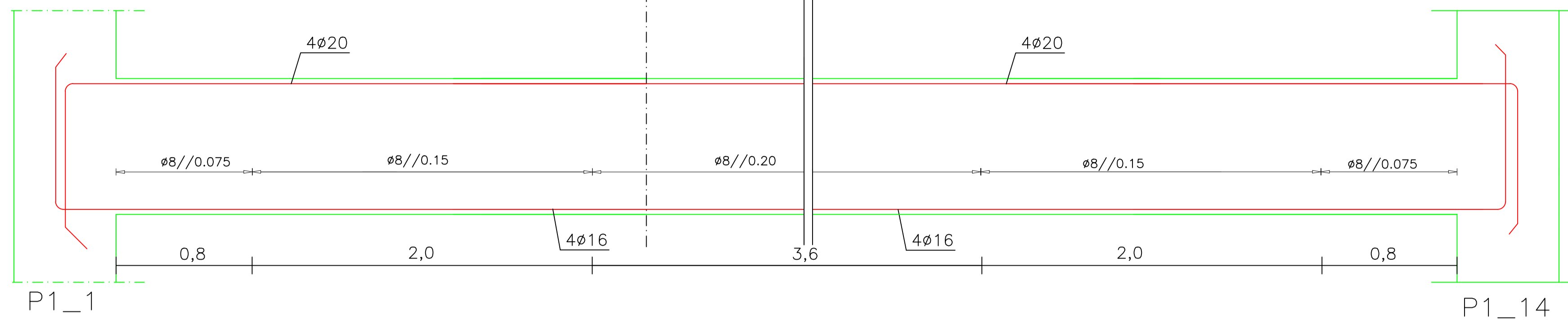
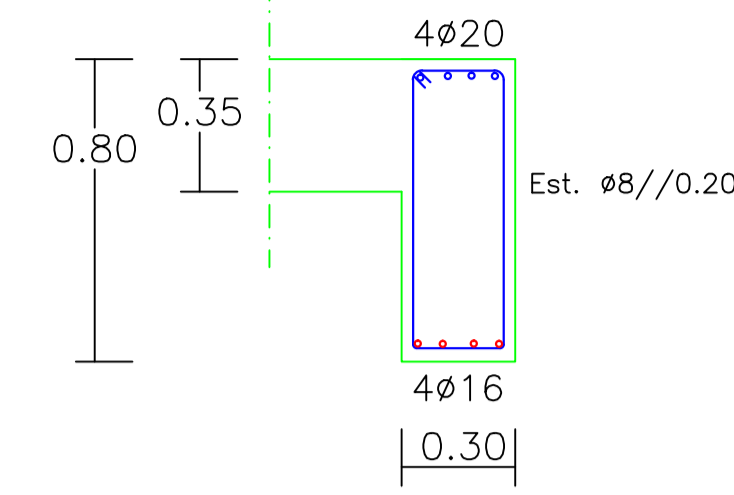


VIGA VG1\_1

ESCALA 1/20

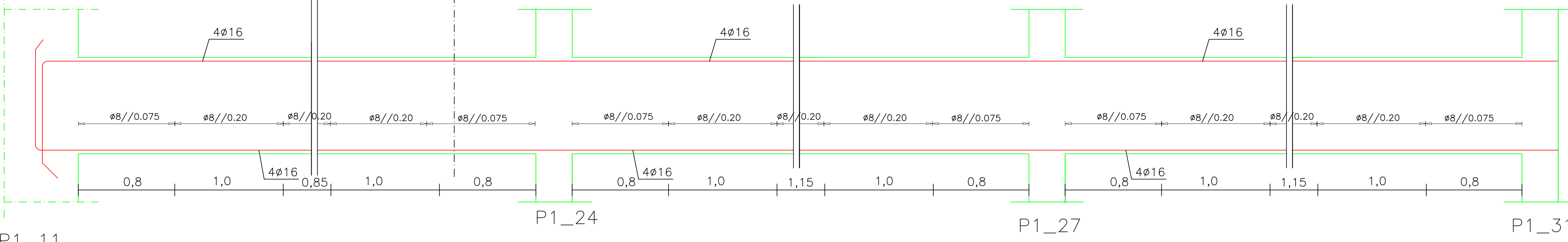


CORTE VG1\_1 A-A'

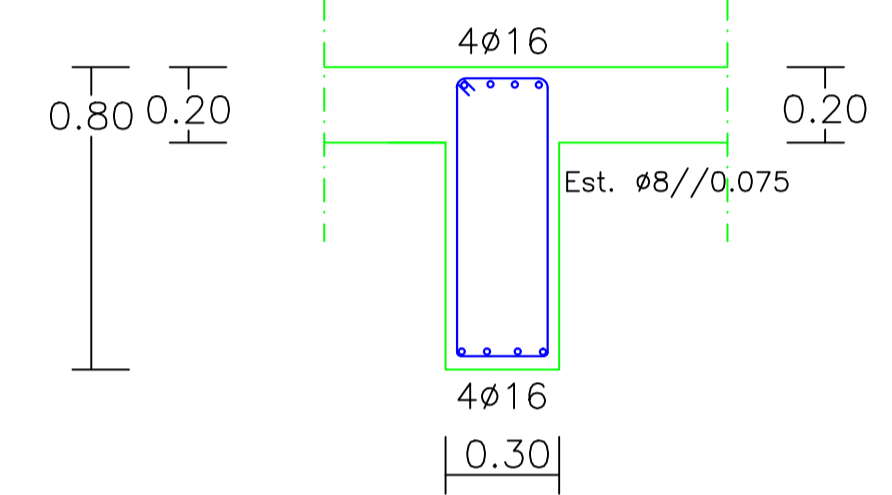


VIGA VG1\_4

ESCALA 1/20

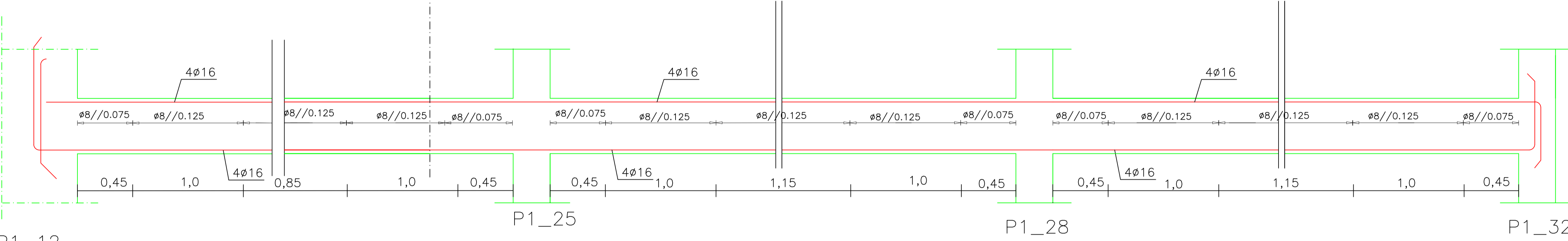


CORTE VG1\_4 A-A'

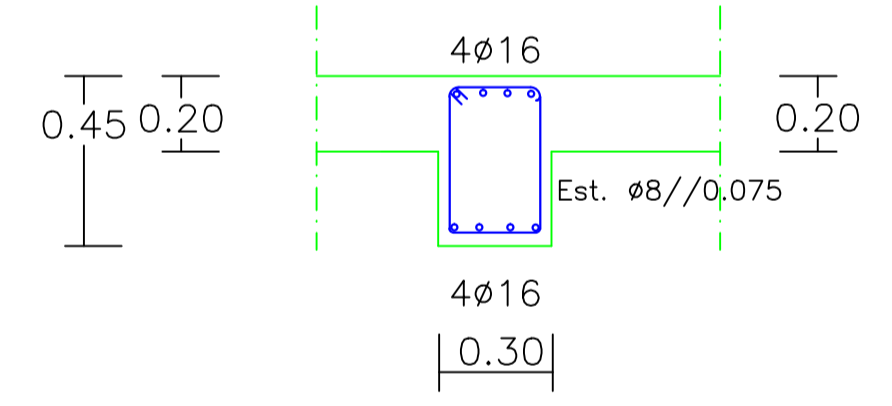


VIGA VG1\_5

ESCALA 1/20

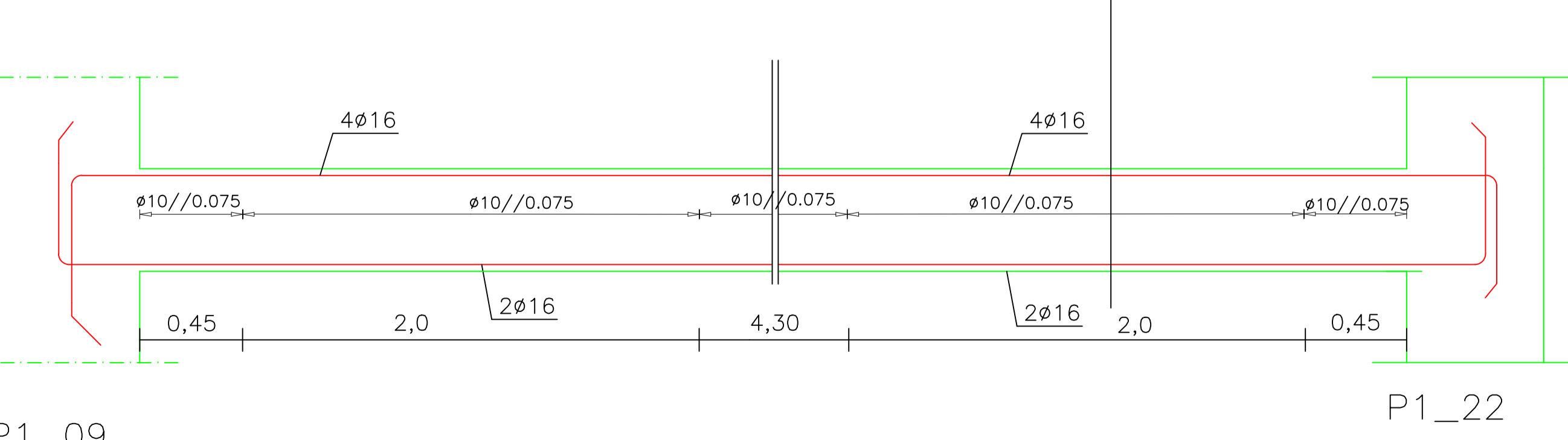


CORTE VG1\_5 A-A'

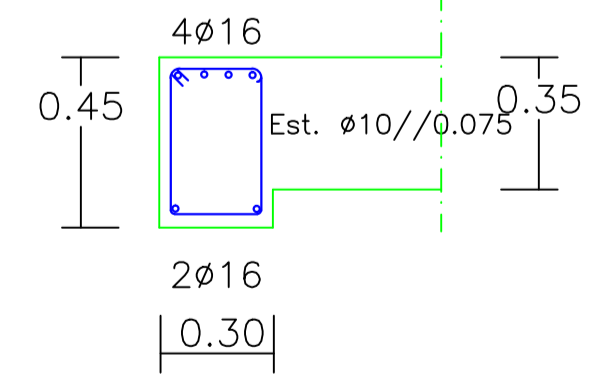


VIGA VG1\_2

ESCALA 1/20



CORTE VG1\_2 A-A'



COMPRIMENTOS AMARRAÇÃO (lb) E EMENDA (lb0)		
Varão	lb (m)	lb0 (m)
Ø10	0.40	0.65
Ø12	0.50	0.75
Ø16	0.70	1.00
Ø20	0.85	1.25
Ø25	1.05	1.25

MATERIAIS	
Fundações	NP EN 206-1:C25/30·XC2(P)·CL0,40·Dmáx 22·S4
Superestrutura	NP EN 206-1:C25/30·XC1(P)·CL0,40·Dmáx 22·S4
Regularização	NP EN 206-1:C16/20·XC1(P)·CL0,40·Dmáx 22·S4

RECOBRIMENTOS	
Fundações	5.0cm
Pilares e Vigas	3.5cm
Lajes	3.5cm

**ISEL** Área Departamental de Engenharia Civil  
Mestrado em Engenharia Civil

Trabalho Final de Mestrado

Realizado por: **André Cardoso**  
Nº 33505

**BETÃO ARMADO**  
Vigas - VG1\_1/2/4/5

Folha: **4/6** N°Des. **15/17**  
Escala: 1/20  
Data: DEZEMBRO/15