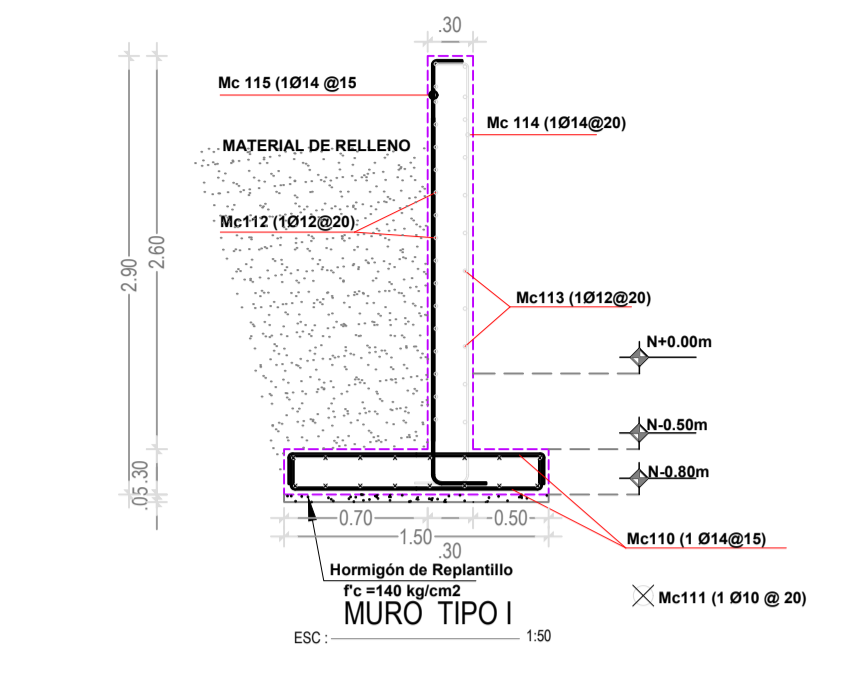


**PLANILLA DE HIERROS AZUL Y ZAMPEADO**

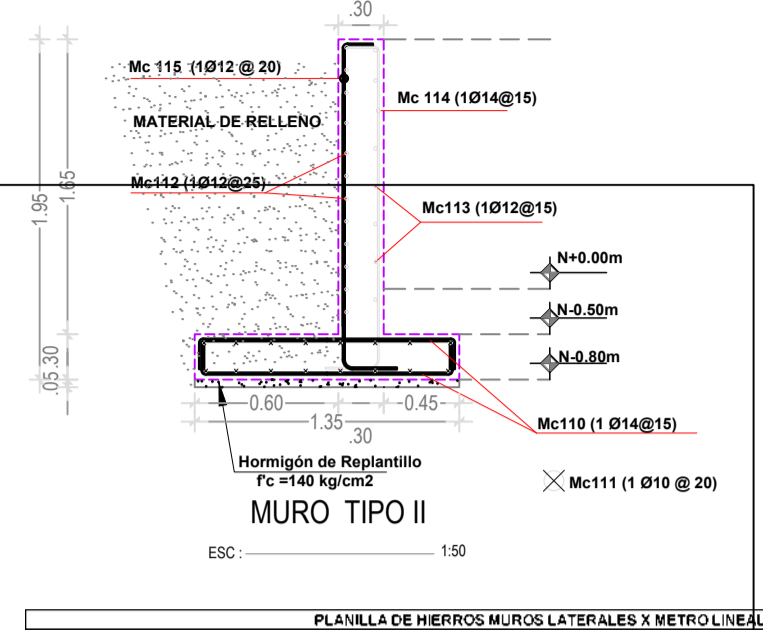
| Mc                              | Ø  | Kg/m | DIMENSIONES |    |      |      |      |   |        | Desarrollada | Total         | OBSERVACIONES |        |  |
|---------------------------------|----|------|-------------|----|------|------|------|---|--------|--------------|---------------|---------------|--------|--|
|                                 |    |      | No.         | a  | b    | c    | d    | e | trast. |              |               |               | g      |  |
| 116                             | 10 | 0.62 | 1           | 93 | 8.70 |      |      |   |        | 0.10         | 4.90          | 455.70        | 282.53 |  |
| 117                             | 14 | 1.21 | 1           | 24 | 5.90 |      |      |   |        | 0.10         | 6.10          | 146.40        | 177.14 |  |
| 118                             | 14 | 1.21 | 5           | 24 | 5.90 | 0.20 | 0.20 |   |        | 0.10         | 6.50          | 156.00        | 198.75 |  |
| 119                             | 8  | 0.39 | 0           | 24 | 0.80 | 0.20 | 0.20 |   |        | 0.10         | 2.20          | 52.80         | 20.59  |  |
| 120                             | 14 | 1.21 | 23          | 24 | 1.95 |      |      |   |        | 0.10         | 2.15          | 51.60         | 62.44  |  |
| 121                             | 14 | 1.21 | 23          | 24 | 3.40 |      |      |   |        | 0.10         | 3.60          | 86.40         | 104.54 |  |
| <b>PESO TOTAL DE ACERO (Kg)</b> |    |      |             |    |      |      |      |   |        |              | <b>111.99</b> | <b>336.01</b> |        |  |



**PLANILLA DE HIERROS MUROS LATERALES X METRO LINEAL DE MURO**

| Mc                              | Ø  | Kg/m | DIMENSIONES |    |      |      |      |   |        | Desarrollada | Total         | OBSERVACIONES |   |
|---------------------------------|----|------|-------------|----|------|------|------|---|--------|--------------|---------------|---------------|---|
|                                 |    |      | No.         | a  | b    | c    | d    | e | trast. |              |               |               | g |
| 110                             | 14 | 1.21 | 1           | 14 | 1.40 | 0.20 | 0.20 |   |        | 1.80         | 25.20         | 30.40         |   |
| 111                             | 10 | 0.62 | 1           | 16 | 1.00 |      |      |   |        | 1.00         | 16.00         | 9.92          |   |
| 112                             | 12 | 0.89 | 1           | 15 | 1.00 |      |      |   |        | 1.00         | 15.00         | 13.35         |   |
| 113                             | 12 | 0.89 | 1           | 15 | 1.00 |      |      |   |        | 1.00         | 15.00         | 13.35         |   |
| 114                             | 12 | 0.89 | L           | 6  | 2.90 | 0.35 |      |   |        | 3.25         | 19.50         | 17.36         |   |
| 115                             | 14 | 1.21 | L           | 7  | 2.90 | 0.35 |      |   |        | 3.25         | 22.75         | 27.53         |   |
| <b>PESO TOTAL DE ACERO (Kg)</b> |    |      |             |    |      |      |      |   |        |              | <b>111.99</b> |               |   |

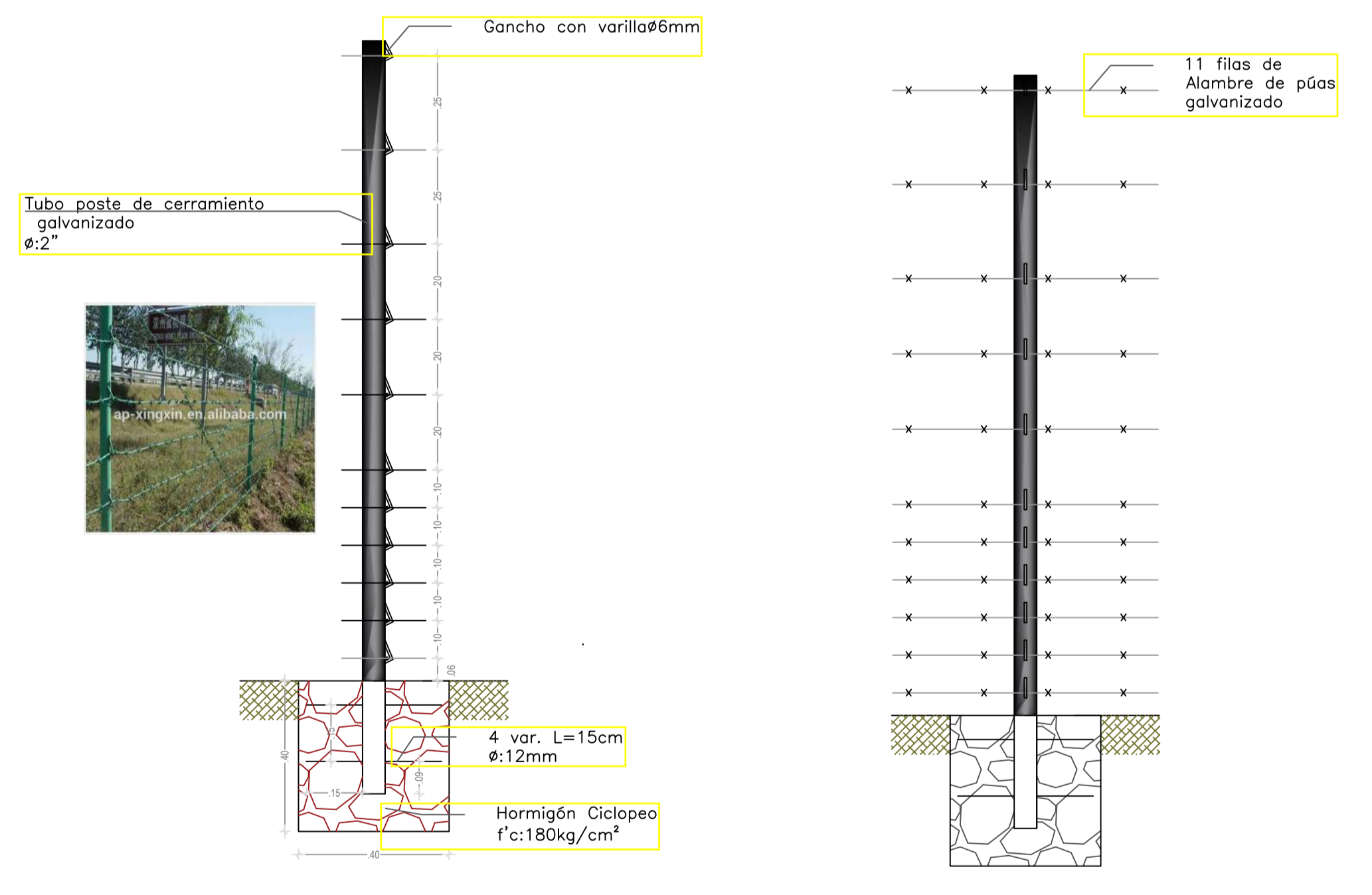
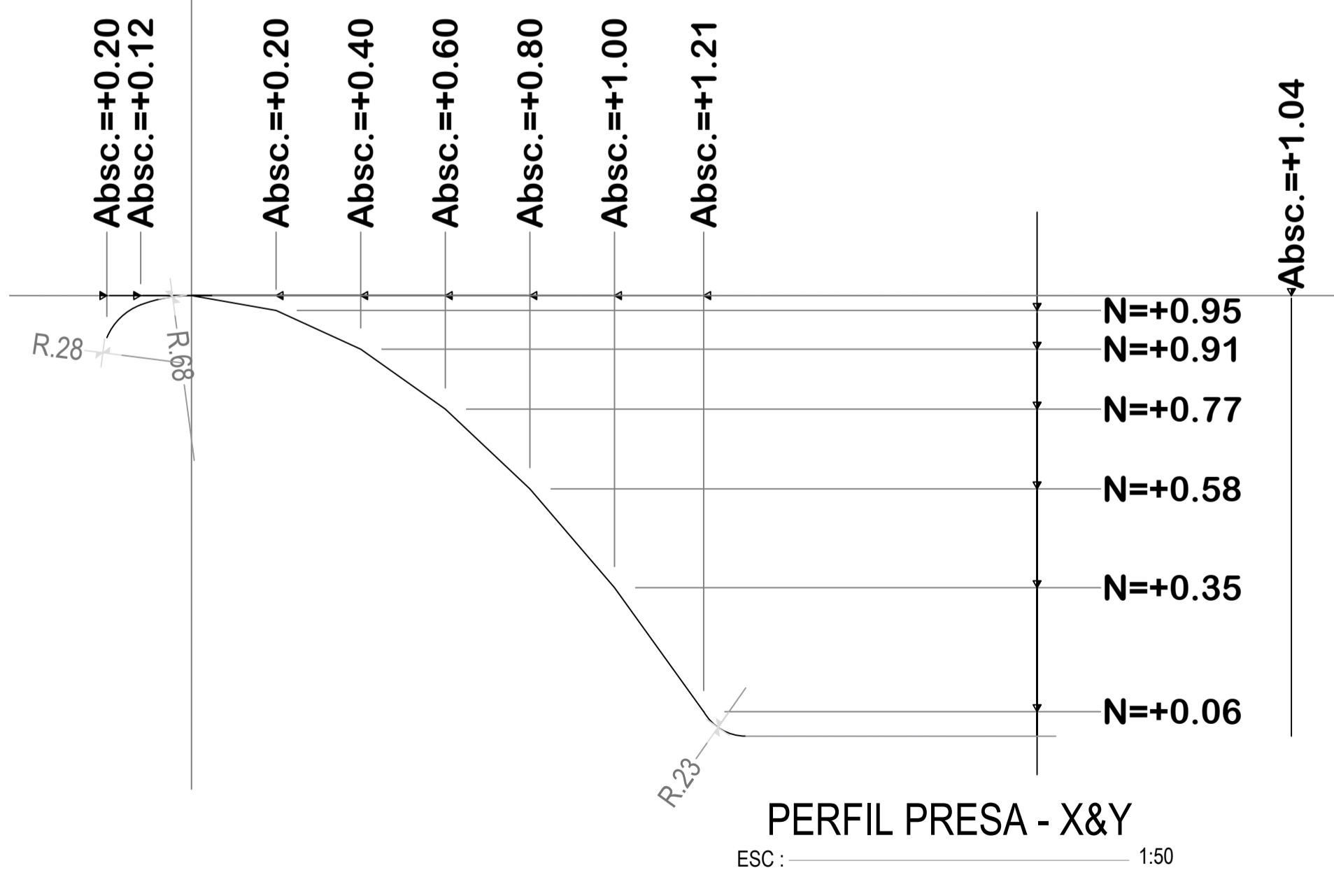
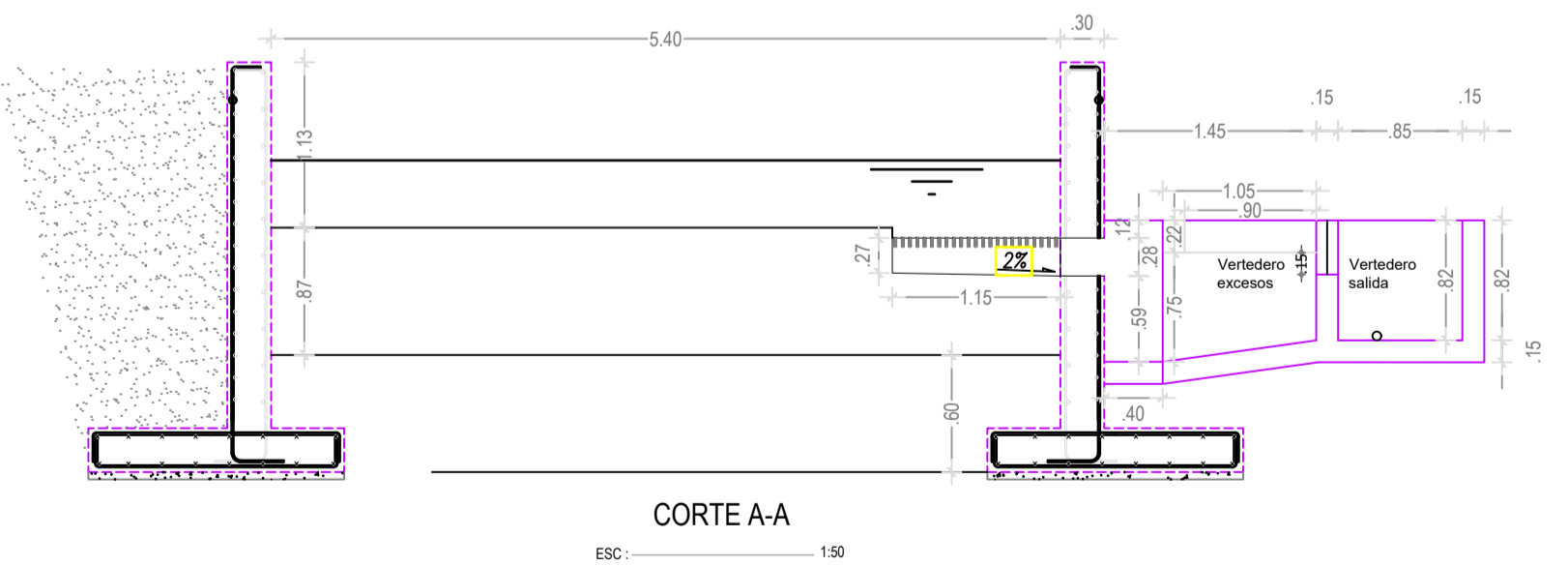
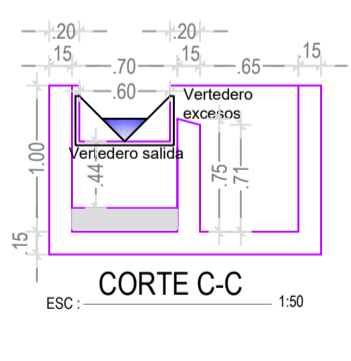
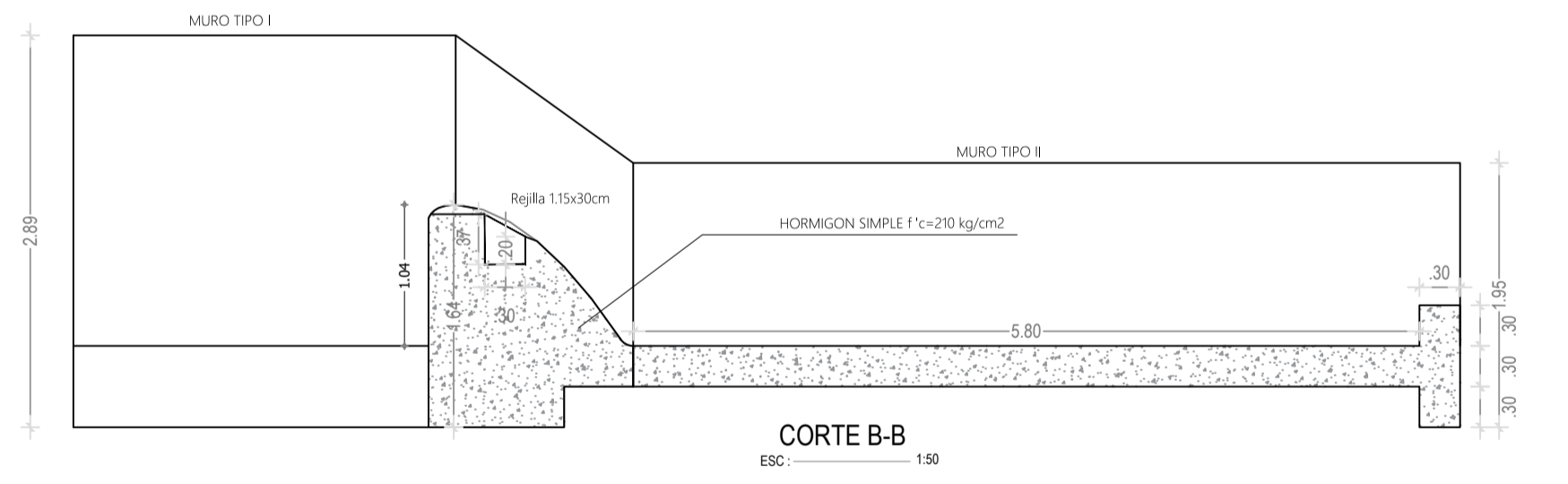
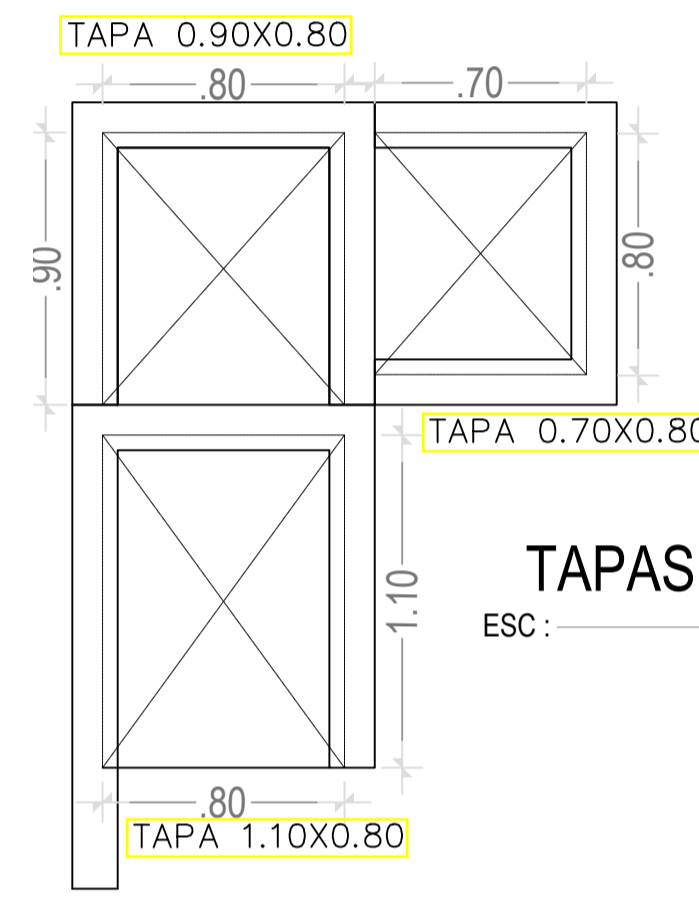
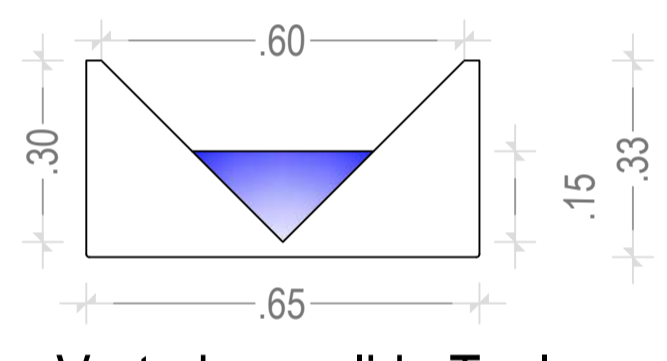
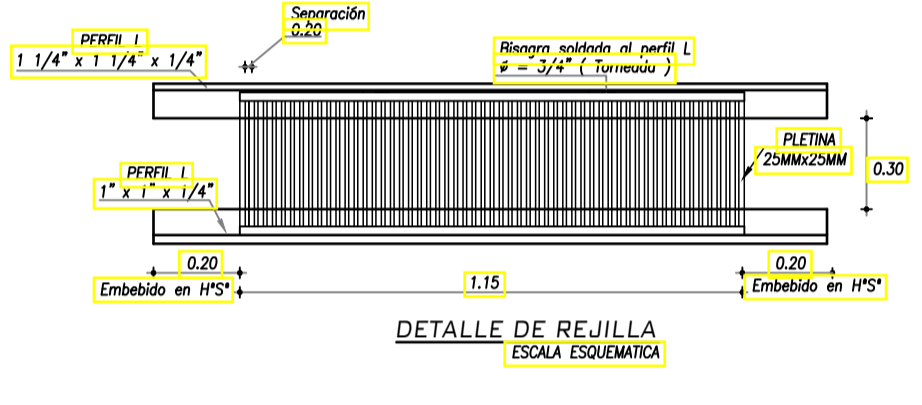
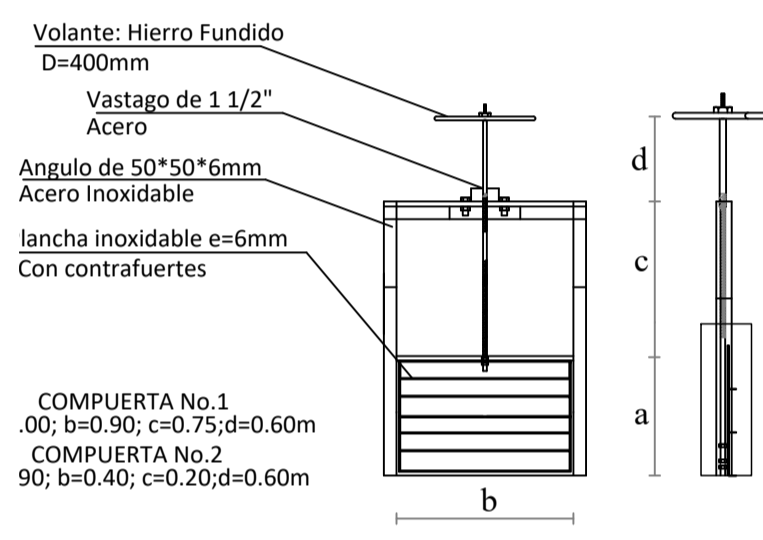
Area de la sección transversal: 1.23  
Longitud del muro (m) ambos lados: 9.20  
VOLUMEN DE HORMIGÓN (m³): 11.32



**PLANILLA DE HIERROS MUROS LATERALES X METRO LINEAL DE MURO**

| Mc                              | Ø  | Kg/m | DIMENSIONES |    |      |      |      |   |        | Desarrollada | Total        | OBSERVACIONES |   |
|---------------------------------|----|------|-------------|----|------|------|------|---|--------|--------------|--------------|---------------|---|
|                                 |    |      | No.         | a  | b    | c    | d    | e | trast. |              |              |               | g |
| 110                             | 12 | 0.89 | 1           | 14 | 1.00 | 0.10 | 0.10 |   |        | 1.60         | 20.50        | 19.07         |   |
| 111                             | 10 | 0.62 | 1           | 14 | 1.00 |      |      |   |        | 1.00         | 14.00        | 8.68          |   |
| 112                             | 12 | 0.89 | 1           | 10 | 1.00 |      |      |   |        | 1.00         | 10.00        | 8.60          |   |
| 113                             | 12 | 0.89 | 1           | 10 | 1.00 |      |      |   |        | 1.00         | 10.00        | 8.60          |   |
| 114                             | 12 | 0.89 | L           | 6  | 1.95 | 0.35 |      |   |        | 2.30         | 13.80        | 12.58         |   |
| 115                             | 14 | 1.21 | L           | 7  | 1.95 | 0.35 |      |   |        | 2.30         | 15.10        | 19.48         |   |
| <b>PESO TOTAL DE ACERO (Kg)</b> |    |      |             |    |      |      |      |   |        |              | <b>76.31</b> |               |   |

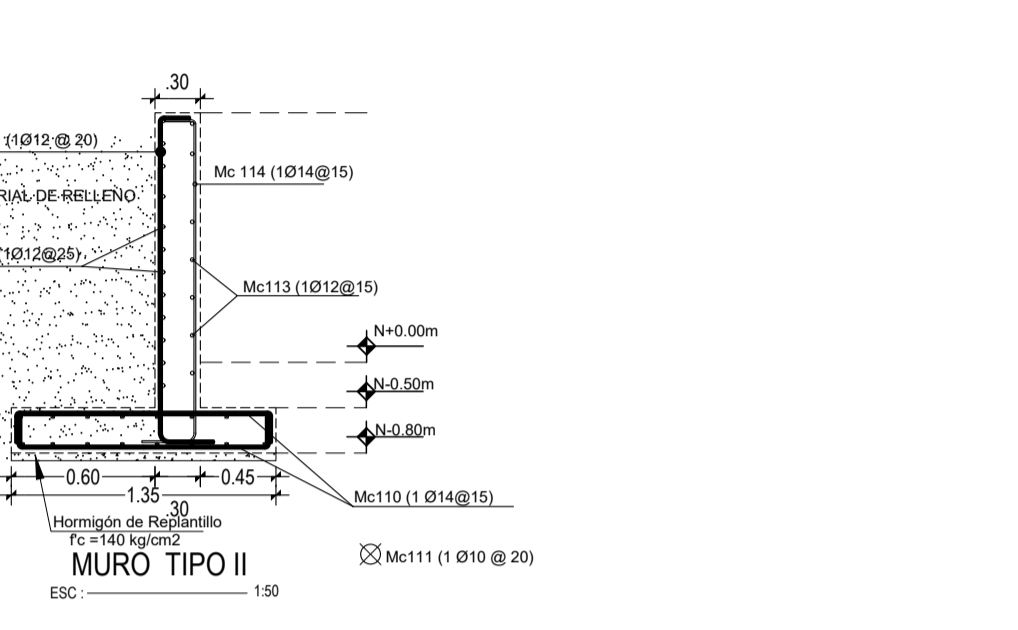
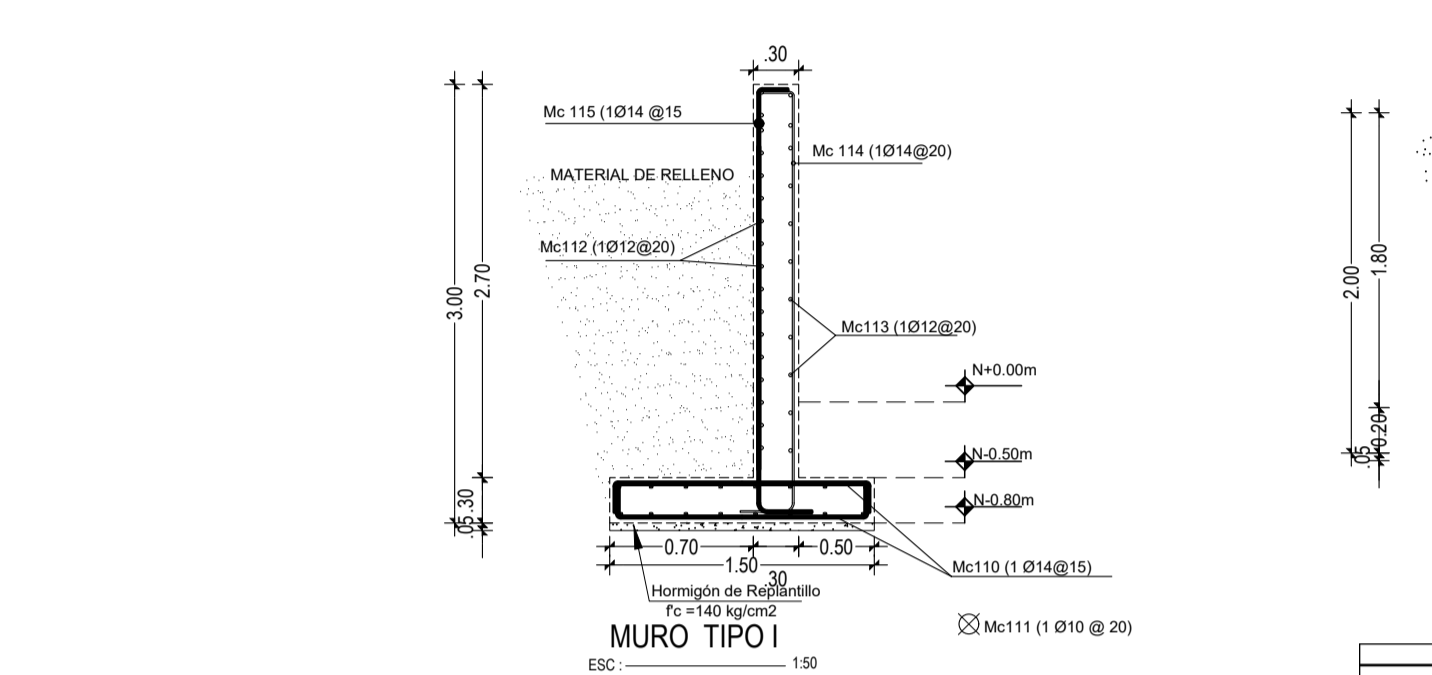
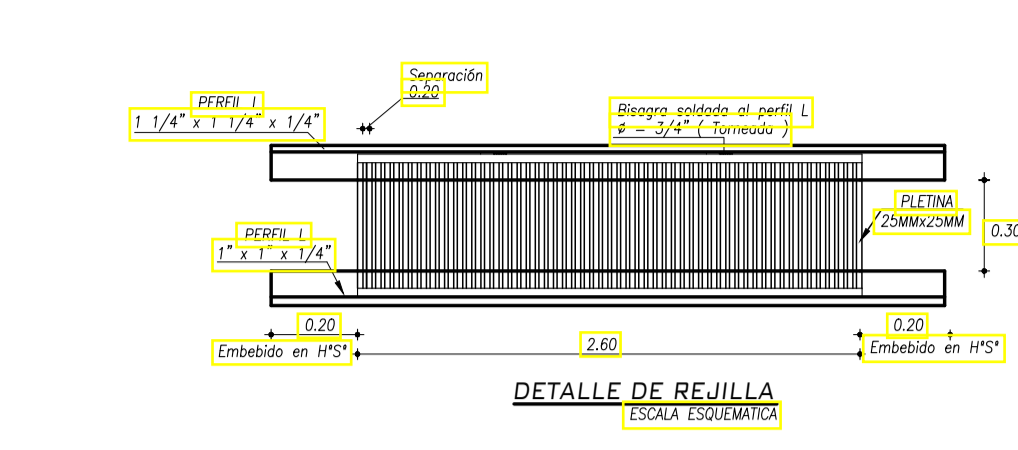
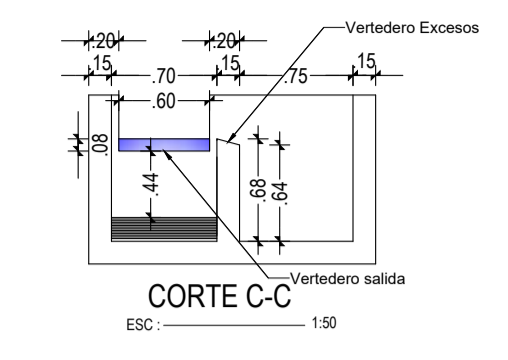
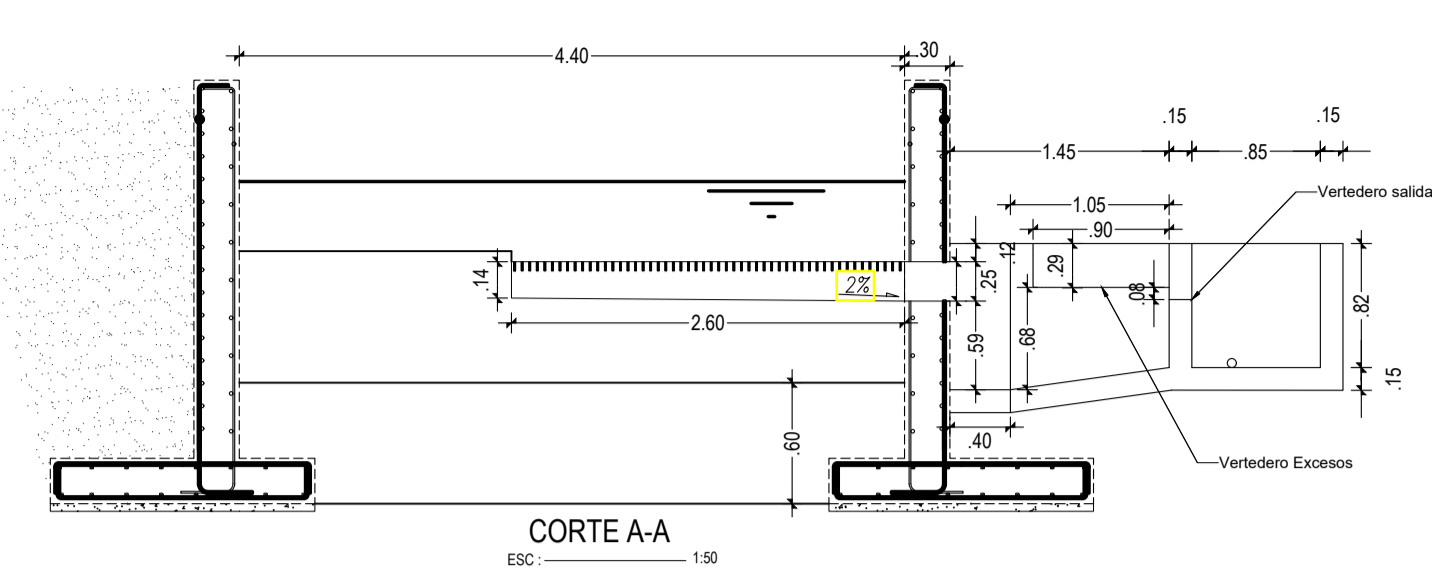
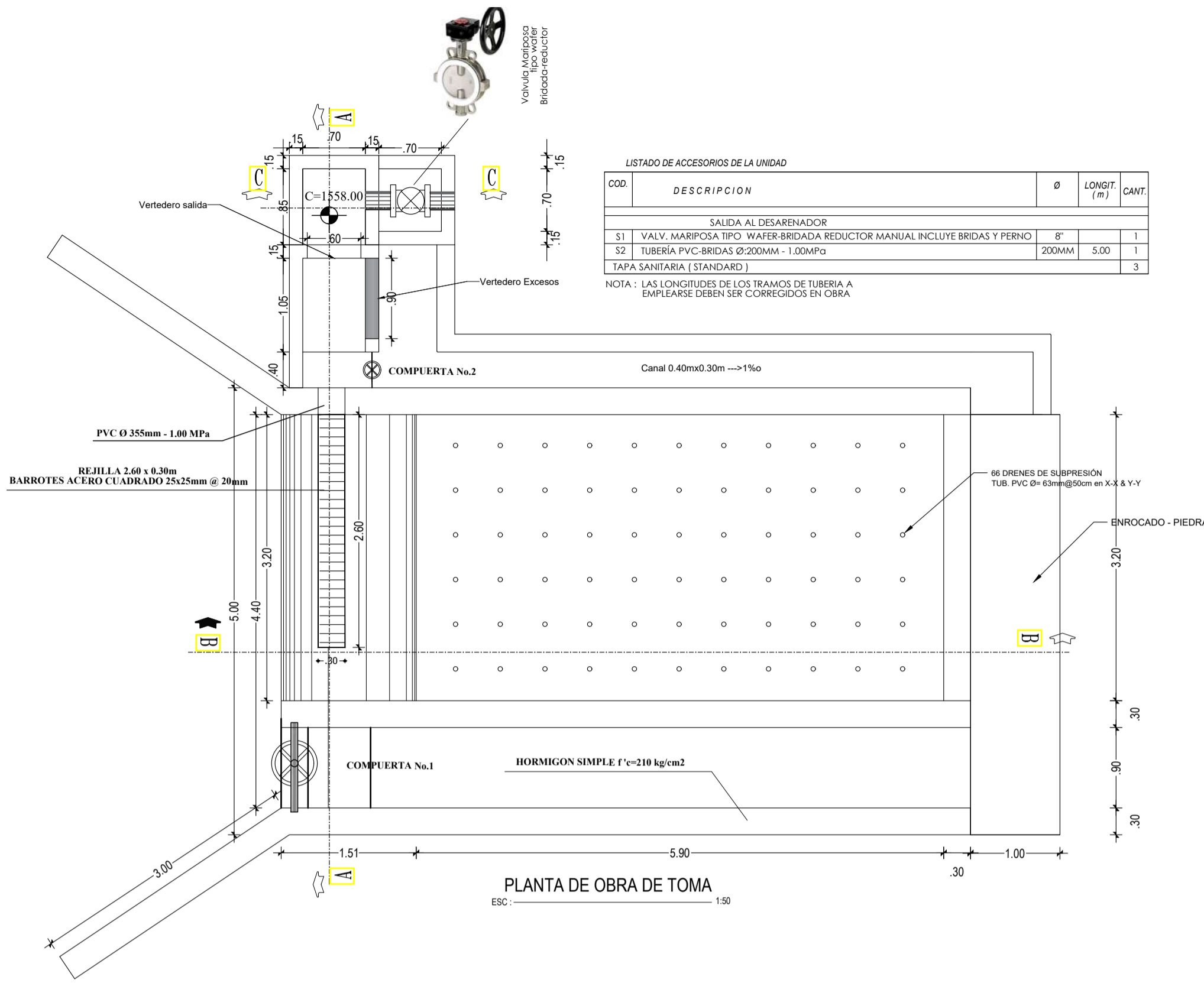
Area de la sección transversal: 0.80  
Longitud del muro (m) ambos lados: 9.20  
VOLUMEN DE HORMIGÓN (m³): 9.72



|                              |                             |            |                   |   |
|------------------------------|-----------------------------|------------|-------------------|---|
| INGENIERIA / REGISTRO DISEÑO | FIRMA                       | FECHA      |                   | <b>GOBIERNO AUTÓNOMO MUNICIPAL DE PIÑAS</b><br>PROYECTO : CONSULTORIA PARA LOS ESTUDIOS Y DISEÑOS DEFINITIVOS DE LA NUEVA CAPTACION-LINEA DE CONDUCCION Y NUEVA PLANTA DE TRATAMIENTO DE AGUA POTABLE PARA LA CIUDAD DE PIÑAS, CANTON PIÑAS, PROVINCIA DE EL ORO.<br>DESCRIPCION : OBRA DE CAPTACION QUEBRADA GONZALO |
| DISEÑO :                     | ING. PAUL TORRES            | OCTUBRE/21 |                   |   |
| ADMINISTRADOR :              | ING. JULIO JARAMILLO FREIRE | OCTUBRE/21 | TAMARO : A1       | DIBUJO N.º :  |
| APROBACION DE FISCALIZADOR : | ING. JOSÉ ANGAMARCA A.      | OCTUBRE/21 | ESCALA : INDICADA | HOJA : 1 DE 64  |
| Gerente de la EPAA-P         | ING. JUAN ESCALANTE F.      | OCTUBRE/21 |                   | REV. A  |
| ALCALDE :                    | SR. JAIME GRANDA            | OCTUBRE/21 |                   |   |

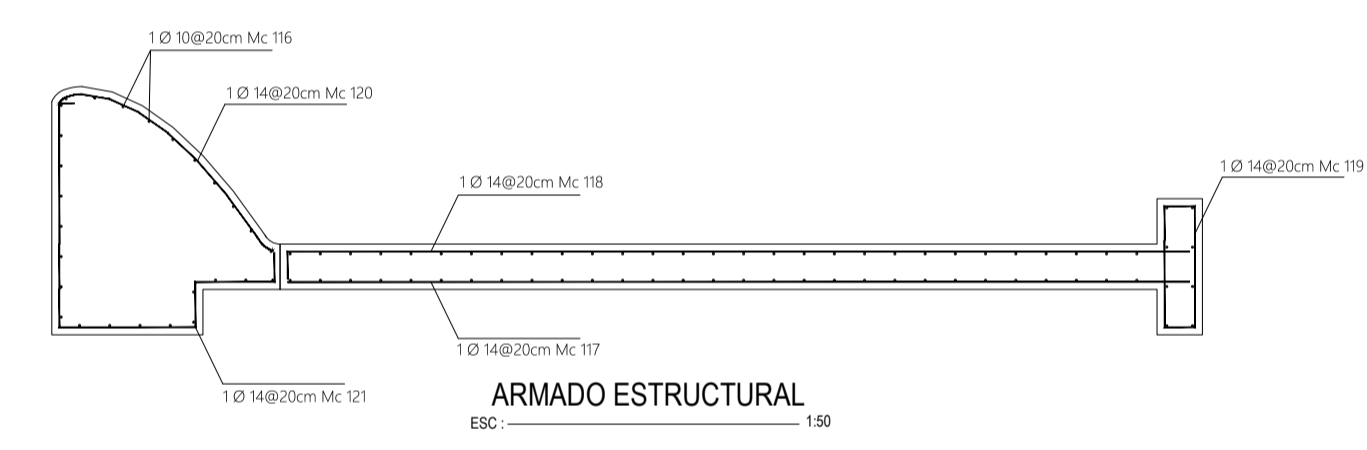
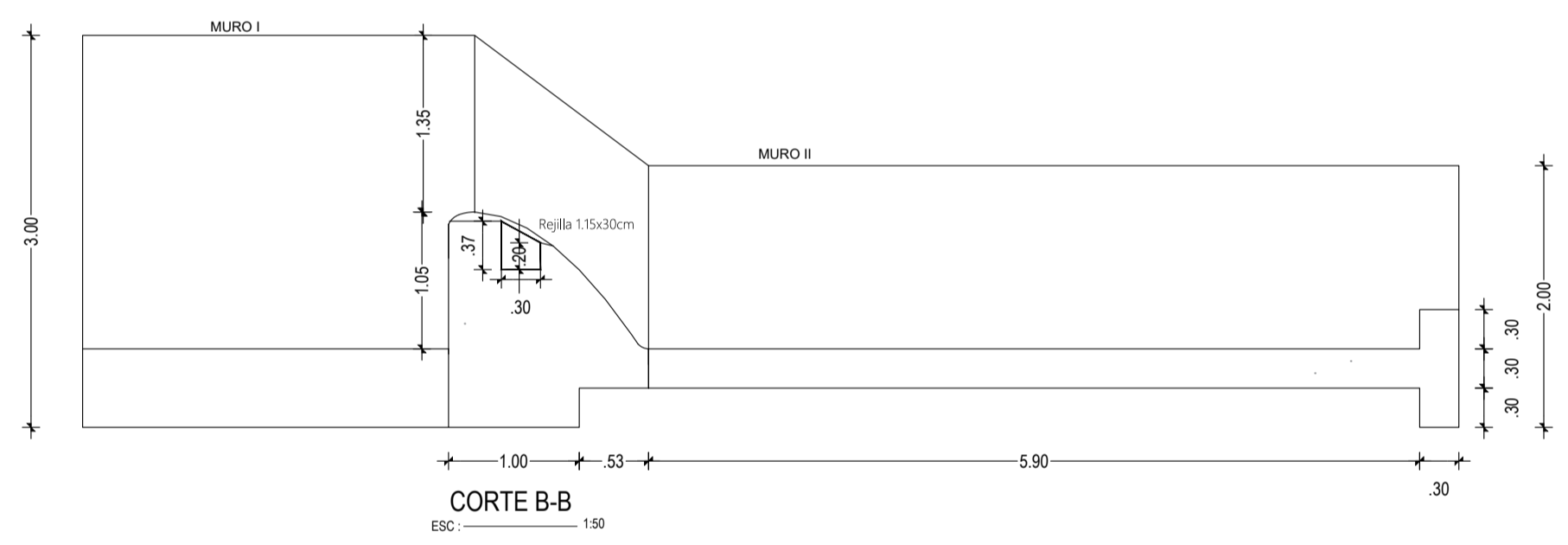
| Vertedero Rectangular Captación - Aliviador |         |
|---|---------|
| Longitud(m) L:                              | 0.9     |
| 0.01  | 1.710   |
| 0.02  | 4.890   |
| 0.03  | 8.910   |
| 0.04  | 13.710  |
| 0.05  | 19.170  |
| 0.06  | 25.190  |
| 0.07  | 31.750  |
| 0.08  | 38.790  |
| 0.085                                       | 42.480  |
| 0.1   | 54.210  |
| 0.11  | 62.540  |
| 0.12  | 71.260  |
| 0.13  | 80.350  |
| 0.14  | 89.800  |
| 0.15  | 99.590  |
| 0.16  | 109.710 |
| 0.17  | 120.150 |

| Vertedero Rectangular Captación - Salida |        |
|--|--------|
| Longitud(m) L:                           | 0.6    |
| 0.01                                     | 1.140  |
| 0.02                                     | 3.230  |
| 0.03                                     | 5.940  |
| 0.04                                     | 9.140  |
| 0.05                                     | 12.780 |
| 0.06                                     | 16.800 |
| 0.07                                     | 21.160 |
| 0.08                                     | 25.860 |
| 0.085                                    | 28.320 |
| 0.1                                      | 36.140 |
| 0.11                                     | 41.690 |
| 0.12                                     | 47.510 |
| 0.13                                     | 53.570 |
| 0.14                                     | 59.860 |
| 0.15                                     | 66.390 |
| 0.16                                     | 73.140 |
| 0.17                                     | 80.100 |

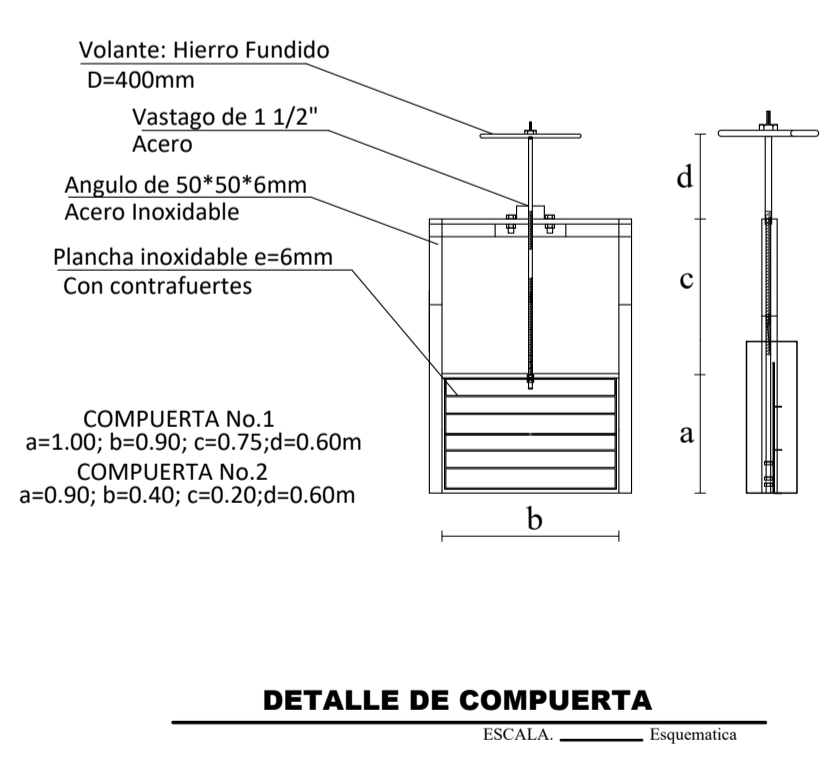
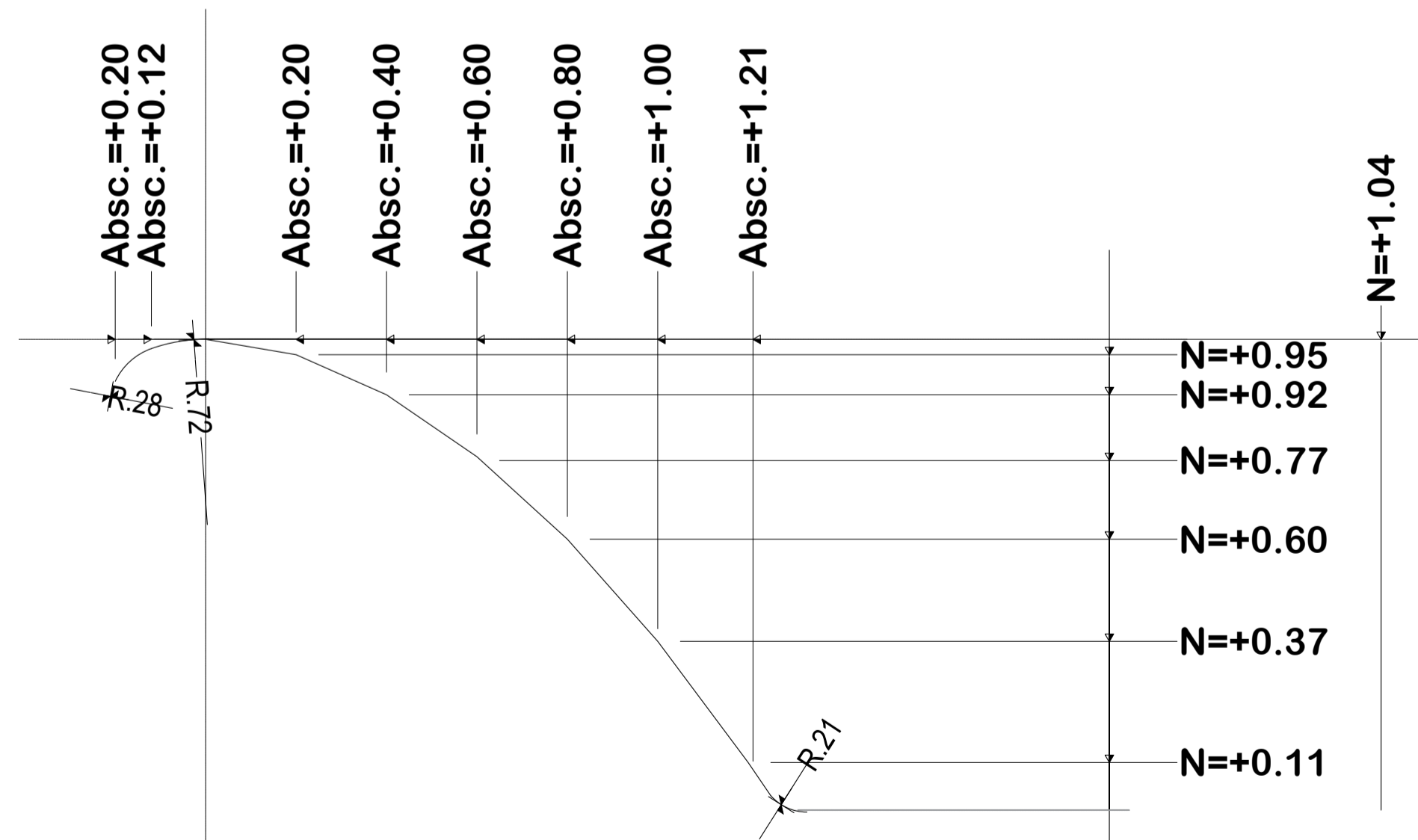
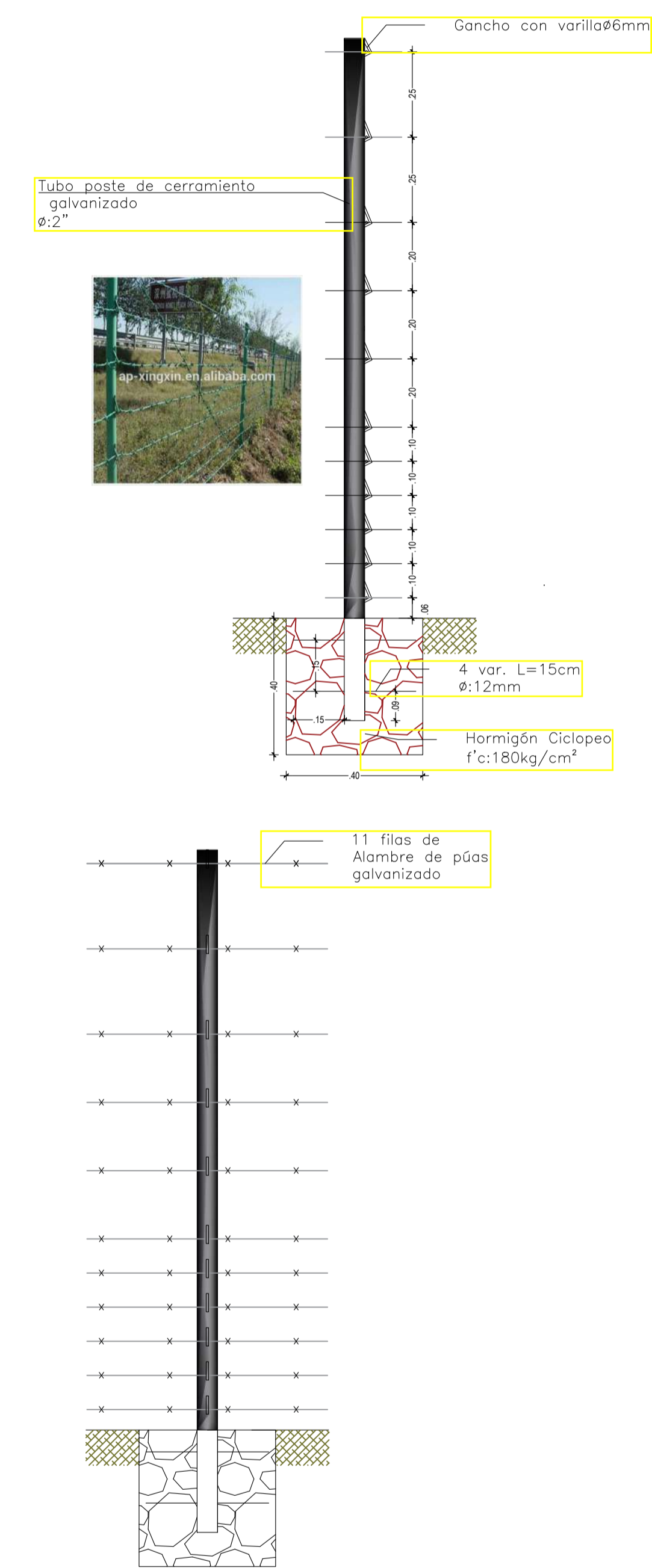


| PLANILLA DE HIERROS MUROS LATERALES X METRO LINEAL DE MURO |    |          |      |      |      |               |      |        |      |           |        |
|--|----|----------|------|------|------|---------------|------|--------|------|-----------|--------|
| DIMENSIONES  |    | LONGITUD |      | PESO |      | OBSERVACIONES |      |        |      |           |        |
| Mc   | Ø  | Kg/m     | TIPO | No.  | a    | b             | c    | trast. | g    | Desarroll | Total  |
| 110  | 14 | 1.21     | C    | 14   | 1.40 | 0.20          | 0.20 |        | 1.90 | 26.50     | 30.49  |
| 111  | 10 | 0.62     | I    | 19   | 1.00 |               |      |        | 1.90 | 18.00     | 9.82   |
| 112  | 12 | 0.89     | I    | 15   | 1.00 |               |      |        | 1.90 | 18.00     | 13.35  |
| 113  | 12 | 0.89     | I    | 15   | 1.00 |               |      |        | 1.90 | 18.00     | 13.35  |
| 114  | 12 | 0.89     | L    | 6    | 3.00 | 0.36          |      |        | 3.35 | 20.10     | 17.89  |
| 115  | 14 | 1.21     | L    | 7    | 3.00 | 0.35          |      |        | 3.35 | 29.45     | 28.97  |
| PESO TOTAL DE ACERO (Kg)                                   |    |          |      |      |      |               |      |        |      |           | 113.38 |

| PLANILLA DE HIERROS MUROS LATERALES X METRO LINEAL DE MURO |    |          |      |      |      |               |      |        |      |           |       |
|--|----|----------|------|------|------|---------------|------|--------|------|-----------|-------|
| DIMENSIONES  |    | LONGITUD |      | PESO |      | OBSERVACIONES |      |        |      |           |       |
| Mc   | Ø  | Kg/m     | TIPO | No.  | a    | b             | c    | trast. | g    | Desarroll | Total |
| 110  | 12 | 0.89     | C    | 14   | 1.20 | 0.10          | 0.10 |        | 1.40 | 20.30     | 16.07 |
| 111  | 10 | 0.62     | I    | 14   | 1.00 |               |      |        | 1.90 | 14.00     | 6.96  |
| 112  | 12 | 0.89     | I    | 10   | 1.00 |               |      |        | 1.90 | 10.00     | 6.90  |
| 113  | 12 | 0.89     | I    | 10   | 1.00 |               |      |        | 1.90 | 10.00     | 6.90  |
| 114  | 12 | 0.89     | L    | 6    | 2.00 | 0.36          |      |        | 2.35 | 14.10     | 12.55 |
| 115  | 14 | 1.21     | L    | 7    | 2.00 | 0.35          |      |        | 2.35 | 16.45     | 19.95 |
| PESO TOTAL DE ACERO (Kg)                                   |    |          |      |      |      |               |      |        |      |           | 77.80 |



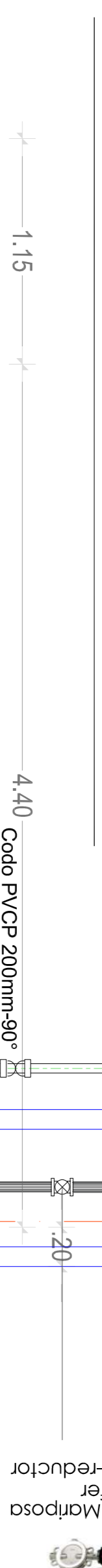
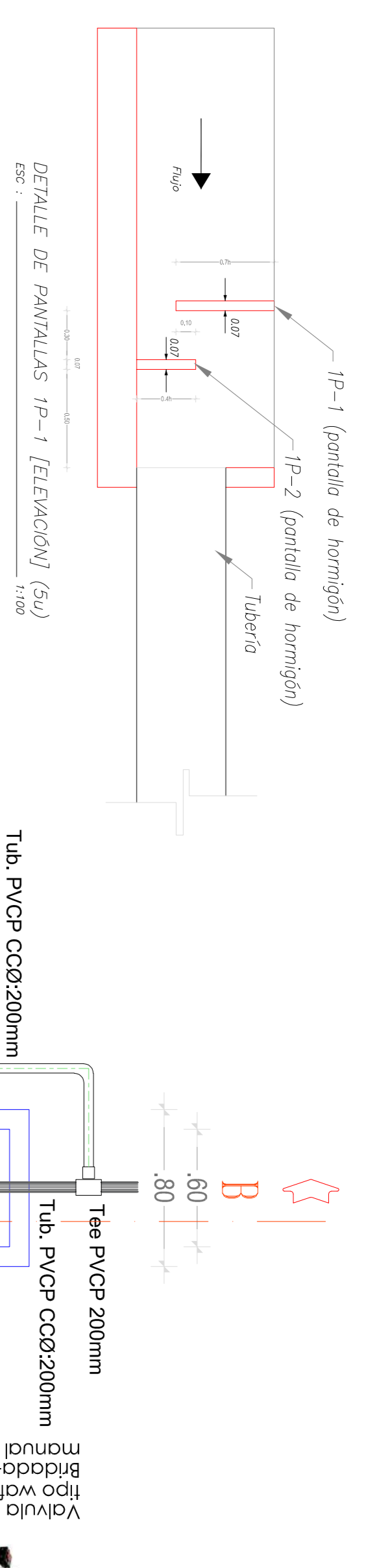
| PLANILLA DE HIERROS ADUJ Y ZAMPEADO |    |          |      |      |      |               |      |      |      |           |        |
|-------------------------------------|----|----------|------|------|------|---------------|------|------|------|-----------|--------|
| DIMENSIONES                         |    | LONGITUD |      | PESO |      | OBSERVACIONES |      |      |      |           |        |
| Mc                                  | Ø  | Kg/m     | TIPO | No.  | a    | b             | c    | d    | e    | Desarroll | Total  |
| 116                                 | 10 | 0.62     | T    | 93   | 4.70 |               |      |      | 0.10 | 4.50      | 451.70 |
| 117                                 | 14 | 1.21     | I    | 24   | 5.90 |               |      |      | 0.10 | 6.10      | 146.40 |
| 118                                 | 14 | 1.21     | L    | 24   | 5.90 | 0.20          | 0.20 |      | 0.10 | 6.50      | 156.00 |
| 119                                 | 8  | 0.39     | D    | 24   | 0.80 | 0.20          | 0.80 | 0.20 | 0.10 | 2.20      | 51.20  |
| 120                                 | 14 | 1.21     | Z3   | 24   | 1.95 |               |      |      | 0.10 | 2.15      | 51.60  |
| PESO TOTAL DE ACERO (Kg)            |    |          |      |      |      |               |      |      |      |           | 836.01 |



| INGENIERIA / REGISTRO DISEÑO | FIRMA | FECHA      |
|------------------------------|-------|------------|
| DISEÑO :                     |       |            |
| ING. PAUL TORRES             |       | OCTUBRE/21 |
| ADMINISTRADOR :              |       |            |
| ING. JULIO JARAMILLO FREIRE  |       | OCTUBRE/21 |
| APROBACION DE FISCALIZADOR:  |       |            |
| ING. JOSÉ ANGAMARCA A.       |       | OCTUBRE/21 |
| Gerente de la EPAA-P         |       |            |
| ING. JUAN ESCALANTE F.       |       | OCTUBRE/21 |
| ALCALDE:                     |       |            |
| SR. JAIME GRANDA             |       | OCTUBRE/21 |

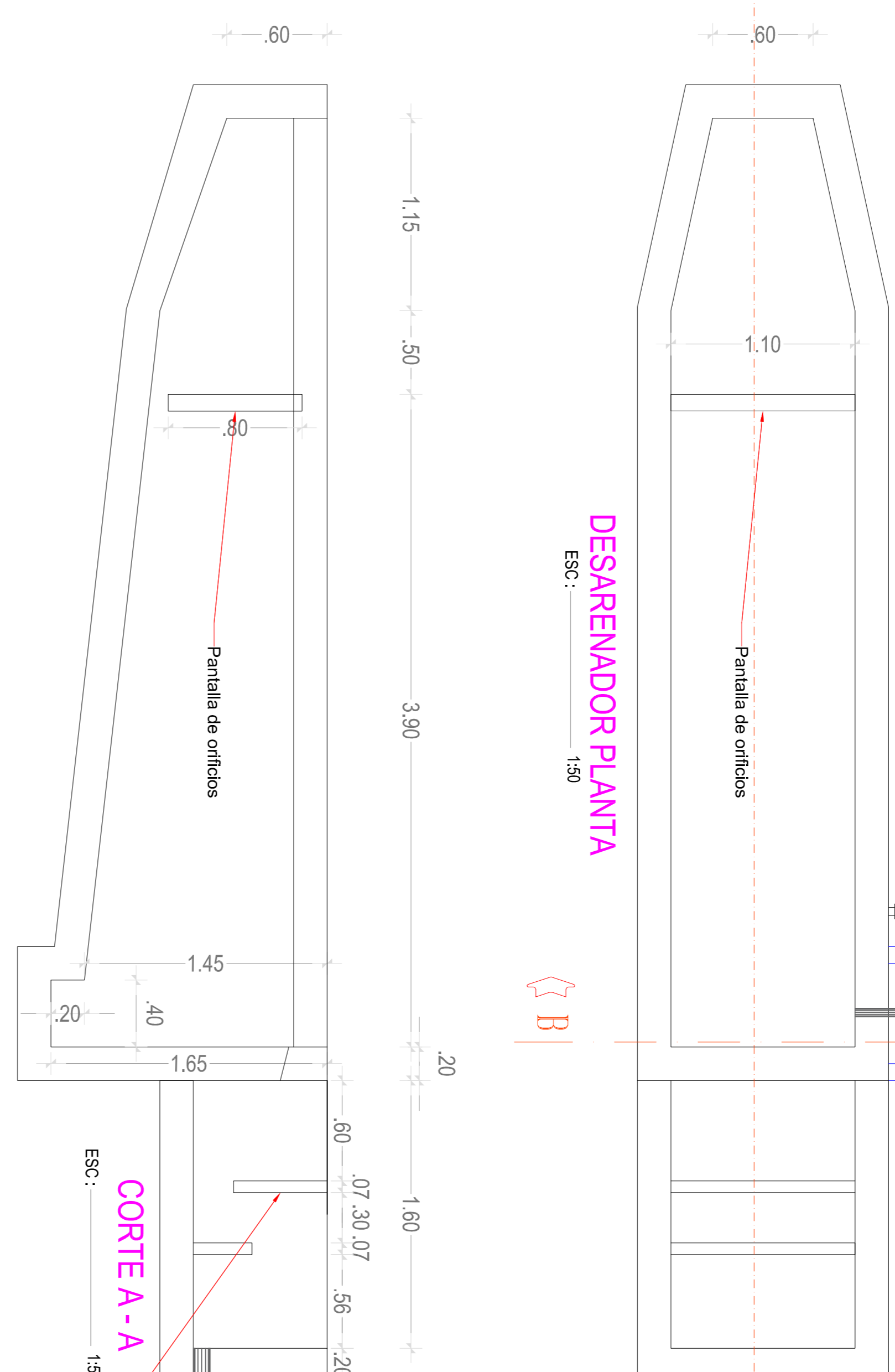
  

| GOBIERNO AUTÓNOMO MUNICIPAL DE PIÑAS |   |
|--------------------------------------|---|
| PROYECTO :                           | CONSULTORIA PARA LOS ESTUDIOS Y DISEÑOS DEFINITIVOS DE LA NUEVA CAPTACION-LINEA DE CONDUCCION Y NUEVA PLANTA DE TRATAMIENTO DE AGUA POTABLE PARA LA CIUDAD DE PIÑAS, CANTON PIÑAS, PROVINCIA DE EL ORO. |
| DESCRIPCION :                        | OBRA DE CAPTACION QUEBRADA HONDA 3  |
| DIBUJO N°:                           | AMLR  |
| HOJA :                               | 2 DE 64   |
| REV.:                                | A   |



### DESARENADOR PLANTA

ESC: 1:50



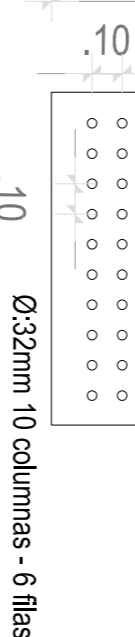
### CORTE A-A

ESC: 1:50



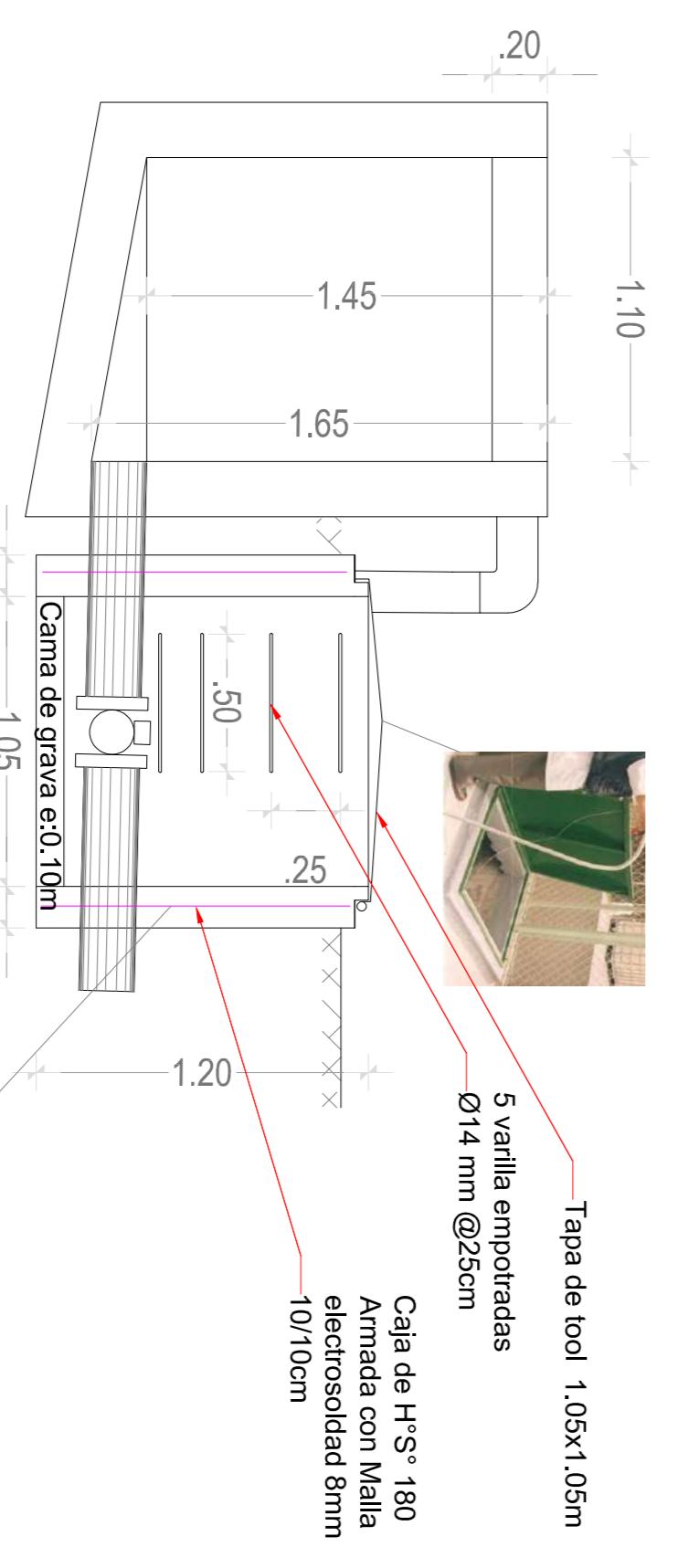
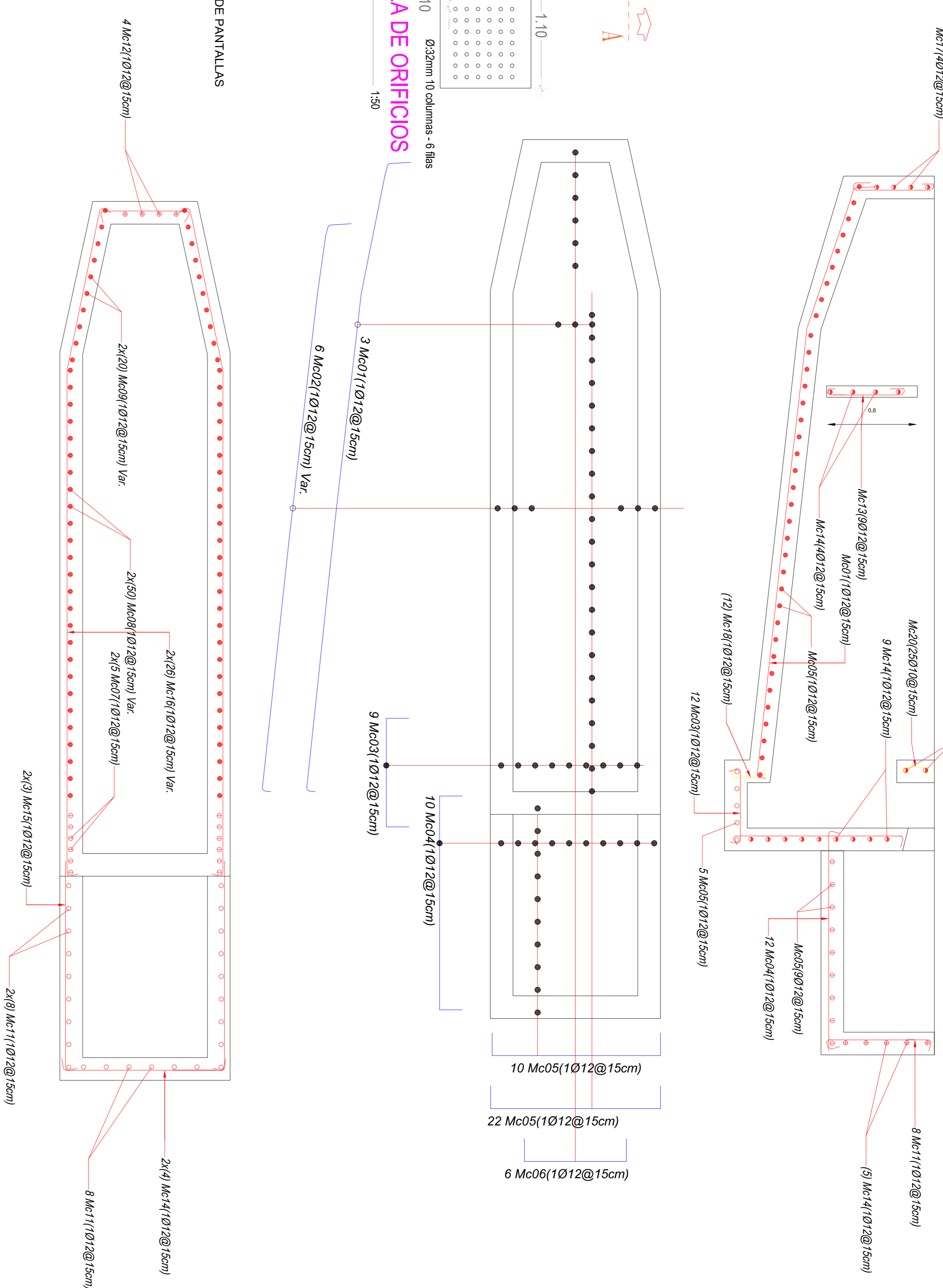
### PANTALLA DE ORIFICIOS

ESC: 1:50



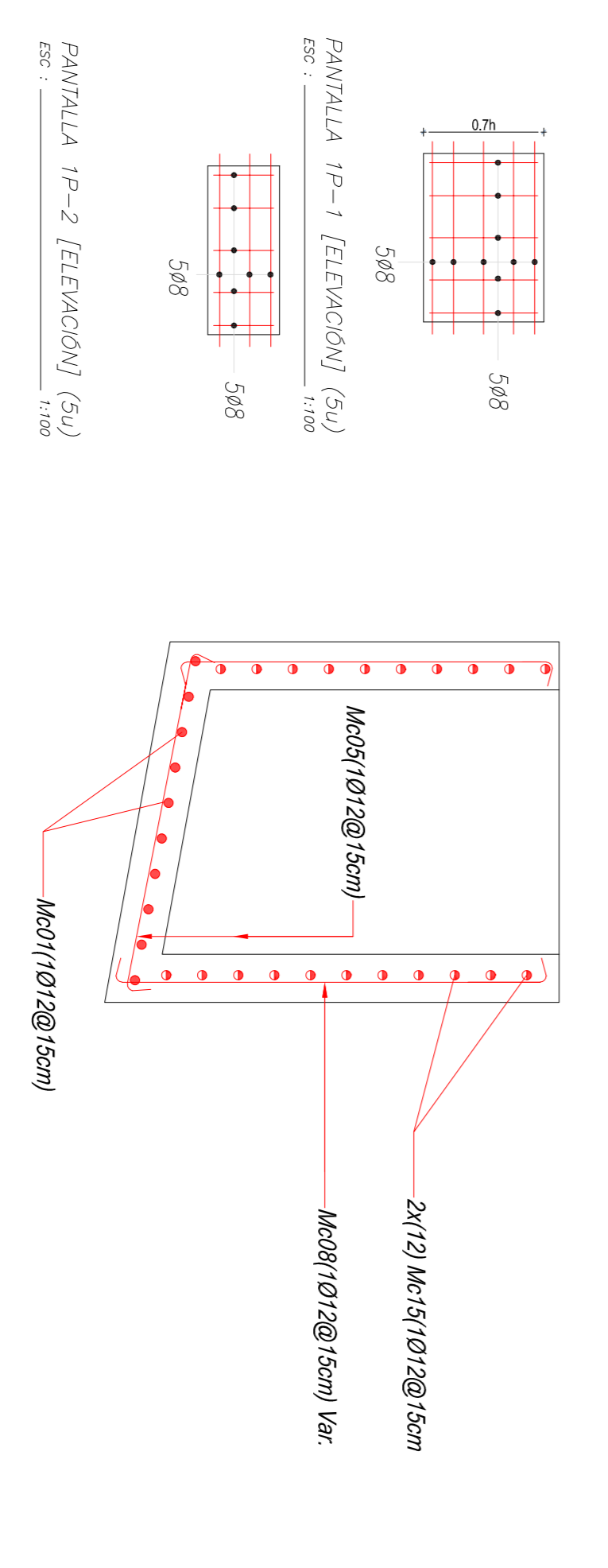
### ARMADO DESARENADOR

ESC: 1:50



### CORTE B-B

ESC: 1:50

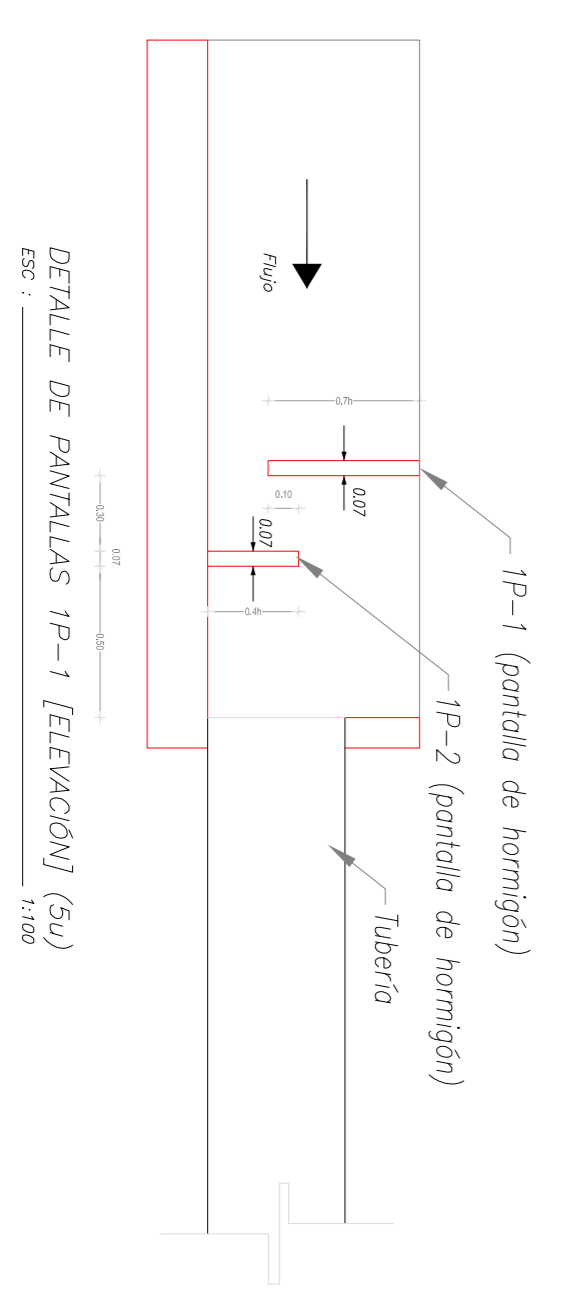
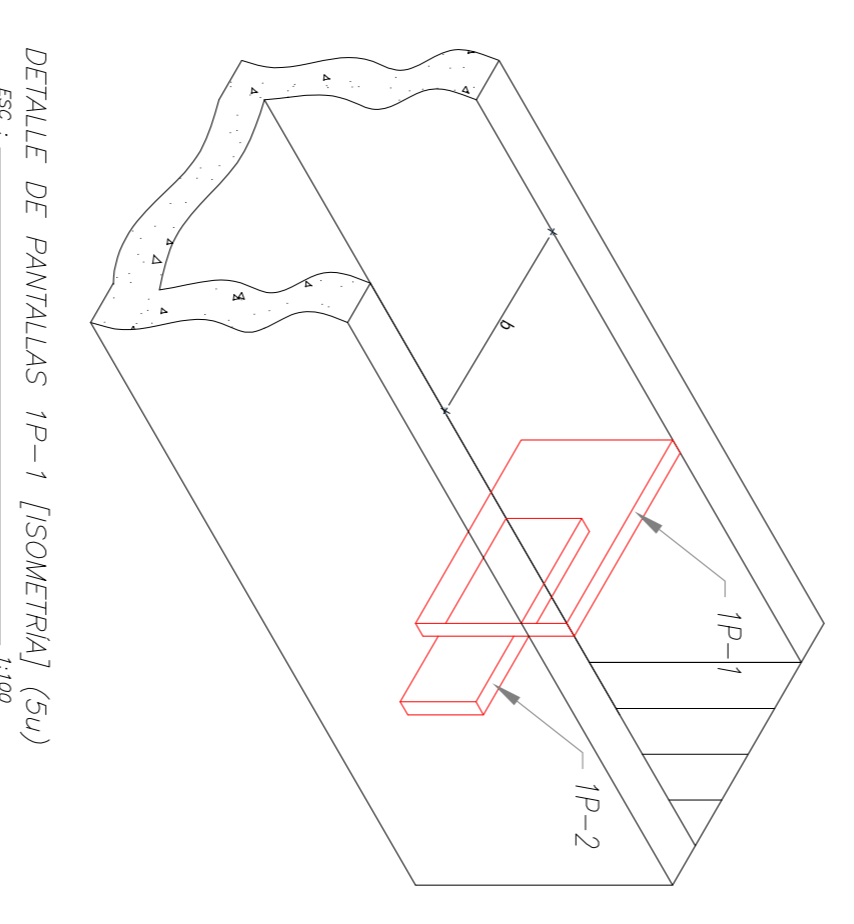
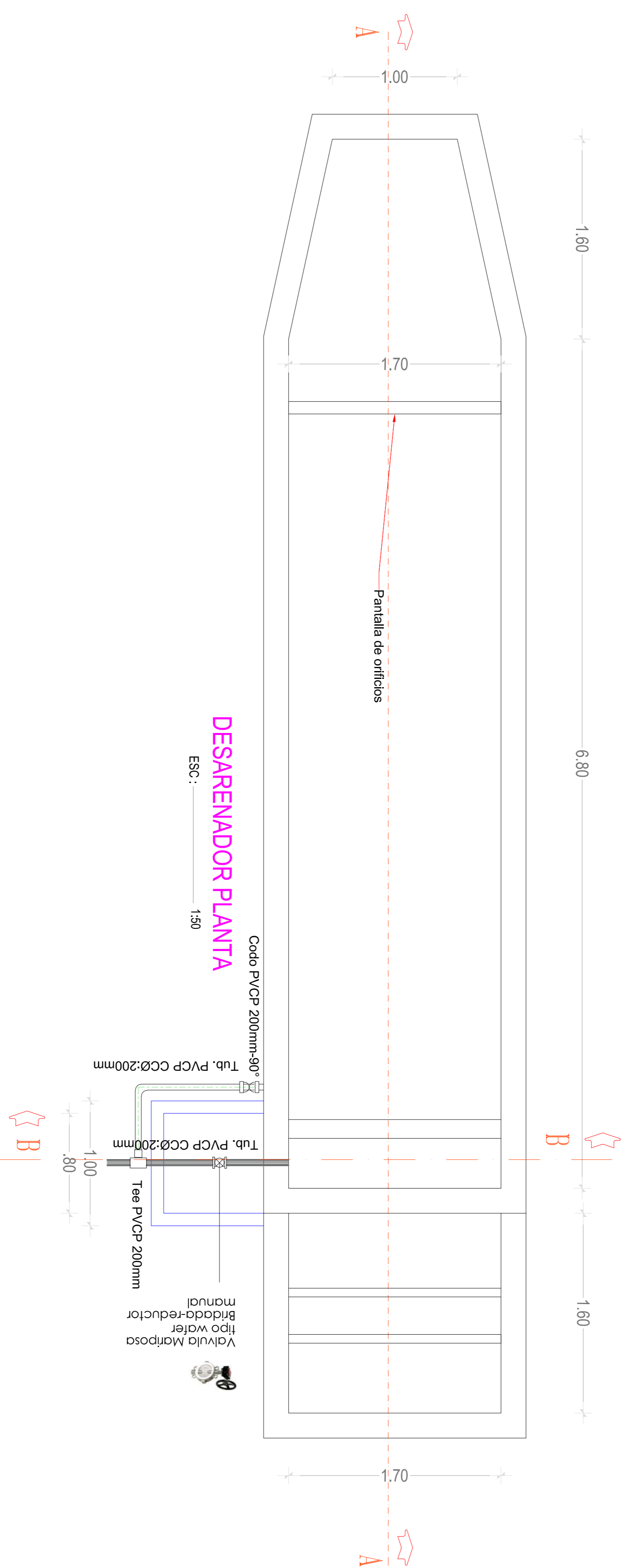
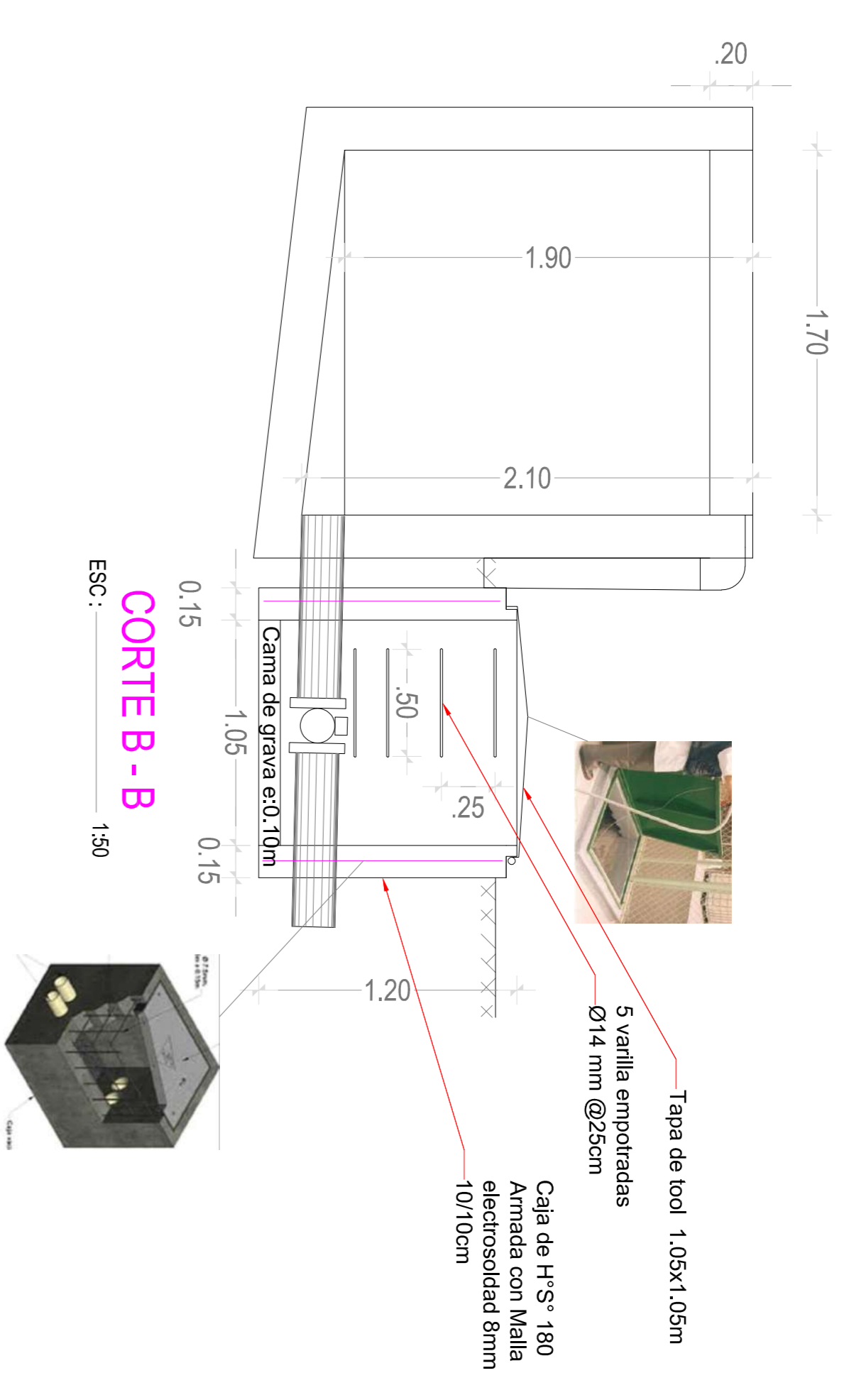
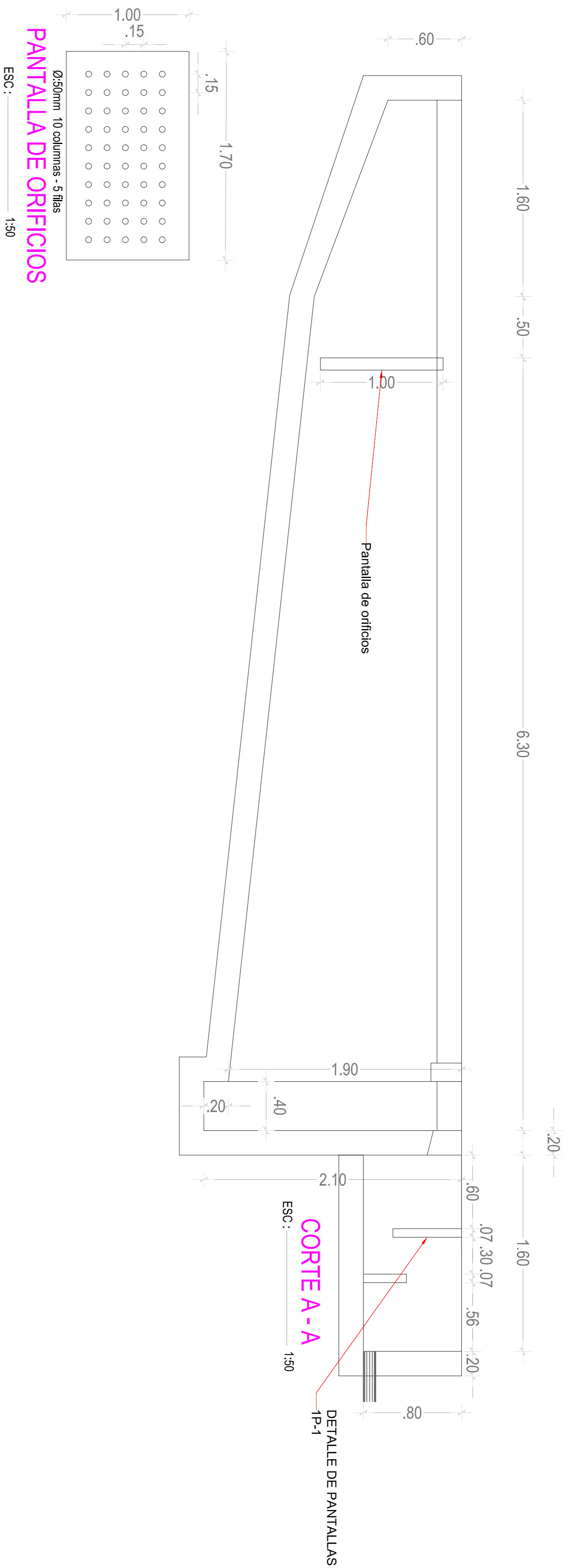


| Mc            | DIAM mm | TIPO | CANT | # ELEM. | CANT. TOTAL | DIMENSIONES |      |   |   | LONGITUD UNITARIA | LONGITUD TOTAL | RESERVACIONE  | PESO (Kg) |
|---------------|---------|------|------|---------|-------------|-------------|------|---|---|-------------------|----------------|---------------|-----------|
|               |         |      |      |         |             | a           | b    | c | d |                   |                |               |           |
| 1             | 12      | Z    | 3    | 1       | 3           | 5.84        |      |   |   | 0.10              | 5.94           | 17.82         | 15.82     |
| 2             | 12      | Z    | 6    | 1       | 6           | 5.28        |      |   |   | 0.10              | 5.48           | 32.88         | 29.19     |
| 3             | 12      | C    | 9    | 1       | 9           | 0.95        | 0.20 |   |   |                   | 1.35           | 12.15         | 10.79     |
| 4             | 12      | C    | 10   | 1       | 10          | 1.90        | 0.20 |   |   |                   | 2.30           | 23.00         | 20.42     |
| 5             | 12      | C    | 32   | 1       | 32          | 1.50        | 0.20 |   |   |                   | 1.90           | 60.80         | 53.98     |
| 6             | 12      | C    | 6    | 1       | 6           | 0.90        | 0.20 |   |   |                   | 1.30           | 7.80          | 6.92      |
| 7             | 12      | Z    | 5    | 2       | 10          | 6.10        |      |   |   | 0.20              | 6.30           | 63.00         | 55.93     |
| 8             | 12      | I    | 50   | 2       | 100         | 2.60        |      |   |   | 0.10              | 2.80           | 280.00        | 218.59    |
| 9             | 12      | I    | 20   | 2       | 40          | 1.00        |      |   |   | 0.10              | 1.20           | 48.00         | 42.62     |
| 10            | 12      | I    | 12   | 1       | 12          | 1.60        |      |   |   | 0.10              | 1.80           | 21.60         | 19.18     |
| 11            | 12      | I    | 16   | 1       | 16          | 0.75        |      |   |   | 0.10              | 0.95           | 15.20         | 13.49     |
| 12            | 12      | I    | 4    | 1       | 4           | 1.00        |      |   |   | 0.10              | 1.20           | 4.80          | 4.26      |
| 13            | 12      | I    | 9    | 1       | 9           | 0.80        |      |   |   | 0.10              | 1.00           | 9.00          | 7.99      |
| 14            | 12      | C    | 13   | 1       | 13          | 1.35        | 0.20 |   |   |                   | 1.75           | 22.75         | 20.20     |
| 15            | 12      | I    | 5    | 2       | 10          | 1.95        |      |   |   | 0.10              | 2.15           | 21.50         | 19.09     |
| 16            | 12      | Z    | 26   | 2       | 52          | 6.10        |      |   |   | 0.10              | 6.20           | 322.40        | 286.23    |
| 17            | 12      | I    | 4    | 1       | 4           | 0.80        |      |   |   | 0.10              | 1.00           | 4.00          | 3.55      |
| 18            | 12      | I    | 10   | 1       | 10          | 0.20        |      |   |   | 0.10              | 0.40           | 4.00          | 3.55      |
| 19            | 12      | I    | 2    | 1       | 2           | 1.30        |      |   |   | 0.10              | 1.50           | 3.00          | 2.66      |
| 20            | 12      | I    | 14   | 1       | 14          | 0.20        |      |   |   | 0.10              | 0.40           | 5.60          | 4.97      |
| <b>TOTAL:</b> |         |      |      |         |             |             |      |   |   |                   |                | <b>869.44</b> |           |

|                              |                  |                             |                        |                        |                 |
|------------------------------|------------------|-----------------------------|------------------------|------------------------|-----------------|
| INGENIERIA / REGISTRO DISEÑO | ING. PAUL TORRES | ING. JITO JARAMILLO PEREIRA | ING. JOSÉ ANGAMARCA A. | ING. JUAN ESCALANTE F. | SR. JAMÉ GRANDA |
| ADMINISTRADOR:               |                  |                             |                        |                        |                 |
| APROBACIÓN DE FISCALIZADOR:  |                  |                             |                        |                        |                 |
| Gerente de la EPA-P          |                  |                             |                        |                        |                 |
| ALCALDE:                     |                  |                             |                        |                        |                 |

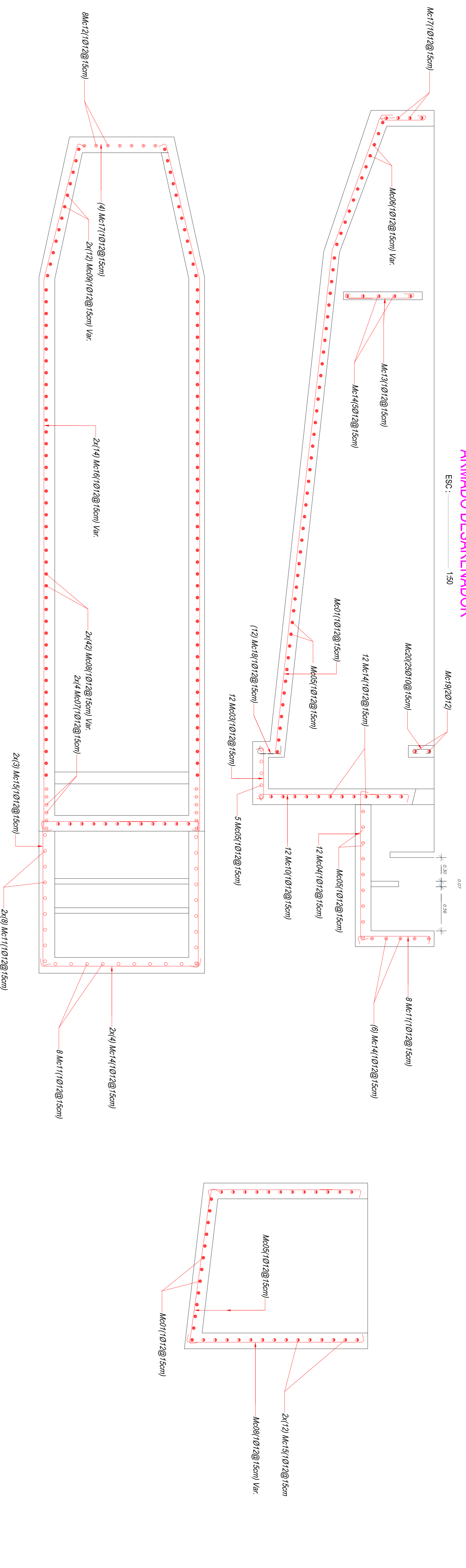
|                                      |              |   |
|--------------------------------------|--------------|---|
| GOBIERNO AUTÓNOMO MUNICIPAL DE PIÑAS | PROYECTO:    | CONSTRUCCIÓN DE LA PLANTA DE TRATAMIENTO DE AGUA POTABLE PARA LA CIUDAD DE PIÑAS, CANTÓN PIÑAS, PROVINCIA DE EL CÓNDO |
|                                      | DESCRIPCIÓN: | DESARENADOR QUERADA GONZALO   |
|                                      | TAMAÑO:      | A1  |
|                                      | INDICADA:    |   |
|                                      | DIBUJO N.º:  | AMLR  |
|                                      | HOLA:        | 3 DE 64   |
|                                      | REV:         | A   |



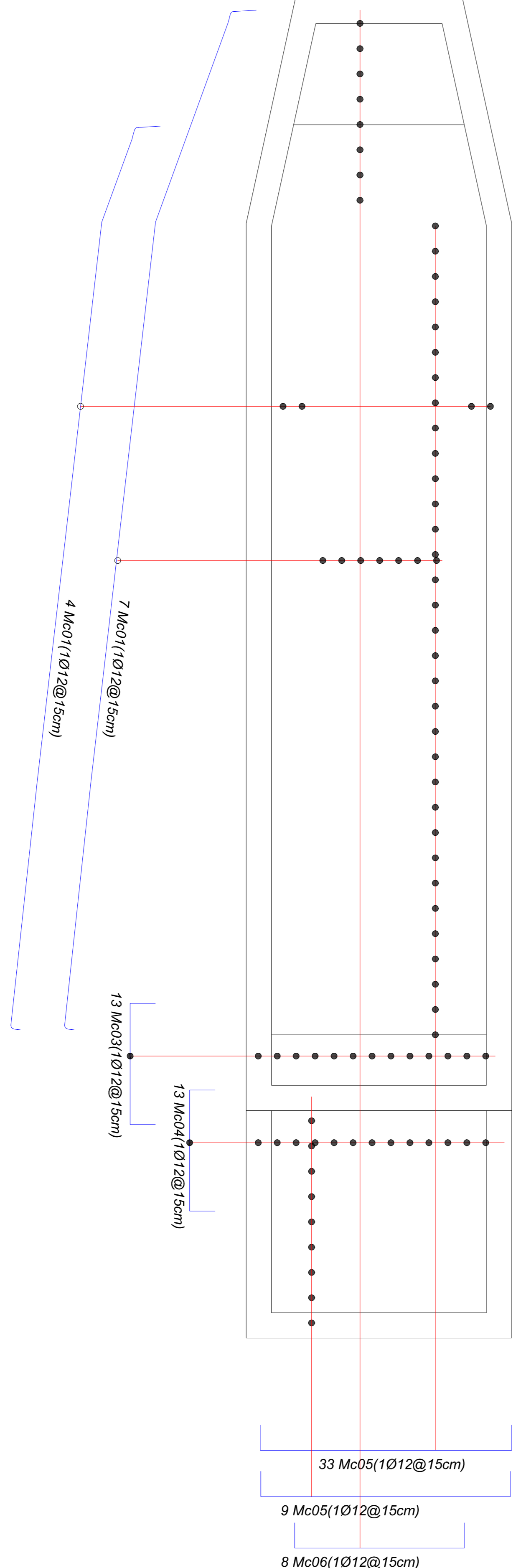
|  |  |             |                   |  |
|--|--|-------------|-------------------|--|
| INGENIERIA / REGISTRO DISEÑO                   |  | FRMA        | FECHA             | <p><b>GOBIERNO AUTÓNOMO MUNICIPAL DE PIÑAS</b></p> <p>PROYECTO : CONSULTA PARA LA REALIZACIÓN Y SERVICIOS DE MANTENIMIENTO DE LA RED DE COLECCIÓN Y TRATAMIENTO DE AGUA POTABLE PARA LA CIUDAD DE PIÑAS, CANTÓN PIÑAS, PROVINCIA DE EL CAJÓN</p> <p>DESCRIPCIÓN : OBRAS DE DESARENADOR- QUERRODA HONDA 3</p> |
| DISEÑO :                                       |  |             | OCTUBRE/ 21       |  |
| ING. PAUL TORRES                               |  |             | OCTUBRE/ 21       |  |
| ADMINISTRADOR :                                |  |             | OCTUBRE/ 21       |  |
| ING. JUILO JARAMILLO FREIRE                    |  |             | OCTUBRE/ 21       |  |
| APROBACION DE FISCALIZADOR:                    |  |             | OCTUBRE/ 21       |  |
| ING. JOSÉ ANSAMARCA A.<br>Gerente de la EPAA-P |  |             | OCTUBRE/ 21       |  |
| ING. JUAN ESCALANTE F.                         |  |             | OCTUBRE/ 21       |  |
| ALCALDE:                                       |  | TAMASO : AI | ESCALA : INDICADA |  |
| SR. JAMÉ GRANDA                                |  | DIBUJO N°:  | AMLR              |  |
|  |  | HOLA :      | 4 DE 64           |  |
|  |  | REV :       | A                 |  |

# ARMADO DESARENADOR

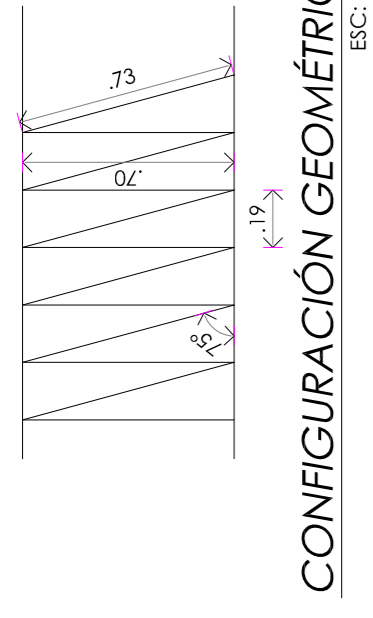
ESC: 1:50



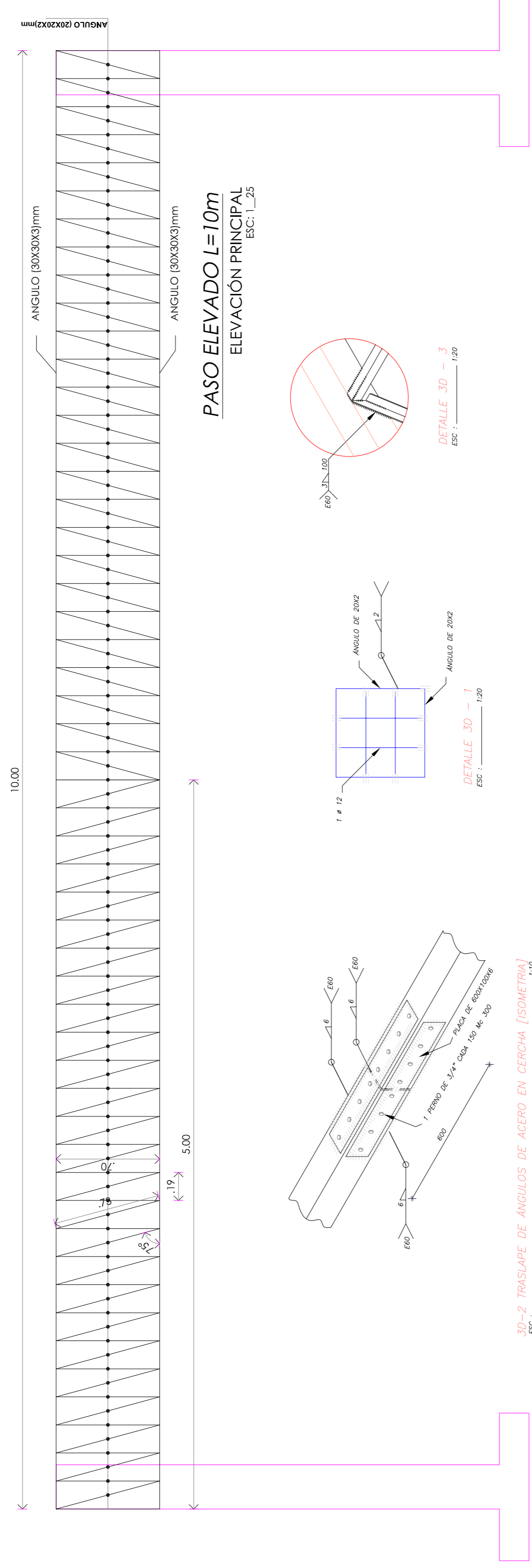
| PLANILLA DE HIERROS DESARENADOR - HONDA 3 |         |      |      |         |             |             |      |   |   |                   |                |               |           |
|---|---------|------|------|---------|-------------|-------------|------|---|---|-------------------|----------------|---------------|-----------|
| Mc  | DIAM mm | TIPO | CANT | # ELEM. | CANT. TOTAL | DIMENSIONES |      |   |   | LONGITUD UNITARIA | LONGITUD TOTAL | RESERVACIONES | PESO (Kg) |
|   |         |      |      |         |             | a           | b    | c | d |                   |                |               |           |
| 1   | 12      | Z    | 7    | 1       | 7           | 8.45        |      |   |   | 0.10              | 8.55           | 59.85         | 53.14     |
| 2   | 12      | Z    | 4    | 1       | 4           | 7.50        |      |   |   | 0.10              | 7.70           | 30.80         | 27.34     |
| 3   | 12      | C    | 13   | 1       | 13          | 0.95        | 0.20 |   |   |                   | 1.35           | 17.55         | 13.58     |
| 4   | 12      | C    | 10   | 1       | 10          | 1.90        | 0.20 |   |   |                   | 2.30           | 29.90         | 26.55     |
| 5   | 12      | C    | 32   | 1       | 32          | 2.00        | 0.20 |   |   |                   | 2.10           | 100.80        | 89.49     |
| 6   | 12      | C    | 6    | 1       | 6           | 1.35        | 0.20 |   |   |                   | 1.75           | 10.50         | 9.32      |
| 7   | 12      | I    | 5    | 2       | 10          | 2.20        |      |   |   |                   | 2.60           | 26.00         | 23.08     |
| 8   | 12      | I    | 42   | 2       | 84          | 2.20        |      |   |   |                   | 2.40           | 201.60        | 178.98    |
| 9   | 12      | I    | 12   | 2       | 24          | 1.00        |      |   |   |                   | 1.20           | 28.80         | 23.57     |
| 10  | 12      | I    | 12   | 1       | 12          | 1.90        |      |   |   |                   | 2.10           | 25.20         | 22.37     |
| 11  | 12      | I    | 27   | 1       | 27          | 0.75        |      |   |   |                   | 0.95           | 25.65         | 22.77     |
| 12  | 12      | I    | 8    | 1       | 8           | 1.00        |      |   |   |                   | 1.20           | 9.60          | 8.52      |
| 13  | 12      | I    | 15   | 1       | 15          | 1.00        |      |   |   |                   | 1.20           | 18.00         | 13.98     |
| 14  | 12      | C    | 23   | 1       | 23          | 2.20        | 0.20 |   |   |                   | 2.60           | 59.80         | 53.09     |
| 15  | 12      | I    | 6    | 2       | 12          | 1.95        |      |   |   |                   | 2.15           | 25.80         | 22.91     |
| 16  | 12      | Z    | 15   | 2       | 31          | 8.95        |      |   |   |                   | 9.05           | 277.53        | 246.40    |
| 17  | 12      | I    | 5    | 1       | 5           | 1.50        |      |   |   |                   | 1.70           | 8.50          | 7.55      |
| 18  | 12      | I    | 15   | 1       | 15          | 0.20        |      |   |   |                   | 0.40           | 6.13          | 5.45      |
| 19  | 12      | I    | 2    | 2       | 2           | 2.30        |      |   |   |                   | 2.50           | 5.00          | 4.44      |
| 20  | 12      | I    | 25   | 1       | 25          | 0.20        |      |   |   |                   | 0.40           | 10.00         | 8.88      |
| <b>TOTAL :</b>                            |         |      |      |         |             |             |      |   |   |                   |                | <b>867.41</b> |           |



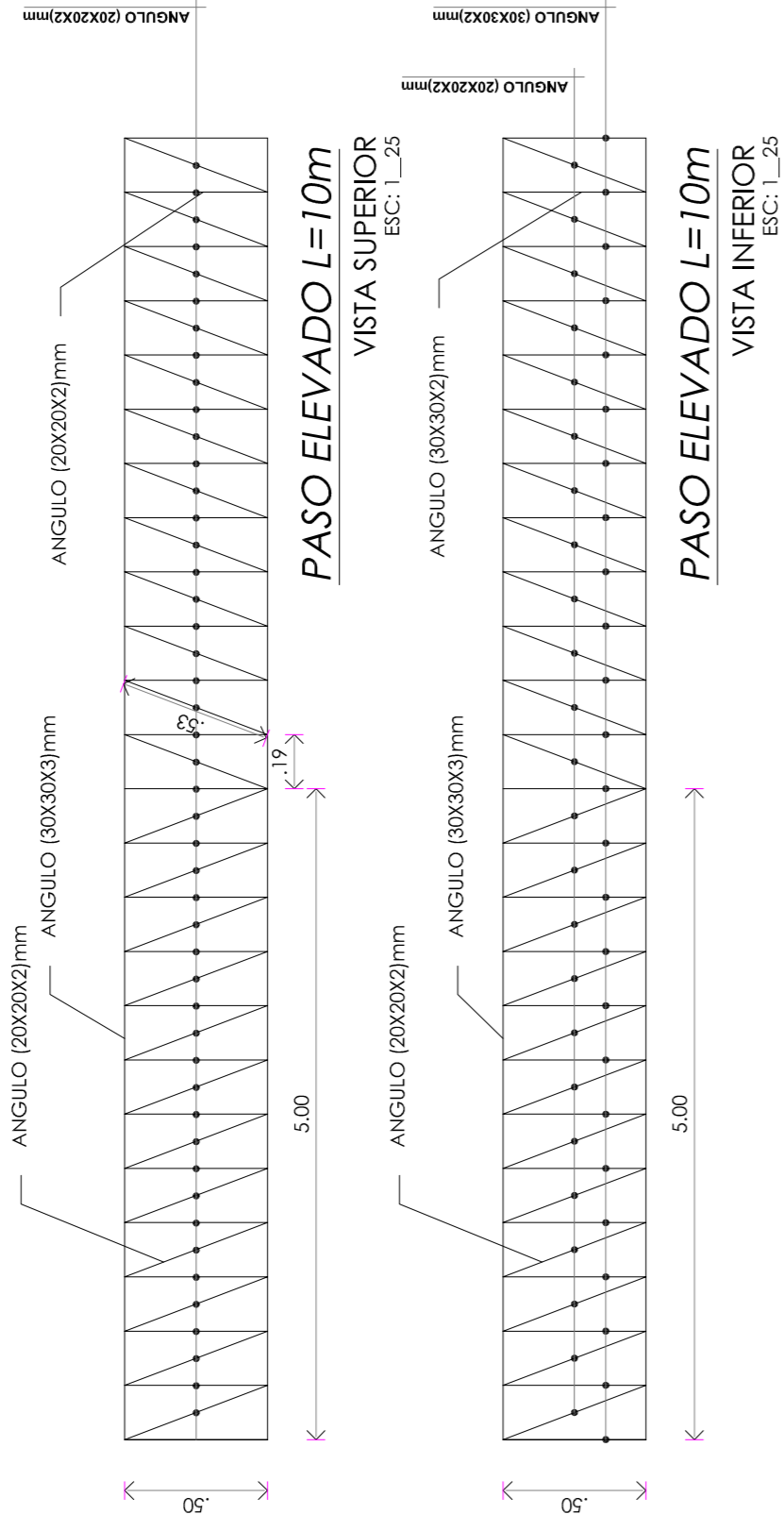
|   |                   |            |   |
|---|-------------------|------------|---|
| INGENIERA / REGISTRO DISEÑO                         | FRMA              | FECHA      | <p><b>GOBIERNO AUTÓNOMO MUNICIPAL DE PIÑÁS</b></p> <p>CONSULTORIA PARA LOS ESTUDIOS Y DISEÑOS PRELIMINARES DE LA NUEVA CONFIGURACIÓN DE LA COMEDORINA Y NUEVA PLANTA DE TRATAMIENTO DE AGUA POTABLE PARA LA CIUDAD DE PIÑÁS, CANTÓN PIÑÁS, PROVINCIA DE EL CÓNDO</p> <p>DESCRIPCIÓN : OBRAS DE DESARENADOR - QUERRODA HONDA 3 ESTRUCTURAL</p> |
| DISEÑO : ING. PAUL TORRES                           |                   | OCTUBRE/21 |   |
| ADMINISTRADOR : ING. JILIO JARAMILLO FREIRE         |                   | OCTUBRE/21 |   |
| APROBACIÓN DE FISCALIZADOR : ING. JOSÉ ANGAMARCA A. |                   | OCTUBRE/21 |   |
| Gerente de la EPAA-P                                |                   |            |   |
| ING. JUAN ESCALANTE F.                              |                   | OCTUBRE/21 |   |
| ALCALDE : SR. JAMÉ GRANDA                           |                   | OCTUBRE/21 |   |
| TAMAÑO : A1   | ESCALA : INDICADA |            |   |
| DIBUJO N.º  | AMLR              |            |   |
| HOLA : 5 DE 04                                      |                   |            |   |
| REV : A   |                   |            |   |



**CONFIGURACIÓN GEOMÉTRICA**  
ESC: 1\_25



**PASO ELEVADO L=10m**  
ELEVACIÓN PRINCIPAL  
ESC: 1\_25

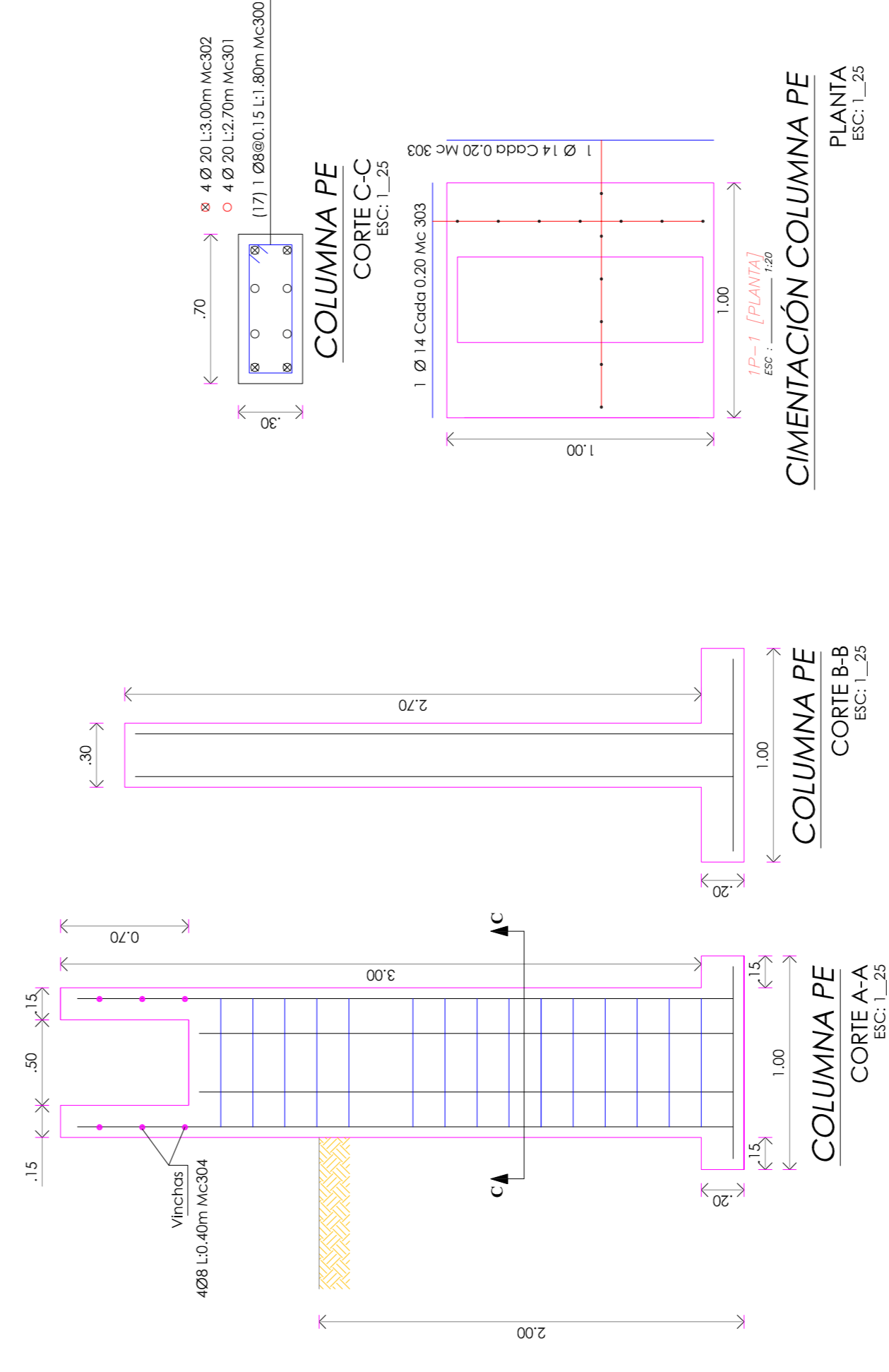


**PASO ELEVADO L=10m**  
VISTA SUPERIOR  
ESC: 1\_25

**PASO ELEVADO L=10m**  
VISTA INFERIOR  
ESC: 1\_25

**PLANILLA DE PERFILES PASO ELEVADO L:20 m**

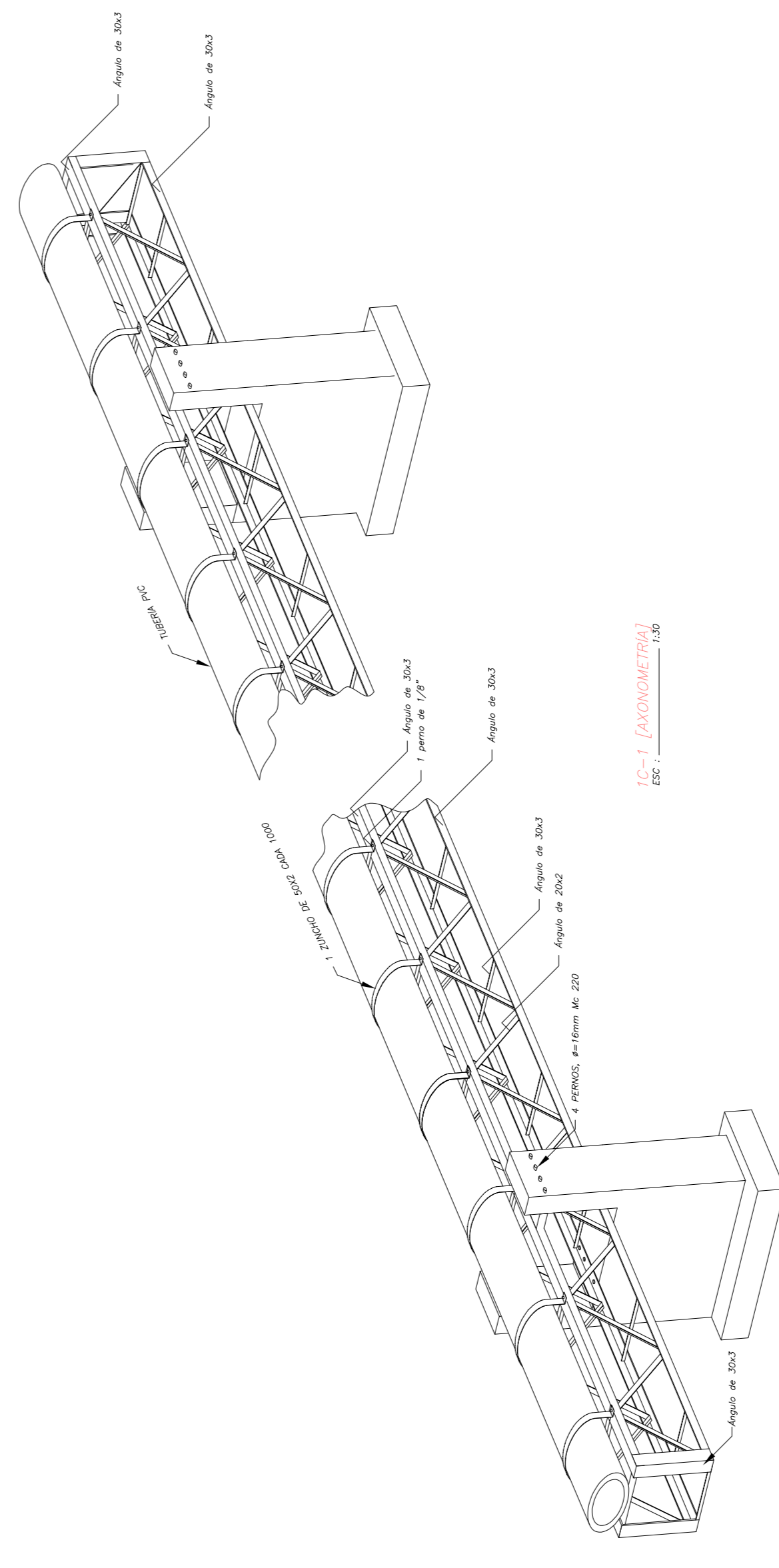
| M.C. | PERFIL   | CANT. | LONGITUD PARCIAL | LONGITUD TOTAL | PESO Kg/m | PESO TOTAL Kg |
|------|----------|-------|------------------|----------------|-----------|---------------|
| 100  | L30X30X3 | 104   | 0,190            | 19,760         | 1,30      | 25,69         |
| 101  | L30X30X3 | 104   | 0,190            | 19,760         | 1,30      | 25,69         |
| 102  | L20X20X2 | 104   | 0,730            | 75,920         | 0,58      | 44,03         |
| 103  | L20X20X2 | 108   | 0,700            | 75,600         | 0,58      | 43,85         |
| 104  | L20X20X2 | 54    | 0,500            | 27,000         | 0,58      | 15,66         |
| 105  | L30X30X2 | 54    | 0,500            | 27,000         | 0,89      | 24,03         |
| 106  | L20X20X2 | 104   | 0,760            | 79,040         | 0,58      | 45,84         |



**CIMENTACIÓN COLUMNNA PE**  
PLANTA  
ESC: 1\_25

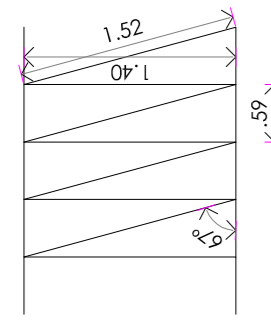
**PLANILLA DE HIERROS**

| M.C. | TIPO | CANT | # ELEM. | DIMENSIONES | LONGITUD | LONGITUD TOTAL | PESO (Kg)     |      |       |       |               |
|------|------|------|---------|-------------|----------|----------------|---------------|------|-------|-------|---------------|
|      |      |      |         | a           | b        | ES             | OBSERVACIONES |      |       |       |               |
| 300  | 8    | 0    | 20      | 2           | 40       | 0,65           | 0,25          | 0,10 | 2,00  | 80,00 | 31,57         |
| 301  | 20   | L    | 4       | 2           | 8        | 2,70           | 0,30          | 3,00 | 24,00 | 24,00 | 59,19         |
| 302  | 20   | L    | 4       | 2           | 8        | 3,00           | 0,30          | 3,30 | 26,40 | 26,40 | 65,11         |
| 303  | 14   | I    | 6       | 4           | 24       | 0,95           | 1,15          | 1,15 | 27,60 | 27,60 | 33,35         |
| 304  | 8    | I    | 4       | 4           | 16       | 0,25           | 0,10          | 0,45 | 7,20  | 7,20  | 2,84          |
|      |      |      |         |             |          |                | <b>TOTAL:</b> |      |       |       | <b>192,05</b> |

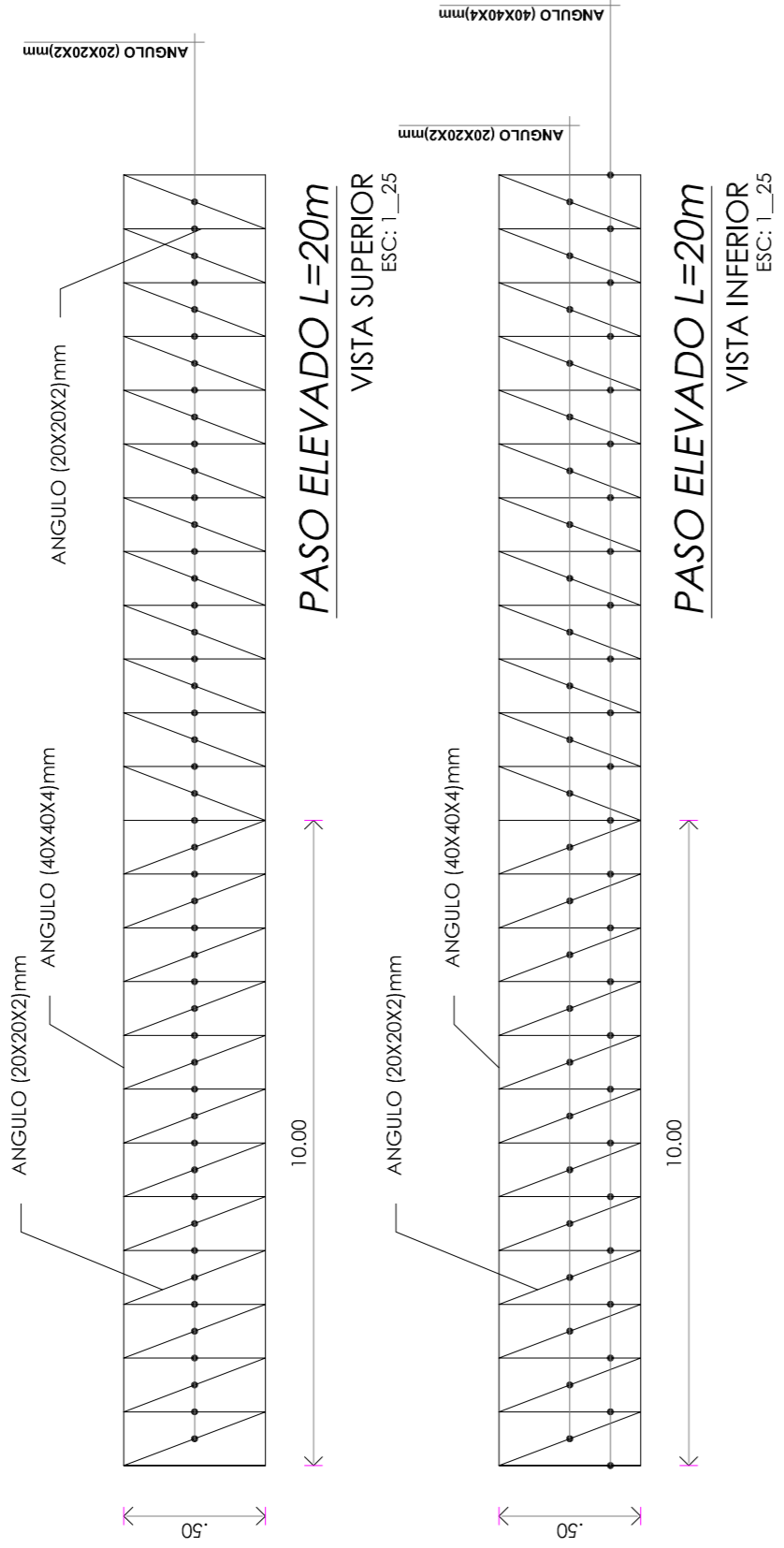
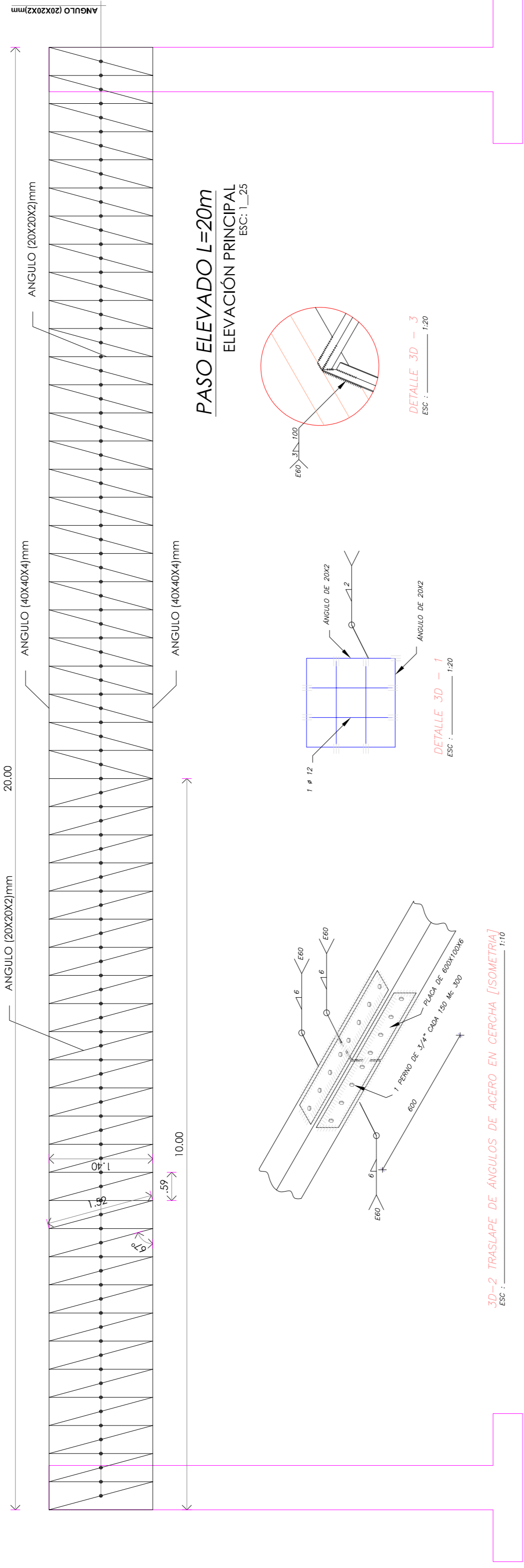


**1C-1 (AXONOMETRIA)**  
ESC: 1\_50

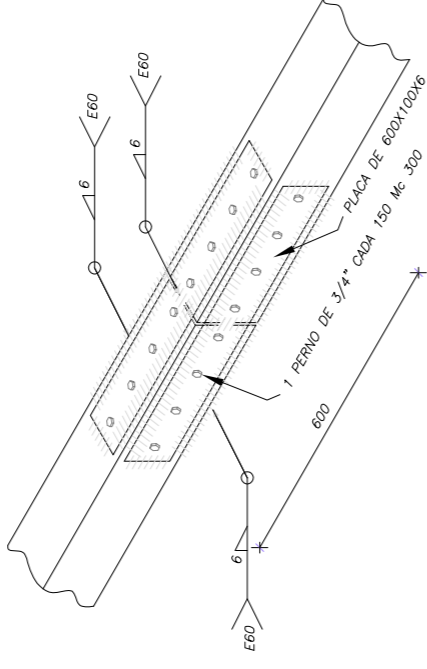




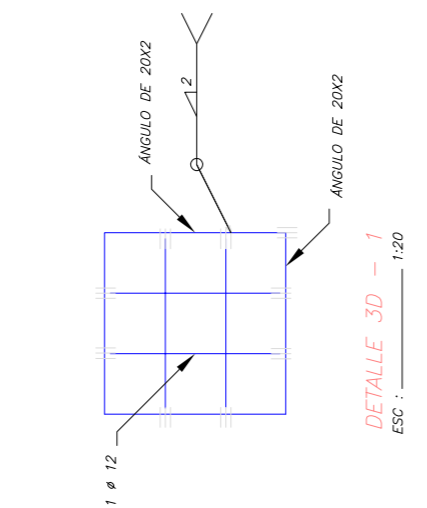
**CONFIGURACIÓN GEOMÉTRICA**  
ESC: 1/25



**3D-2 TRASLASE DE ANGULOS DE ACERO EN GERCHA [ISOMETRIA]**  
ESC: 1/100

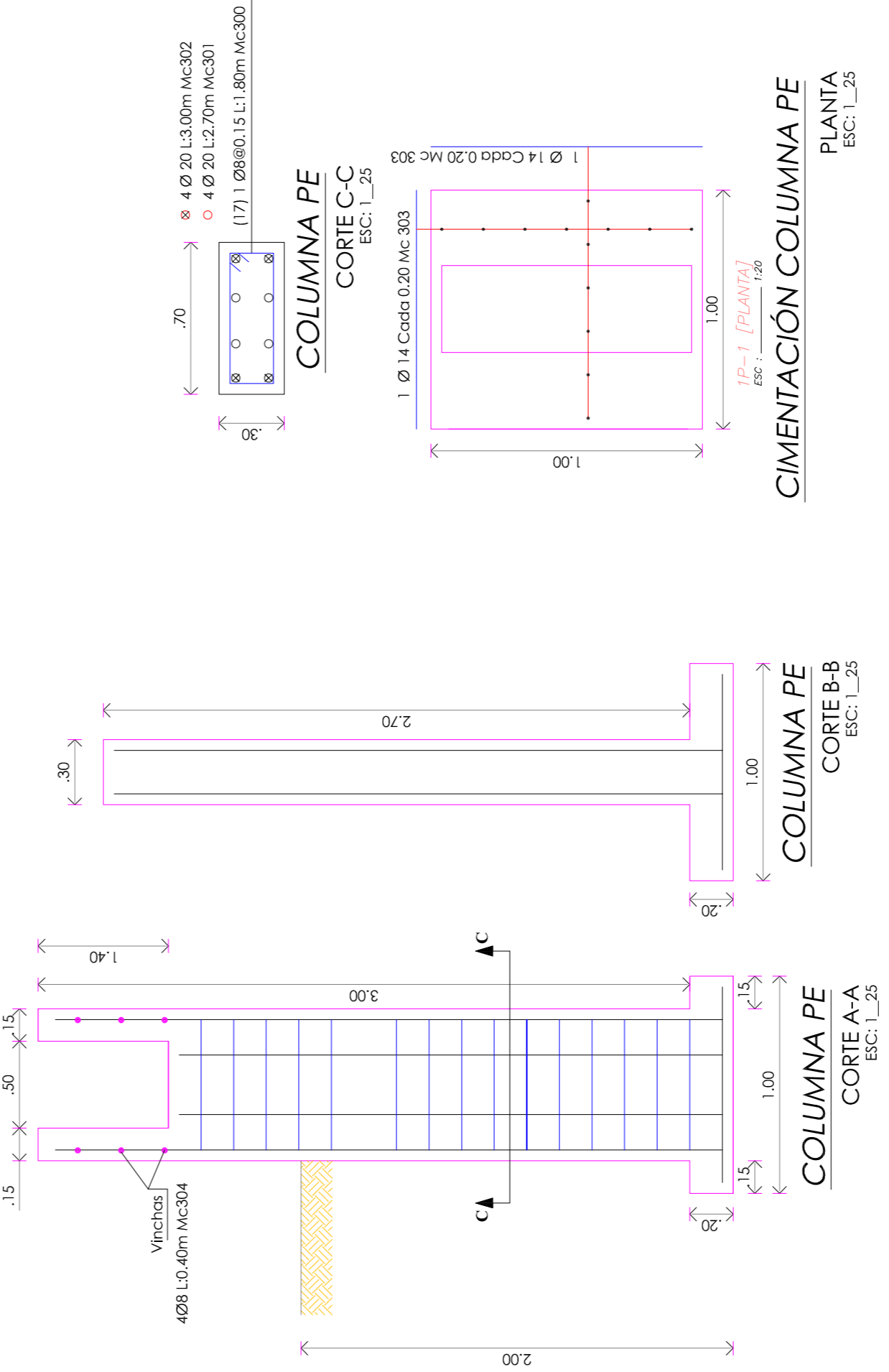


**DETALLE 3D-1**  
ESC: 1/100



**PLANILLA DE PERFILES PASO ELEVADO L=20 m**

| Mc  | PERFIL   | CANT. | LONGITUD PARCIAL | LONGITUD TOTAL | PESO Kg/m | PESO TOTAL Kg |
|-----|----------|-------|------------------|----------------|-----------|---------------|
| 100 | L40X40X4 | 68    | 0,590            | 40,120         | 2,31      | 92,68         |
| 101 | L40X40X4 | 68    | 0,590            | 40,120         | 2,31      | 92,68         |
| 102 | L20X20X2 | 68    | 1,520            | 103,360        | 0,58      | 59,95         |
| 103 | L20X20X2 | 76    | 1,400            | 106,400        | 0,58      | 61,71         |
| 104 | L20X20X2 | 38    | 0,500            | 19,000         | 0,58      | 11,02         |
| 105 | L40X40X4 | 38    | 0,500            | 19,000         | 2,31      | 43,89         |
| 106 | L20X20X2 | 68    | 0,770            | 52,340         | 0,58      | 30,37         |
|     |          |       |                  |                |           | <b>392,29</b> |



**COLUMNA PE**  
CORTE C-C  
ESC: 1/25

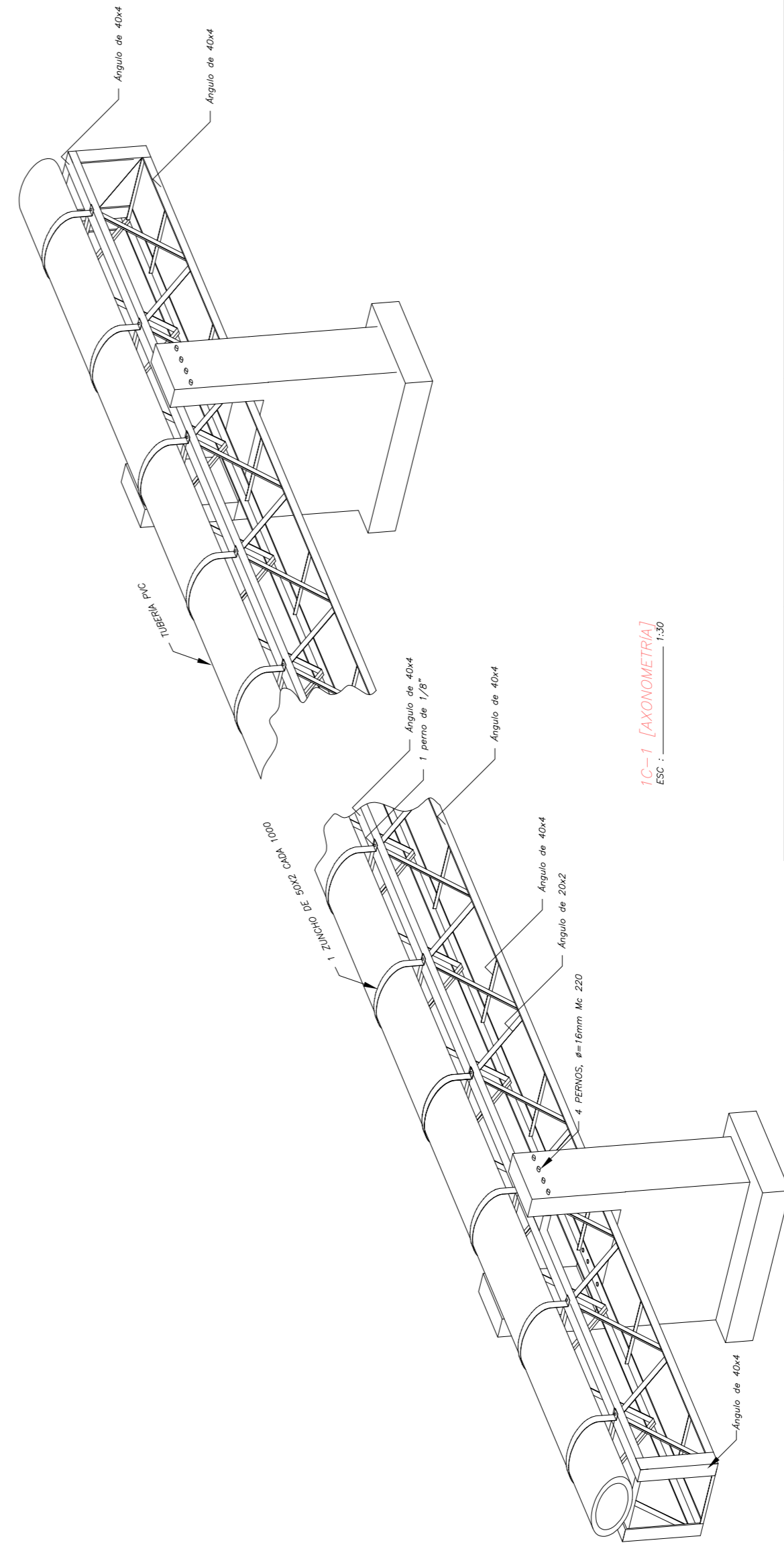
**CIMENTACIÓN COLUMNA PE**  
PLANTA  
ESC: 1/25

**COLUMNA PE**  
CORTE B-B  
ESC: 1/25

**COLUMNA PE**  
CORTE A-A  
ESC: 1/25

**PLANILLA DE HIERROS**

| DIAM mm | TIPO | CANT | # ELEM. | CANT. TOTAL | LONGITUD a | b    | c    | d     | e     | ES   | UNIDAD | LONGITUD TOTAL       | PESO (Kg) |
|---------|------|------|---------|-------------|------------|------|------|-------|-------|------|--------|----------------------|-----------|
| 300     | Ø    | 8    | 2       | 40          | 0,65       | 0,25 | 0,10 | 2,00  | 2,00  | 0,10 | 2,00   | 80,00                | 31,57     |
| 301     | Ø    | 20   | 4       | 8           | 2,70       | 0,30 | 3,30 | 3,00  | 24,00 | 0,10 | 3,00   | 24,00                | 59,19     |
| 302     | Ø    | 20   | 4       | 8           | 3,00       | 0,30 | 3,30 | 3,30  | 26,40 | 0,10 | 3,30   | 26,40                | 65,11     |
| 303     | Ø    | 14   | 6       | 24          | 0,95       | 0,10 | 1,15 | 27,60 | 27,60 | 0,10 | 1,15   | 27,60                | 32,35     |
| 304     | Ø    | 8    | 4       | 16          | 0,25       | 0,10 | 0,45 | 7,20  | 7,20  | 0,10 | 0,45   | 7,20                 | 2,84      |
|         |      |      |         |             |            |      |      |       |       |      |        | <b>TOTAL: 192,05</b> |           |



**1C-1 (AXONOMETRIA)**  
ESC: 1/100

**GOBIERNO AUTÓNOMO MUNICIPAL DE PIÑAS**

PROYECTO : OBRAS PARA LAS ESTERILIZADORAS Y PASADISOS EN LA NUEVA CARPINTERÍA DE CONDUCCIÓN Y NUEVA PLANTA DE TRATAMIENTO DE AGUA POTABLE PARA LA CIUDAD DE PIÑAS, CANTÓN PIÑAS, PROVINCIA DEL DORADO.

DESCRIPCIÓN : PASO ELEVADO EN GERCHA L=20,00m

INGENIERIA / REGISTRO DISEÑO : INGENIERIA / REGISTRO DISEÑO

DISEÑO : ING. PAUL TORRES

ADMINISTRADOR : ING. JULIO JARAMILLO FREIRE

APROBACIÓN DE FISCALIZADOR: APROBACIÓN DE FISCALIZADOR:

ING. JOSÉ ANGAMARCA A. Gerente de la EFAA-P

ING. JUAN ESCALANTE F.

ALCALDE: SR. JAIME GRANDA

FECHA : OCTUBRE/21

FECHA : OCTUBRE/21

FECHA : OCTUBRE/21

FECHA : OCTUBRE/21

FECHA : OCTUBRE/21

TAMAÑO : A1

ESCALA : INDICADA

DIBUJO N.º : AMLR

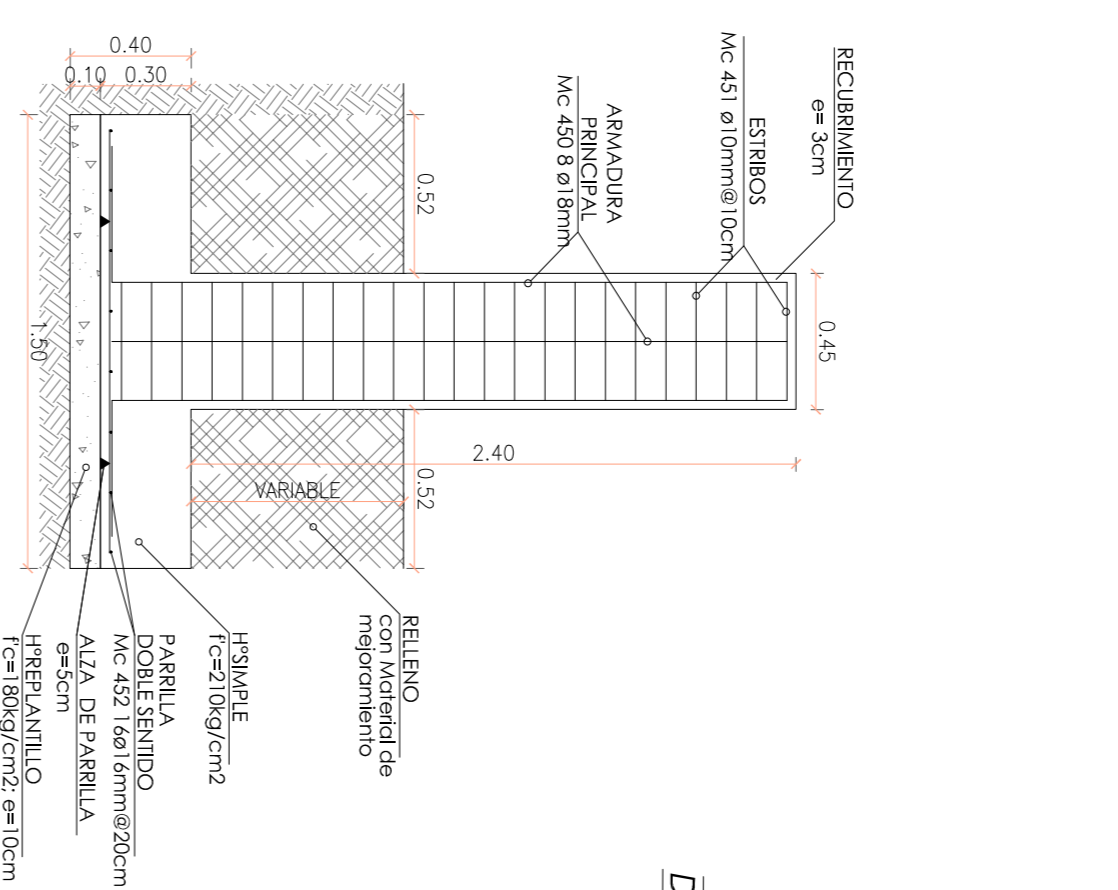
HOJA : 48 DE 64

REV. : A



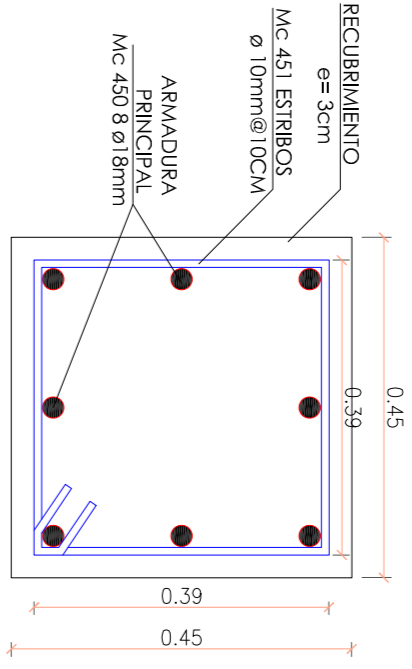
DETALLE 20 MODELO 2-1 (10) CIMENTACIÓN Y COLUMNA [CORTE A-A']

ESC: 1/25



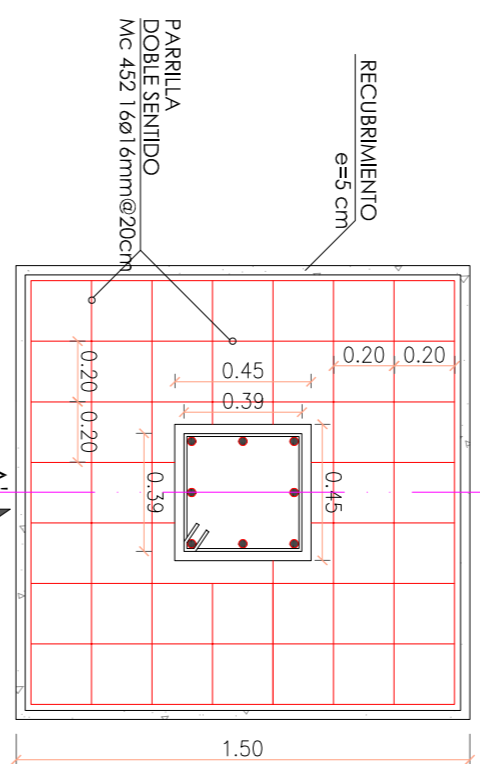
DETALLE 20 MODELO 2-2 (10) COLUMNA [PLANTA]

ESC: 1/10



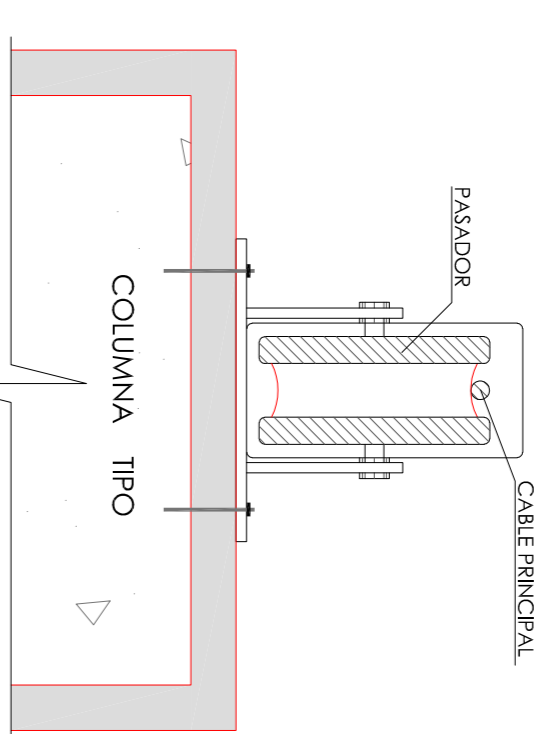
DETALLE 20 MODELO 2-3 (10) PUNTO [PLANTA]

ESC: 1/25



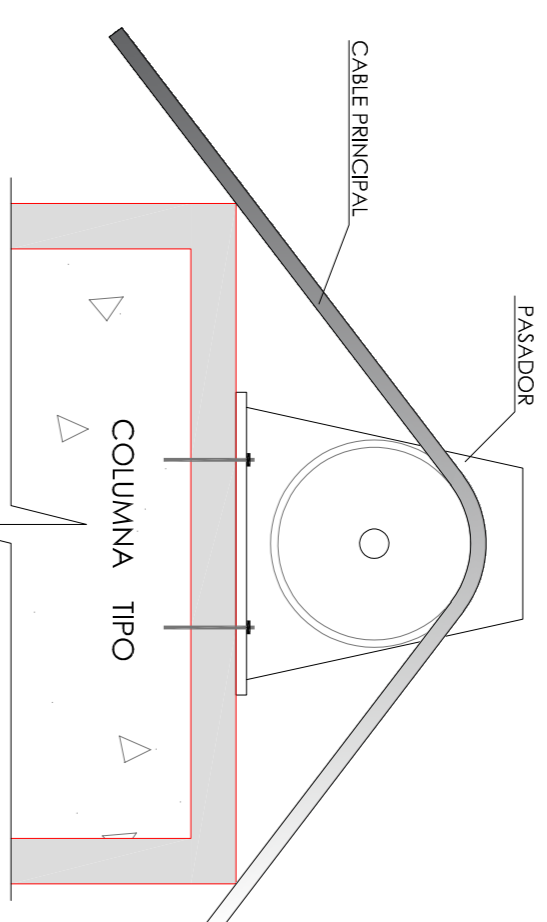
DETALLE 20 L-1 (10) PASADOR [CORTE Y-Y']

ESC: 1/ESQUEMÁTICA



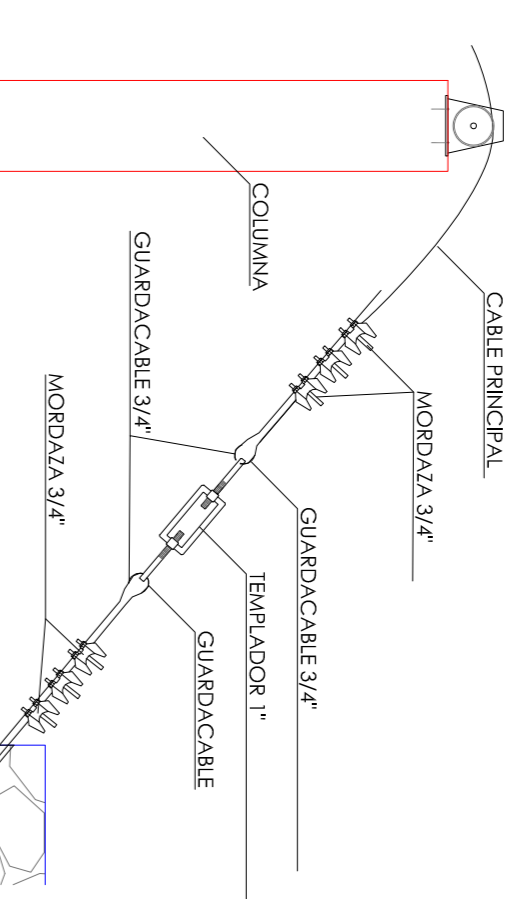
DETALLE 20 L-2 (10) PASADOR [CORTE X-X']

ESC: 1/ESQUEMÁTICA



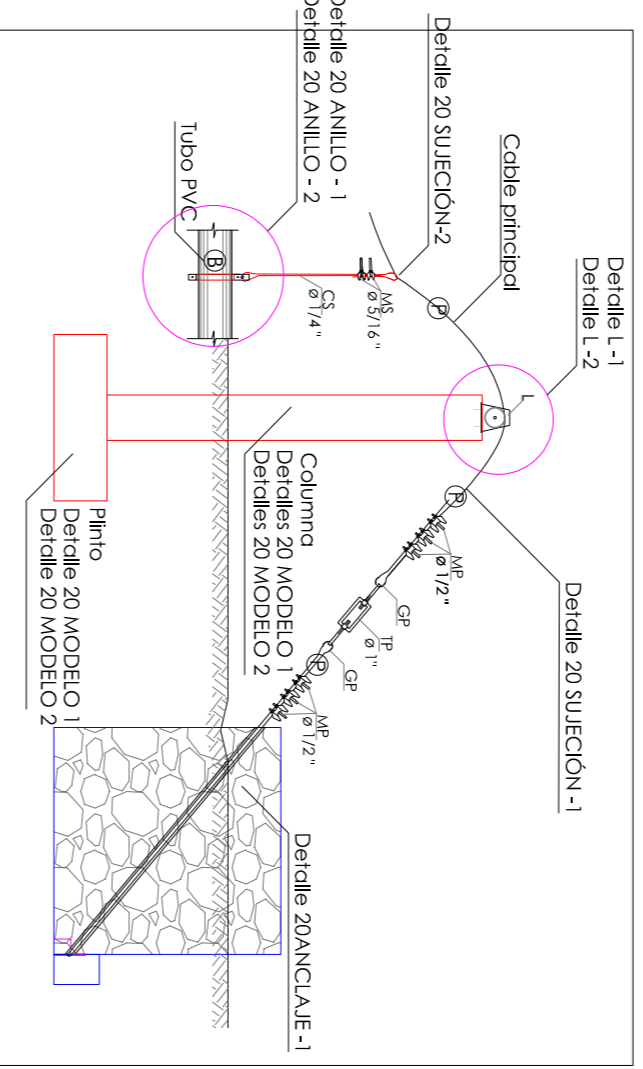
DETALLE 20 SUECIÓN-1 (14) SUECIÓN DEL CABLE PRINCIPAL [CORTE X-X']

ESC: 1/25



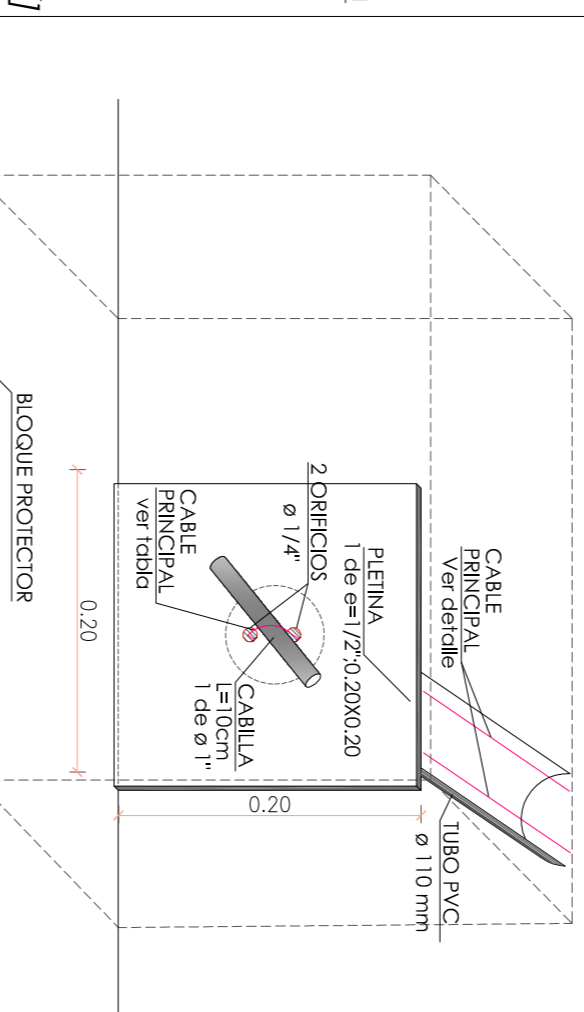
DETALLE 20 ARMADO-1 (14) ESQUEMA GENERAL [CORTE X-X'] CABLES, SOSTENES Y ANCLAJES EN PASO ELEVADO DE CONDUCCIÓN Y DISTRIBUCIÓN GRÁFICA

ESC: 1/GRÁFICA



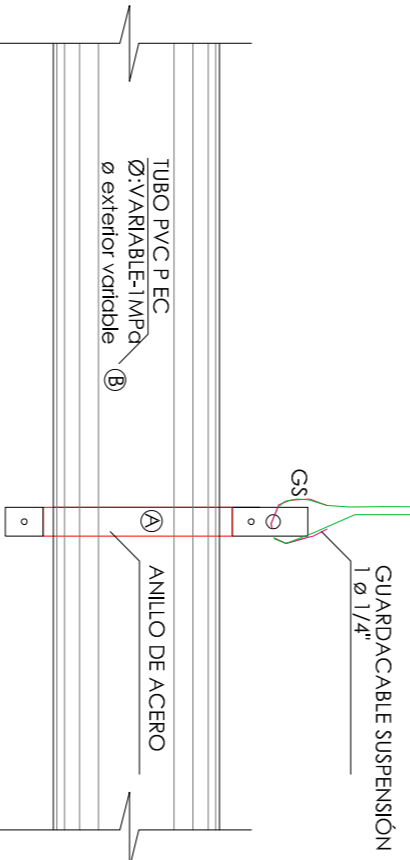
DETALLE 20 PLETINA - 2 (14) FILACIÓN A ANCLAJE [AXONOMETRÍA]

ESC: 1/GRÁFICA



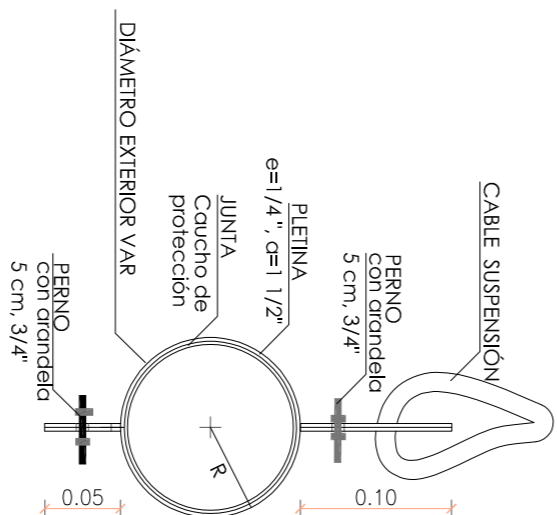
DETALLE 20 SUECIÓN-2 SUECIÓN DEL CABLE SUSPENSIÓN AL CABLE PRINCIPAL Y ANILLOS DE ACERO [VISTA FRONTAL]

ESC: 1/10



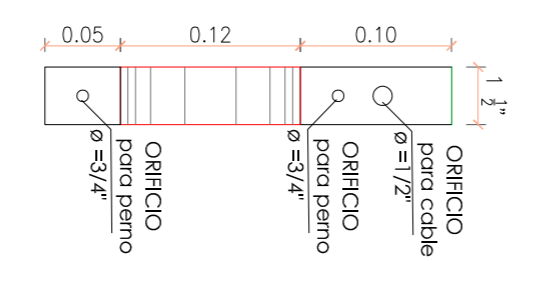
20 ANILLO - 1 (63) ANILLO DE ACERO PARA SUECIÓN DEL TUBO PVC AL CABLE SUSPENSIÓN [CORTE A-A']

ESC: 1/5



20 ANILLO - 2 (63) ANILLO [VISTA FRONTAL]

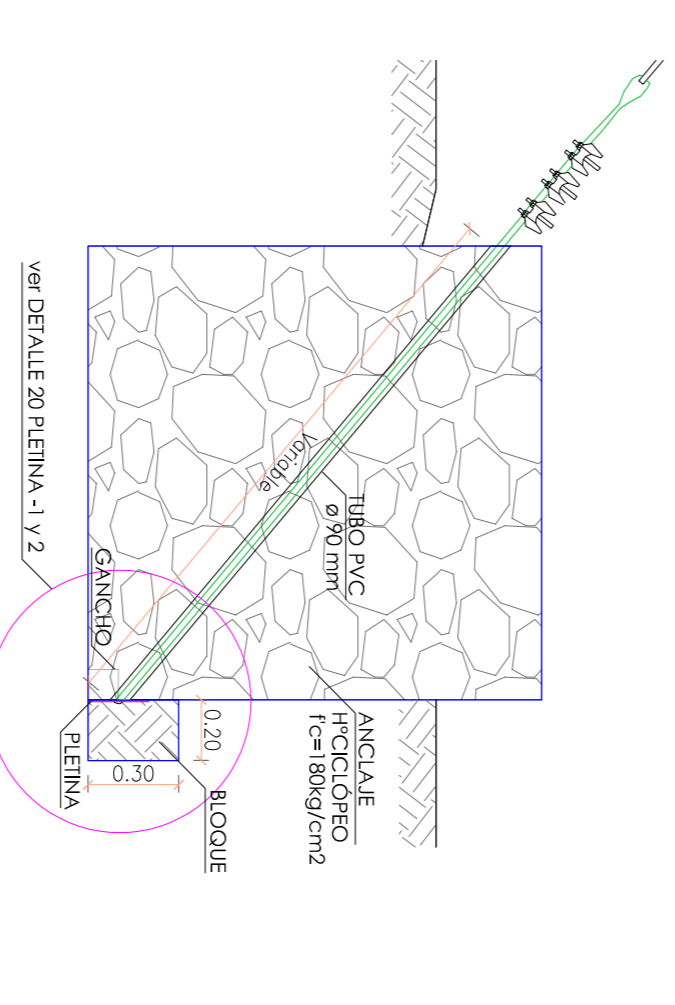
ESC: 1/5



| Material                                 | Unidad         | Cantidad |
|--|----------------|----------|
| Cable de acero D=3/4"                    | m              | 57,881   |
| Cable de acero D=1/4"                    | m              | 12,889   |
| Cable de acero D=1/4"                    | m              | 68,272   |
| Cable de acero D=1/2"                    | m              | 31,2     |
| Mordaza modificada D=3/4"                | unidad         | 24       |
| Mordaza para cable D=1/4"                | unidad         | 30       |
| Guardacable D=1/8"                       | unidad         | 15       |
| Polera para cable de acero D=3/4"        | unidad         | 2        |
| Pasador para cable                       | unidad         | 2        |
| Guardacable D=3/4"                       | unidad         | 10       |
| Mordaza para cable D=3/4"                | unidad         | 30       |
| Tensor D=2"                              | unidad         | 48       |
| Mordaza para cable D=1/4"                | unidad         | 2        |
| Guardacable D=1/4"                       | unidad         | 20       |
| Tensor D=1/4"                            | unidad         | 8        |
| Hormigón 210 kg/cm <sup>2</sup>          | m <sup>3</sup> | 6,576    |
| Hormigón de ligero 180kg/cm <sup>2</sup> | m <sup>3</sup> | 5,9      |
| Acero de refuerzo                        | kg             | 1291,995 |
| Excavación                               | m <sup>3</sup> | 15,100   |
| Anillo de sujeción D=355mm               | unidad         | 9,600    |
|  | unidad         | 15       |

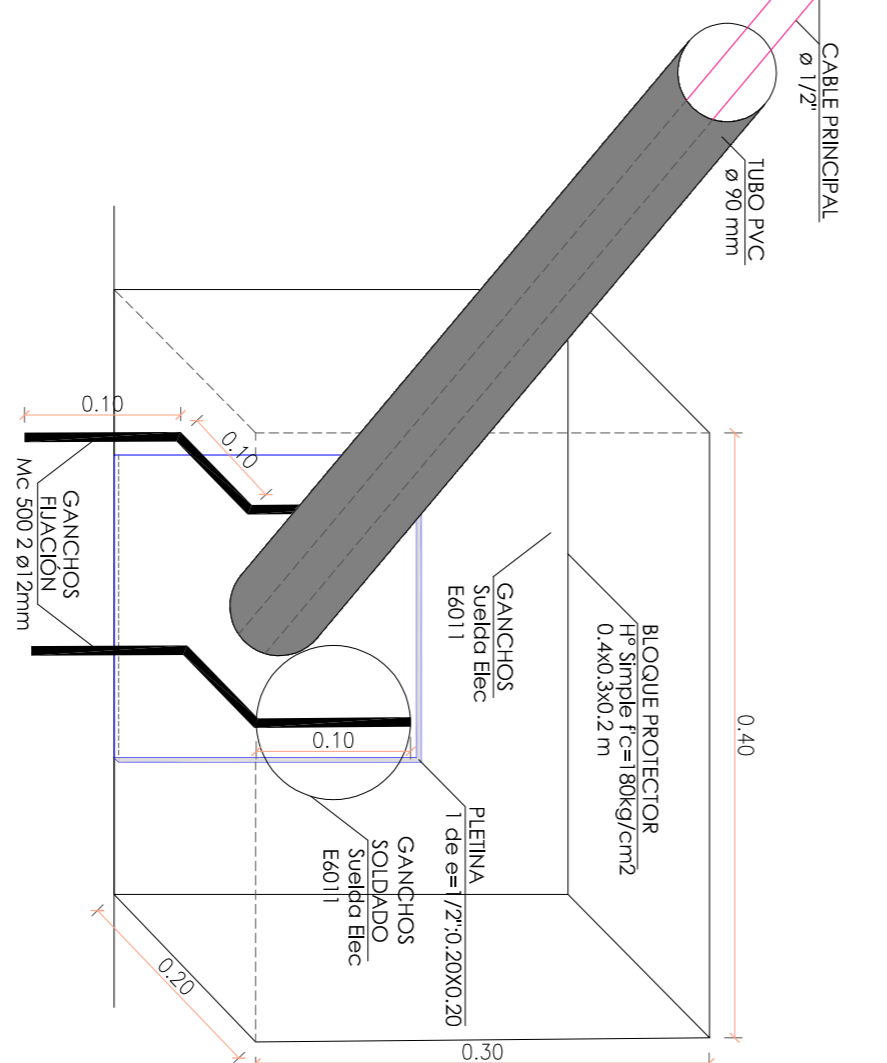
DETALLE 20 ANCLAJE - 1 (28) ESQUEMA GENERAL SUECIÓN A ANCLAJE [CORTE Y-Y']

ESC: 1/25



DETALLE 20 PLETINA - 1 (28) SUECIÓN DE CABLE PRINCIPAL A ANCLAJE [AXONOMETRÍA]

ESC: 1/GRÁFICA

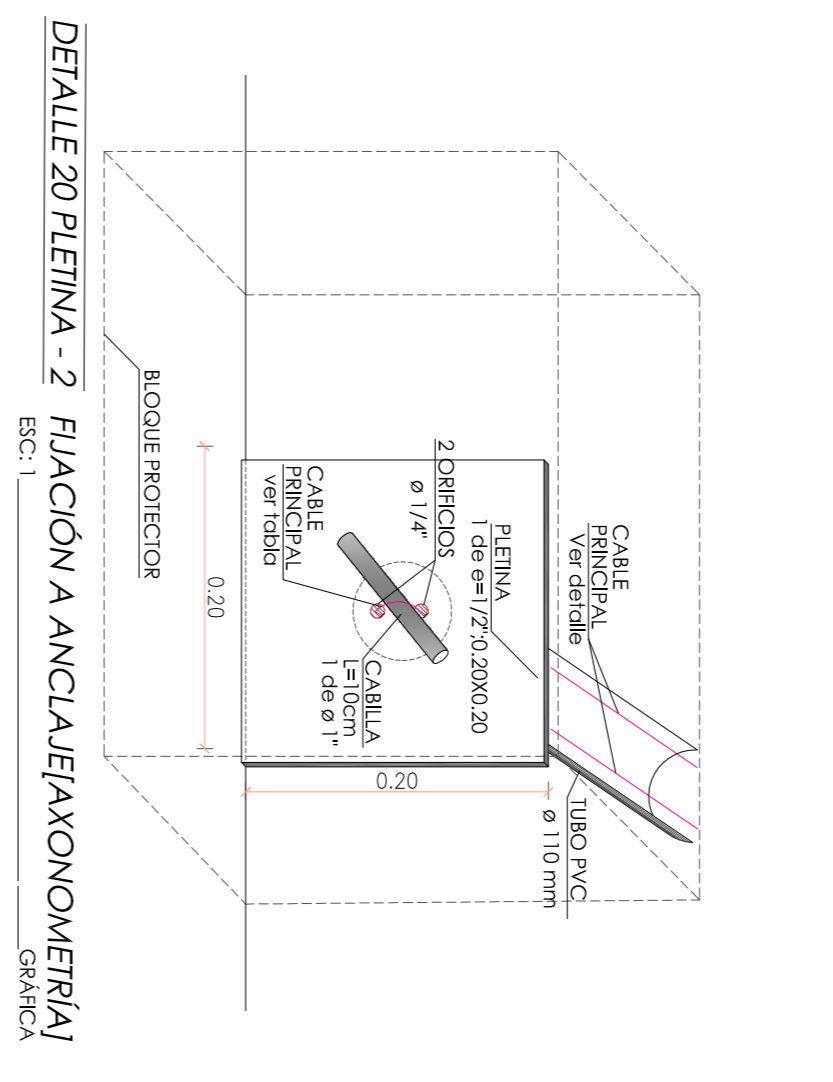
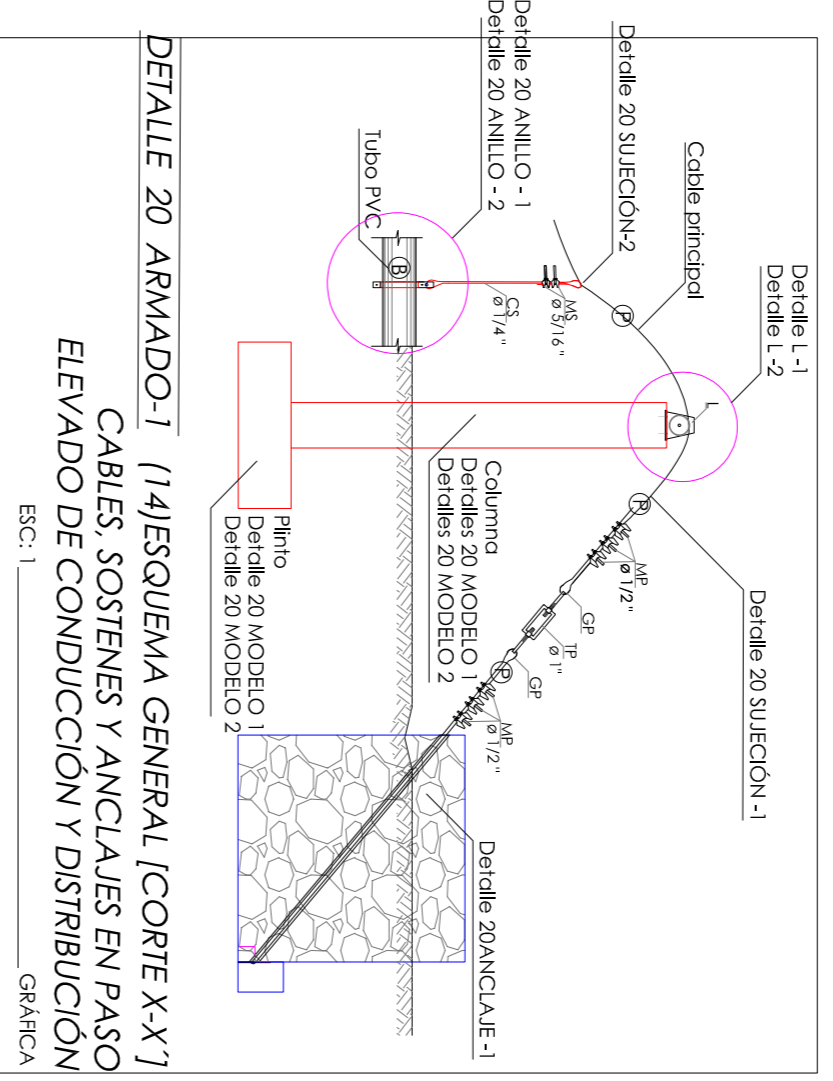
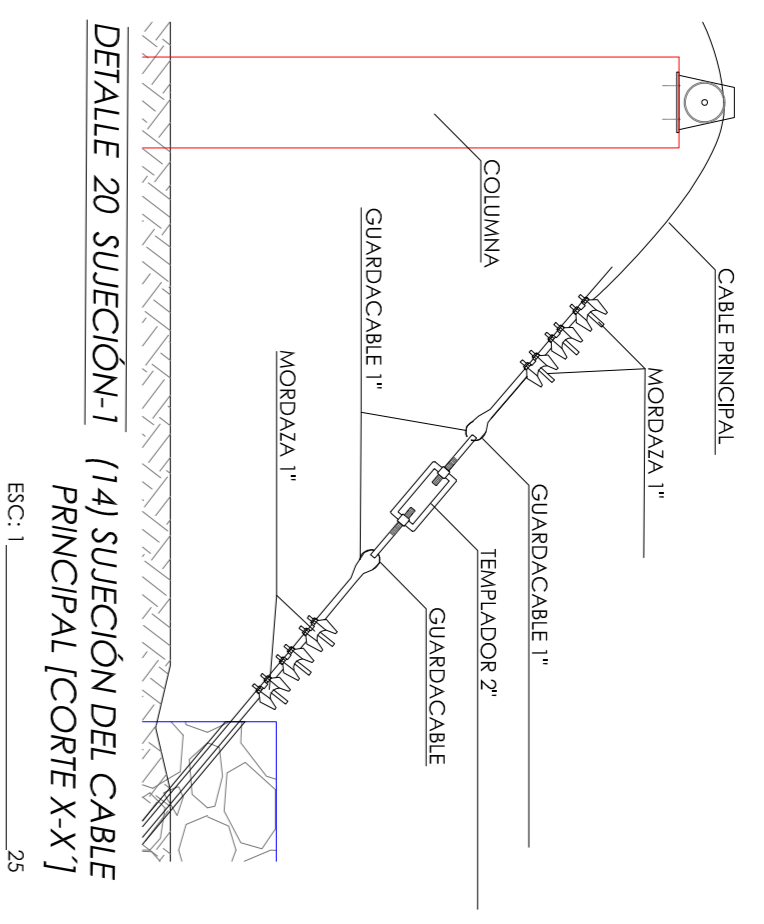
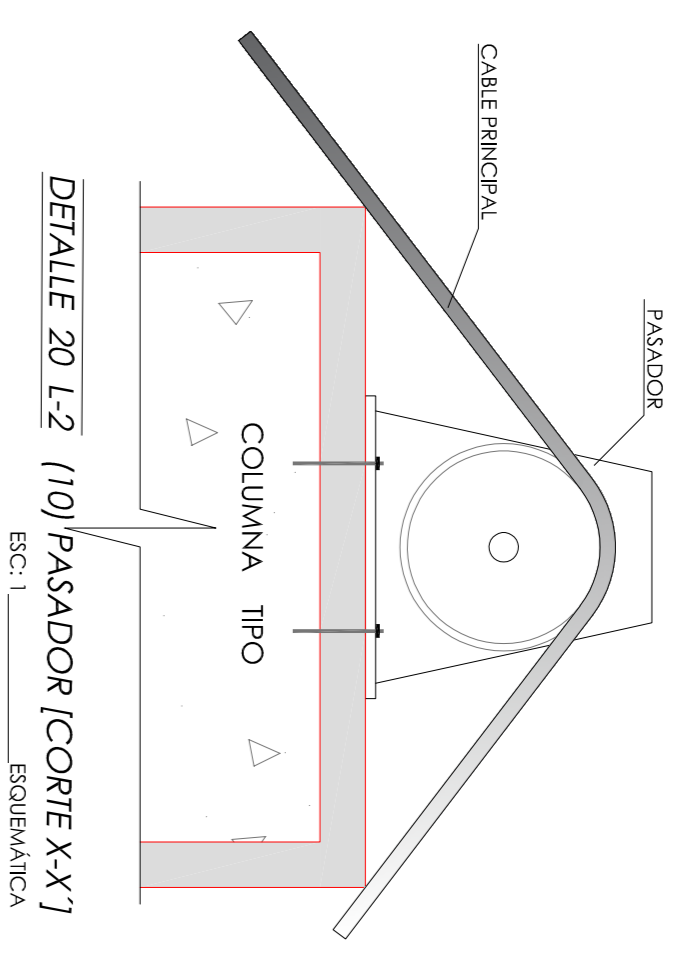
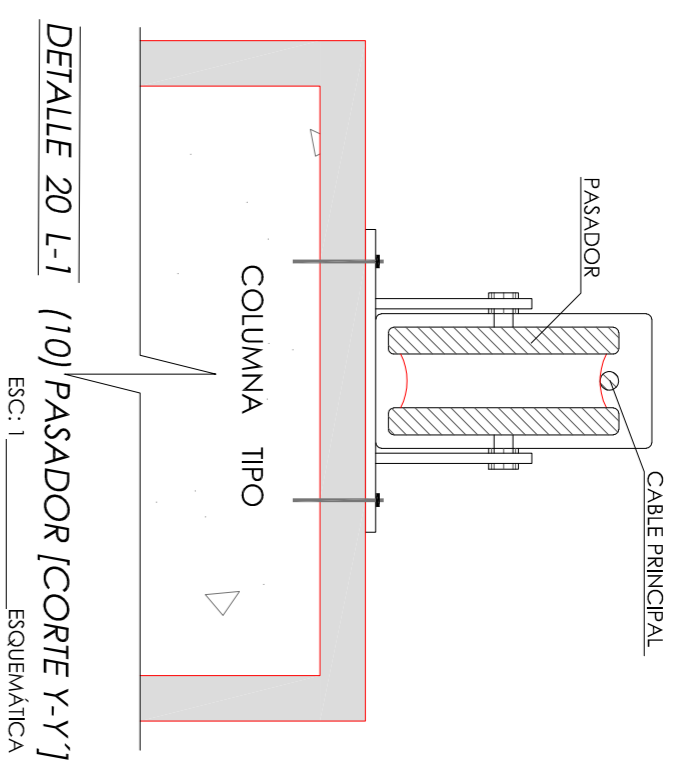


| INGENIERIA / REGISTRO DISEÑO | FIRMA    | FECHA      |
|------------------------------|----------|------------|
| DISEÑO :                     |          |            |
| ING. PAUL TORRES             |          | OCTUBRE/21 |
| ADMINISTRADOR :              |          | OCTUBRE/21 |
| ING. JULIO JARAMILLO FREIRE  |          | OCTUBRE/21 |
| APROBACIÓN DE FISCALIZADOR:  |          | OCTUBRE/21 |
| ING. JOSÉ ANGLARICA A.       |          | OCTUBRE/21 |
| Gerente de la EPAL-P         |          | OCTUBRE/21 |
| ING. JUAN ESCALANTE F.       |          | OCTUBRE/21 |
| ALCALDE:                     |          |            |
| SR. JAIME GRANDA             |          |            |
| TAMAÑO :                     | A1       |            |
| ESCALA :                     | INDICADA |            |
| DIBUJO N.º :                 | AMIR     |            |
| HOLLA :                      | 50 DE 64 | REV A      |

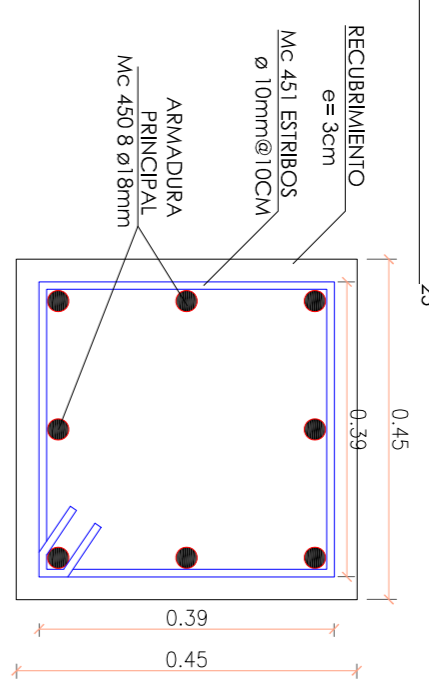
GOBIERNO AUTÓNOMO MUNICIPAL DE PIÑAS

PROYECTO : CONSULTA PARA LA ELABORACIÓN Y/O REVISIÓN DE LOS PLANOS DE LA RED DE CIMENTACIÓN PARA LA CONSTRUCCIÓN DE UN PASADIZO DE TRÁNSITO PARA EL PASAJE DE UN CAMIÓN EN LA CARRETERA PRINCIPAL DE LA COMUNA DE PIÑAS, PROVINCIA DE EL CAYO.

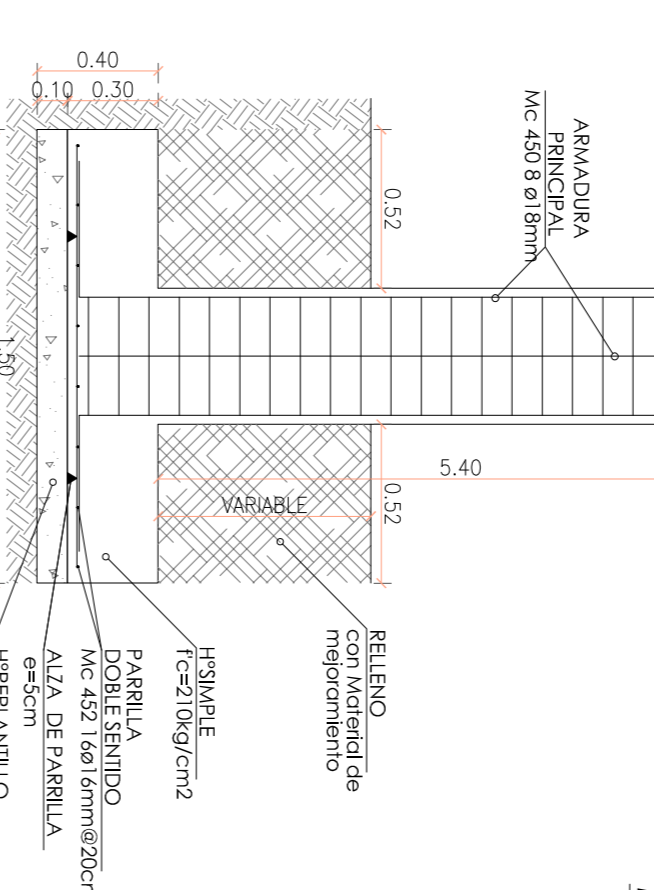
DESCRIPCIÓN : DETALLES DE LOS PASOS ELEVADOS COJUNTES L=30m



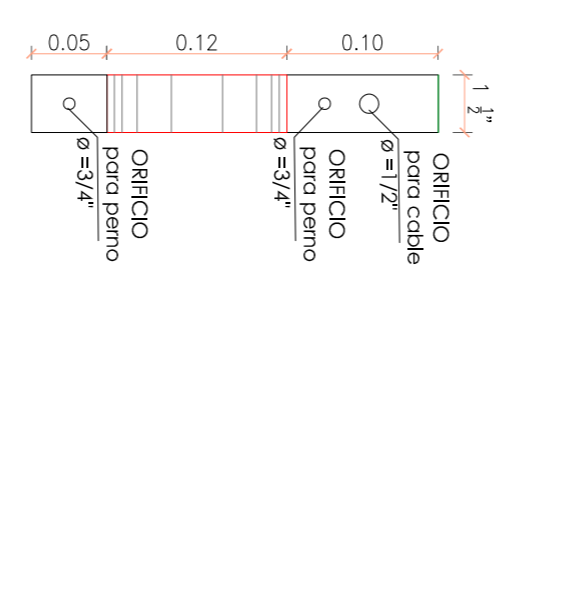
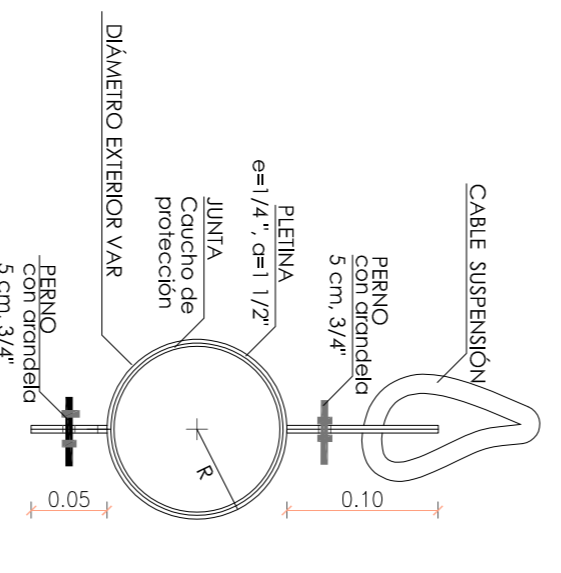
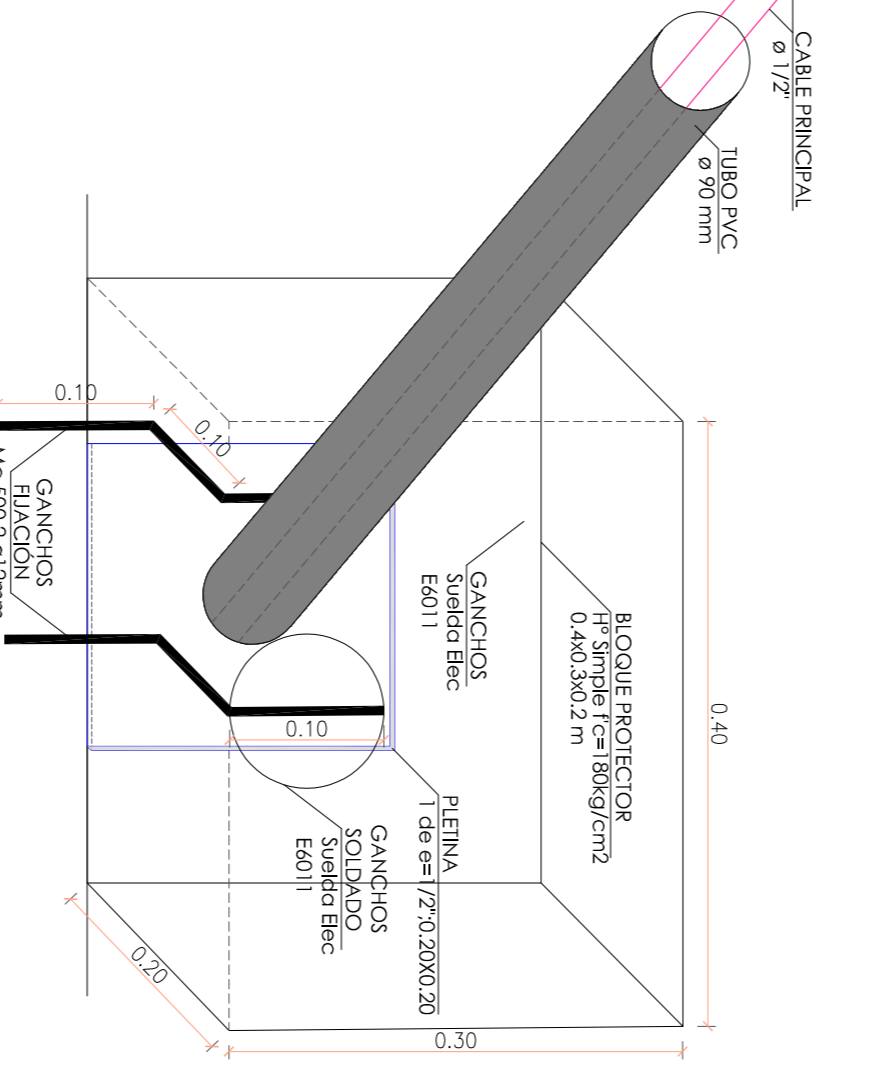
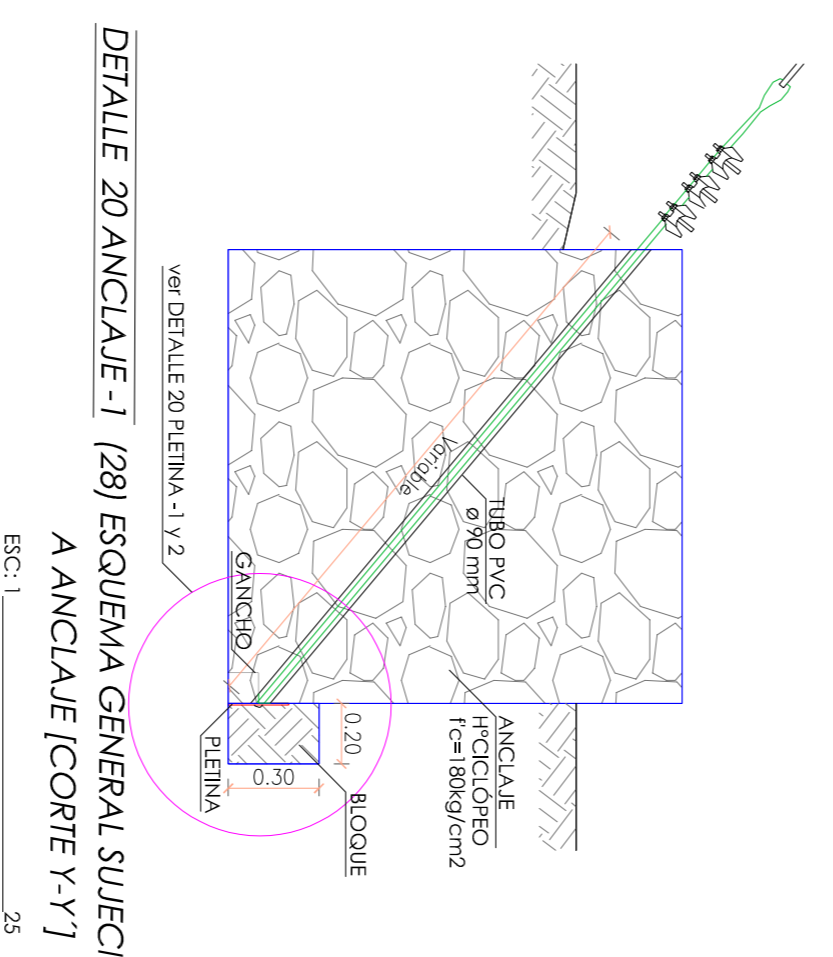
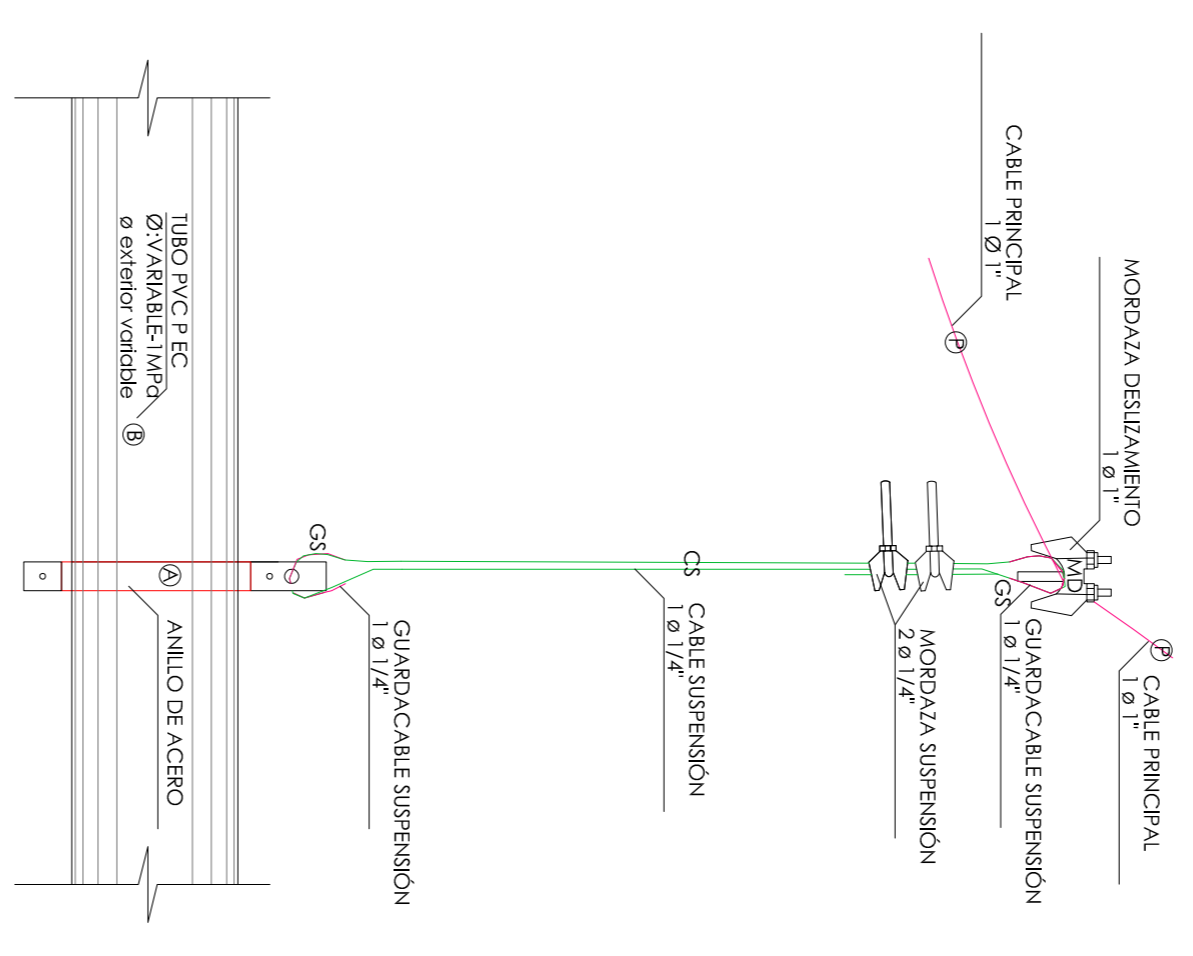
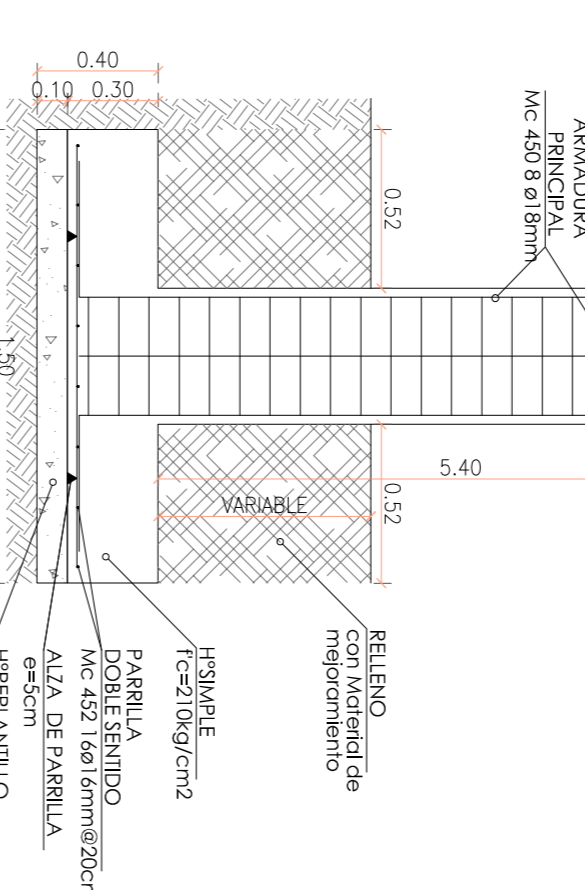
DETALLE 20 MODELO 2-1 (110) CIMENTACIÓN Y COLUMNA [CORTE A-A'] ESC: 1/25



DETALLE 20 MODELO 2-2 (110) COLUMNA [PLANTA] ESC: 1/10



DETALLE 20 MODELO 2-3 (110) PINTO [PLANTA] ESC: 1/25



| Material                       | Unidad | Cantidad |
|--------------------------------|--------|----------|
| Cable de acero D=1"            | m      | 78.35    |
| Cable de acero D= 3/4"         | m      | 31.55    |
| Cable de acero D= 1/2"         | m      | 96.75    |
| Mordaza para cable D=1/2"      | unidad | 24       |
| Mordaza para cable D=1/4"      | unidad | 40       |
| Guardacable D=3/8"             | unidad | 20       |
| Poles para cable de acero D=1" | unidad | 2        |
| Pasador para cable             | unidad | 2        |
| Guardacable D=1"               | unidad | 10       |
| Mordaza para cable D=1"        | unidad | 30       |
| Tensor D=2"                    | unidad | 2        |
| Mordaza para cable D=1/4"      | unidad | 48       |
| Guardacable D=3/4"             | unidad | 20       |
| Tensor D=1/4"                  | unidad | 8        |
| Hormigón adopleo 180kg/cm2     | m3     | 9.600    |
| Acero de refuerzo              | kg     | 1569.520 |
| Excavación                     | m3     | 15.100   |
| Relleño                        | m3     | 9.600    |
| Anillo de sujeción D=355mm     | unidad | 20       |

|                              |                              |               |          |
|------------------------------|------------------------------|---------------|----------|
| INGENIERIA / REGISTRO DISEÑO | FINMA                        | FECHA         |          |
| DISÑO :                      | ING. PAIL TORRES             | 02/OCTUBRE/21 |          |
| ADMINISTRADOR :              | ING. JUDIL JARAMILLO PERIERE | 02/OCTUBRE/21 |          |
| APROBACIÓN DE FISCALIZADOR:  | ING. JOSE ANGAMARCA A.       | 02/OCTUBRE/21 |          |
| Gerente de la EPAAP          | ING. JUAN ESCALANTE F.       | 02/OCTUBRE/21 |          |
| ALCALDE:                     | SR. JAME GRANDA              | 02/OCTUBRE/21 |          |
| TAMAÑO :                     | A1                           | ESCALA :      | INDICADA |
| DIBUJO N.º                   | AMIR                         | HOLA :        | 51 DE 64 |
|                              |                              | REV           | A        |

**GOBIERNO AUTÓNOMO MUNICIPAL DE PIÑAS**

PROYECTO : CONSULTORÍA PARA LOS ESTUDIOS Y DISEÑOS PRELIMINARES DE LA NUEVA CERCAMURALLA DE CONDUCCIÓN Y NUEVA PLANTA DE TRATAMIENTO DE AGUA POTABLE PARA LA CIUDAD DE PIÑAS, CANTÓN PIÑAS, PROVINCIA DE EL DÑO.

DESCRIPCIÓN : DETALLES DE LOS PISOS ELEVADOS COLGANTES L=60m