

## **MUNICÍPIO DE BOM JESUS DO OESTE**

Prefeito : AIRTON ANTÔNIO REINEHR  
Projeto : PROJETO ESTRUTURAL – MURO DE CONTENÇÃO / TALUDE INCLINADO  
Local : ESCOLA FNDE / BOM JESUS DO OESTE - SC

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### **MEMORIAL DE CÁLCULO DOS QUANTITATIVOS FÍSICOS - ESTRUTURAL**

O presente Memorial de cálculo refere-se ao Projeto Estrutural de um muro de contenção localizado no terreno da Escola - FNDE, com comprimento total de **175,13 m (Muro) + 39,66 m (Inclinação talude)**, no município de **BOM JESUS DO OESTE - (SC)**;

PLACA DA OBRA (1,25 X 2,00)	= <b><u>2,50 m<sup>2</sup></u></b>
CORTE PARA TALUDE (Escavação)	= <b><u>156,00 m<sup>3</sup></u></b>
ATERRO	= <b><u>100,00 m<sup>3</sup></u></b>
ATERRO COMPACTADO PARA TALUDE INCLINADO (3,46 m <sup>2</sup> x 41,00m)	= <b><u>142,00 m<sup>3</sup></u></b>
PLANTIO DE GRAMA DE LEIVA	= <b><u>80,00 m<sup>2</sup></u></b>
AGULHAMENTO DE FUNDO DE VALA	= <b><u>167,71 m<sup>2</sup></u></b>
CONCRETO USINADO Fck 25 MPa	
(19,99m x 0,70m)	= 13,99 m <sup>2</sup>
(17,14m x 1,00m)	= 17,14 m <sup>2</sup>
(18,57m x 1,10m)	= 20,43 m <sup>2</sup>
(19,55m x 1,10m)	= 21,50 m <sup>2</sup>
(14,57m x 1,10m)	= 16,03 m <sup>2</sup>
(13,58m x 1,00m)	= 13,58 m <sup>2</sup>
(27,22m x 0,70m)	= 19,05 m <sup>2</sup>
(29,55m x 1,20m)	= 35,46 m <sup>2</sup>
(15,04m x 0,70m)	= 10,53 m <sup>2</sup>

$$\Sigma 167,71 \text{ m}^2 \times 0,15\text{m} = \underline{\underline{25,16 \text{ m}^3}}$$

$$\text{ARMAÇÃO AÇO 8.0 mm} = \underline{\underline{370,00 \text{ Kg}}}$$

#### ALVENARIA DE PEDRAS DE BASALTO ARGAMASSADA

$$1,00\text{m} \times 0,70\text{m} \times 52,67\text{m} = 36,87 \text{ m}^3$$

$$1,00\text{m} \times 0,90\text{m} \times 52,67\text{m} = 47,40 \text{ m}^3$$

$$0,95\text{m} \times 0,70\text{m} \times 52,67\text{m} = 35,02 \text{ m}^3$$

$$1,00\text{m} \times 1,00\text{m} \times 30,72\text{m} = 30,72 \text{ m}^3$$

$$0,75\text{m} \times 0,80\text{m} \times 30,72\text{m} = 18,43 \text{ m}^3$$

$$0,70\text{m} \times 0,60\text{m} \times 30,72\text{m} = 12,90 \text{ m}^3$$

$$1,00\text{m} \times 0,70\text{m} \times 47,22\text{m} = 33,05 \text{ m}^3$$

$$0,45\text{m} \times 0,60\text{m} \times 47,22\text{m} = 12,75 \text{ m}^3$$

$$1,00\text{m} \times 1,20\text{m} \times 29,55\text{m} = 35,46 \text{ m}^3$$

$$0,75\text{m} \times 1,00\text{m} \times 29,55\text{m} = 22,16 \text{ m}^3$$

$$0,70\text{m} \times 0,80\text{m} \times 29,55\text{m} = 16,55 \text{ m}^3$$

$$1,00\text{m} \times 0,70\text{m} \times 15,04\text{m} = 10,53 \text{ m}^3$$

$$0,45\text{m} \times 0,60\text{m} \times 15,04\text{m} = 4,06 \text{ m}^3$$

$$\Sigma = \underline{\underline{315,90 \text{ m}^3}}$$

Rachão atrás do muro:

$$52,69\text{m} \times 2,95\text{m} \times 0,20\text{m} = \underline{\underline{31,07 \text{ m}^2}}$$

$$60,27\text{m} \times 2,45\text{m} \times 0,20\text{m} = \underline{\underline{29,53 \text{ m}^2}}$$

$$62,25\text{m} \times 1,45\text{m} \times 0,20\text{m} = \underline{\underline{18,05 \text{ m}^2}}$$

$$\Sigma = \underline{\underline{78,65 \text{ m}^3}}$$

Manta geotextil

$$52,69\text{m} \times 2,95\text{m} = \underline{\underline{155,38 \text{ m}^2}}$$

$$60,27\text{m} \times 2,45\text{m} = \underline{\underline{147,66 \text{ m}^2}}$$

$$62,25\text{m} \times 1,45\text{m} = \underline{\underline{90,26 \text{ m}^2}}$$

$$\Sigma = \underline{\underline{393,30 \text{ m}^2}}$$

$$\text{Tubo corrugado} = \underline{\underline{180,00 \text{ m}}}$$

$$\text{Tubo escoamento em PVC diâm 75 mm} = \underline{\underline{150,00 \text{ m}}}$$

$$\text{Canaleta com meio tubo de concreto diâm 30 cm} = \underline{\underline{172,00 \text{ m}}}$$

Maravilha (SC), 07 de Outubro de 2016.

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