

COMPUTOS METRICOS CANAL DE RIEGO FERRETERIA

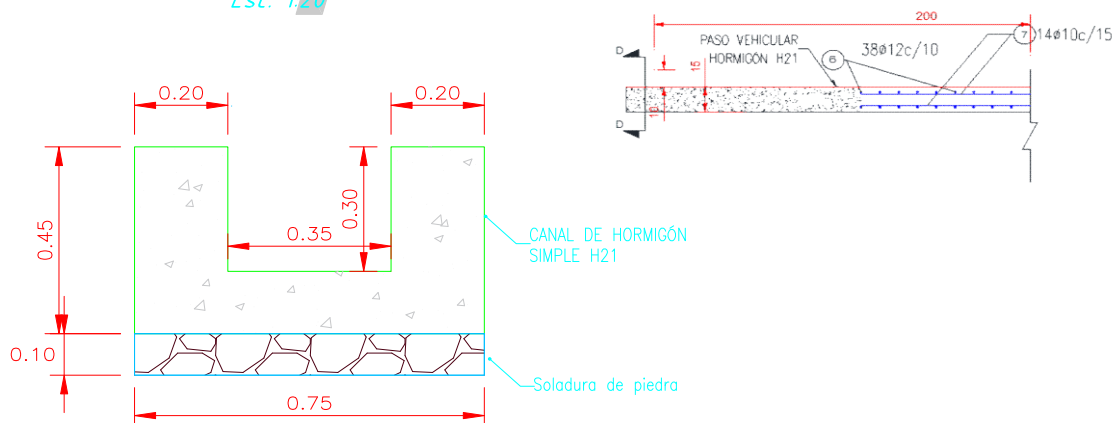
|  |   |
|--|---|
| Item:  | 1 |
| PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA |   |

| ITEM                | DETALLE             | CANTIDAD | L1   | L2   | H         | AREA PARCIAL | VOL.TOTAL |
|---------------------|---------------------|----------|------|------|-----------|--------------|-----------|
|                     |                     |          | m    | m    | m         | m2           | m3        |
| 1                   | HORMIGON SIMPLE H21 |          |      |      |           |              |           |
|                     | AREA 1              | 1        | 0,75 | 0,15 | 150       | 16,88        | 16,88     |
|                     | AREA 2              | 2        | 0,2  | 0,3  | 150       | 9,00         | 18,00     |
|                     |                     |          |      |      |           | VOL TOTAL M3 | 34,88     |
|                     | EXCAVACIÓN          |          |      |      |           |              |           |
|                     | CANAL               |          |      |      |           |              |           |
|                     | AREA 1              | 1        | 0,75 | 0,15 | 150       | 16,88        | 16,88     |
|                     | AREA 2              | 2        | 0,2  | 0,3  | 150       | 9,00         | 18,00     |
|                     |                     |          |      |      |           | VOL TOTAL M3 | 34,88     |
|                     | SOLADURA DE PIEDRA  | 1        | 0,75 | 0,1  | 150       | 0,08         | 11,25     |
|                     |                     |          |      |      | VOL TOTAL | 46,13        |           |
| HORMIGÓN ARMADO H21 |                     |          |      |      |           |              |           |
| PASOS VEHICULARES   | 1                   | 0,75     | 27   | 0,15 | 3,04      | 3,04         |           |

| RESUMEN DE CANTIDADES |      |      |       |       |
|-----------------------|------|------|-------|-------|
| DETALLE               | UNID | CANT | CANT  |       |
|                       |      |      | UNIT  | TOTAL |
| HORMIGON SIMPLE H21   | M3   | 1    | 34,88 | 34,88 |
| EXCAVACIÓN            | M3   | 1    | 46,13 | 46,13 |
| SOLADURA DE PIEDRA    | M3   | 1    | 11,25 | 11,25 |
| HORMIGÓN ARMADO H21   | M3   | 1    | 3,04  | 3,04  |

CANAL DE RIEGO FERRETERIA

Esc. 1:20



COMPUTOS METRICOS RESPIRADERO CAMARA VENTOSA

|  |   |
|--|---|
| Item:  | 2 |
| PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA |   |

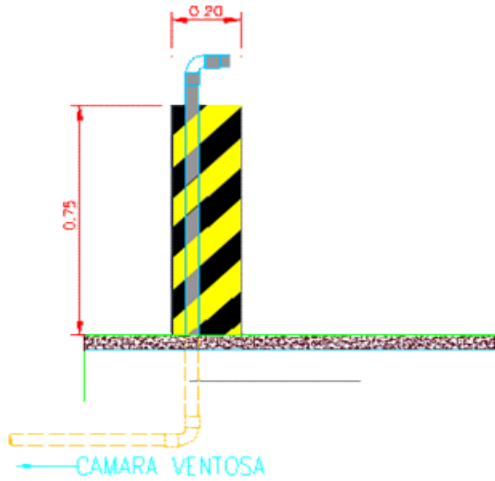
RESPIRADERO CAMARA VENTOSA

| ITEM                 | DETALLE             | CANTIDAD | L1       | L2  | H   | AREA PARCIAL | AREA TOTAL | vol. Total |      |
|----------------------|---------------------|----------|----------|-----|-----|--------------|------------|------------|------|
|                      |                     |          | m        | m   | m   | m2           | m2         | m3         |      |
| 2                    | HORMIGON SIMPLE H21 |          |          |     |     |              |            |            |      |
|                      | AREA 1              | 1        | 0,75     | 0,2 | 0,2 | 0,15         | 0,15       | 0,03       |      |
|                      | AREA 2              | 2        | 0,35     | 0,2 | 0,2 | 0,07         | 0,14       | 0,03       |      |
|                      | VOL TOTAL M3        |          |          |     |     |              |            |            | 0,06 |
| REJILLA ANTIROEDORES |                     |          |          |     |     |              |            |            |      |
|                      | REJILLA             | 1        | UNIDADES |     |     |              |            |            | 1,00 |
|                      | DEMOLICION          | 1        | 1,05     | 0,2 | 0,2 | 0,21         | 0,21       | 0,04       |      |

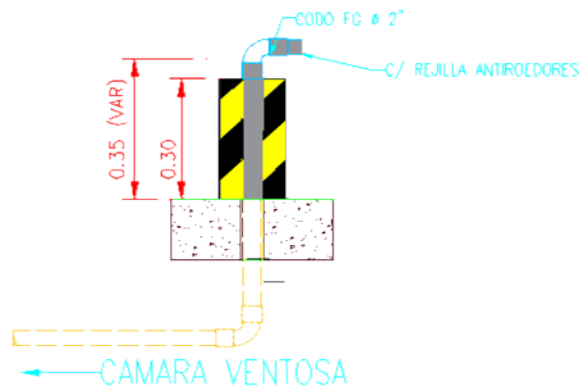
RESUMEN DE CANTIDADES

| DETALLE             | UNID | CANT | CANT |       |
|---------------------|------|------|------|-------|
|                     |      |      | UNIT | TOTAL |
| HORMIGON SIMPLE H21 | M3   | 1    | 0,06 | 0,06  |
| REJILLA             | U    | 4    | 1,00 | 4,00  |
| DEMOLICION          | M3   | 1    | 0,04 | 0,04  |

RESPIRADERO EXISTENTE



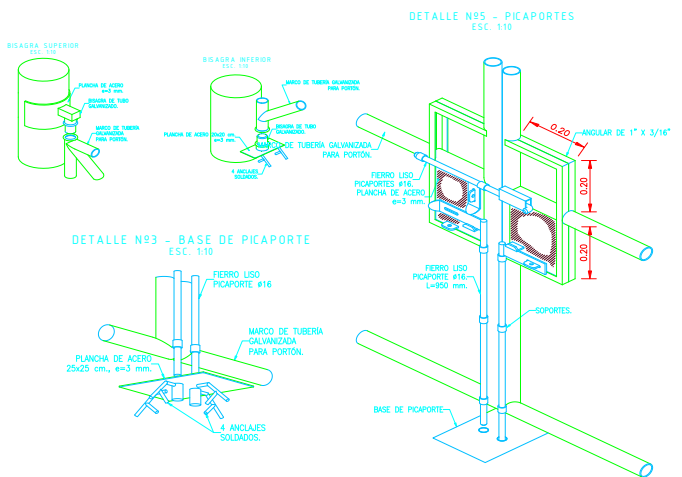
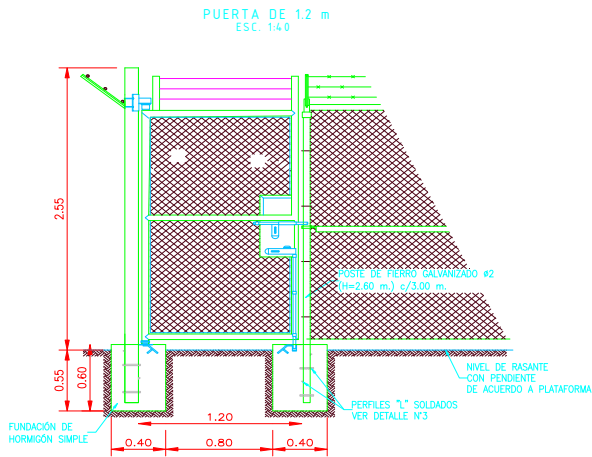
RESPIRADERO  
ESC. 1:15



COMPUTOS METRICOS PORTON

| Item:  | 3               |      |         |         |        |                  |                 |
|--|-----------------|------|---------|---------|--------|------------------|-----------------|
| PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA |                 |      |         |         |        |                  |                 |
| PORTONES INGRESO PEATONAL HIDRANTES (PORTON INGRESO 1,2m)                  |                 |      |         |         |        |                  |                 |
| ITEM   | DETALLE         | CANT | L1<br>m | L2<br>m | H<br>m | VOL.PARC<br>m3   | VOL.TOTAL<br>m3 |
| 3  | EXCAVACION      |      |         |         |        |                  |                 |
|  | fundaciones     | 2    | 0,4     | 0,4     | 0,55   | 0,09             | 0,18            |
|  |                 |      |         |         |        | total excavación | 0,18            |
|  | HORMIGON SIMPLE |      |         |         |        |                  |                 |
|  | fundaciones     | 2    | 0,4     | 0,4     | 0,6    | 0,10             | 0,19            |
|  |                 |      |         |         |        | total excavación | 0,19            |
|  | MALLA OLIMPICA  |      |         |         |        |                  |                 |
|  | malla           | 2    | 1,05    | 1,03    |        | 1,08             | 2,16            |
|  |                 |      |         |         |        | total            | 2,16            |
|  | ALAMBRE DE PUAS |      |         |         |        |                  |                 |
| alambre  | 3               | 0,97 | 1       |         | 0,97   | 2,91             |                 |
|  |                 |      |         |         | total  | 2,91             |                 |

| RESUMEN DE CANTIDADES                                   |      |      |              |               |
|---|------|------|--------------|---------------|
| DETALLE   | UNID | CANT | CANT<br>UNIT | CANT<br>TOTAL |
| EXCAVACION  | M3   | 6    | 0,18         | 1,06          |
| HORMIGON SIMPLE   | M3   | 6    | 0,19         | 1,15          |
| MALLA OLIMPICA  | M2   | 6    | 2,16         | 12,98         |
| ALAMBRE DE PUAS   | ML   | 6    | 2,91         | 17,46         |
| BISAGRA INFERIOR DE TUBO GALVANIZADO Y PLANCHA DE 3MM , | GLB  | 6    | 1            | 6,00          |
| BASE INFERIOR DE PLANCHA DE 3MM                         | GLB  | 6    | 1            | 6,00          |
| BISAGRA SUPERIOR DE TUBO GALVANIZADO Y PLANCHA DE 3MM   | GLB  | 6    | 1            | 6,00          |
| TESADOR DE 3/16"X3/4" (PLETINA GALVANIZADA)             | GLB  | 6    | 1            | 6,00          |
| ANGULAR DE 1" X 3/16"                                   | GLB  | 6    | 1            | 6,00          |
| PICAPORTE Y ACCESORIOS                                  | GLB  | 6    | 1            | 6,00          |
| CANDADO   | UNID | 6    | 1            | 6,00          |

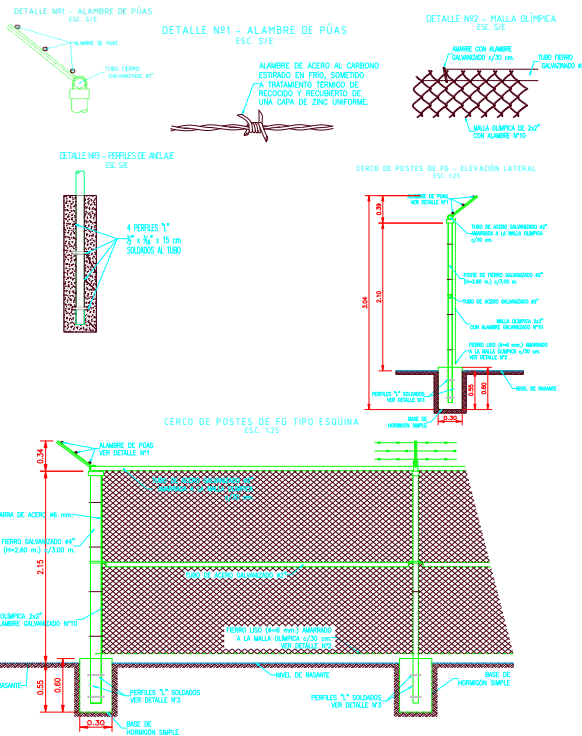
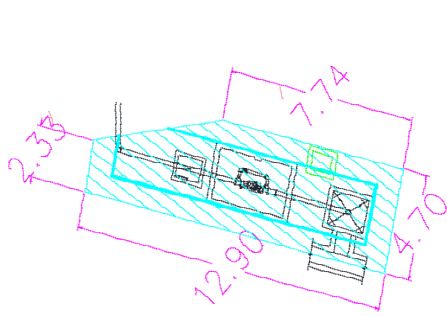


COMPUTOS METRICOS CERCO PERIMETRAL HIDRANTE H3

| ITEM   | DETALLE         | CANT | L1<br>m | L2<br>m | H<br>m | VOL.PARC<br>m3   | VOL.TOTAL<br>m3 |
|--------|-----------------|------|---------|---------|--------|------------------|-----------------|
| 4      | EXCAVACIÓN      |      |         |         |        |                  |                 |
|        | postes          | 1    | 0,3     | 0,3     | 0,55   | 0,05             | 0,05            |
|        |                 |      |         |         |        | total excavación | 0,05            |
|        | MALLA OLIMPICA  |      |         |         |        |                  |                 |
|        | malla           | 1    | 2,1     | 1       | 1      | 2,10             | 2,10            |
|        |                 |      |         |         |        | total excavación | 2,10            |
|        | ALAMDE DE PUAS  |      |         |         |        |                  |                 |
|        | alambre         | 3    | 1       | 1       | 1      | 1,00             | 3,00            |
|        |                 |      |         |         |        | total            | 3,00            |
|        | HORMIGON SIMPLE |      |         |         |        |                  |                 |
| postes | 1               | 0,3  | 0,3     | 0,6     | 0,05   | 0,05             |                 |
|        |                 |      |         |         | total  | 0,05             |                 |

RESUMEN DE CANTIDADES CERCO PERIMETRAL H3

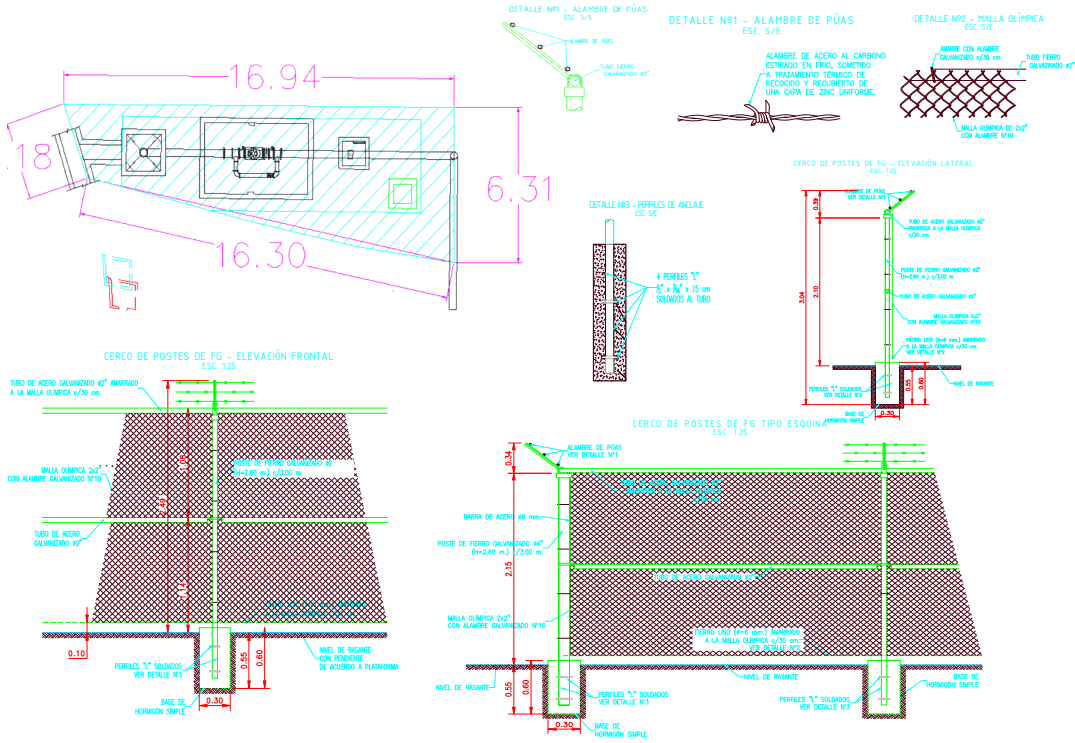
| DETALLE         | UNID | CANT | CANT<br>UNIT | CANT<br>TOTAL |
|-----------------|------|------|--------------|---------------|
| EXCAVACIÓN      | M3   | 13   | 0,05         | 0,64          |
| MALLA OLIMPICA  | M2   | 27   | 2,10         | 56,70         |
| ALAMDE DE PUAS  | ML   | 27   | 3,00         | 81,00         |
| HORMIGON SIMPLE | M3   | 13   | 0,05         | 0,70          |



COMPUTOS METRICOS CERCO PERIMETRAL HIDRANTE H4

| Item:  | 5               |      |     |     |      |          |           |
|--|-----------------|------|-----|-----|------|----------|-----------|
| PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA |                 |      |     |     |      |          |           |
| VOLUMENES DE OBRA POR METRO LINEAL   |                 |      |     |     |      |          |           |
| ITEM   | DETALLE         | CANT | L1  | L2  | H    | VOL.PARC | VOL.TOTAL |
|  |                 |      | m   | m   | m    |          |           |
| 5  | EXCAVACION      |      |     |     |      |          |           |
|  | postes          | 1    | 0,3 | 0,3 | 0,55 | 0,05     | 0,05      |
|  |                 |      |     |     |      |          | 0,05      |
|  | MALLA OLIMPICA  |      |     |     |      |          |           |
|  | malla           | 1    | 2,1 | 1   | 1    | 2,10     | 2,10      |
|  |                 |      |     |     |      |          | 2,10      |
|  | ALAMBE DE PUAS  |      |     |     |      |          |           |
|  | alambre         | 3    | 1   | 1   | 1    | 1,00     | 3,00      |
|  |                 |      |     |     |      |          | 3,00      |
|  | HORMIGON SIMPLE |      |     |     |      |          |           |
| postes   | 1               | 0,3  | 0,3 | 0,6 | 0,05 | 0,05     |           |
|  |                 |      |     |     |      | 0,05     |           |

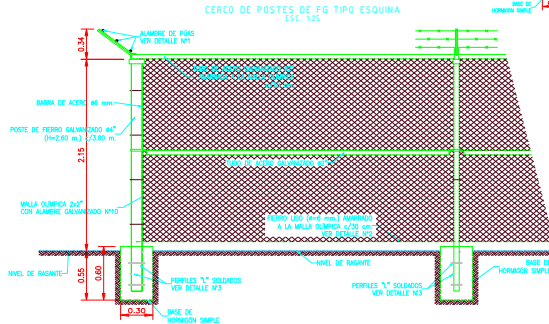
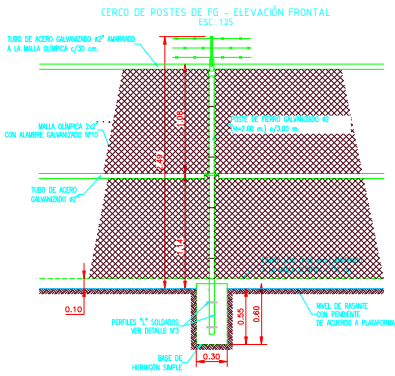
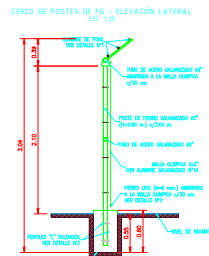
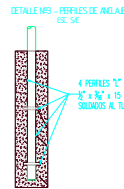
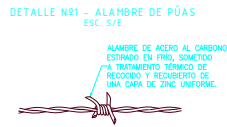
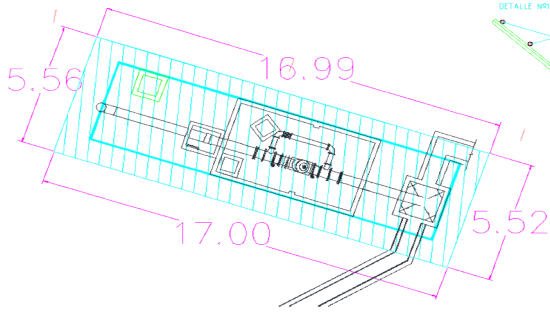
| RESUMEN DE CANTIDADES CERCCO PERIMETRAL H4 |      |      |      |        |
|--|------|------|------|--------|
| DETALLE                                    | UNID | CANT | CANT |        |
|  |      |      | UNIT | TOTAL  |
| EXCAVACION                                 | M3   | 21   | 0,05 | 1,04   |
| MALLA OLIMPICA                             | M2   | 45   | 2,10 | 94,50  |
| ALAMBRE DE PUAS                            | ML   | 45   | 3,00 | 135,00 |
| HORMIGON SIMPLE                            | M3   | 21   | 0,05 | 1,13   |



COMPUTOS METRICOS CERCO PERIMETRAL HIDRANTE H6

| Item:  |                 | 6    |     |     |      |          |                  |
|--|-----------------|------|-----|-----|------|----------|------------------|
| PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA |                 |      |     |     |      |          |                  |
| VOLUMENES DE OBRA POR METRO LINEAL   |                 |      |     |     |      |          |                  |
| ITEM   | DETALLE         | CANT | L1  | L2  | H    | VOL.PARC | VOL.TOTAL        |
|  |                 |      | m   | m   | m    |          |                  |
| 6  | EXCAVACION      |      |     |     |      |          |                  |
|  | postes          | 1    | 0,3 | 0,3 | 0,55 | 0,05     | 0,05             |
|  |                 |      |     |     |      |          | 0,05             |
|  |                 |      |     |     |      |          | total excavación |
|  | MALLA OLIMPICA  |      |     |     |      |          |                  |
|  | malla           | 1    | 2,1 | 1   | 1    | 2,10     | 2,10             |
|  |                 |      |     |     |      |          | total excavación |
|  |                 |      |     |     |      |          | 2,10             |
|  | ALAMBRE DE PUAS |      |     |     |      |          |                  |
|  | alambre         | 3    | 1   | 1   | 1    | 3,00     | 3,00             |
|  |                 |      |     |     |      | total    |                  |
|  |                 |      |     |     |      | 3,00     |                  |
| HORMIGON SIMPLE  |                 |      |     |     |      |          |                  |
| postes   | 1               | 0,3  | 0,3 | 0,6 | 0,05 | 0,05     |                  |
|  |                 |      |     |     |      | total    |                  |
|  |                 |      |     |     |      | 0,05     |                  |

| RESUMEN DE CANTIDADES CERCCO PERIMETRAL H6 |      |      |      |        |
|--|------|------|------|--------|
| DETALLE                                    | UNID | CANT | CANT |        |
|  |      |      | UNIT | TOTAL  |
| EXCAVACION                                 | M3   | 21   | 0,05 | 1,04   |
| MALLA OLIMPICA                             | M2   | 44   | 2,10 | 92,40  |
| ALAMBRE DE PUAS                            | ML   | 44   | 3,00 | 132,00 |
| HORMIGON SIMPLE                            | M3   | 21   | 0,05 | 1,13   |



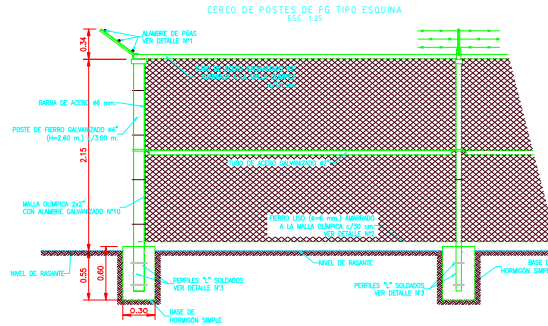
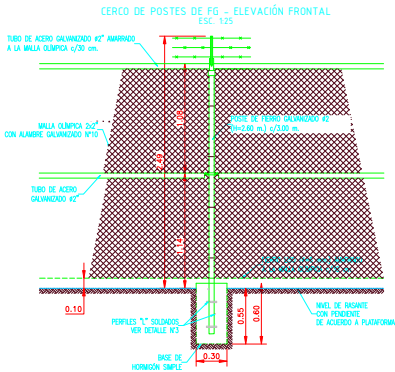
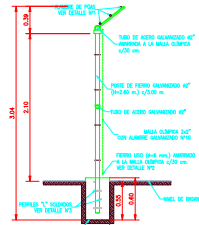
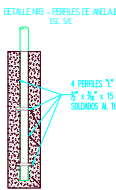
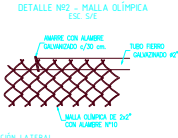
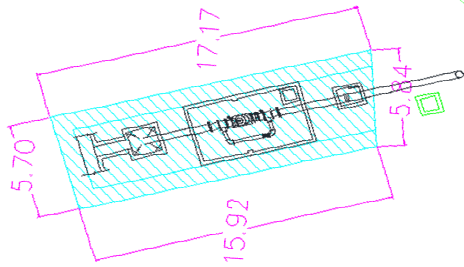


COMPUTOS METRICOS CERCO PERIMETRAL HIDRANTE H8

| ITEM   | DETALLE         | CANT | L1<br>m | L2<br>m | H<br>m | VOL PARC<br>m3   | VOL TOTAL<br>m3 |
|--------|-----------------|------|---------|---------|--------|------------------|-----------------|
| 8      | EXCAVACION      |      |         |         |        |                  |                 |
|        | postes          | 1    | 0,3     | 0,3     | 0,55   | 0,05             | 0,05            |
|        |                 |      |         |         |        | total excavación | 0,05            |
|        | MALLA OLIMPICA  |      |         |         |        |                  |                 |
|        | malla           | 1    | 2,1     | 1       | 1      | 2,10             | 2,10            |
|        |                 |      |         |         |        | total excavación | 2,10            |
|        | ALAMBE DE PUAS  |      |         |         |        |                  |                 |
|        | alambre         | 3    | 1       | 1       | 1      | 1,00             | 3,00            |
|        |                 |      |         |         |        | total            | 3,00            |
|        | HORMIGON SIMPLE |      |         |         |        |                  |                 |
| postes | 1               | 0,3  | 0,3     | 0,6     | 0,05   | 0,05             |                 |
|        |                 |      |         |         | total  | 0,05             |                 |

RESUMEN DE CANTIDADES CERCO PERIMETRAL H8

| DETALLE         | UNID | CANT | CANT<br>UNIT | CANT<br>TOTAL |
|-----------------|------|------|--------------|---------------|
| EXCAVACION      | M3   | 21   | 0,05         | 1,04          |
| MALLA OLIMPICA  | M2   | 43   | 2,10         | 90,30         |
| ALAMBRE DE PUAS | ML   | 43   | 3,00         | 129,00        |
| HORMIGON SIMPLE | M3   | 21   | 0,05         | 1,13          |



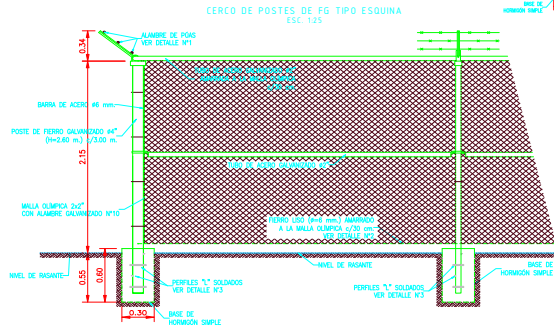
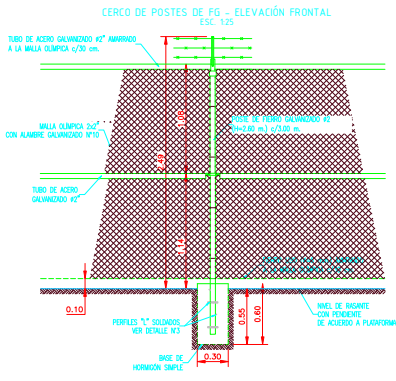
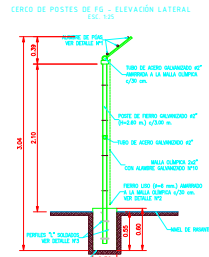
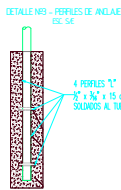
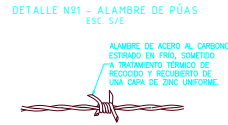
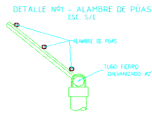
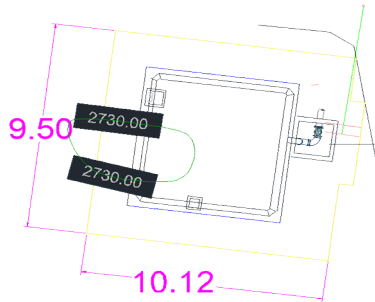




COMPUTOS METRICOS CERCO PERIMETRAL CARCAMO

| Item:  | 10             |      |     |     |       |                  |           |
|--|----------------|------|-----|-----|-------|------------------|-----------|
| PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOYAYA |                |      |     |     |       |                  |           |
| VOLUMENES DE OBRA POR METRO LINEAL   |                |      |     |     |       |                  |           |
| ITEM   | DETALLE        | CANT | L1  | L2  | H     | VOL_PARC         | VOL_TOTAL |
|  |                |      | m   | m   | m     | m3               | m3        |
| 10   | EXCAVACION     |      |     |     |       |                  |           |
|  | postes         | 1    | 0,3 | 0,3 | 0,55  | 0,05             | 0,05      |
|  |                |      |     |     |       | total excavación | 0,05      |
|  | MALLA OLIMPICA |      |     |     |       |                  |           |
|  | malla          | 1    | 2,1 | 1   | 1     | 2,10             | 2,10      |
|  |                |      |     |     |       | total excavación | 2,10      |
|  | ALAMBE DE PUAS |      |     |     |       |                  |           |
| alambre  | 3              | 1    | 1   | 1   | 3,00  | 3,00             |           |
|  |                |      |     |     | total | 3,00             |           |
| HORMIGON SIMPLE  |                |      |     |     |       |                  |           |
| postes   | 1              | 0,3  | 0,3 | 0,6 | 0,05  | 0,05             |           |
|  |                |      |     |     | total | 0,05             |           |

| RESUMEN DE CANTIDADES CERCO CARCAMO |      |      |      |        |
|-------------------------------------|------|------|------|--------|
| DETALLE                             | UNID | CANT | CANT | CANT   |
|                                     |      |      | UNIT | TOTAL  |
| EXCAVACION                          | M3   | 19   | 0,05 | 0,94   |
| MALLA OLIMPICA                      | M2   | 40   | 2,10 | 84,00  |
| ALAMBRE DE PUAS                     | ML   | 40   | 3,00 | 120,00 |
| HORMIGON SIMPLE                     | M3   | 19   | 0,05 | 1,03   |



**COMPUTOS METRICOS TAPAS METALICAS HIDRANTES**

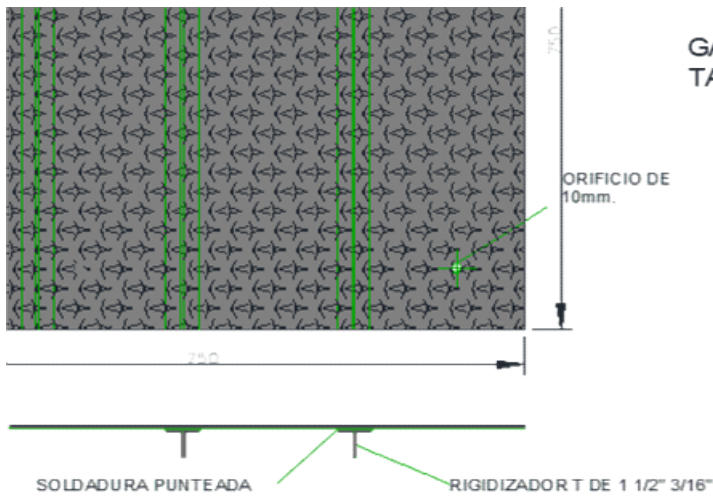
|   |    |
|---|----|
| <b>Item:</b>  | 11 |
| <b>PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA</b> |    |

**TAPAS METALICAS HIDRANTES**

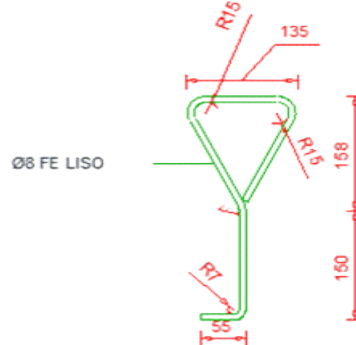
| ITEM | DETALLE   | CANT | L1   | L2   | VOL.PARC | VOL.TOTAL |
|------|---|------|------|------|----------|-----------|
|      |   |      | m    | m    | m3       | m3        |
| 11   | tapas metalicas Plancha texturizada e=4.7mm , 3/16" | 1    | 0,75 | 0,75 | 0,56     | 0,56      |
|      | ganchos   | 1    |      |      | 1,00     | 1,00      |
|      | Candado y cerrojo                                   | 1    |      |      | 1,00     | 1,00      |

**RESUMEN DE CANTIDADES**

| DETALLE         | UNID | CANT | CANT | CANT  |
|-----------------|------|------|------|-------|
|                 |      |      | UNIT | TOTAL |
| TAPAS METALICAS | M2   | 6    | 0,56 | 3,38  |
| GANCHOS         | UNID | 6    | 1,00 | 6,00  |
| CANDADOS        | UNID | 6    | 1,00 | 6,00  |



**GANCHOS PARA MANIPULACIÓN DE TAPAS 5 UNIDADES**



**COMPUTOS METRICOS PINTURA HIDRANTES**

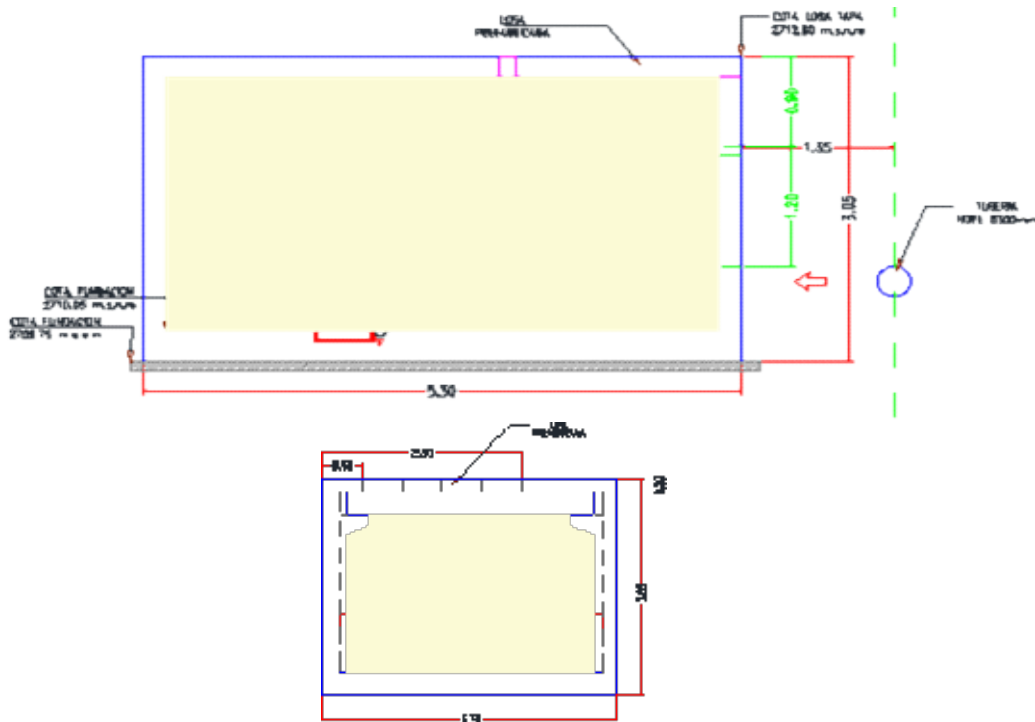
|   |    |
|---|----|
| <b>Item:</b>  | 12 |
| <b>PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA</b> |    |

**PINTURA IMPERMEABILIZANTE HIDRANTES**

| ITEM | DETALLE          | CANT | L1  | L2     | VOL.PARC | VOL.TOTAL |
|------|------------------|------|-----|--------|----------|-----------|
|      |                  |      | m   | m      | m2       | m2        |
| 12   | Pintura          |      |     |        |          |           |
|      | Paredes Hidrante | 2    | 5,1 | 2,2    | 11,22    | 22,44     |
|      | Paredes Hidrante | 2    | 3,3 | 2,2    | 7,26     | 14,52     |
|      |                  |      |     | total= |          | 36,96     |

**RESUMEN DE CANTIDADES**

| DETALLE | UNID | CANT | CANT  | CANT   |
|---------|------|------|-------|--------|
|         |      |      | UNIT  | TOTAL  |
| PINTURA | M2   | 5    | 36,96 | 184,80 |



**COMPUTOS METRICOS ESCALERA METÁLICA**

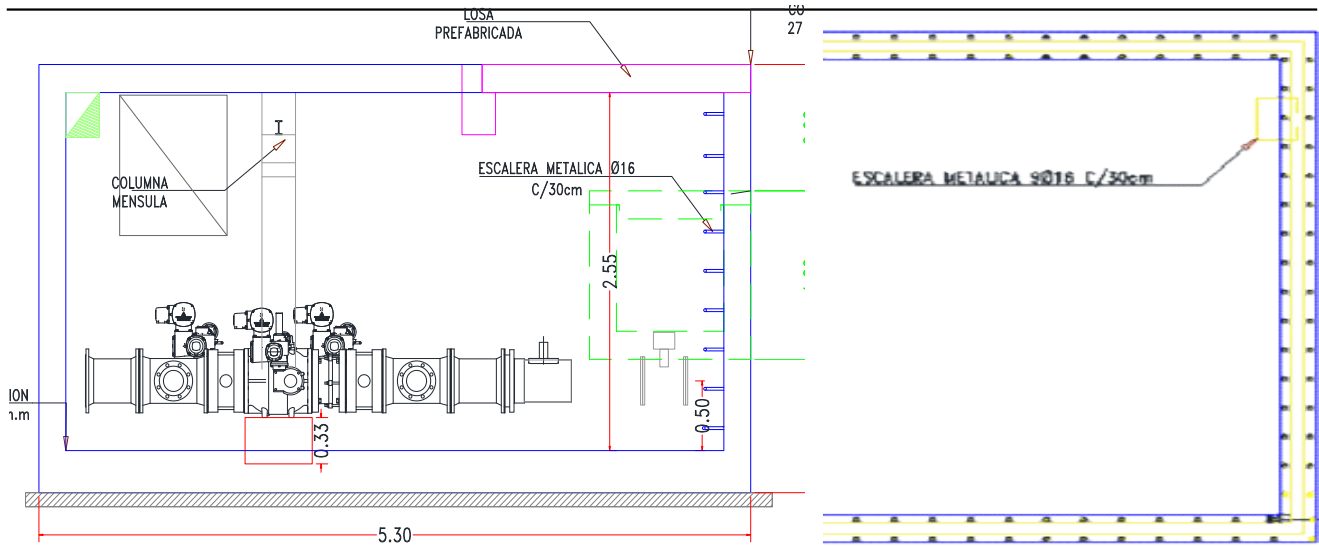
|   |    |
|---|----|
| <b>Item:</b>  | 13 |
| <b>PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA</b> |    |

**ESCALERA METALICA Ø16**

| ITEM   | DETALLE                  | CANT | Ø  | LONG | PESO | LONG.TOTAL | PESO TOTAL |
|--------|--------------------------|------|----|------|------|------------|------------|
|        |                          |      | mm | m    | kg/m | M          | KG         |
| 13     | Escalera metalica        |      |    |      |      |            |            |
|        | ESCALERA METALICA<br>Ø16 | 10   | 16 | 1,1  | 1,58 | 11,00      | 17,358     |
| total= |                          |      |    |      |      | 17,360     |            |

**RESUMEN DE CANTIDADES**

| DETALLE                  | UNID | CANT | CANT | CANT  |
|--------------------------|------|------|------|-------|
|                          |      |      | UNIT | TOTAL |
| ESCALERA METALICA<br>Ø16 | UNID | 6    | 1,00 | 6,00  |



**COMPUTOS METRICOS RESPIRADERO**

|   |    |
|---|----|
| Item:   | 14 |
| <b>PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA</b> |    |

**RESPIRADERO**

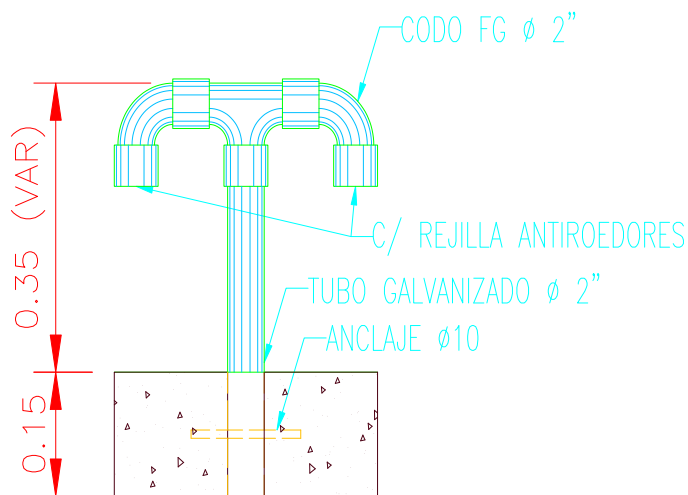
| ITEM | DETALLE           | UNID | CANT. | CANT  |
|------|-------------------|------|-------|-------|
|      |                   |      | UNIT  | TOTAL |
| 14   | Escalera metalica |      |       |       |
|      | RESPIRADERO       | Unid | 1,00  | 6     |
|      | total=            |      | 6,000 |       |

**RESUMEN DE CANTIDADES**

| DETALLE     | UNID | CANT | CANT | CANT  |
|-------------|------|------|------|-------|
|             |      |      | UNIT | TOTAL |
| RESPIRADERO | UNID | 7    | 1,00 | 7,00  |

**RESPIRADERO HIDRANTES**

ESC. 1:15



**COMPUTOS METRICOS PINTURA TAPAS FRANJA DE SEGURIDAD**

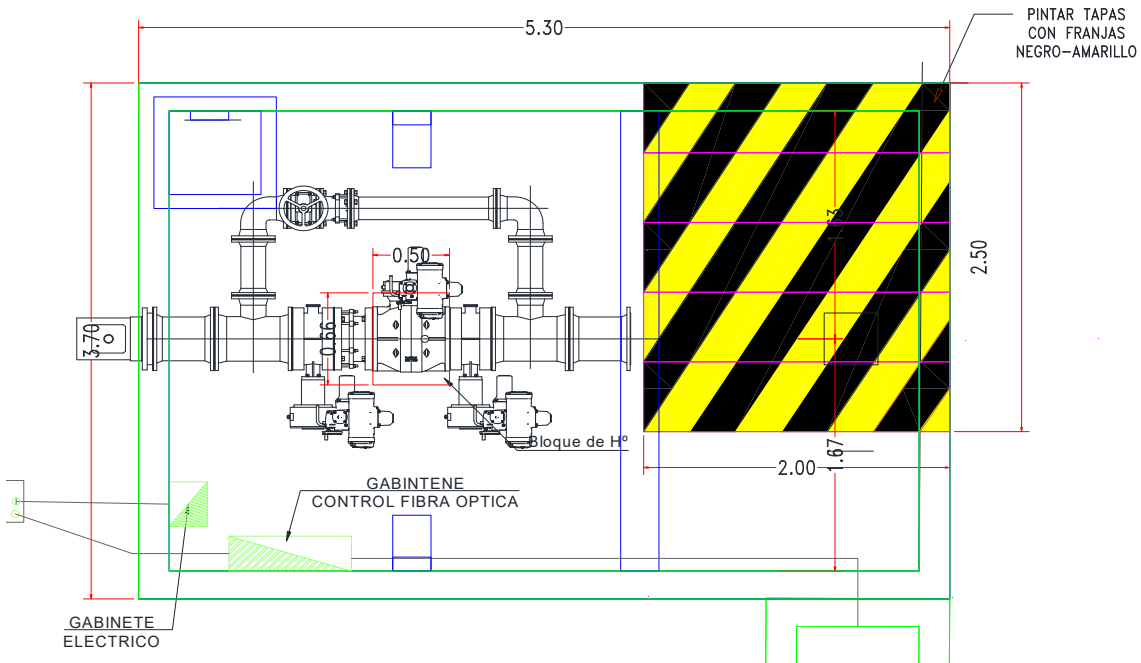
|   |    |
|---|----|
| Item:   | 15 |
| <b>PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA</b> |    |

**PINTURA TAPAS FRANJAS DE SEGURIDAD**

| ITEM   | DETALLE       | CANT | L1 | L2  | VOL.PARC | VOL.TOTAL |
|--------|---------------|------|----|-----|----------|-----------|
|        |               |      | m  | m   | m2       | m2        |
| 15     | PINTURA TAPAS |      |    |     |          |           |
|        | TAPAS         | 6    | 2  | 2,5 | 5,00     | 30,00     |
| total= |               |      |    |     |          | 30,00     |

**RESUMEN DE CANTIDADES**

| DETALLE | UNID | CANT | CANT | CANT  |
|---------|------|------|------|-------|
|         |      |      | UNIT | TOTAL |
| PINTURA | M2   | 5    | 5,00 | 25,00 |



COMPUTOS METRICOS CORTE BUZON OKHOSURU

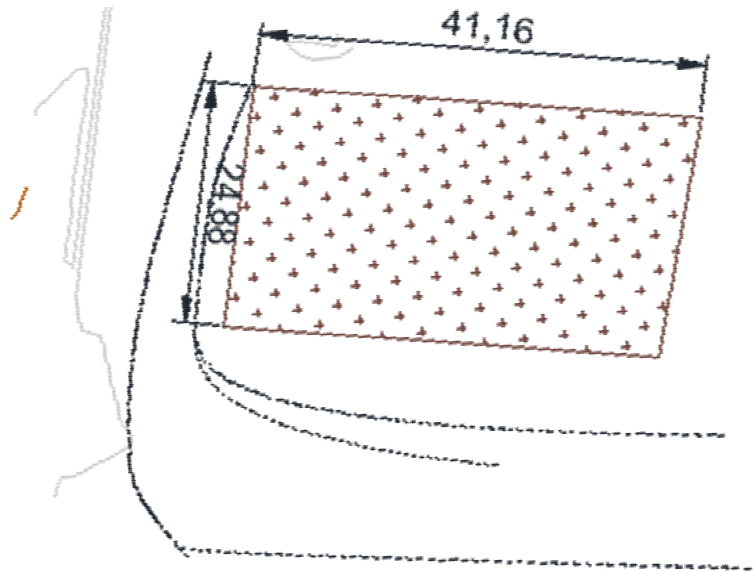
|  |    |
|--|----|
| Item:  | 16 |
| PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA |    |

CORTE BUZON OKHOSURU

| ITEM | DETALLE       | CANT | L1 | L2 | H   | VOL.PARC         | VOL.TOTAL |
|------|---------------|------|----|----|-----|------------------|-----------|
|      |               |      | m  | m  | m   | m3               | m3        |
| 16   | excavacion-m3 |      |    |    |     |                  |           |
|      | remoción      | 1    | 25 | 41 | 2,5 | 2562,50          | 2562,50   |
|      |               |      |    |    |     | total excavación | 2562,50   |

RESUMEN DE CANTIDADES

| DETALLE    | UNID | CANT | CANT    | CANT    |
|------------|------|------|---------|---------|
|            |      |      | UNIT    | TOTAL   |
| EXCAVACION | M3   | 1    | 2562,50 | 2562,50 |





**COMPUTOS METRICOS LETREROS INFORMATIVOS DE SEGURIDAD (\*)**

|       |      |
|-------|------|
| Item: | 17.1 |
|-------|------|

**PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA  
LETREROS INFORMATIVOS DE SEGURIDAD (\*)**

| ITEM    | DETALLE                     | UNIDAD | CANT | CANT UNI | VOL.PARC |
|---------|-----------------------------|--------|------|----------|----------|
|         |                             |        |      |          | m2       |
| 17.1    | LETREROS DE SEGURIDAD       |        |      |          |          |
|         | LETRERO RIESGO ELECTRICO    | U      | 6    | 1        | 6,00     |
|         | LETRERO EXTINTOR            | U      | 6    | 1        | 6,00     |
|         | LETRERO HIDRANTE            | U      | 6    | 1        | 6,00     |
|         | LETRERO PERSONAL AUTORIZADO | U      | 6    | 1        | 6,00     |
| total=6 |                             |        |      |          |          |

| RESUMEN DE CANTIDADES            |      |      |      |       |
|----------------------------------|------|------|------|-------|
| DETALLE                          | UNID | CANT | CANT | CANT  |
|                                  |      |      | UNIT | TOTAL |
| LETRERO RIESGO ELECTRICO         | U    | 6    | 1    | 6     |
| LETRERO EXTINTOR                 | U    | 6    | 1    | 6     |
| LETRERO HIDRANTE                 | U    | 6    | 1    | 6     |
| LETRERO SOLO PERSONAL AUTORIZADO | U    | 6    | 1    | 6     |



**COMPUTOS METRICOS EXTINTORES**

|   |      |
|---|------|
| <b>Item:</b>  | 17.2 |
| <b>PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA</b> |      |

**EXTINTORES**

| ITEM | DETALLE  | UNIDAD | CANT | CANT UNI | VOL.PARC |
|------|----------|--------|------|----------|----------|
|      |          |        |      |          | m2       |
| 17.2 | EXTINTOR |        |      |          |          |
|      | EXTINTOR | U      | 8    | 1        | 8,00     |
|      | total=6  |        |      |          |          |

**RESUMEN DE CANTIDADES**

| DETALLE  | UNID | CANT | CANT | CANT  |
|----------|------|------|------|-------|
|          |      |      | UNIT | TOTAL |
| EXTINTOR | U    | 8    | 1    | 8     |



**COMPUTOS METRICOS GRADAS METALICAS**

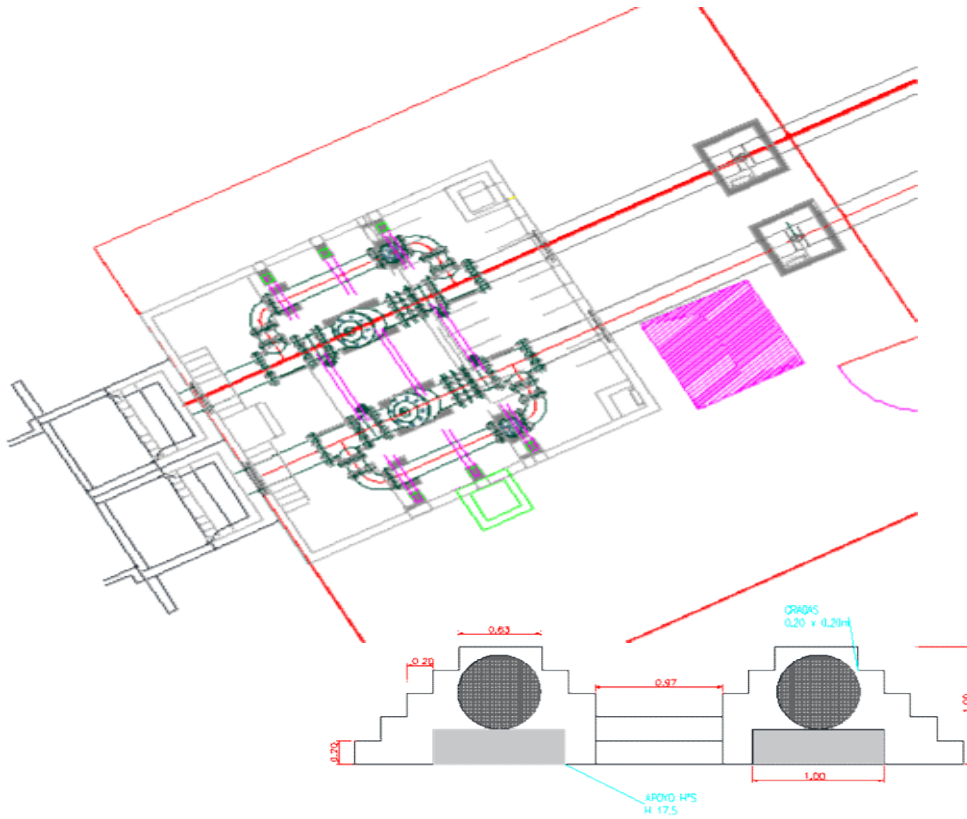
|   |    |
|---|----|
| <b>Item:</b>  | 18 |
| <b>PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA</b> |    |

**GRADAS METALICAS**

| ITEM | DETALLE   | CANT | L1   | L2 | VOL.PARC | VOL.TOTAL |
|------|-----------|------|------|----|----------|-----------|
|      |           |      | m    | m  | m2       | m2        |
| 18   | GRADAS D2 | 1    | 4,63 | 1  | 4,63     | 4,63      |
|      | GRADAS    |      |      |    |          |           |

**RESUMEN DE CANTIDADES**

| DETALLE | UNID | CANT | CANT | CANT  |
|---------|------|------|------|-------|
|         |      |      | UNIT | TOTAL |
| GRADAS  | GLB  | 1    | 1,00 | 1,00  |

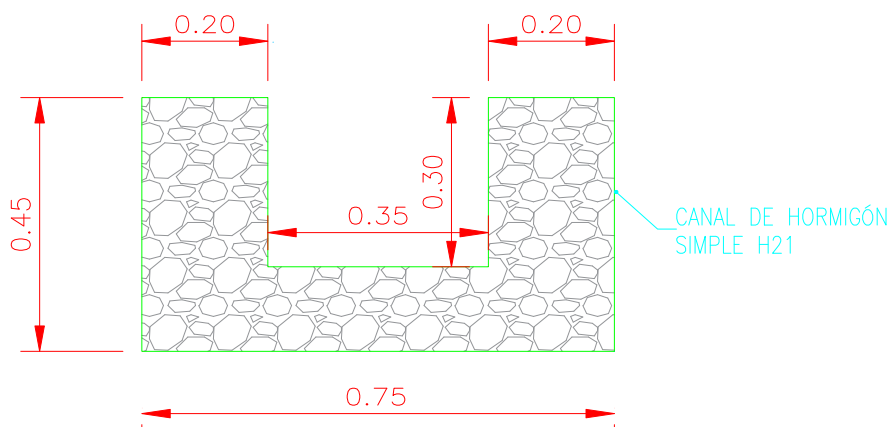


COMPUTOS METRICOS REMEDIACIÓN: MATERIAL PARA CANAL Y CAMARA

|  |    |
|--|----|
| Item:  | 19 |
| PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA |    |

REMEDIACIÓN: MATERIAL PARA CANAL Y CAMARA (CANAL DE RIEGO LA SALLE)

| ITEM | DETALLE        | L1   | L2   | CANTIDAD                     | AREA PARCIAL           | AREA TOTAL |
|------|----------------|------|------|------------------------------|------------------------|------------|
|      |                | m    | m    |                              | m3                     | m3         |
| 19   | CANAL DE RIEGO |      |      |                              |                        |            |
|      | AREA 1         | 0,75 | 0,15 | 1                            | 0,11                   | 0,11       |
|      | AREA 2         | 0,2  | 0,3  | 2                            | 0,06                   | 0,12       |
|      |                |      |      |                              | AREA TOTAL             | 0,23       |
|      | VOLUMEN        |      | 45   |                              | 0,23                   | 10,46      |
|      |                |      |      |                              | VOLUMEN TOTAL M 3      | 10,46      |
|      | RENDIMIENTO    |      |      |                              |                        |            |
|      | CEMENTO        |      | 350  |                              | 10,46                  | 3661,88    |
|      |                |      |      |                              | CEMENTO KG             | 3661,88    |
|      |                |      |      |                              | CEMENTO BOLSAS DE 50KG | 73,24      |
|      |                |      |      | TOTAL CEMENTO BOLSAS DE 50KG | 76,90                  |            |
|      |                |      |      | BOLSAS DE CEMENTO            | 80,00                  |            |



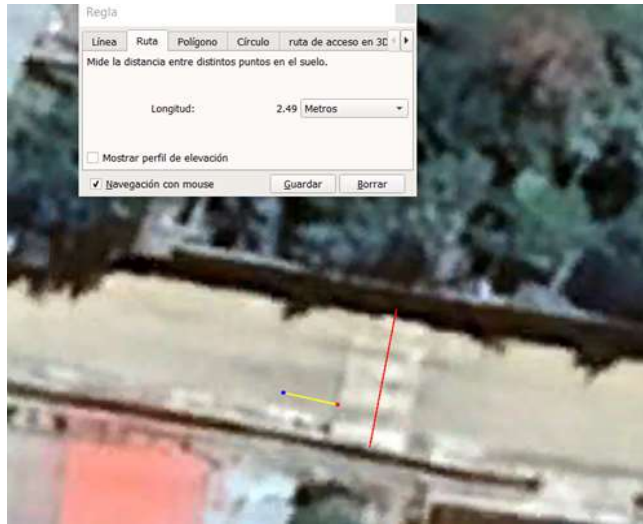
**COMPUTOS METRICOS ROMPEMUELLE 1+950**

|       |    |
|-------|----|
| Item: | 20 |
|-------|----|

**PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCCAYA**  
**REMEDIACIÓN: RELLENO APROXIMACIONES CARPETA ASFÁLTICA (ROMPE MUELLE 1+950)**

| ITEM | DETALLE                | CANTIDAD | L1 | L2 | H    | VOL. PARCIAL | VOL. TOTAL |
|------|------------------------|----------|----|----|------|--------------|------------|
|      |                        |          | m  | m  | m    |              |            |
| 20   | CARPETA ASFALTICA      |          |    |    |      | M3           | M3         |
|      | CARPETA ASFALTICA      | 2        | 3  | 6  | 0,05 | 0,45         | 0,90       |
|      | IMPRIMACIÓN BITUMINOSA | 2        | 3  | 6  |      | 18,00        | 36,00      |

| RESUMEN DE CANTIDADES  |      |      |       |       |
|------------------------|------|------|-------|-------|
| DETALLE                | UNID | CANT | CANT  |       |
|                        |      |      | UNIT  | TOTAL |
| CARPETA ASFALTICA      |      |      |       |       |
| CARPETA ASFALTICA      | M3   | 2    | 0,45  | 0,90  |
| IMPRIMACIÓN BITUMINOSA | M2   | 2    | 18,00 | 36,00 |



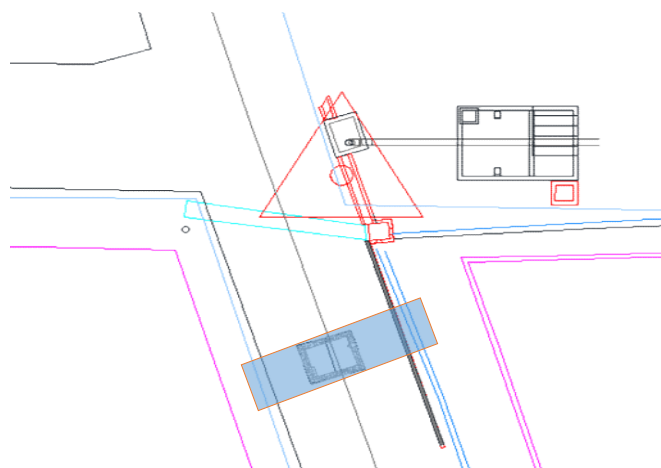
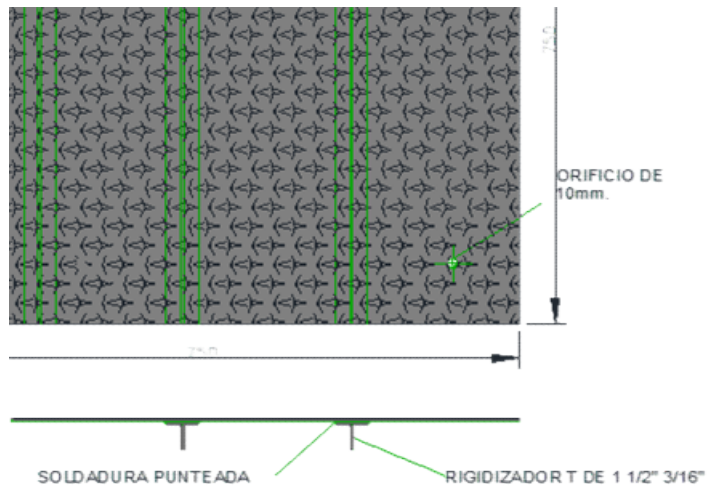
**COMPUTOS METRICOS CERCO PERIMETRAL CARCAMO**

|   |    |
|---|----|
| <b>Item:</b>  | 21 |
| <b>PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA</b> |    |

**REMEDIACIÓN: NIVELACIÓN SOBRE CAMARA EN CALLE INCLINADA (ROMPEMUELLE 1+350)**

| ITEM | DETALLE   | CANT | L1  | L2  | VOL.PARC | VOL.TOTAL |
|------|---|------|-----|-----|----------|-----------|
|      |   |      | m   | m   | M3       | M3        |
| 21   | tapas metalicas Plancha texturizada e=4.7mm , 3/16" | 1    | 0,8 | 0,8 | 0,64     | 0,64      |
|      | HORMIGON H21  | 1    | 6,5 | 0,2 | 1,30     | 1,30      |

| RESUMEN DE CANTIDADES                               |      |      |      |       |
|---|------|------|------|-------|
| DETALLE   | UNID | CANT | CANT | CANT  |
|   |      |      | UNIT | TOTAL |
| tapas metalicas Plancha texturizada e=4.7mm , 3/16" | M2   | 1    | 0,64 | 0,64  |
| HORMIGON H21  | M3   | 1    | 1,30 | 1,30  |

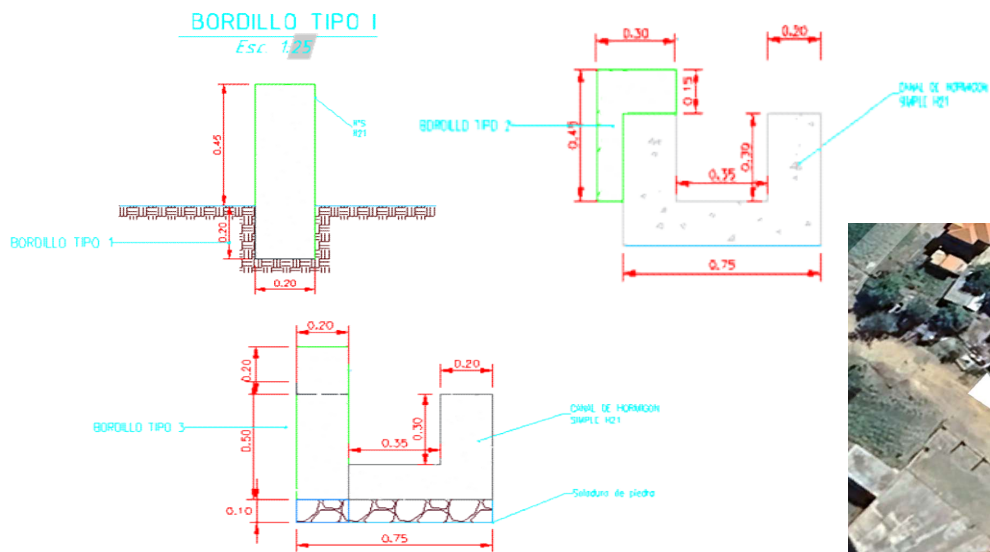


COMPUTOS METRICOS PRETIL-BORDILLOS CON MANTO GEOTEXTIL

|  |    |
|--|----|
| Item:  | 22 |
| PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA |    |

| ITEM                    | DETALLE                | CANTIDAD | L1 | L2   | H     | VOL. PARCIAL | VOL.TOTAL    |      |
|-------------------------|------------------------|----------|----|------|-------|--------------|--------------|------|
|                         |                        |          | m  | m    | m     |              |              |      |
| 22                      | HORMIGON H21           |          |    |      |       |              |              |      |
|                         | BORDILLO TIPO 1        | 1        | 5  | 0,65 | 0,2   | 0,65         | 0,65         |      |
|                         | BORDILLO TIPO 2        | 1        | 15 | 0,45 | 0,3   | 2,03         | 2,03         |      |
|                         | BORDILLO TIPO 3        | 1        | 14 | 0,2  | 0,2   | 0,56         | 0,56         |      |
|                         |                        |          |    |      |       |              | VOL TOTAL M3 | 3,24 |
|                         | MANTO GEOMEMBRANA Base | 1        | 14 | 5    | 15    | 70,00        | 35,00        |      |
| MANTO GEOMEMBRANA muros | 0,45                   | 14       | 5  | 15   | 15,30 | 15,30        |              |      |
|                         |                        |          |    |      |       | VOL TOTAL M2 | 50,30        |      |

| RESUMEN DE CANTIDADES           |      |      |       |       |
|---------------------------------|------|------|-------|-------|
| DETALLE                         | UNID | CANT | CANT  |       |
|                                 |      |      | UNIT  | TOTAL |
| HORMIGON H21                    |      |      |       |       |
| BORDILLO TIPO 1                 | M3   | 1    | 0,65  | 0,65  |
| BORDILLO TIPO 2                 | M3   | 1    | 2,03  | 2,03  |
| BORDILLO TIPO 3                 | M3   | 1    | 0,56  | 0,56  |
| VOL.TOTAL                       |      |      |       | 3,24  |
| MANTO GEOMEMBRANA Base<br>Muros | M2   | 1,00 | 50,30 | 50,30 |



**COMPUTOS METRICOS ROMPEMUELLE 1+950**

|  |    |
|--|----|
| Item:  | 23 |
| <b>PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA</b>                |    |
| <b>MEJORA EN LA IMPERMEABILIZACIÓN DEL PASAMURO CON PROTECCIÓN, SALIDA TUBERÍAS DESFOGUE D-2</b> |    |

| N°           | Ubicación  | Área              |
|--------------|------------|-------------------|
| 1            | Prog 0+020 | 7                 |
| 2            | Prog 0+035 | 8                 |
| 3            | Prog 0+046 | 2                 |
| 4            | Prog 0+393 | 2                 |
| 5            | Prog 0+588 | 2                 |
| 6            | Prog 0+678 | 2                 |
| 7            | Prog 0+688 | 2                 |
| 8            | Prog 0+774 | 2                 |
| 9            | Prog 0+800 | 2                 |
| 10           | Prog 1+339 | 2                 |
| 11           | Prog 1+360 | 2                 |
| 12           | Prog 1+390 | 2                 |
| 13           | Prog 1+525 | 2                 |
| 14           | Prog 1+610 | 2                 |
| 15           | Prog 1+674 | 2                 |
| 16           | Prog 1+695 | 2                 |
| 17           | Prog 1+770 | 2                 |
| 18           | Prog 1+824 | 2                 |
| 19           | Prog 1+885 | 2                 |
| 20           | Prog 1+983 | 2                 |
| <b>total</b> |            | 51 m <sup>2</sup> |

| REMOCION ESCOMBROS CANAL |            |      |
|--------------------------|------------|------|
| N°                       | Ubicación  | Vol. |
| 1                        | Prog 0+020 | 2,8  |
| 2                        | Prog 0+070 | 3,5  |
| <b>total</b>             |            | 6,3  |

m<sup>3</sup>



| RESUMEN DE CANTIDADES             |      |      |       |       |
|-----------------------------------|------|------|-------|-------|
| DETALLE                           | UNID | CANT | CANT  |       |
|                                   |      |      | UNIT  | TOTAL |
| REMOSION Y REPOSICIÓN DE EMPERADO | M2   | 1    | 51,00 | 51,00 |
| RETIRO DE ESCOMBROS Y LIMPIEZA    | M2   | 1    | 6,30  | 6,30  |



COMPUTOS METRICOS ROMPEMUELLE 1+950

| Item:   | 24                         |          |      |        |     |              |           |
|---|----------------------------|----------|------|--------|-----|--------------|-----------|
| PROYECTO: MEJORAMIENTO DE OBRAS Y REMEDIACIONES SOCIOAMBIENTALES - CHOCAYA                |                            |          |      |        |     |              |           |
| MEJORA EN LA IMPERMEABILIZACIÓN DEL PASAMURO CON PROTECCIÓN, SALIDA TUBERÍAS DESFOGUE D-2 |                            |          |      |        |     |              |           |
| ITEM  | DETALLE                    | CANTIDAD | L1   | L2     | H   | VOL. PARCIAL | VOL.TOTAL |
|   |                            |          | m    | m      | m   | M3           | M3        |
| 24  | MANTA ASFALTICA C/ALUMINIO | 2        | 0,6  | 3,1416 | 0,2 | 0,38         | 0,75      |
|   | MANTA ASFALTICA C/ALUMINIO | 2        | 0,8  | 0,9    |     | 0,72         | 1,44      |
|   | PLANCHA DE ACERO INXODABLE | 2        | 0,8  | 0,9    |     | 0,72         | 1,44      |
|   | IMPRIMACIÓN BITUMINOSA     | 2        | 0,38 | 0,72   |     | 1,10         | 2,19      |

| RESUMEN DE CANTIDADES      |      |      |      |       |
|----------------------------|------|------|------|-------|
| DETALLE                    | UNID | CANT | CANT |       |
|                            |      |      | UNIT | TOTAL |
| MANTA ASFALTICA C/ALUMINIO | M2   | 2    | 0,38 | 0,75  |
| MANTA ASFALTICA C/ALUMINIO | M2   | 2    | 0,72 | 1,44  |
| PLANCHA DE ACERO INXODABLE | M2   | 2    | 0,72 | 1,44  |

