

Datos para cajas de válvulas de compuerta con vástago fijo

| Caja tipo No. | Dámetro de válvula (mm) | Cant. de válvulas | h (m) | l (m) | b (m) | x (m) | y (m) | Contramarcos | Perfora | Excavación | Rejilla Red. (m <sup>2</sup> ) | Losas (m <sup>2</sup> ) | Losas (m <sup>3</sup> ) | Losas (kg) | Muro a techar (m <sup>2</sup> ) | Losas (m <sup>3</sup> ) | Losas (kg) | Acero #3 varillas 3/8" (kg) | Alperrino 1/4" 0.248 kg/m (kg) |       |       |       |       |       |       |
|---------------|-------------------------|-------------------|-------|-------|-------|-------|-------|--------------|---------|------------|--------------------------------|-------------------------|-------------------------|------------|---------------------------------|-------------------------|------------|-----------------------------|--------------------------------|-------|-------|-------|-------|-------|-------|
| 1             | 100x50                  | 1                 | 1.66  | 1.63  | 20.0  | 2.30  | 1.96  | 1            | 4       | 8.50       | 5.50                           | 3.04                    | 0.30                    | 7.00       | 0.20                            | 9.43                    | 6.18       | 0.48                        | 7.00                           | 0.20  | 18.84 | 21.22 | 20.46 | 82.50 |       |
| 2             | 200x50                  | 1                 | 1.79  | 2.17  | 20.0  | 2.30  | 1.80  | 28           | 2.70    | 2.40       | 2.15                           | -                       | -                       | 1          | 6                               | 12.83                   | 6.48       | 3.78                        | 0.38                           | 7.80  | 0.22  | 13.88 | 19.02 | 18.60 | 82.50 |
| 3             | 400x50                  | 1                 | 2.27  | 2.63  | 20.0  | 2.30  | 1.25  | 28           | 3.30    | 2.85       | 2.60                           | -                       | -                       | 1          | 6                               | 23.04                   | 9.41       | 6.08                        | 0.61                           | 9.90  | 0.28  | 22.28 | 29.60 | 29.58 | 82.50 |
| 4             | 100x50                  | 2                 | 1.66  | 1.63  | 20.0  | 2.30  | 1.60  | 28           | 2.70    | 2.30       | 1.95                           | -                       | -                       | 2          | 4                               | 9.35                    | 6.05       | 3.44                        | 0.34                           | 7.50  | 0.21  | 10.09 | 14.08 | 13.94 | 80.44 |
| 5             | 200x50                  | 2                 | 1.79  | 1.93  | 20.0  | 2.30  | 1.75  | 28           | 2.70    | 2.35       | 2.10                           | -                       | -                       | 2          | 6                               | 13.11                   | 7.05       | 4.20                        | 0.42                           | 8.30  | 0.23  | 13.78 | 17.44 | 17.28 | 80.44 |
| 6             | 300x50                  | 2                 | 2.09  | 2.17  | 20.0  | 2.30  | 1.60  | 28           | 3.25    | 2.50       | 2.25                           | -                       | -                       | 2          | 6                               | 17.31                   | 8.13       | 5.04                        | 0.50                           | 9.30  | 0.25  | 17.56 | 21.52 | 21.34 | 82.50 |
| 7             | 400x50                  | 2                 | 2.27  | 2.63  | 20.0  | 2.30  | 1.20  | 28           | 3.70    | 2.80       | 2.55                           | -                       | -                       | 2          | 6                               | 25.38                   | 10.36      | 6.82                        | 0.68                           | 10.60 | 0.30  | 23.85 | 29.60 | 29.58 | 82.50 |
| 8             | 100x50                  | 2                 | 1.66  | 1.63  | 20.0  | 2.30  | 1.85  | 28           | 2.45    | 2.45       | 2.30                           | -                       | -                       | 2          | 4                               | 9.27                    | 6.00       | 3.42                        | 0.34                           | 7.40  | 0.21  | 9.95  | 14.08 | 13.94 | 80.44 |
| 9             | 200x50                  | 2                 | 1.79  | 1.93  | 20.0  | 2.30  | 1.20  | 28           | 2.70    | 2.70       | 2.45                           | -                       | -                       | 2          | 4                               | 13.56                   | 7.29       | 4.41                        | 0.44                           | 8.40  | 0.24  | 13.94 | 17.44 | 17.28 | 80.44 |
| 10            | 300x50                  | 2                 | 2.09  | 2.17  | 20.0  | 2.30  | 1.25  | 28           | 2.85    | 2.85       | 2.60                           | -                       | -                       | 2          | 6                               | 17.30                   | 8.12       | 5.06                        | 0.51                           | 9.00  | 0.25  | 17.37 | 21.52 | 21.34 | 82.50 |
| 11            | 100x50                  | 3                 | 1.66  | 1.63  | 20.0  | 2.30  | 1.85  | 28           | 2.75    | 2.45       | 2.20                           | -                       | -                       | 2          | 4                               | 10.41                   | 6.74       | 3.98                        | 0.40                           | 8.00  | 0.22  | 10.76 | 14.08 | 13.94 | 80.44 |
| 12            | 200x50                  | 3                 | 1.79  | 2.40  | 20.0  | 2.30  | 1.20  | 28           | 3.30    | 2.90       | 2.65                           | -                       | -                       | 3          | 6                               | 20.05                   | 9.57       | 6.31                        | 0.62                           | 10.00 | 0.28  | 18.95 | 21.52 | 21.34 | 82.50 |

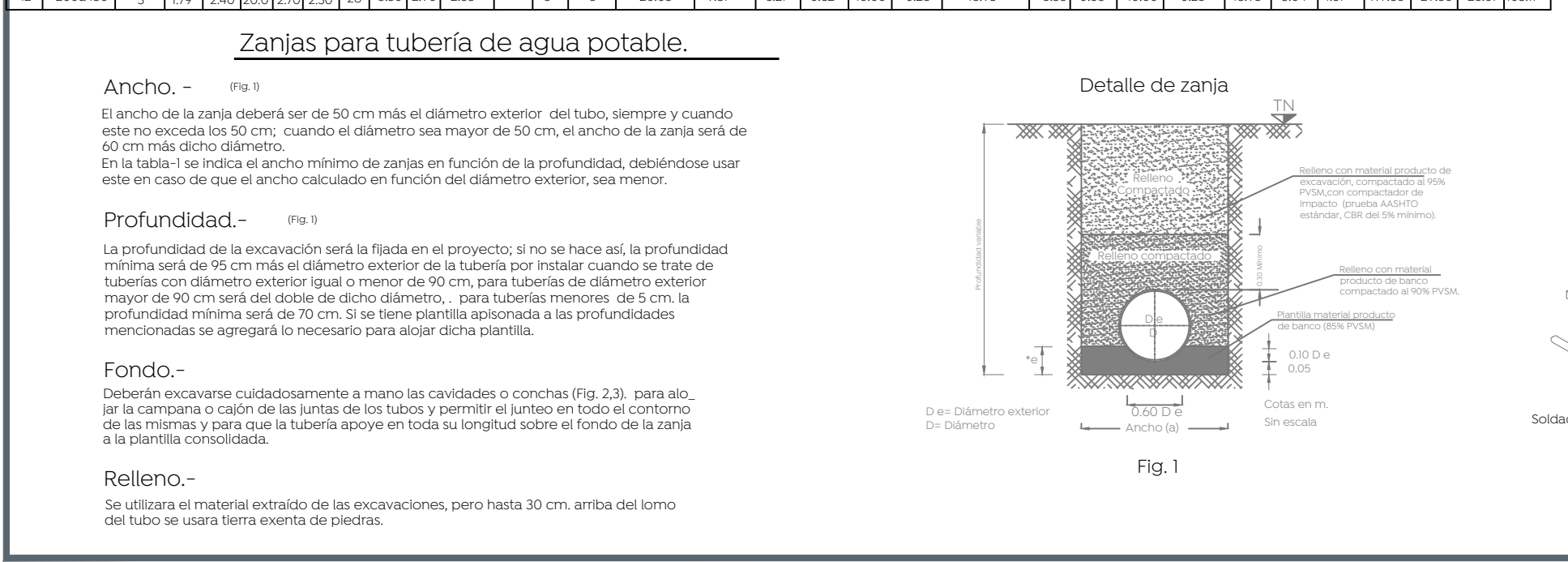
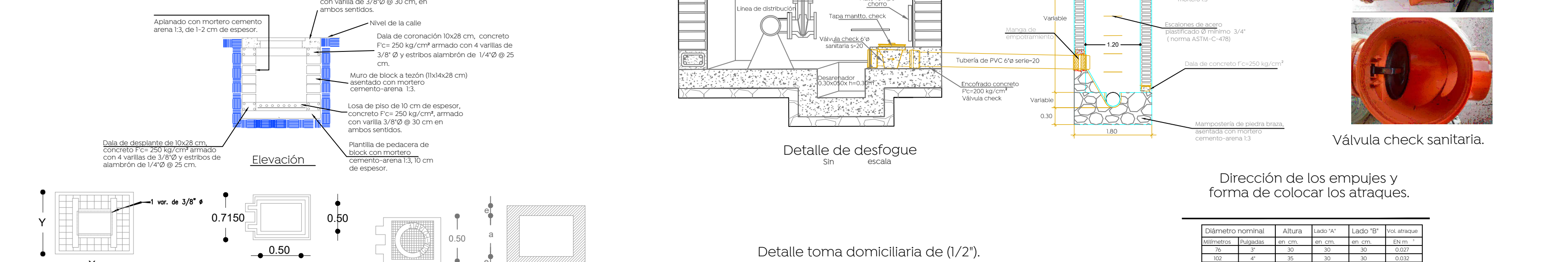


Tabla 1. Isométrico que indica la forma de unir el contramarcos con las varillas de la losa por medio de una varilla de 9.5 mm 3/8" Ø soldada perimetralmente al contramarcos.

| Dámetro nominal | Altura | Lado "x" | Lado "y" | Vol. ataca (litros) |
|-----------------|--------|----------|----------|---------------------|
| 100             | 45     | 45       | 45       | 0.054               |
| 150             | 45     | 45       | 45       | 0.081               |
| 200             | 45     | 45       | 45       | 0.108               |
| 250             | 45     | 45       | 45       | 0.135               |
| 300             | 45     | 45       | 45       | 0.162               |
| 350             | 45     | 45       | 45       | 0.189               |
| 400             | 45     | 45       | 45       | 0.216               |
| 450             | 45     | 45       | 45       | 0.243               |
| 500             | 45     | 45       | 45       | 0.270               |
| 550             | 45     | 45       | 45       | 0.297               |
| 600             | 45     | 45       | 45       | 0.324               |
| 650             | 45     | 45       | 45       | 0.351               |
| 700             | 45     | 45       | 45       | 0.378               |
| 750             | 45     | 45       | 45       | 0.405               |
| 800             | 45     | 45       | 45       | 0.432               |
| 850             | 45     | 45       | 45       | 0.459               |
| 900             | 45     | 45       | 45       | 0.486               |
| 950             | 45     | 45       | 45       | 0.513               |
| 1000            | 45     | 45       | 45       | 0.540               |

Nombre del proyecto:  
**Modernización a la Red de Vía Urbana, Zona Centro, incluye: pavimentación, alcantarillado sanitario, agua potable, banquetas, cruces peatonales, accesibilidad universal, señalética horizontal - vertical y obras complementarias, Municipio de Zapopan, Jalisco**

Contenido del plano:  
**Proyecto y detalles agua potable**

No. Contrato:  
**DOPI-MUN-RM-PAV-LP-131-2022**

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**Calle Venustiano Carranza de la Av. José Simeón de Urías al Centro Cultural Constitución, en la colonia Zapopan Jalisco**

Fecha:  
**Septiembre 2022**

Escala:  
**1:500**

Acotaciones:  
**Metros**

Clave:  
**APO-02**