

PROYECTO EJECUTIVO

OBRA N° 12

Defensa contra inundaciones a Pozo Borrado

Primera Etapa

- PLANOS -

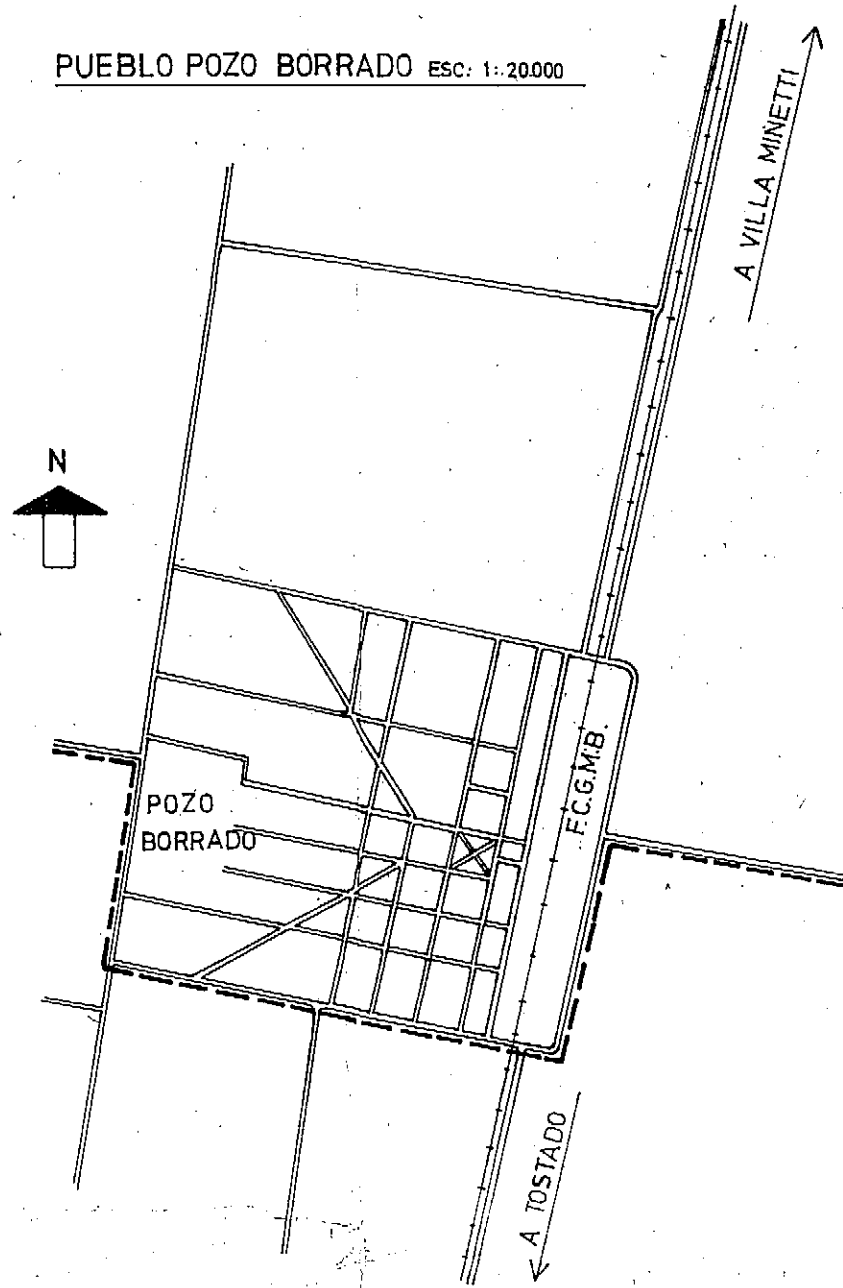
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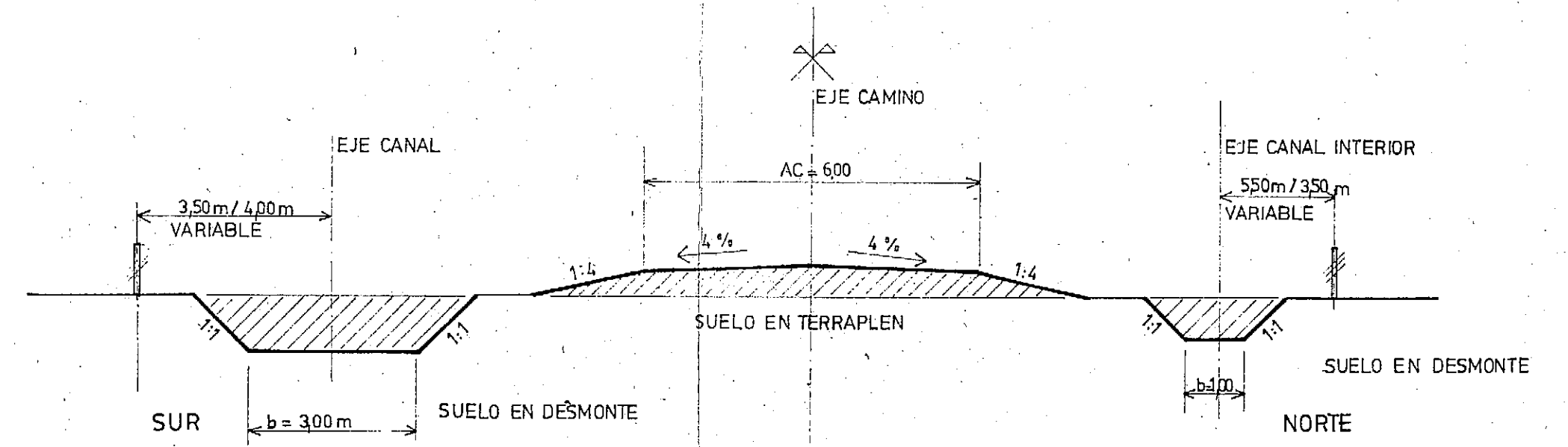
ANEXO: Proyecto de alcantarillas ferroviarias.

1. Memoria descriptiva.
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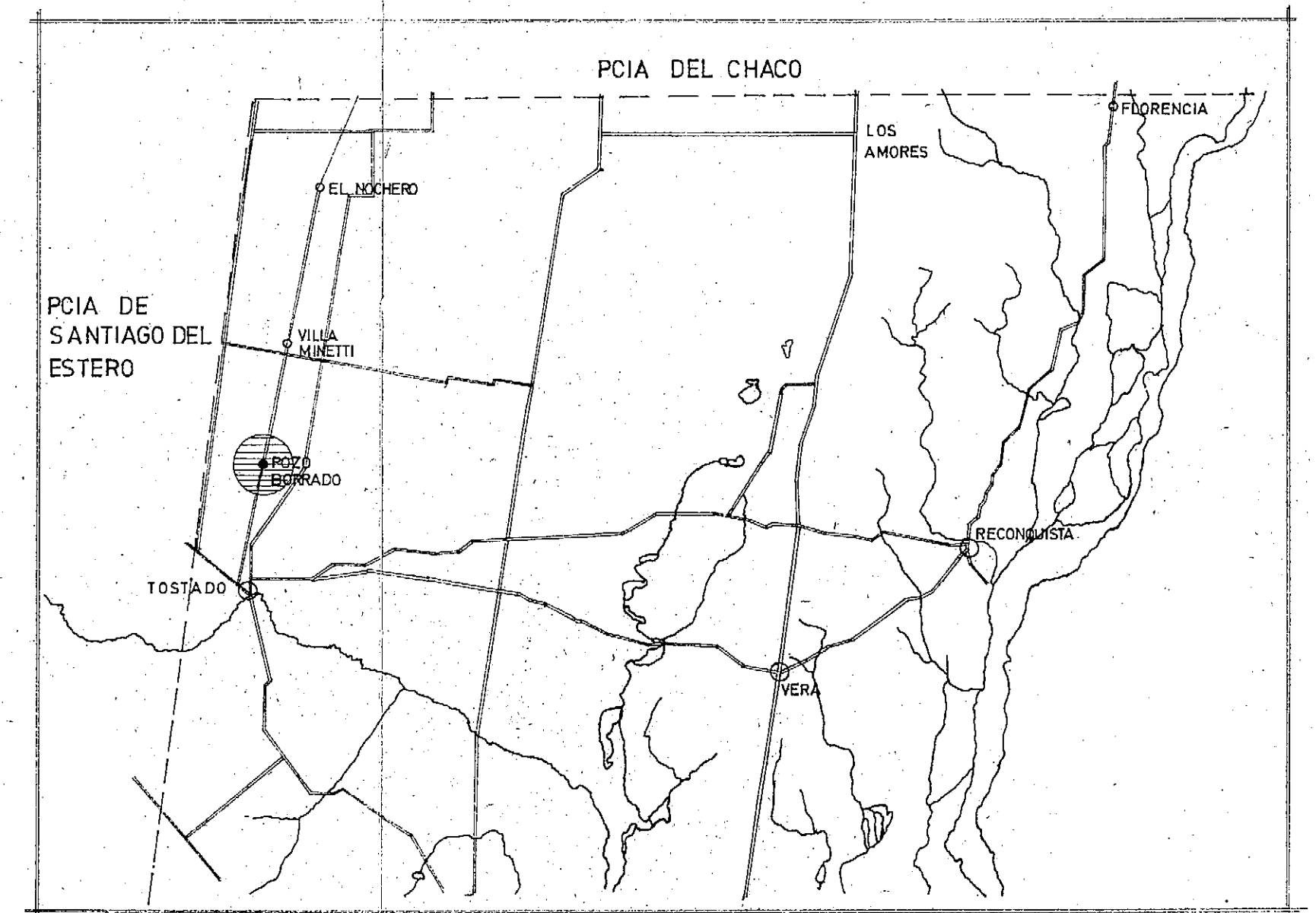
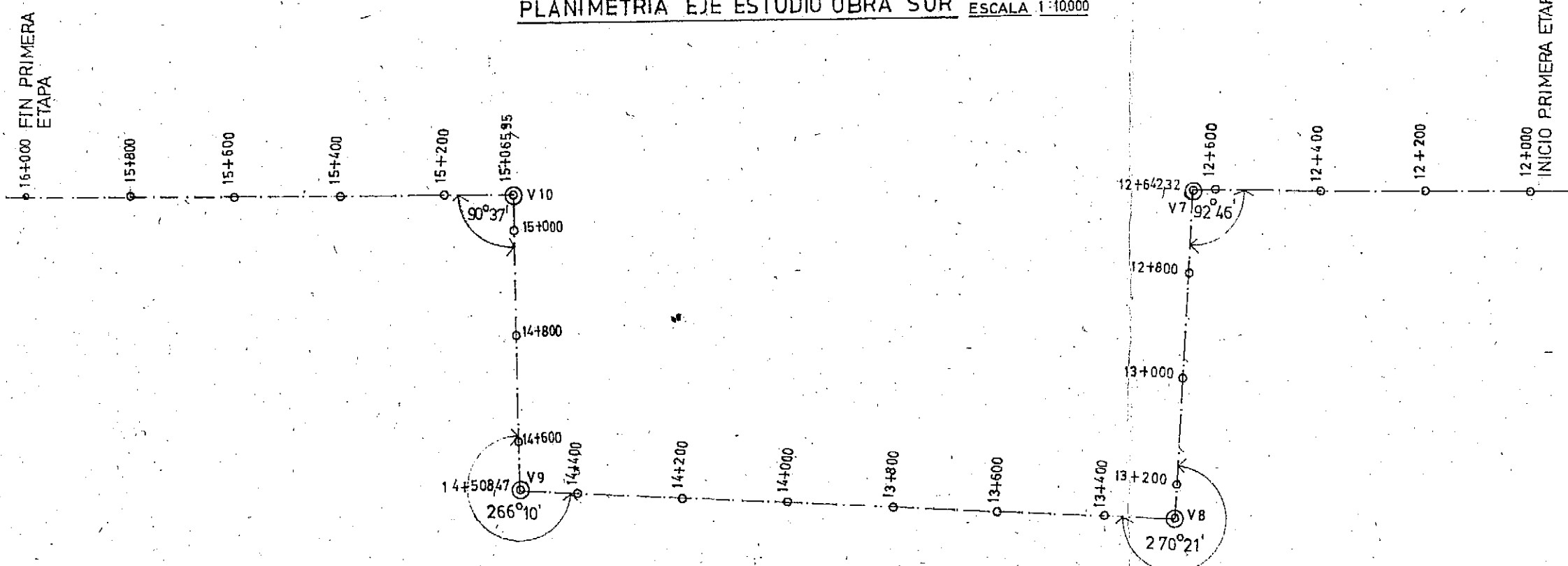
PUEBLO POZO BORRADO ESC: 1:20000



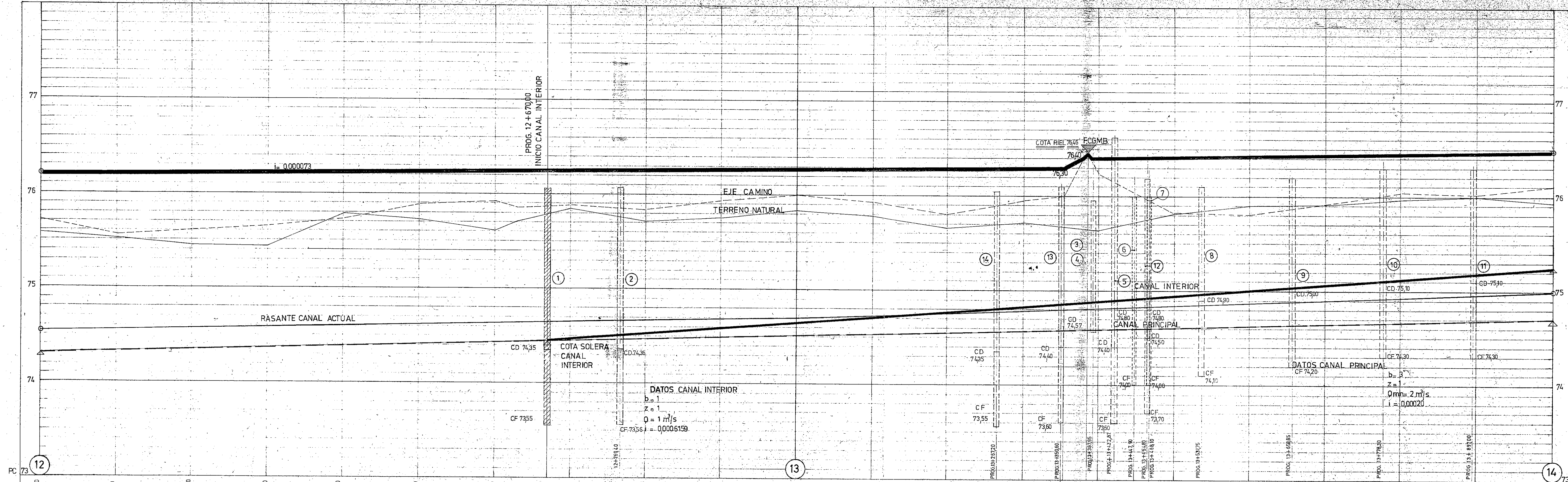
PERFIL TIPO



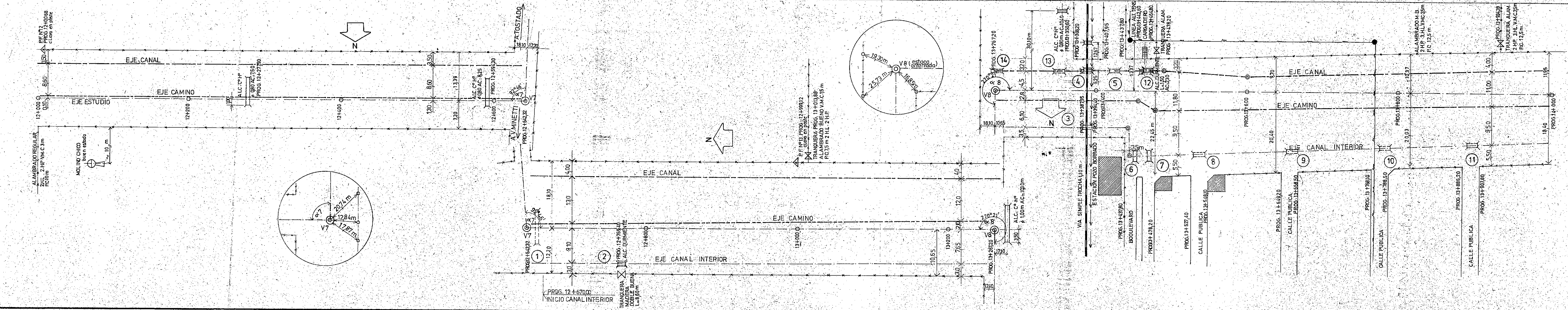
PLANIMETRIA EJE ESTUDIO OBRA SUR ESCALA 1:30000



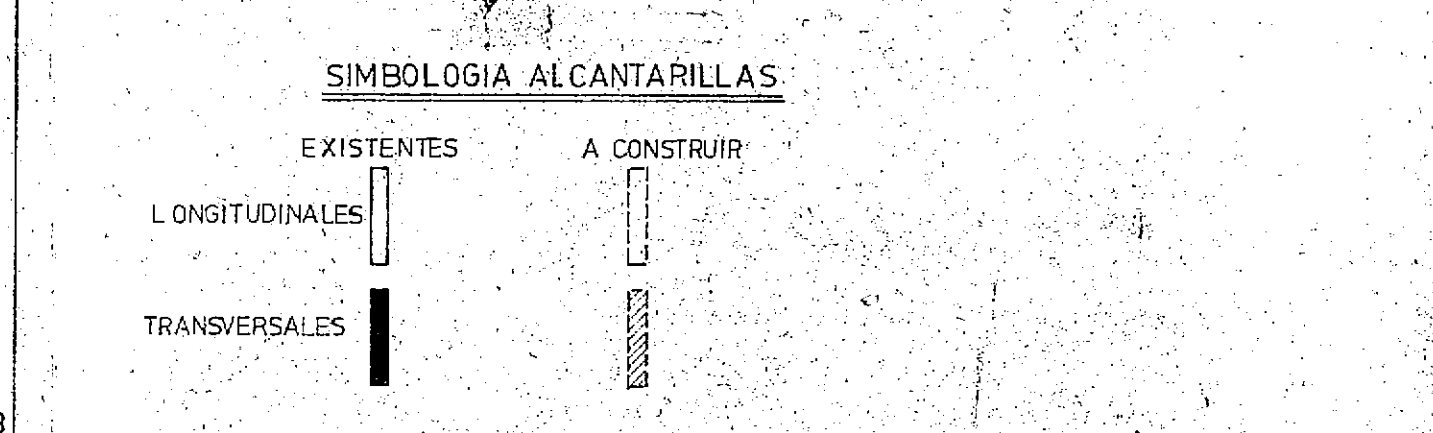
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|---|--|---|---|
| CONVENIO BAJOS SUBMERIDIONALES UNIDAD TECNICA SANTA FE | | CONSEJO FEDERAL DE INVERSIONES PROVINCIA DE SANTA FE | |
| ESTUDIO: | | OBRAS DE DEFENSA CONTRA INUNDACIONES A POZO BORRADO | |
| PROYECTO: | | | |
| DIBUJO: | | | |
| APROBO: | | 1ra ETAPA | |
| OBSERVACIONES: | | ESCALA: | |
| | | FECHA: | |
| | | N° PLANO: | 1 |



| PC | PROGRESIVA | | | | | | | | | | DATOS DEL ESTUDIO | | |
|-----|-----------------|----------------------|-------------------------|-------------------|---------------------------|-------------------------|---|-------------------|------------------------|-------------------------|--|--------------|------------------|
| | COTA PUNTO FIJO | COTA TERRENO NATURAL | COTAS EJE CAMINO ACTUAL | COTA FONDO SOLERA | PROFUNDIDAD DE EXCAVACION | AREA EXCAVACION TEORICA | AREA CUNETAS ACTUAL COINCIDENTE CON CANAL PRINCIPAL | COTA FONDO SOLERA | PROFUNDIDAD EXCAVACION | AREA EXCAVACION TEORICA | AREA CUNETAS ACTUAL COINCIDENTE CON CANAL INTERIOR | COTA RASANTE | ALTURA TERRAPLEN |
| 313 | 049.7620 | 049.7620 | 049.7621 | 049.7621 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 477 | 048.7621 | 048.7621 | 048.7621 | 048.7621 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 426 | 061.7621 | 061.7621 | 061.7621 | 061.7621 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 387 | 057.7622 | 057.7622 | 057.7622 | 057.7622 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 322 | 050.7623 | 050.7623 | 050.7623 | 050.7623 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 203 | 038.7624 | 038.7624 | 038.7624 | 038.7624 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 180 | 035.7624 | 035.7624 | 035.7624 | 035.7624 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 211 | 037.7625 | 037.7625 | 037.7625 | 037.7625 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 252 | 042.7626 | 042.7626 | 042.7626 | 042.7626 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 180 | 039.7626 | 039.7626 | 039.7626 | 039.7626 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 185 | 027.7627 | 027.7627 | 027.7627 | 027.7627 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 195 | 035.7628 | 035.7628 | 035.7628 | 035.7628 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 313 | 049.7629 | 049.7629 | 049.7629 | 049.7629 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 187 | 034.7629 | 034.7629 | 034.7629 | 034.7629 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 054 | 045.7640 | 045.7640 | 045.7640 | 045.7640 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 387 | 038.7641 | 038.7641 | 038.7641 | 038.7641 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 426 | 061.7643 | 061.7643 | 061.7643 | 061.7643 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 340 | 052.7644 | 052.7644 | 052.7644 | 052.7644 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 244 | 041.7646 | 041.7646 | 041.7646 | 041.7646 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 269 | 044.7647 | 044.7647 | 044.7647 | 044.7647 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 211 | 037.7649 | 037.7649 | 037.7649 | 037.7649 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |



- SIGNIFICADO DE LOS NUMEROS**
1. ALCANTARILLA TRANSVERSAL TIPO "E" S/PL.04. PROG. 12+670.00. SOBRE RTA PROV. N° 91. S. L=2 m. H=1.50 m. AC=8 m. COTA DES. 74.35. COTA FUND. 73.55.
 2. ALCANTARILLA LONGITUDINAL TIPO "E" S/PL.04. PROG. 12+769.40. L=2 m. H=1.50 m. AC=6 m. COTA DES. 74.36. COTA FUND. 73.56.
 3. ALCANTARILLA LONGITUDINAL EN INTERSECCION CON F.C.G.M.B. SEGUN PLANO 05. PROG. FREG. 370+522.47. PROG. 13+387.95. COINCIDENTE CON VIAS F.E.C.C. PARA CANAL INTERIOR. L=2 m. H=1 m. AC=4.50 m. COTA DESAGUE: 74.57.
 4. ALCANTARILLA LONGITUDINAL EN COINCIDENCIA CON EL F.E.C.C. S/PLANO 05. PROG. 13+387.95. COINCIDENTE CON EL F.E.C.C. PARA CANAL PRINCIPAL. L=2 m. H=1 m. AC=4.50 m. COTA DESAGUE: 74.57.
 5. ALCANTARILLA LONGITUDINAL TIPO "E" SEGUN PLANO 04. PROG. 13+422.87. L=3 m (2L=150m). H=1.50 m. AC=6 m. COTA DESAGUE: 74.40. COTA FUND.: 73.60.
 6. ALCANTARILLA LONGITUDINAL TIPO "E" S/PL.04. L=2 m. H=1 m. AC=6.00 m. CD=74.80. CF=74.00. PROG. 13+447.9 (CANAL INTERIOR).
 7. ALCANTARILLA LONGITUDINAL TIPO "E" S/PL.04 (PARA CANAL INTERIOR) PROG. 13+468.10. L=2 m. H=1.00 m. AC=6.00 m. CD=74.80 m. CF=74.00.
 8. ALCANTARILLA LONGITUDINAL TIPO "E" S/PL.04. PROG. 13+537.75 (CANAL INTERIOR). L=2 m. H=1 m. AC=6 m. CD=74.90. CF=74.10.
 9. ALCANTARILLA LONGITUDINAL TIPO "E" S/PL.04 (PARA CANAL INTERIOR) PROG. 13+658.85 (SOBRE CANAL INTERIOR). L=2 m. H=1 m. AC=6 m. CD=75.00. CF=74.20.
 10. ALCANTARILLA LONGITUDINAL TIPO "E" SEGUN PL.04. PROG. 13+778.30 (SOBRE CANAL INTERIOR). L=2 m. H=3 m. AC=6 m. CD=75.10. CF=74.30.
 11. ALCANTARILLA LONGITUDINAL TIPO "E" S/PL.04. PROG. 13+897.00. (SOBRE CANAL INTERIOR). L=2 m. H=1 m. AC=6 m. CD=75.10. CF=74.30.
 12. ALCANTARILLA LONGITUDINAL TIPO "E" S/PL.04. PROG. 13+464.80. COINCIDENCIA CON CARGADERO DE HACIENDA DE COOP.PRINC. L=3 (2L=150). H=1.50 m. AC=6 m. CD=74.50. CF=73.70.
 13. ALCANTARILLA LONGITUDINAL TIPO "E" S/PL.04. PROG. 13+350.60. (SOBRE CANAL PRINCIPAL). L=3 m. H=1.5 m. AC=6 m. CD=74.40. CF=73.60.
 14. ALCANTARILLA LONGITUDINAL TIPO "E" S/PL.04. PROG. 13+267.20. L=3 m. H=1.50 m. AC=8 m. CD=74.35. CF=73.55.



| PROGRESIVA | | DATOS DEL ESTUDIO | |
|---------------------------|--|---|-----------------|
| COTA PUNTO FIJO | | COTA TERRENO NATURAL | |
| COTAS EJE CAMINO ACTUAL | | COTA FONDO SOLERA | |
| PROFUNDIDAD DE EXCAVACION | | AREA EXCAVACION TEORICA | CANAL PRINCIPAL |
| AREA EXCAVACION TEORICA | | AREA CUNETAS ACTUAL COINCIDENTE CON CANAL PRINCIPAL | |
| COTA FONDO SOLERA | | PROFUNDIDAD EXCAVACION | CANAL INTERIOR |
| AREA EXCAVACION TEORICA | | AREA CUNETAS ACTUAL COINCIDENTE CON CANAL INTERIOR | |
| COTA RASANTE | | ALTURA TERRAPLEN | CAMINO |
| AREA TERRAPLEN CAMINO | | | |

NOTA: DONDE NO FIGURA VALOR DE CUNETA EXISTENTE SIGNIFICA QUE ES IGUAL O MAYOR QUE LA EXCAVACION TEORICA

EXCAVACION TOTAL LAMINA = 5495 m³

AREA TERRAPLEN TOTAL LAMINA = 7457 m²

ALTIMETRIA ESCALAS: HORIZONTAL: 1:250 - VERTICAL: 1:20

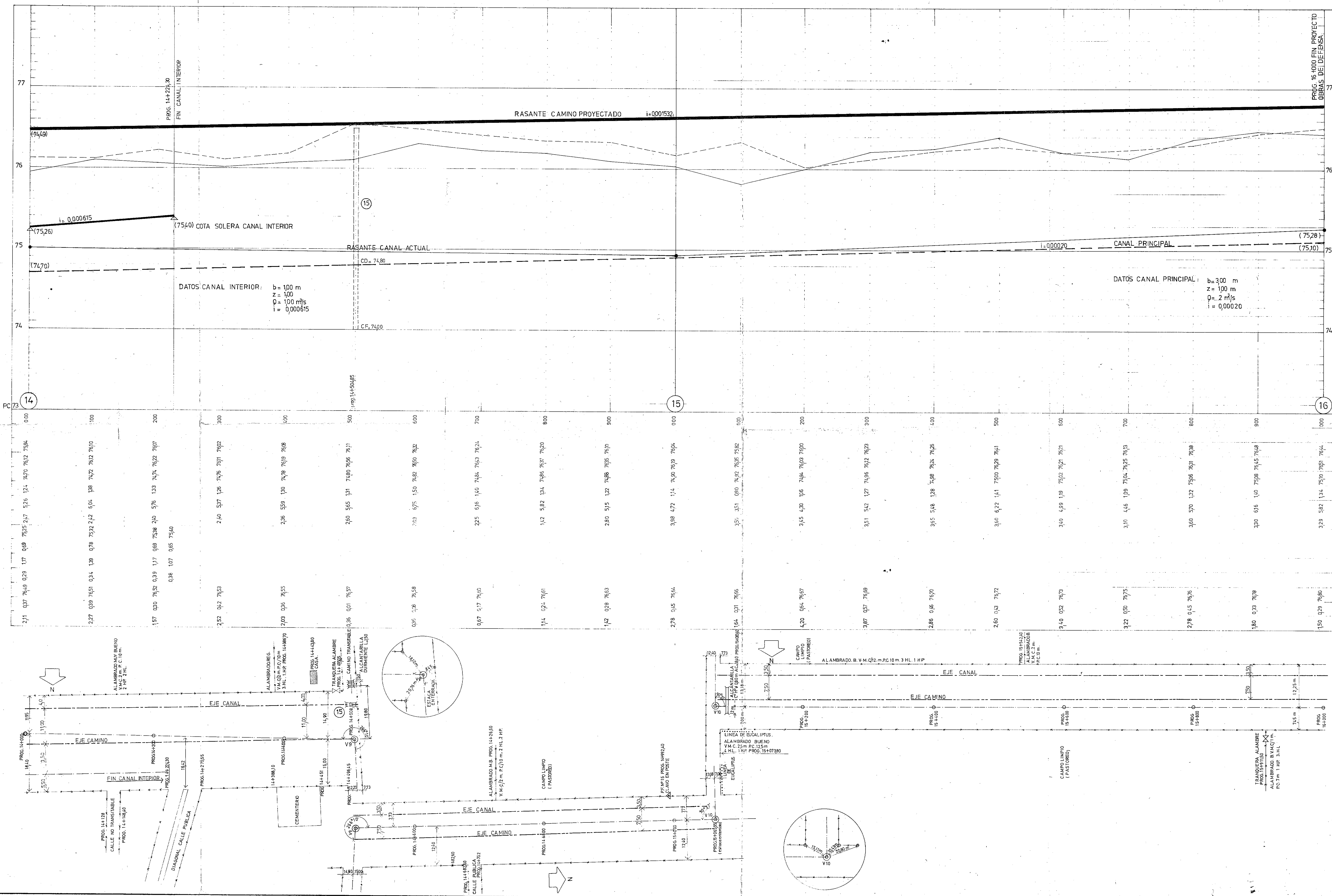
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| CONVENIO BAJO SUBMERIDIONALES | | CONSEJO FEDERAL DE INVERSIONES | |
| UNIDAD TECNICA SANTA FE | | PROVINCIA DE SANTA FE | |
| ESTUDIO: | PLANI-ALTIMETRIA PROGRESIVAS 12+1000 A 14+000 | | |
| PROYECTO: | OBRAS DE DEFENSA CONTRA INUNDACIONES A POZO BORRADO | | |
| DIBUJO: | | | |
| APROBADO: | | 1ra ETAPA | |
| OBSERVACIONES: | | | |

| | |
|----------------|---|
| ESTUDIO: | PLANI-ALTIMETRIA PROGRESIVAS 12+1000 A 14+000 |
| PROYECTO: | OBRAS DE DEFENSA CONTRA INUNDACIONES A POZO BORRADO |
| DIBUJO: | |
| APROBADO: | |
| OBSERVACIONES: | |

ESCALA: _____

FECHA: _____

INPLANO: 2



SIGNIFICADO DE LOS NUMEROS

15 ALCANTARILLA LONG. TIPO "E" SEG. PL. 04. PROG. 14+504,85 (CANAL PRINCIPAL)
 L = 3 m (2L = 150 m) - H = 1,50 m. AC = 8 m - CD = 74,80 CF = 74,00
 EXCAVACION TOTAL LAMINA : 5.113,6 m³
 AREA TERRAPLEN TOTAL LAMINA : 5923 m³

DATOS CANAL INTERIOR:
 b = 100 m
 z = 100
 Q = 100 m³/s
 i = 0,000615

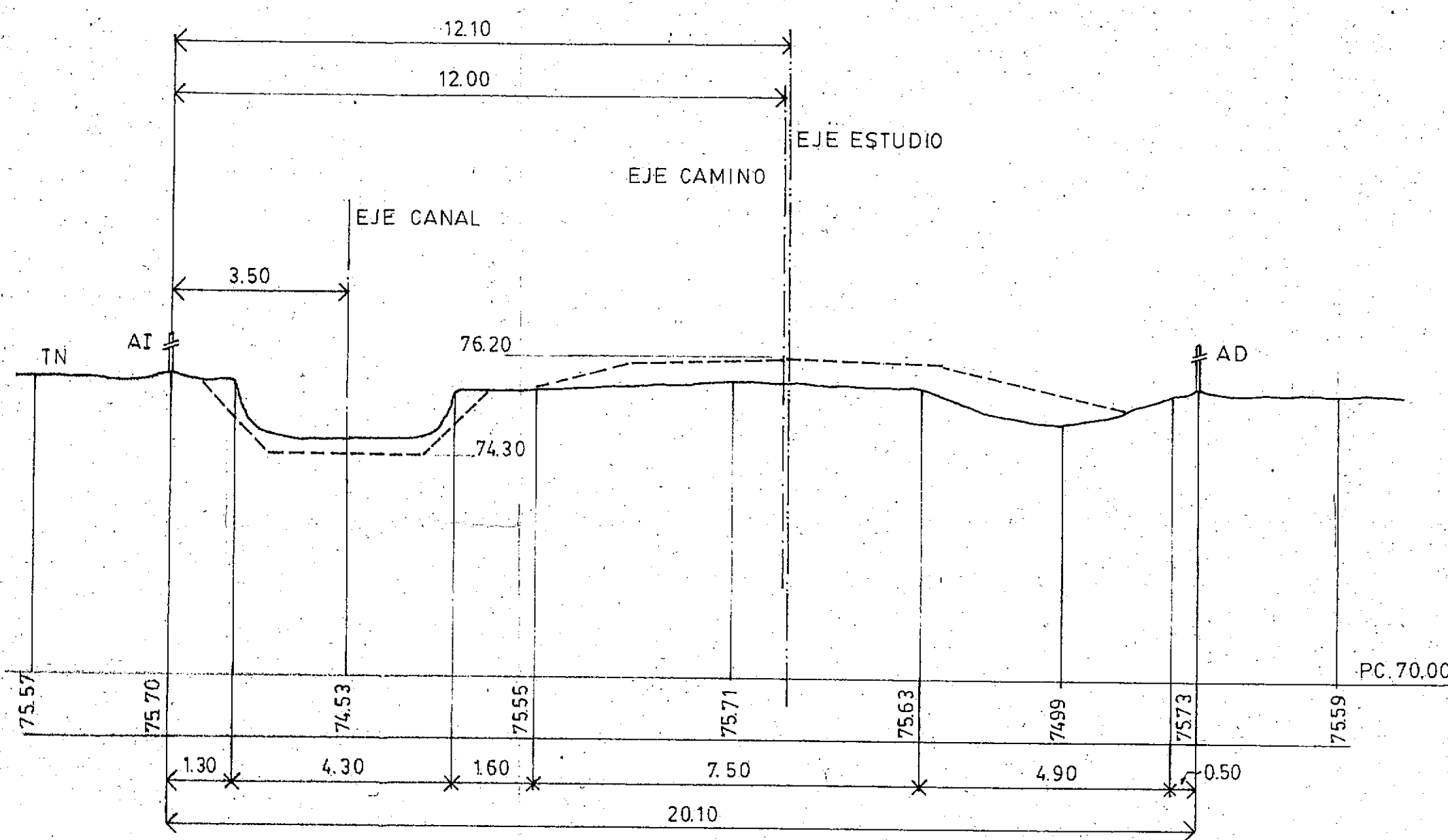
DATOS CANAL PRINCIPAL:
 b = 300 m
 z = 100 m
 Q = 2 m³/s
 i = 0,00020

| PROGRESIVA | DATOS DEL ESTUDIO | |
|--|-------------------|-----------------|
| | CANAL INTERIOR | CANAL PRINCIPAL |
| COTA PUNTO FIJO | | |
| COTA TERRENO NATURAL | | |
| COTAS EJE CAMINO ACTUAL | | |
| COTA FONDO SOLERA | | |
| PROFUNDIDAD DE EXCAVACION | | |
| AREA EXCAVACION TEORICA | | |
| AREA CUNETAS ACTUALES COINCIDENTES CON CANAL PRINCIPAL | | |
| COTA FONDO SOLERA | | |
| PROFUNDIDAD EXCAVACION | | |
| AREA EXCAVACION TEORICA | | |
| AREA CUNETAS ACTUALES COINCIDENTES CON CANAL INTERIOR | | |
| COTA RASANTE | | |
| ALTURA TERRAPLEN | | |
| AREA TERRAPLEN CAMINO | | |

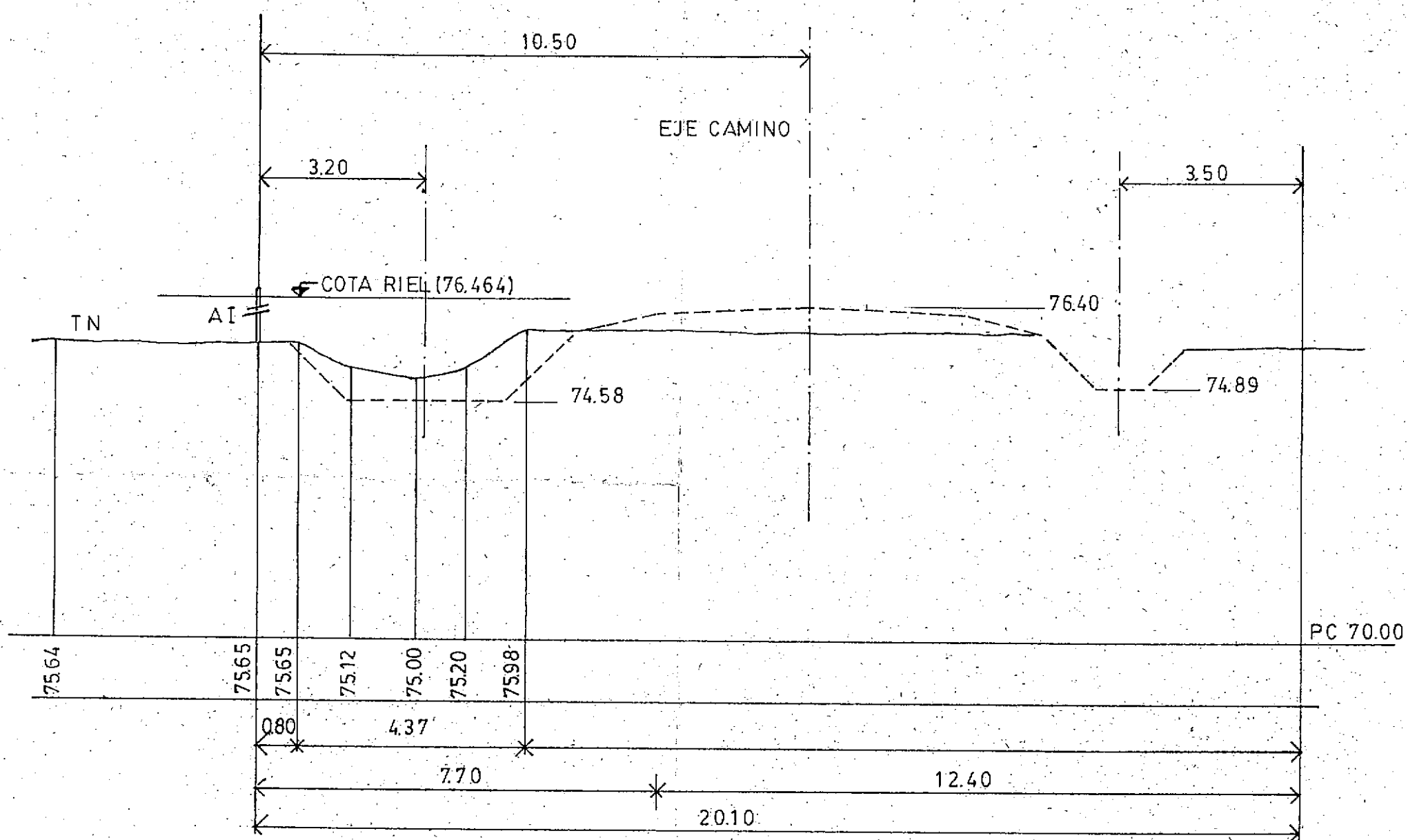
ALTIMETRIA ESCALAS: HORIZONTAL: 1:2500 VERTICAL: 1:20

| | | |
|------------------------------|---|--------------------------------|
| CONVENIO BAJOS SUBMEDIANALES | | CONSEJO FEDERAL DE INVERSIONES |
| UNIDAD TECNICA SANTA FE | | PROVINCIA DE SANTA FE |
| ESTUDIO: | PLANI/ALTIMETRIA | PROGRESIVAS 14+000 A 16+000 |
| PROYECTO: | OBRAS DE DEFENSA CONTRA INUNDACIONES A POZO | |
| DIBUJO: | BORRADO | |
| APROBADO: | 1ra ETAPA | |
| OBSERVACIONES: | ESCALA: | FECHA: |
| | | Nº PLANO: |

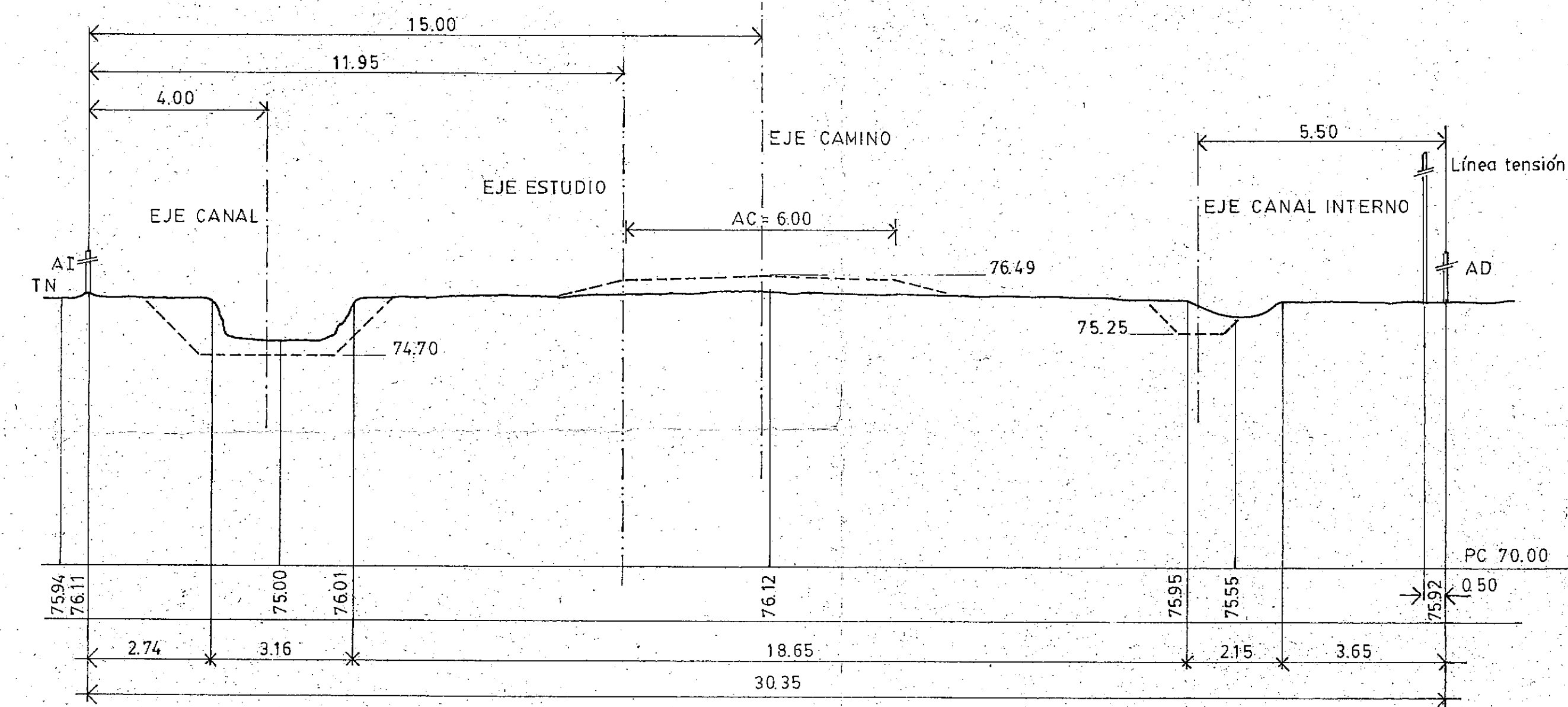
PERFIL TRANSVERSAL PROG. 12+000



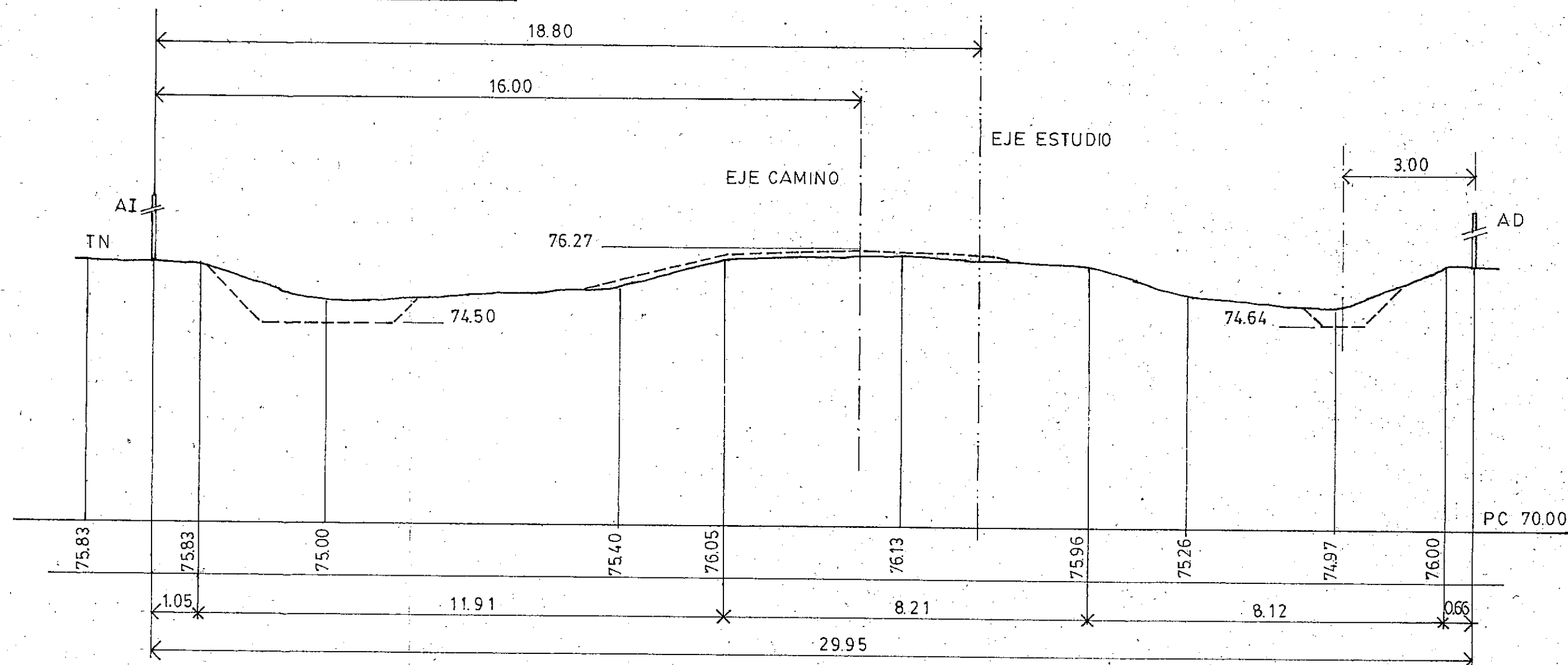
PERFIL TRANSVERSAL PROG. 13+400



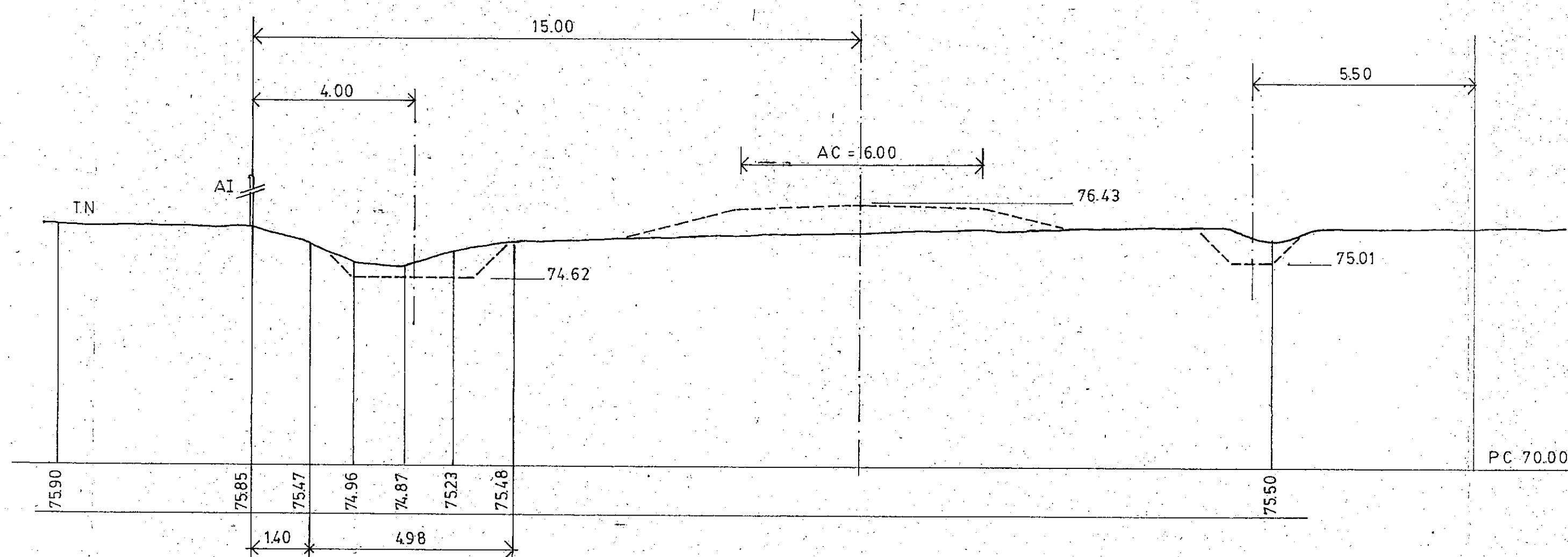
PERFIL TRANSVERSAL PROG. 14+000



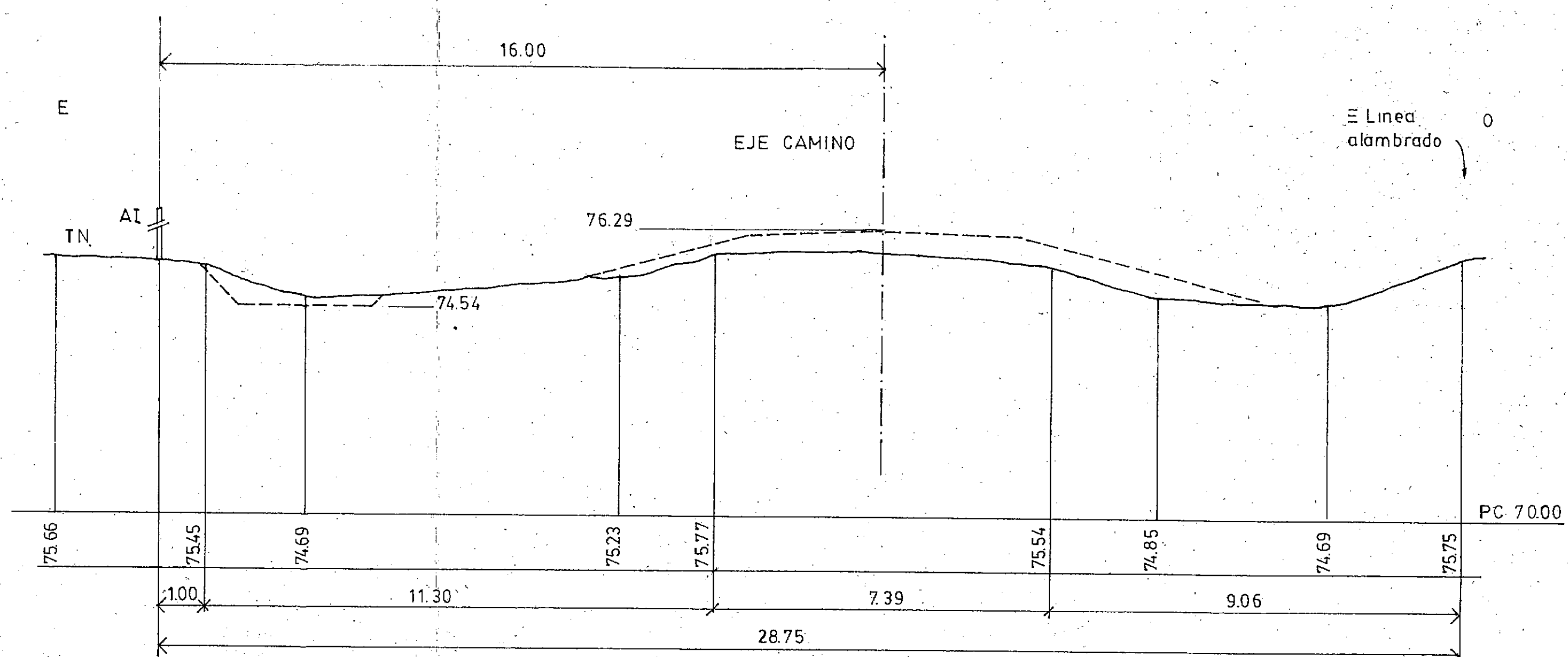
PERFIL TRANSVERSAL PROG. 13+000



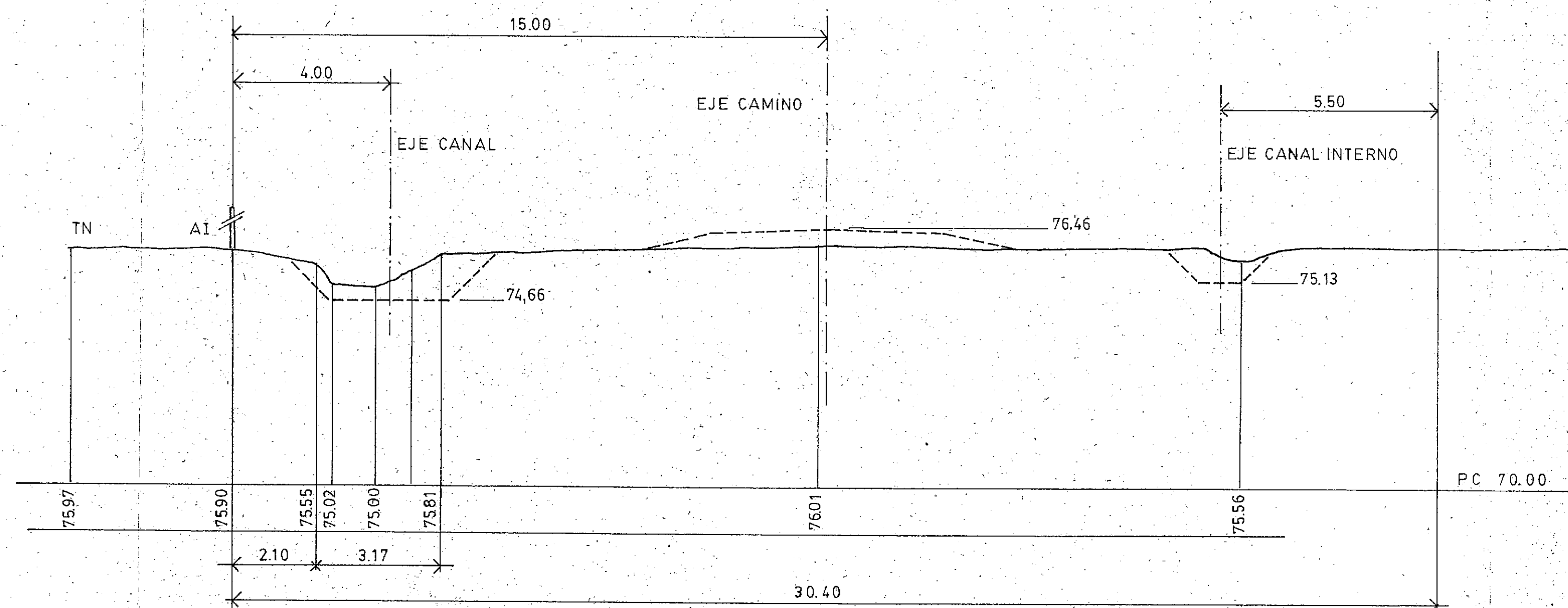
PERFIL TRANSVERSAL PROG. 13+600



PERFIL TRANSVERSAL PROG. 13+200

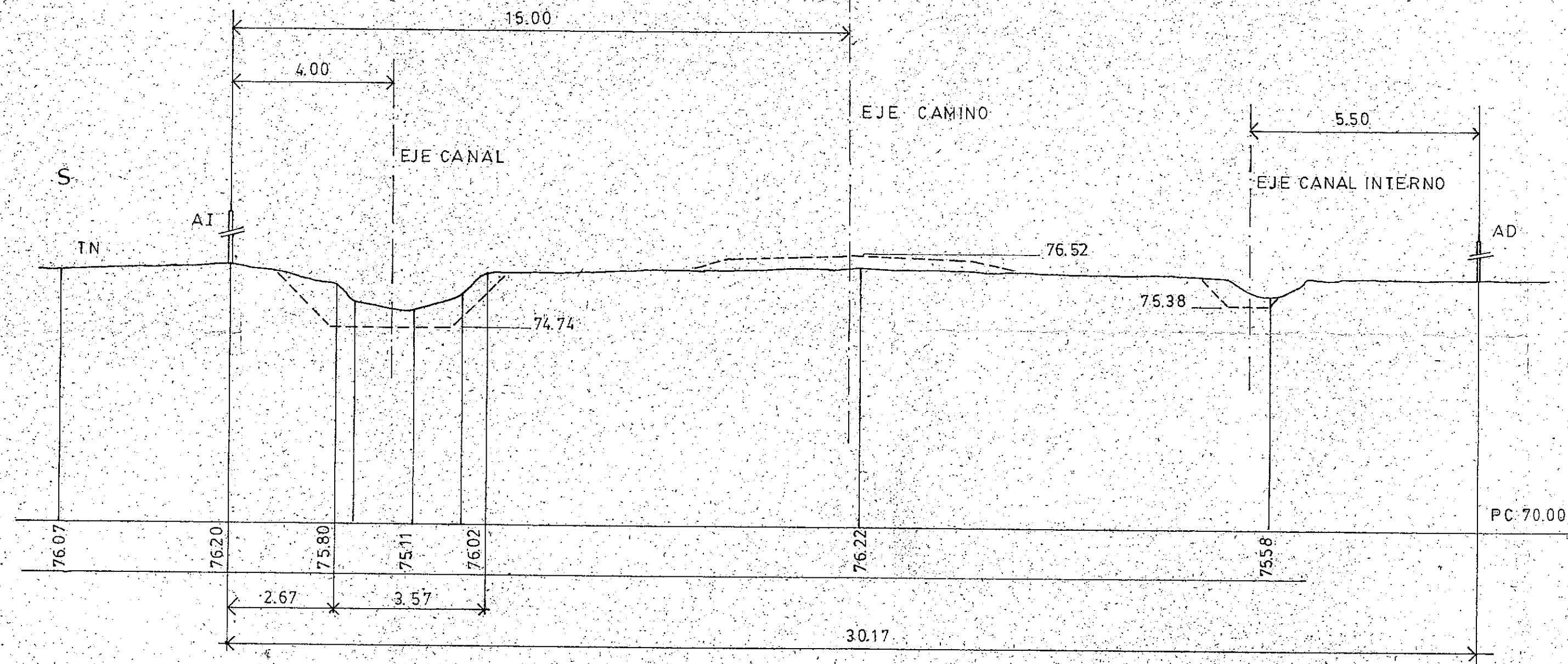


PERFIL TRANSVERSAL PROG. 13+800

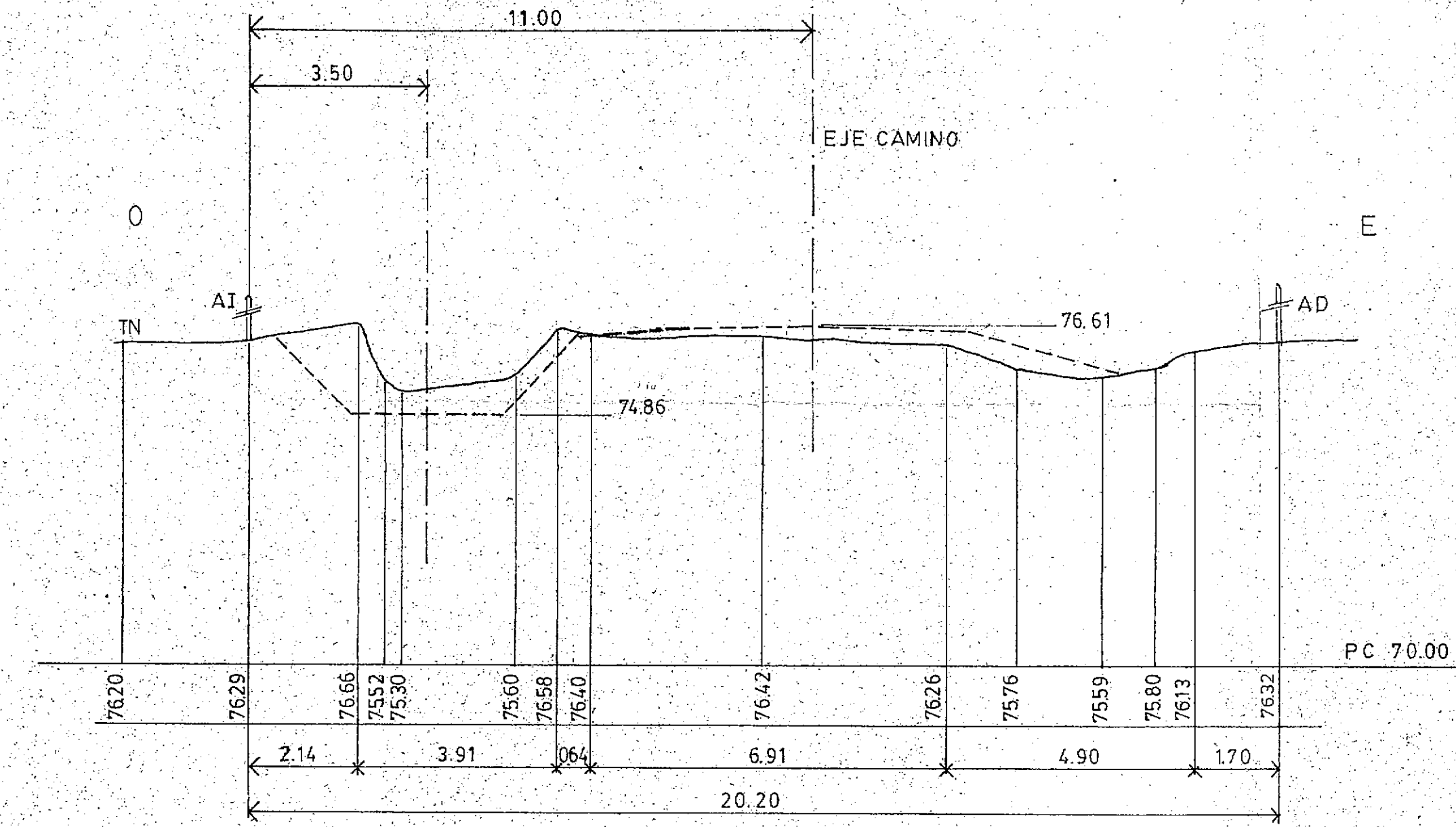


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|---|--|---|--|
| CONVENIO BAJOS SUBMERIDIONALES UNIDAD TECNICA SANTA FE | | CONSEJO FEDERAL DE INVERSIONES PROVINCIA DE SANTA FE | |
| TOPOGRAFIA | | PERFILES TRANSVERSALES | |
| PROYECTADO | | | |
| DIBUJADO | | OBRAS DE DEFENSA CONTRA INUNDACIONES A | |
| RESPONSABLE TECNICO | | POZO BORRADO. | |
| OBSERVACIONES | | 1ra ETAPA | |
| | | ESCALA 1:100 | |
| | | FECHA | |
| | | Nº DE PLANO 4 | |

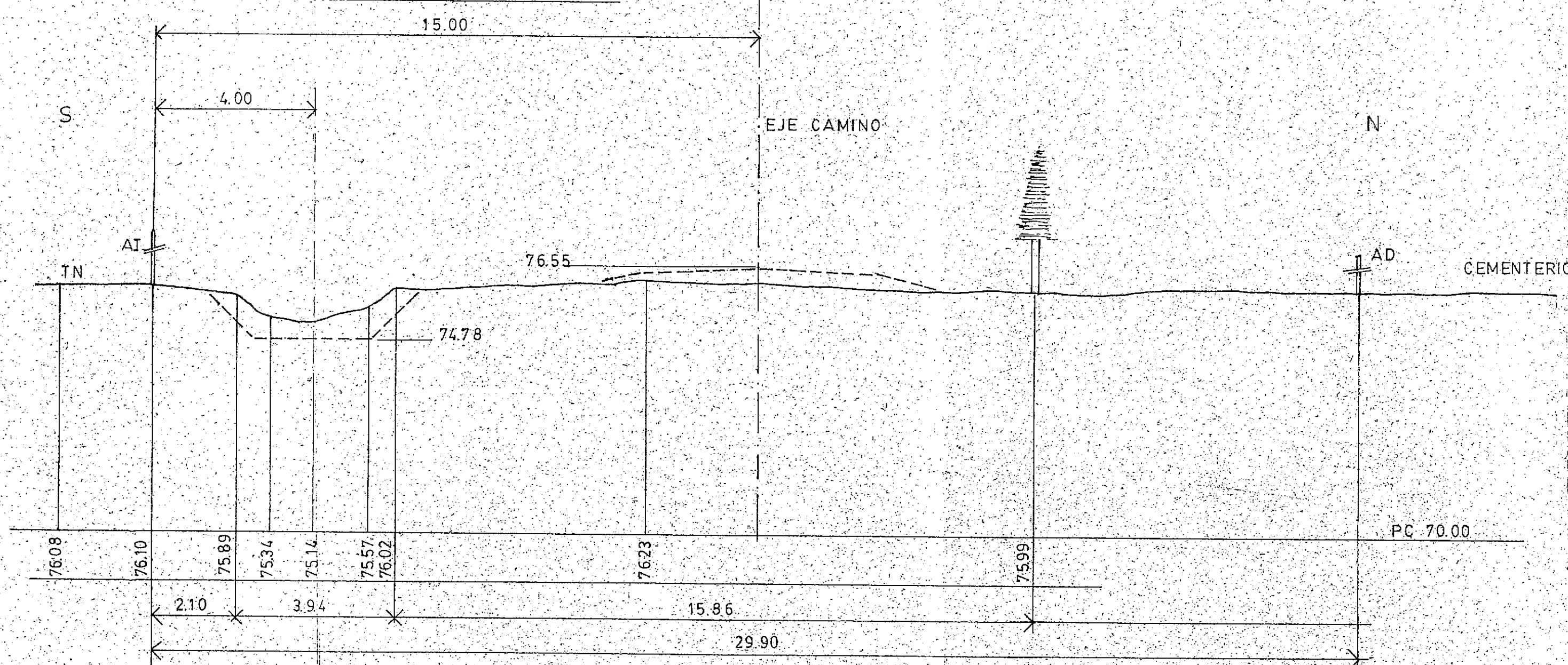
PERFIL TRANSVERSAL PROG. 14+200



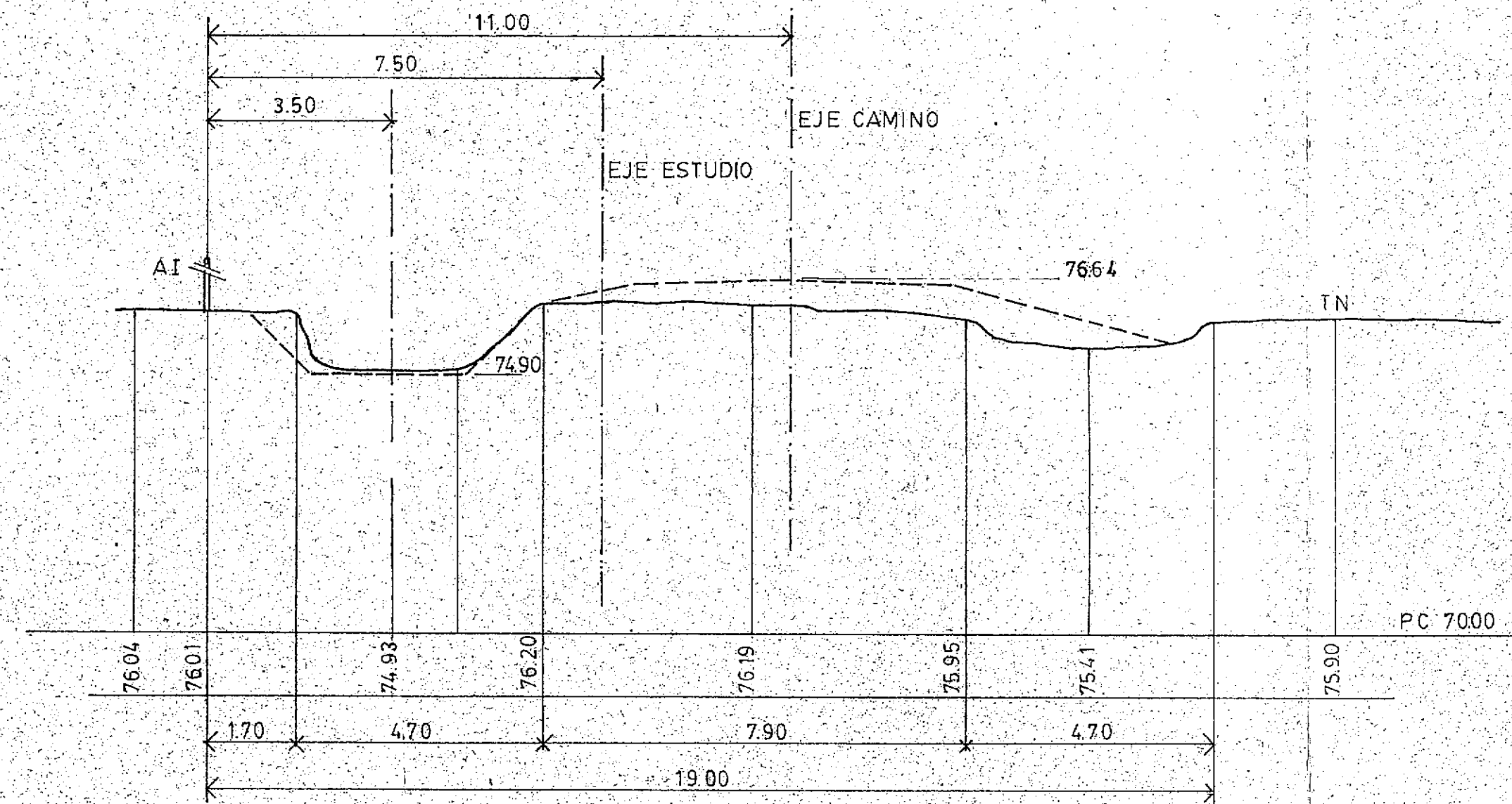
PERFIL TRANSVERSAL PROG. 14+800



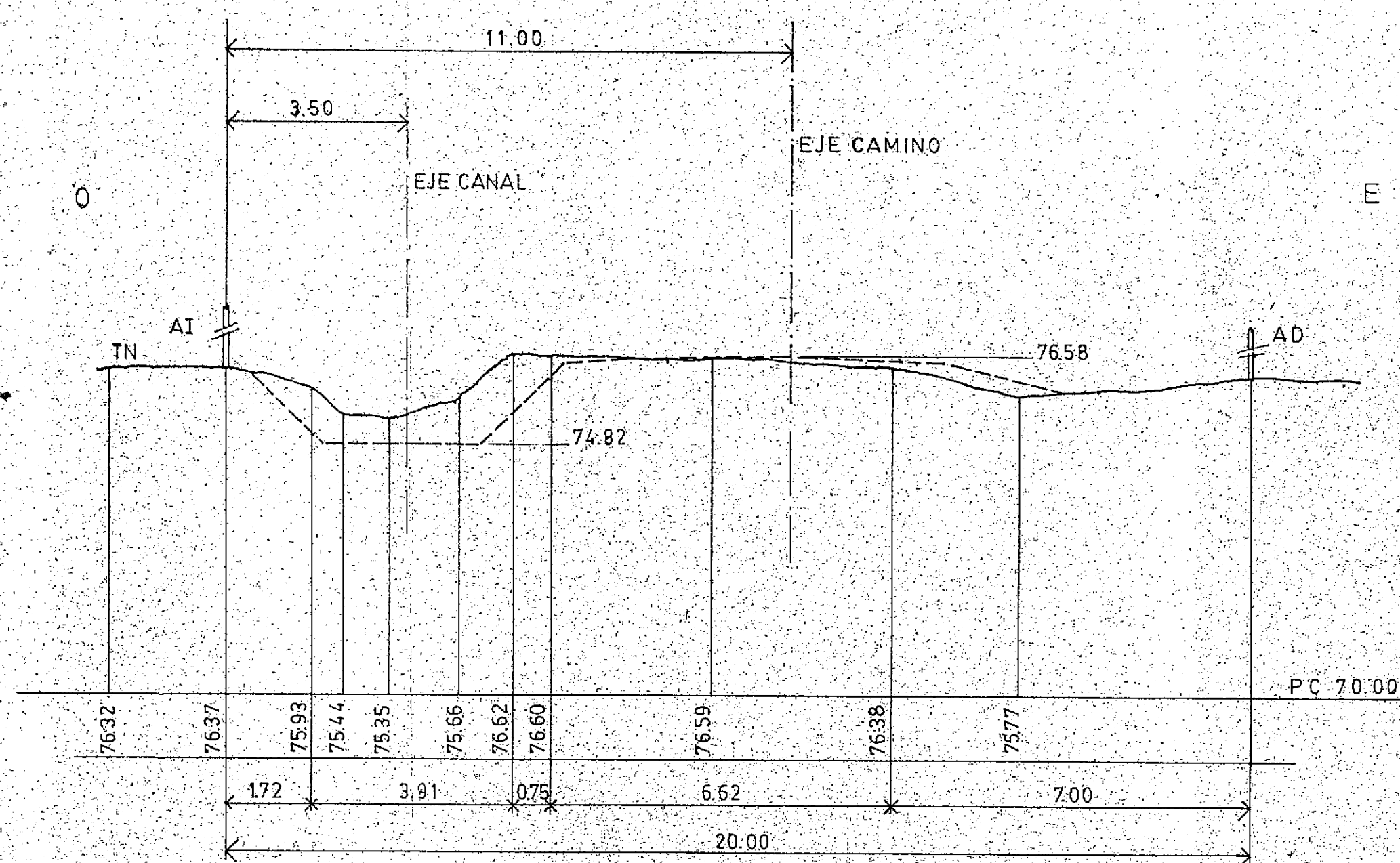
PERFIL TRANSVERSAL PROG. 14+400



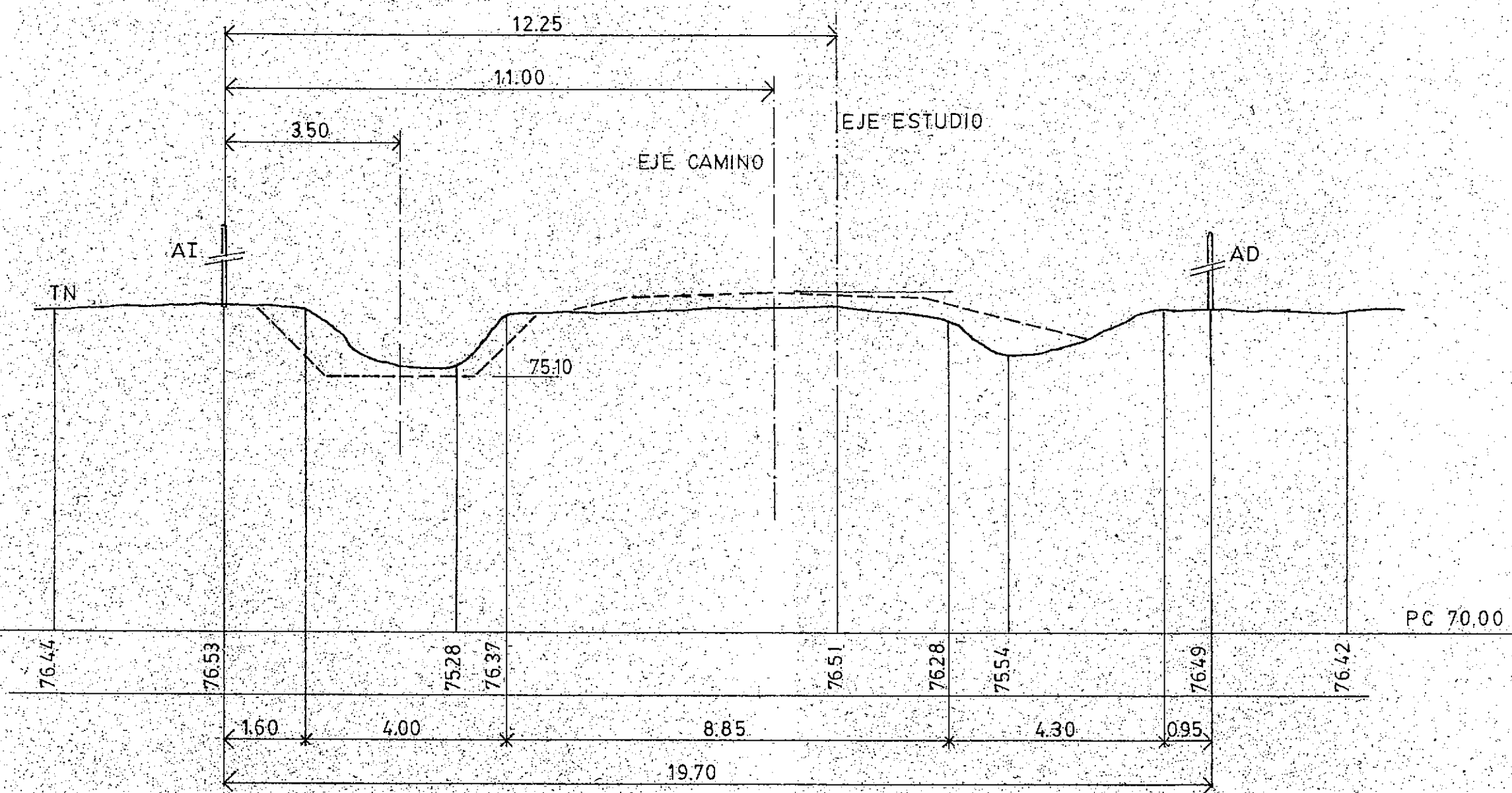
PERFIL TRANSVERSAL PROG. 15+000



PERFIL TRANSVERSAL PROG. 14+600

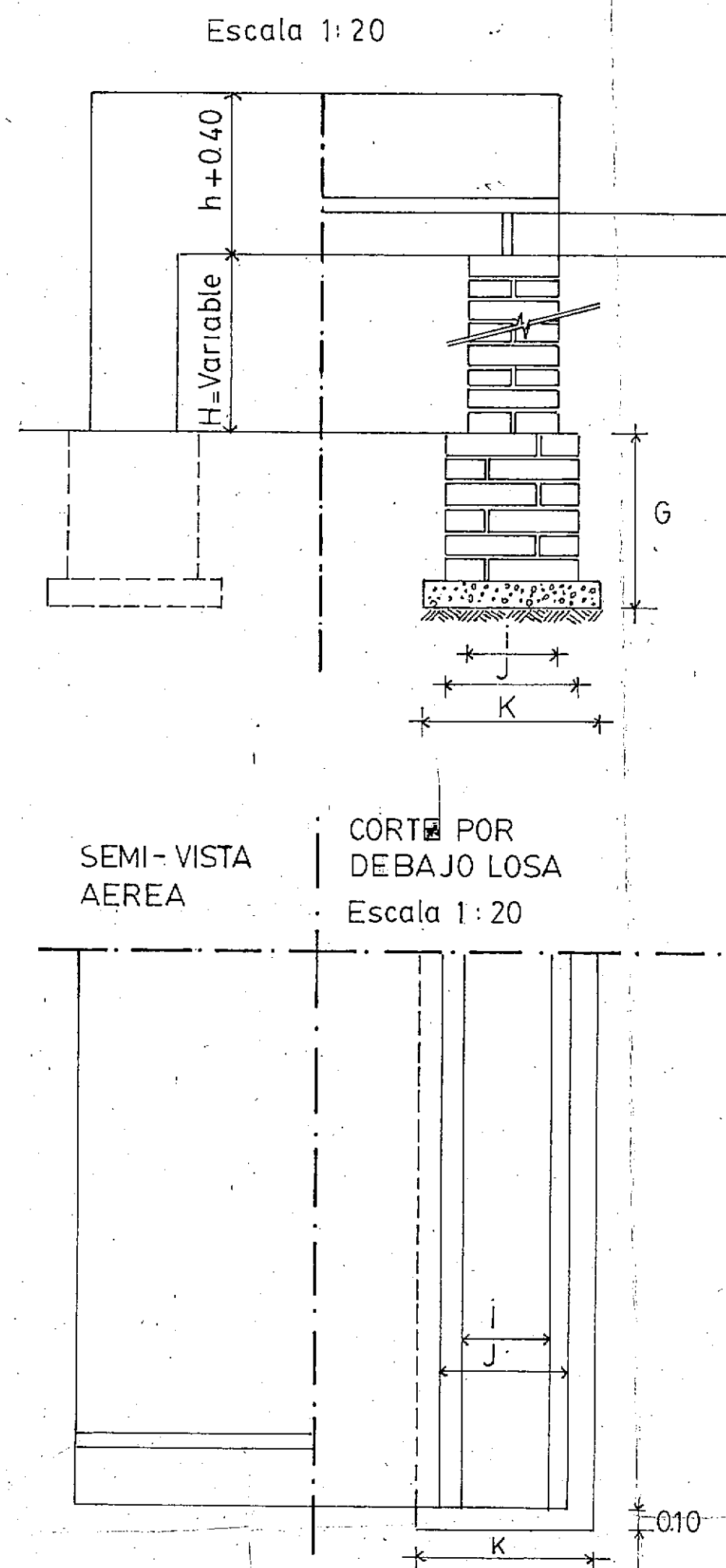


PERFIL TRANSVERSAL PROG. 16+000

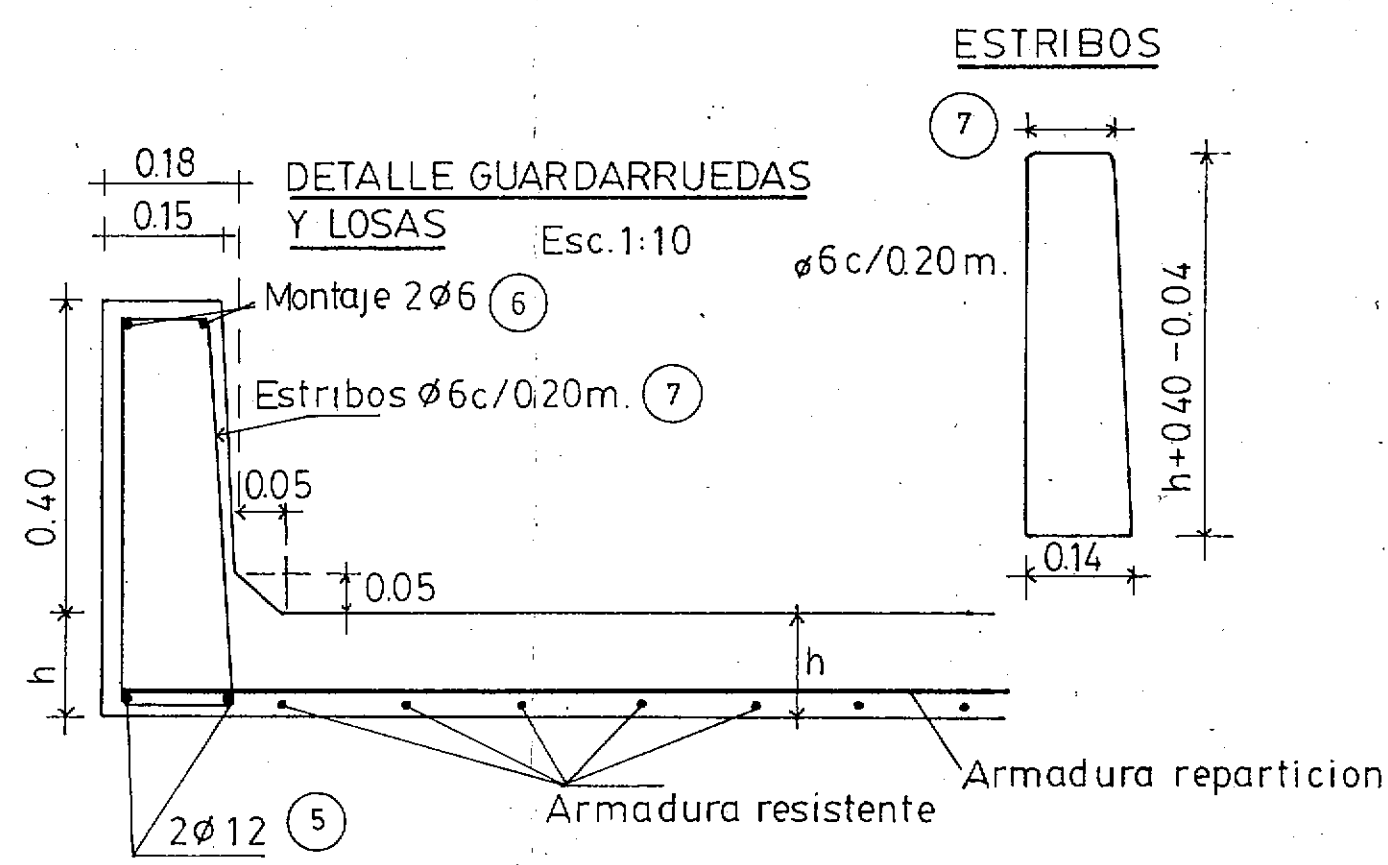
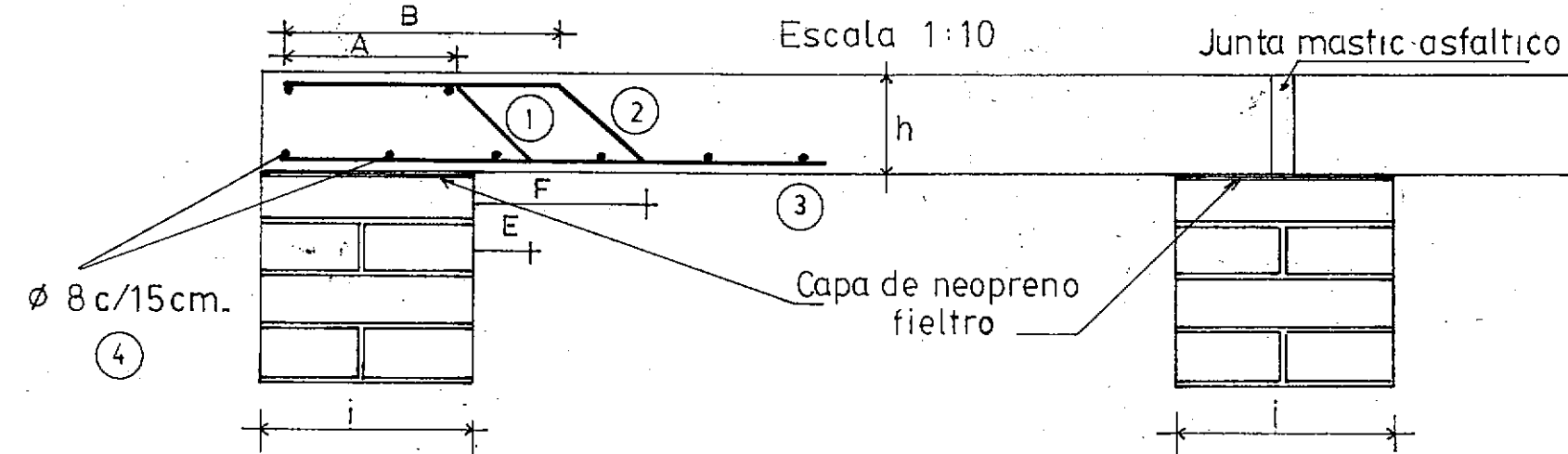


| | | |
|---|--|---|
| CONVENIO BAJOS SUBMERIDIONALES UNIDAD TECNICA SANTA FE | | CONSEJO FEDERAL DE INVERSIONES PROVINCIA DE SANTA FE |
| TOPOGRAFIA | | PERFILES TRANSVERSALES |
| PROYECTADO | | |
| DIBUJADO | | OBRAS DE DEFENSA CONTRA INUNDACIONES A POZO BORRADO |
| RESPONSABLE TECNICO | | 1ra ETAPA |
| OBSERVACIONES | | ESCALA 1:100 |
| | | FECHA |
| | | Nº DE PLANO |

VISTA - CORTE



DETALLE DE LA ARMADURA DE LA LOSA



NOTA: Las dimensiones se ajustarán en obra...

| TIPO | DETALLE | Ø | Separación | |
|------|------------------------|----|------------|---------|
| | | | L. 1.50 | L. 2.00 |
| 1 | | 12 | 0.465 | 0.435 |
| 2 | | 12 | 0.465 | 0.435 |
| 3 | | 12 | 0.465 | 0.435 |
| 4 | | 8 | 0.15 | 0.15 |
| 5 | | 12 | — | — |
| 6 | | 6 | — | — |
| 7 | Segun detalle estribos | 6 | 0.20 | 0.20 |

| A C m. | L m. | DIMENSIONES | | | | | | COMPUTOS | | | |
|--------|------|-------------|------|-------------|--------------------|-----------------------|------------------------|------------------------|------------|----------------|---------------------------------|
| | | H m. | g m. | h (losa) m. | i (ancho pilar) m. | j (ancho cimiento) m. | k (ancho fundación) m. | VOLUMEN mamposteria m3 | Hº losa m3 | Hº cascotes m3 | VOLUMEN EXCAVACION cimientos m3 |
| 6.00 | 2.00 | 1.50 | 0.80 | 0.20 | 0.30 | 0.45 | 0.60 | 9.72 | 3.48 | 0.74 | 15.88 |
| | | 2.00 | 0.90 | 0.20 | 0.30 | 0.45 | 0.60 | 12.06 | 3.48 | 0.74 | 17.64 |
| | | 2.50 | 1.00 | 0.20 | 0.45 | 0.60 | 0.75 | 20.70 | 3.89 | 0.93 | 19.40 |
| | 3.00 | 1.50 | 0.70 | 0.18 | 0.30 | 0.45 | 0.60 | 13.77 | 4.76 | 1.12 | 21.18 |
| | | 2.00 | 0.80 | 0.18 | 0.30 | 0.45 | 0.60 | 17.28 | 4.76 | 1.12 | 23.82 |
| | | 2.50 | 0.90 | 0.18 | 0.45 | 0.60 | 0.75 | 29.97 | 5.31 | 1.40 | 26.46 |
| | 4.00 | 1.50 | 0.80 | 0.20 | 0.30 | 0.45 | 0.60 | 14.58 | 6.57 | 1.12 | 23.82 |
| | | 2.00 | 0.90 | 0.20 | 0.30 | 0.45 | 0.60 | 18.09 | 6.57 | 1.12 | 24.46 |
| | | 2.50 | 1.00 | 0.20 | 0.45 | 0.60 | 0.75 | 31.05 | 7.17 | 1.40 | 29.10 |
| | 4.50 | 1.50 | 0.70 | 0.18 | 0.30 | 0.45 | 0.60 | 18.36 | 6.96 | 1.48 | 28.24 |
| | | 2.00 | 0.80 | 0.18 | 0.30 | 0.45 | 0.60 | 23.04 | 6.96 | 1.48 | 31.76 |
| | | 2.50 | 0.90 | 0.18 | 0.45 | 0.60 | 0.75 | 39.96 | 7.68 | 1.86 | 35.28 |
| 6.00 | 1.50 | 0.80 | 0.20 | 0.30 | 0.45 | 0.60 | 19.44 | 9.65 | 1.48 | 31.76 | |
| | 2.00 | 0.90 | 0.20 | 0.30 | 0.45 | 0.60 | 24.12 | 9.65 | 1.48 | 35.28 | |
| | 2.50 | 1.00 | 0.20 | 0.45 | 0.60 | 0.75 | 41.40 | 10.45 | 1.86 | 38.80 | |
| 8.00 | 2.00 | 1.50 | 0.80 | 0.20 | 0.30 | 0.45 | 0.60 | 12.96 | 4.52 | 0.98 | 20.92 |
| | | 2.00 | 0.90 | 0.20 | 0.30 | 0.45 | 0.60 | 16.08 | 4.52 | 0.98 | 23.24 |
| | | 2.50 | 1.00 | 0.20 | 0.45 | 0.60 | 0.75 | 27.60 | 5.05 | 1.24 | 25.56 |
| | 3.00 | 1.50 | 0.70 | 0.18 | 0.30 | 0.45 | 0.60 | 18.36 | 6.17 | 1.47 | 27.90 |
| | | 2.00 | 0.80 | 0.18 | 0.30 | 0.45 | 0.60 | 23.04 | 6.17 | 1.47 | 31.38 |
| | | 2.50 | 0.90 | 0.18 | 0.45 | 0.60 | 0.75 | 39.96 | 6.87 | 1.86 | 34.86 |
| | 4.00 | 1.50 | 0.80 | 0.20 | 0.30 | 0.45 | 0.60 | 19.44 | 8.53 | 1.47 | 31.38 |
| | | 2.00 | 0.90 | 0.20 | 0.30 | 0.45 | 0.60 | 24.12 | 8.53 | 1.47 | 34.86 |
| | | 2.50 | 1.00 | 0.20 | 0.45 | 0.60 | 0.75 | 41.40 | 9.31 | 1.86 | 38.34 |
| | 4.50 | 1.50 | 0.70 | 0.18 | 0.30 | 0.45 | 0.60 | 24.48 | 9.01 | 1.96 | 37.20 |
| | | 2.00 | 0.80 | 0.18 | 0.30 | 0.45 | 0.60 | 30.72 | 9.01 | 1.96 | 41.84 |
| | | 2.50 | 0.90 | 0.18 | 0.45 | 0.60 | 0.75 | 53.28 | 9.95 | 2.48 | 46.48 |
| 6.00 | 1.50 | 0.80 | 0.20 | 0.30 | 0.45 | 0.60 | 25.92 | 12.53 | 1.96 | 41.84 | |
| | 2.00 | 0.90 | 0.20 | 0.30 | 0.45 | 0.60 | 32.16 | 12.53 | 1.96 | 46.48 | |
| | 2.50 | 1.00 | 0.20 | 0.45 | 0.60 | 0.75 | 55.20 | 13.57 | 2.48 | 51.12 | |

| DIMENSIONES | | | | | | |
|-------------|------|------|------|------|------|------|
| Lm. | A | B | C | D | E | F |
| 1.50 | 0.29 | 0.18 | 0.50 | 0.18 | 0.12 | 0.34 |
| 2.00 | 0.34 | 0.21 | 0.60 | 0.21 | 0.17 | 0.44 |

PLANILLA DE HIERROS

| MODULOS A C 6.00m. | | | | | | |
|--------------------|------|-------|-------|-------|-------|-----|
| Lm. | Tipo | Ø mm. | Long. | Cant. | Sep. | Kg. |
| 1.50 | 1 | 12 | 2.16 | 13 | 0.465 | 25 |
| | 2 | 12 | 2.16 | 13 | 0.465 | 25 |
| | 3 | 12 | 2.06 | 13 | 0.465 | 24 |
| | 4 | 8 | 6.32 | 14 | 0.150 | 35 |
| | 5 | 12 | 2.06 | 4 | — | 7 |
| | 6 | 6 | 2.06 | 4 | — | 2 |
| 2.00 | 7 | 6 | 1.49 | 17 | 0.200 | 6 |
| | 1 | 12 | 2.68 | 14 | 0.435 | 33 |
| | 2 | 12 | 2.68 | 14 | 0.435 | 33 |
| | 3 | 12 | 2.56 | 14 | 0.435 | 32 |
| | 4 | 8 | 6.32 | 17 | 0.150 | 43 |
| | 5 | 12 | 2.56 | 4 | — | 9 |
| | 6 | 6 | 2.56 | 4 | — | 2 |

| MODULOS A C 8.00m. | | | | | | |
|--------------------|------|-------|-------|-------|-------|-----|
| Lm. | Tipo | Ø mm. | Long. | Cant. | Sep. | Kg. |
| 1.50 | 1 | 12 | 2.16 | 17 | 0.465 | 33 |
| | 2 | 12 | 2.16 | 17 | 0.465 | 33 |
| | 3 | 12 | 2.06 | 17 | 0.465 | 31 |
| | 4 | 8 | 8.32 | 14 | 0.150 | 47 |
| | 5 | 12 | 2.06 | 4 | — | 7 |
| | 6 | 6 | 2.06 | 4 | — | 2 |
| | 7 | 6 | 1.49 | 17 | 0.200 | 6 |
| 2.00 | 1 | 12 | 2.68 | 18 | 0.435 | 43 |
| | 2 | 12 | 2.68 | 18 | 0.435 | 43 |
| | 3 | 12 | 2.56 | 18 | 0.435 | 41 |
| | 4 | 8 | 8.32 | 17 | 0.150 | 57 |
| | 5 | 12 | 2.56 | 4 | — | 9 |
| | 6 | 6 | 2.56 | 4 | — | 2 |
| | 7 | 6 | 1.53 | 22 | 0.200 | 7 |

| A C = 6.00 mts. | | | | |
|-----------------|------|-----|-----------------|---------|
| Lm. | Tipo | Kg. | Precio Unitario | Importe |
| 2.00 | 1 | 33 | | |
| | 2 | 33 | | |
| | 3 | 32 | | |
| | 4 | 43 | | |
| | 5 | 9 | | |
| | 6 | 2 | | |
| | 7 | 7 | | |
| 3.00 | 1 | 50 | | |
| | 2 | 50 | | |
| | 3 | 48 | | |
| | 4 | 70 | | |
| | 5 | 14 | | |
| | 6 | 4 | | |
| | 7 | 12 | | |
| 4.00 | 1 | 66 | | |
| | 2 | 66 | | |
| | 3 | 64 | | |
| | 4 | 86 | | |
| | 5 | 18 | | |
| | 6 | 4 | | |
| | 7 | 14 | | |
| 4.50 | 1 | 75 | | |
| | 2 | 75 | | |
| | 3 | 72 | | |
| | 4 | 105 | | |
| | 5 | 21 | | |
| | 6 | 6 | | |
| | 7 | 18 | | |
| 6.00 | 1 | 99 | | |
| | 2 | 99 | | |
| | 3 | 96 | | |
| | 4 | 129 | | |
| | 5 | 27 | | |
| | 6 | 6 | | |
| | 7 | 21 | | |

| A C = 8.00 mts. | | | | |
|-----------------|------|-----|-----------------|---------|
| Lm. | Tipo | Kg. | Precio Unitario | Importe |
| 2.00 | 1 | 43 | | |
| | 2 | 43 | | |
| | 3 | 41 | | |
| | 4 | 57 | | |
| | 5 | 9 | | |
| | 6 | 2 | | |
| | 7 | 7 | | |
| 3.00 | 1 | 66 | | |
| | 2 | 66 | | |
| | 3 | 62 | | |
| | 4 | 90 | | |
| | 5 | 14 | | |
| | 6 | 4 | | |
| | 7 | 12 | | |
| 4.00 | 1 | 86 | | |
| | 2 | 86 | | |
| | 3 | 82 | | |
| | 4 | 114 | | |
| | 5 | 18 | | |
| | 6 | 4 | | |
| | 7 | 14 | | |
| 4.50 | 1 | 99 | | |
| | 2 | 99 | | |
| | 3 | 93 | | |
| | 4 | 141 | | |
| | 5 | 21 | | |
| | 6 | 6 | | |
| | 7 | 18 | | |
| 6.00 | 1 | 129 | | |
| | 2 | 129 | | |
| | 3 | 123 | | |
| | 4 | 171 | | |
| | 5 | 27 | | |
| | 6 | 6 | | |
| | 7 | 21 | | |

PESO DE LOS HIERROS Ø 5 - 0.22 Kg./m.
Ø 8 - 0.40 Kg./m.
Ø 12 - 0.89 Kg./m.

| | | | |
|--|--|---|--|
| CONVENIO BAJOS SUBMERRIDIONALES UNIDAD TECNICA SANTA FE | | CONSEJO FEDERAL DE INVERSIONES PROVINCIA DE SANTA FE | |
| ESTUDIO: | | ALCANTARILLA TIPO'E | |
| PROYECTO: | | | |
| DIBUJO: | | | |
| APROBO: | | | |
| OBSERVACIONES: | | ES COPIA DEL PLANO DE LA D.G.A.E.H. | |
| | | ESCALA: | |
| | | FECHA: JUNIO '85 | |
| | | Nº DE PLANO: 5 | |