SANDRA GUADALUPE RUIZ MORALES
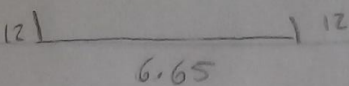
TALLER DE CONSTRUCCION DE MATERIALES BASICOS

VOLUMEN DE OBRA

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18 DE FEBRERO DEL 2021

UDS
PASIÓ ¿POR EDUCAR

[Varilla no.3]   12 |————————| 12
                      6.65

▶ longitudinal

Largo = 6.65 + 0.24 = 6.89 m (4 pzas) = 27.56 m

▶ transversal
                        12 |————————| 12
Largo = 80+24 = 1.04m   80

pzas = 6.65 / 0.15 + 1 = 45.3 → 46

1.04 m (46 pzas) = 47.84 m

▶ contratrabe
                                                    12 |————————| 1
Largo = 6 + 0.24 = 6.24 m (2 pzas) = 12.48 mL   6.00

▶ Total de vavilla no.3
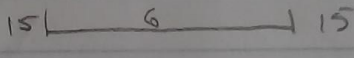
   27.56m + 47.84m + 12.48m = 87.88 (1.03) = 90.5164

▶▶ Total de kg

   90.5164 (0.566) = 51.23 kg

▶ Total de pzas

   90.5164 / 12 = 7.54 → 8 pzas

[Varilla no.4]   15 |———6———| 15
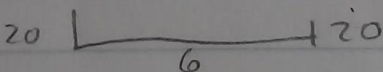
▶ largo = 6 + 0.30 = 6.30m (2 pzas) = 12.6 (1.05) = 13.23
▶ kg = 13.23 (0.997) = 13.19 kg
▶▶ pzas = 13.23 / 12 = 1.1025 → 1 pza

[Varilla no.5]   20 |————————| 20
                            6

▶ largo = 6 + 0.40 = 6.40m (2 pzas) = 12.8 m (1.07) = 13.696
▶ kg = 13.696 (1.566) = 21.44
▶ pza = 13.696 / 12 = 1.14 → 1 pza

[Varilla no.2] (estribo)
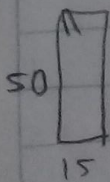
            largo = 1.30 + 0.14 = 1.44m
      50   pza = 6 / 0.15 + 1 = 41 pzas
                ▶ long. total = 1.44m (41 pzas) = 59.04 (1.03) = 60.81 m
      15   ▶ kg = 60.81 (0.250) = 15.2025 kg

Excavación

Base = 0.40 + 0.20 = 1.00 m
Largo = 6.65 + 0.20 = 6.85 m   } 7.8775 (1.30) = 10.24 m³
altura = 1.15 m

Concreto   F'c = 100 Kg/m²

1m x 6.85m x 0.05m = 0.3425 (1.1) = 0.376 m³

Concreto   F'c = 200 Kg/m²

Sección 1 = 0.8 m x 0.15 m x 6.65 m = 0.798 m³
Sección 2 = 0.15 m x 0.35 m x 6.00 m = 0.315 m³
                                    1.113 m³ (1.05) = 1.168 m³