

### - ESCAVAÇÃO

MURO H=3,00:

$$12,33\text{m}^2 \times 142,50\text{m} = 1.757\text{m}^3$$

MURO H=2,00:

$$10,53\text{m}^2 \times 42,50\text{m} = 447,50\text{m}^3$$

$$\boxed{2.204\text{m}^3}$$

### - ATERRO

MURO H=3,00:

$$9,73\text{m}^2 \times 142,50\text{m} = 1.386,50\text{m}^3$$

MURO H=2,00:

$$8,64\text{m}^2 \times 42,50\text{m} = 367,20\text{m}^3$$

$$\boxed{1.754\text{m}^3}$$

### - AREIA

$$0,45\text{m} \times 185\text{m} = \boxed{83\text{m}^3}$$

### - BRITA

$$0,12\text{m}^2 \times 185\text{m} = \boxed{22\text{m}^3}$$

### - TUBO FLEXÍVEL DRENO Ø=6"

$$\boxed{185\text{m}}$$

### - MANTA GEOTEXTIL

$$1,85\text{m} \times 185\text{m} = \boxed{342\text{m}^2}$$

### - GEOMEMBRANA PEADE

MURO H=3,00:

$$4,80\text{m} \times 142,50\text{m} = 684\text{m}^2$$

MURO H=2,00:

$$3,80\text{m} \times 42,50\text{m} = 161,50\text{m}^2$$

$$\boxed{845\text{m}^2}$$

### - CONCRETO

MURO H=3,00:

$$1,85m^2 \times 142,50m = 263,60m^3$$

MURO H=2,00:

$$0,94m^2 \times 42,50m = 39,95m^3$$

$$\boxed{303m^3}$$

### - AÇO CA-50 > 12,5mm

$$303m^3 \times 90kg/m^3 = 27.270kg \times 80\% = \boxed{21.816kg}$$

### - AÇO CA-50 < 12,5mm

$$27.270kg - 21.816kg = \boxed{5.454kg}$$

### - FORMA

MURO H=3,00:

$$3,00m \times 142,50m \times 2 = 855m^2$$

MURO H=2,00:

$$2,00m \times 42,50m \times 2 = 170m^2$$

$$\boxed{1.025m^2}$$

### - LASTRO

MURO H=3,00m:

$$5,60m \times 142,50m \times 0,10m = 79,80m^3$$

MURO H=2,00m:

$$4,55m \times 42,50m \times 0,10m = 19,34m^3$$

$$\boxed{99m^3}$$