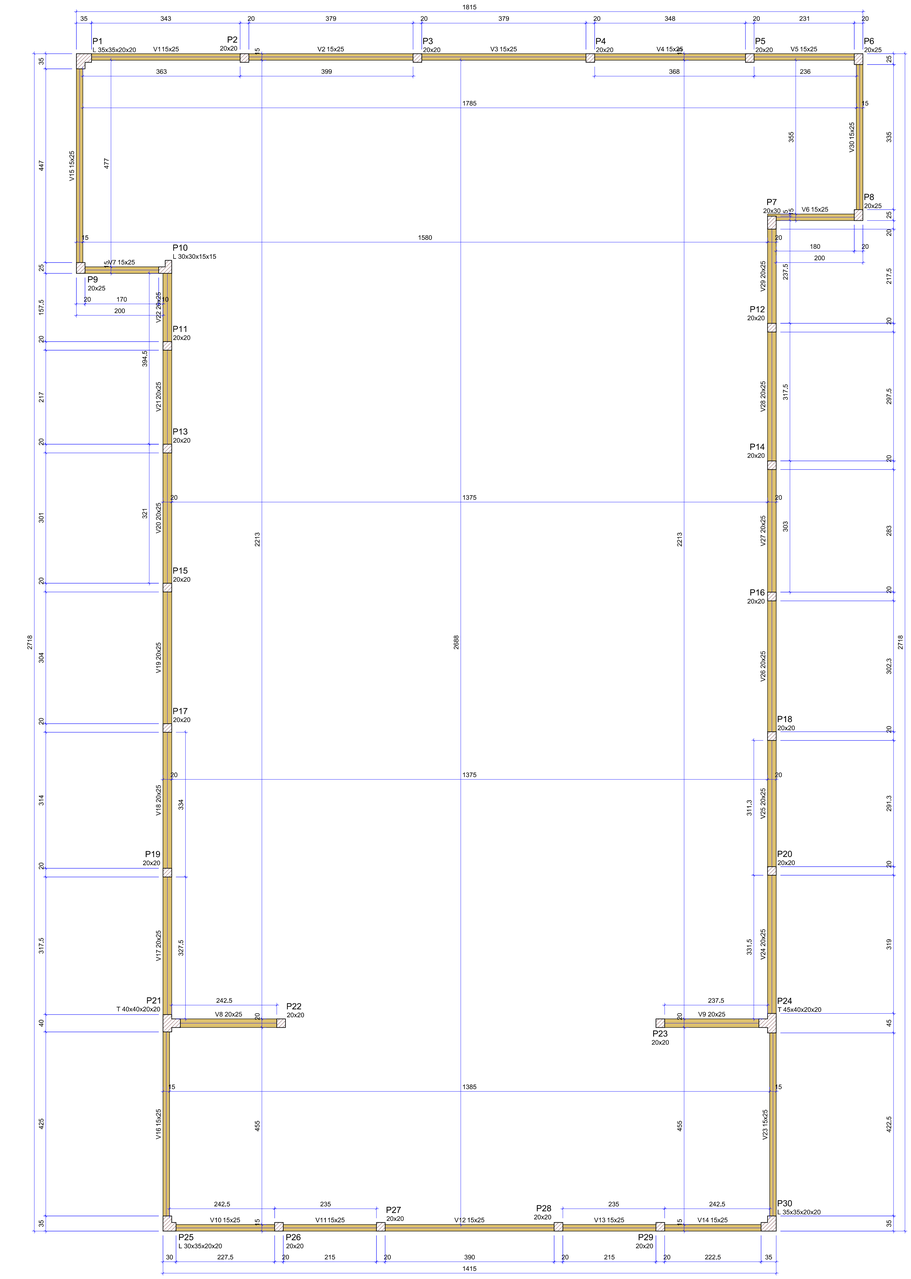
2xP1 P7 P24 | 2xP2 P10 P23 | 3xP6 P21

AÇO	N.	DIAM. (mm)	QUANT.	C.UNIT. (cm)	C.TOTAL (cm)
CA60	1	5,0	40	101	4040
	2	5,0	160	71	11360
	3	5,0	8	81	1944
	4	5,0	16	91	1456
	5	5,0	16	81	1296
	6	5,0	24	111	2664
	7	5,0	8	121	968
CA50	8	10,0	148	118	17464

RESUMO DO AÇO

AÇO	DIAM. (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	10,0	174,8	107,7
CA60	5,0	237,3	36,6
PESO TOTAL (kg):			
CA50	107,7		
CA60	36,6		

Volume de concreto (C-30) = 1,37 m³
Área de forma = 24,05 m²

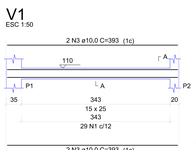


Forma do pavimento LANCE 02 (Nível 110)

escala 1:50

V1

ESC 1:50

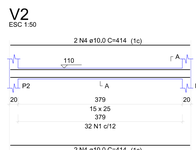


SEÇÃO A-A ESC 1:25



V2

ESC 1:50

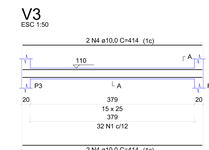


SEÇÃO A-A ESC 1:25



V3

ESC 1:50

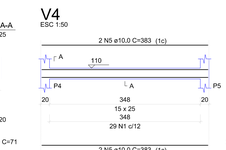


SEÇÃO A-A ESC 1:25



V4

ESC 1:50

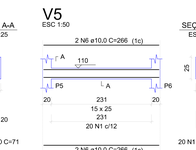


SEÇÃO A-A ESC 1:25



V5

ESC 1:50

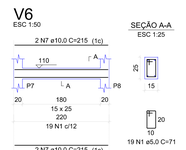


SEÇÃO A-A ESC 1:25



V6

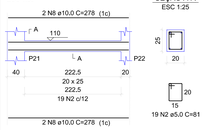
ESC 1:50



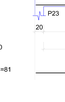
SEÇÃO A-A ESC 1:25

V8

ESC 1:50



SEÇÃO A-A ESC 1:25



V9

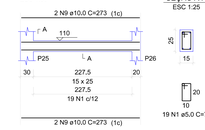
ESC 1:50

SEÇÃO A-A ESC 1:25



V10

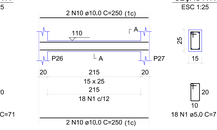
ESC 1:50



SEÇÃO A-A ESC 1:25

V11

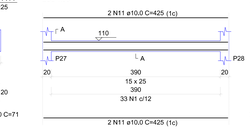
ESC 1:50



SEÇÃO A-A ESC 1:25

V12

ESC 1:50

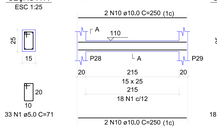


SEÇÃO A-A ESC 1:25



V13

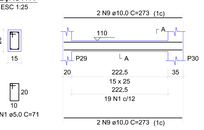
ESC 1:50



SEÇÃO A-A ESC 1:25

V14

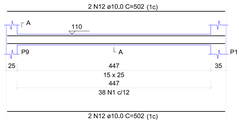
ESC 1:50



SEÇÃO A-A ESC 1:25

V15

ESC 1:50

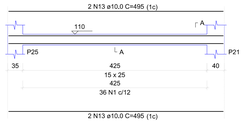


SEÇÃO A-A ESC 1:25



V16

ESC 1:50

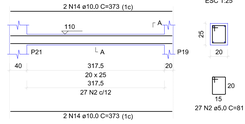


SEÇÃO A-A ESC 1:25



V17

ESC 1:50



SEÇÃO A-A ESC 1:25

V18

ESC 1:50

SEÇÃO A-A ESC 1:25

V19

ESC 1:50

SEÇÃO A-A ESC 1:25

V21

ESC 1:50

SEÇÃO A-A ESC 1:25

V22

ESC 1:50

SEÇÃO A-A ESC 1:25

V23

ESC 1:50

SEÇÃO A-A ESC 1:25

V24

ESC 1:50

SEÇÃO A-A ESC 1:25

V25

ESC 1:50

SEÇÃO A-A ESC 1:25

V26

ESC 1:50

SEÇÃO A-A ESC 1:25

V27

ESC 1:50

SEÇÃO A-A ESC 1:25

V28

ESC 1:50

SEÇÃO A-A ESC 1:25

V29

ESC 1:50

SEÇÃO A-A ESC 1:25

V30

ESC 1:50

SEÇÃO A-A ESC 1:25

V7

ESC 1:50

SEÇÃO A-A ESC 1:25

V20

ESC 1:50

SEÇÃO A-A ESC 1:25

RELAÇÃO DO AÇO

V1 V2 V3
V4 V5 V6
V7 V8 V9
V10 V11 V12
V13 V14 V15
V16 V17 V18
V19 V20 V21
V22 V23 V24
V25 V26 V27
V28 V29 V30

AÇO	N.	DIAM. (mm)	QUANT.	C.UNIT. (cm)	C.TOTAL (cm)
CA50	1	5,0	421	71	29891
	2	10,0	523	81	42363
CA50	3	10,0	4	393	1572
	4	10,0	4	414	1656
	5	10,0	4	383	1532
	6	10,0	4	266	1064
	7	10,0	4	215	1720
	8	10,0	4	278	1112
	9	10,0	52	273	3276
	10	10,0	4	250	1000
	11	10,0	4	425	1700
	12	10,0	4	502	2008
	13	10,0	4	495	1980
	14	10,0	4	373	1492
	15	10,0	4	349	1396
	16	10,0	4	339	1356
	17	10,0	4	336	1344
	18	10,0	4	252	1008
	19	10,0	4	203	812
	20	10,0	4	498	1992
	21	10,0	4	379	1516
	22	10,0	4	326	1304
	23	10,0	4	337	1348
	24	10,0	4	318	1272
	25	10,0	4	333	1332
	26	10,0	4	263	1052
	27	10,0	4	380	1520

RESUMO DO AÇO

AÇO	DIAM. (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	10,0	440,2	564,7
CA60	5,0	560,5	86,4
PESO TOTAL (kg):			
CA50	246,7		
CA60	86,4		

Volume de concreto (C-30) = 4,36 m³
Área de forma = 66,19 m²

Vigas

Nome	Seção (cm)	Elevação (cm)	Nível (cm)
V1	15x25	0	110
V2	15x25	0	110
V3	15x25	0	110
V4	15x25	0	110
V5	15x25	0	110
V6	15x25	0	110
V7	15x25	0	110
V8	20x25	0	110
V9	20x25	0	110
V10	15x25	0	110
V11	15x25	0	110
V12	15x25	0	110
V13	15x25	0	110
V14	15x25	0	110
V15	15x25	0	110
V16	15x25	0	110
V17	20x25	0	110
V18	20x25	0	110
V19	20x25	0	110
V20	20x25	0	110
V21	20x25	0	110
V22	20x25	0	110
V23	15x25	0	110
V24	20x25	0	110
V25	20x25	0	110
V26	20x25	0	110
V27	20x25	0	110
V28	20x25	0	110
V29	20x25	0	110
V30	15x25	0	110

Pilares

Nome	Seção (cm)	Elevação (cm)	Nível (cm)
P1	L 35x35x20x20	0	110
P2	20x20	0	110
P3	20x20	0	110
P4	20x20	0	110
P5	20x20	0	110
P6	20x25	0	110
P7	20x30	0	110
P8	20x25	0	110
P9	20x25	0	110
P10	L 30x30x15x15	0	110
P11	20x20	0	110
P12	20x20	0	110
P13	20x20	0	110
P14	20x20	0	110
P15	20x20	0	110
P16	20x20	0	110
P17	20x20	0	110
P18	20x20	0	110
P19	20x20	0	110
P20	20x20	0	110
P21	T 40x40x20x20	0	110
P22	20x20	0	110
P23	20x20	0	110
P24	T 45x40x20x20	0	110
P25	L 30x35x20x20	0	110
P26	20x20	0	110
P27	20x20	0	110
P28	20x20	0	110
P29	20x20	0	110
P30	L 35x35x20x20	0	110

Características dos materiais

fck (kgf/cm²)	Ecs (kgf/cm²)
300	268384

Dimensão máxima do agregado = 19 mm

Legenda dos pilares: Pilar que passa

Legenda das vigas e paredes: Viga

PREFEITURA MUNICIPAL DE SERRANIA
CNPJ:18.243.261/0001-06

Proprietário: PREFEITURA MUNICIPAL DE SERRANIA
Projeto: ESTRUTURAL
Ref.: PILARES E VIGAS - LANCE 02
Endereço: RUA CEL. ANTONIO FAUSTINO, CENTRO - SERRANIA - MG
Data: JUN/2021
Autores: SAMIR ABDALA N. FERREIRA
Engenheiro Civil - CREA 245413/D - MG
Escala: 1/50
Folha: 02