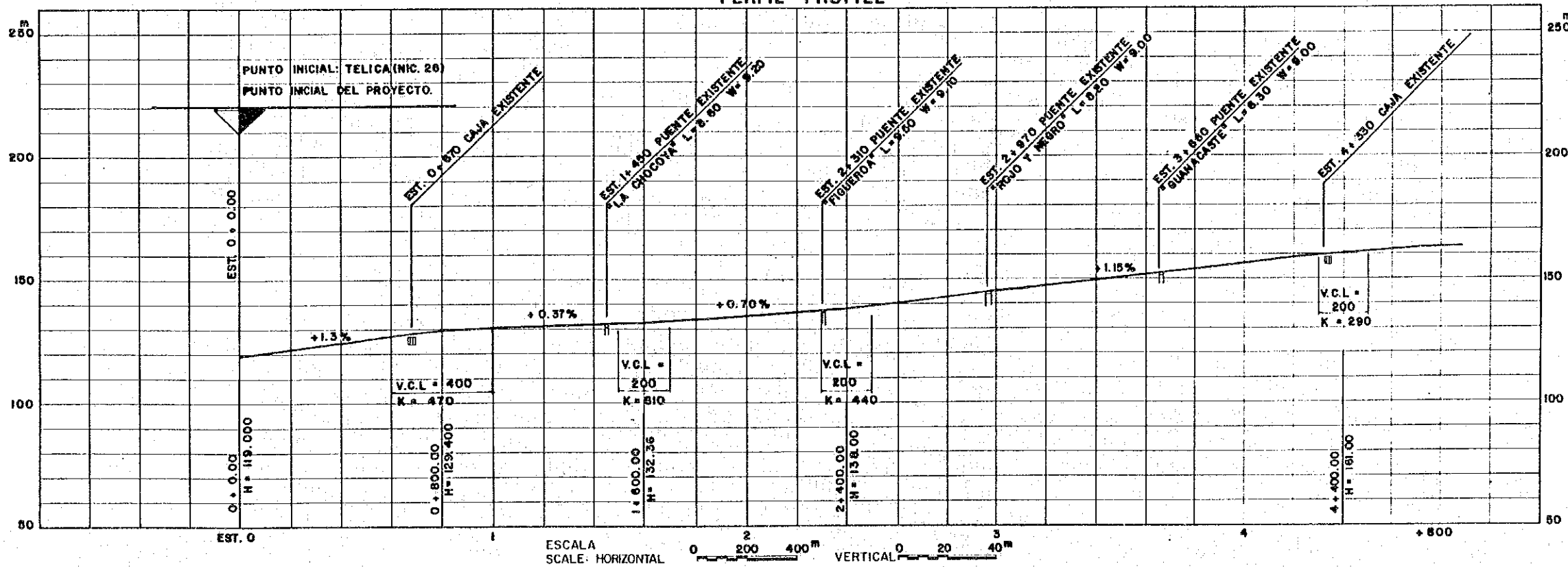
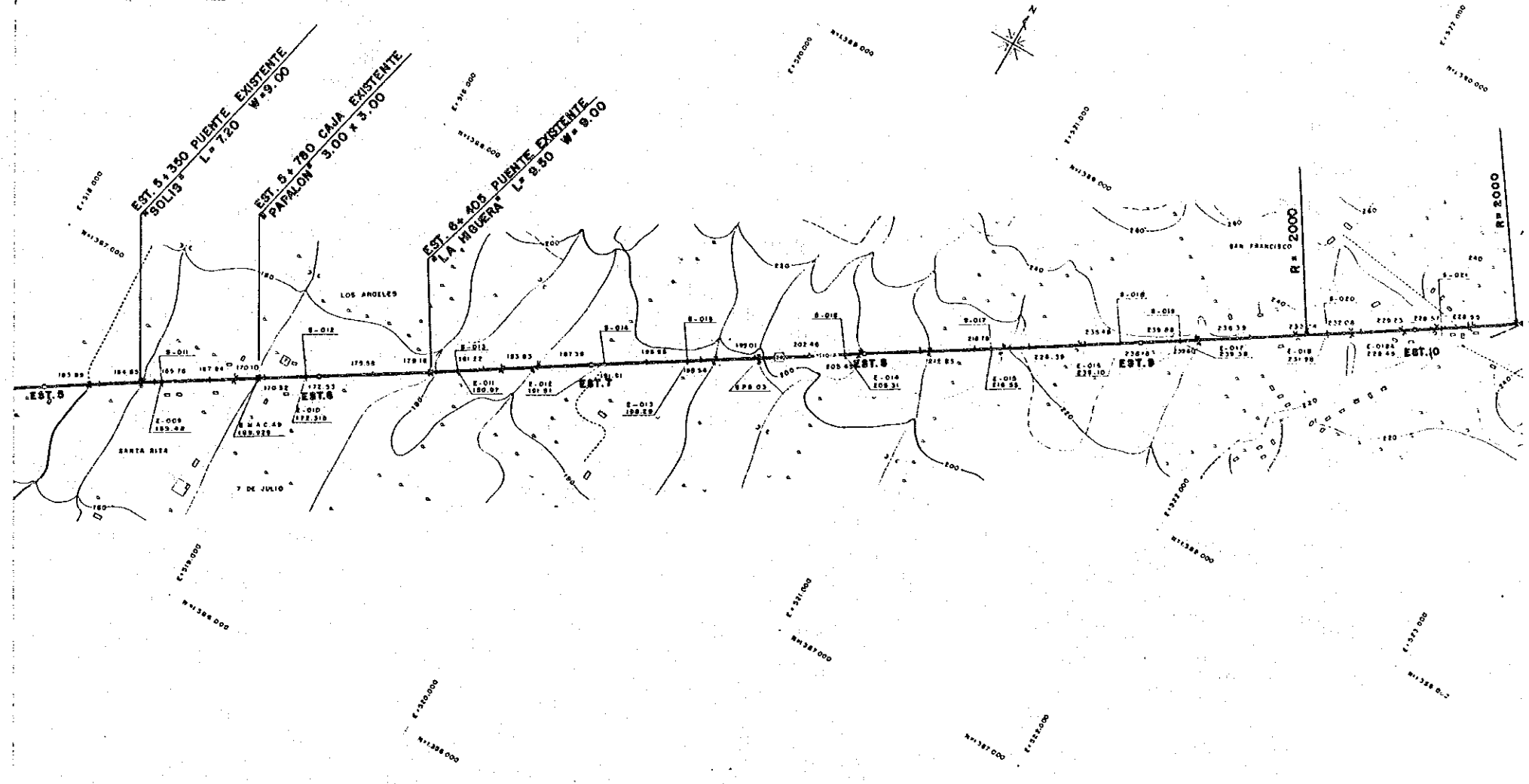
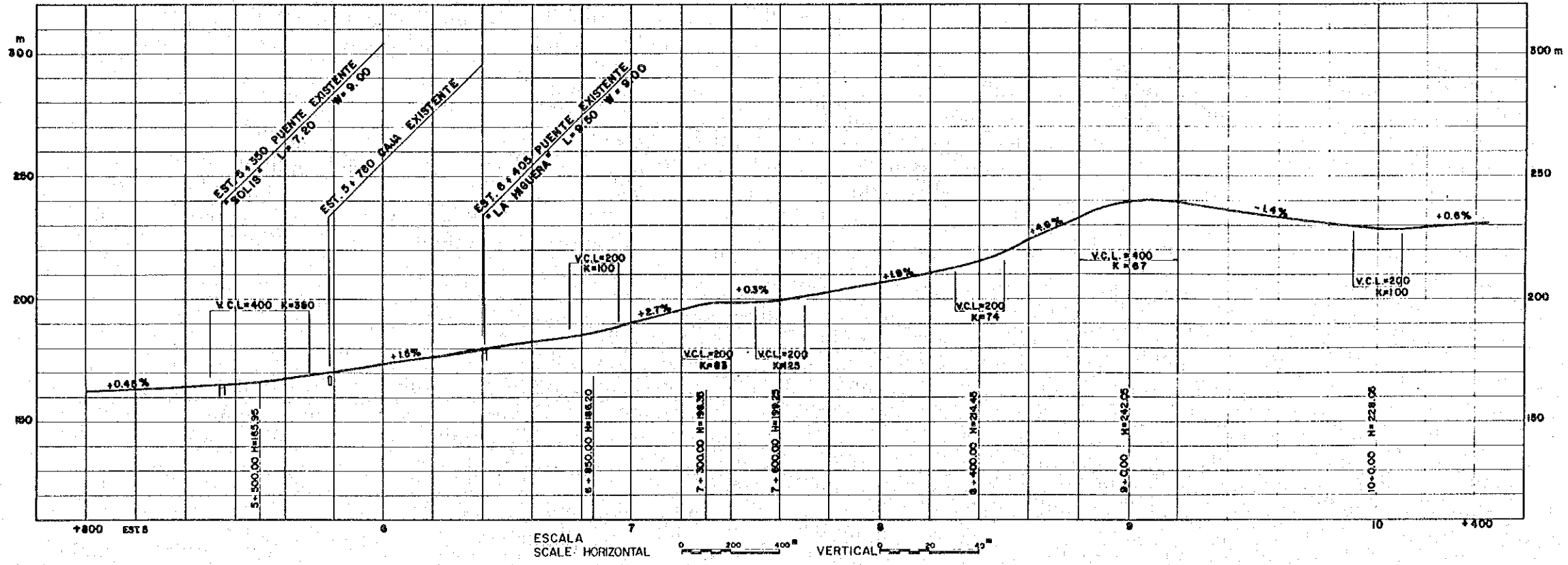


PERFIL - PROFILE

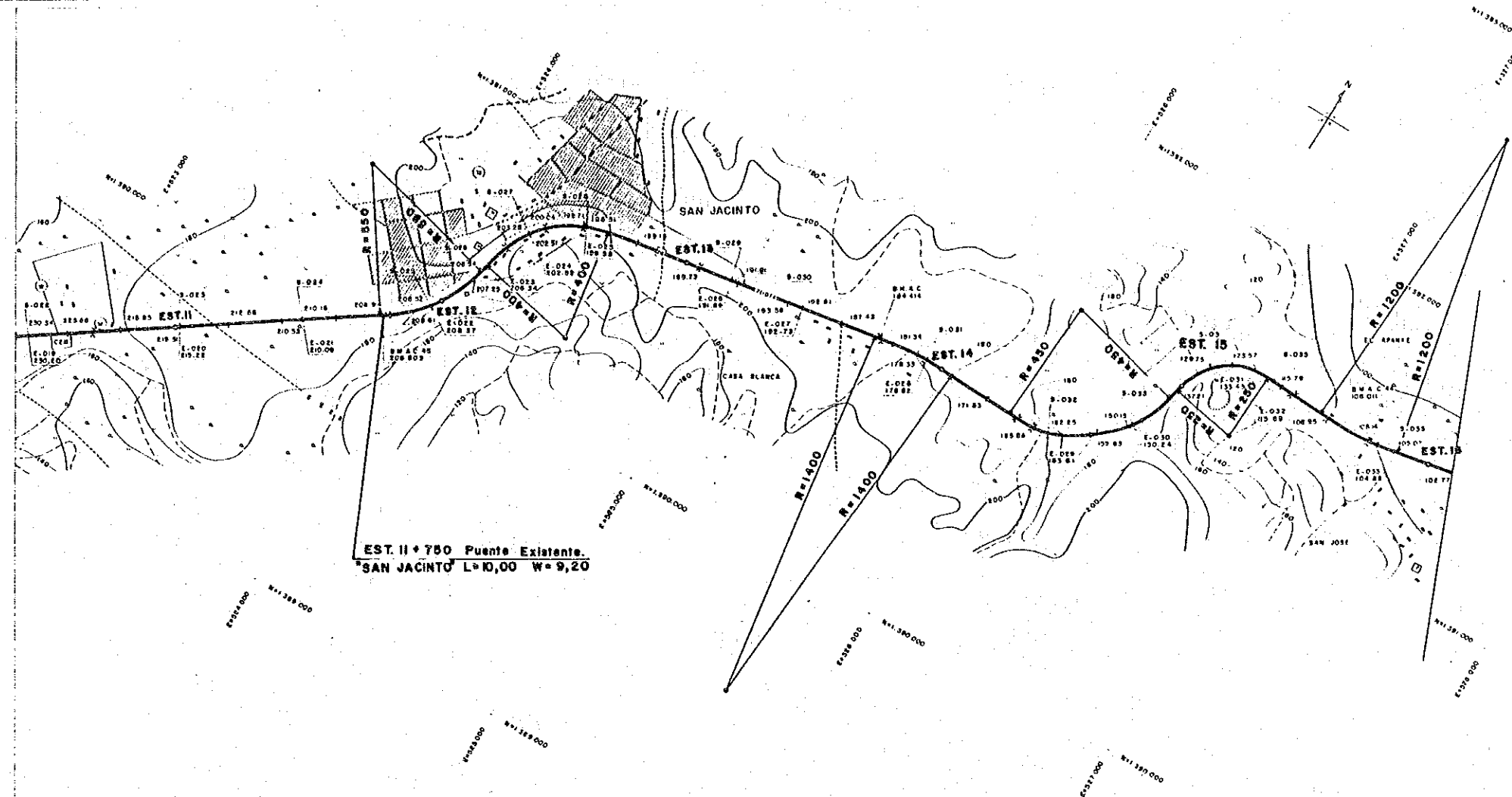




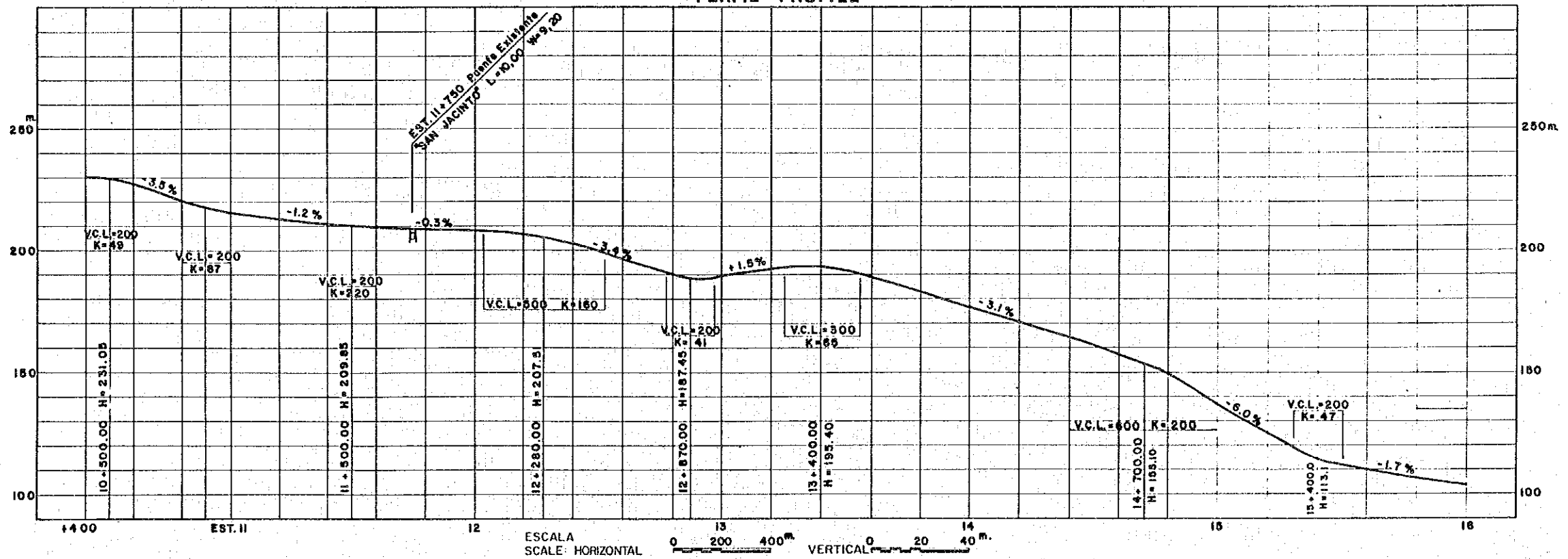
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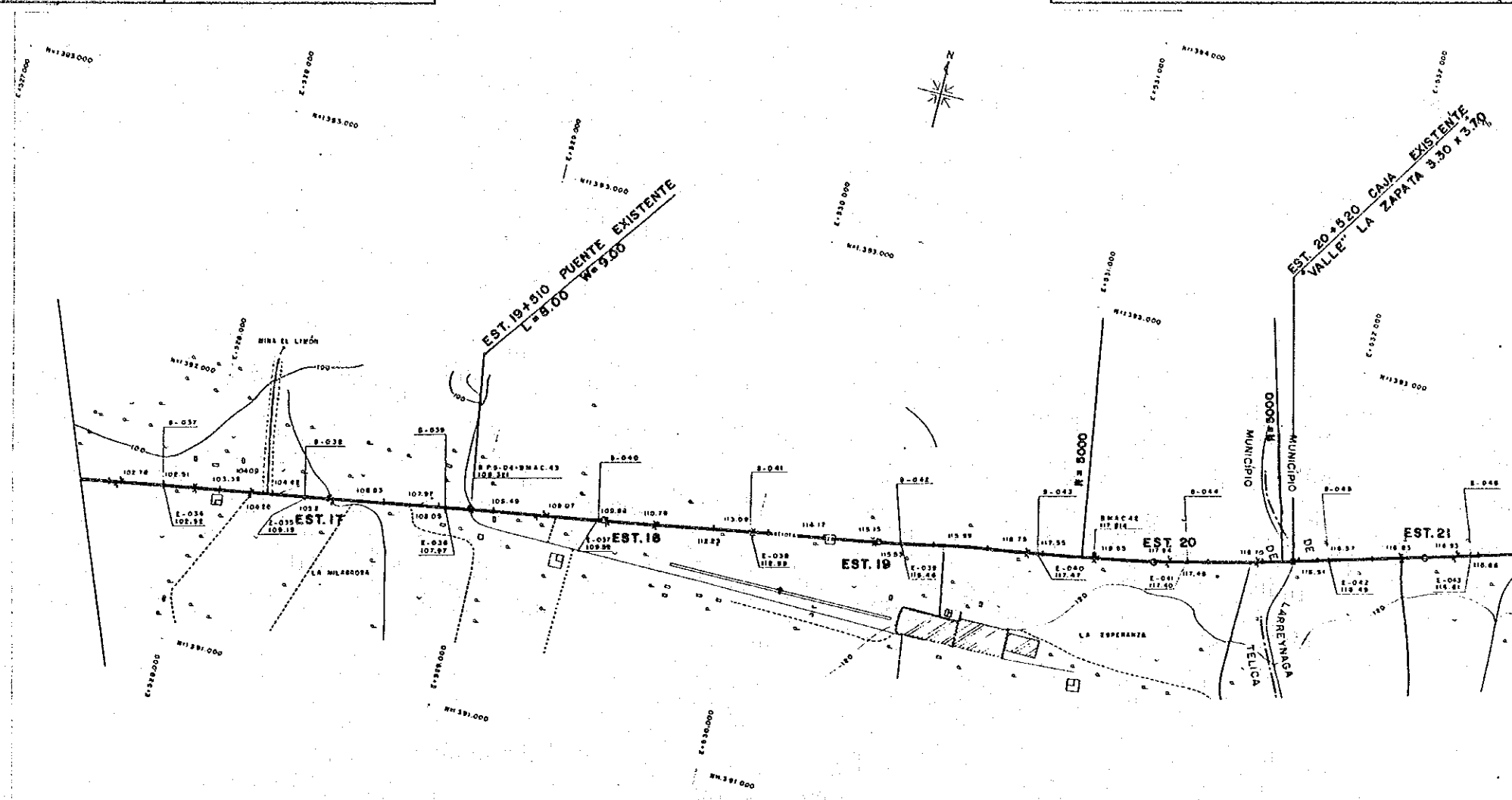


ESCALA SCALE: HORIZONTAL 0 200 400 M VERTICAL 0 20 40 M

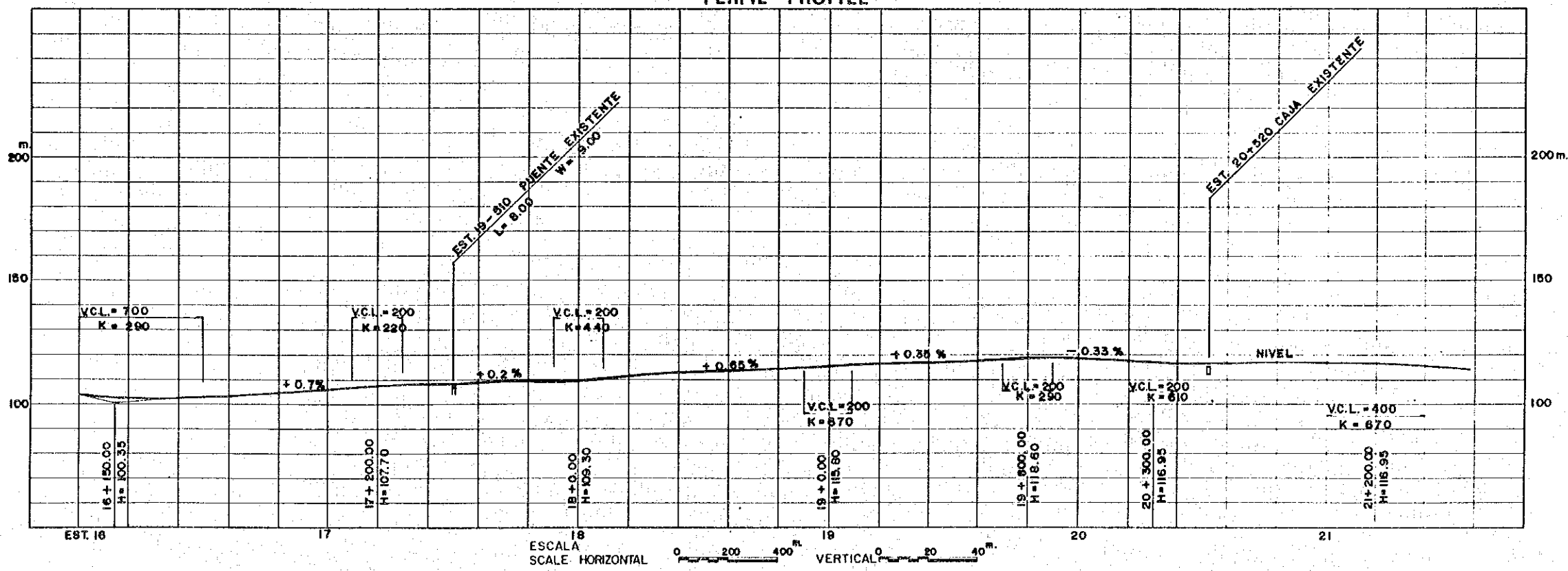


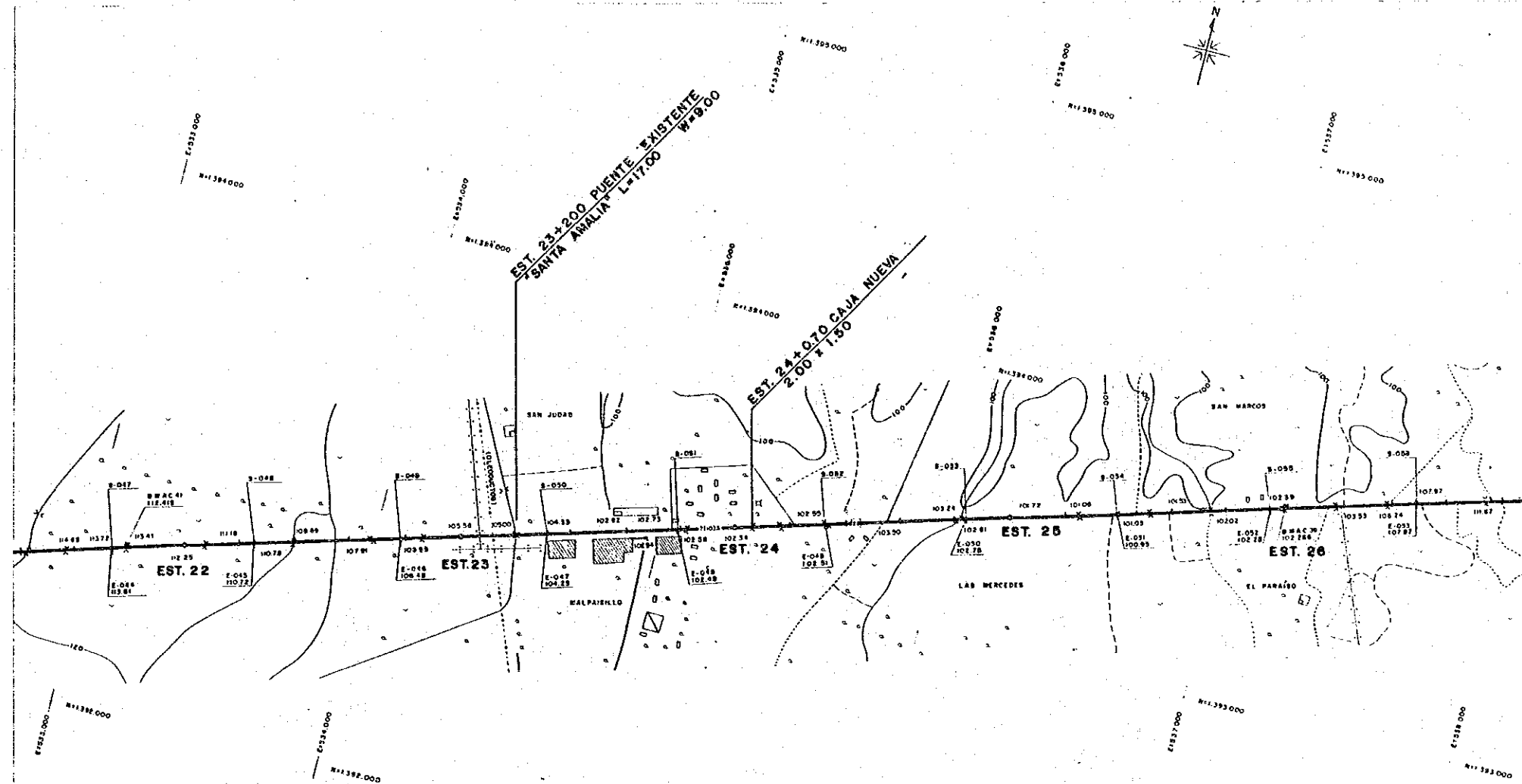
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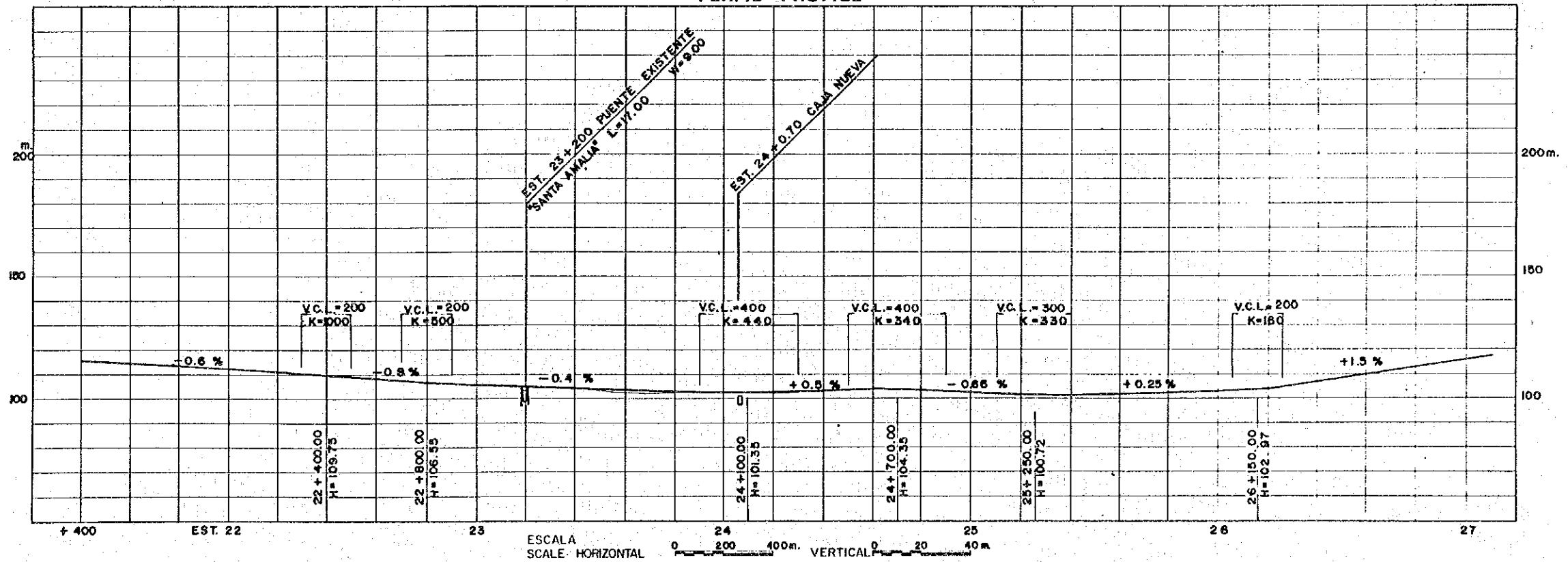


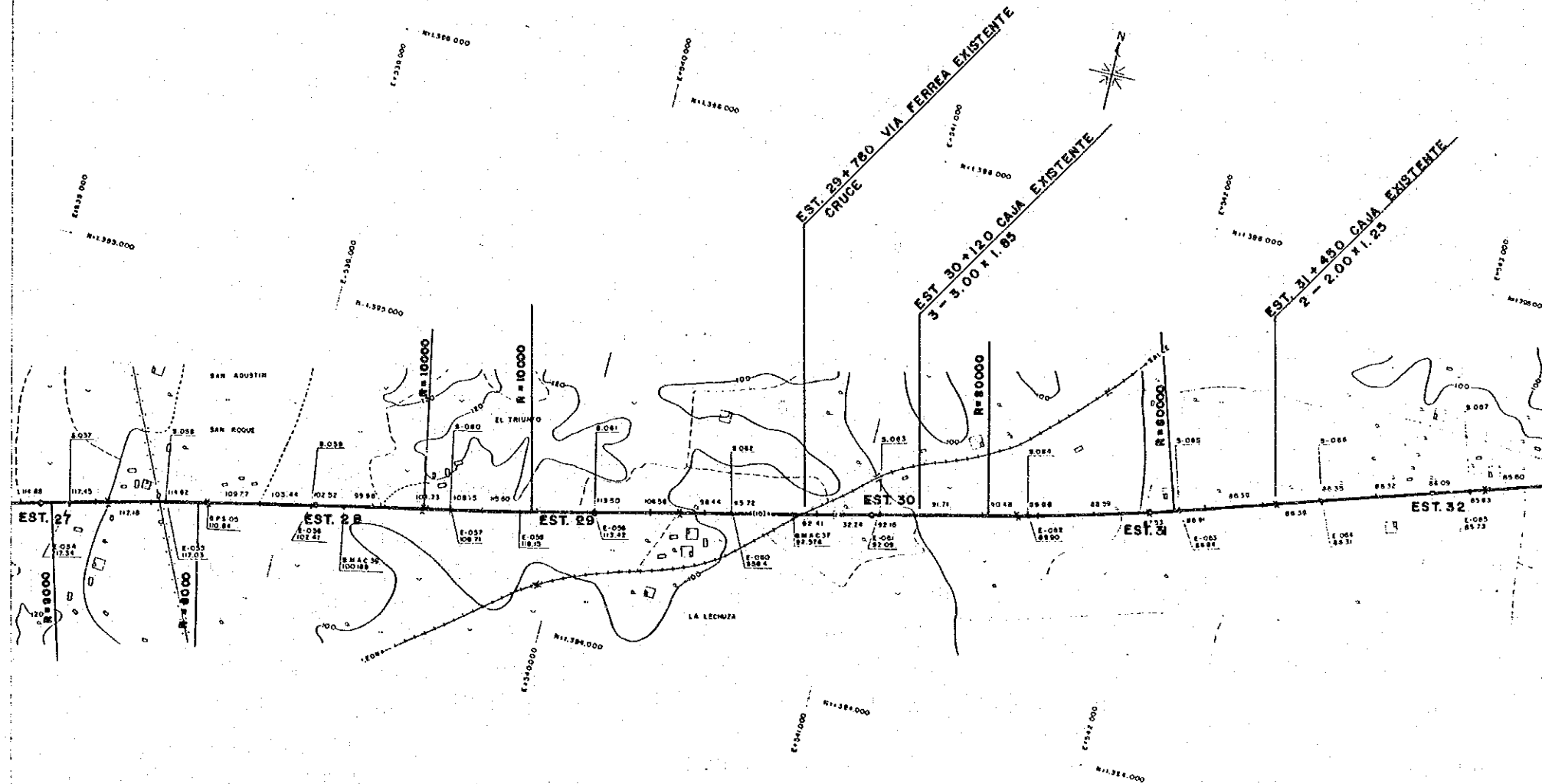
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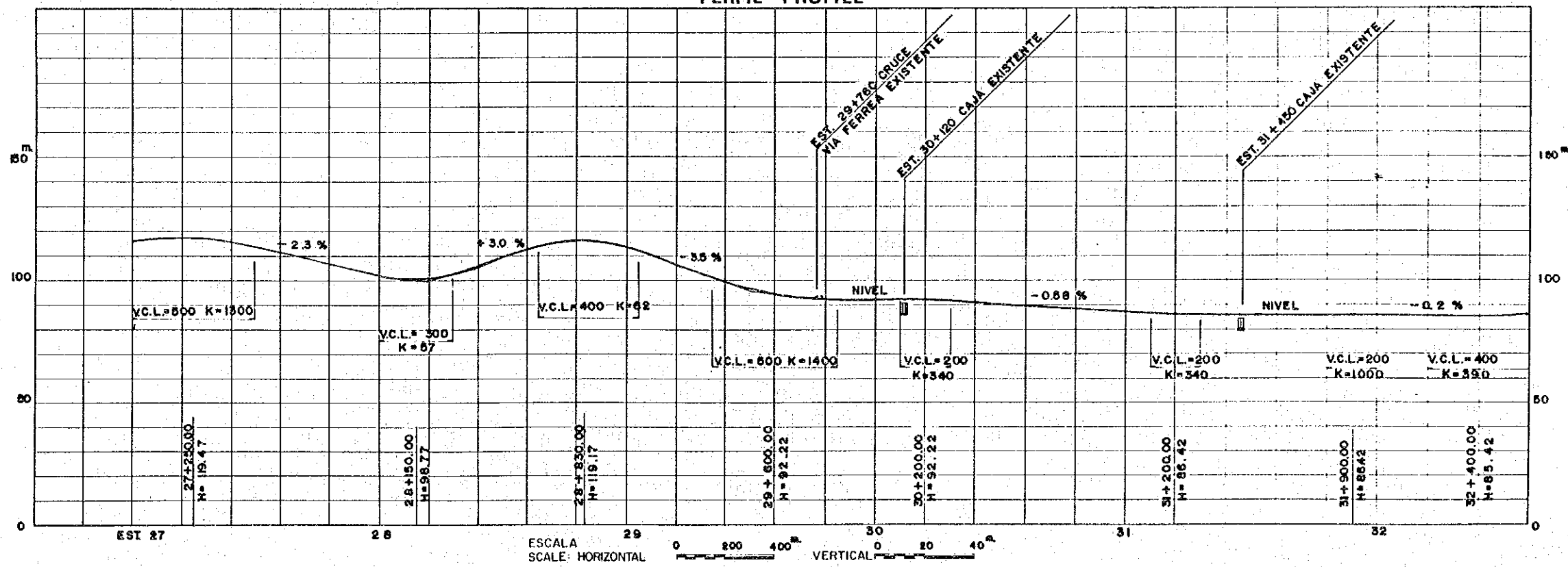


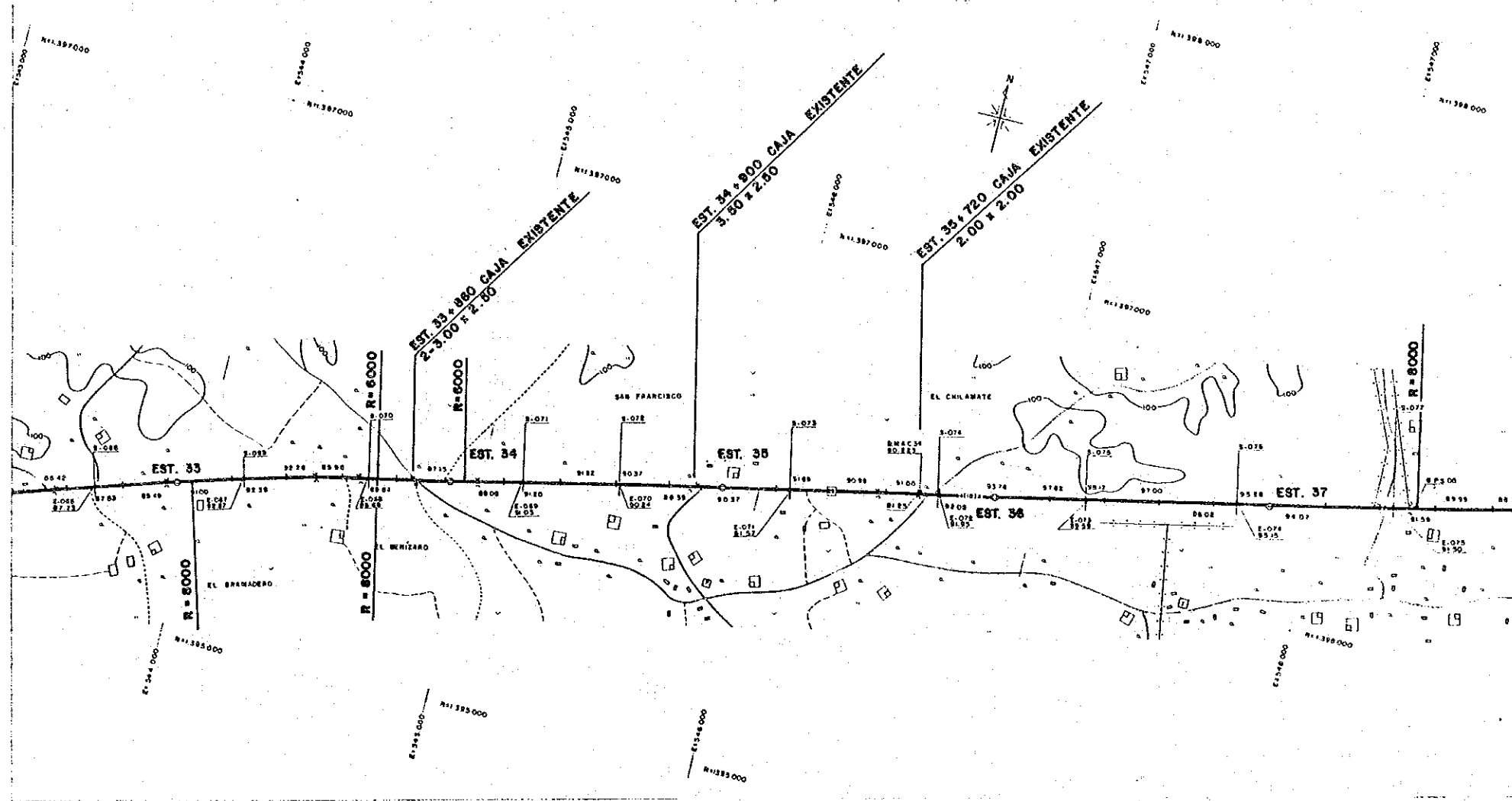
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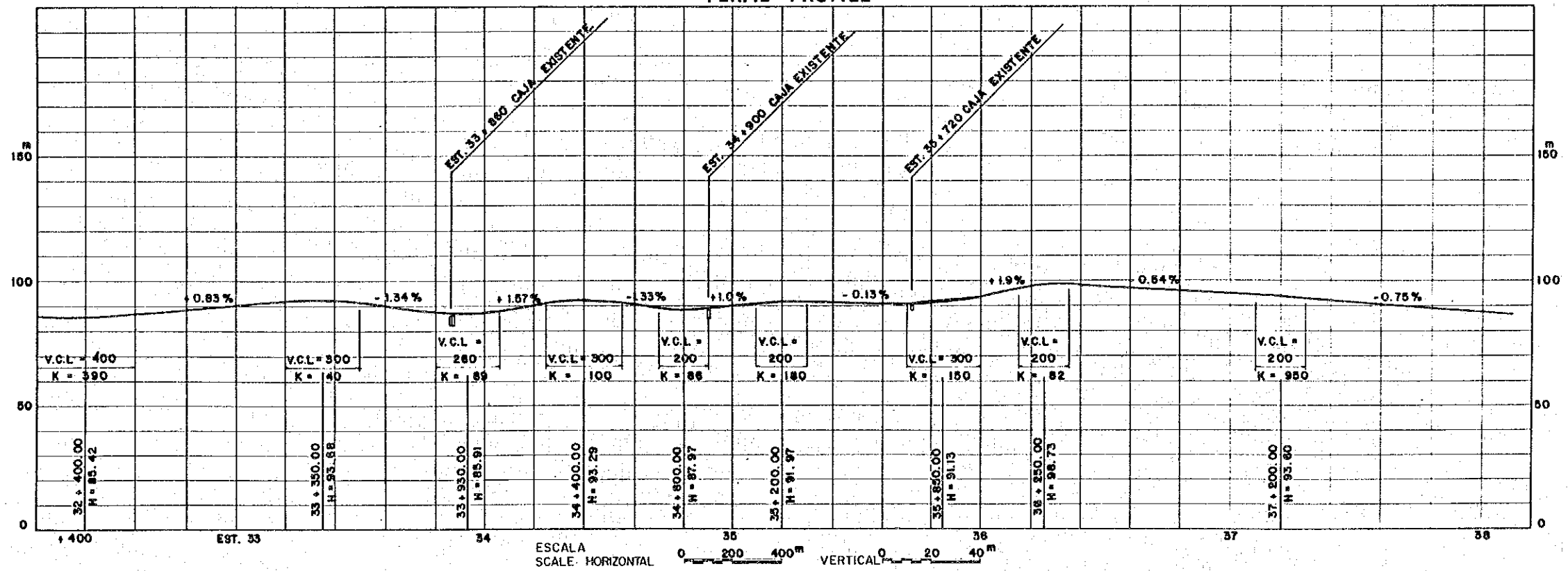


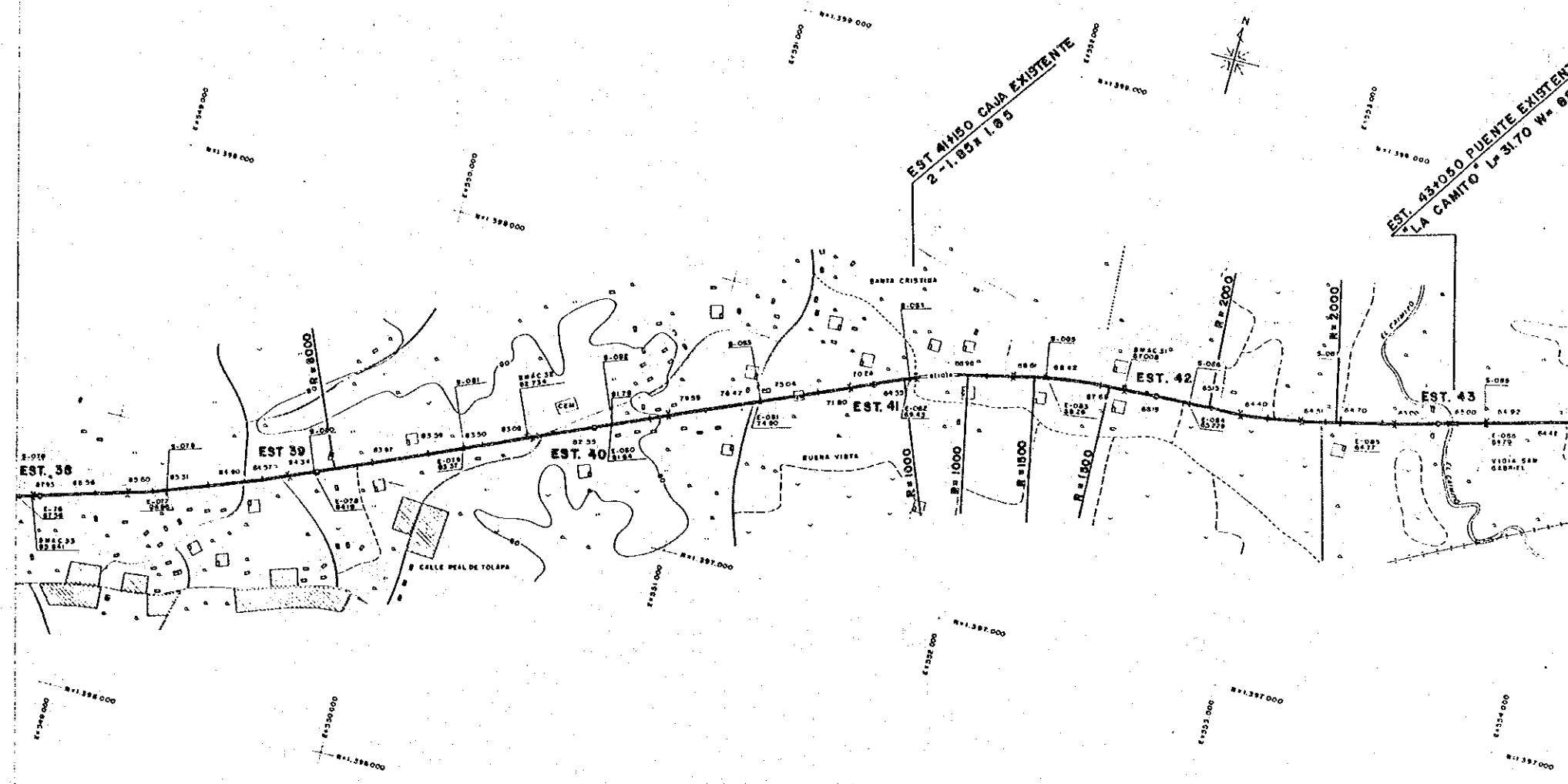
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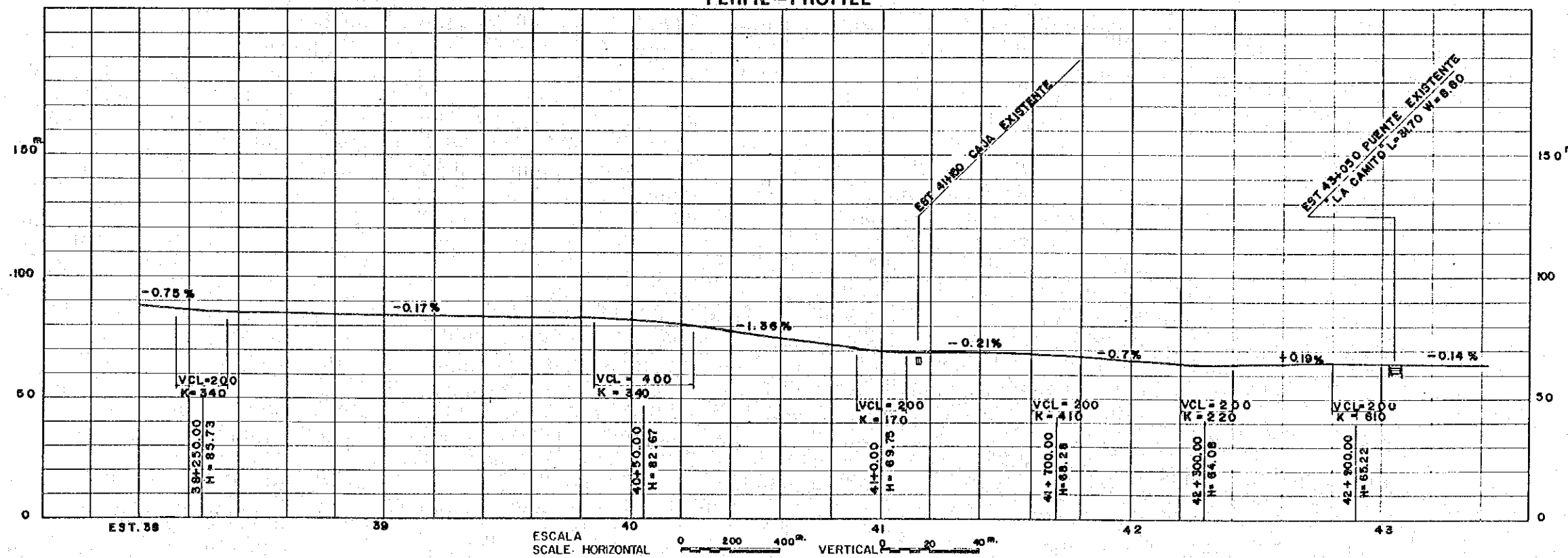


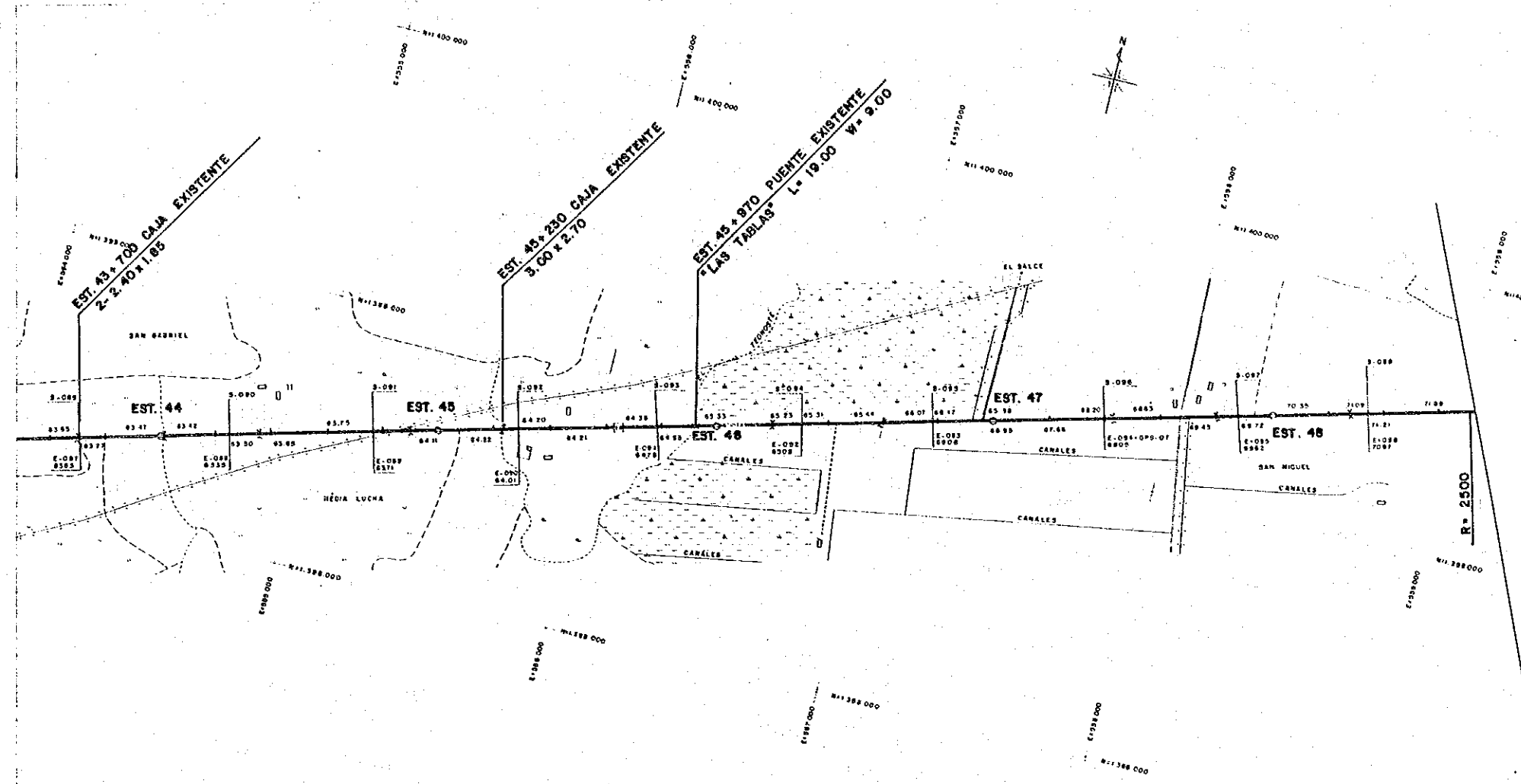
PERFIL -- PROFILE



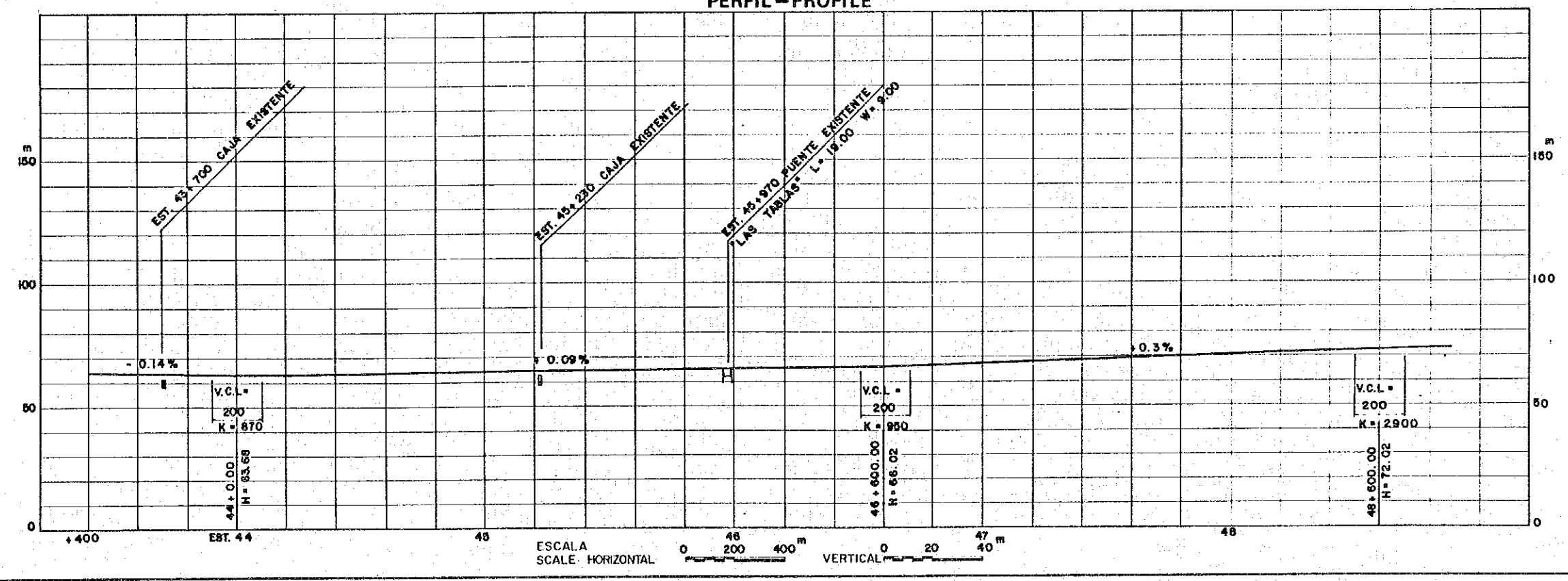


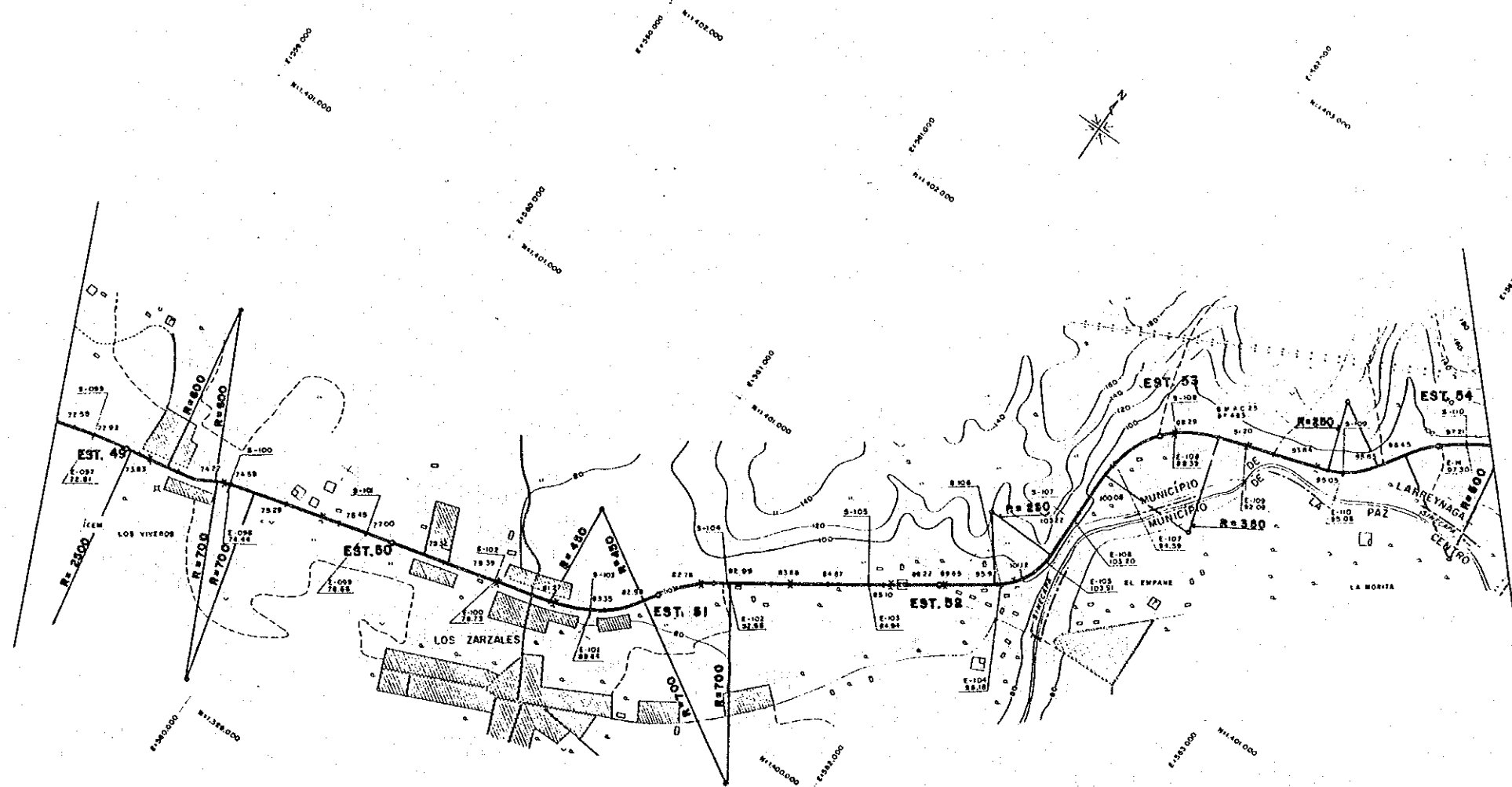
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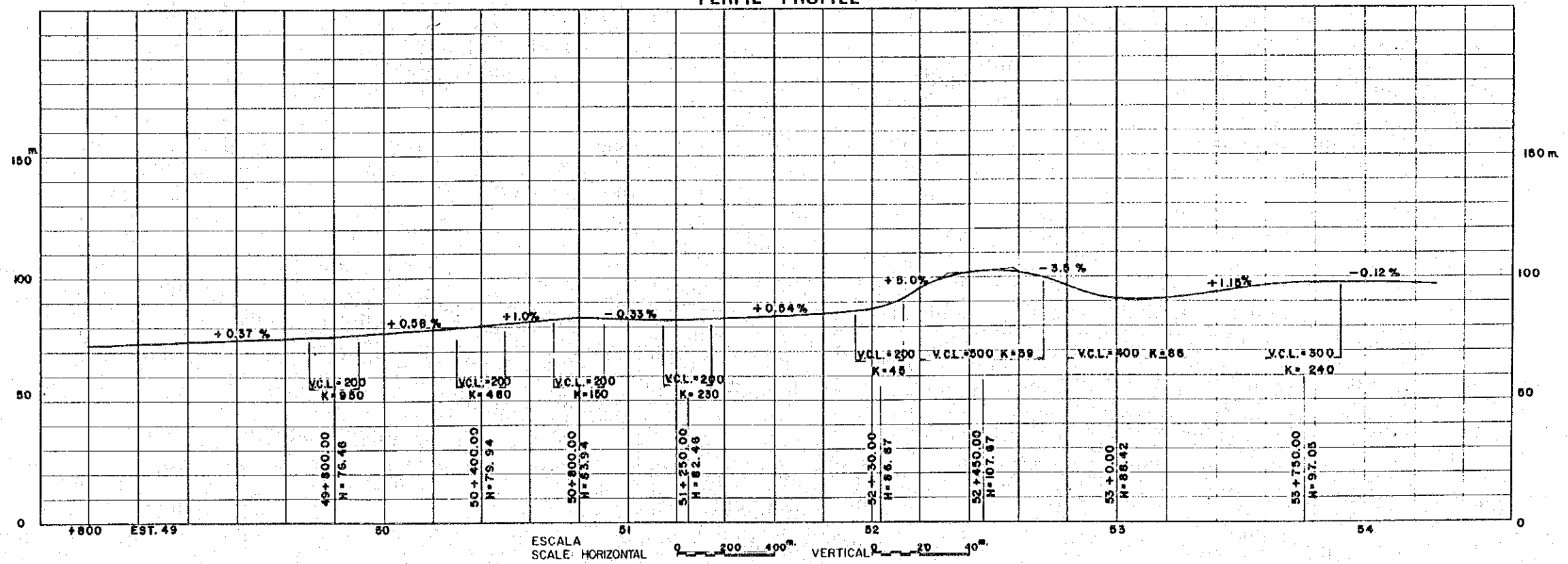


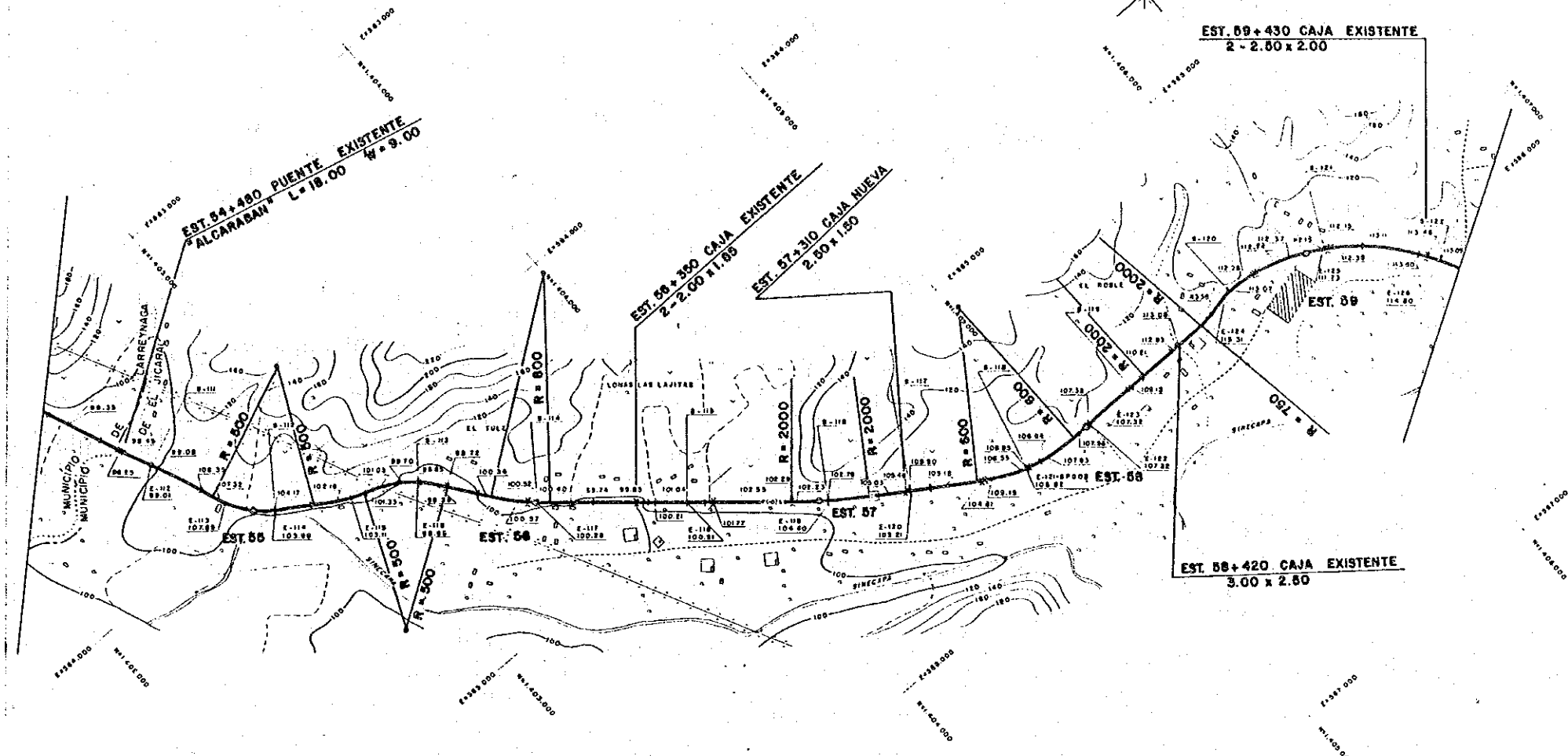
PERFIL - PROFILE



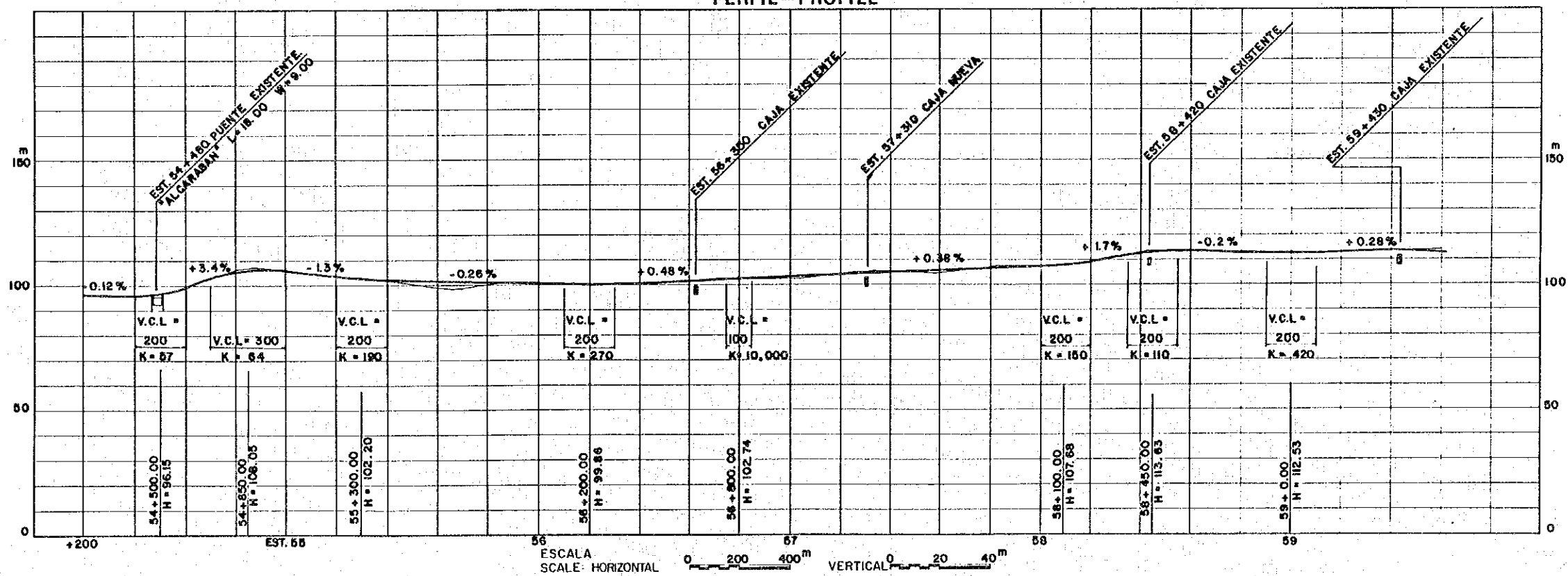


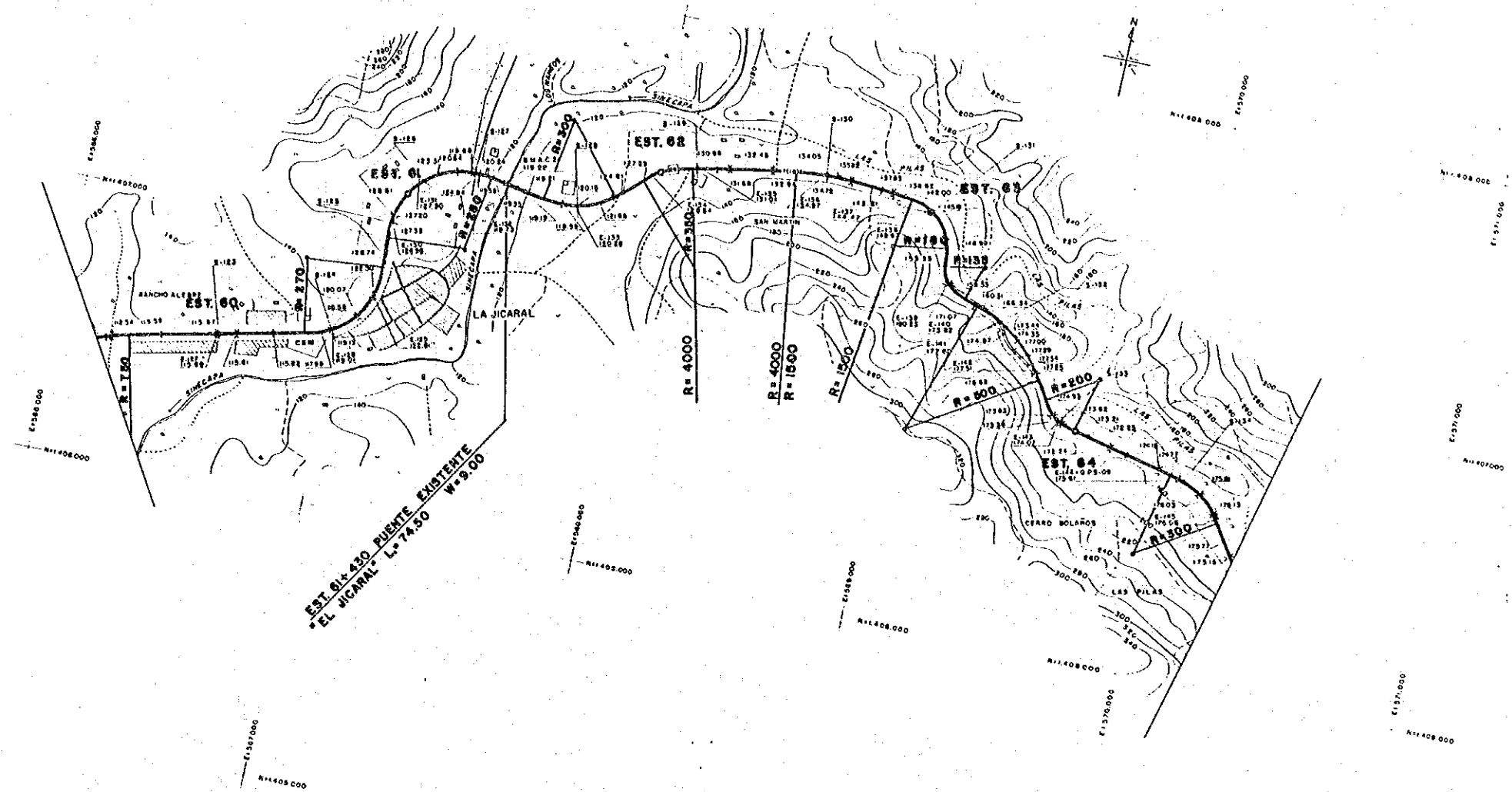
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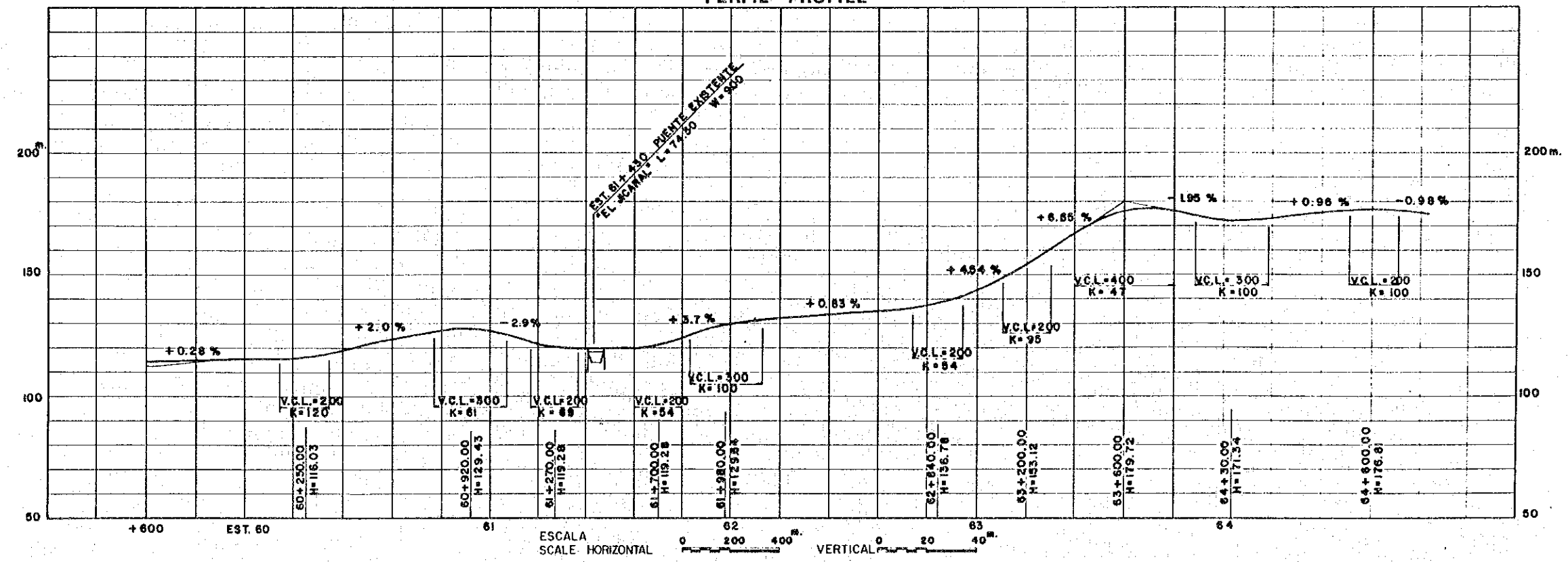


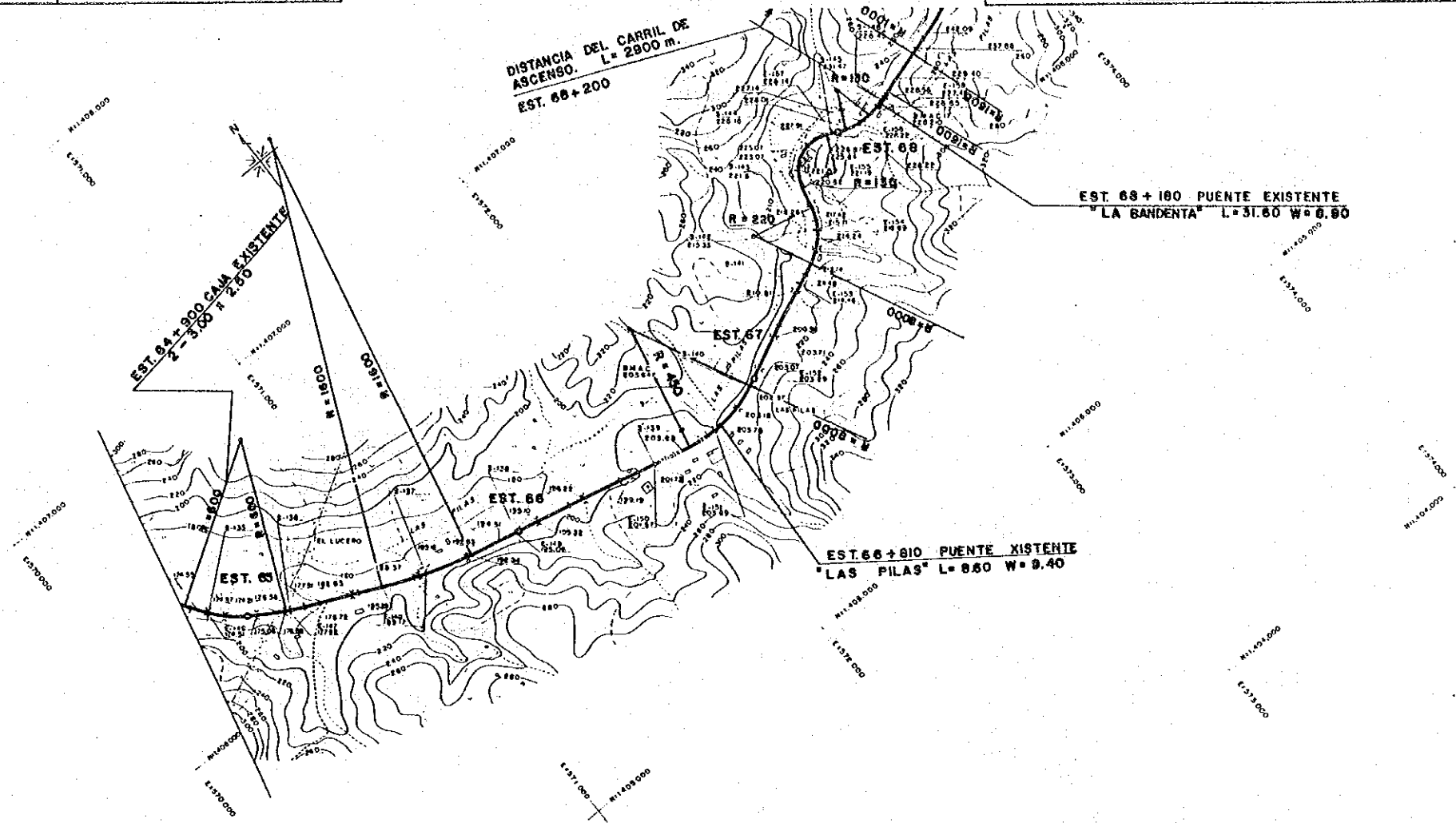
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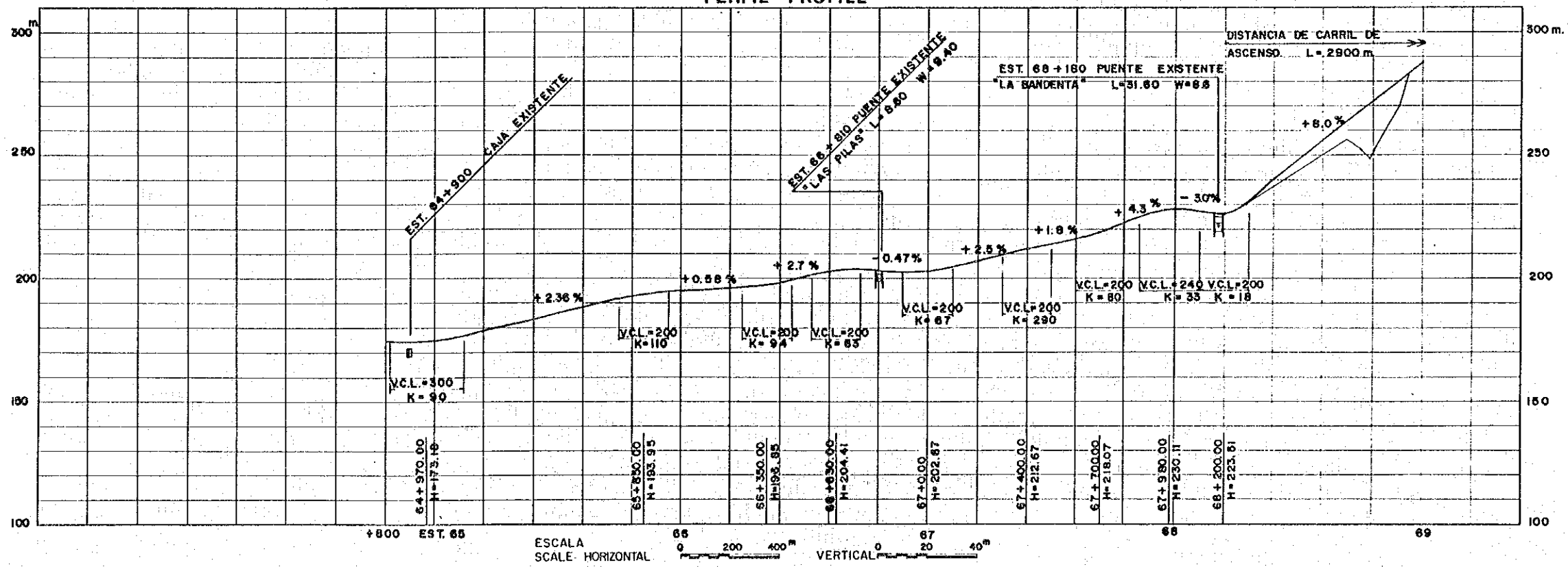


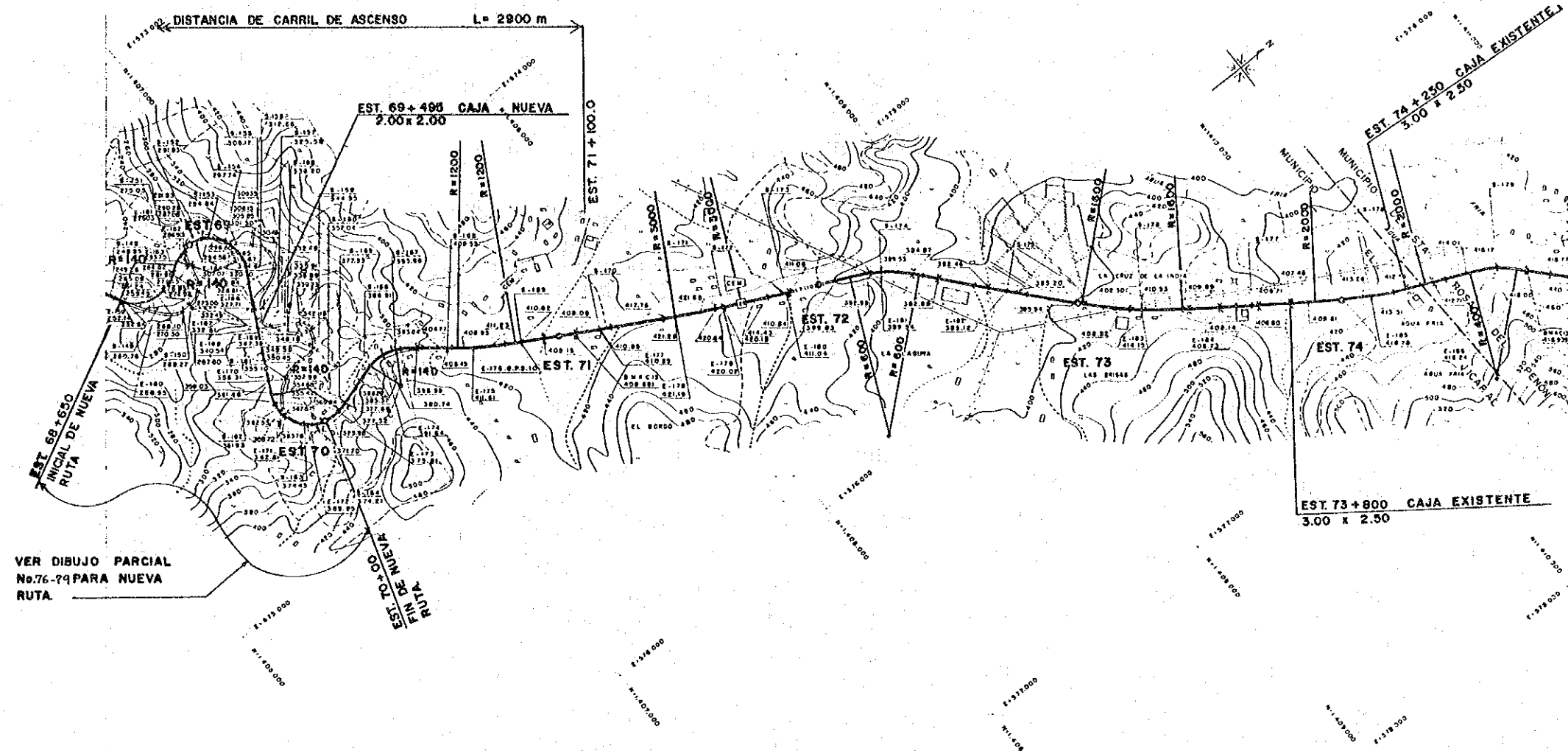
PERFIL -- PROFILE





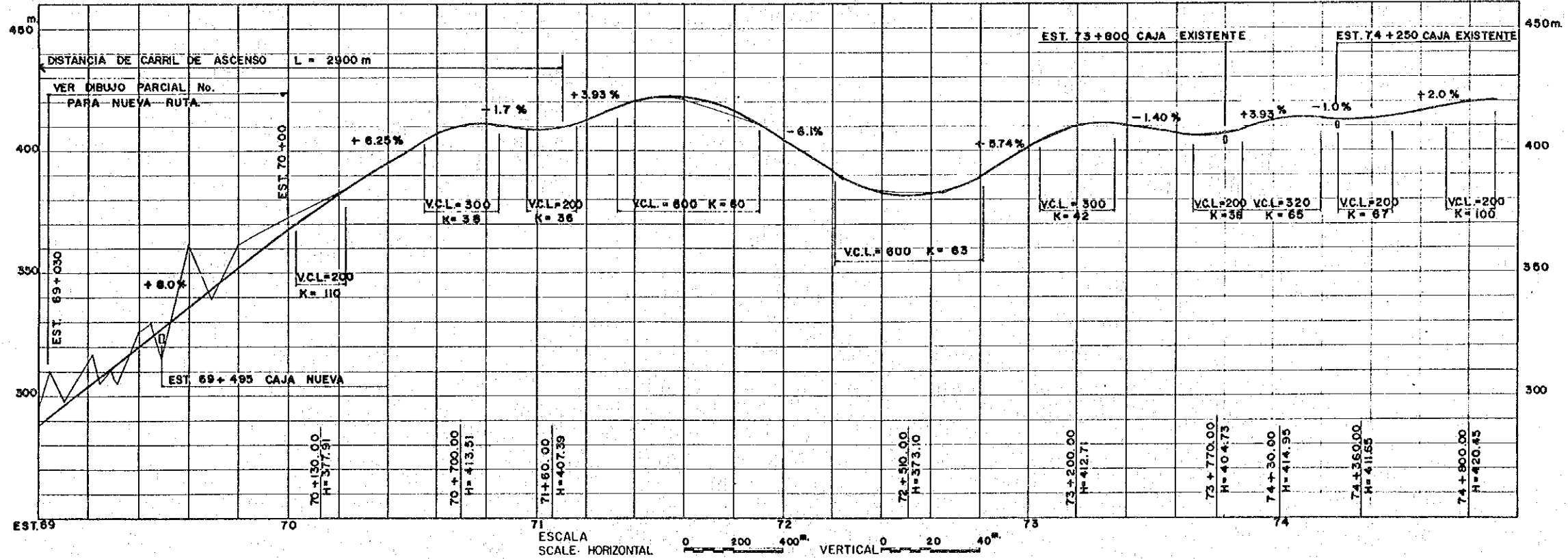
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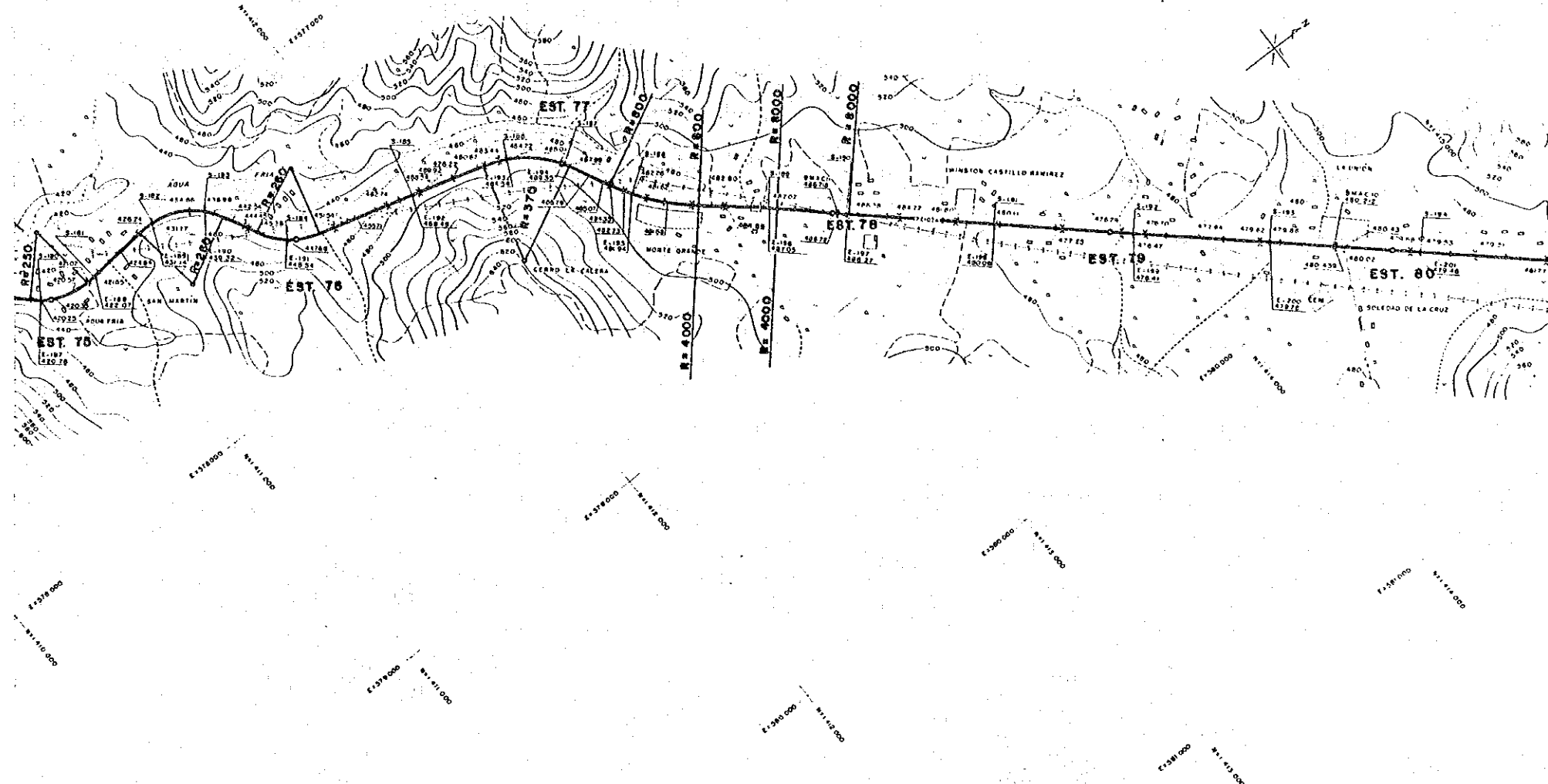


VER DIBUJO PARCIAL No.76-79 PARA NUEVA RUTA.

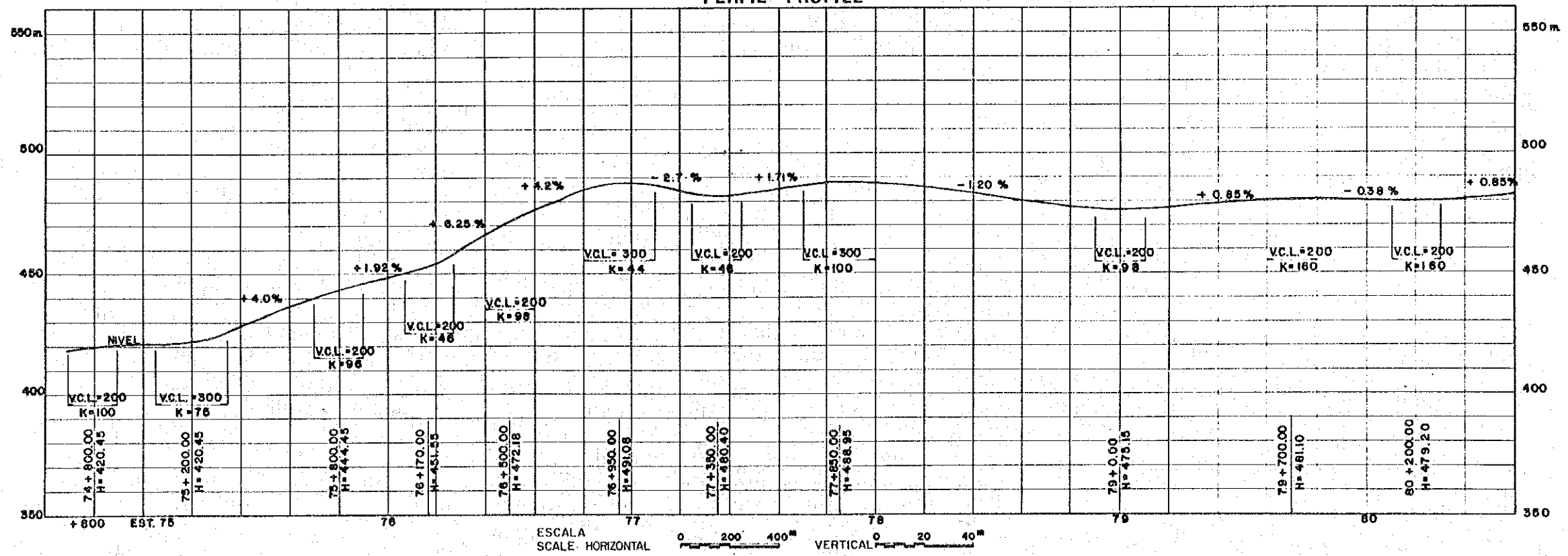
PERFIL - PROFILE

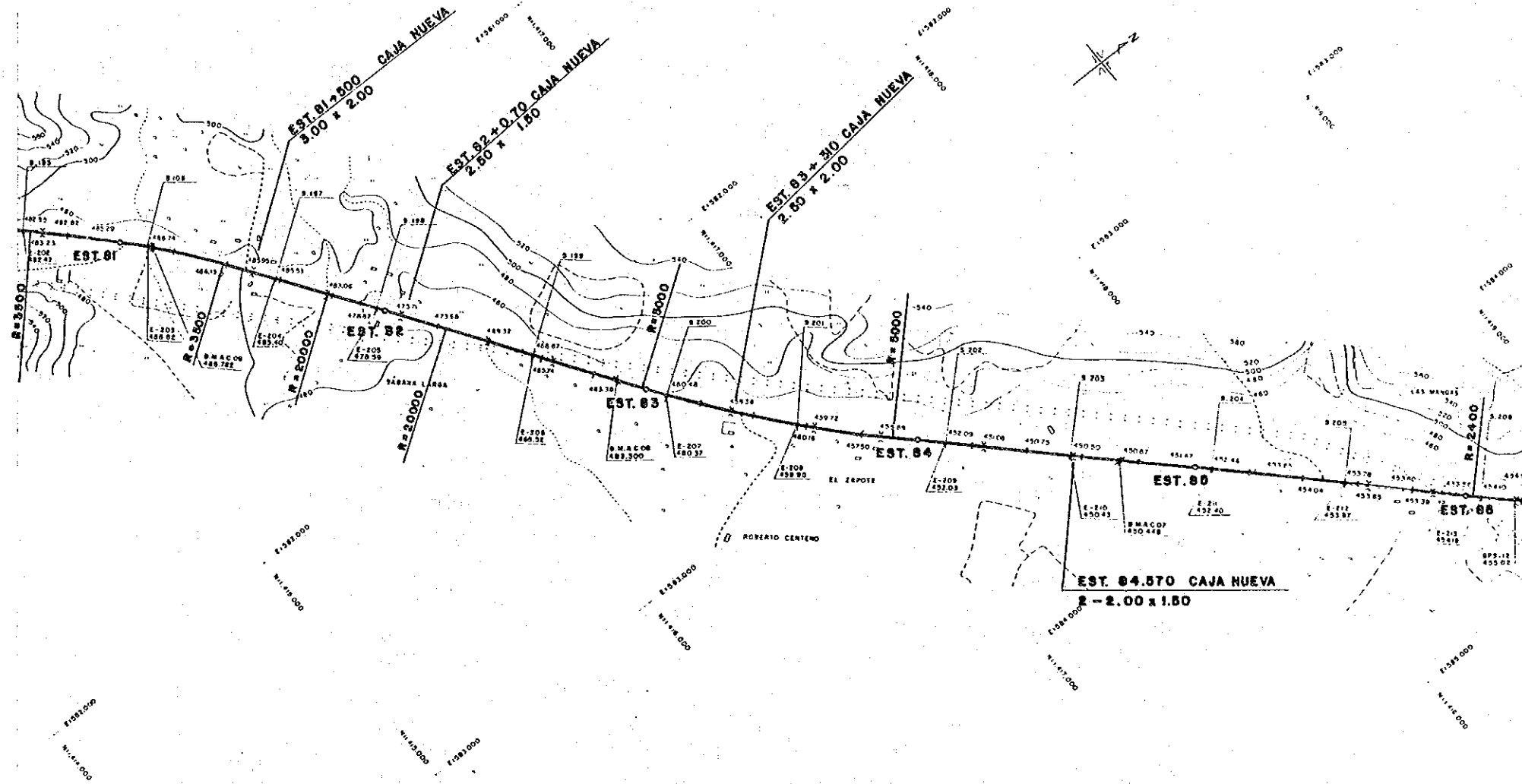


ESCALA SCALE: HORIZONTAL 0 200 400m VERTICAL 0 20 40m

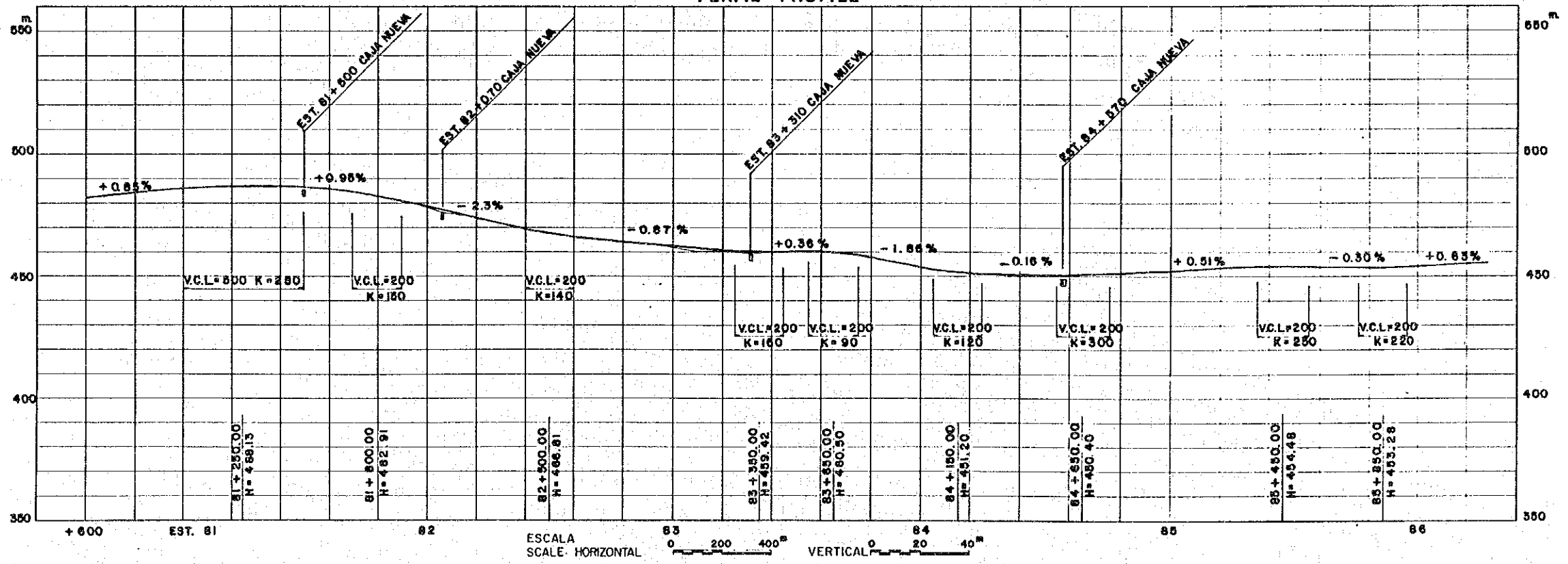


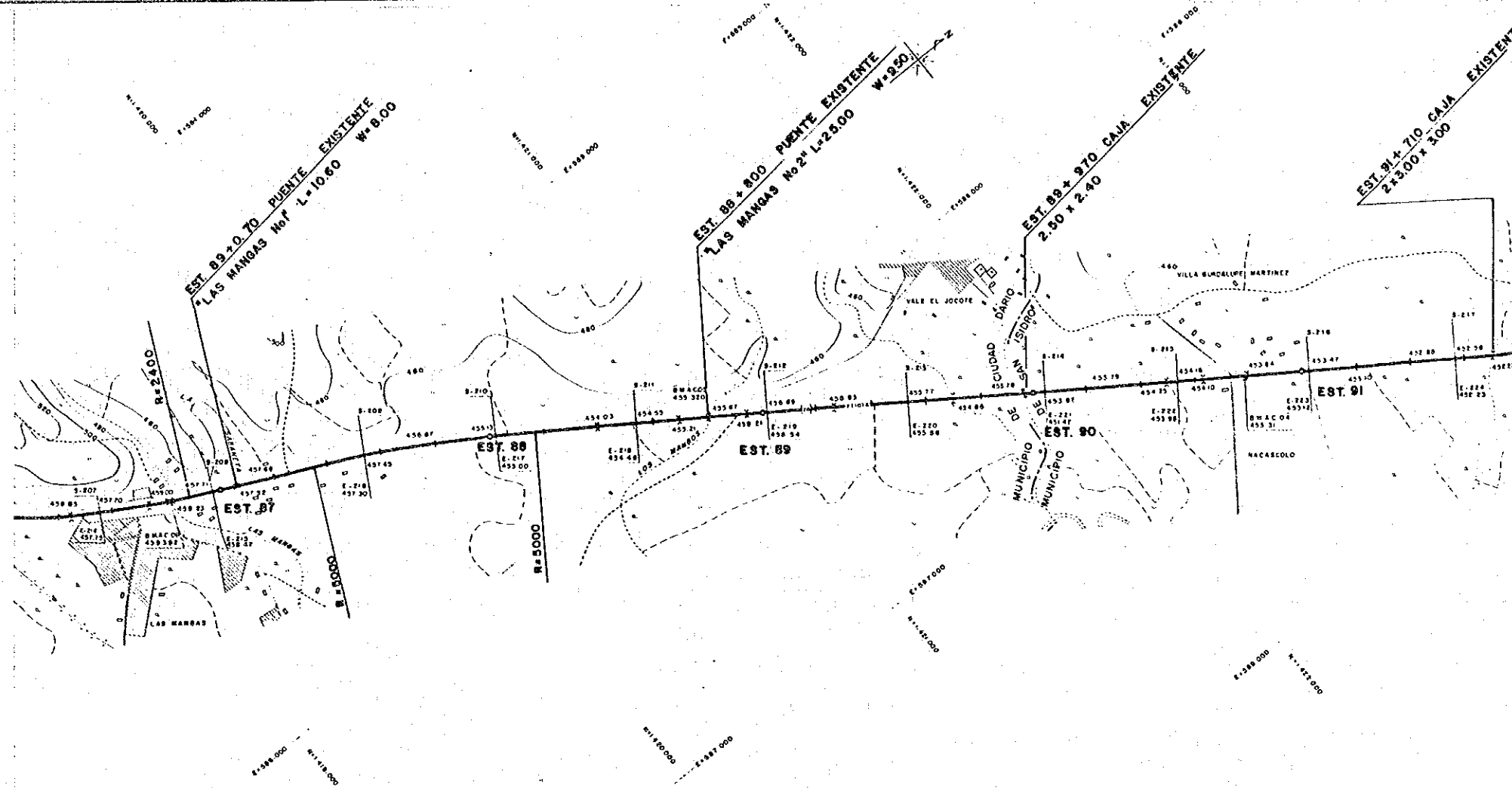
PERFIL -- PROFILE



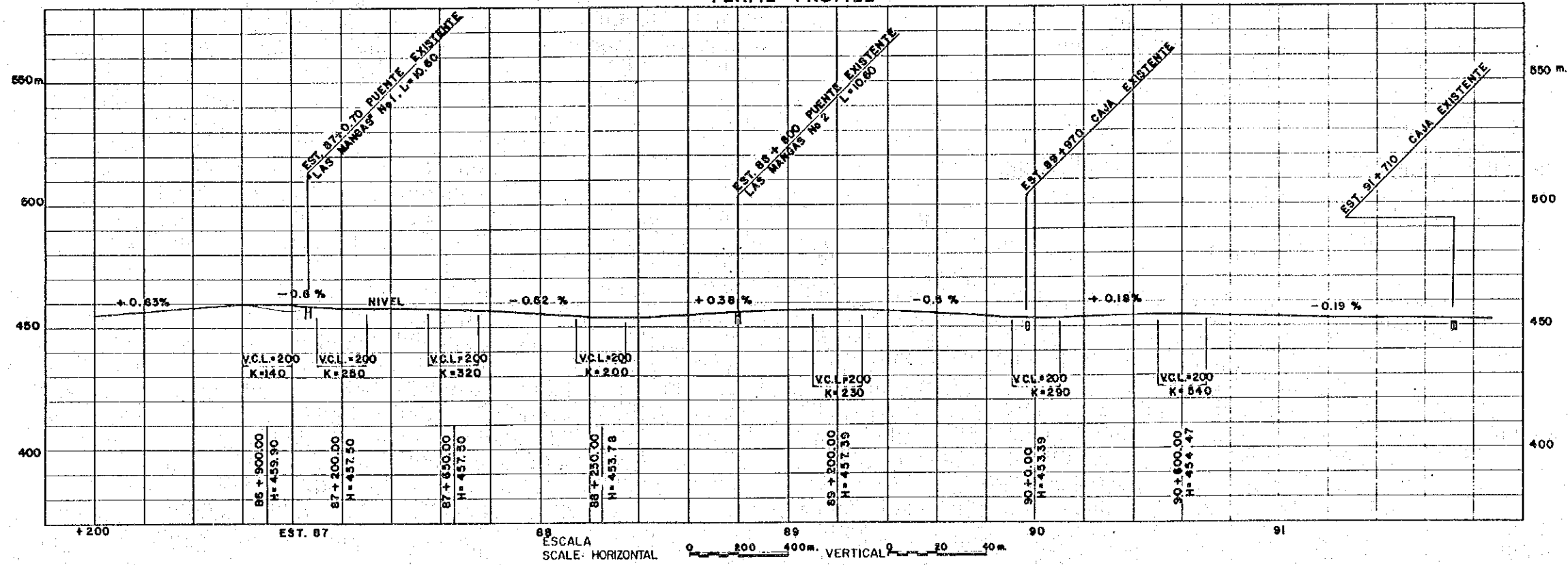


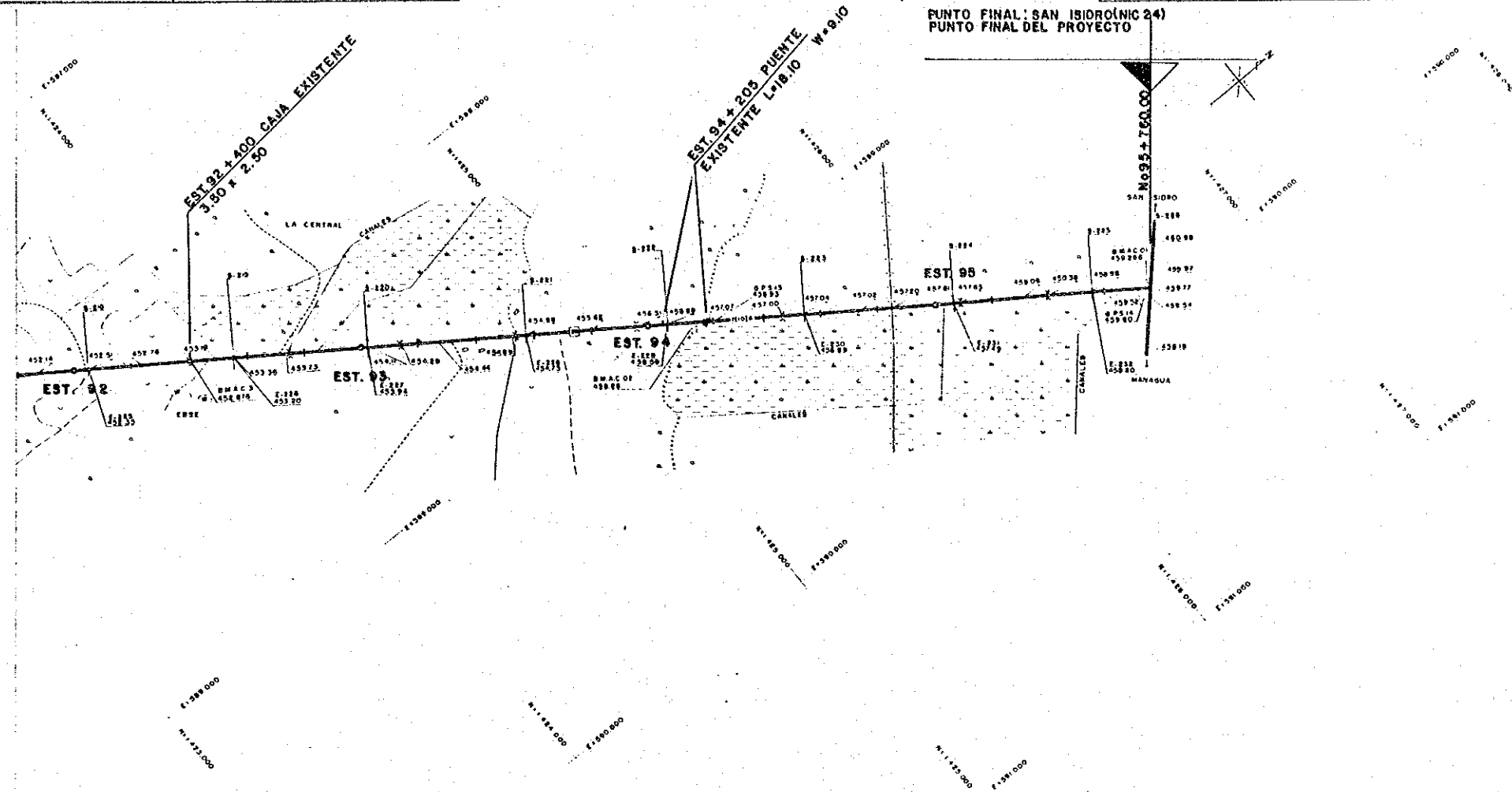
PERFIL - PROFILE



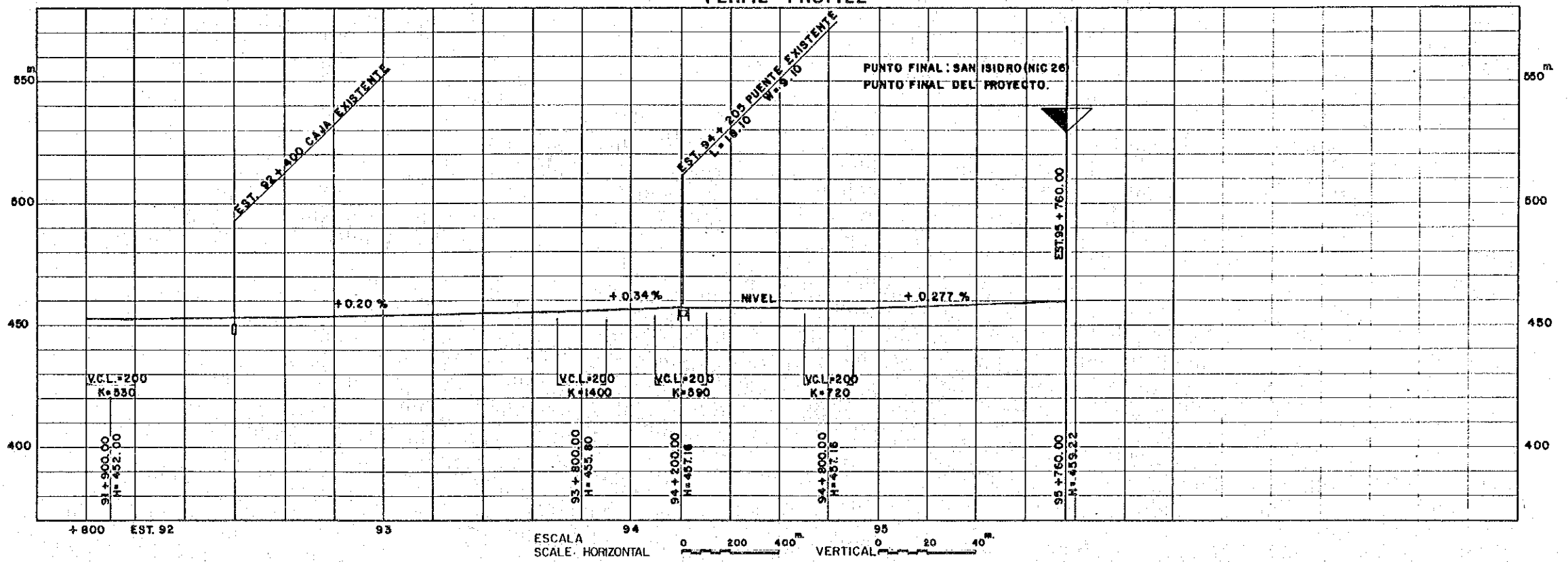


PERFIL -- PROFILE

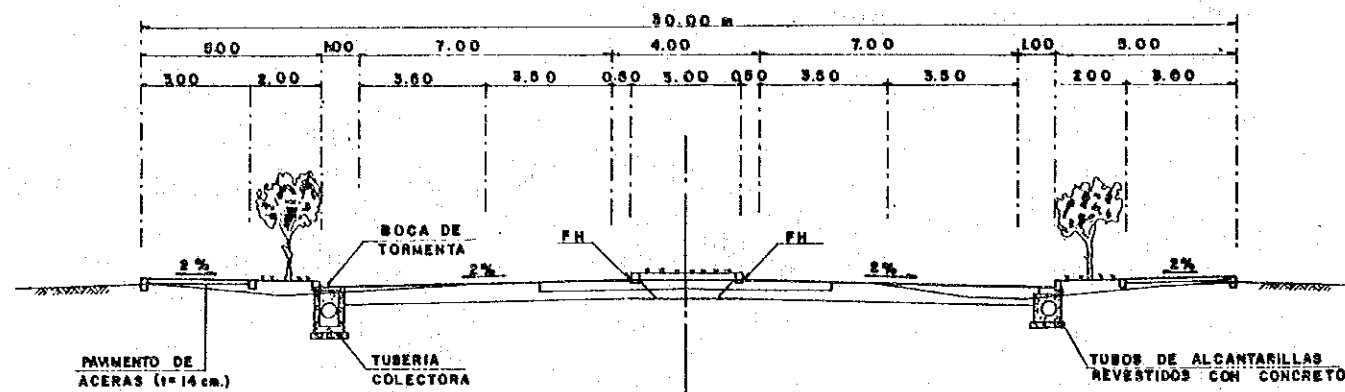




PERFIL - PROFILE

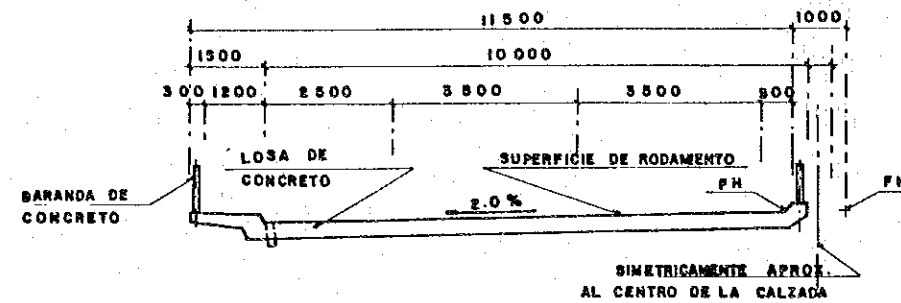


MANAGUA — MASAYA

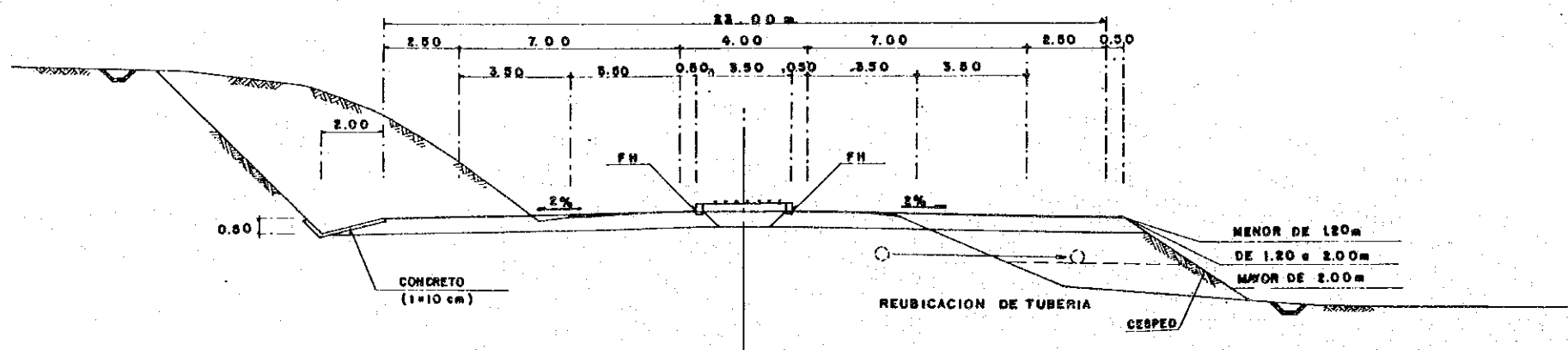


NOTA: INSTALACION DE BOCAS DE TORMENTA A CADA 50m

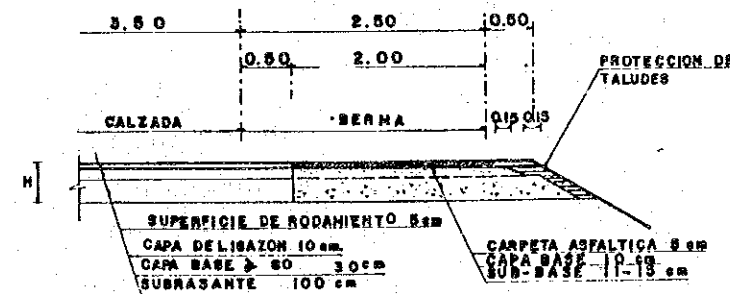
SECCION TIPICA CON ACERA
ESCALA 1:100



SECCION DE PUENTE
ESCALA 1:100

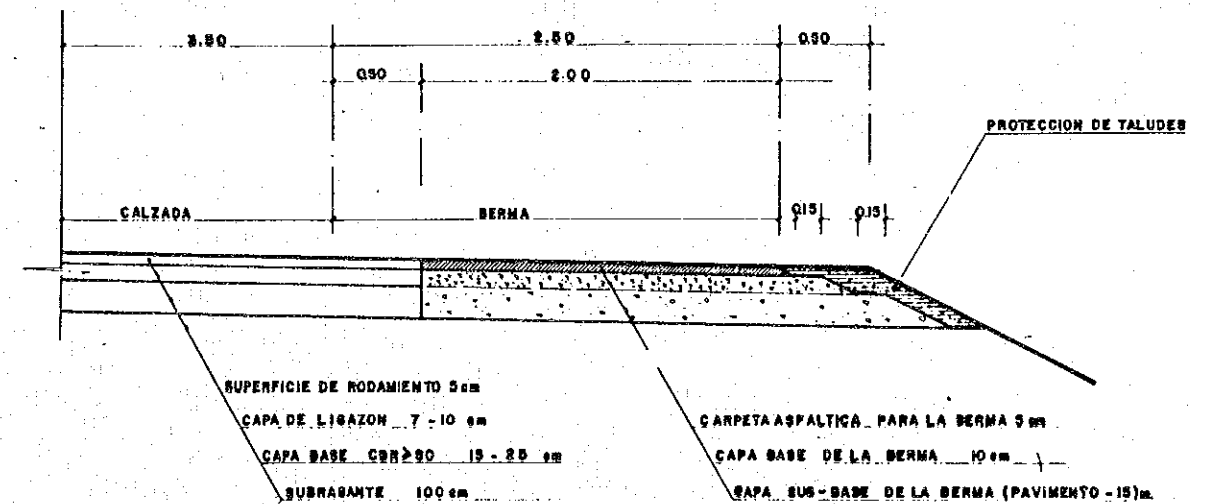
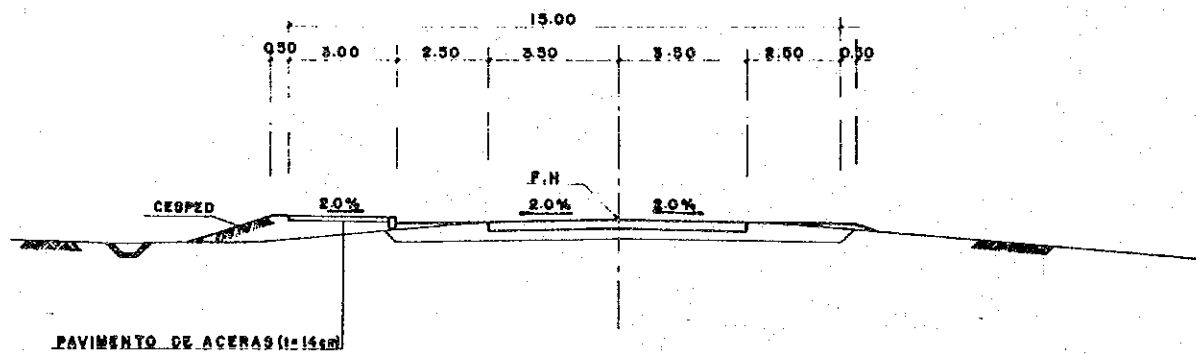
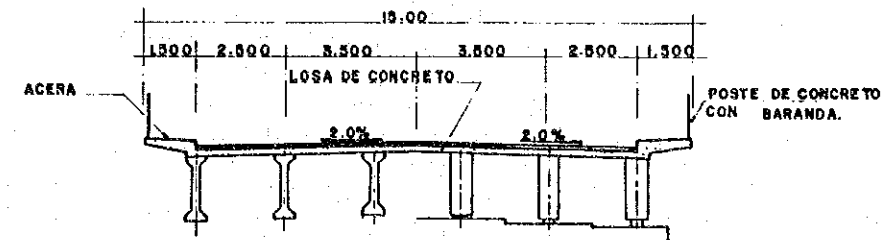
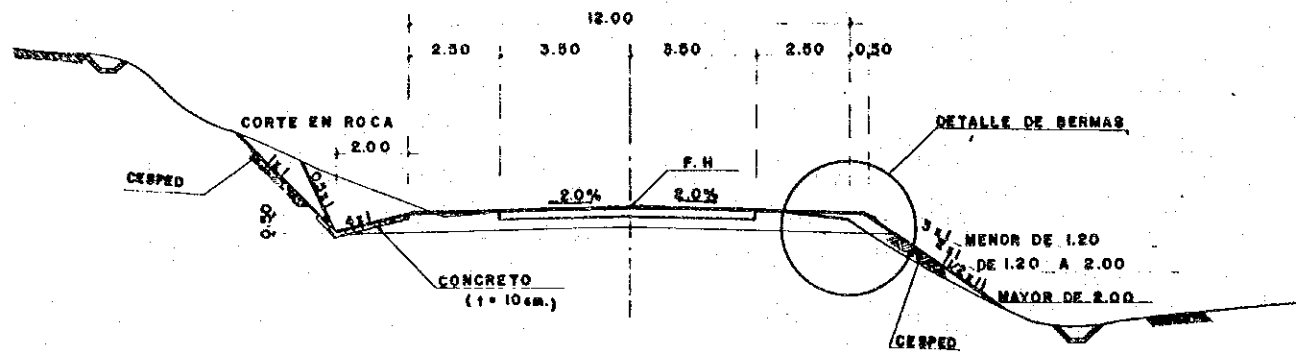


SECCION TIPICA SIN ACERA
ESCALA 1:100

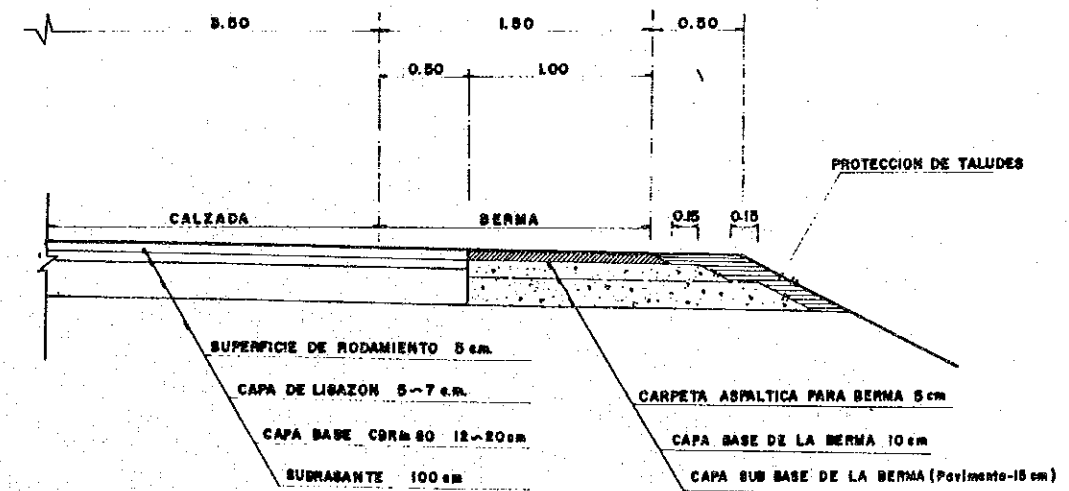
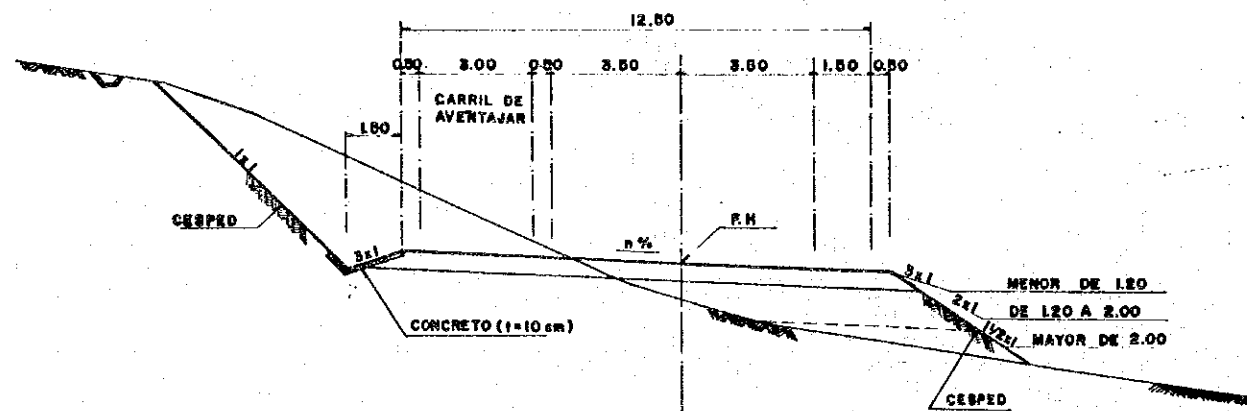
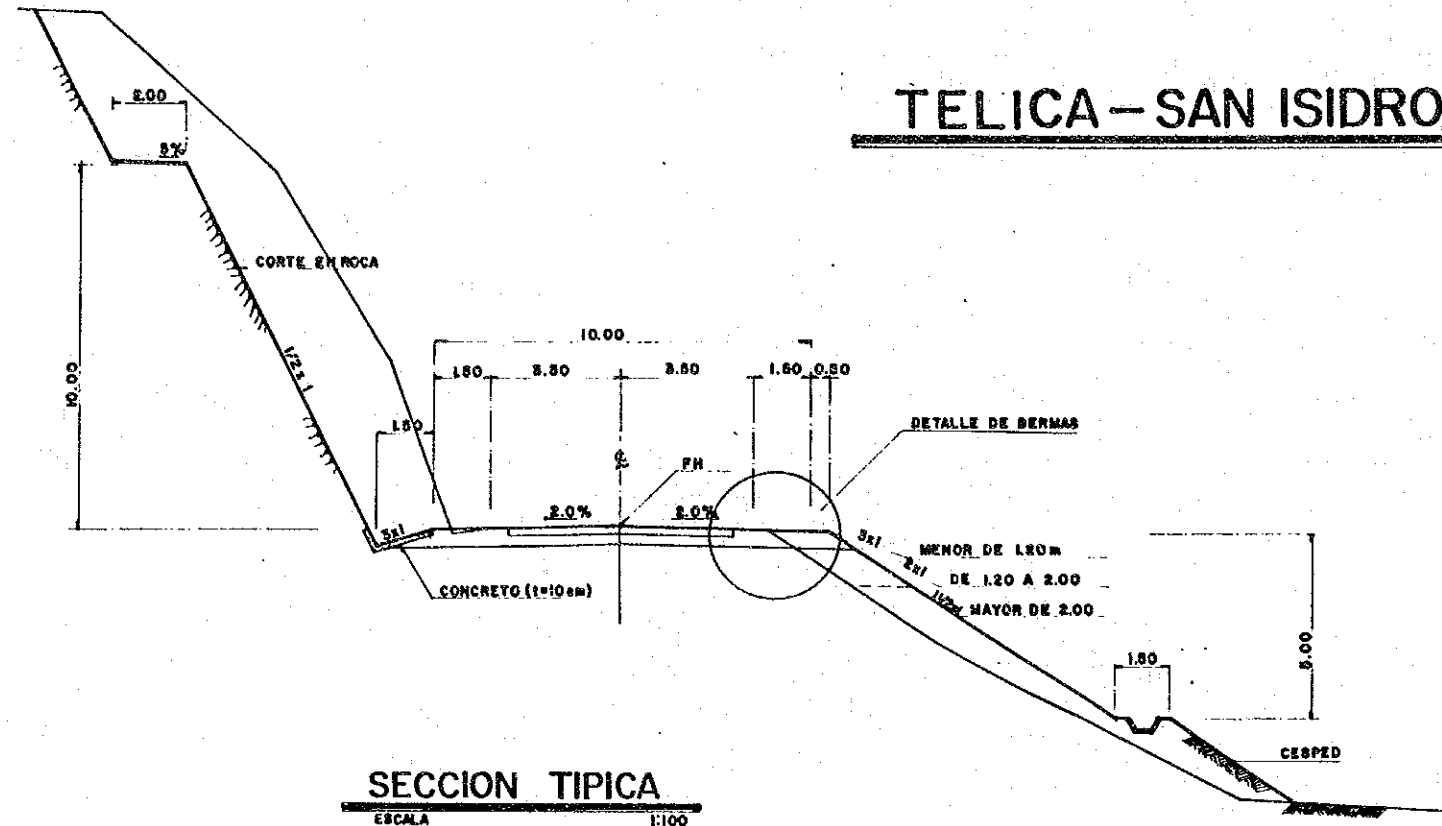


DETALLE DE BERMAS
SIN ESCALA

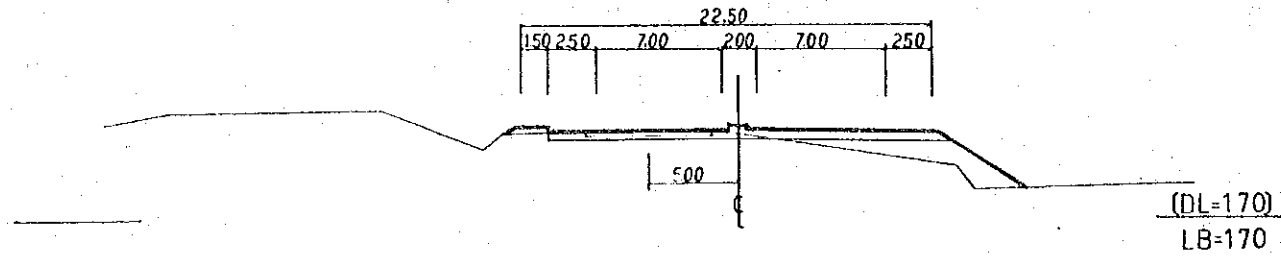
NANDAIME - MASAYA - TIPITAPA - SAN BENITO, TIPITAPA - SAN CRISTOBAL



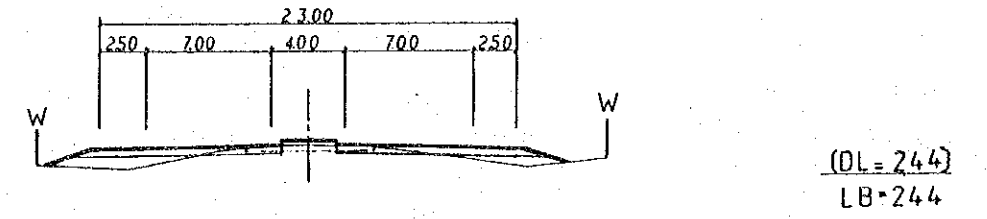
TELICA - SAN ISIDRO



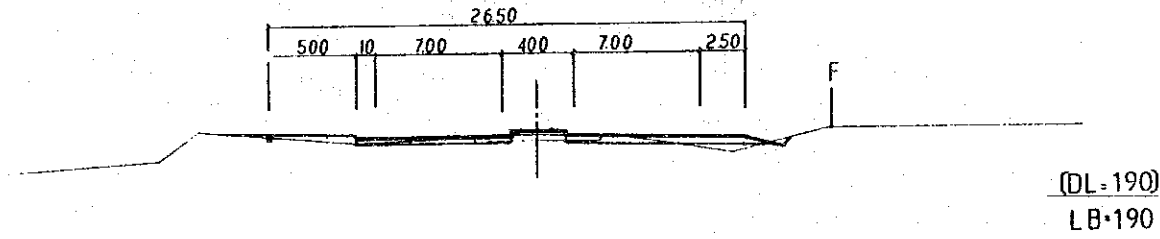
EST 0+520



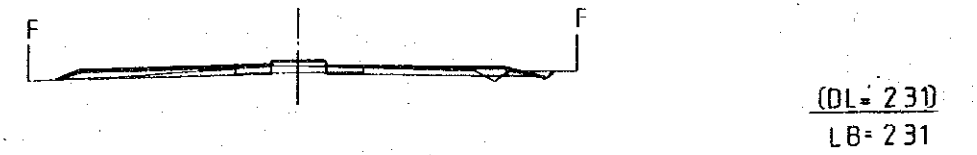
EST 4+500



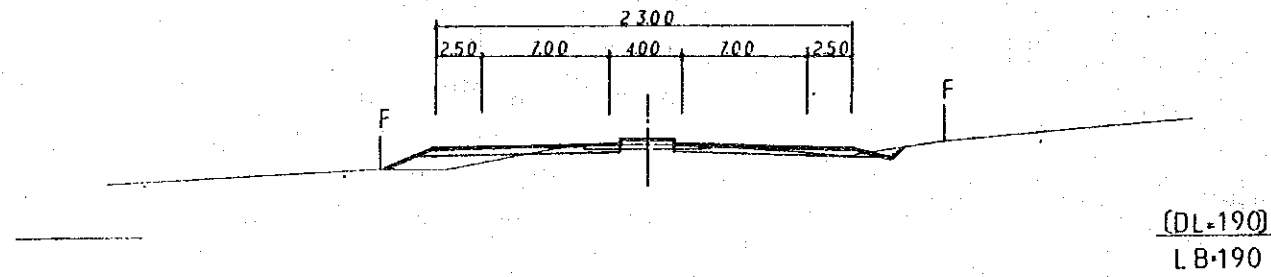
EST 1+000



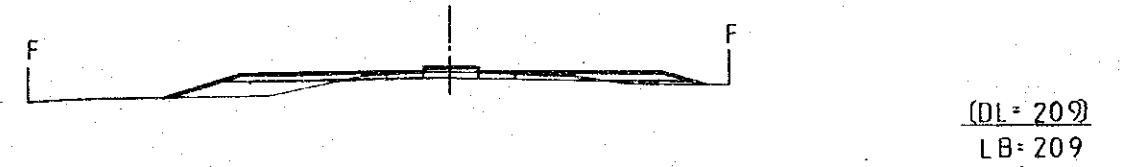
EST. 5+970



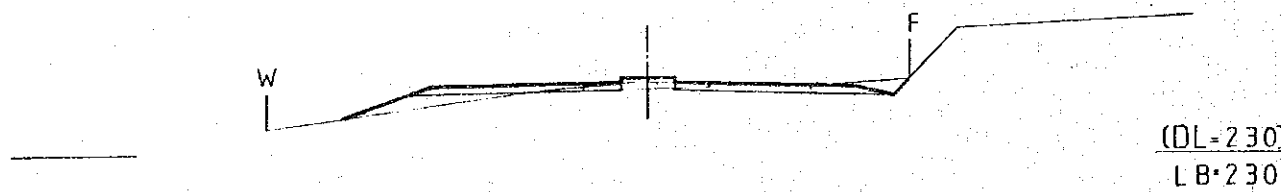
EST 1+500



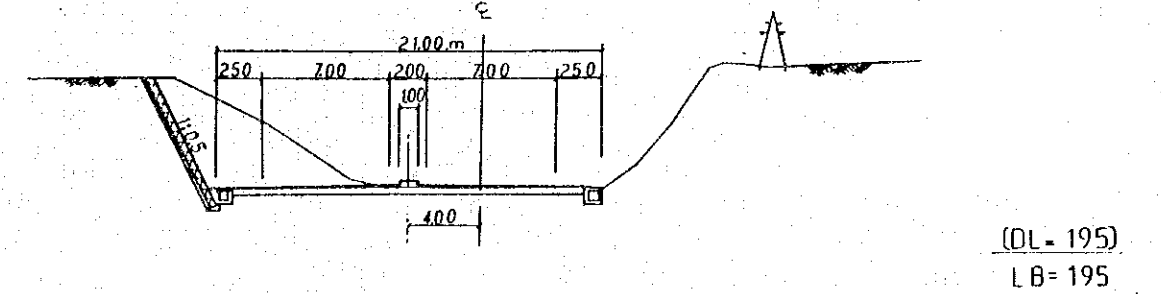
EST. 7+470



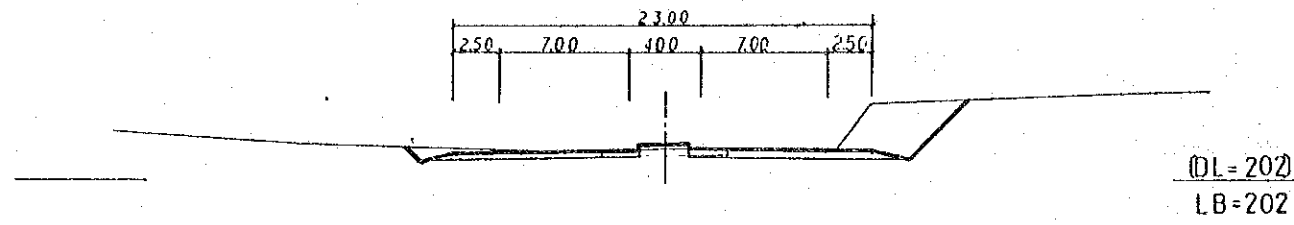
EST 3+000



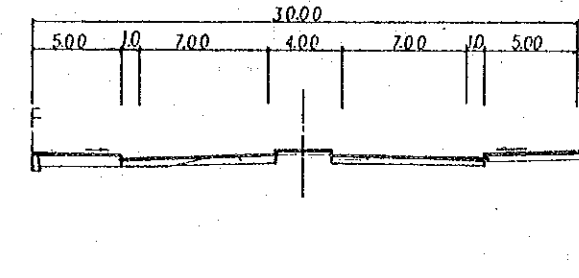
EST 8+100



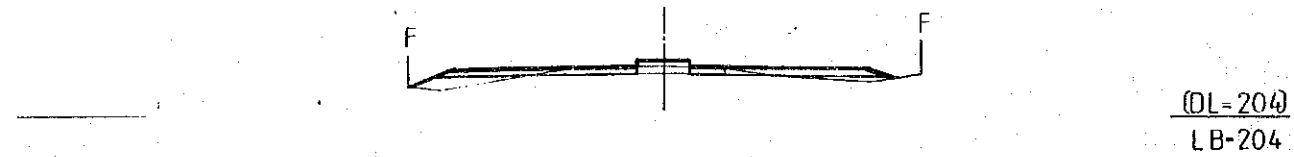
EST. 8+490



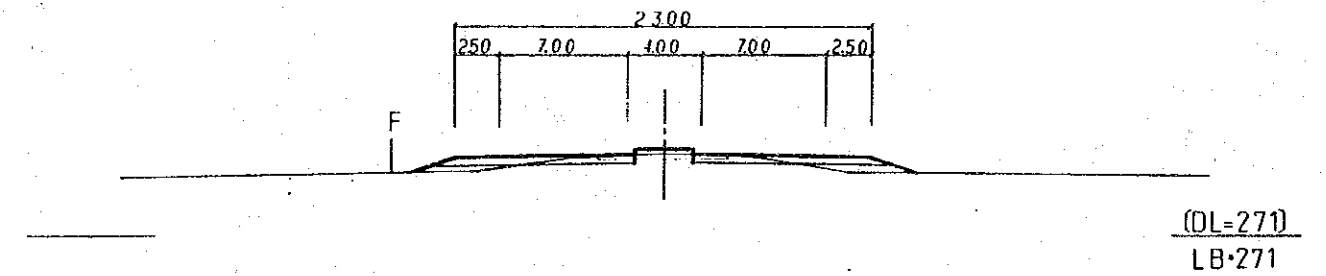
EST. 13+950



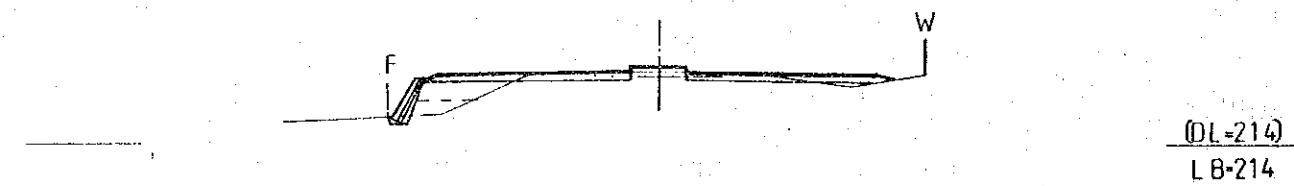
EST. 8+970



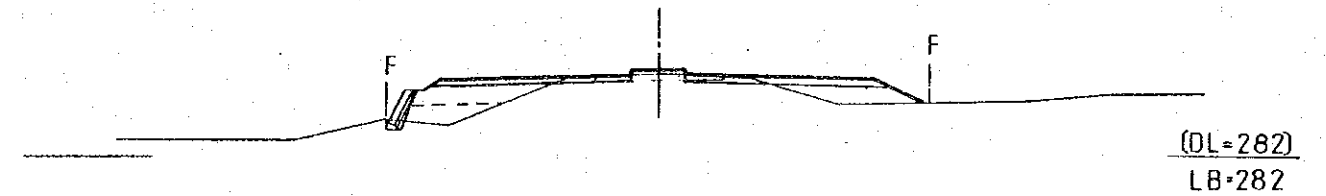
EST. 15+450



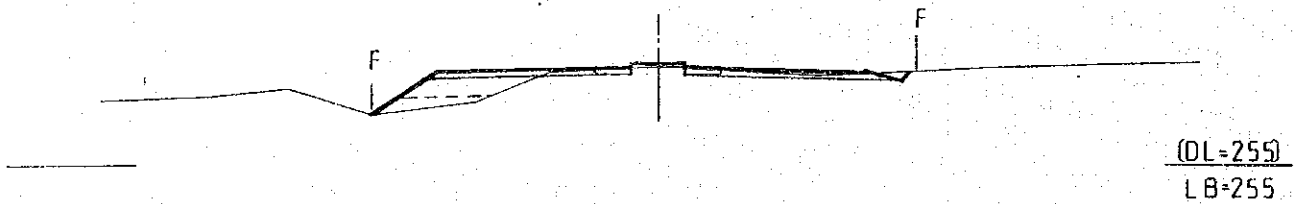
EST. 9+970



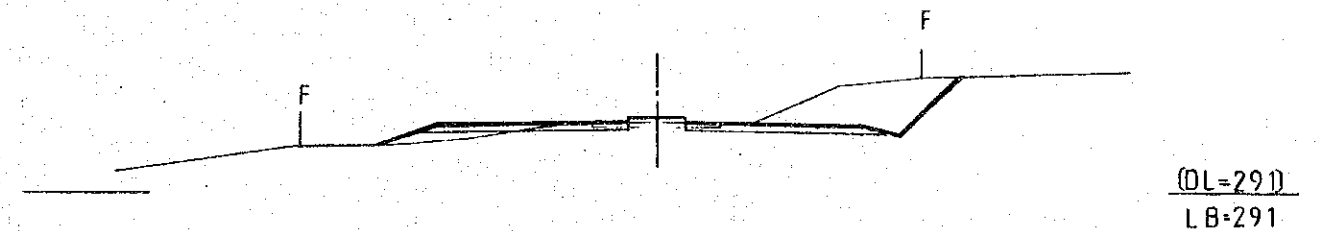
EST. 16+450



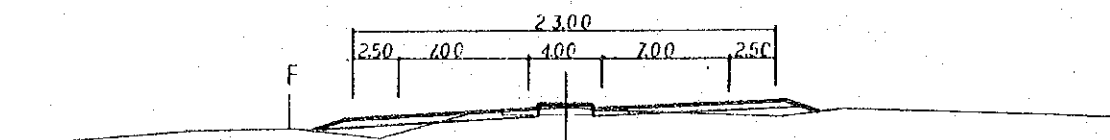
EST. 11+960



EST. 17+950

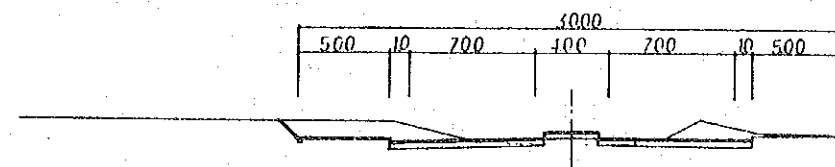


EST. 18+950



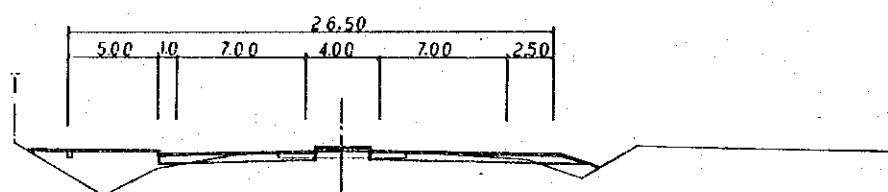
(DL=244)
LB=244

EST. 22+630



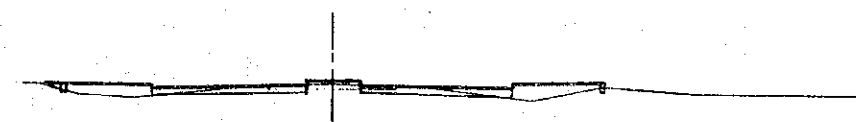
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EST. 20+130



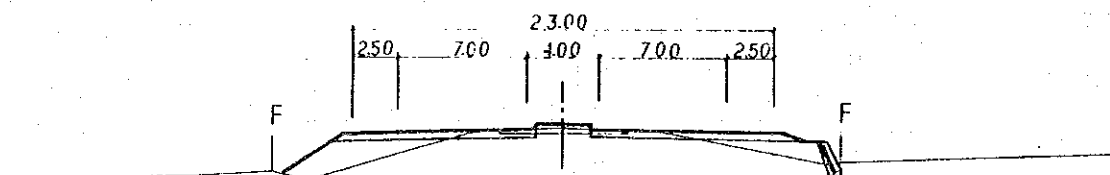
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EST. 23+630



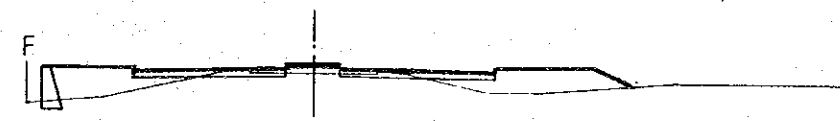
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EST. 21+630



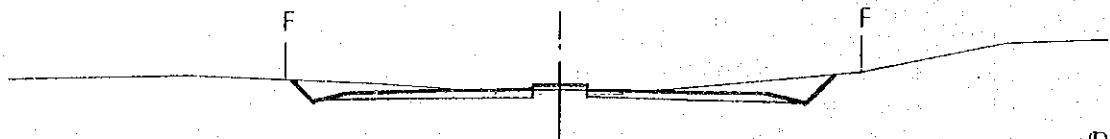
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LB=216

EST. 24+620



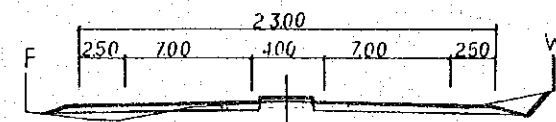
(DL=242)
LB=242

EST. 21+950



(DL=223)
LB=223

EST. 25+620



(DL=248)
LB=248

MASAYA - NANDAIME

ESTUDIO SOBRE MEJORAMIENTO Y REHABILITACION DE CARRETERAS EN LA REPUBLICA DE NICARAGUA

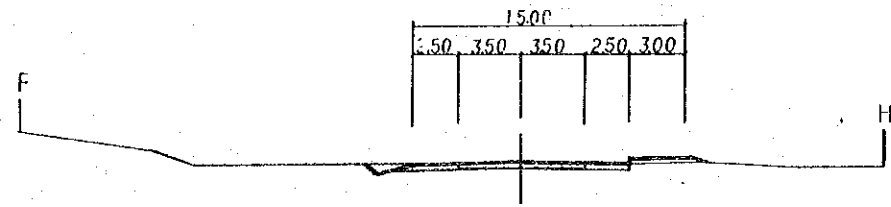
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON

THE ROAD IMPROVEMENT AND REHABILITATION STUDY IN NICARAGUA

JAPAN INTERNATIONAL COOPERATION AGENCY

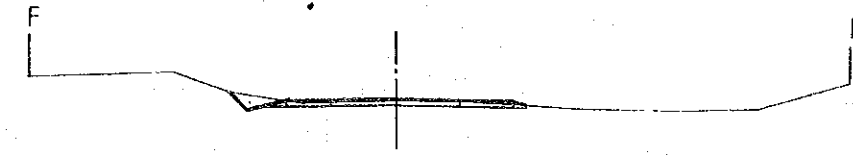
48/79

EST. 0+730



DL=252
LB=252

EST. 3+230



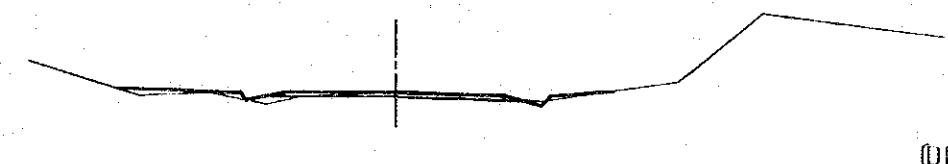
DL=291
LB=291

EST. 1+750



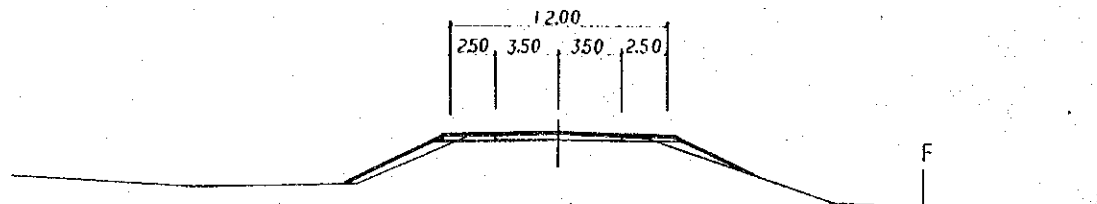
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LB=265

EST. 4+230



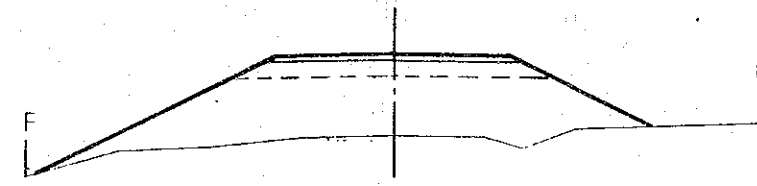
DL=334
LB=334

EST. 2+250



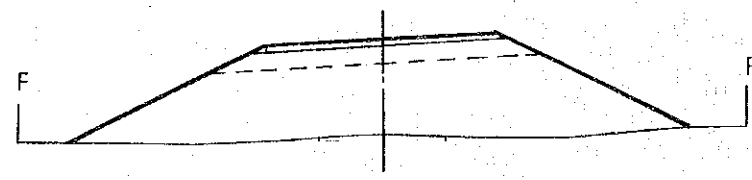
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LB=264

EST. 4+730



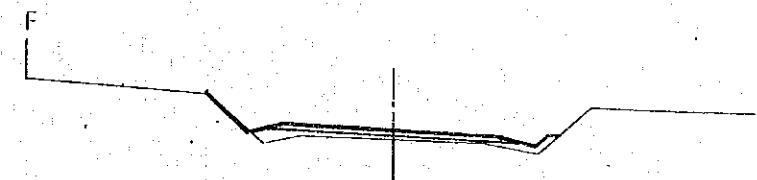
DL=353
LB=353

EST. 2+750



DL=269
LB=269

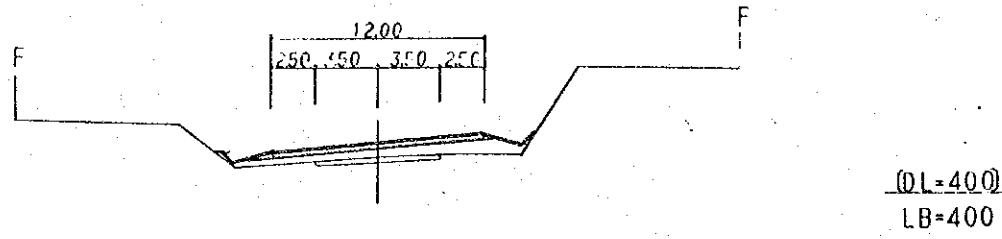
EST. 5+230



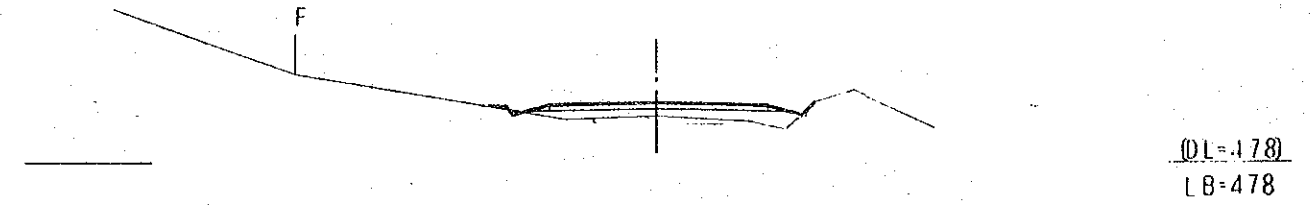
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MASAYA - NANDAIME

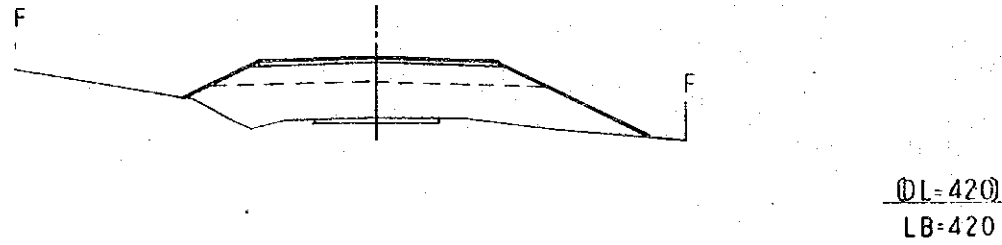
EST 5+720



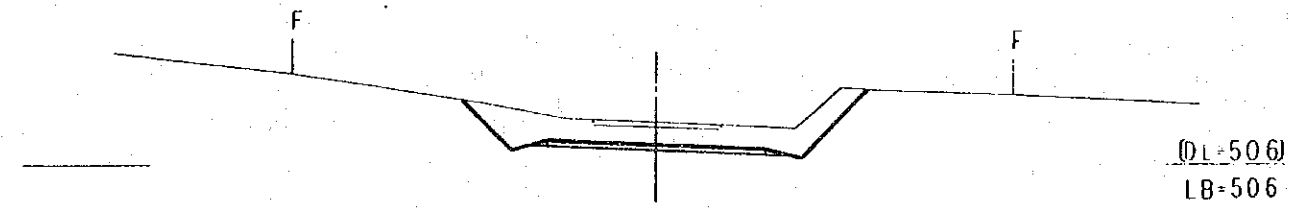
EST. 7+720



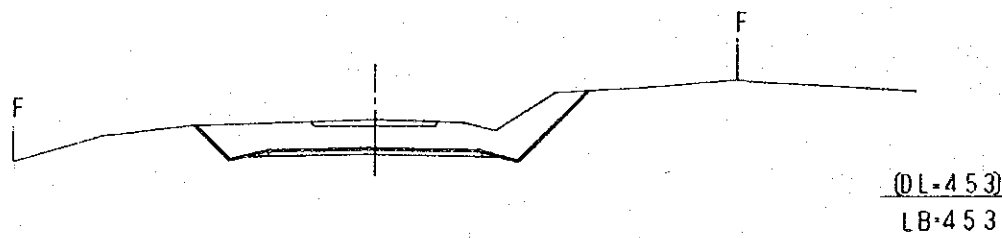
EST. 6+220



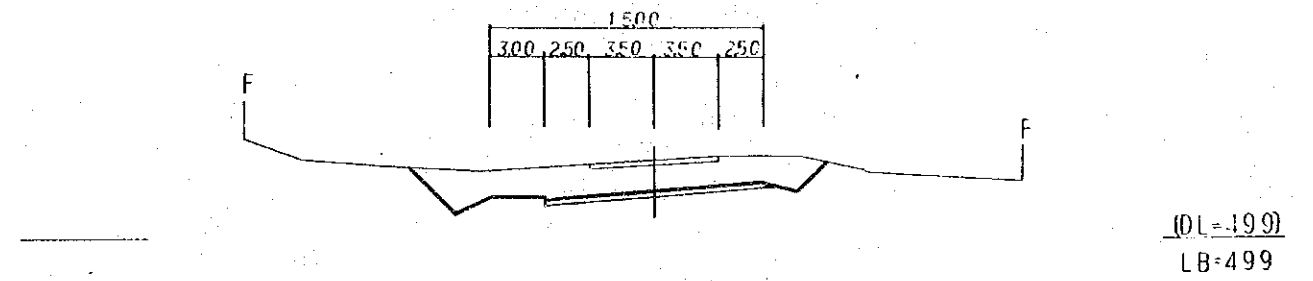
EST. 8+210



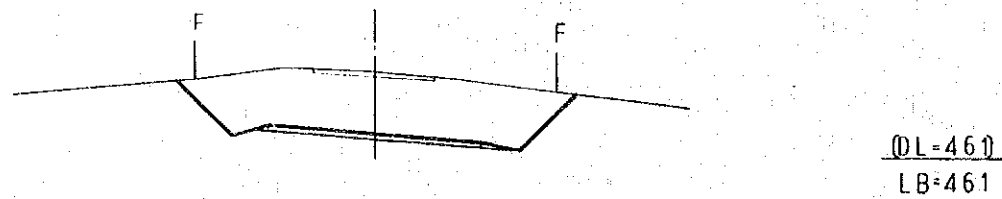
EST. 6+720



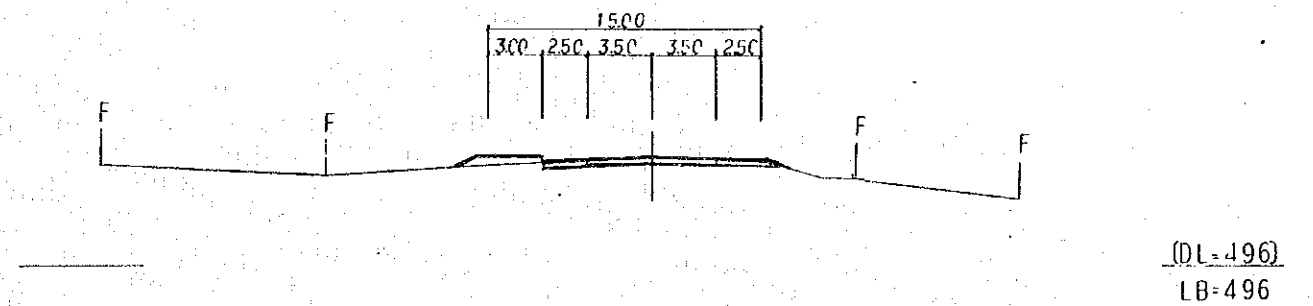
EST. 8+700



EST. 7+220



EST. 9+200



MASAYA - NANDAIME

ESTUDIO SOBRE MEJORAMIENTO Y REHABILITACION DE CARRETERAS EN LA REPUBLICA DE NICARAGUA

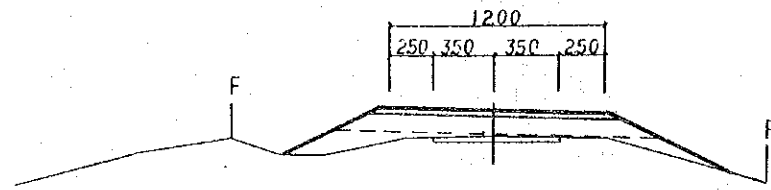
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON

THE ROAD IMPROVEMENT AND REHABILITATION STUDY IN NICARAGUA

JAPAN INTERNATIONAL COOPERATION AGENCY

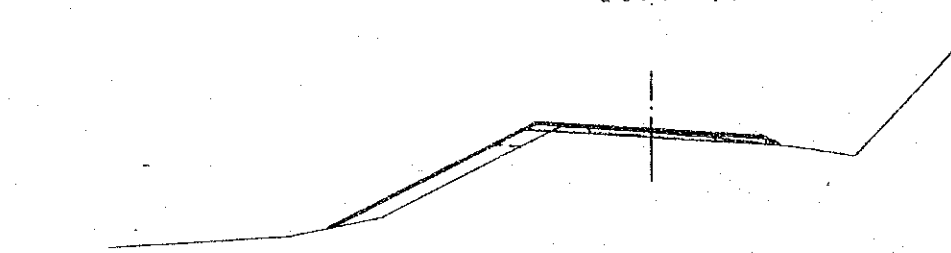
50/79

EST. 9+700



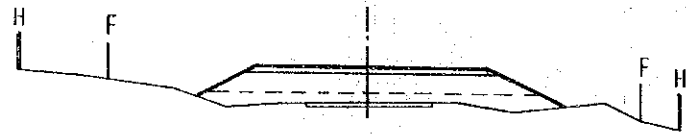
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LB=476

EST. 11+700



(DL=369)
LB=369

EST. 10+200



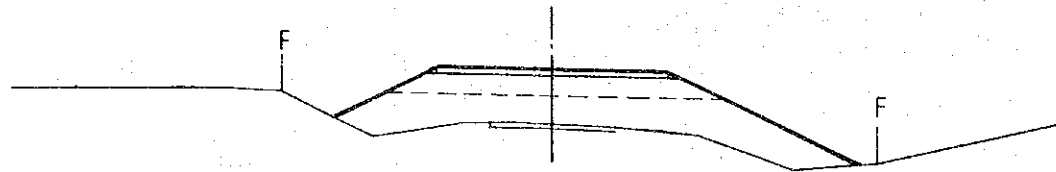
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EST. 12+200



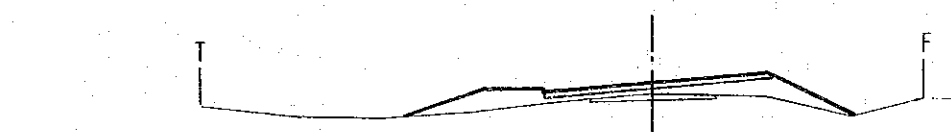
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LB=349

EST. 10+700



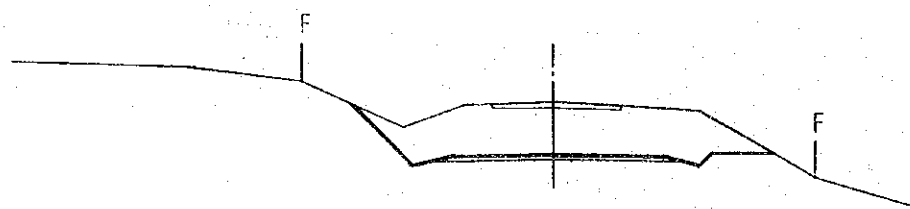
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EST. 12+700



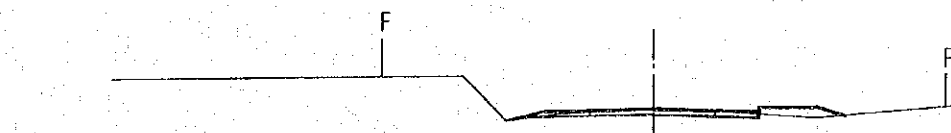
(DL=345)
LB=345

EST. 11+200



(DL=407)
LB=407

EST. 13+200



(DL=341)
LB=341

MASAYA - NANDAIME

ESTUDIO SOBRE MEJORAMIENTO Y REHABILITACION DE CARRETERAS EN LA REPUBLICA DE NICARAGUA

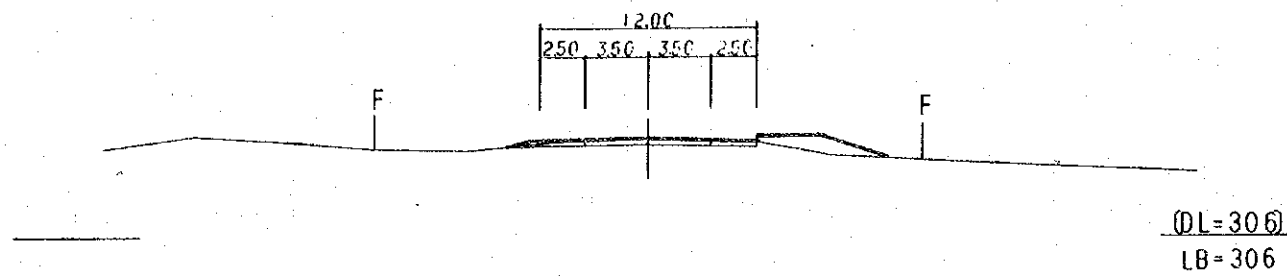
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON

THE ROAD IMPROVEMENT AND REHABILITATION STUDY IN NICARAGUA

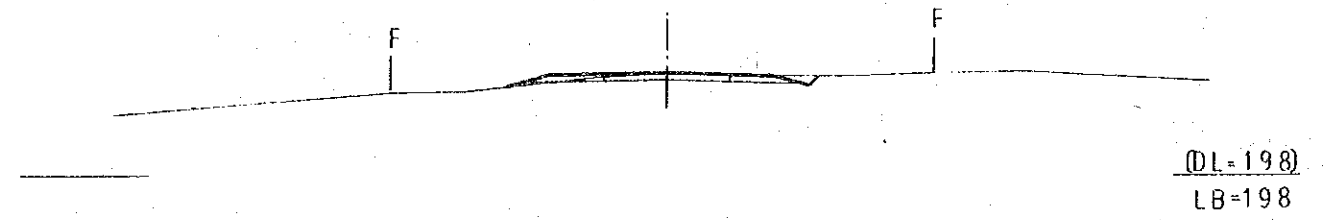
JAPAN INTERNATIONAL COOPERATION AGENCY

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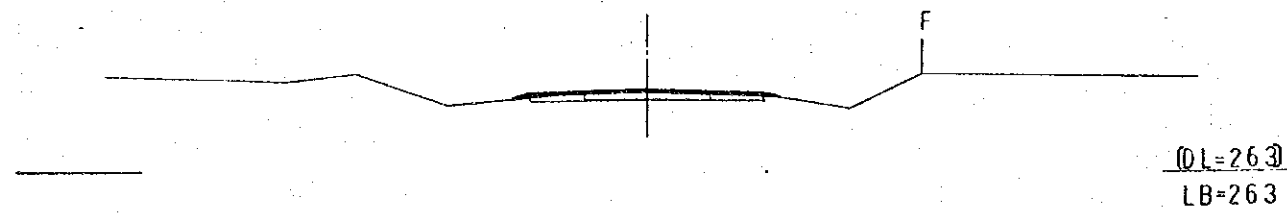
EST. 15+220



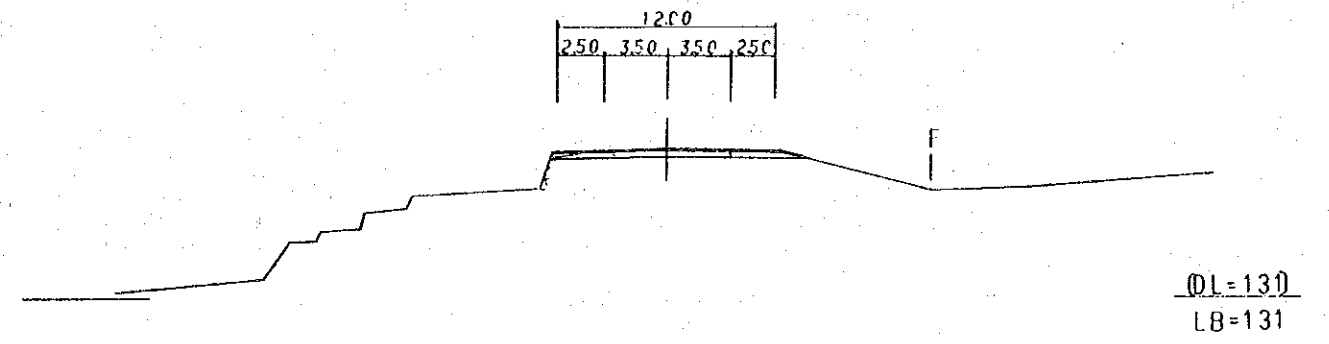
EST. 22+780



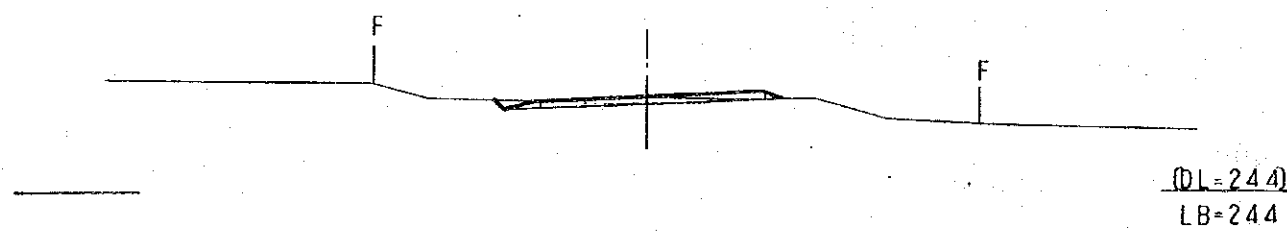
EST. 17+220



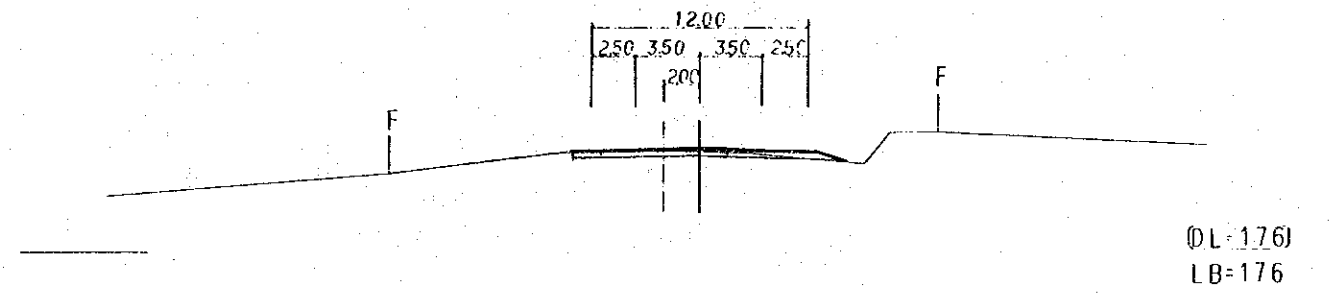
EST. 23+780



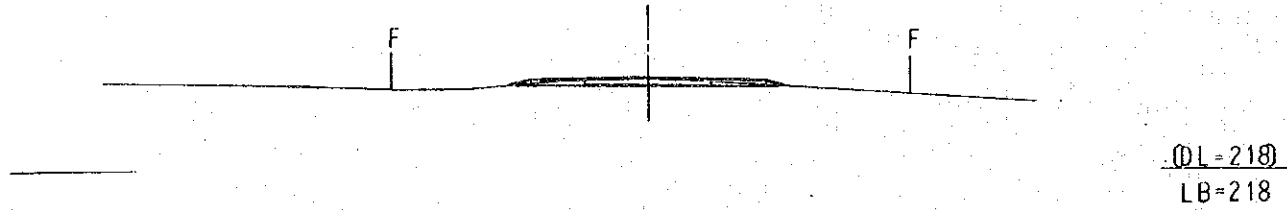
EST. 18+780



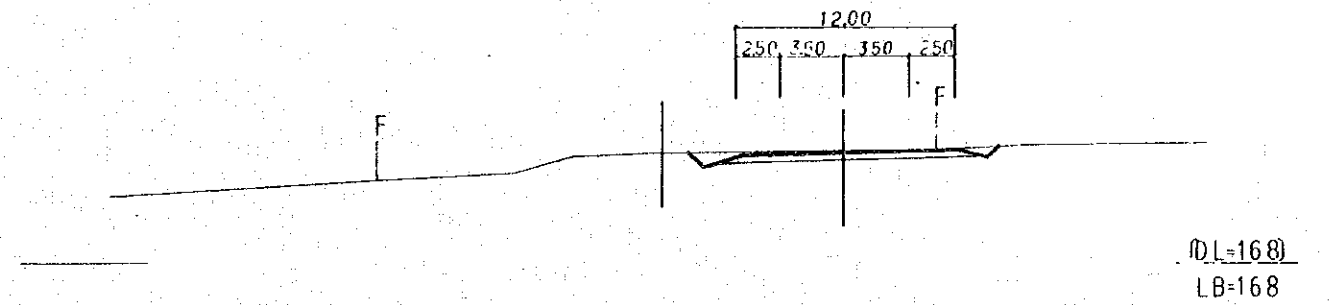
EST. 24+780

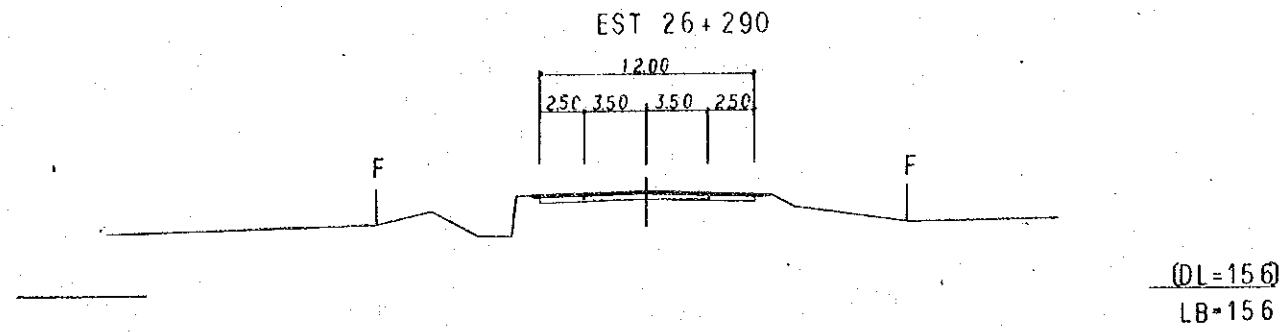


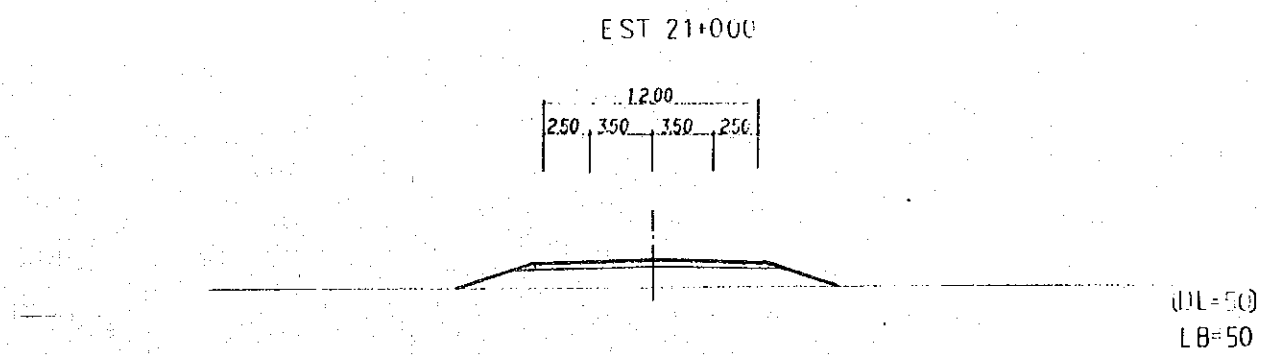
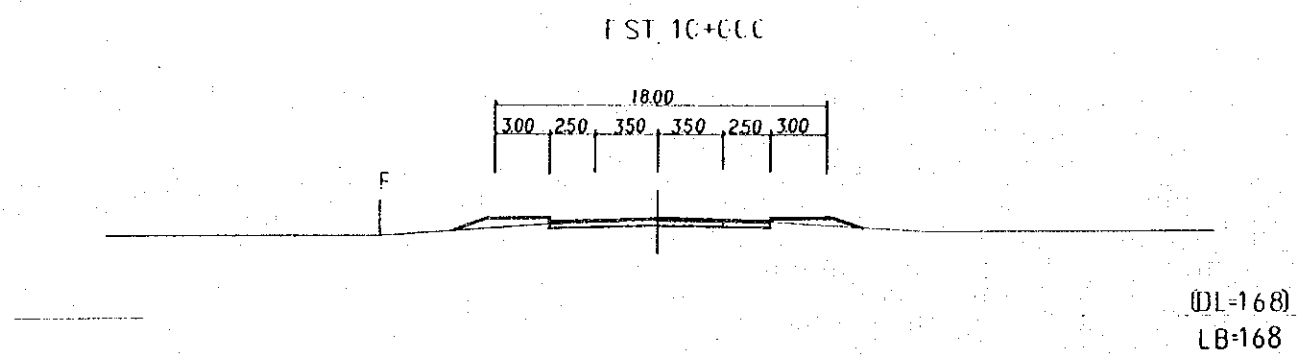
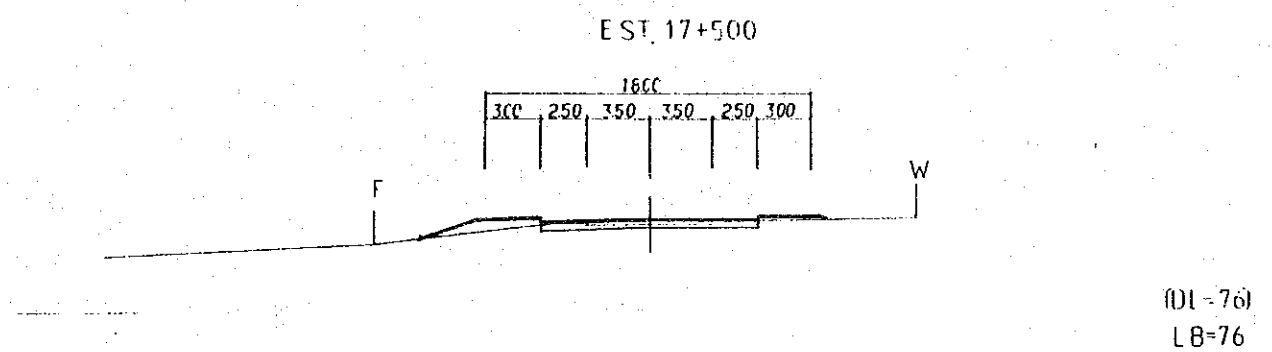
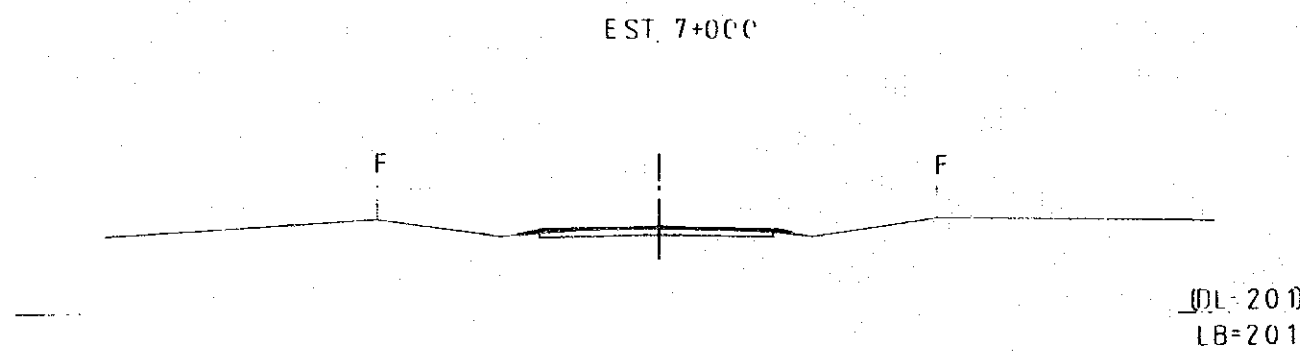
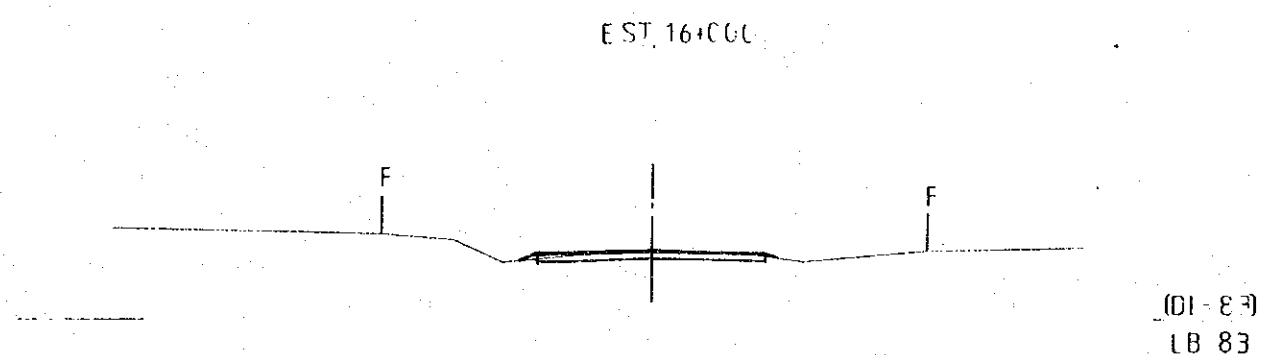
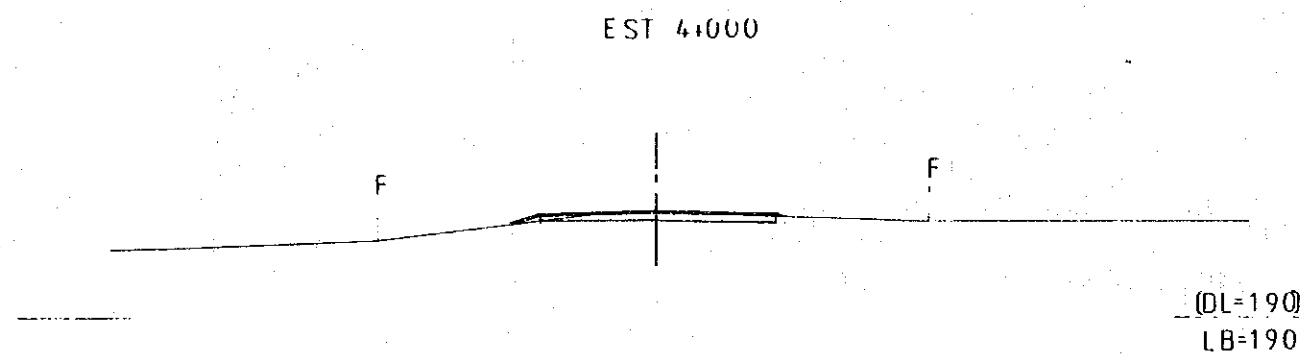
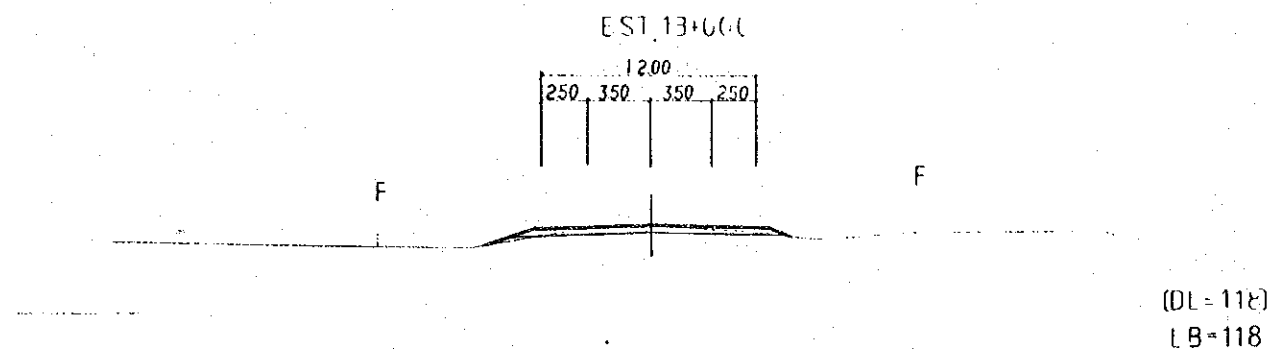
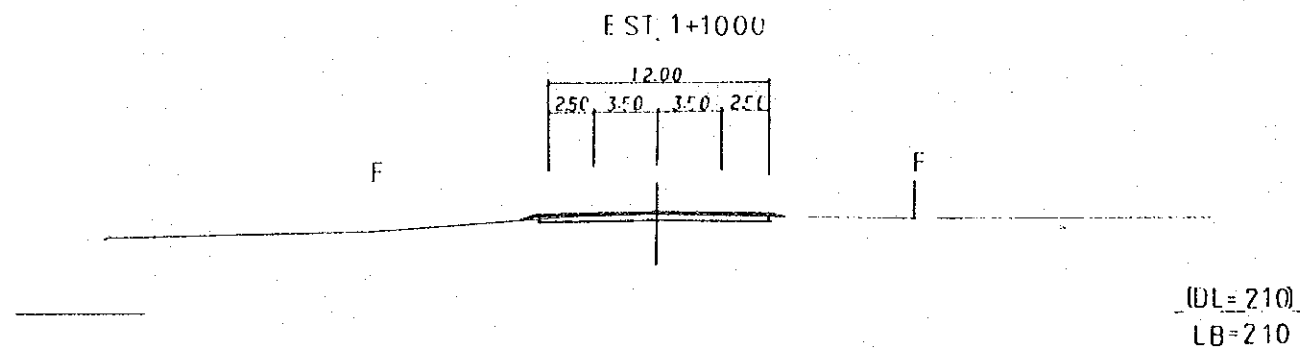
EST. 20+780



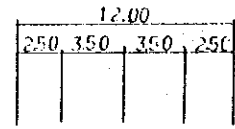
EST. 25+290







EST. 0+930



F

F

(DL=41)
LB=41

EST. 9+960

F

F

(DL=52)
LB=52

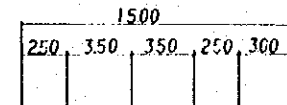
EST. 3+950

F

F

(DL=41)
LB=41

EST. 12+460



F

F

(DL=66)
LB=66

EST. 6+960

F

(DL=480)
LB=480

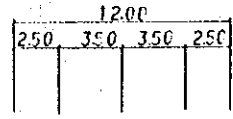
EST. 14+950

F

F

(DL=69)
LB=69

EST. 0+580



F

F

(DL = 39)
LB = 39

EST. 2+600

F

F

(DL = 41)
LB = 41

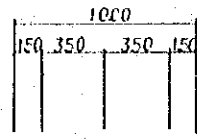
EST. 4+100

F

F

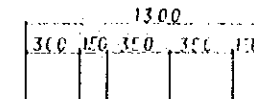
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LB = 43

EST 0+720



(DL=120)
LB=120

EST 12+180



(DL=200)
LB=200

EST 4+880

(DL=155)
LB=155

EST 12+600

(DL=190)
LB=190

EST 9+600

(DL=225)
LB=225

EST 13+160

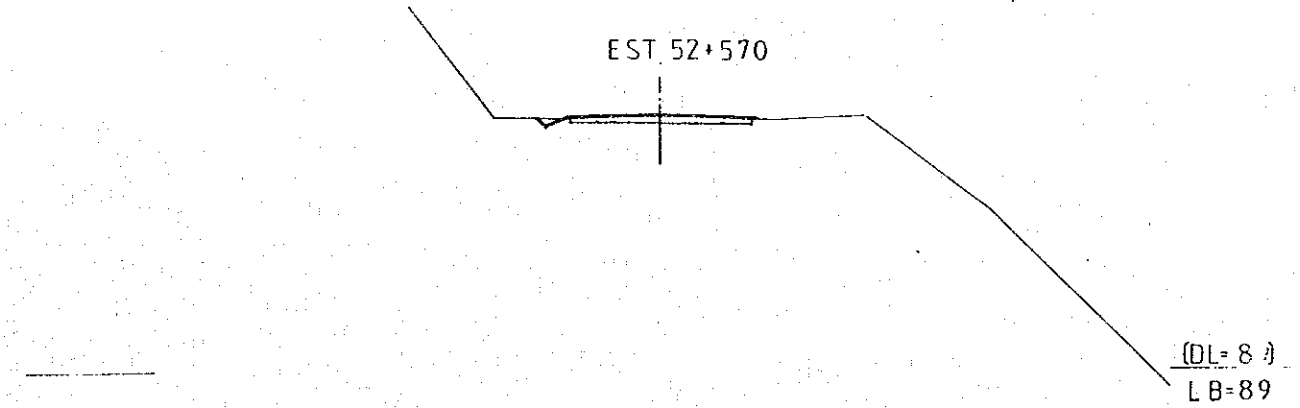
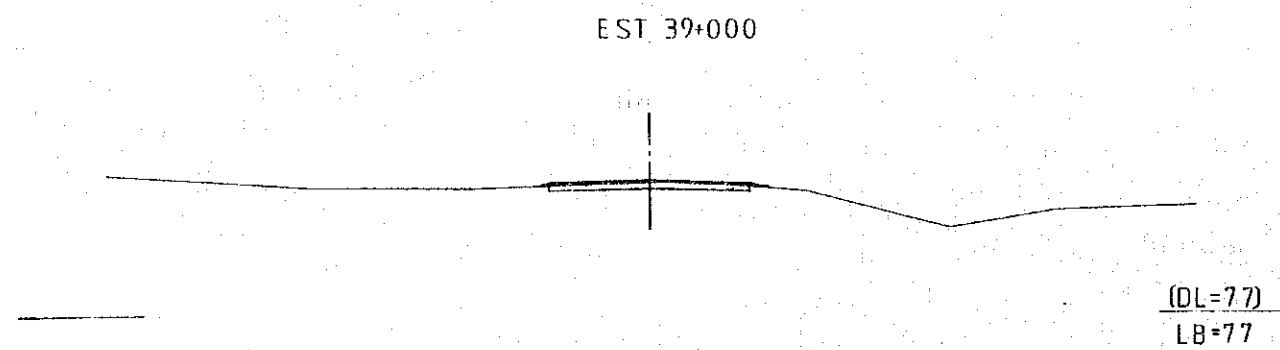
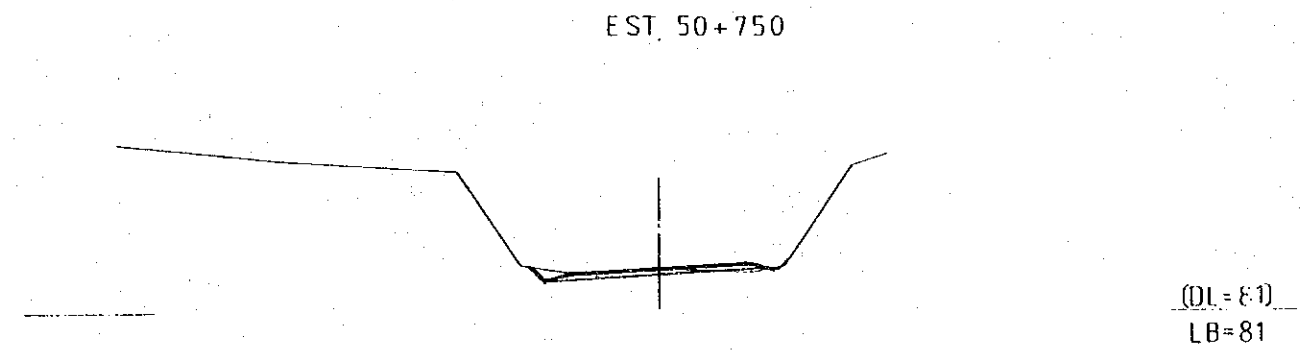
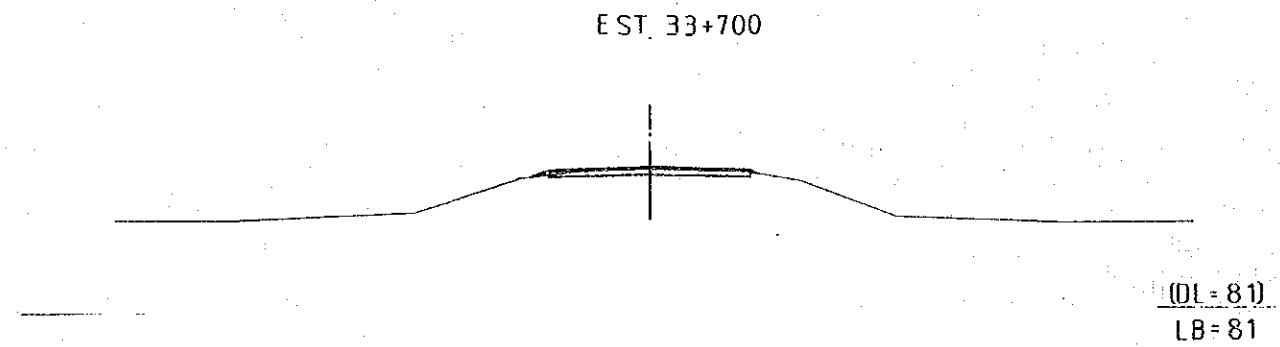
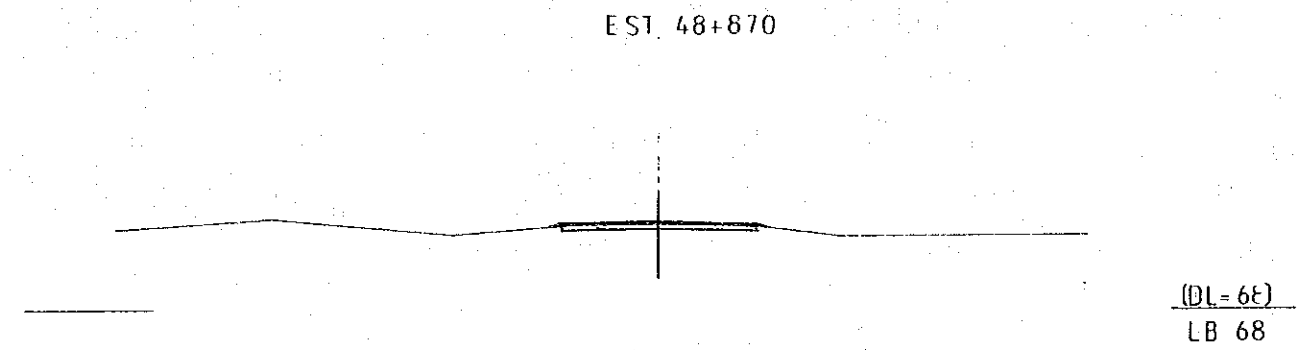
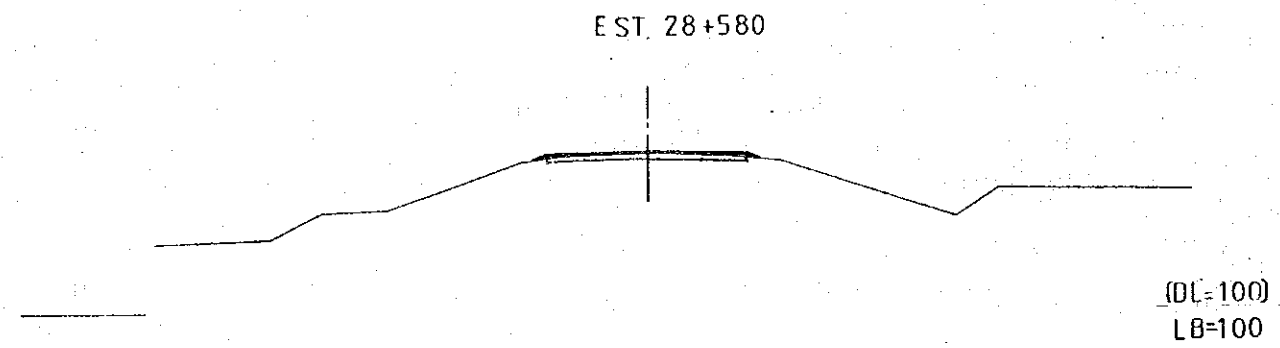
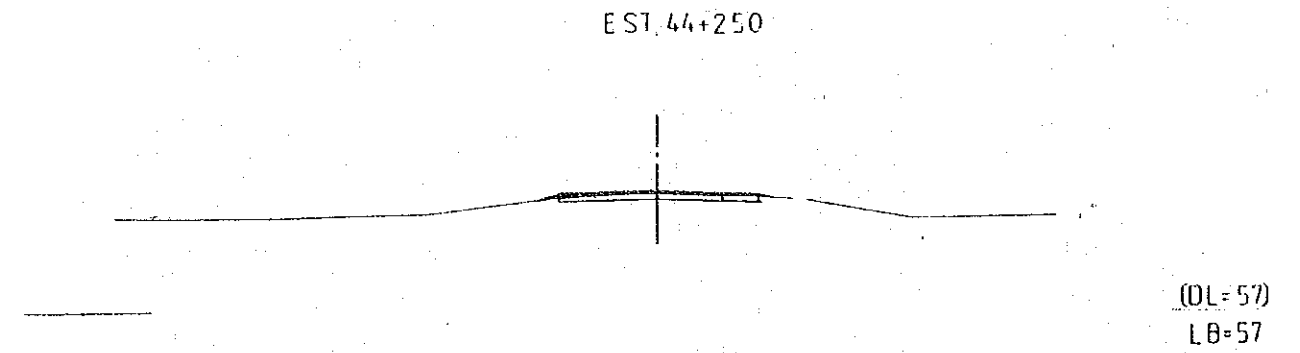
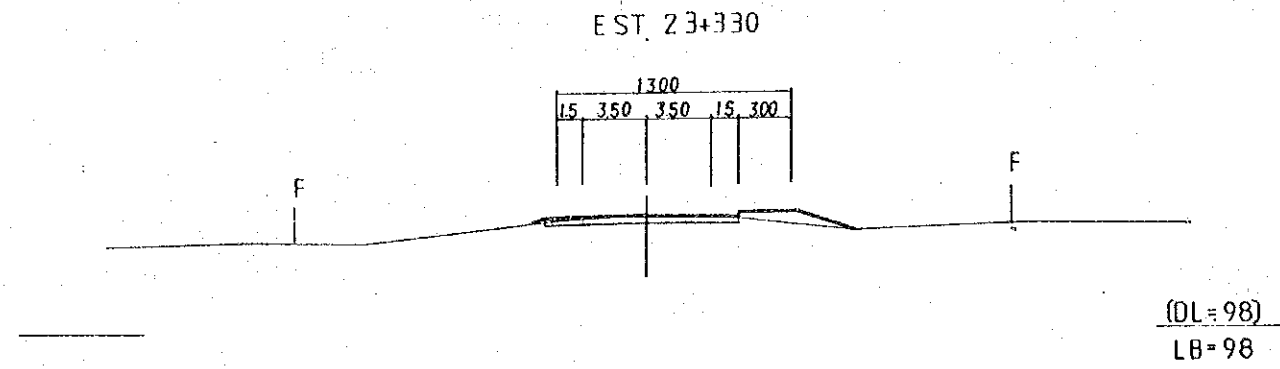
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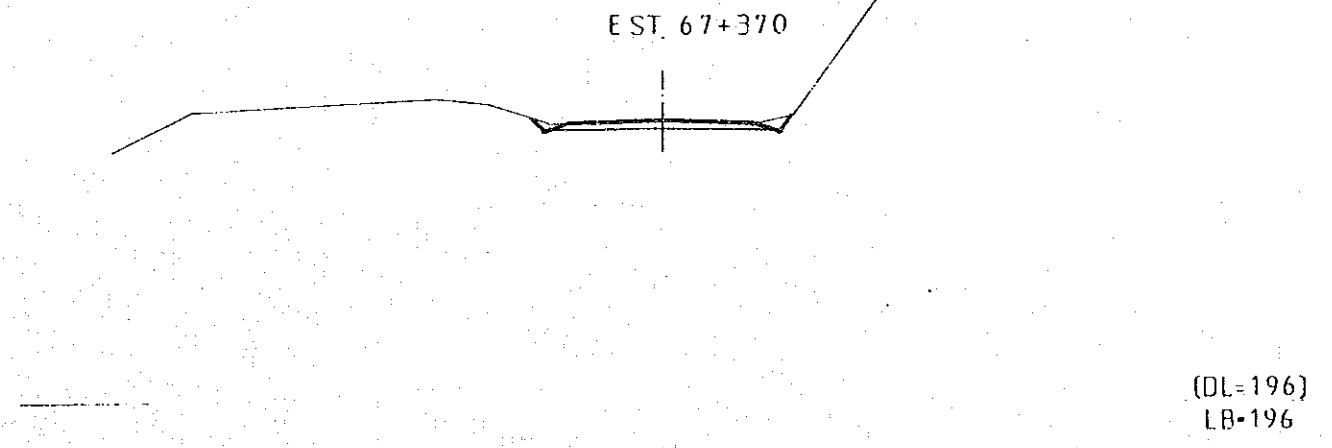
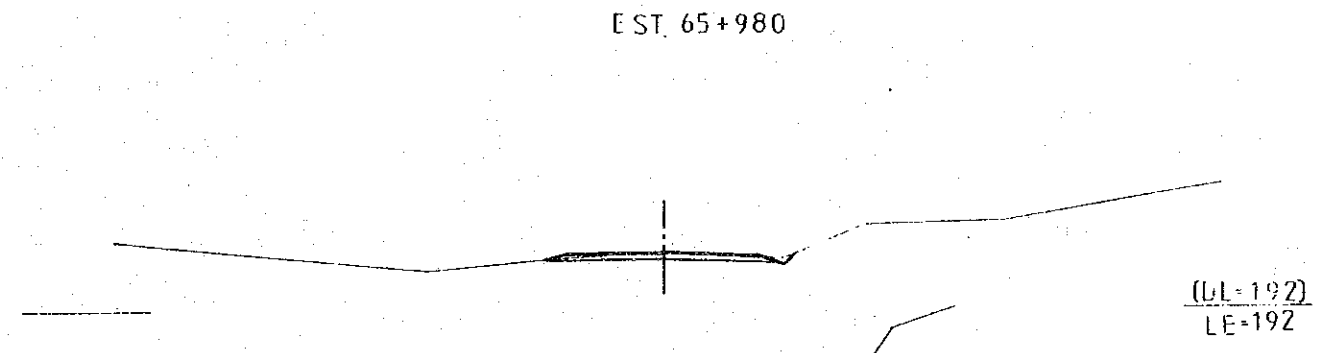
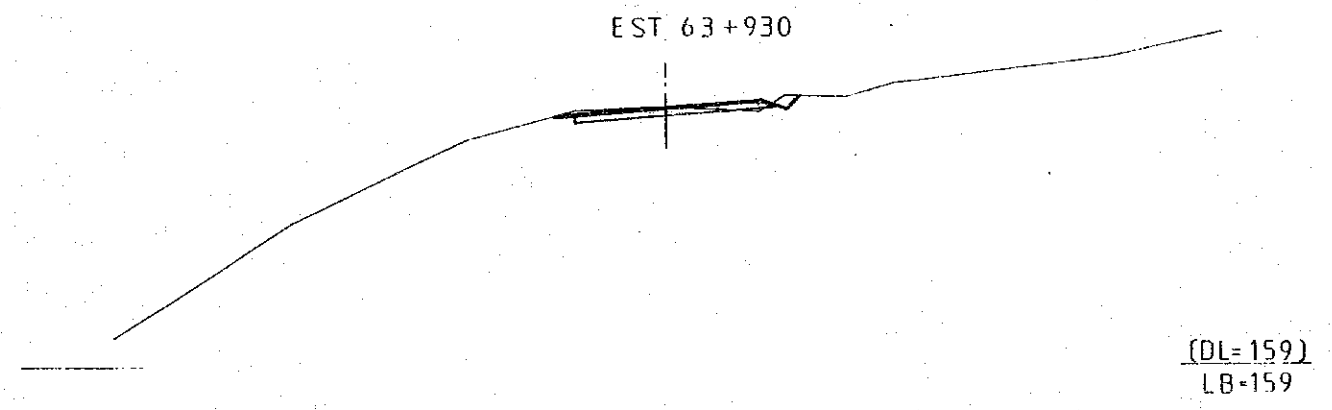
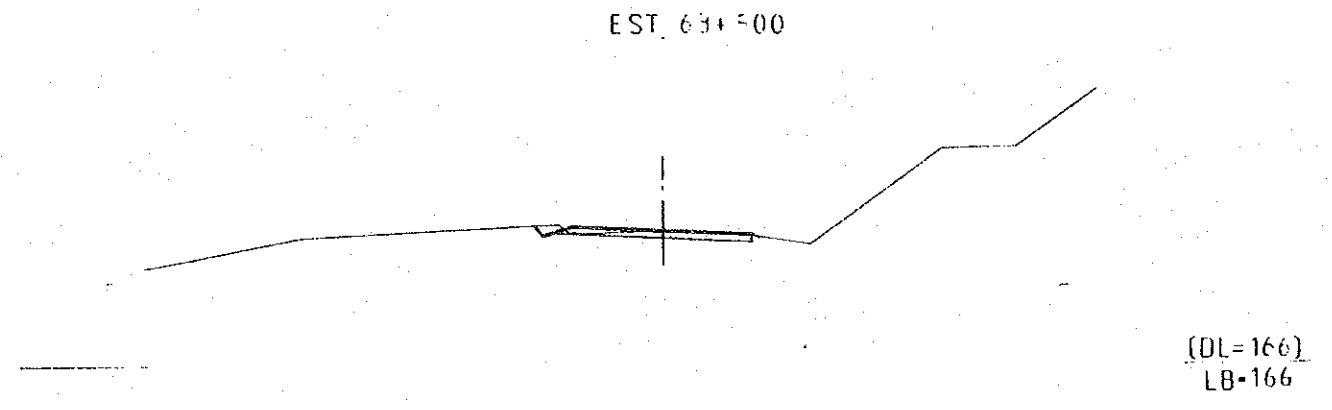
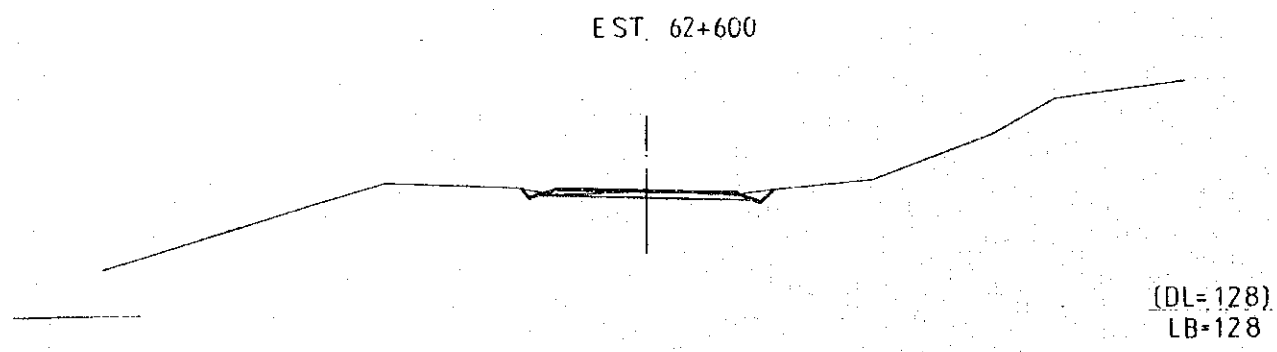
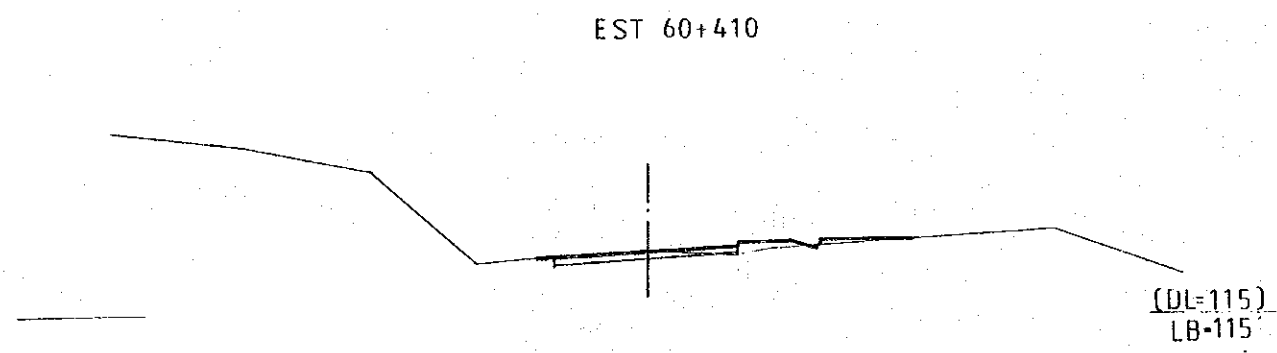
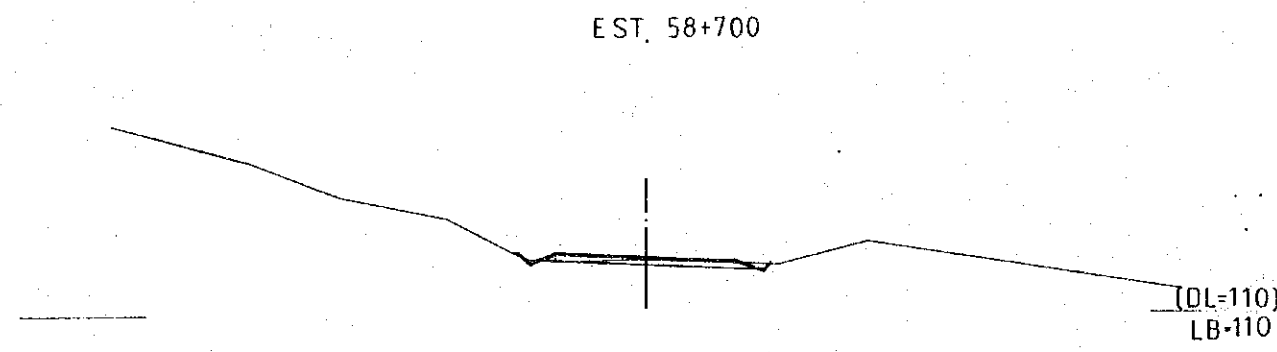
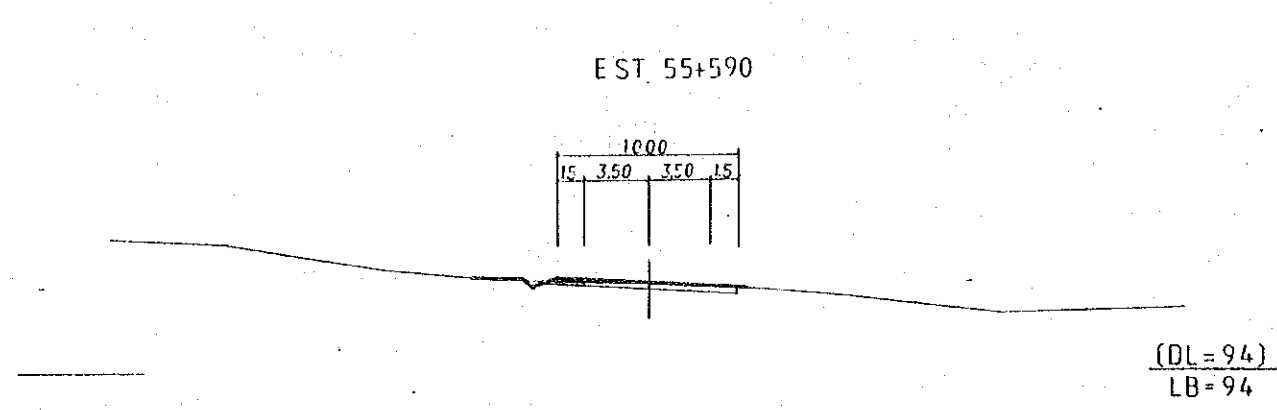
EST 11+470

(DL=205)
LB=205

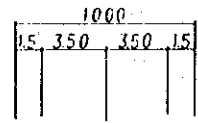
EST 17+980

(DL=103)
LB=103



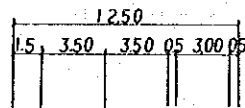


EST 67+980



(DL=225)
LB=225

EST 68+410



(DL=230)
LB=230

EST 68+585



(DL=245)
LB=245

TELICA - SAN ISIDRO

ESTUDIO SOBRE MEJORAMIENTO Y REHABILITACION DE CARRETERAS EN LA REPUBLICA DE NICARAGUA

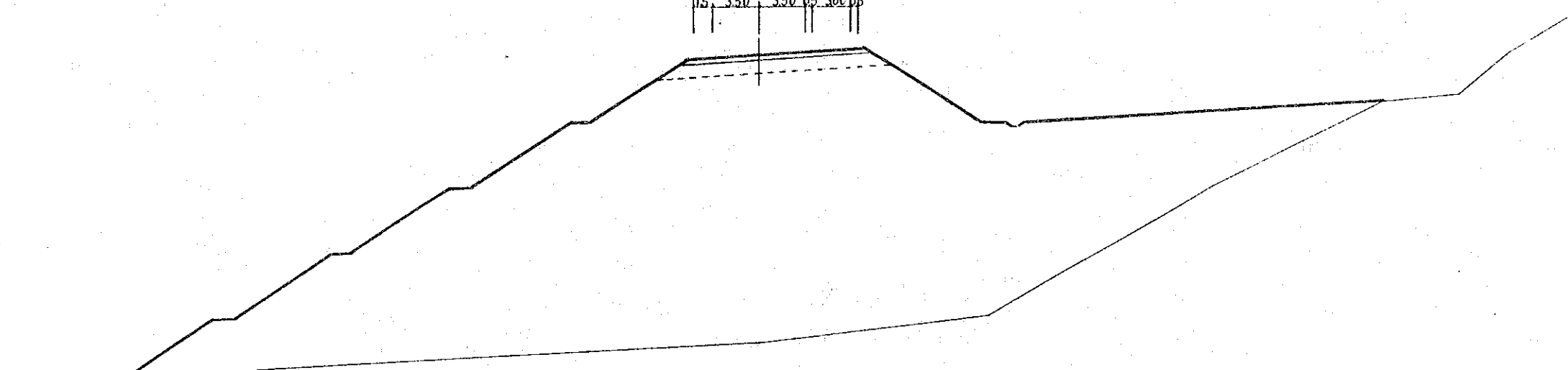
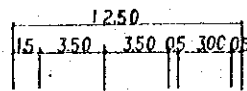
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON

THE ROAD IMPROVEMENT AND REHABILITATION STUDY IN NICARAGUA

JAPAN INTERNATIONAL COOPERATION AGENCY

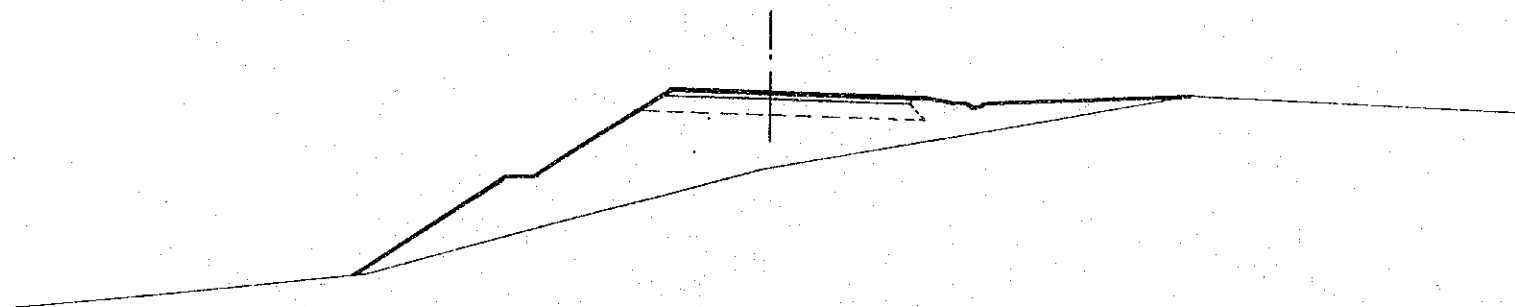
60/79

EST 68+785



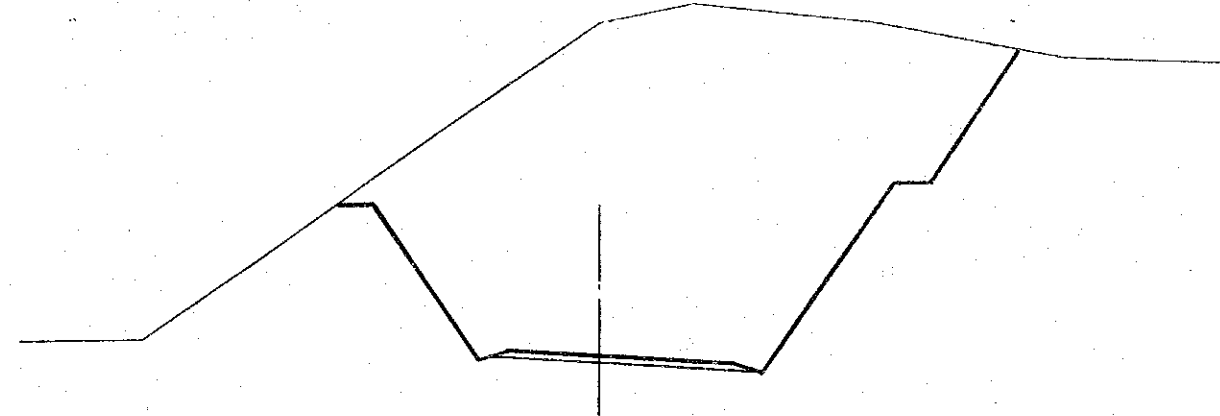
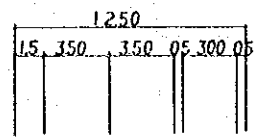
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EST 68+935



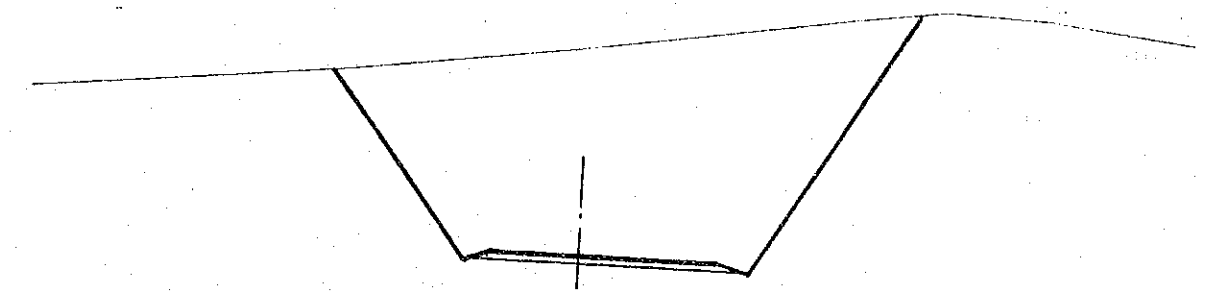
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EST 69+050



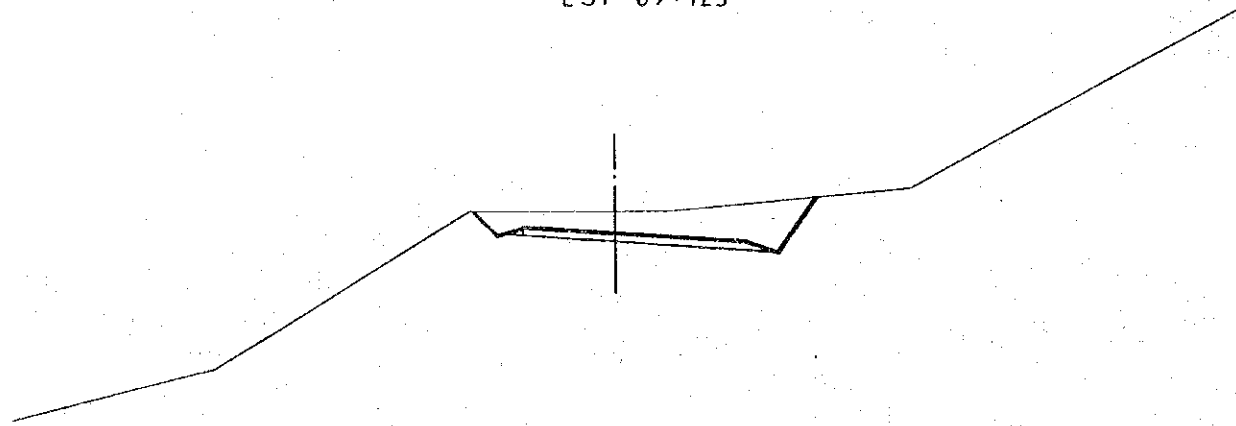
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EST 69+215



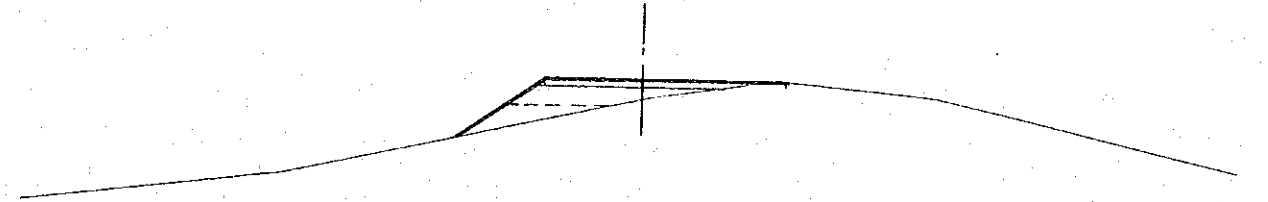
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LB=290

EST 69+125



(DL=280)
LB=280

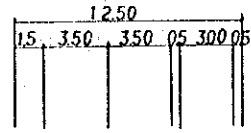
EST 69+295



(DL=290)
LB=290

EST 69+425

EST 69+595



(DL=310)
LB=310

(DL=330)
LB=330

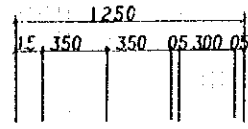
EST. 69+470

EST 69+725

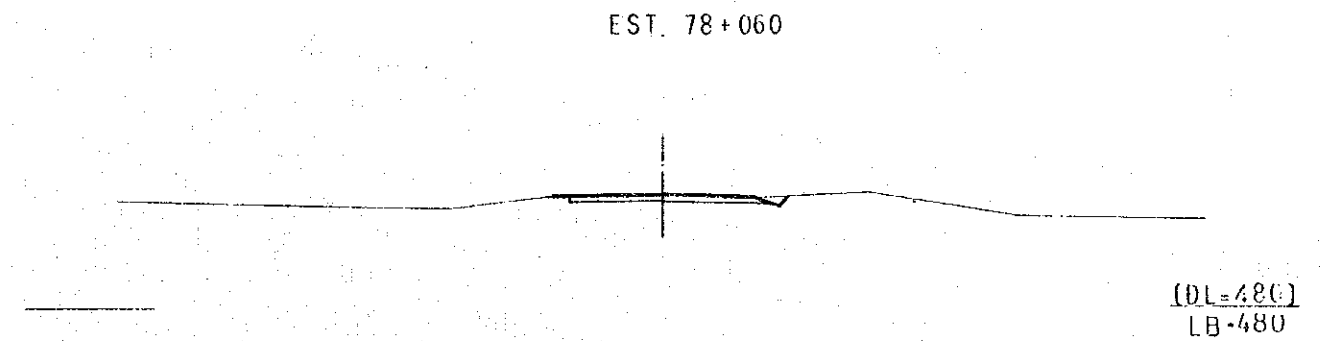
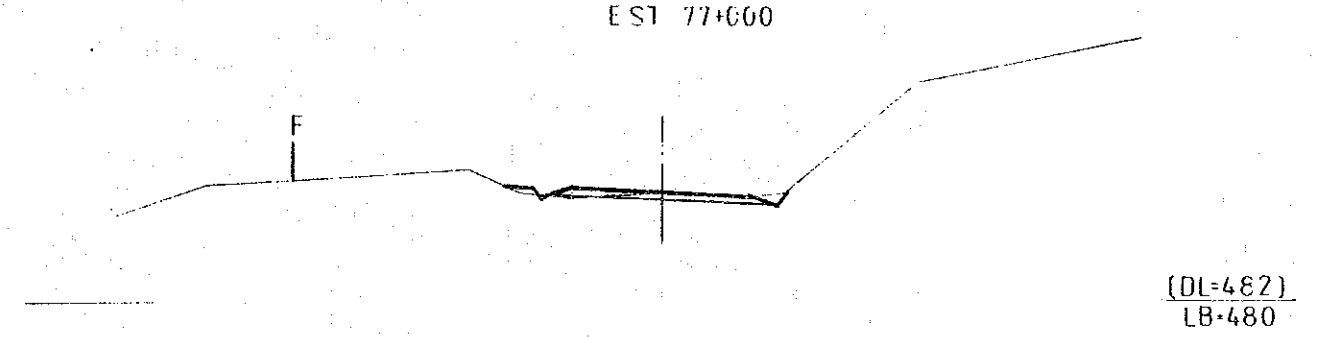
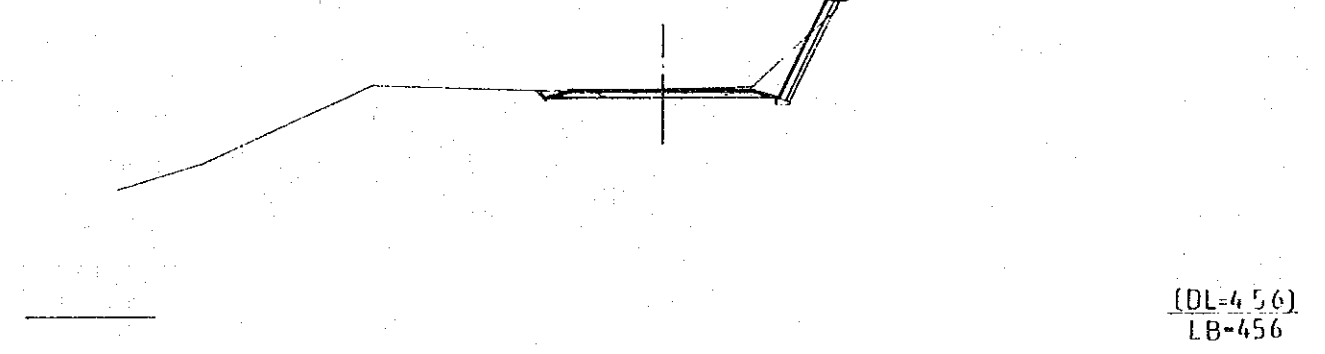
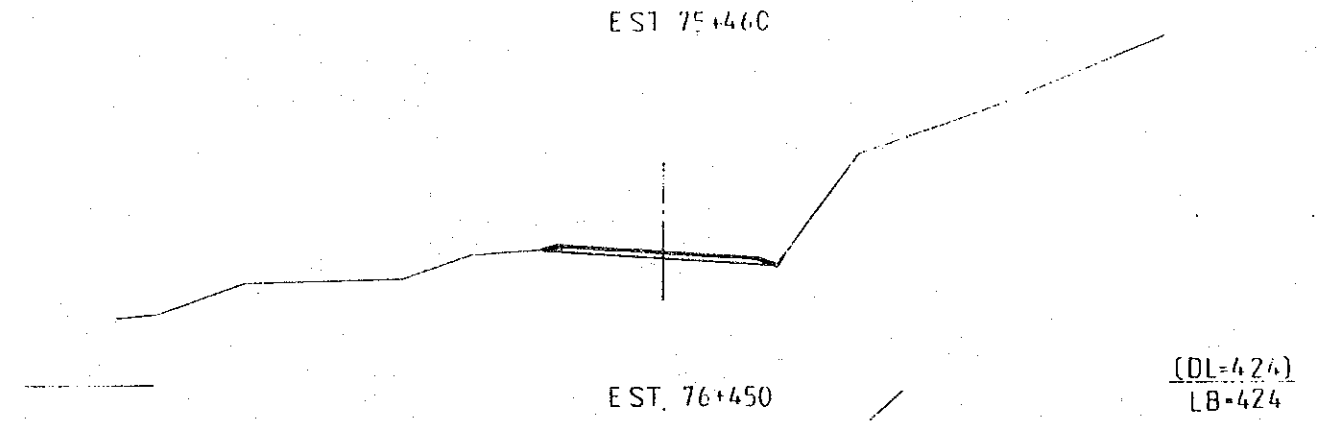
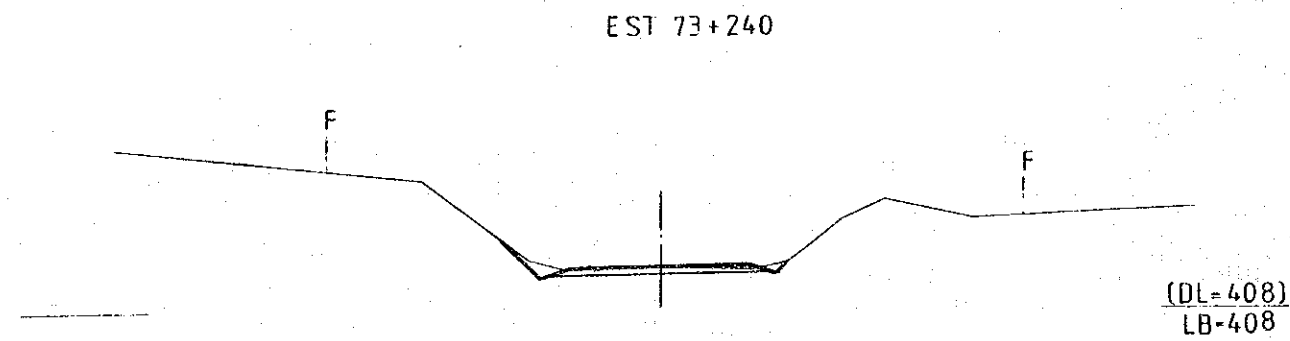
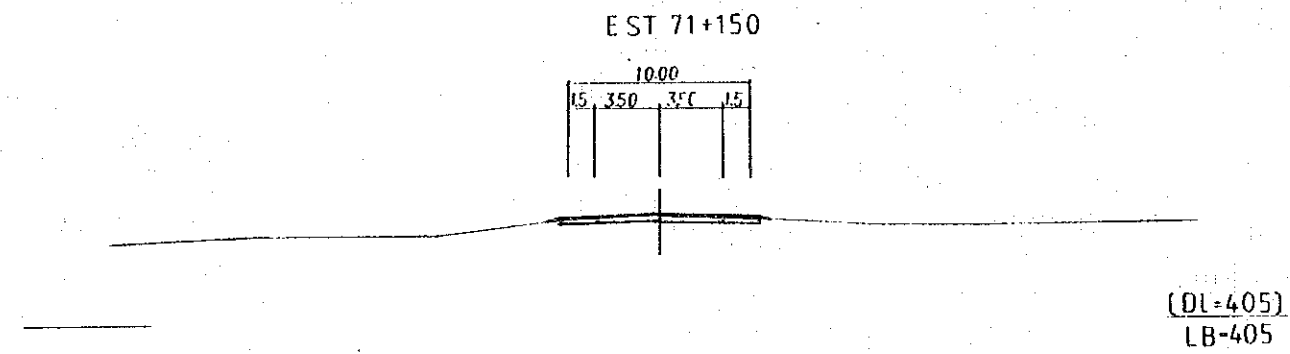
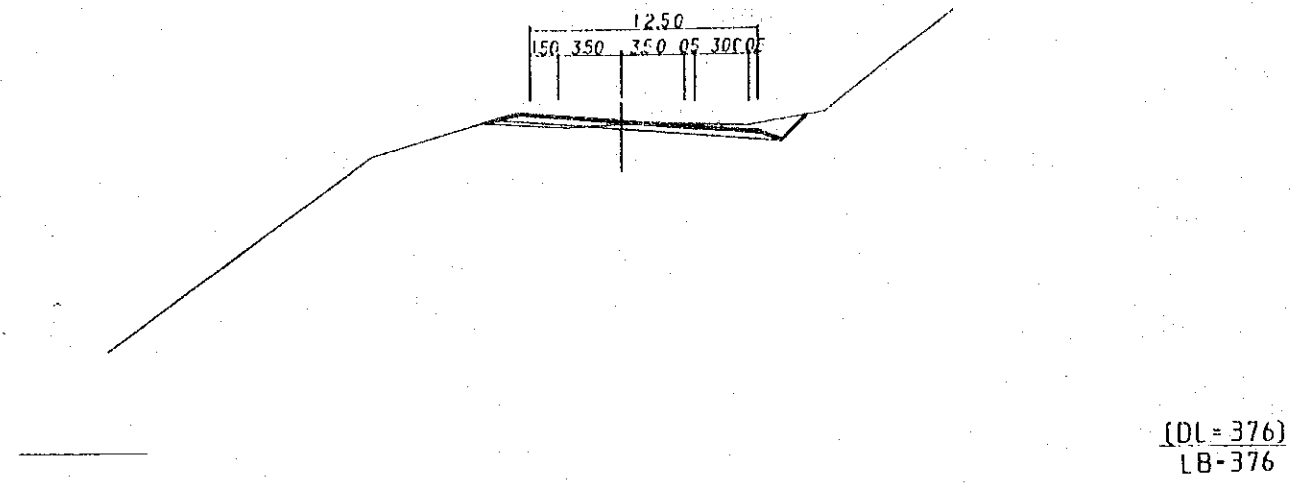
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LB=300

(DL=330)
LB=330

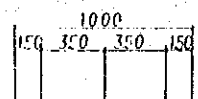
EST 69+985



(OL=365)
LB=365

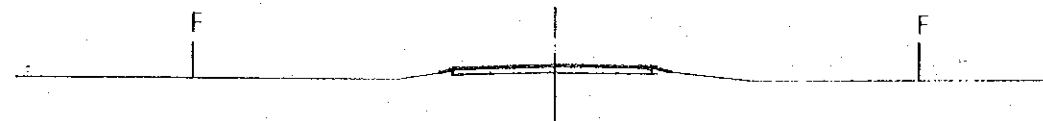


EST. 79+570



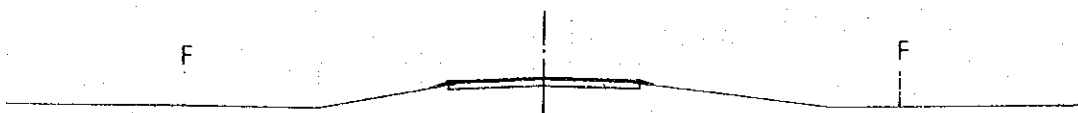
(DL=473)
LB-473

EST 89+020



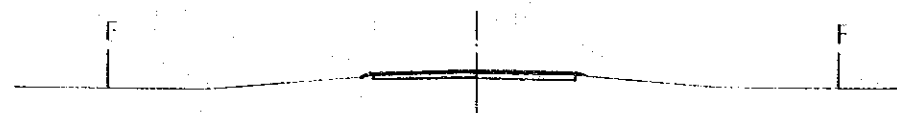
(DL=452)
LB-452

EST. 83+080



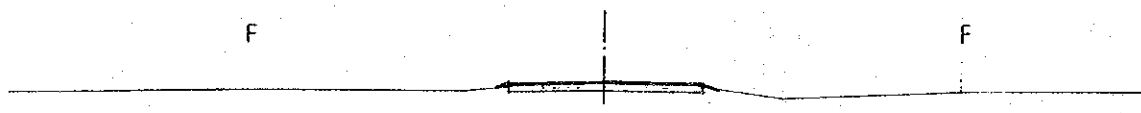
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LB-454

EST 91+030



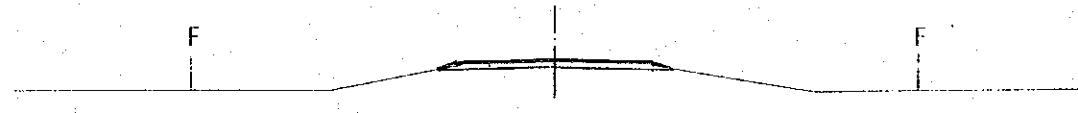
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LB-448

EST 85+070



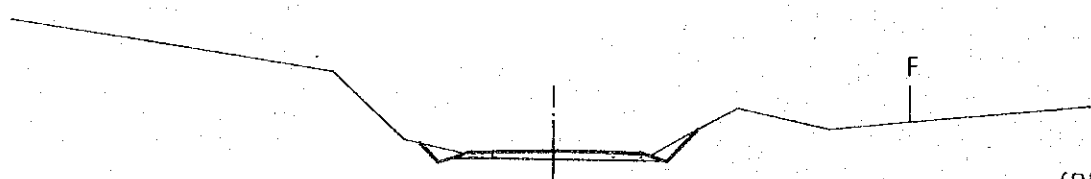
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LB-446

EST 93+020



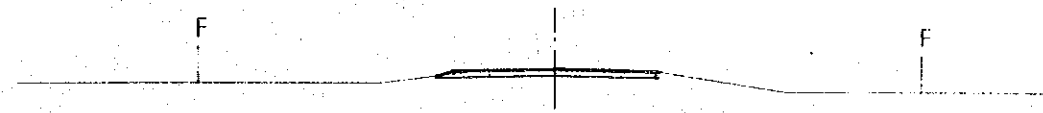
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LB-448

EST. 86+970

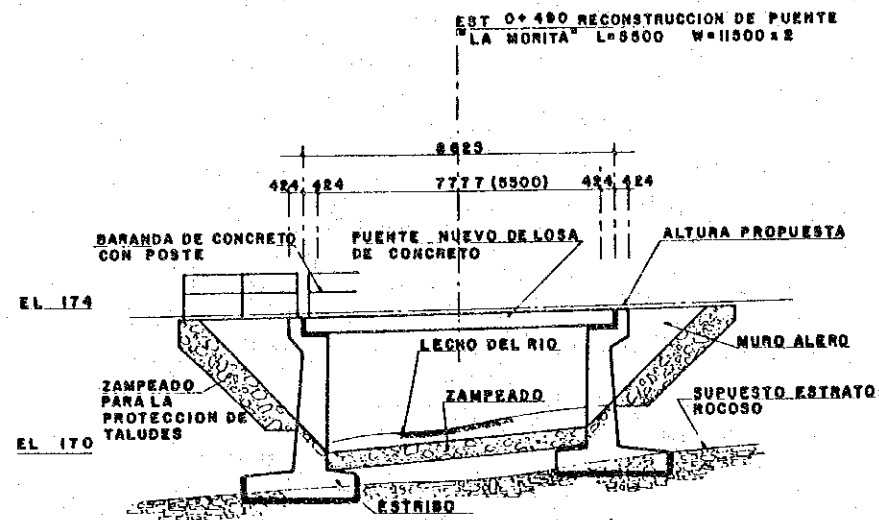


(DL=455)
LB-455

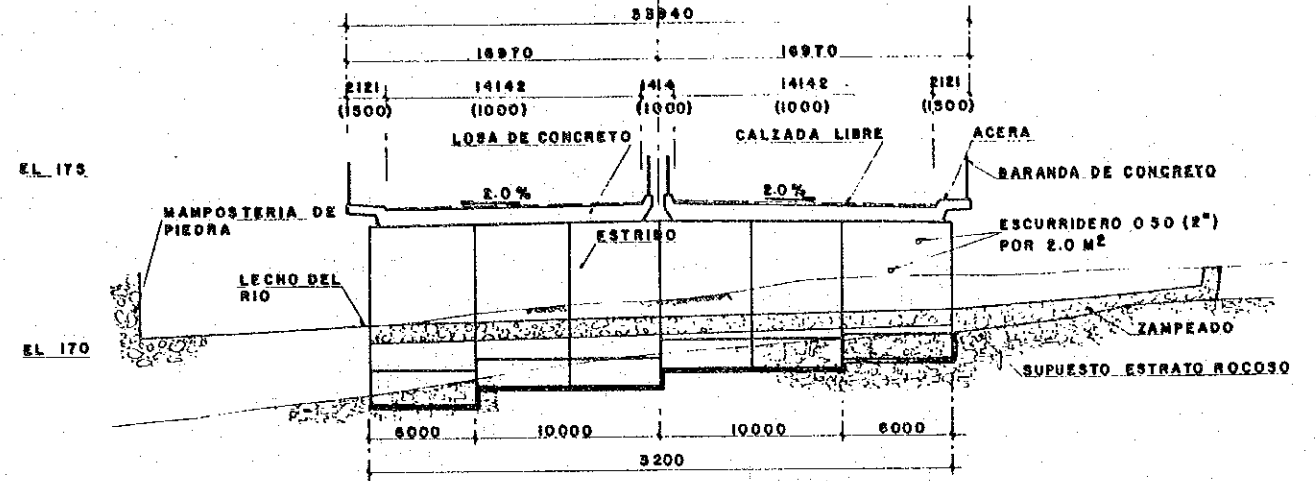
EST 95+070



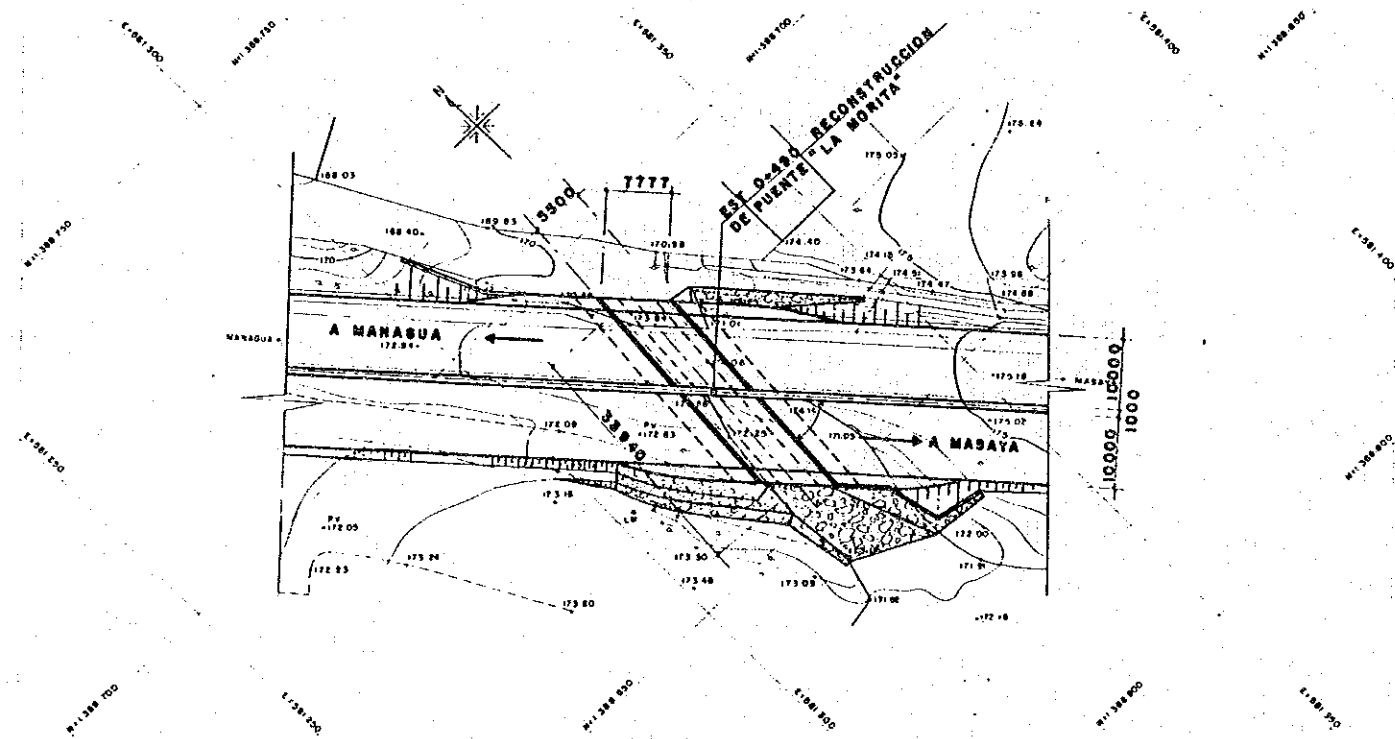
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LB-452



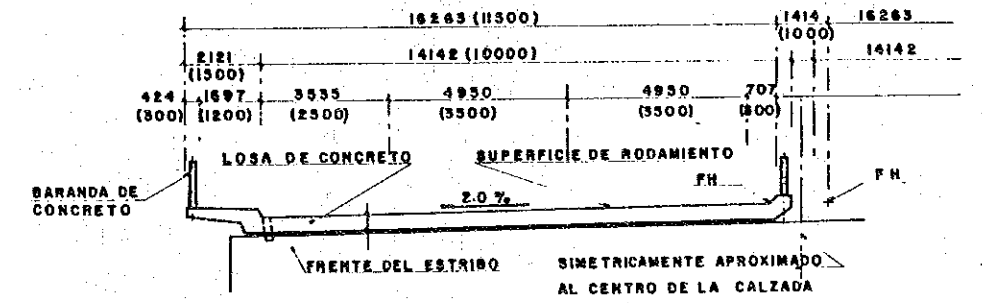
SECCION
ESCALA 1:100



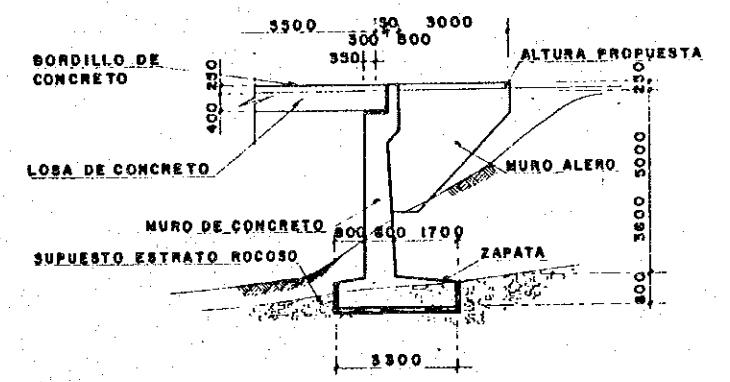
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ESCALA VERTICAL 1:100
ESCALA HORIZONTAL 1:500



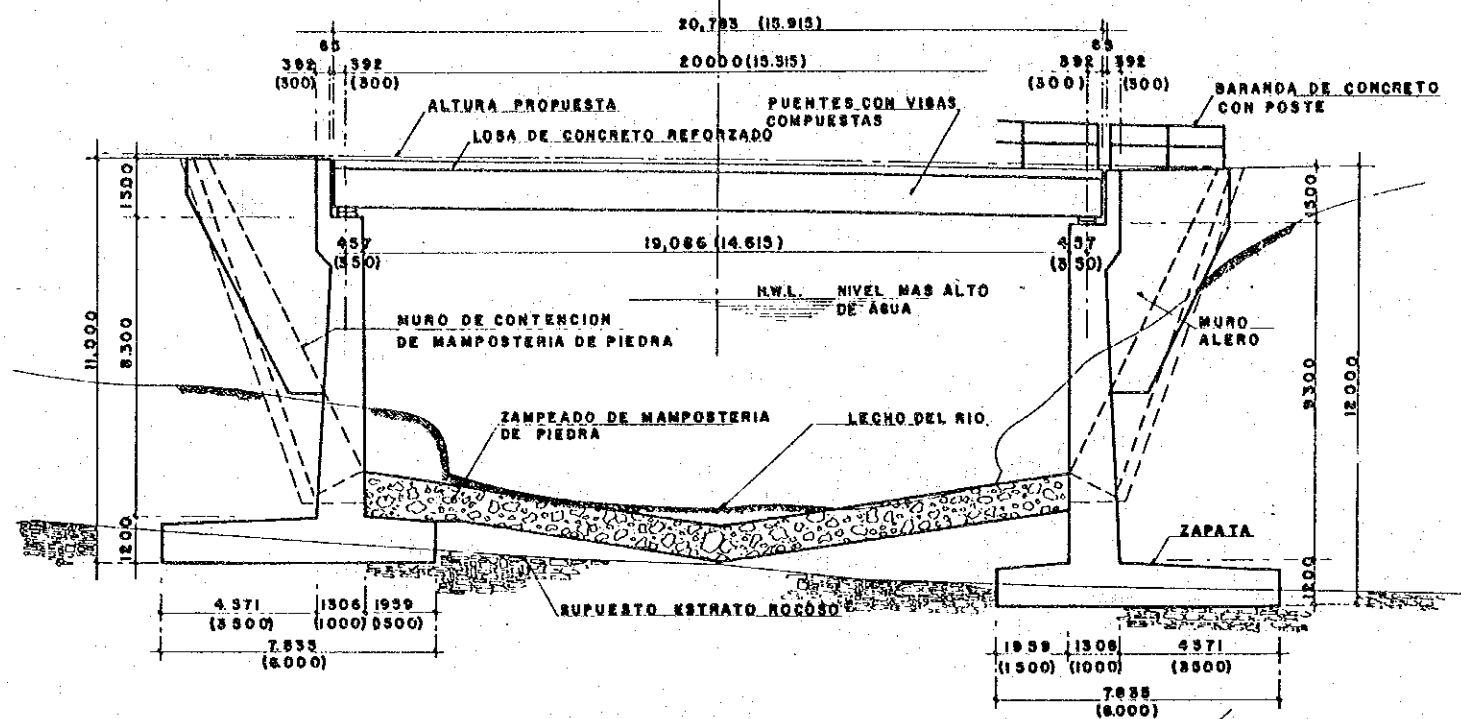
PLANTA-PLAN
ESCALA 1:500



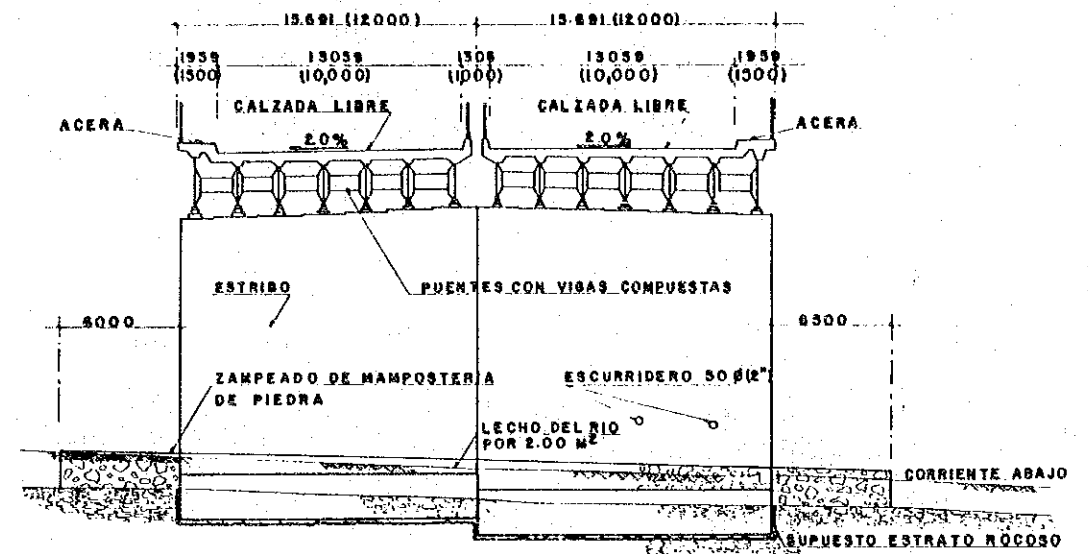
SECCION TIPICA PARA LOSA DE CONCRETO
ESCALA 1:100



SECCION TIPICA PARA EL ESTRIBO
ESCALA 1:100

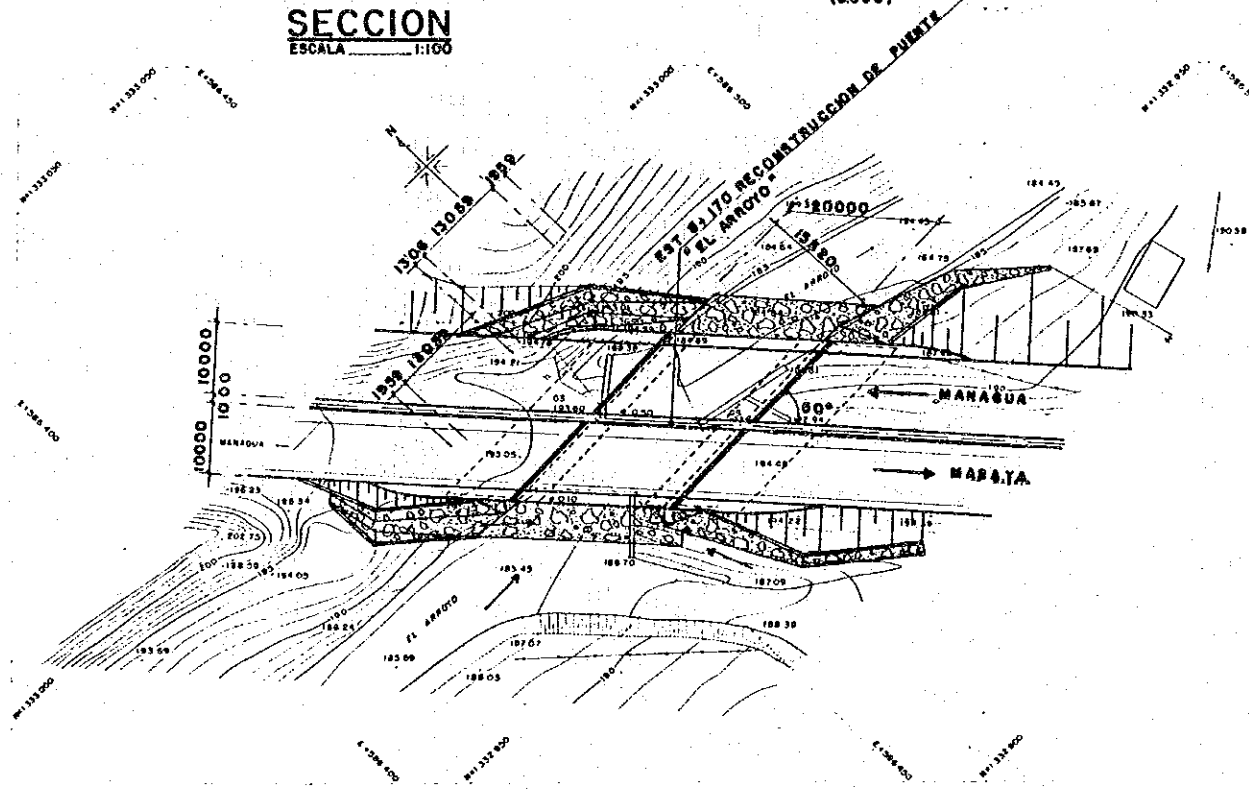


SECCION ESCALA 1:100

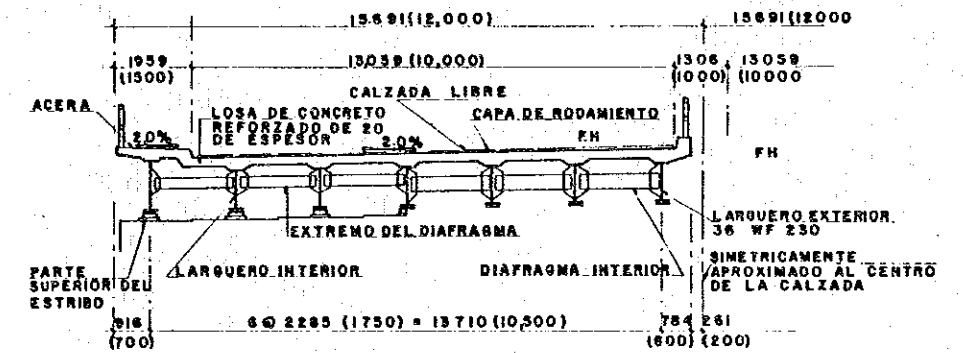


SECCION TRANSVERSAL

ESCALA VERTICAL 1:100
HORIZONTAL 1:200

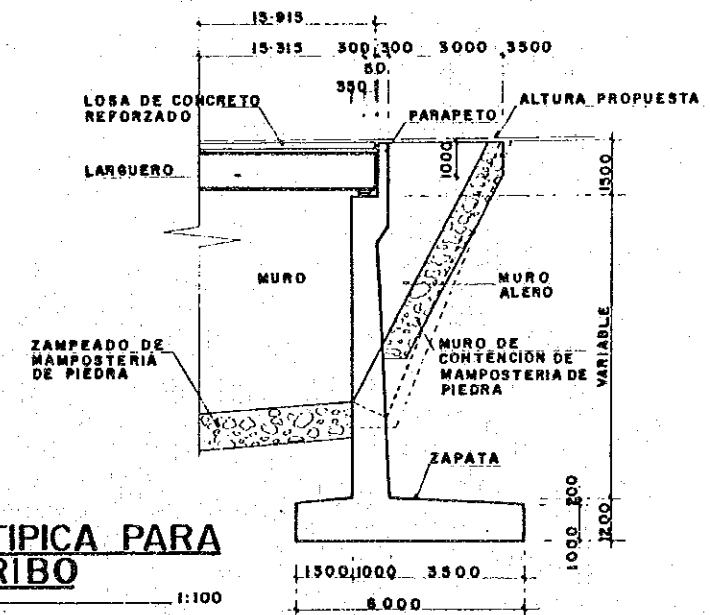


PLANTA-PLAN ESCALA 1:500



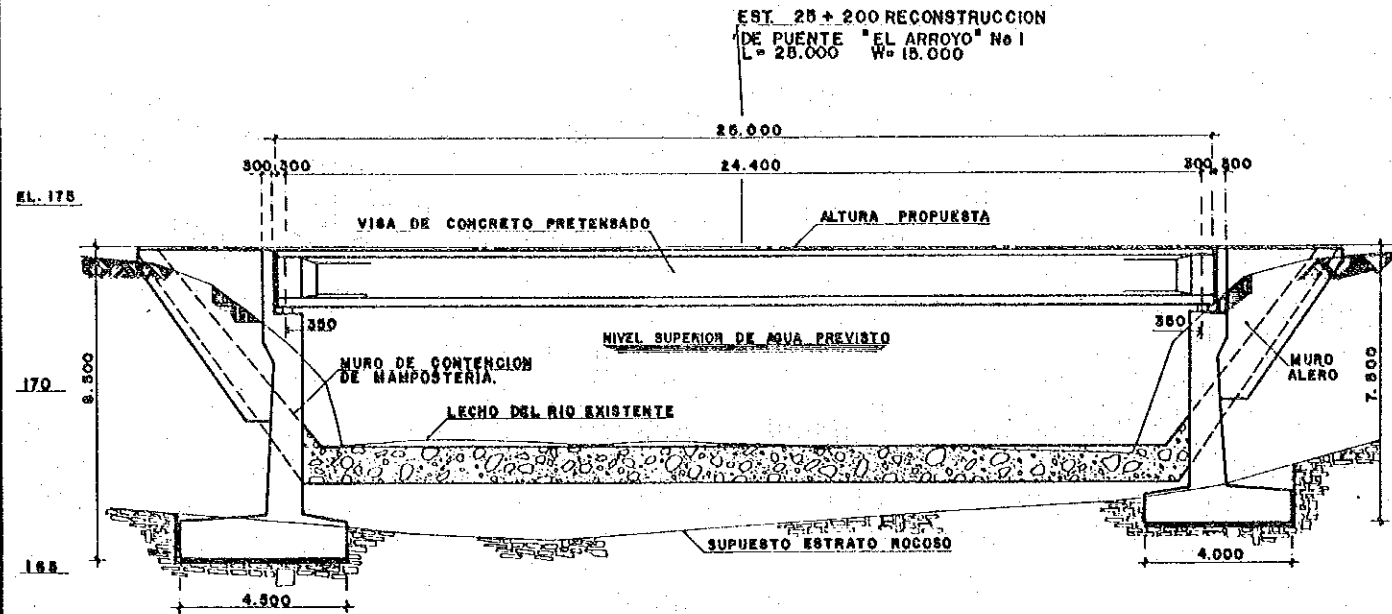
SECCION TIPICA PARA PUENTES CON VIGAS COMPUESTAS

ESCALA 1:100

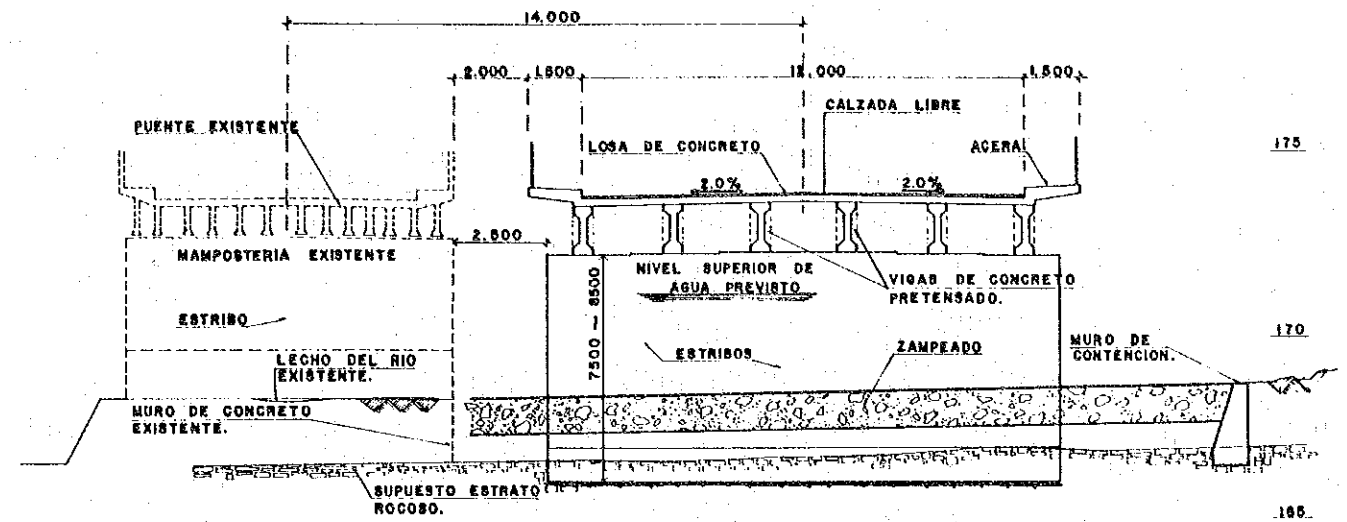


SECCION TIPICA PARA ESTRIBO

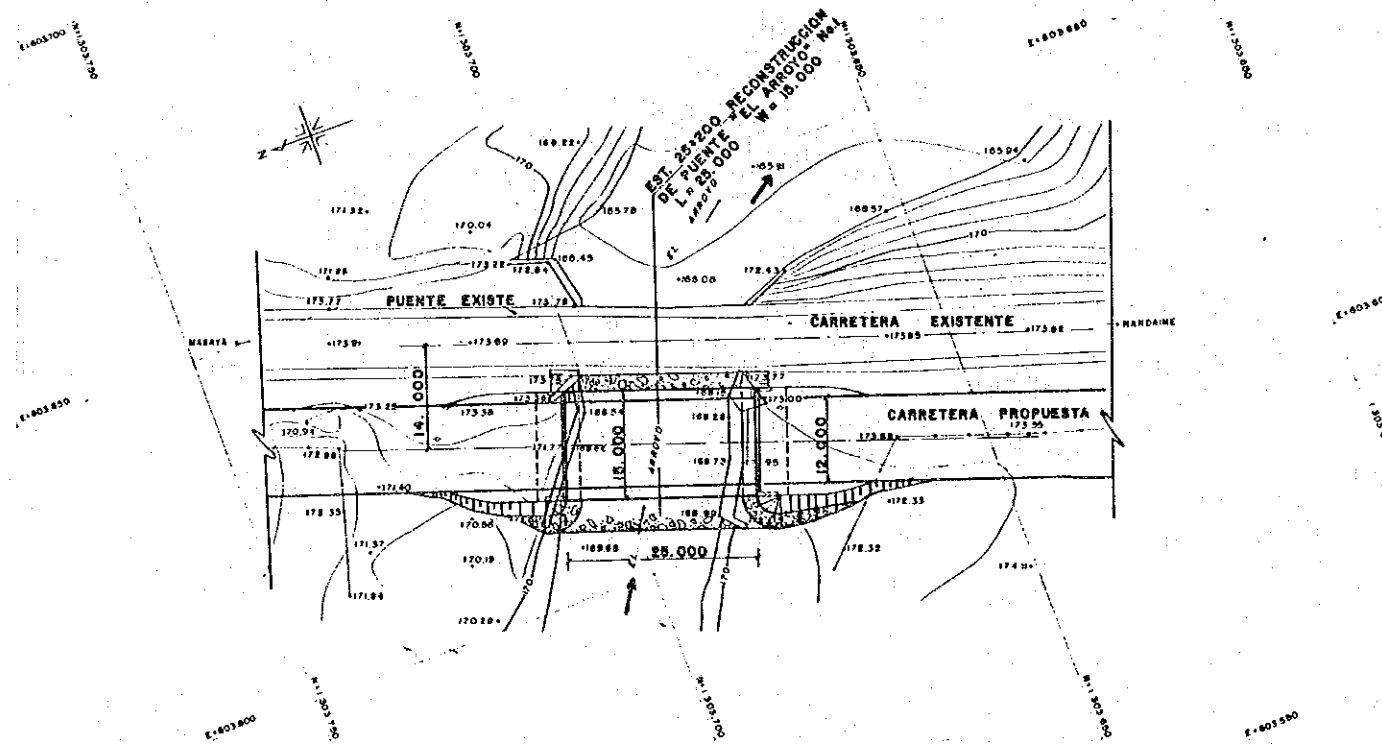
ESCALA 1:100



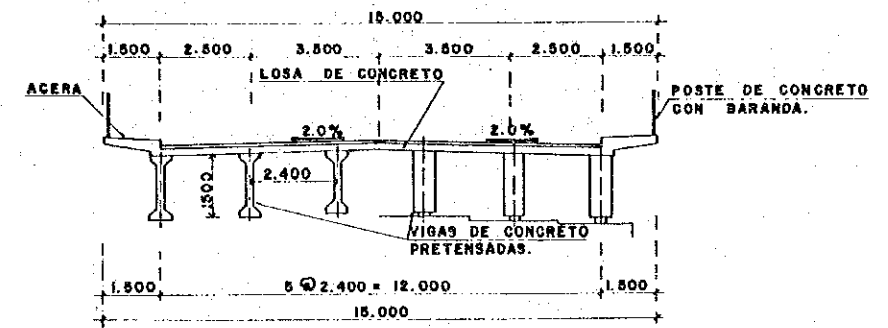
SECCION TIPICA
ESCALA 1:100



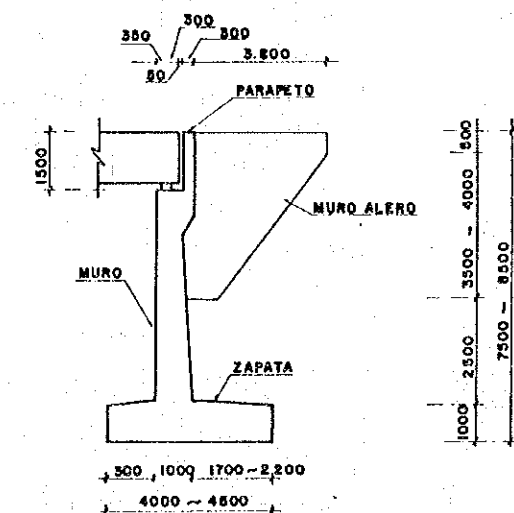
SECCION TRANSVERSAL
ESCALA 1:100



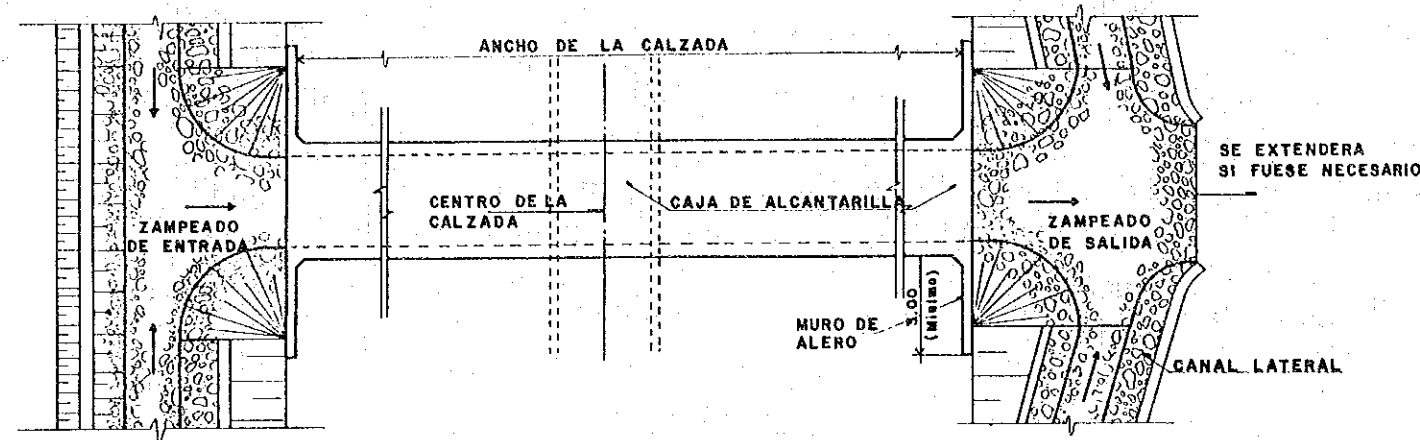
PLANTA-PLAN
ESCALA 1:500



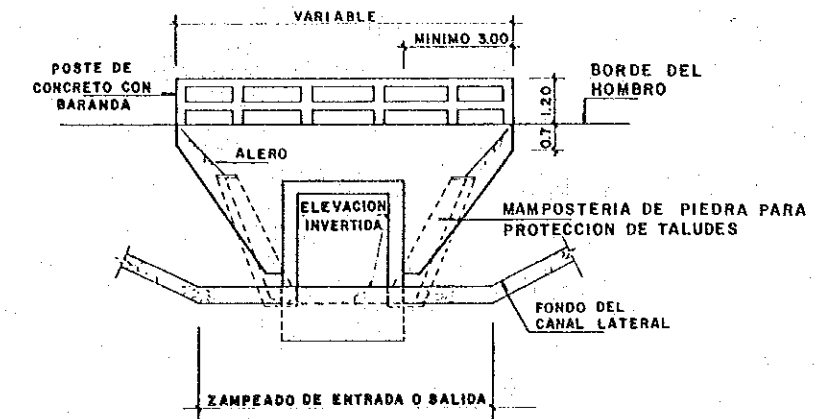
SECCION TIPICA VIGAS P.C.
ESCALA 1:100



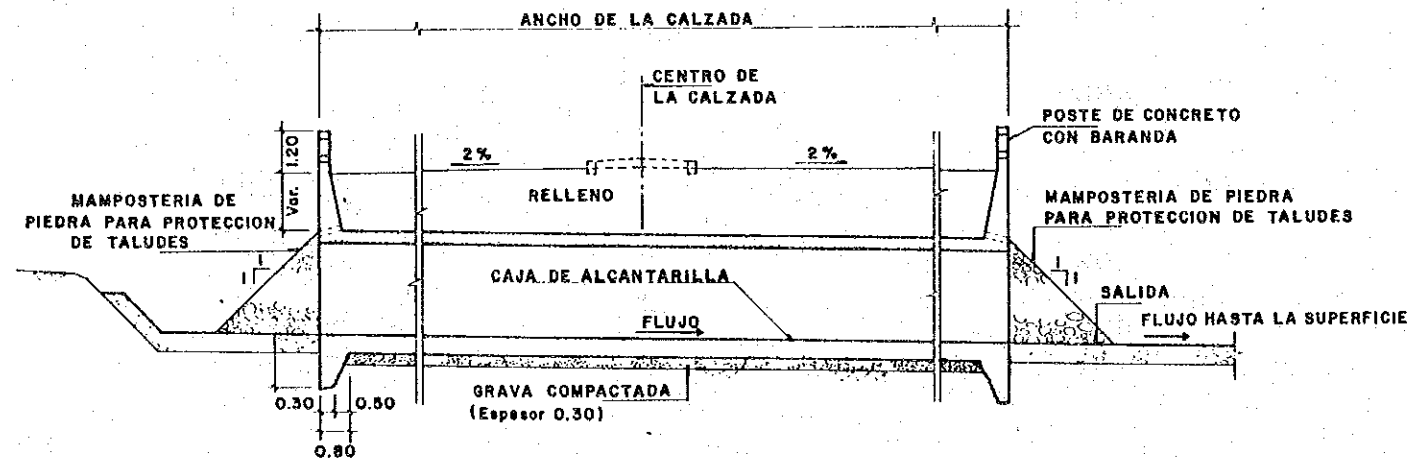
SECCION TIPICA ESTRIBOS
ESCALA 1:100



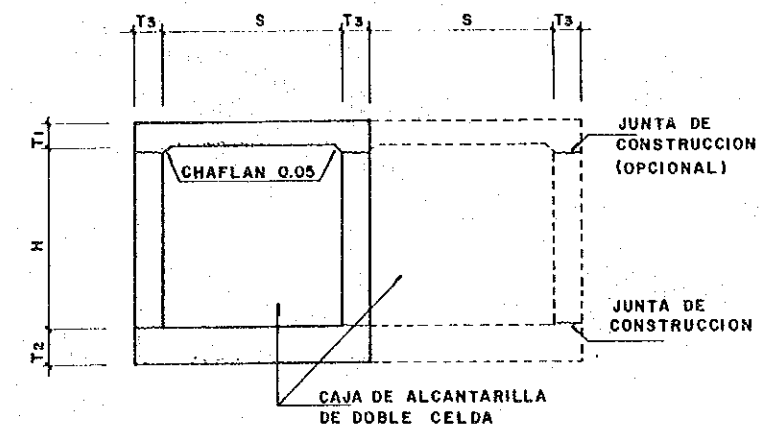
PLANTA
ESCALA 1:100



VISTA FRONTAL
ESCALA 1:100

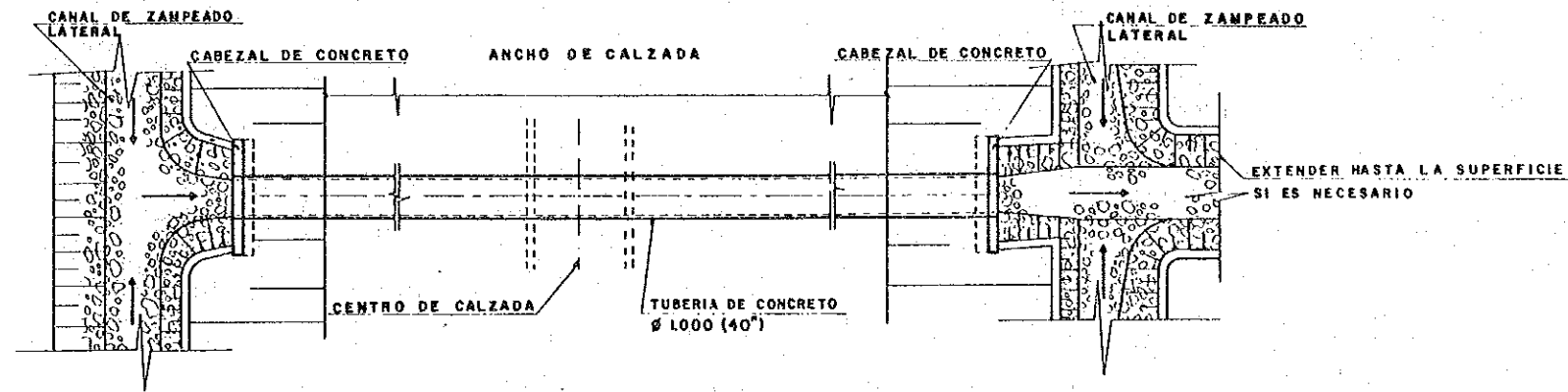


SECCION TIPICA
ESCALA 1:100

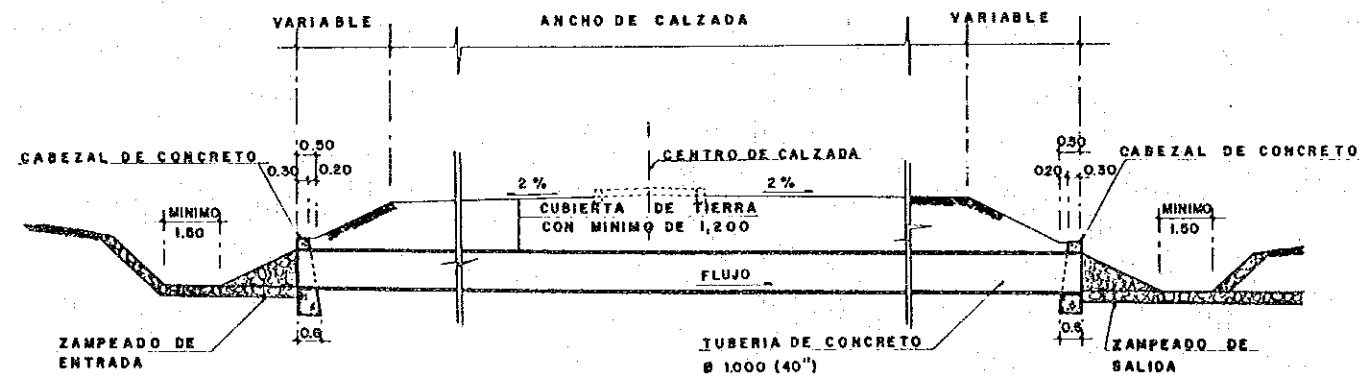


SECCION TIPICA DE ALCANTARILLA
SIN ESCALA

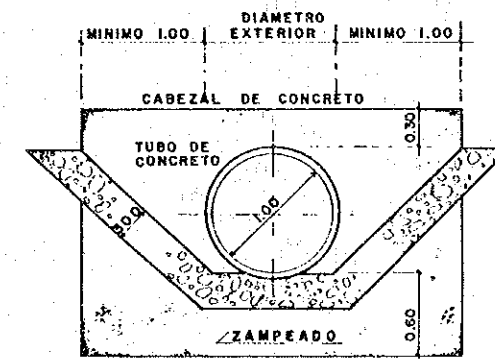
NOTA: LAS DIMENSIONES DE LAS CAJAS DE ALCANTARILLA DE CELDA DOBLE O SENCILLA, FUERON TOMADAS DE LOS PLANOS ESTANDARES DEL M.C.T.



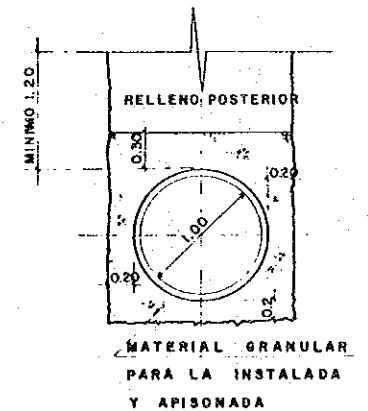
PLANTA
ESCALA 1:100



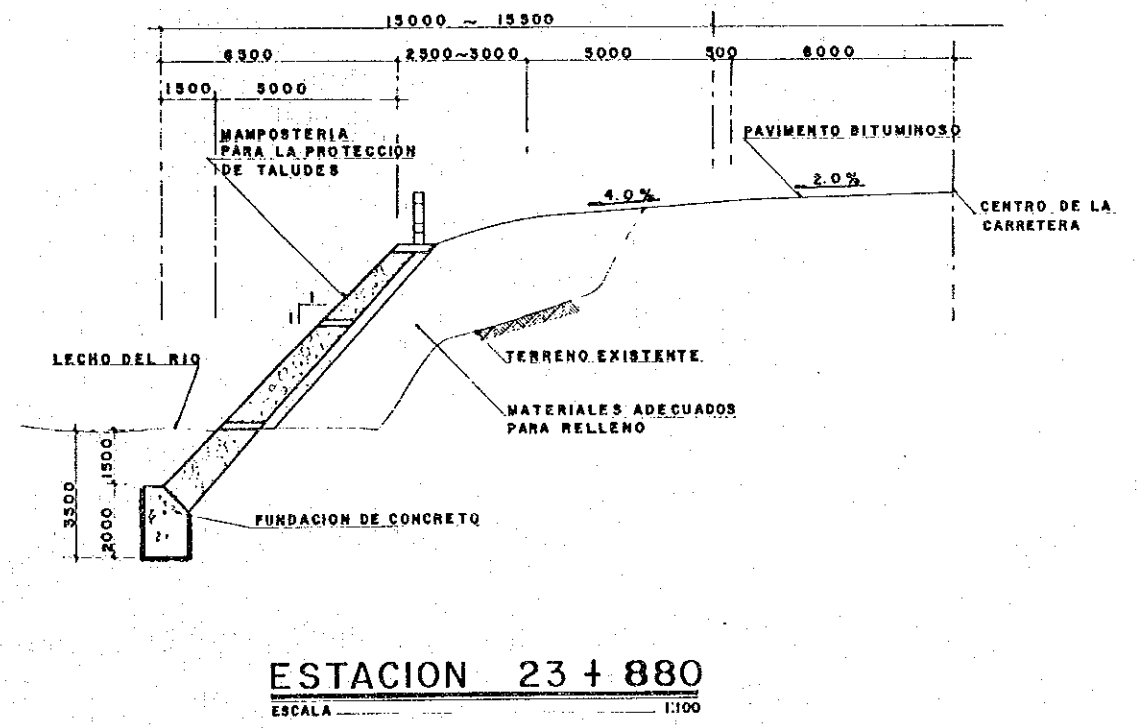
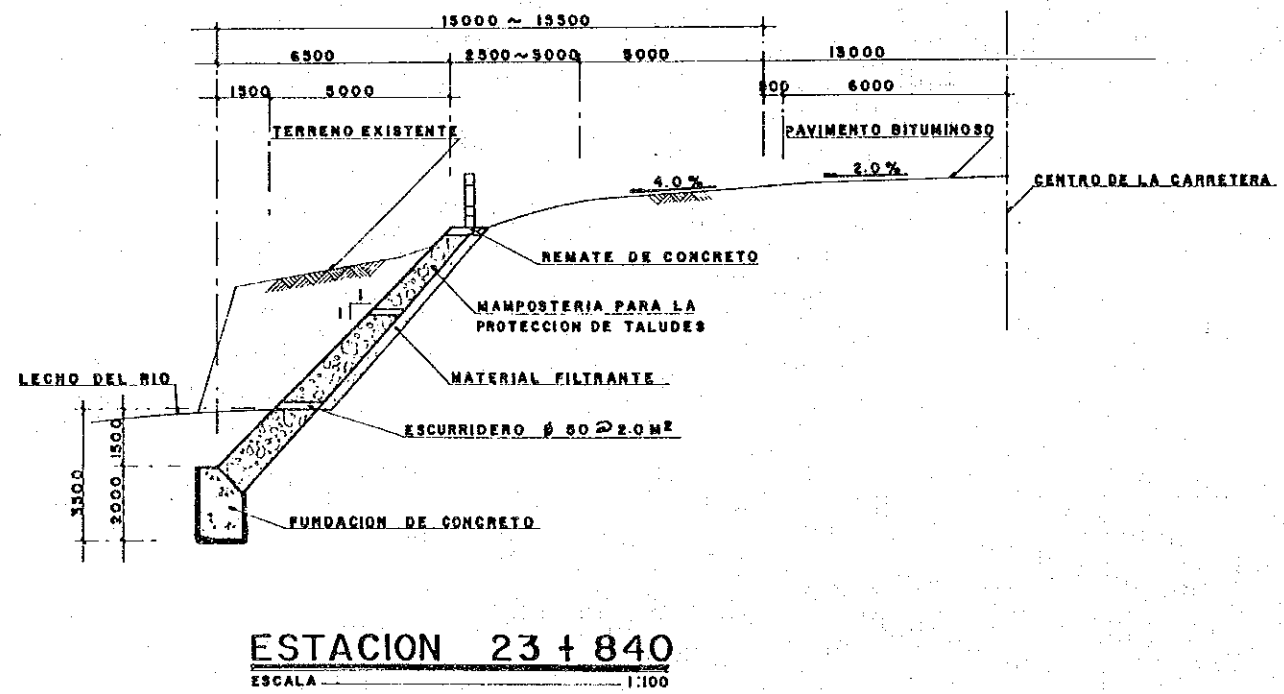
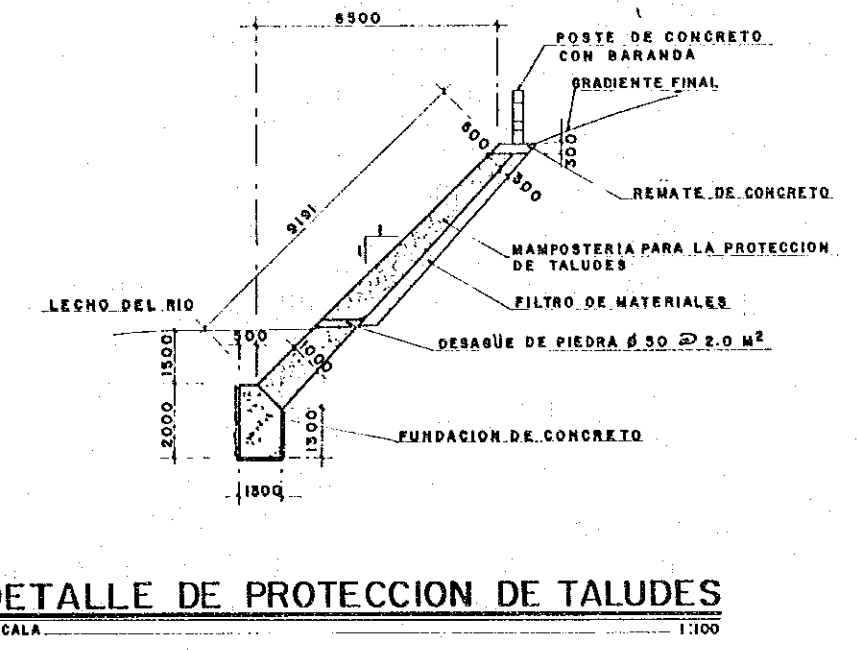
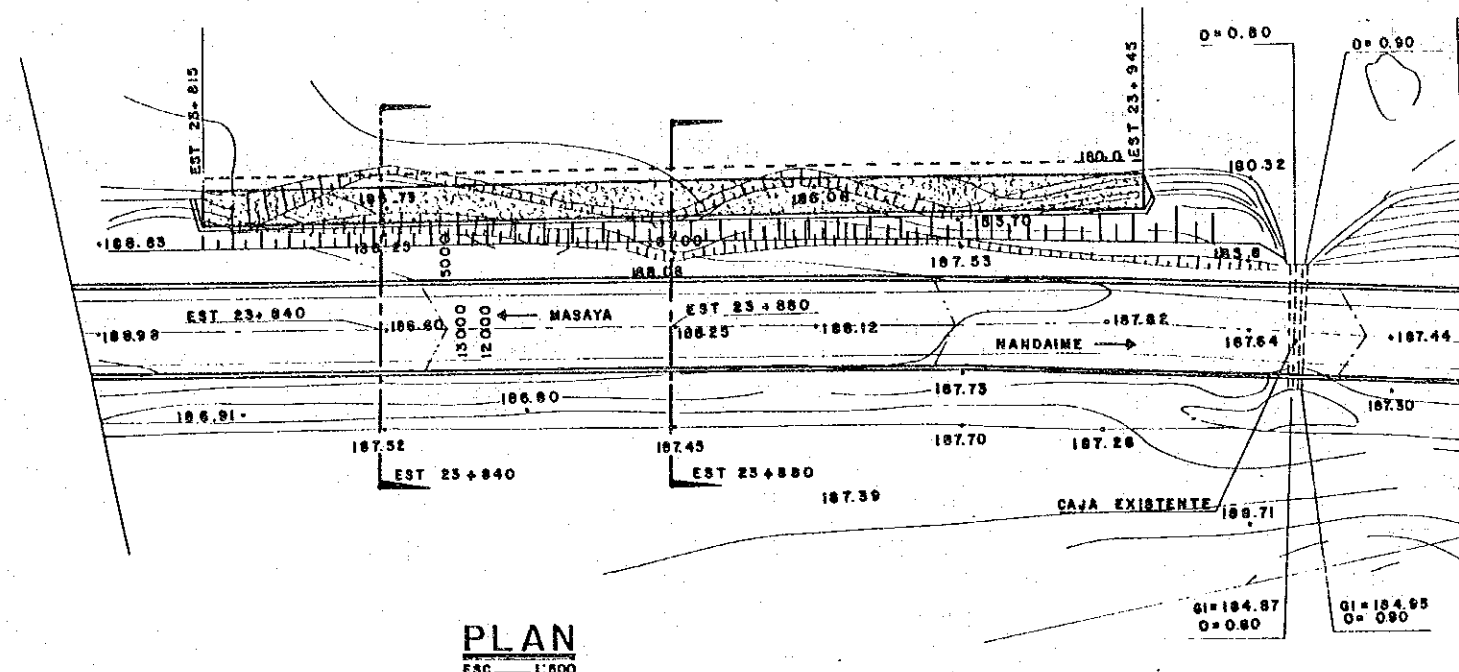
SECCION TIPICA
ESCALA 1:100

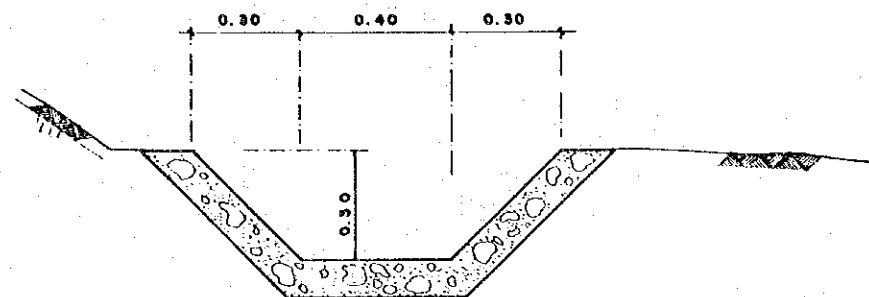


VISTA FRONTAL ENTRADA Y SALIDA
ESCALA 1:30



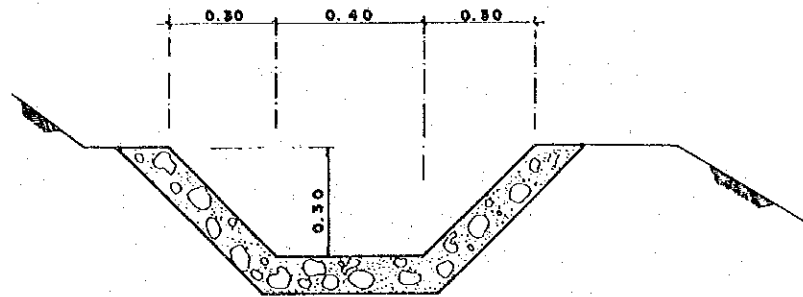
CANAL DE TUBERIA
ESCALA 1:30





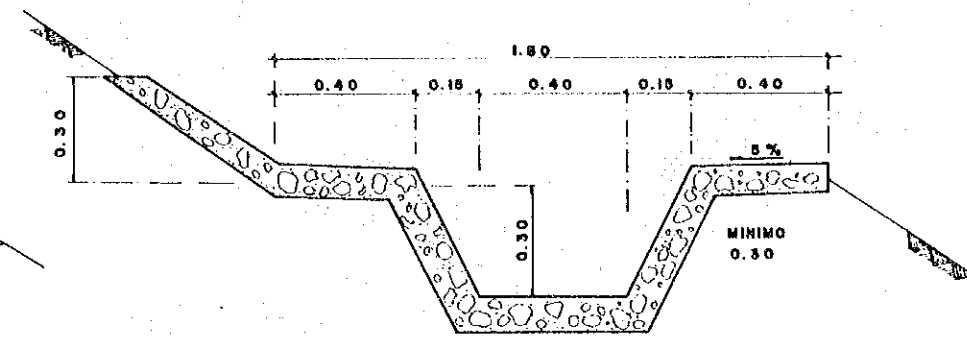
PIE DE TALUD EN RELLENO

ESCALA 1:10

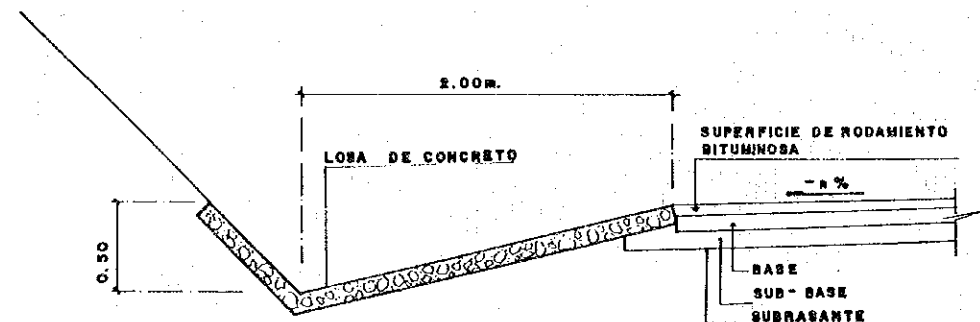


CORONAMIENTO DE TALUDES (CONTRACUNETA)

ESCALA 1:10

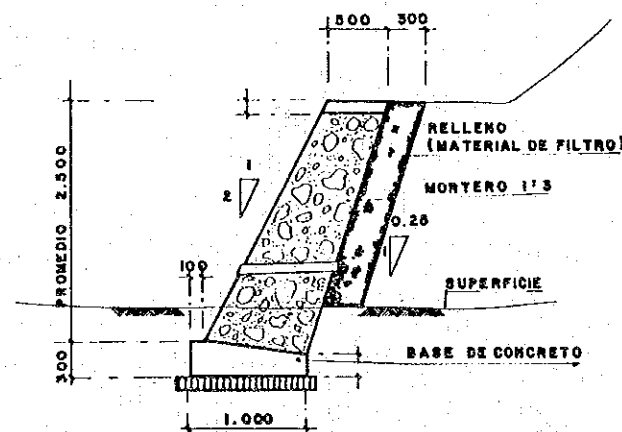


TERRAZAS



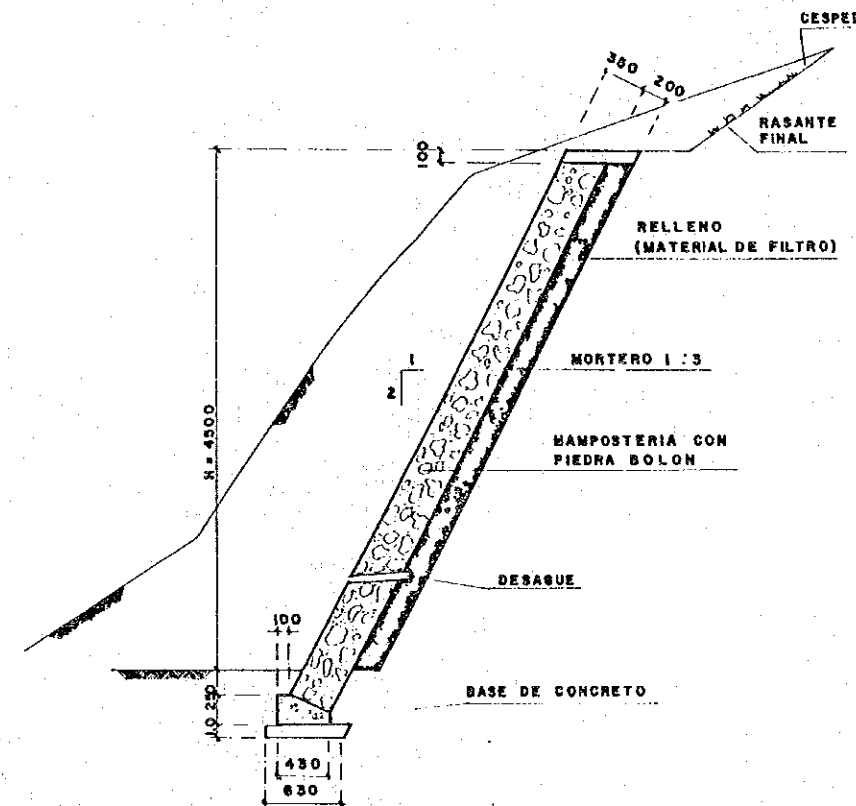
DETALLE DE CUNETAS

ESCALA 1:20



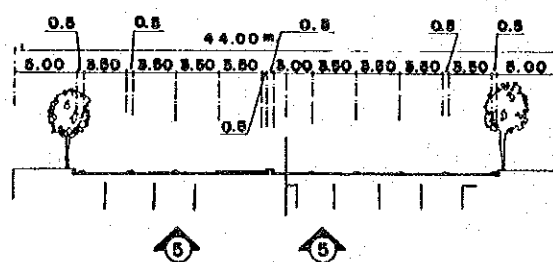
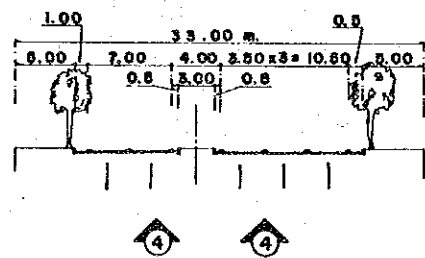
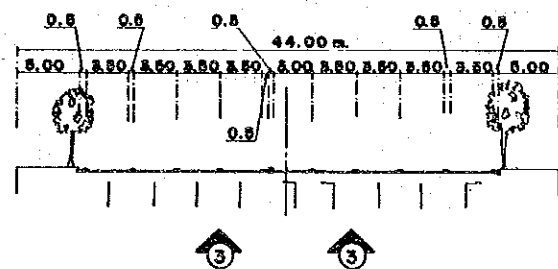
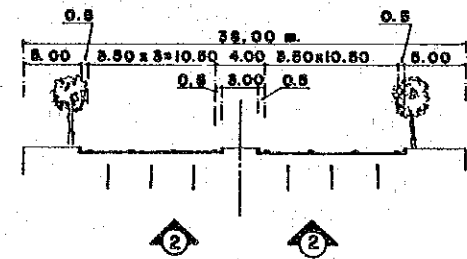
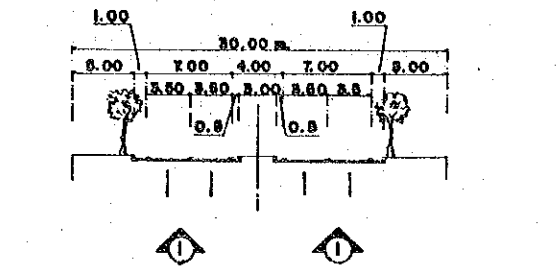
MURO DE RETENCION DE PIEDRA BOLON

ESCALA 1:30

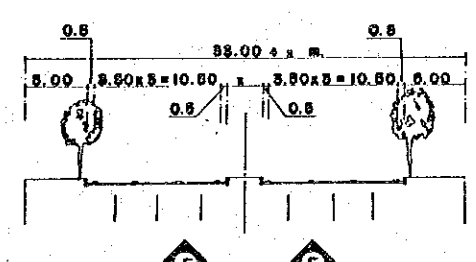
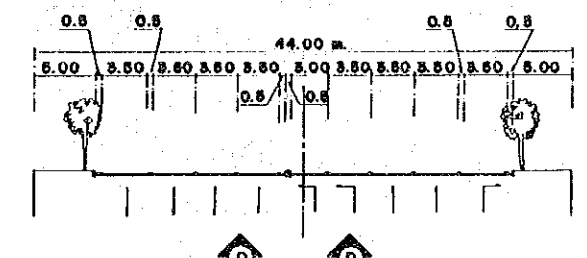
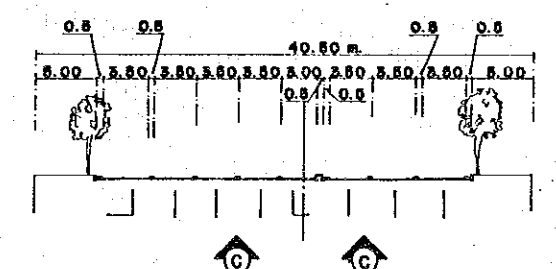
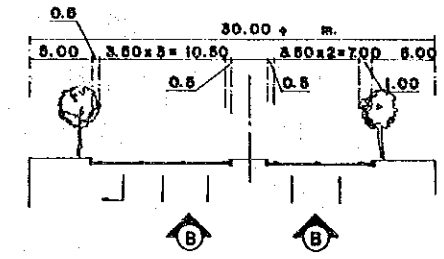
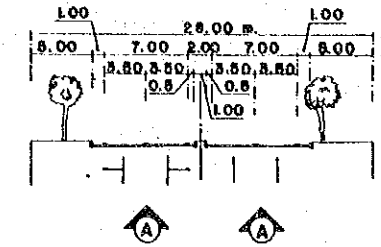


INTERSECCION "COLONIA CENTROAMERICA"

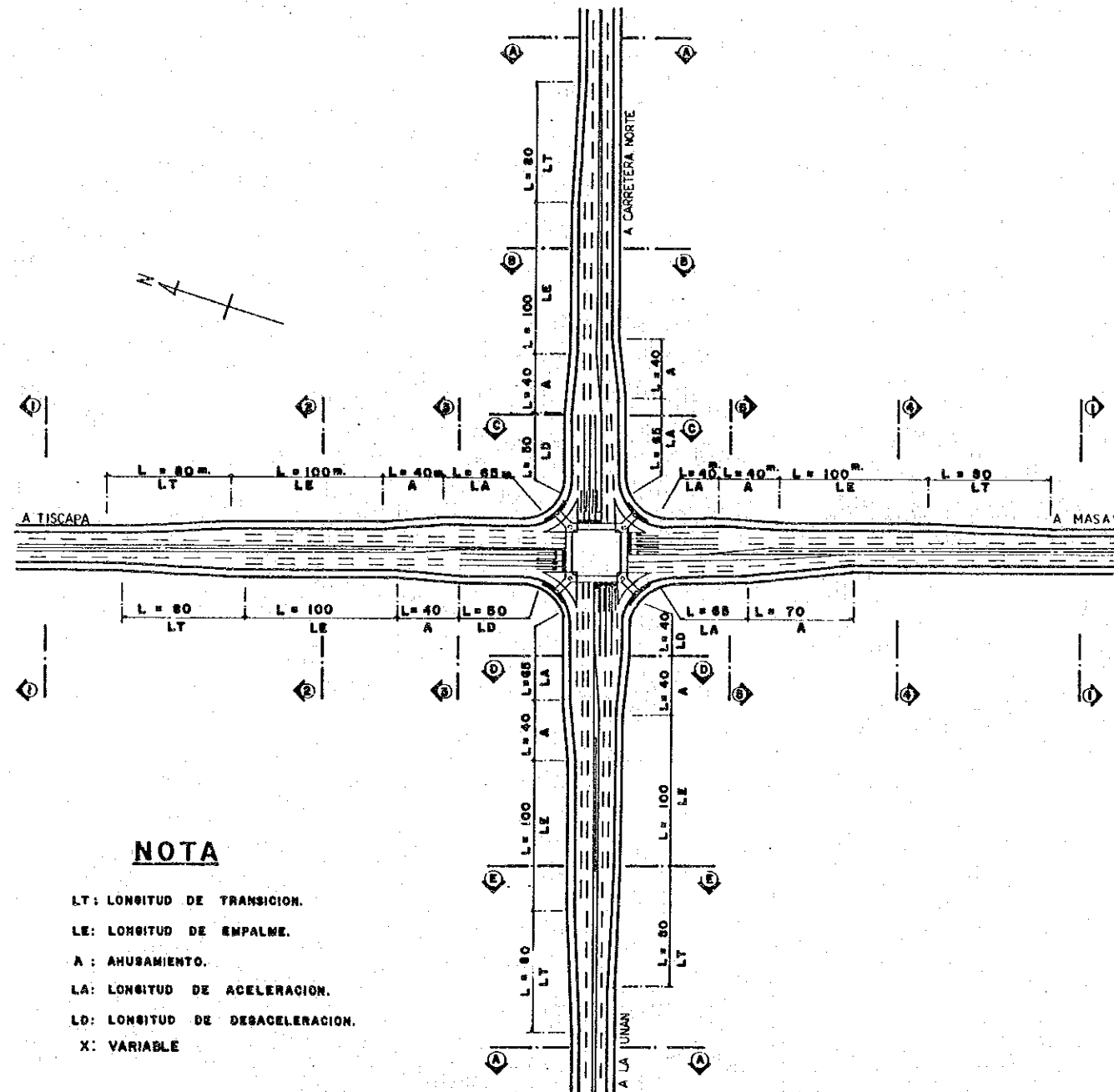
(V = 80 km/h)



ESCALA 1:300



ESCALA 1:300



NOTA

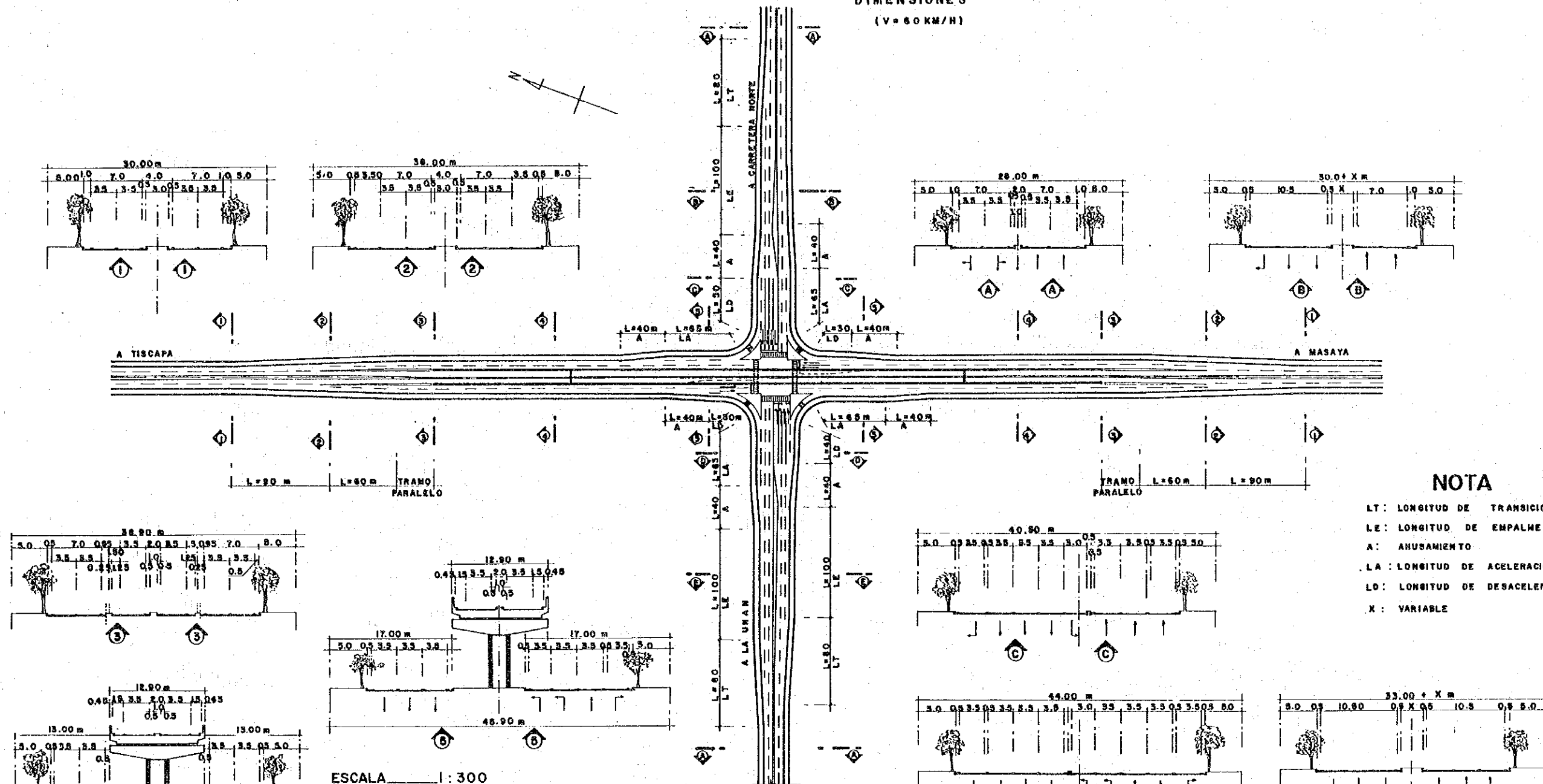
- LT: LONGITUD DE TRANSICION.
- LE: LONGITUD DE EMPALME.
- A: AHUSAMIENTO.
- LA: LONGITUD DE ACELERACION.
- LD: LONGITUD DE DESACELERACION.
- X: VARIABLE

PLANTA
ESCALA 1:2000

INTERSECCION "COLONIA CENTROAMERICA"

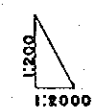
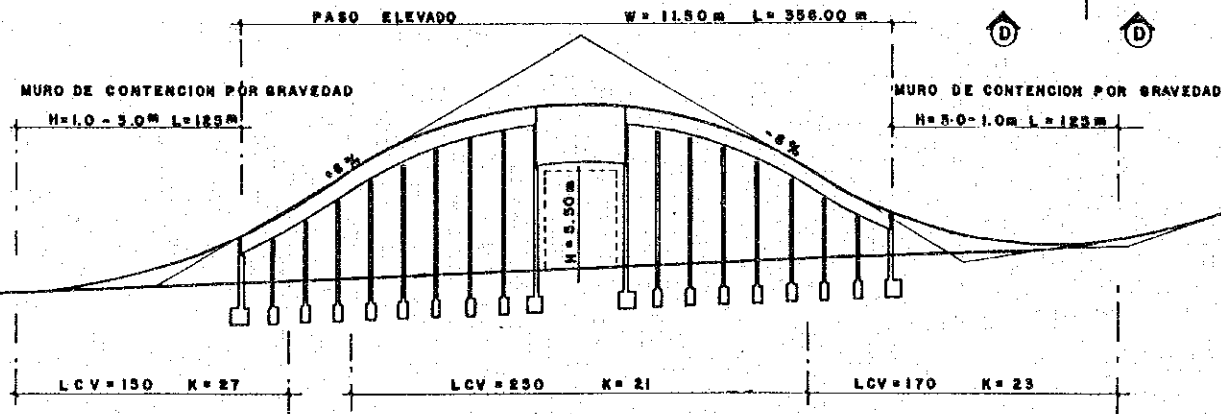
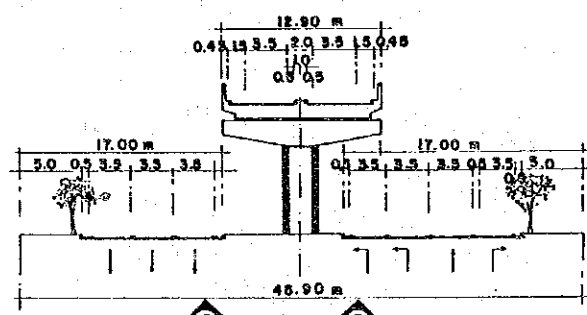
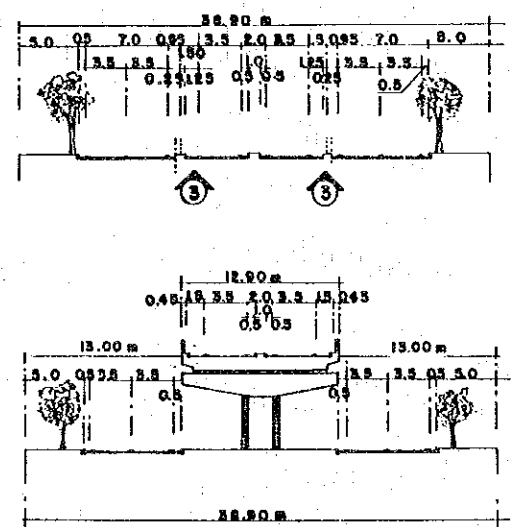
DIMENSIONES

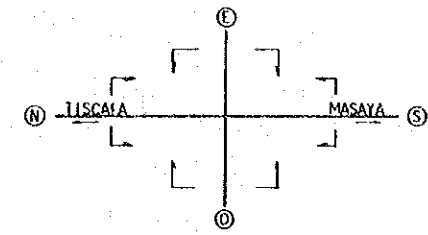
(V = 60 KM/H)



NOTA

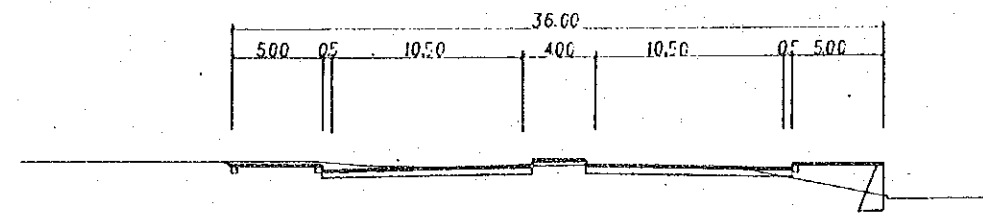
- LT : LONGITUD DE TRANSICION
- LE : LONGITUD DE EMPALME
- A : ANUSAMIENTO
- LA : LONGITUD DE ACELERACION
- LD : LONGITUD DE DESACELERACION
- X : VARIABLE





PASO A NIVEL

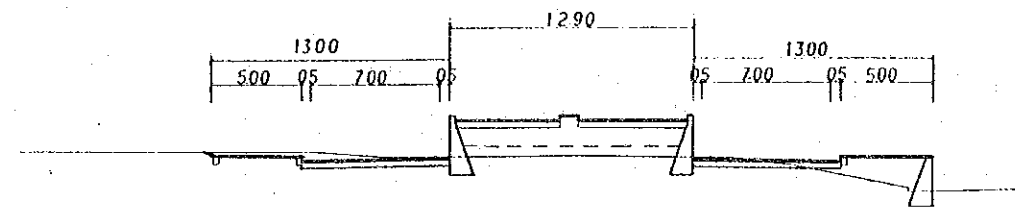
N-EST. 0+230



(DL=160)
LB=160

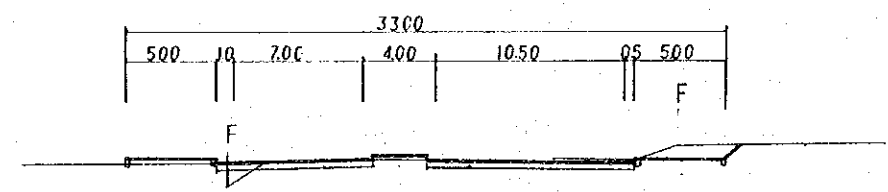
PASO A DESNIVEL

N-EST. 0+230



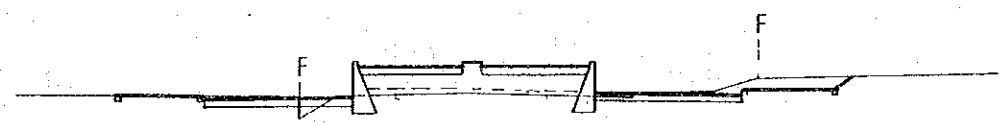
(DL=160)
LB=160

S-EST. 0+230



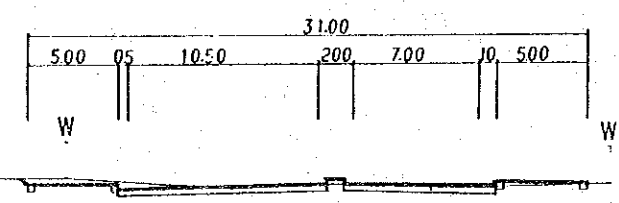
(DL=163)
LB=163

S-EST. 0+230



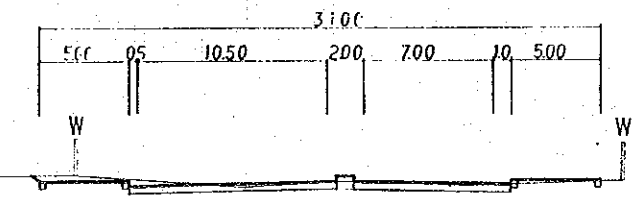
(DL=163)
LB=163

E-EST. 0+230



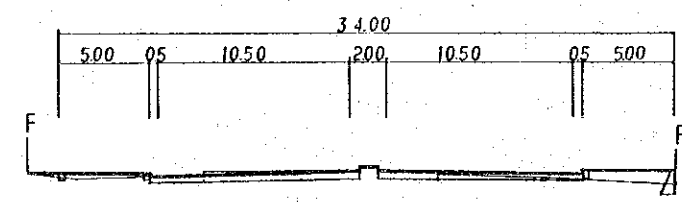
(DL=153)
LB=153

E-EST. 0+230



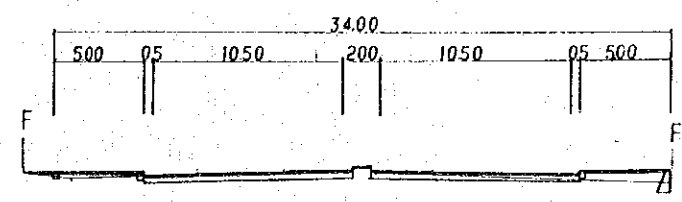
(DL=153)
LB=153

O-EST. 0+230



(DL=167)
LB=167

O-EST. 0+230



(DL=167)
LB=167