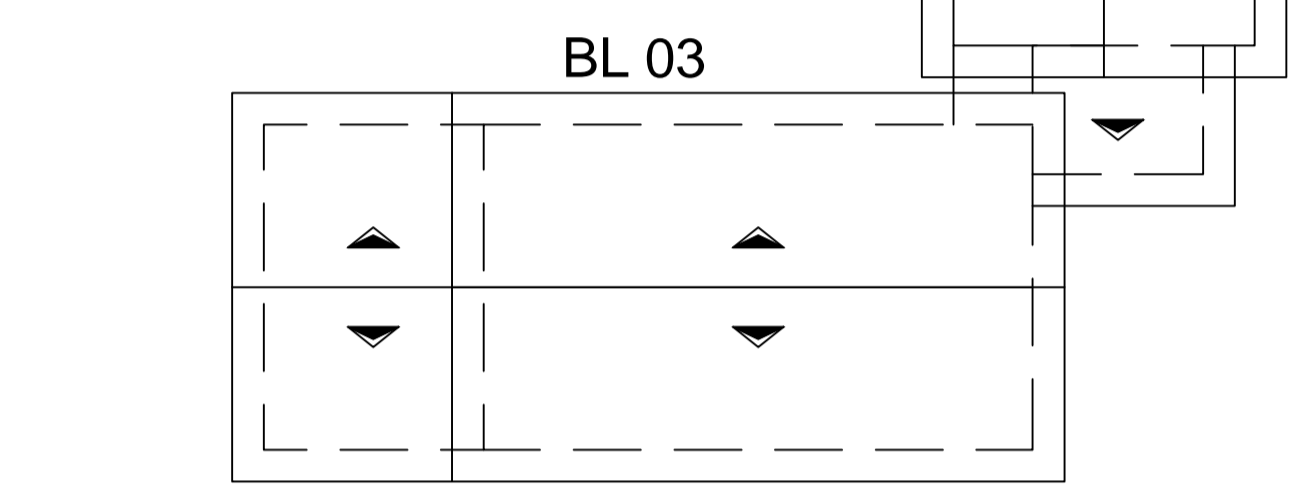
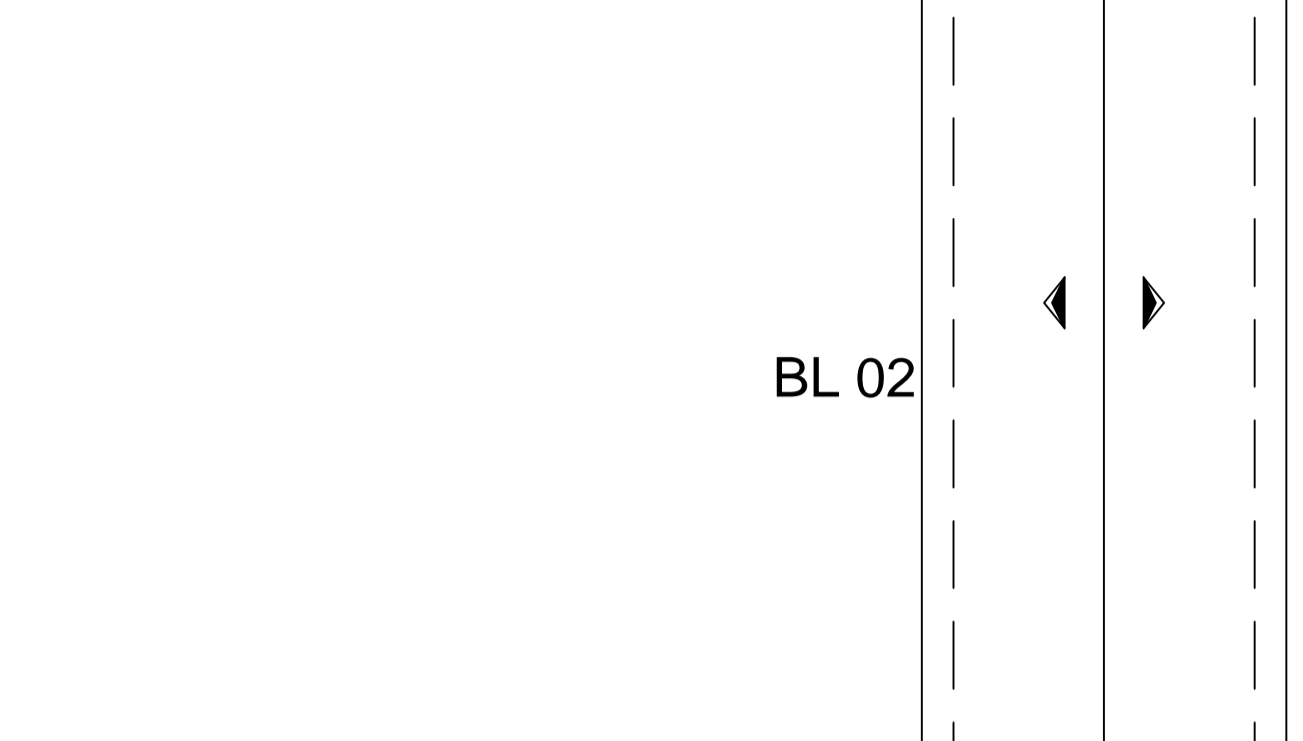
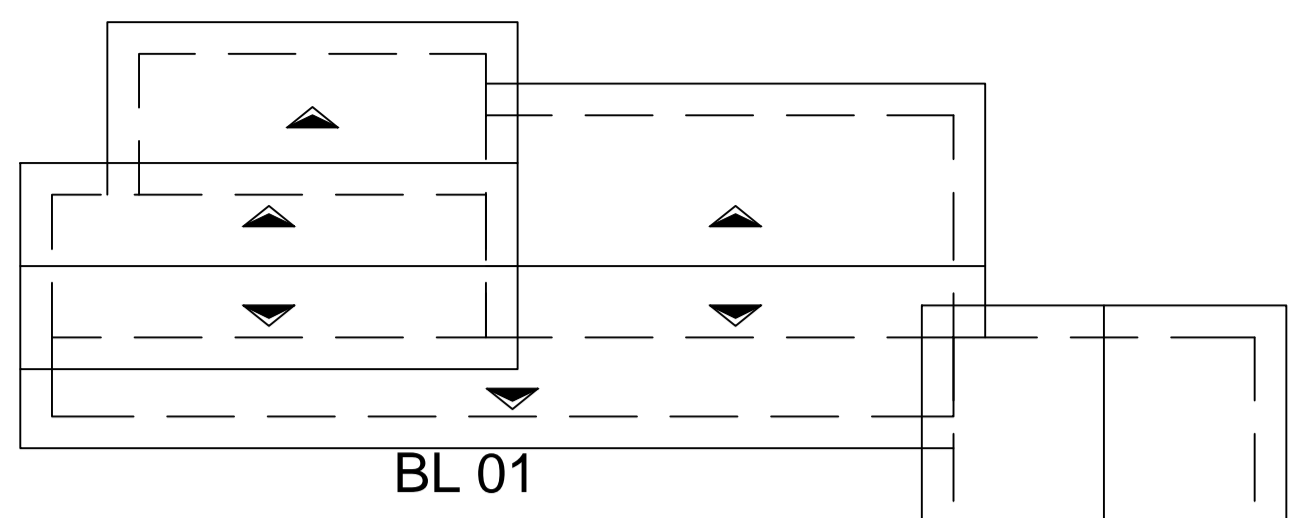
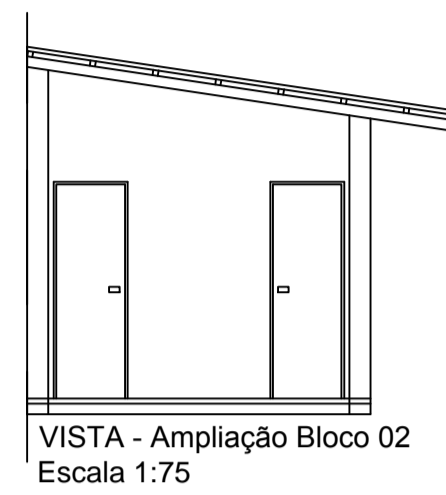
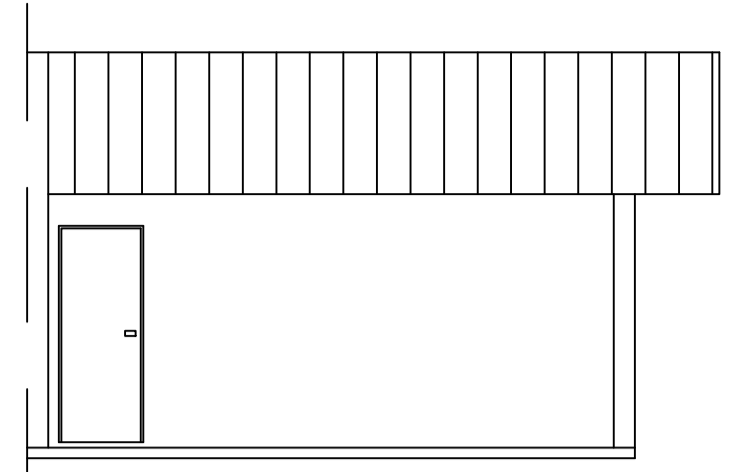
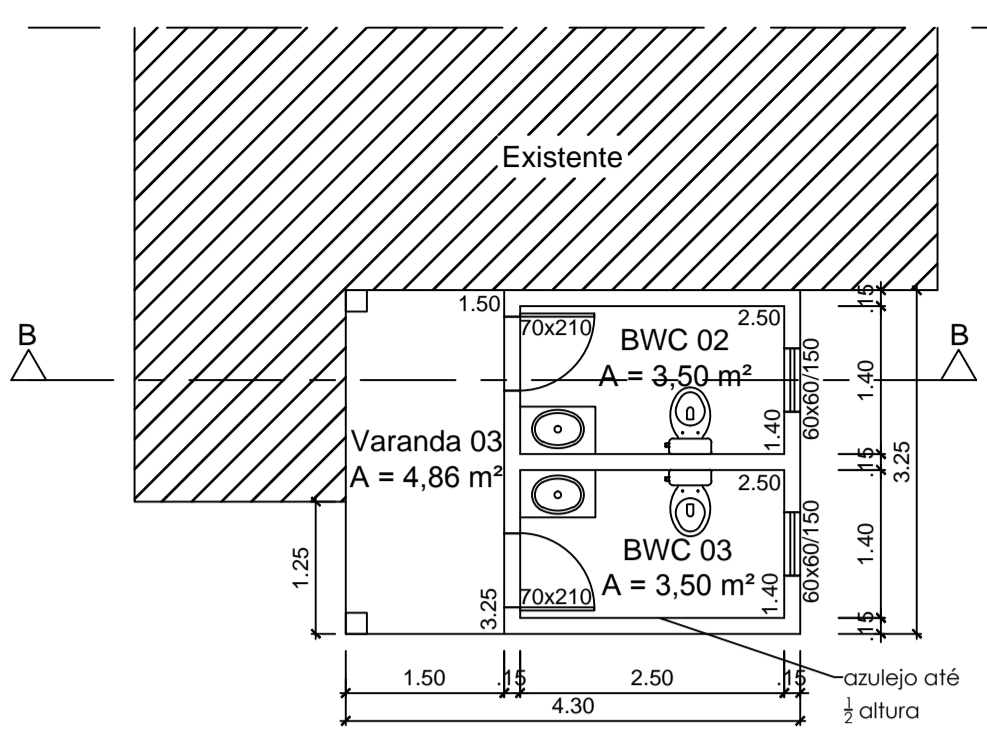
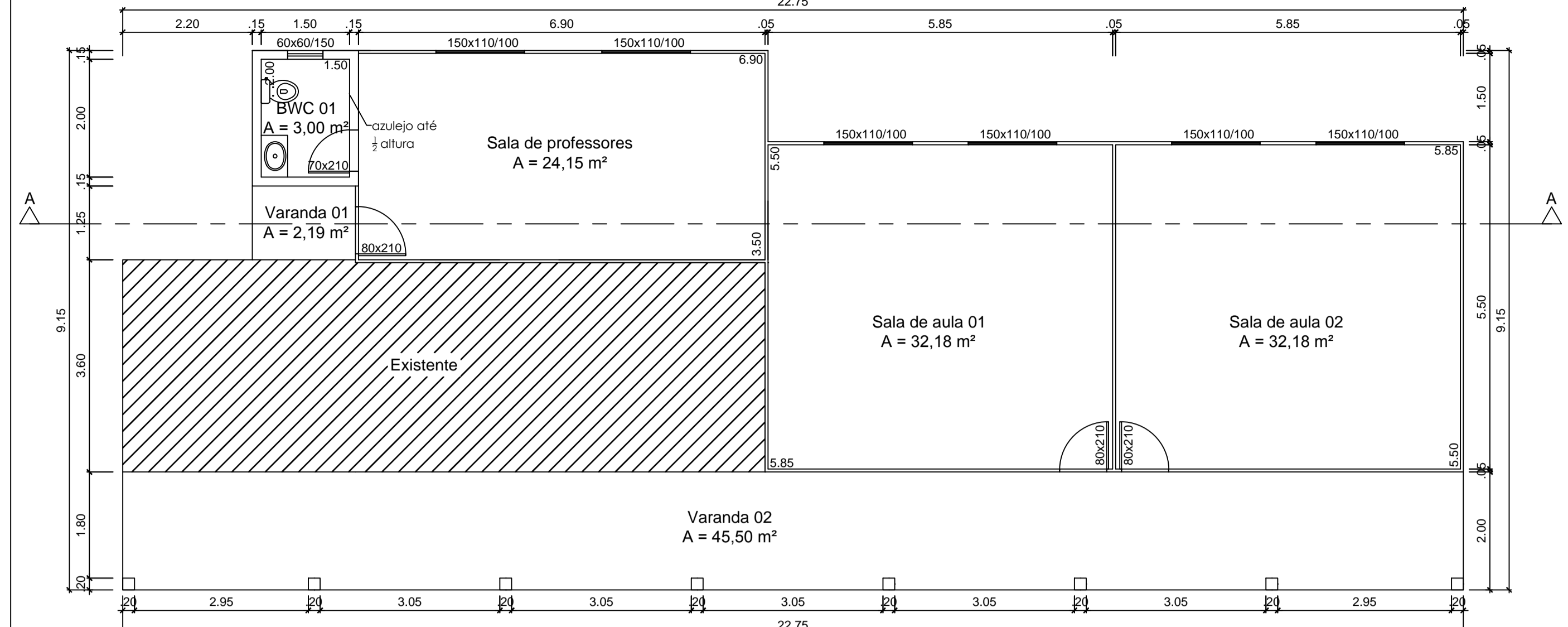
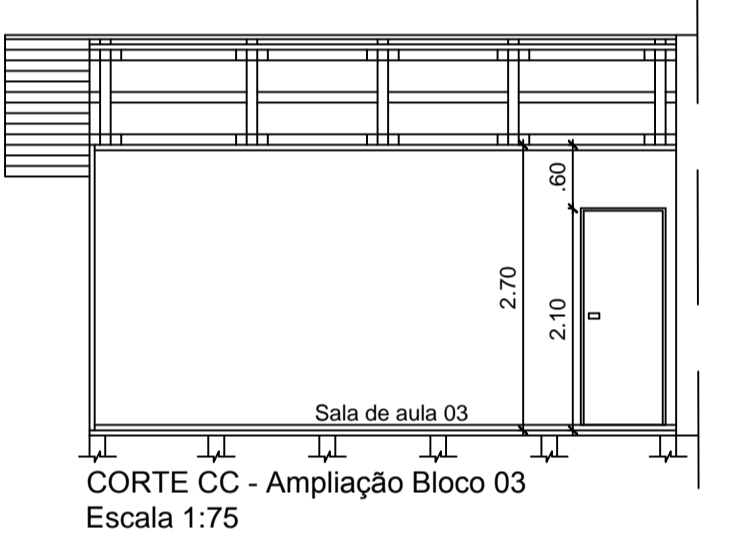
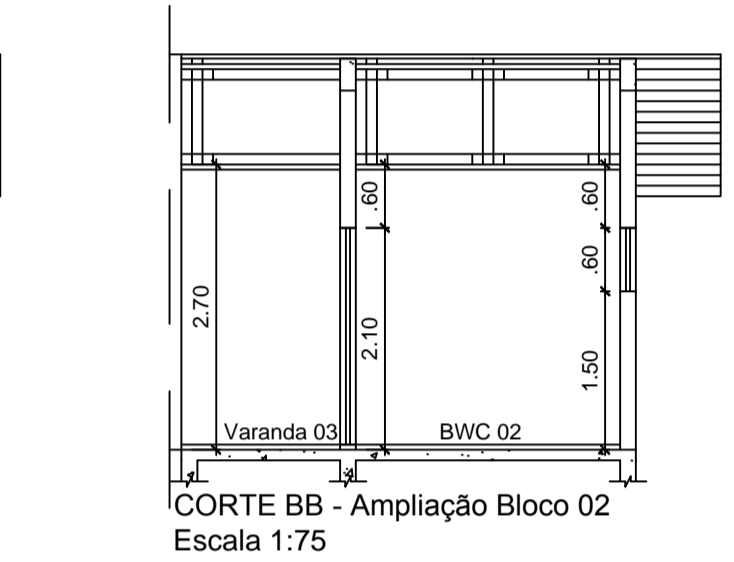
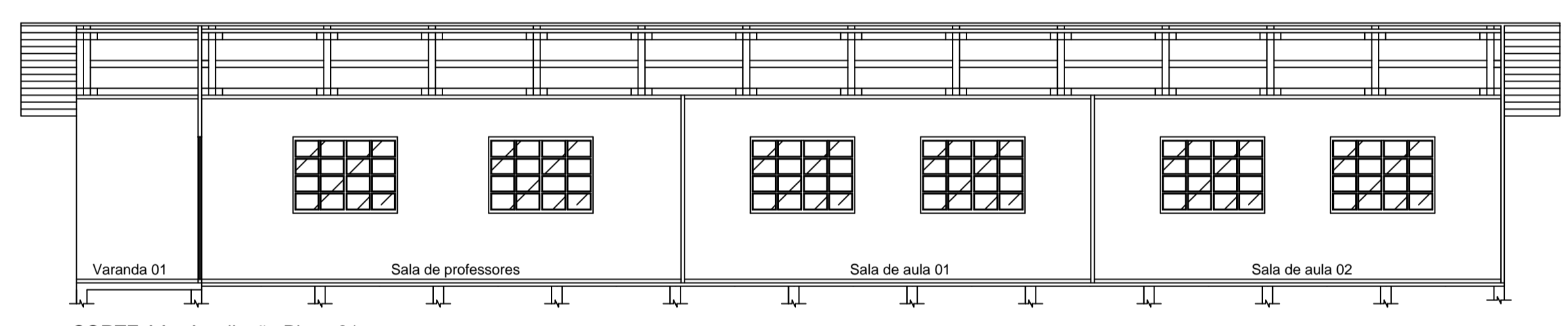
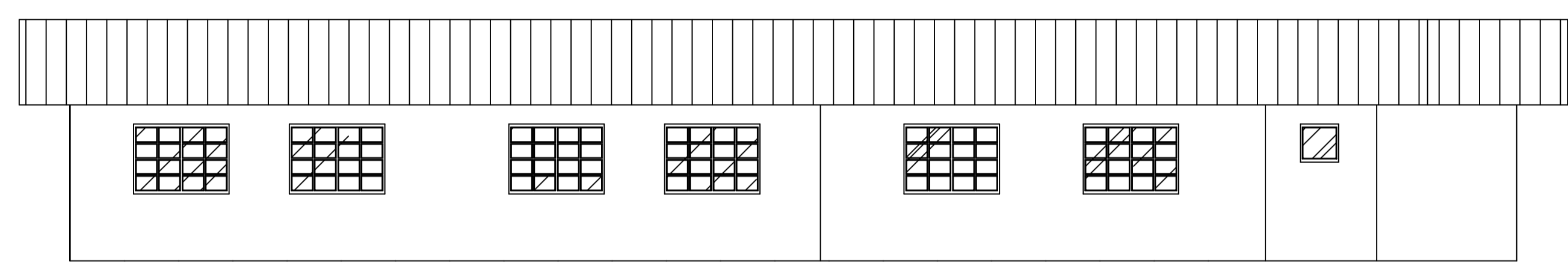
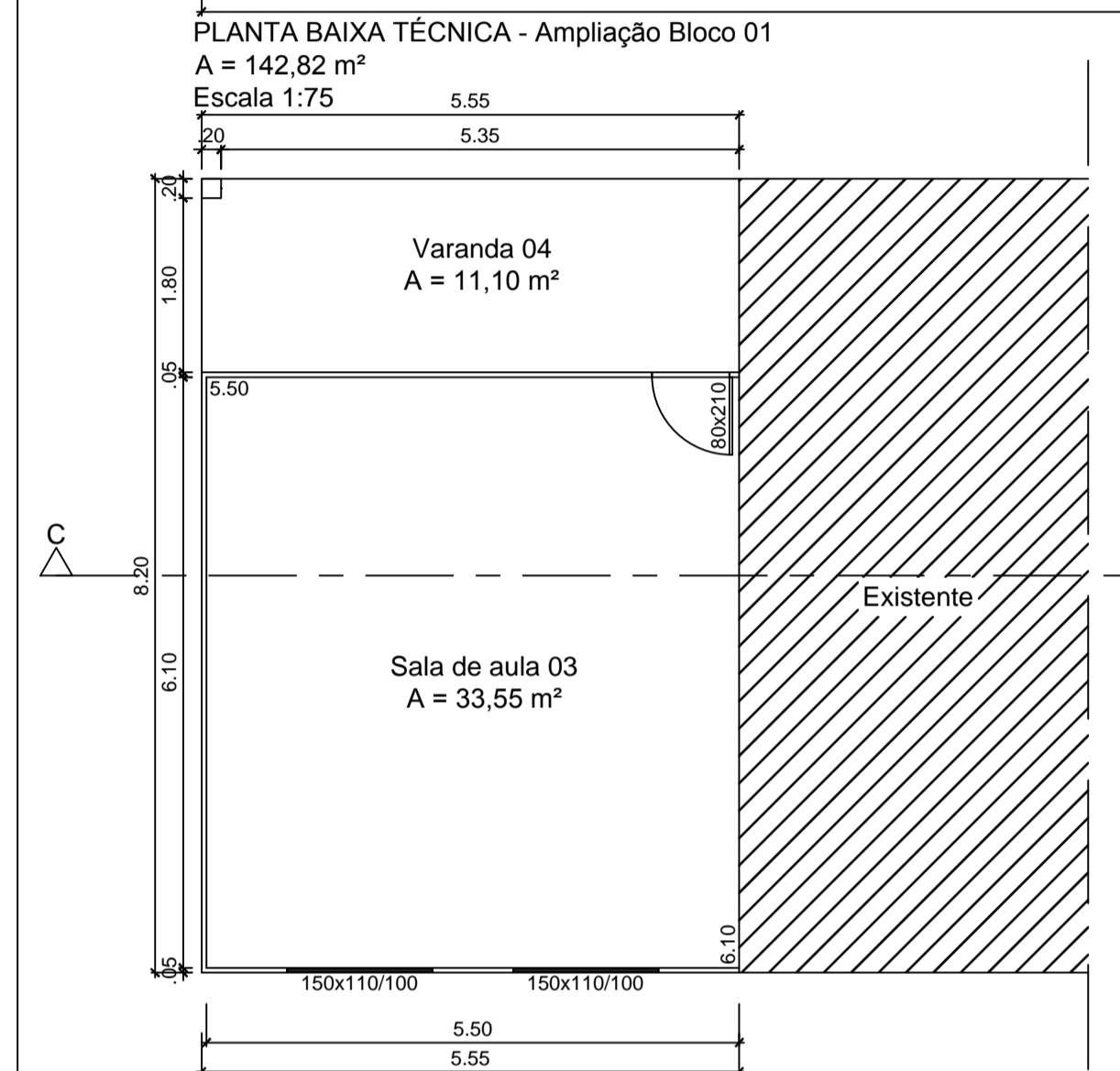


**PROJETO ARQUITETÔNICO**



Planta de Cobertura  
 Escala 1:200



**MEMÓRIA DE CÁLCULO**

**FÓRMULA PARA DIMENSIONAMENTO DO FILTRO ANAEROBICO NBR 7229**

$V_u = 1,6 \cdot (N \cdot C \cdot T)$   
 $V_u = 1,6 \cdot (110 \cdot 2 \cdot 1)$   
 $V_u = 352 \text{ L ou } 0,35 \text{ m}^3$  - Volume mínimo = 1000 L = 1 m<sup>3</sup>

Volume do Cilindro  
 $V_u = \pi \cdot r^2 \cdot h$   
 $r = \frac{D}{2}$   
 $r = (1 / 3,1416 \cdot 1,2^2)^{1/2}$   
 $r = 0,515 \text{ m}$   
 $D = 2r$   
 $D = 2 \cdot 0,515$   
 $D = 1,05 \text{ m}$

**MEMÓRIA DE CÁLCULO**

**FÓRMULA PARA DIMENSIONAMENTO DA FOSSA SÉPTICA NBR 7229**

$V_u = 1000 \cdot N \cdot C \cdot T + K \cdot L \cdot D$   
 $V_u = 110 \cdot 2$   
 $V_u = 220 \text{ litros}$

$V_u = 1000 \cdot N \cdot C \cdot T + K \cdot L \cdot D$   
 $V_u = 1000 \cdot 110 \cdot (2,1 + 105 \cdot 0,02)$   
 $V_u = 1451 \text{ L}$

$V_u = L \cdot w \cdot h$   
 $h = \text{Profundidade útil} = 1,20 \text{ m}$   
 $w = \text{largura interna mínima} = 0,80 \text{ m}$

$1,5 = L \cdot 0,80 \cdot 1,2$   
 $L = 1,60 \text{ m}$

Verificação:  
 $L = 1,60 = 2,00 \text{ OK!}$   
 $w = 0,8$

**MEMORIAL DE CALCULO**

**FÓRMULA PARA DIMENSIONAMENTO DO SUMIDOURO**

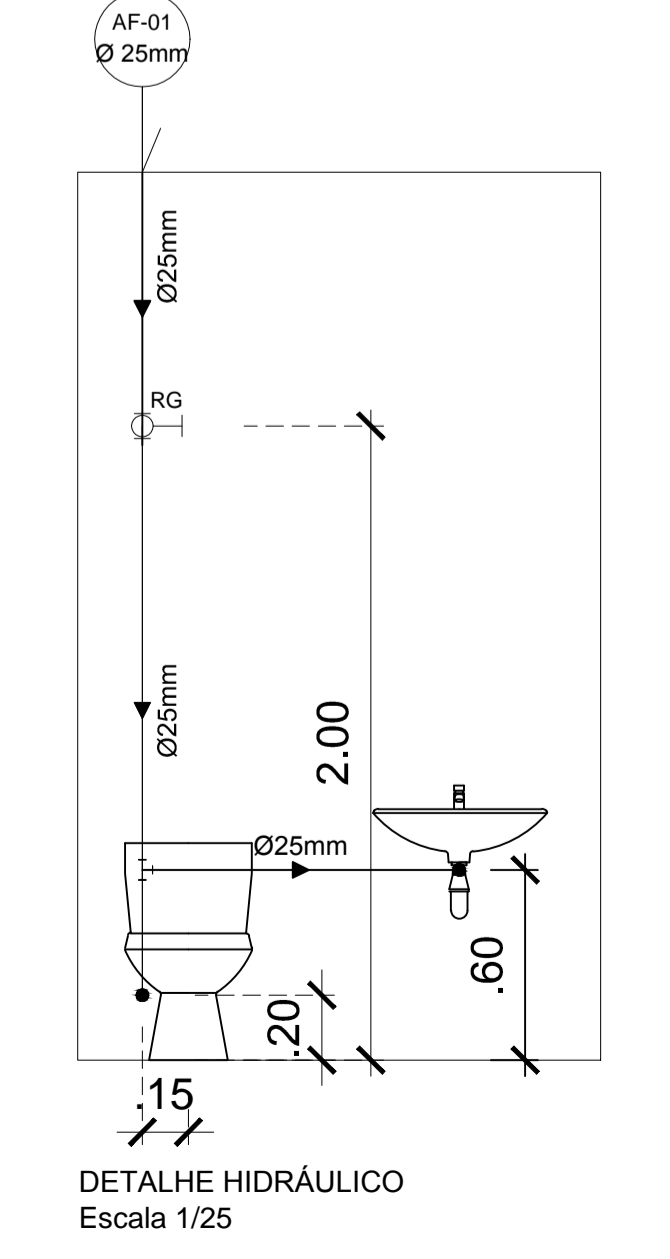
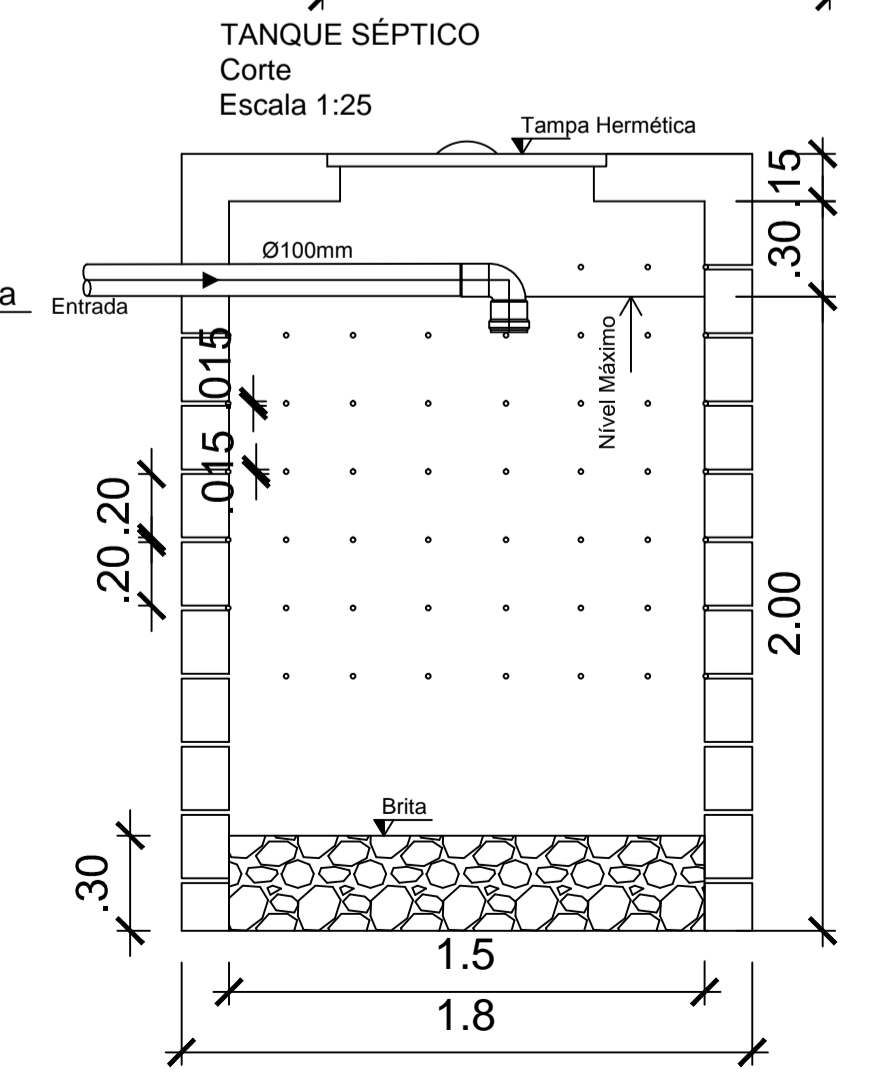
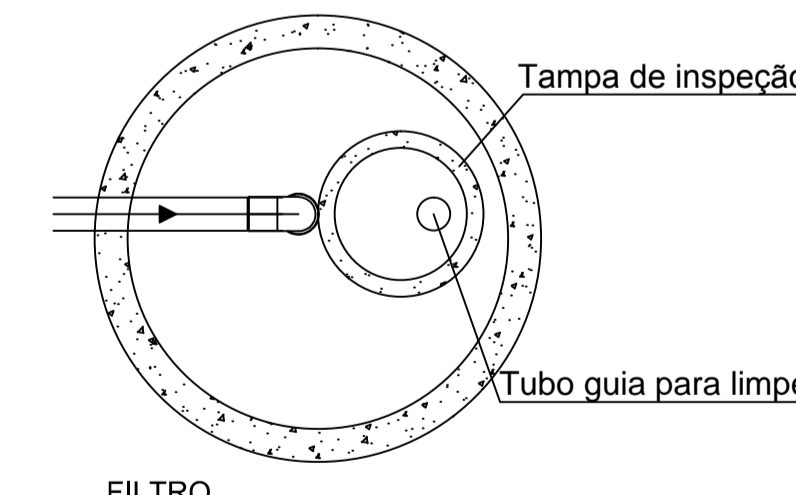
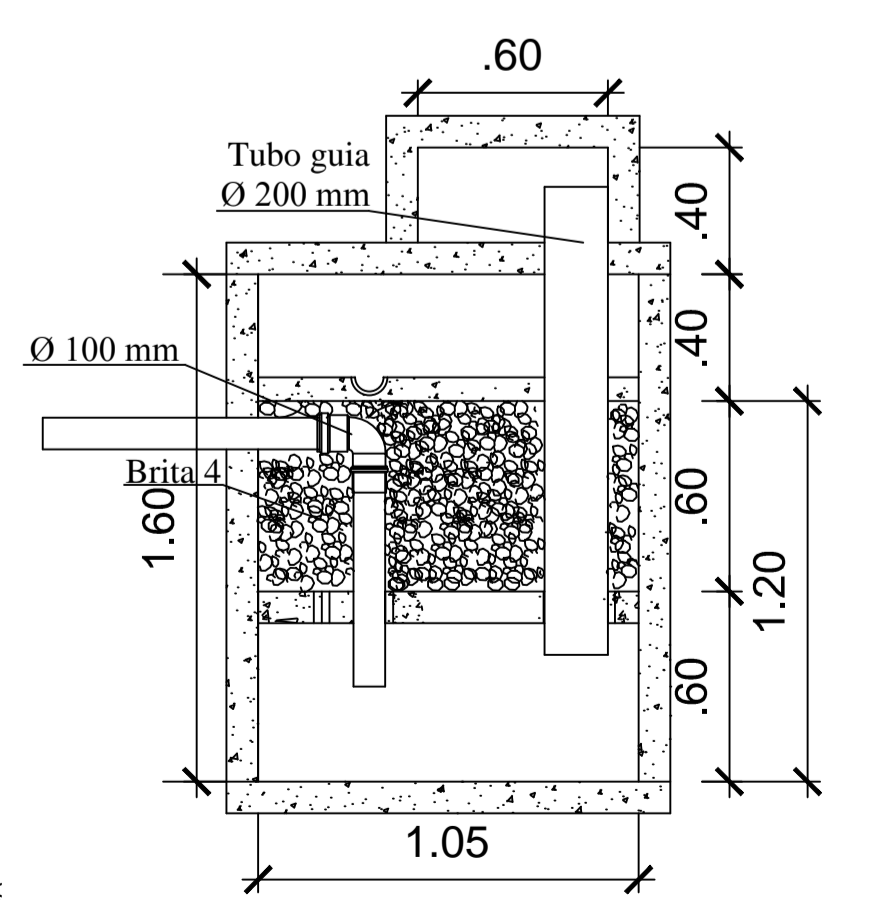
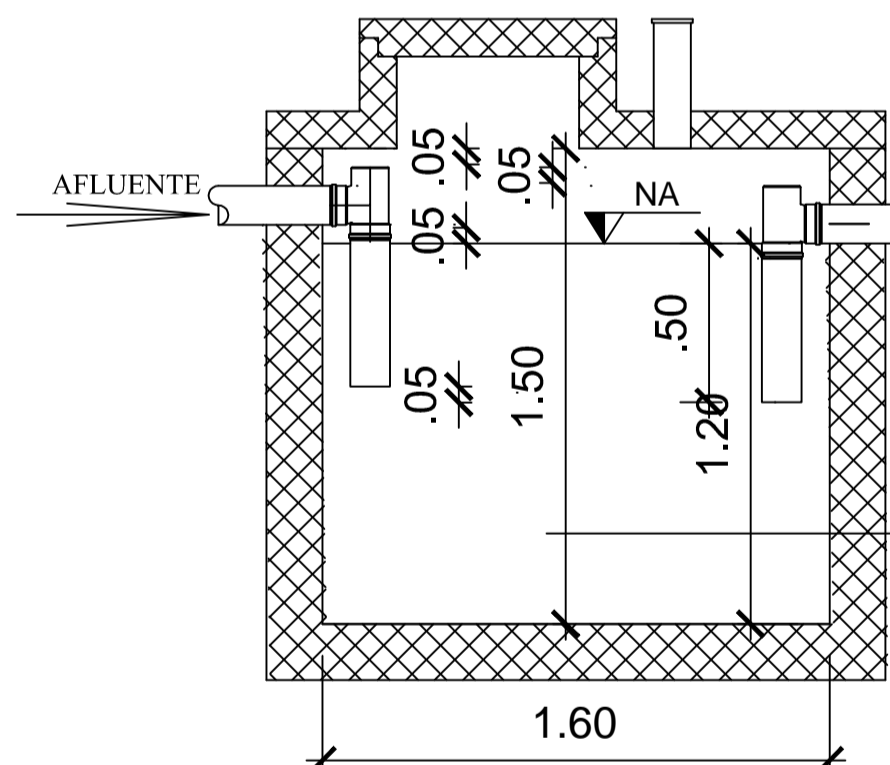
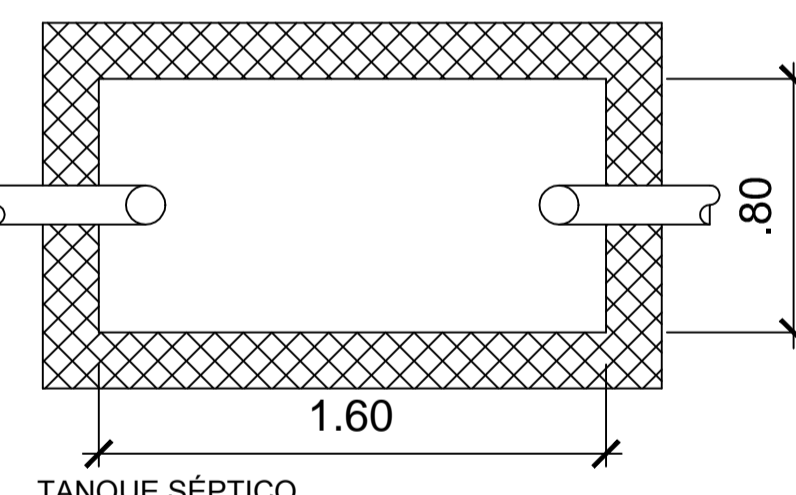
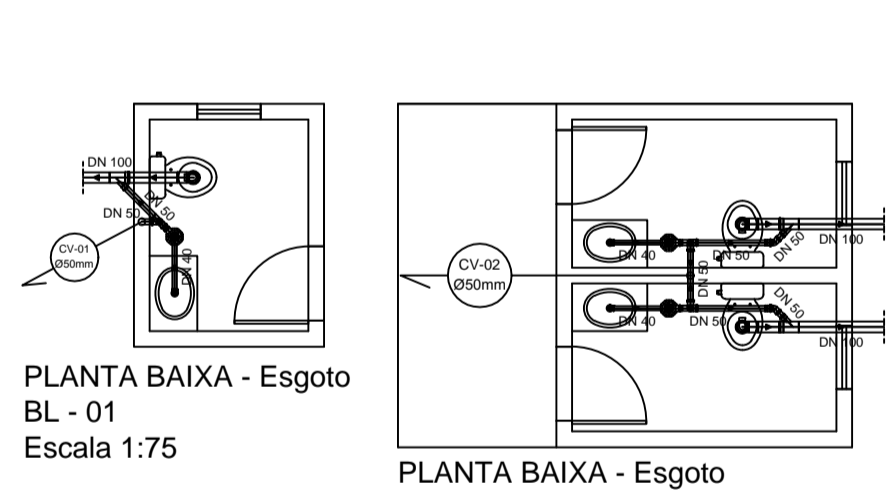
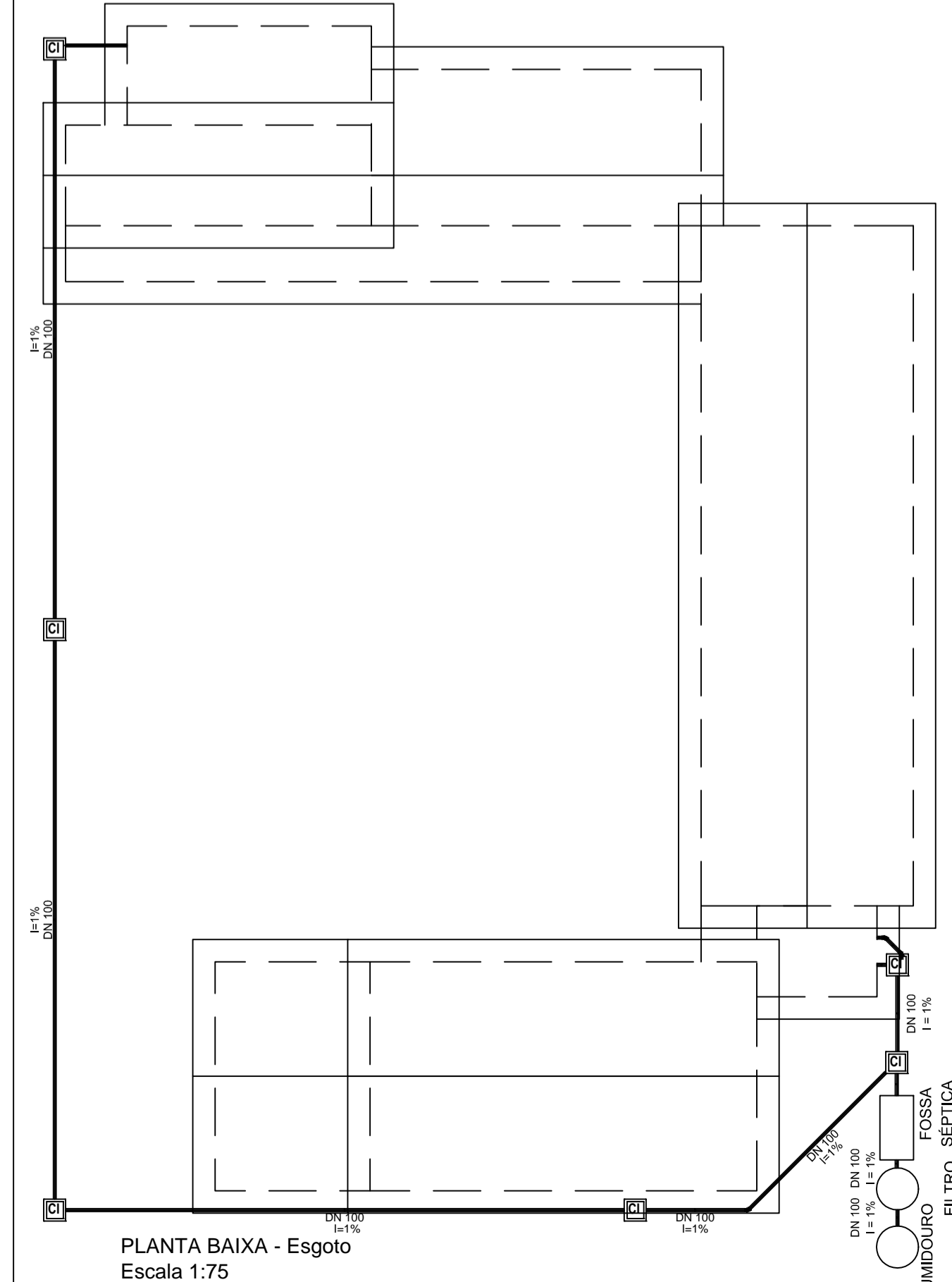
$V = N \cdot C$   
 $V = 110 \cdot 2$   
 $V = 220 \text{ litros}$

$A = \frac{V}{C_i}$     $A = \frac{V}{0,03}$     $A = 7,33 \text{ m}^2$

$A = \text{área em m}^2$ , para o sumidouro  
 $V = \text{volume de contribuição diária em l/dia}$   
 $C_i = \text{coeficiente de infiltração}$

$\phi = 1,50 \text{ m}$   
 Profundidade = 2,00 m  
 $A_f = 1,77 \text{ m}^2$ ;  $A_i = 9,42 \text{ m}^2$   
 $A = A_f + A_i = 11,19 \text{ m}^2$   
 $N = 10,47 \text{ m}^2 / 11,19 \text{ m}^2 = 0,94 = 1 \text{ unidade}$   
 $\text{Área} = (1 \times 11,19) = 11,19 \text{ m}^2 (1 \text{ unidade})$

**PROJETO HIDROSSANITÁRIO**



**MUNICÍPIO DE CAMPO BELO DO SUL**

Ampliação - Escola Itinerante José Joaquim de Lima Xavier - Núcleo Monte Alegre - Projetos: Arquitetônico, Hidráulico, Sanitário, Elétrico  
 Comunidade Monte Alegre, Campo Belo do Sul - SC

PRONCHAL: **01/02**

DATA: 29/11/2018   RESENHO: SARAH   ESCALAS: 1:75   ÁREA: 202,31 m<sup>2</sup>

RESPONSÁVEL TÉCNICO: SARAH DUTRA  
 Engenheira Civil  
 CREA - SC 123628-3

PROPRIETÁRIO: MUNICÍPIO DE CAMPO BELO DO SUL  
 CNPJ: 82.777.319/0001-92