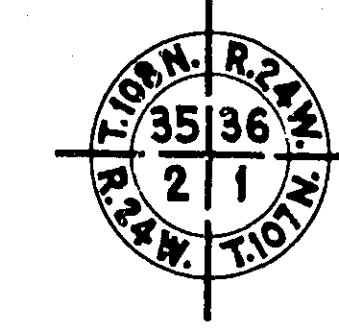
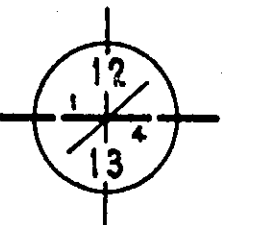


CONVENTIONAL SIGNS

| | | | |
|-----------------------------------|-------|---|--|
| STATE LINE | ----- | TIMBER | |
| COUNTY LINE | ----- | BRUSH | |
| TOWNSHIP OR RANGE LINE | ----- | ORCHARD | |
| SECTION LINE | ----- | ROCK LEDGE | |
| QUARTER LINE | ----- | SAND | |
| SIXTEENTH LINE | ----- | EDGE OF CUT | |
| RIGHT-OF-WAY LINE | ----- | TOE OF EMBANKMENT | |
| PRESENT ROAD 1/4 LINE | ----- | CATCH BASIN | |
| LIMITED ACCESS | ----- | MANHOLE | |
| PROPERTY LINE (Except Land Lines) | ----- | DROP INLET | |
| VACATED PLATTED PROPERTY | ----- | FIRE HYDRANT | |
| CORPORATE OR CITY LIMITS | ----- | ARC LAMP | |
| TRUNK HIGHWAY CENTER LINE | ----- | OTHER LAMPS (Tale Kind) | |
| RETAINING WALL | ----- | RAILROAD CROSSING SIGN | |
| STEAM RAILROAD | ----- | RAILROAD CROSSING BELL | |
| ELECTRIC RAILROAD | ----- | ELECTRIC WARNING SIGN | |
| RAILROAD RIGHT-OF-WAY LINE | ----- | CROSSING GATE | |
| CREEK | ----- | CATTLE GUARD | |
| RAPIDS OR WATERFALL | ----- | OVERHEAD (Highway Over) | |
| DRY RUN | ----- | UNDERPASS (Highway Under) | |
| DRAINAGE DITCH | ----- | ABUTMENT, WALL & PIER | |
| HIGH TENSION LINE | ----- | BRIDGE | |
| POWER POLE LINE | ----- | CULVERT | |
| TELEPHONE OR TELEGRAPH LINE | ----- | BUILDING (One Story Frame) | |
| TELEPHONE CONDUIT | ----- | C-CONCRETE S-STONE T-TILE B-BRICK ST-STUCCO | |
| GUARD RAIL | ----- | HEDGE | |
| WIRE FENCE | ----- | IRON PIPE | |
| RAILROAD SHOW FENCE | ----- | STONE MONUMENT | |
| BOARD OR HIGHWAY SHOW FENCE | ----- | WOOD STAKE OR HUB | |
| STONE WALL OR FENCE | ----- | MEANDER CORNER | |
| GAS MAIN | ----- | | |
| WATER PIPE | ----- | | |
| SEWER PIPE | ----- | | |
| DRAIN TILE | ----- | | |
| GRAVEL PIT | ----- | | |
| SAND PIT | ----- | | |
| CLAY PIT | ----- | | |
| ROCK QUARRY | ----- | | |
| SPRINGS | ----- | | |
| MARSH | ----- | | |



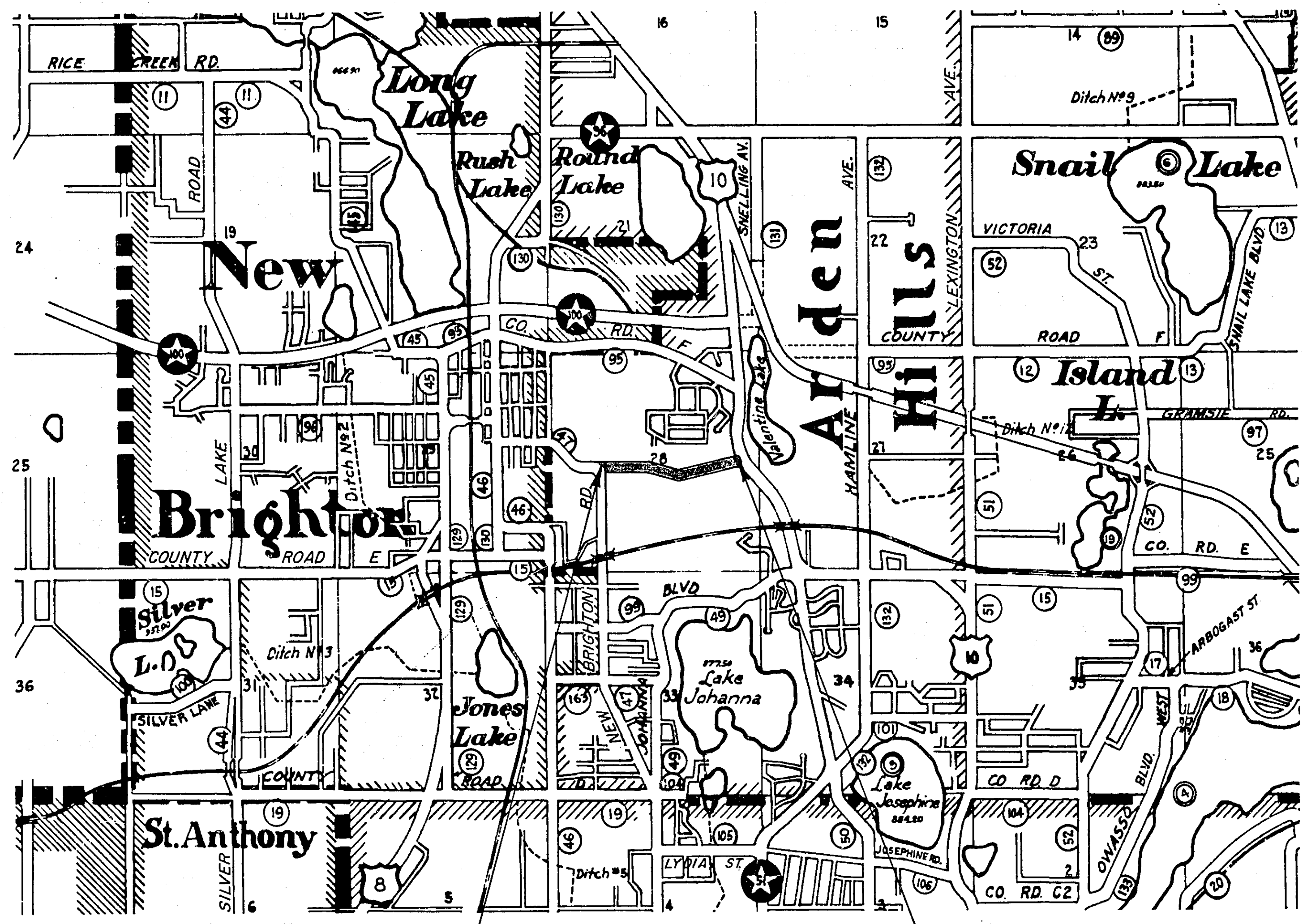
NOTE: SECTION NUMBERS READ FROM THE SOUTH

PIT DATA

| | |
|---------------|------------------|
| PIT NO. _____ | Located in _____ |
| PIT NO. _____ | Located in _____ |
| PIT NO. _____ | Located in _____ |
| PIT NO. _____ | Located in _____ |

SPECIFICATIONS

THE "SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED MAY 1, 1959 SHALL GOVERN.



**OFFICE OF COUNTY ENGINEER
RAMSEY COUNTY
CONSTRUCTION PLAN FOR GRADING AND SURFACING
COUNTY ROAD "E-2"**

FROM: NEW BRIGHTON RD. (C.S.A.H. 47) TO: T.H. 10 (ANOKA CUT-OFF)
1481.19' WEST OF THE CENTER OF SECTION 28, T.29 N., R.23 W. 605.86' EAST & 193.30' NORTH OF N. 1/4 CORNER OF S.E. 1/4 OF SECTION 28, T.29 N., R.23 W.

| | | |
|-------------------|--------------|-------------|
| GROSS LENGTH | 3529.00 FEET | 0.668 MILES |
| BRIDGES-LENGTH | 0 FEET | 0 MILES |
| EXCEPTIONS-LENGTH | 0 FEET | 0 MILES |
| NET LENGTH | 3529.00 FEET | 0.668 MILES |

| INDEX | |
|-----------|---|
| SHEET NO. | DESCRIPTION |
| 1 | TITLE SHEET |
| 2 | TYPICAL SECTIONS & ESTIMATED QUANTITIES |
| 3-4 | PLAN & PROFILE SHEETS |
| 5-13 | CROSS SECTION SHEETS |

| | |
|----------------------------|---|
| SCALES | PLAN, 1 inch = 100 Feet |
| | PROFILE, Horiz. 1 inch = 100 Feet. Vert. 1 inch = 10 Feet. |
| | WORKING PLANS { Horiz. 1 inch = 100 Feet Vert. 1 inch = 10 Feet Cross-Sections 1 inch = 10 Feet |
| LAYOUT, 1 inch = 2640 Feet | |

DESIGN SPEED 40 M.P.H.
EXCEPT BETWEEN STA. 1+00 TO STA. 6+00 = 30 M.P.H.
DESIGN LOAD 7 TON (ULT. 9 TON)
TRAFFIC COUNT - NONE AVAILABLE

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Travis Anderson REG. NO. 20422 DATE 6-17-63

RECOMMENDED FOR APPROVAL *Dean R. Datta* DATE 6-17-63
COUNTY ENGINEER

APPROVED *Ed J. Brundis* DATE 7-28-63
CHAIRMAN OF RAMSEY COUNTY BOARD

MINNESOTA STATE HIGHWAY DEPARTMENT
RECOMMENDED FOR APPROVAL *J. F. Berglund* DATE 7-31-63

RECOMMENDED FOR APPROVAL *Art Breuninger* DATE 7-31-63
ASST. DISTRICT ENGINEER

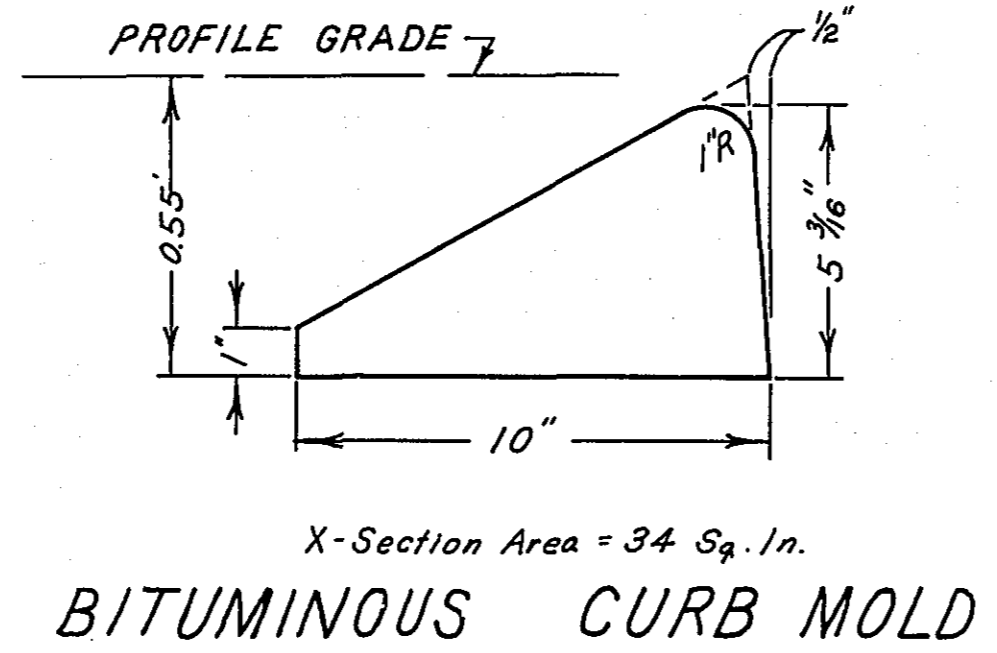
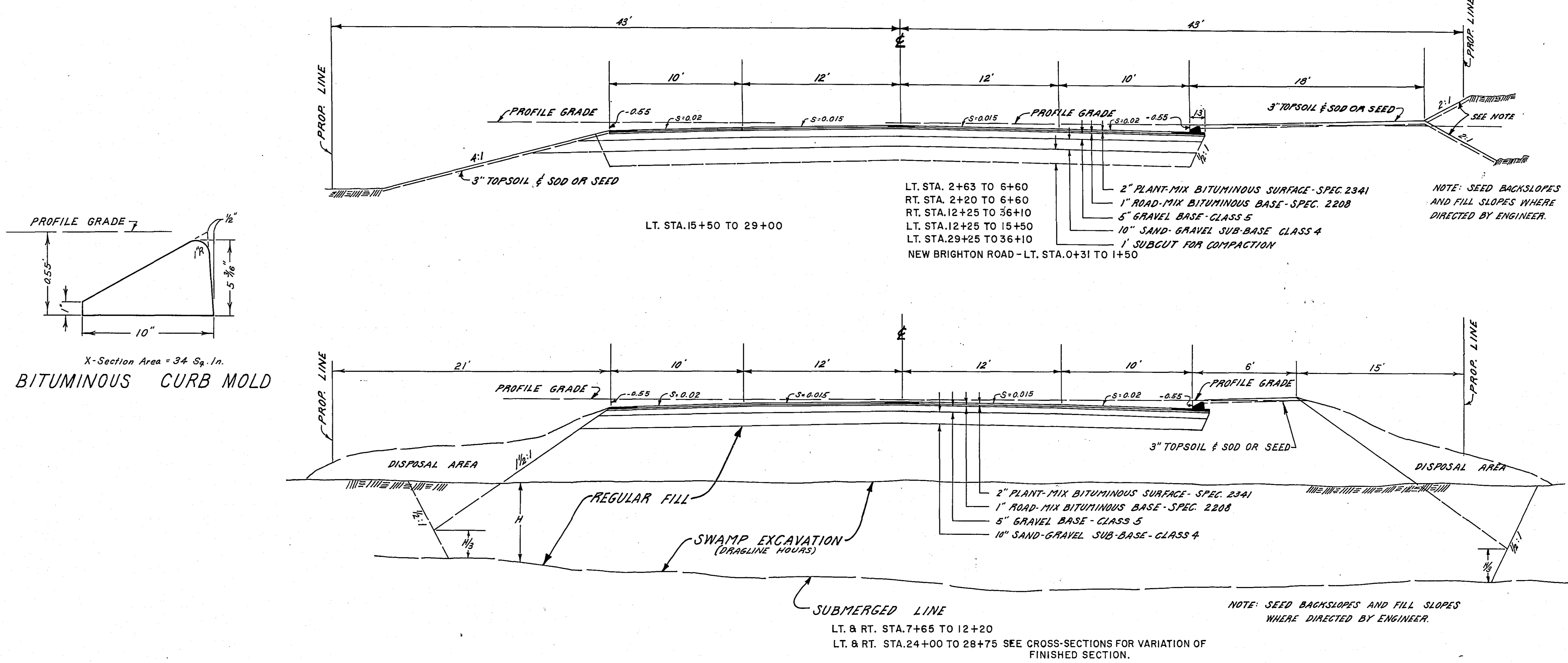
APPROVED *W. J. ...* DATE 8-31-63
STATE AID ENGINEER

MICRO-FILMED

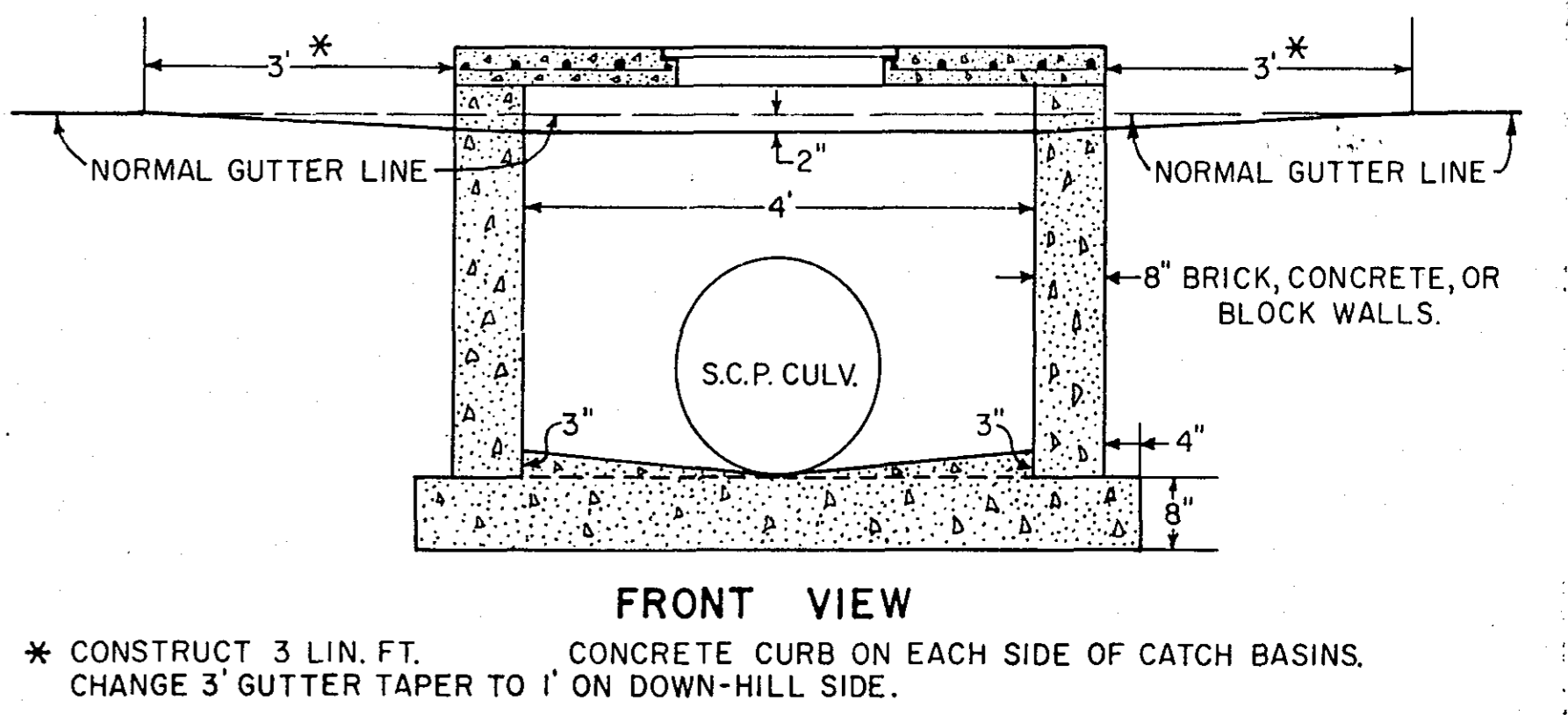
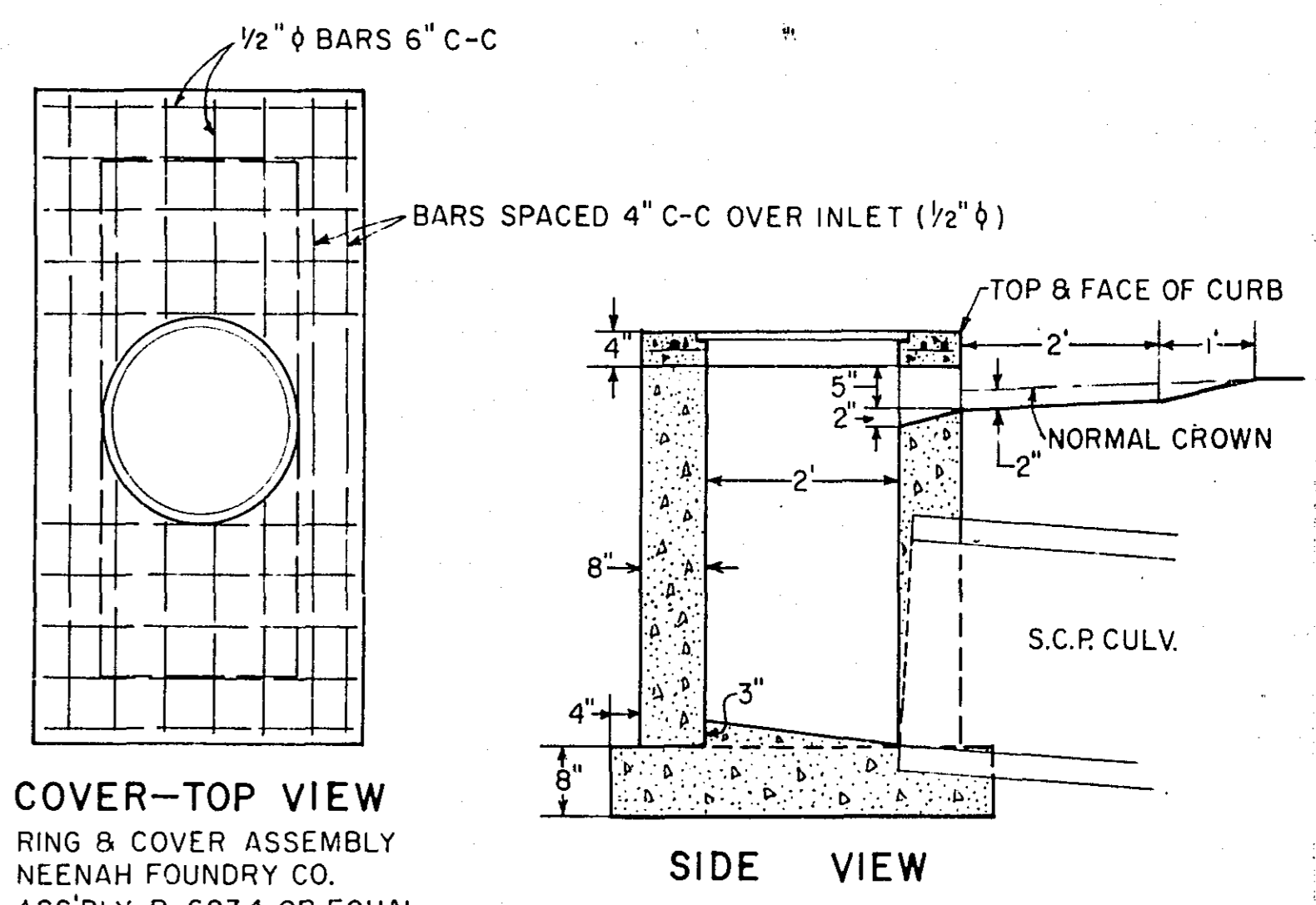
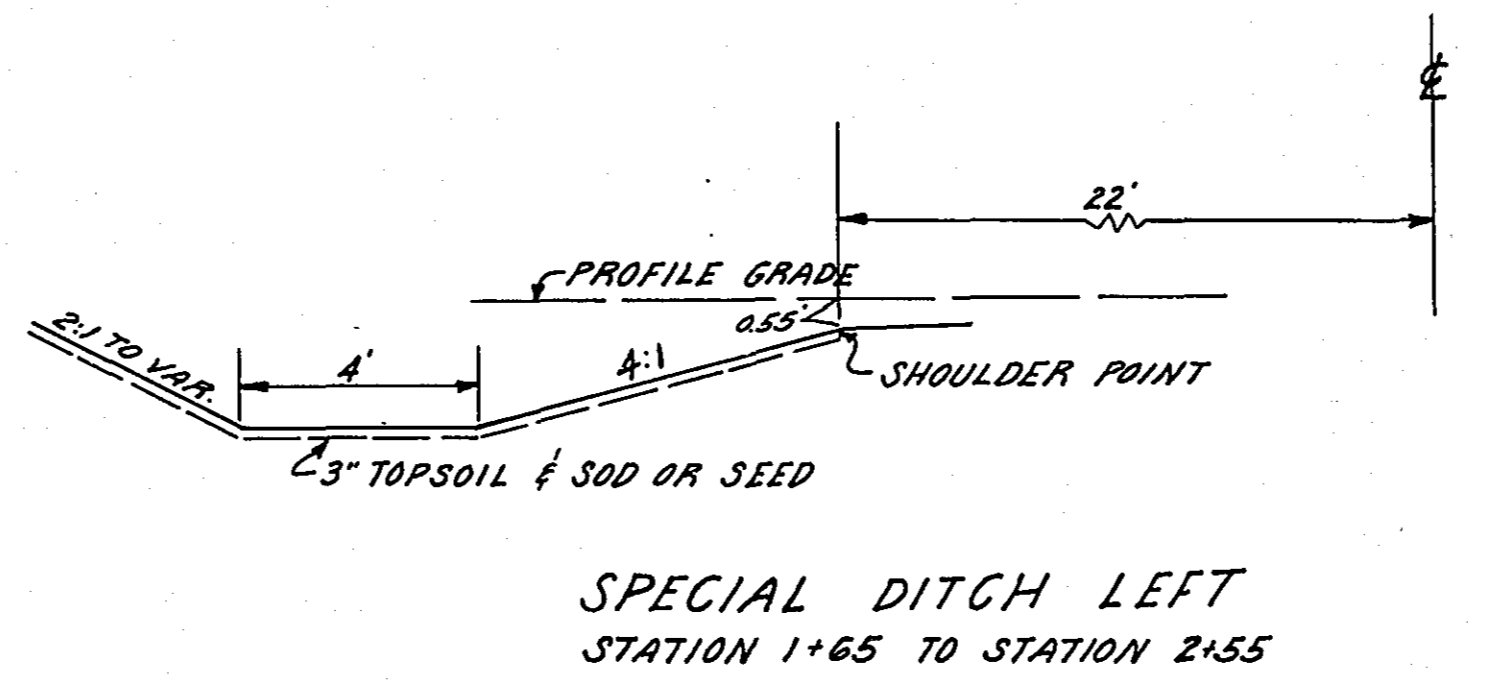
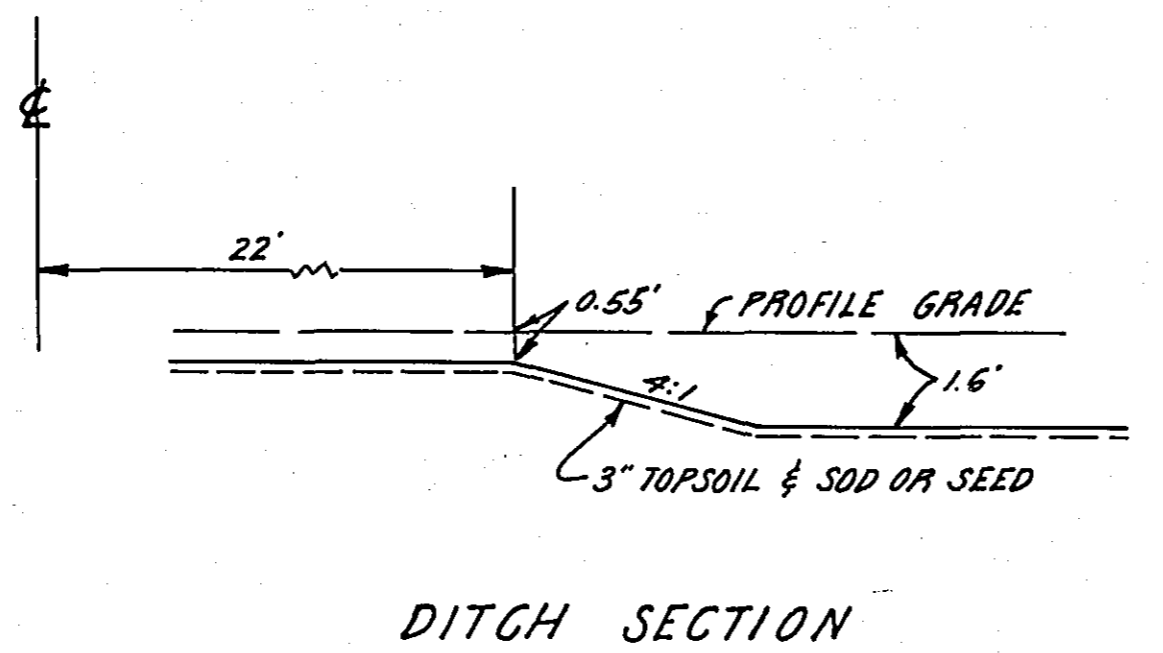
| ESTIMATED QUANTITIES | | | |
|----------------------|--|------------------|----------------------------|
| SPEC. NO. | DESCRIPTION | UNIT | TOTAL ESTIMATED QUANTITIES |
| 2101.501 | CLEARING | ACRE | 1 |
| 2101.502 | CLEARING | TREE | 1 |
| 2101.503 | GRUBBING | ACRE | 1 |
| 2101.507 | GRUBBING | TREE | 1 |
| 2104.510 | REMOVE GUARD RAIL (WELDED STEEL RAIL) | LINEAR FOOT | 212 |
| 2105.501 | CLASS 'A' EXCAVATION | CUBIC YARD | 53,929 |
| 2123.506 | 1 CUBIC YARD DRAGLINE | HOUR | 392 |
| 2123.509 | DOZER | HOUR | 32 |
| 2201.526 | GRAVEL SUB-BASE IN PLACE (CLASS 4) | TON | 8,900 |
| 2202.526 | GRAVEL BASE IN PLACE (CLASS 5) | TON | 4,950 |
| 2208.501 | BITUMINOUS MATERIAL FOR PRIME COAT | GALLON | 5,520 |
| 2208.503 | BITUMINOUS MATERIAL FOR MIXTURE | GALLON | 16,040 |
| 2208.506 | AGGREGATE | TON | 1,050 |
| 2341.502 | BITUMINOUS MATERIAL FOR TACK COAT | GALLON | 920 |
| 2341.504 | BITUMINOUS MATERIAL FOR MIXTURE | TON | 118 |
| 2341.505 | BITUMINOUS MATERIAL FOR FOG SEAL COAT | GALLON | 1,840 |
| 2341.511 | BITUMINOUS MIXTURE (WEARING COURSE) | TON | 2,150 |
| 2341.531 | AGGREGATE FOR FOG SEAL COAT | CUB. YARD (V.M.) | 81 |
| 2501.549 | SAND-GRAVEL SUB FOUNDATION | CUBIC YARD | 3,100 |
| 2501.521-15 | F.F.I. S.C. PIPE CULVERT, CLASS II, 15" | LINEAR FOOT | 80 |
| 2501.521-48 | F.F.I. S.C. PIPE CULVERT, CLASS III, 48" | LINEAR FOOT | 110 |
| 2501.522 | F.F.I. S.C. PIPE CULVERT, RISE-36", SPAN-58 1/2", CLASS II | LINEAR FOOT | 84 |
| 2503.512-21 | F.F.I. R.C. PIPE SEWER, CLASS II, 21" | LINEAR FOOT | 46 |
| 2503.512-24 | F.F.I. R.C. PIPE SEWER, CLASS II, 24" | LINEAR FOOT | 58 |
| 2503.514-18 | F.F.I. C.M. PIPE SEWER, 18" | LINEAR FOOT | 58 |
| 2506.501 | CONSTRUCT SPECIAL CATCH BASIN | LINEAR FOOT | 15.9 |
| 2506.511 | RECONSTRUCT MANHOLES | LINEAR FOOT | 11.2 |
| 2506.521 | INSTALL CASTINGS | ASSEMBLY | 1 |
| 2515.541-24 | F.F.I. CONCRETE APRONS FOR S.C. PIPE, 24" | APRON | 1 |
| 2515.541-48 | F.F.I. CONCRETE APRONS FOR S.C. PIPE, 48" | APRON | 2 |
| 2515.542 | F.F.I. CONCRETE APRONS FOR S.C.P. ARCH, R-36", S-58 1/2" | APRON | 2 |
| 2535.501 | BITUMINOUS CURB | LINEAR FOOT | 5,345 |
| 2574.501 | ROADSIDE SEEDING | ACRE | 3.5 |
| 2574.511 | SEED (CLASS 15) | POUND | 420 |
| 2576.501 | SODDING | SQUARE YARD | 100 |

| STANDARD DETAIL PLATES | |
|------------------------|--|
| 3000 B | REINFORCED CONCRETE PIPE |
| 3014 A | REINFORCED CONCRETE PIPE-ARCH |
| 3100 B-3102 A | CONCRETE APRON FOR REINFORCED CONCRETE PIPE |
| 3110 | CONCRETE APRON FOR REINFORCED CONCRETE PIPE-ARCH |
| 4005 E | MANHOLE OR CATCH BASIN |
| 4181 | MANHOLE STEP CASTING |
| 8000 A & 8009 | STANDARD BARRICADE |
| 9102 A | SODDING AT PIPE CULVERT ENDS |

TYPICAL SECTIONS



SPECIAL CATCH BASIN (R.C.I.)



STA. 1+10 Lt. 29'
12" x 40' C.M.
O.K. Leave

STA. 2+55 ±
F. & I. 15" x 60' S.C.P. Culv.
Class II

STA. 10+36 ± SKEW TO FIT DITCH
F. & I. 48" x 110' S.C.P. Culv.
Class III
F. & I. 2 APRONS
Elev. Rt. 677
Elev. Lt. 675

STA. 11+25 ± F. & I. 21" x 46' R.C.P. Sewer, Class II
Lt. 23' to Lt. 60' F. & I. 18" x 38' C.M.P. Sewer
Rt. 23' Construct C.B. 4.7 L.F. } R.C. I
Lt. 23' Construct C.B. 5.2 L.F. }

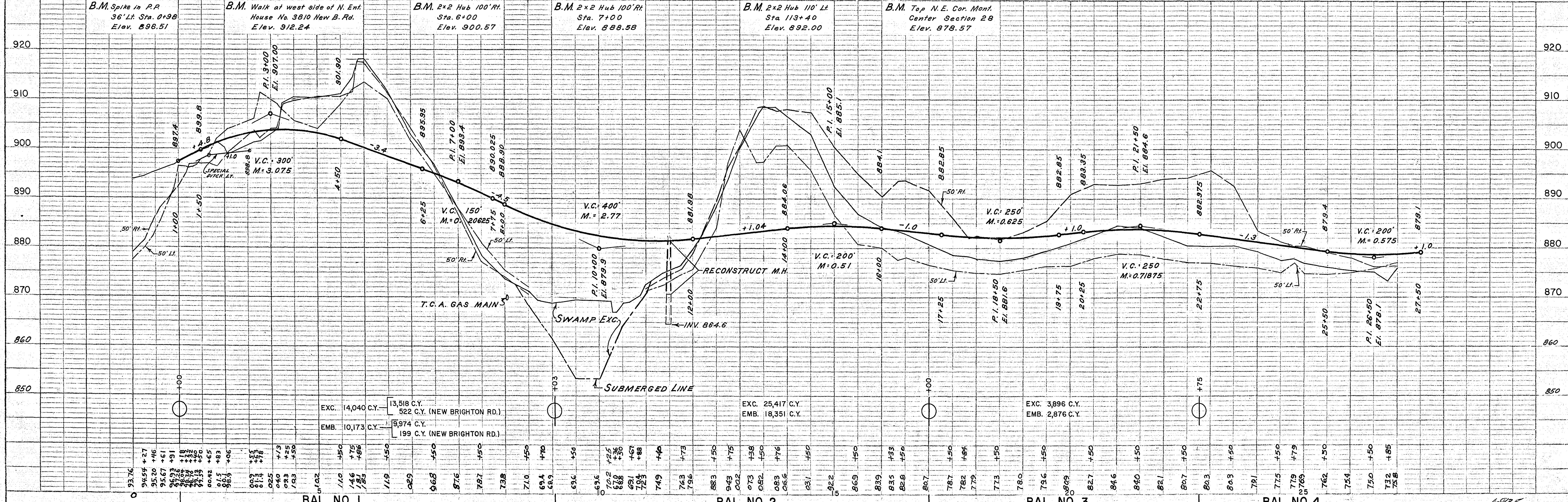
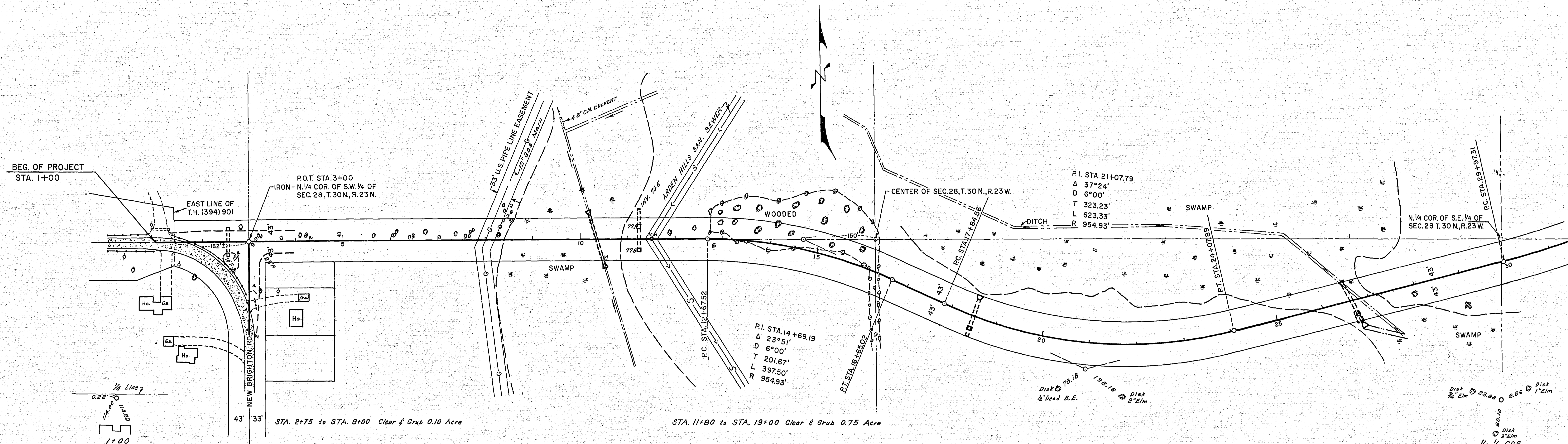
STA. 11+50 ± Manhole Inplace
Reconstruct 11.2 L.F.
Install Casting Assembly

STA. 18+50 ± F. & I. 24" x 58' R.C.P. Sewer, Class II
Lt. F. & I. One Apron
Rt. 23' Construct C.B. 6.0 L.F. - R.C. I
Rt. 23' to Rt. 43' F. & I. 18" x 20' C.M.P. Sewer

STA. 26+65 Rt. 22' to Rt. 48'
Construct Bituminous spillway
as directed by Engineer
5 Tons (included in 2341.511)

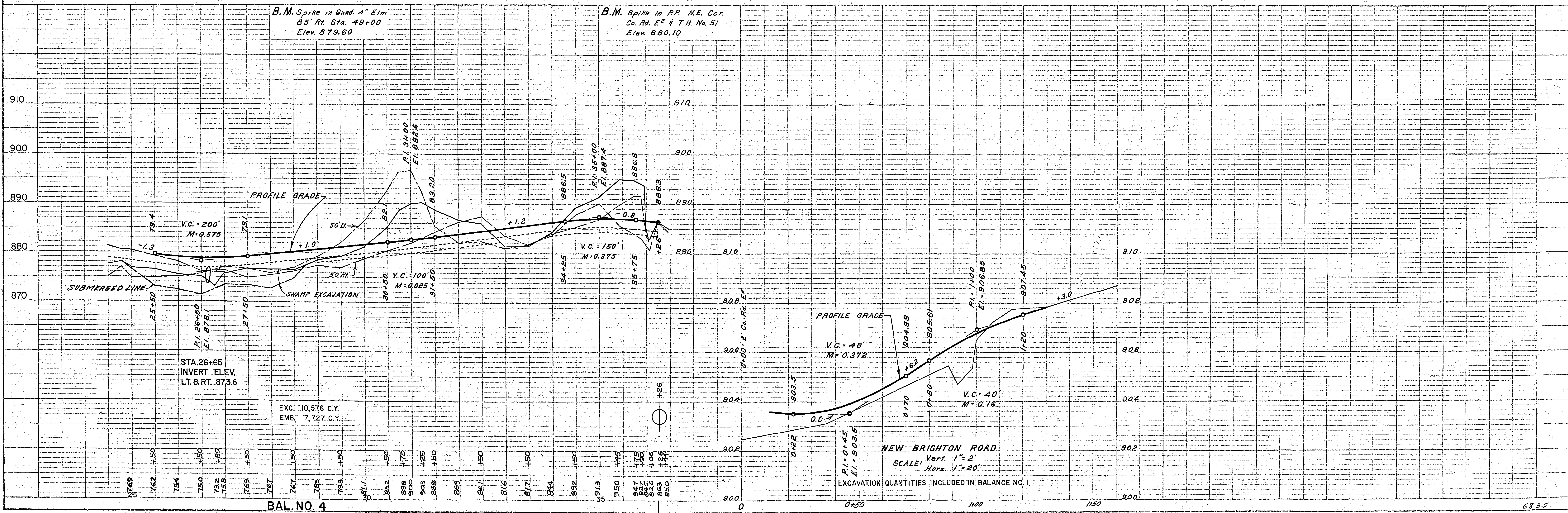
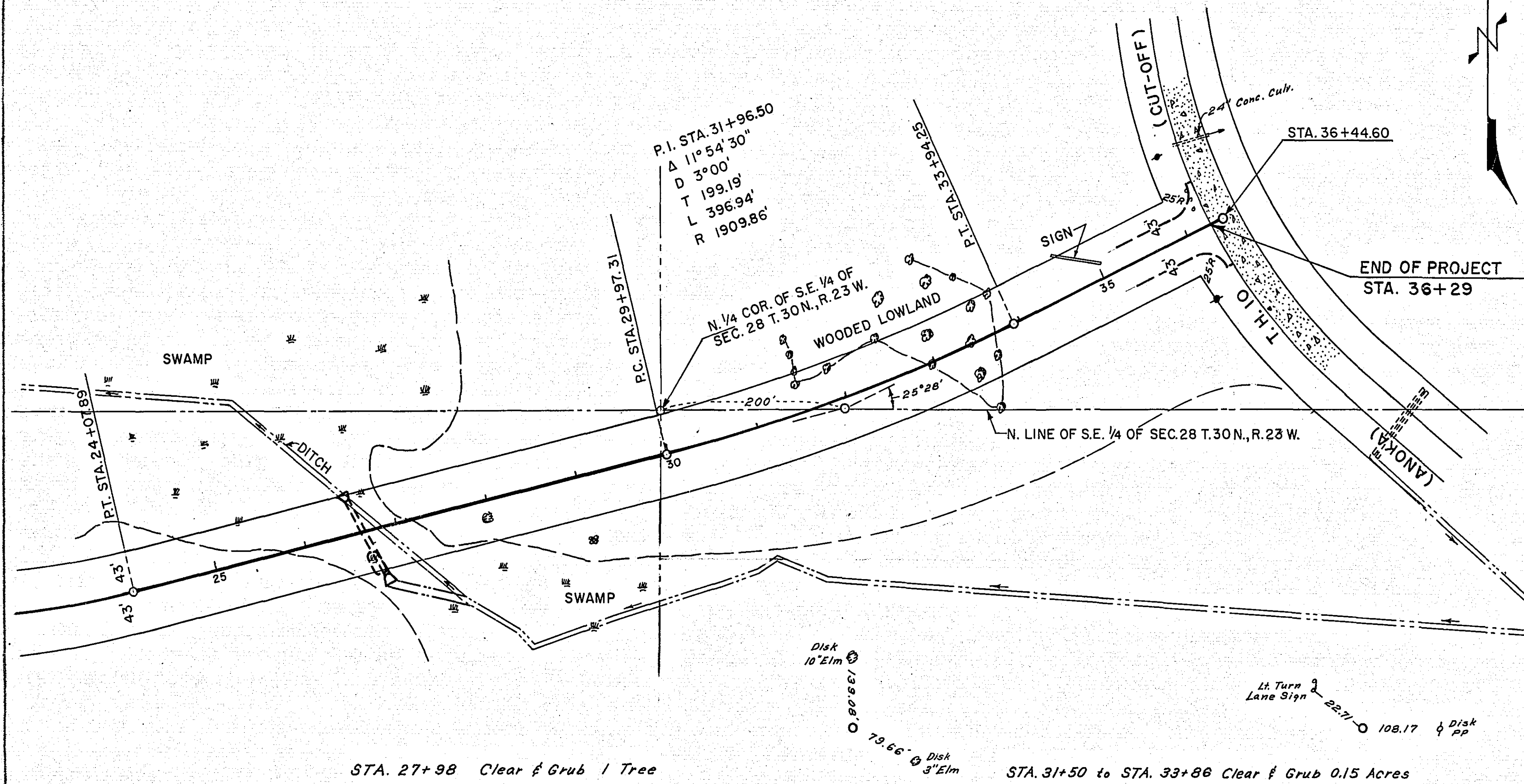
PLAN
SURVEYED, PLOTTED, CHECKED, NO. OF WAY CHECKED.
NOTE BOOK NO. OF WAY CHECKED.

PROFILE
SURVEYED, PLOTTED, CHECKED, NO. OF WAY CHECKED.
NOTE BOOK NO. OF WAY CHECKED.



STA. 26+56⁺ Lt. 35' to STA. 26+76⁺ Rt. 51'
 F#1. 84 L.F. Pipe Arch R=36' S=58 1/2° Class II
 F#1. 2 Arch Aprons R=36' S=58 1/2°
 Channel Change (Dragline Hours)

Invert elev 873.6



STATION-ELEVATION

EXCAVATION | EMBANKMENT
SUB TOTALS CU. YDS. | CU. YDS. SUB TOTALS

STATION-ELEVATION

EXCAVATION | EMBANKMENT
SUB TOTALS CU. YDS. | CU. YDS. SUB TOTALS

+32 98.7

16 3

3 902.5

+22 98.24

12 0

206 43

+18 98.04

4 0

+18 901.4

78 23

897.26

16 0

+63 901.3

20 5

NEW BRIGHTON RD. SHEET 13-522 100

898.8 F&I, 15" x 60" I.F. S.C.P. GULV. 899.3

+55 900.9

106 21

+06 898.9

10 5

2 900.1

25 14

+83 901.5

24 16

+65 900.42

18 14

+50 899.59

13 9

1440 899.12

CROSS SECTIONS SCALE 1" = 10'

6835

JAMIESO
YI/RU2
NO. 3700, 24313
C-14

JAMIE
YI/RU2
NO. 3700, 24313
C-14

STATION-ELEVATION
E

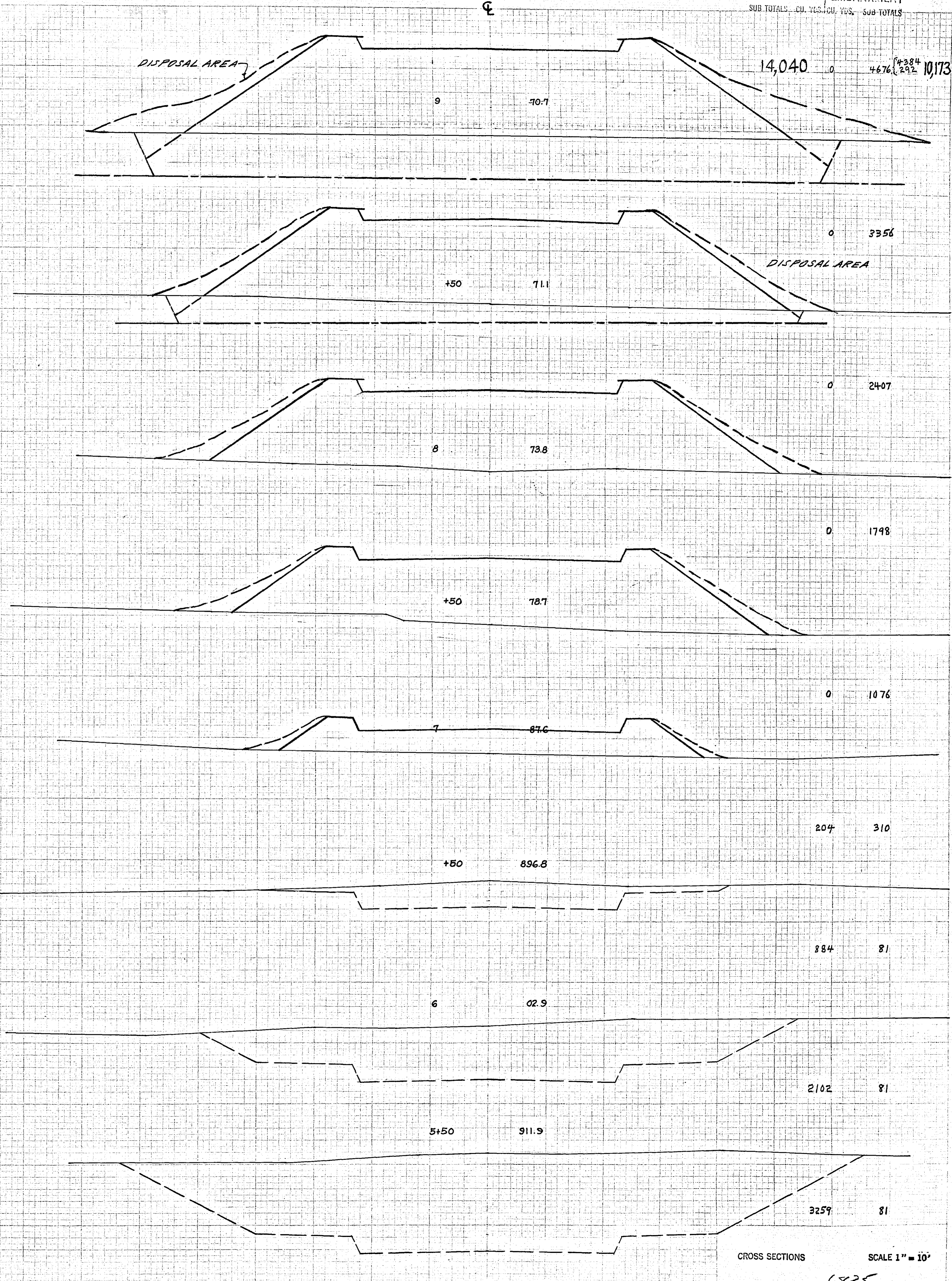
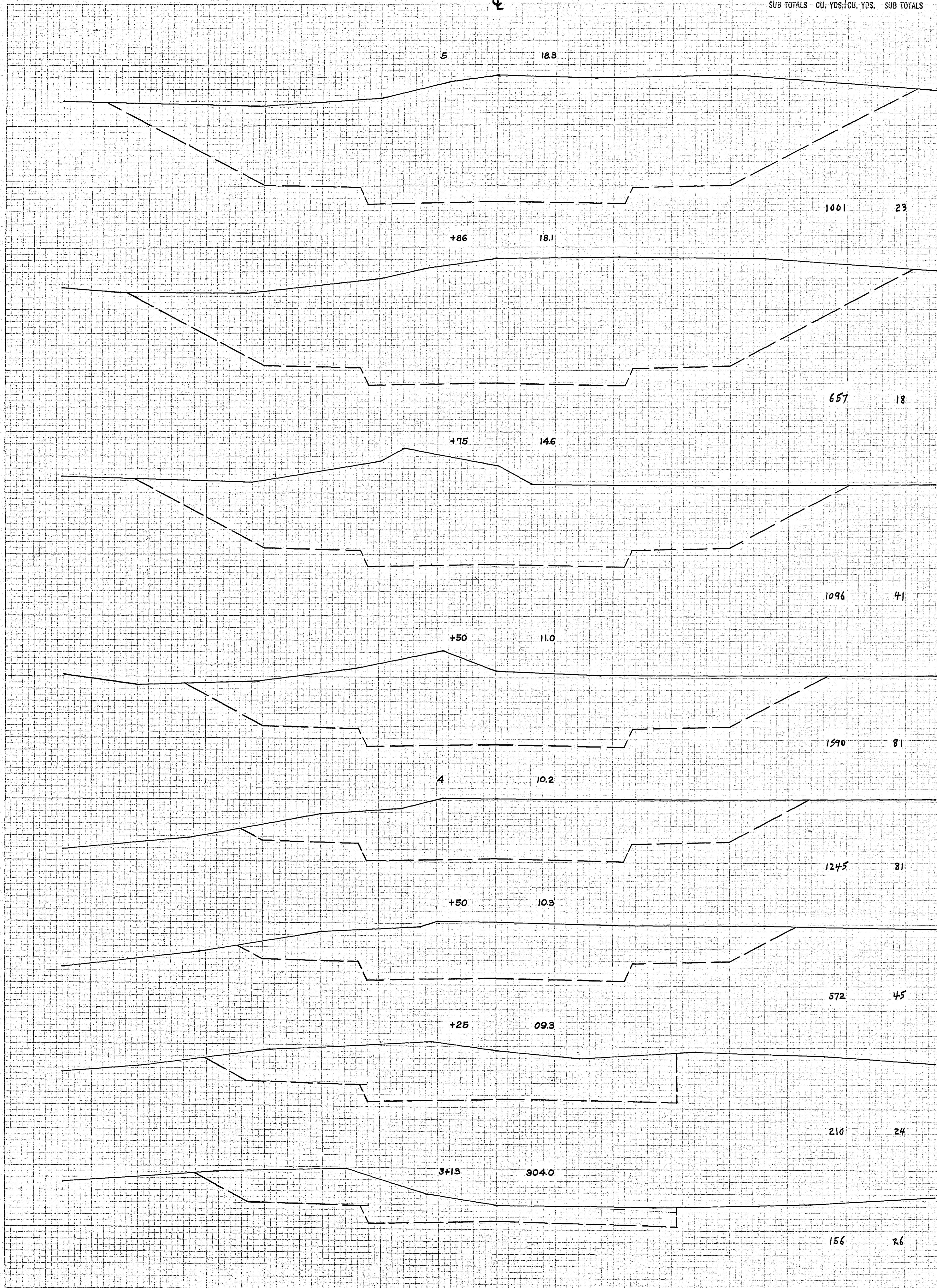
EXCAVATION | EMBANKMENT
SUB TOTALS - CU. YDS. | CU. YDS. SUB TOTALS

STATION-ELEVATION
E

EXCAVATION | EMBANKMENT
SUB TOTALS - CU. YDS. | CU. YDS. SUB TOTALS

MOORE BOOK SURVEY ORIGINAL

MOORE BOOK SURVEY FINAL



CROSS SECTIONS SCALE 1" = 10'

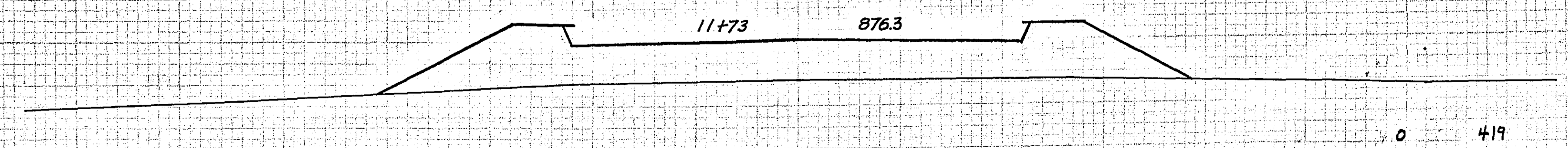
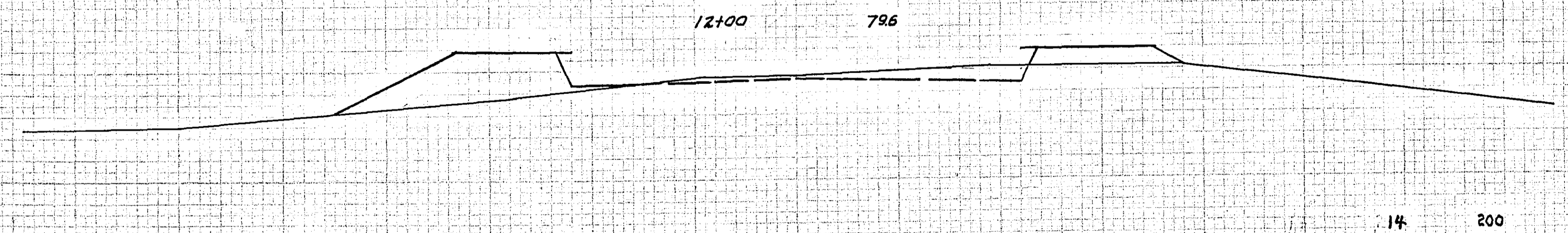
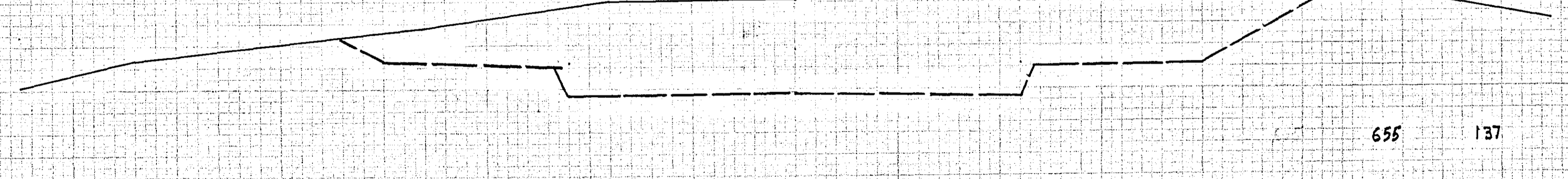
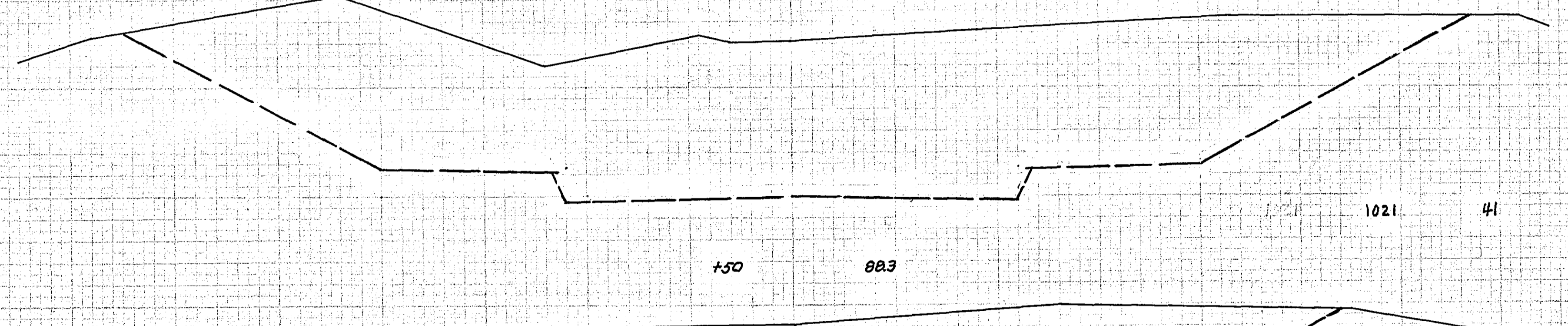
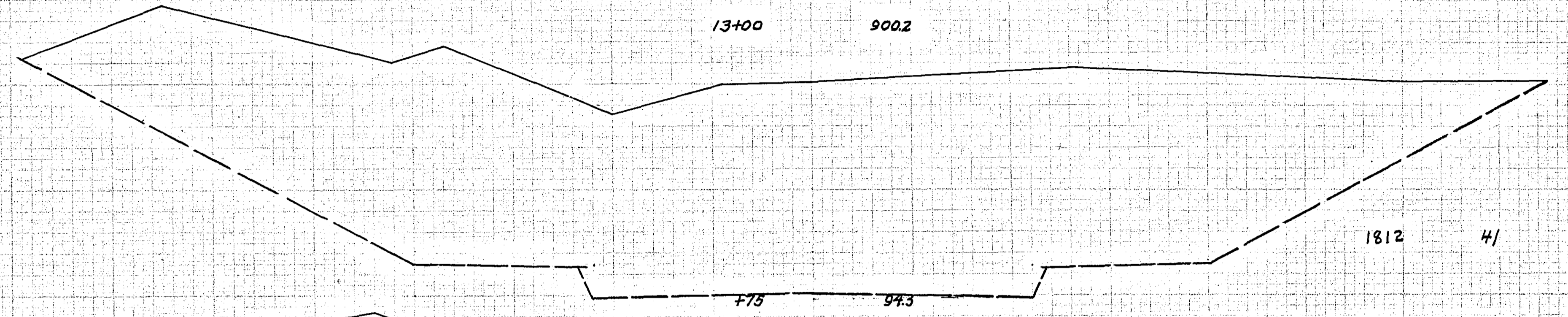
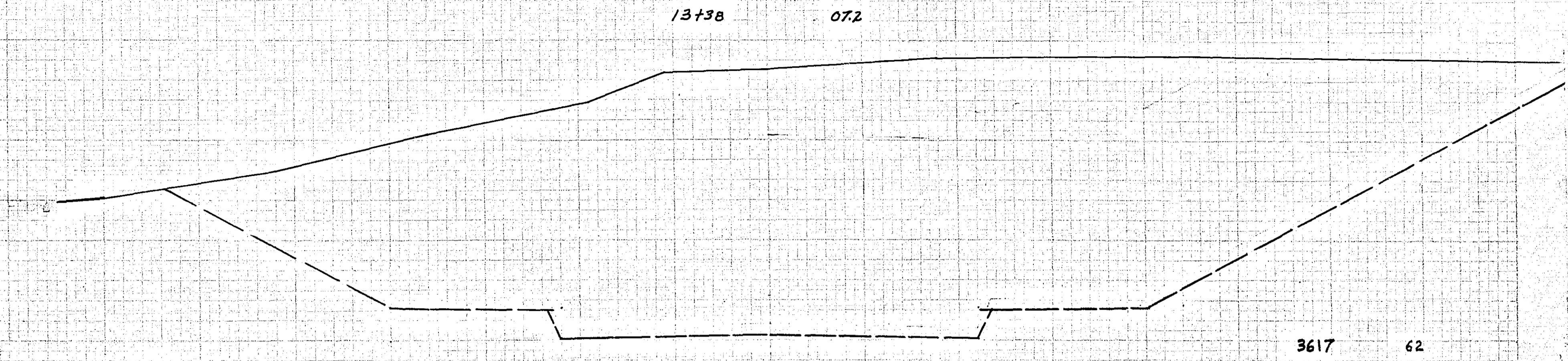
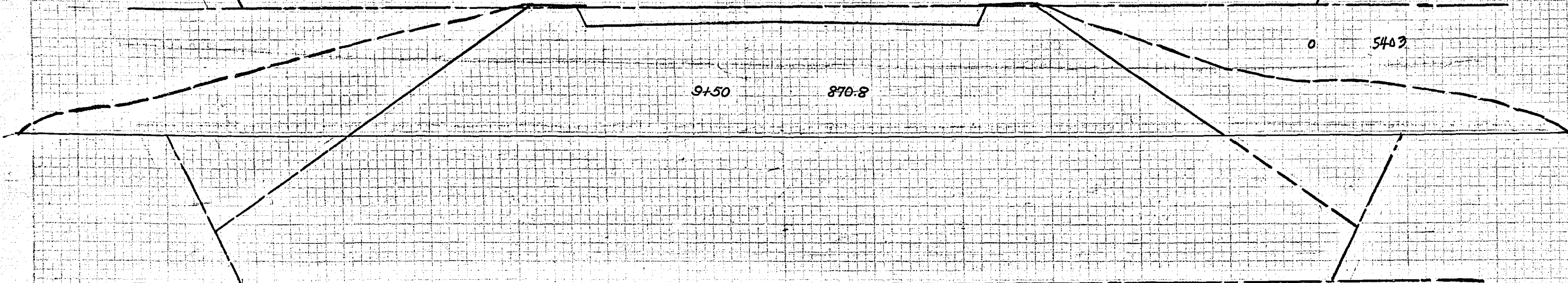
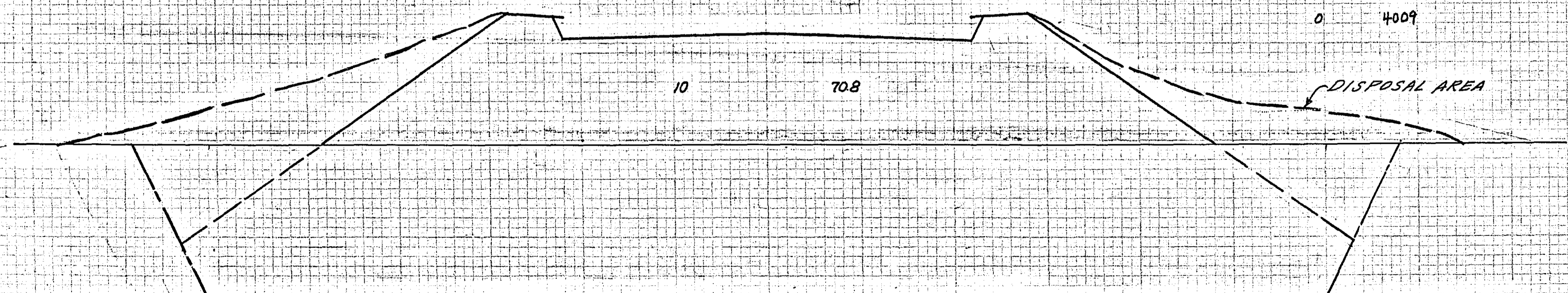
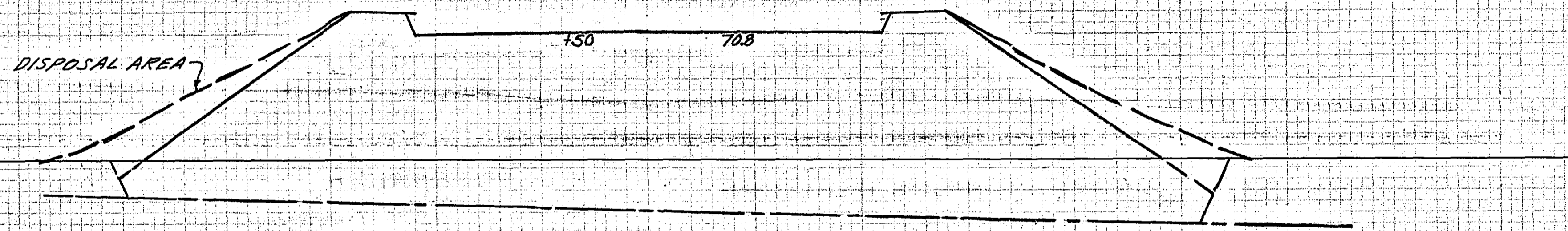
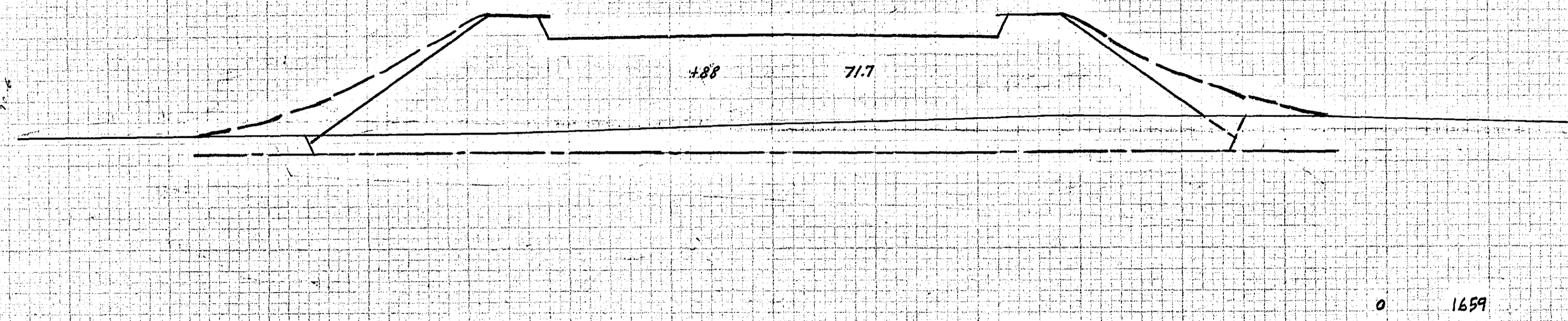
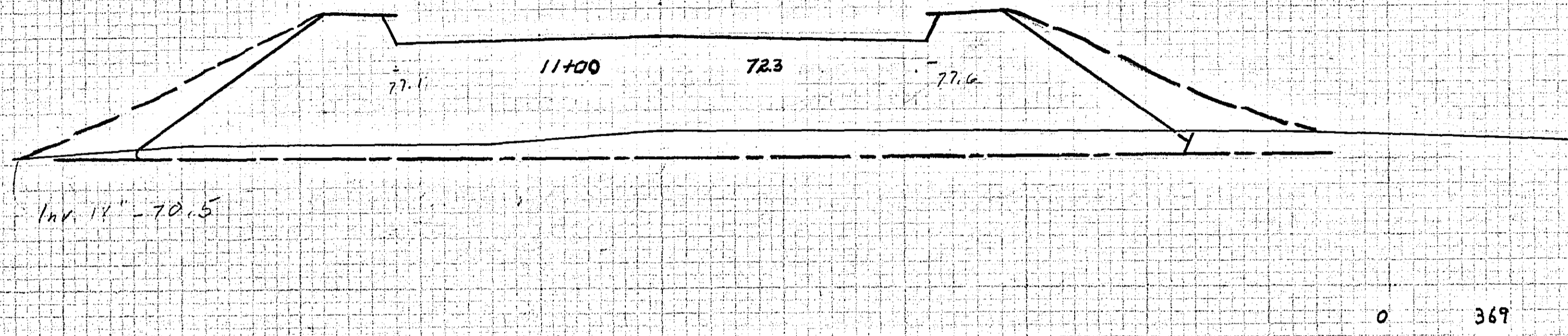
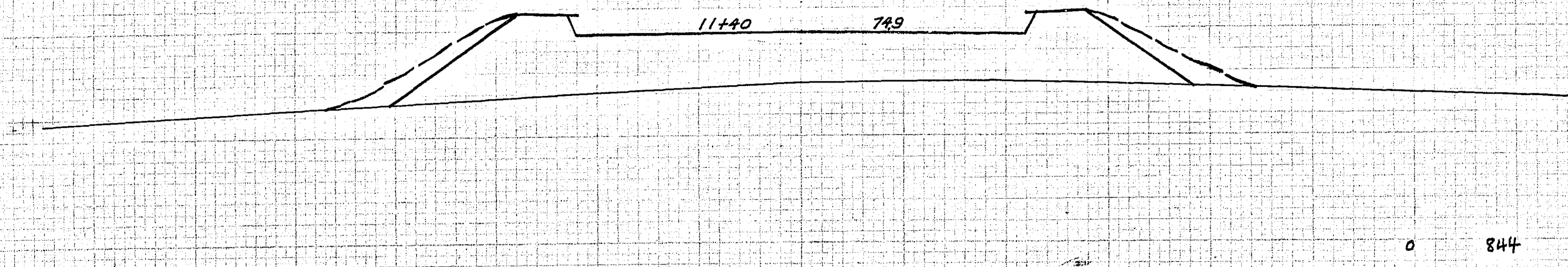
6835

STATION-ELEVATION
⊕

EXCAVATION | EMBANKMENT
SUB TOTALS CU. YDS. | CU. YDS. SUB TOTALS

STATION-ELEVATION
⊕

EXCAVATION | EMBANKMENT
SUB TOTALS CU. YDS. | CU. YDS. SUB TOTALS



CROSS SECTIONS SCALE 1" = 10'

6835

STATION-ELEVATION
☉

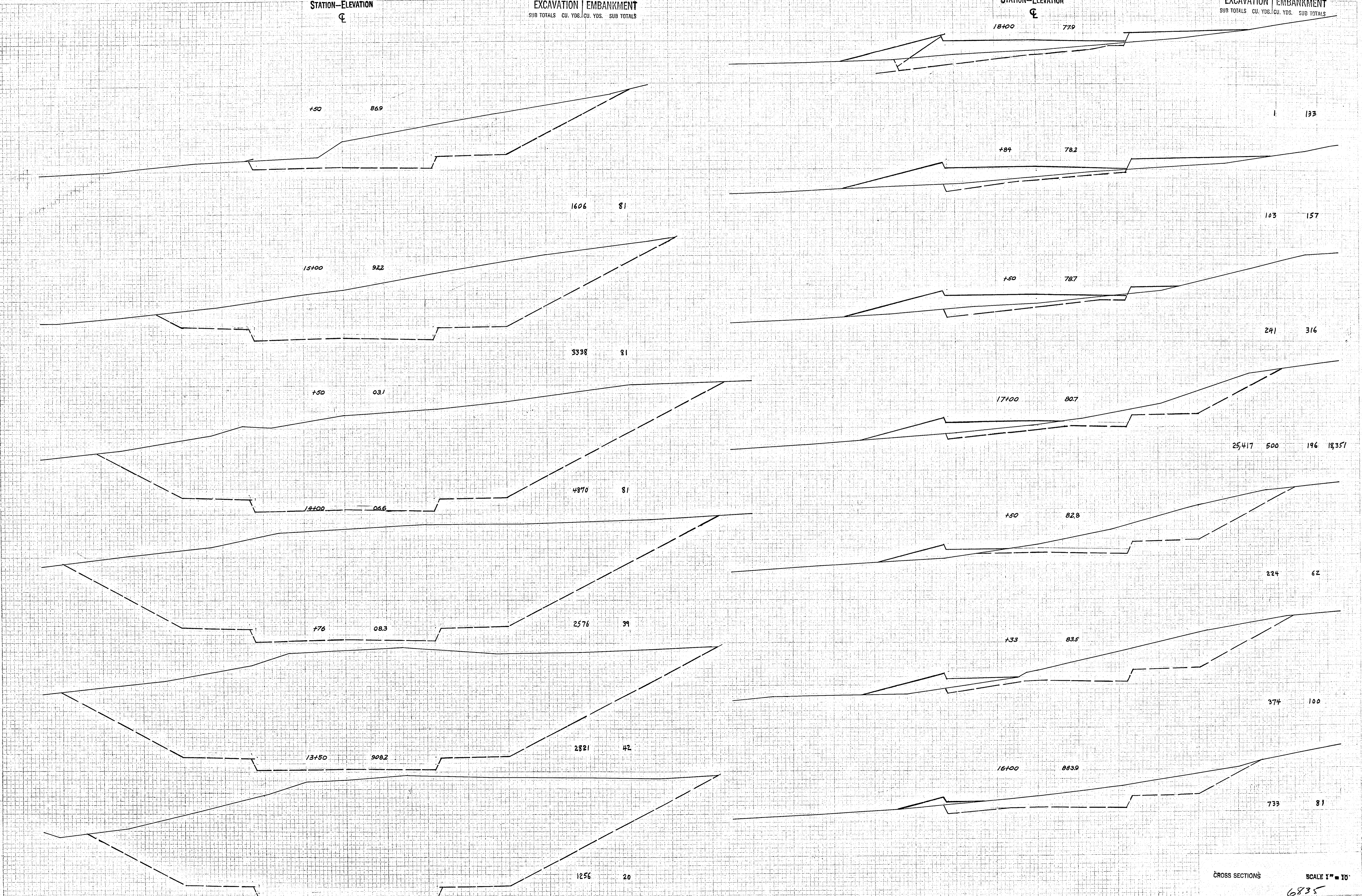
EXCAVATION | EMBANKMENT
SUB TOTALS CU. YDS. CU. YDS. SUB TOTALS

STATION-ELEVATION
☉

EXCAVATION | EMBANKMENT
SUB TOTALS CU. YDS. CU. YDS. SUB TOTALS

DATE: 1/15/50
BY: J.S. [unclear]
CHECKED BY: [unclear]
SCALE: 1" = 10'

NAME: [unclear]
NO. [unclear]
DATE: [unclear]
SCALE: 1" = 10'



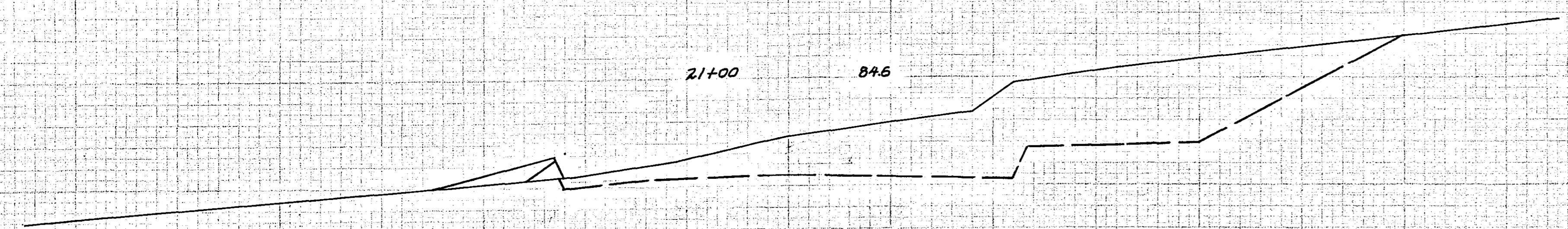
CROSS SECTIONS SCALE 1" = 10'

STATION-ELEVATION
E

EXCAVATION | EMBANKMENT
SUB TOTALS CU. YDS. | CU. YDS. SUB TOTALS

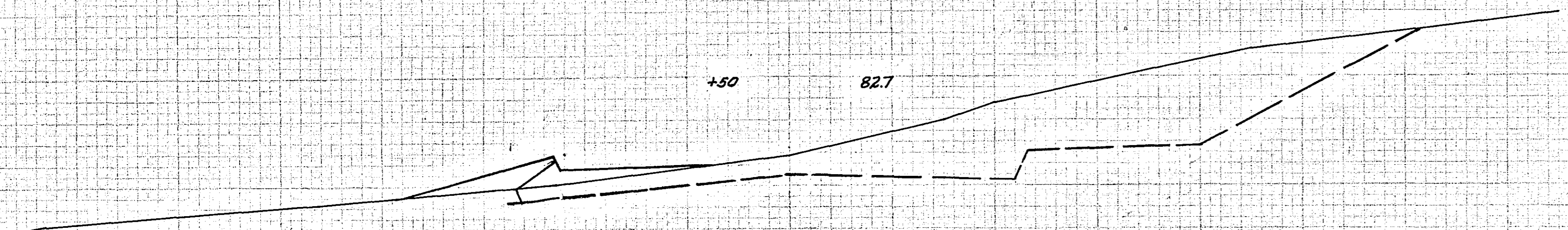
STATION-ELEVATION
E

EXCAVATION | EMBANKMENT
SUB TOTALS CU. YDS. | CU. YDS. SUB TOTALS



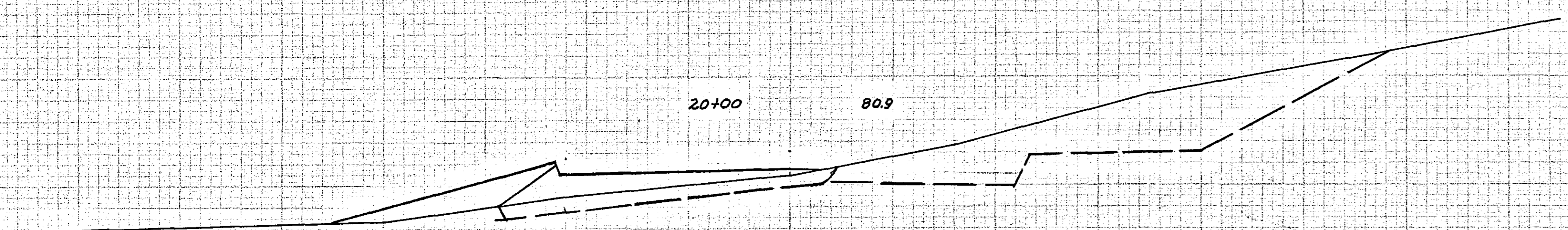
21+00 89.6

669 127



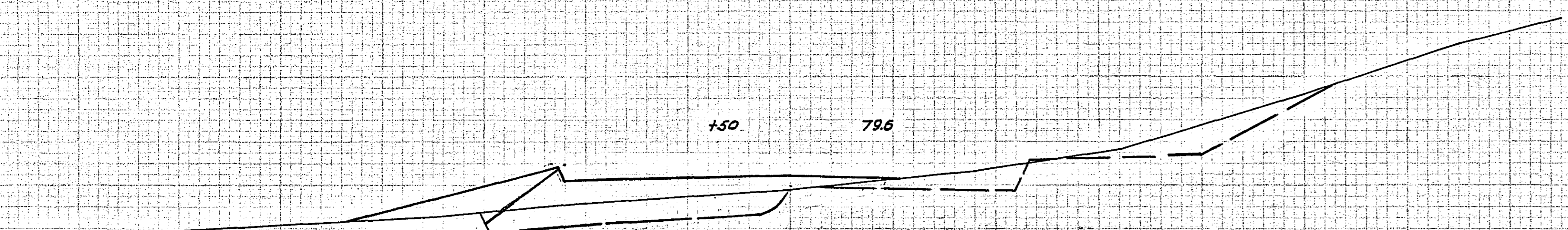
21+50 82.7

509 186



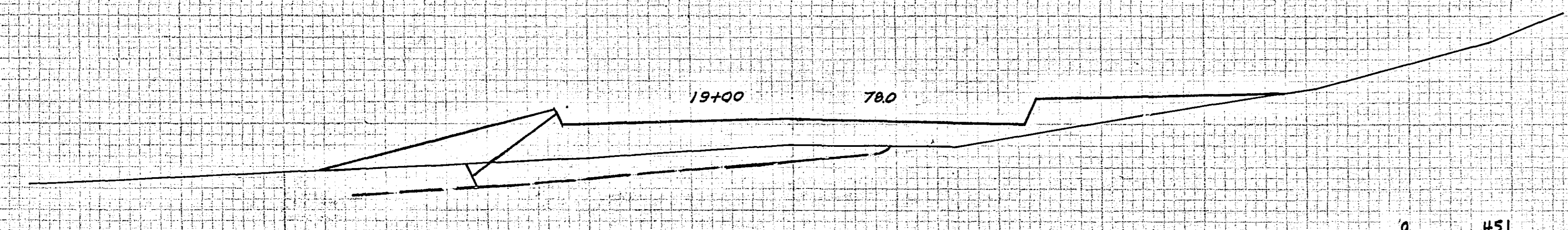
20+00 80.9

247 226



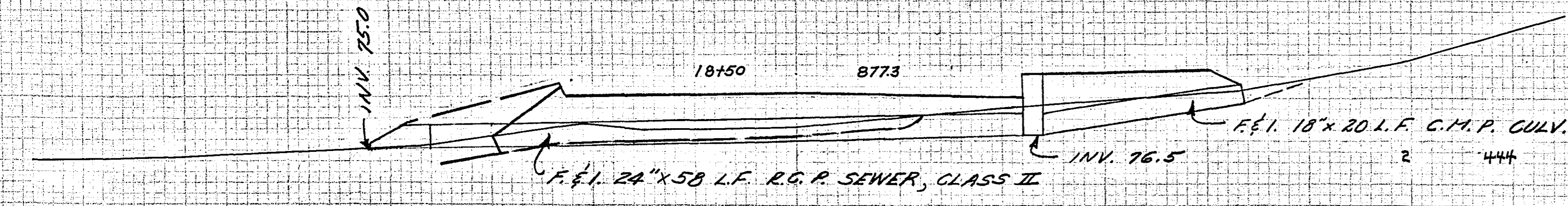
20+50 79.6

57 349



19+00 78.0

0 451



18+50 87.3

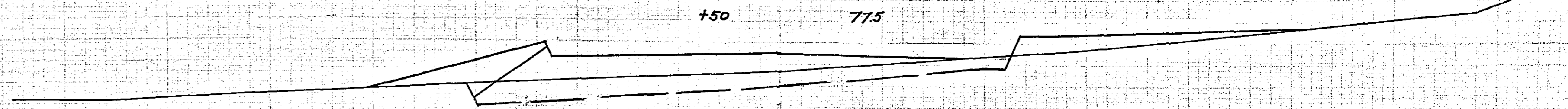
INV. 75.0

F.F.I. 18" x 20" L.F. C.M.P. CULV.

F.F.I. 24" x 50" L.F. R.C.P. SEWER, CLASS II

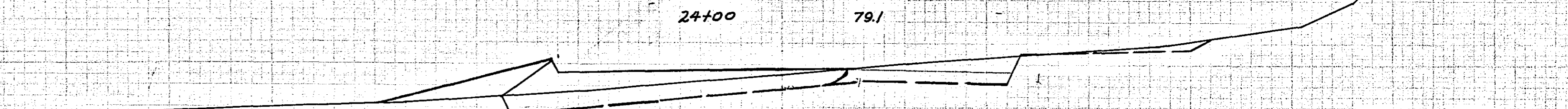
INV. 76.5

2 444



24+00 77.5

42 271



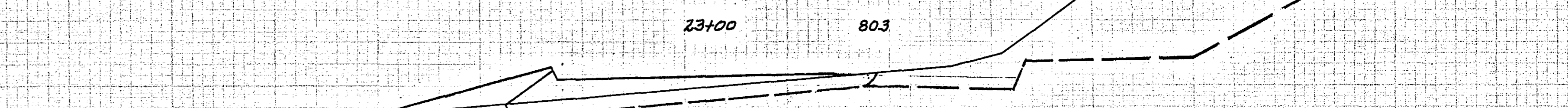
24+50 79.1

356 180



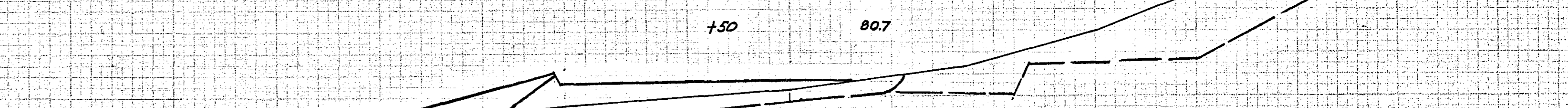
23+00 80.3

718 169



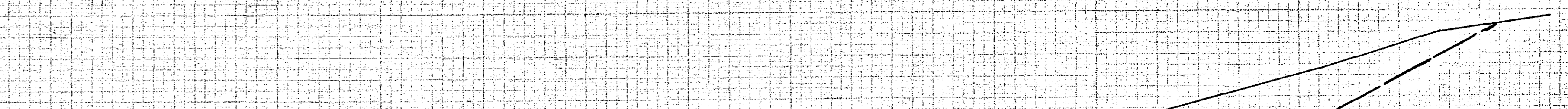
23+50 80.3

3,896 $\frac{311}{312}$ 623 201 $\frac{101}{100}$ 2,876



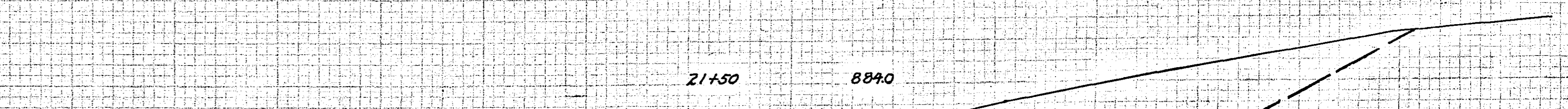
22+00 80.7

503 193



22+50 82.1

593 119



21+50 88.0

659 75

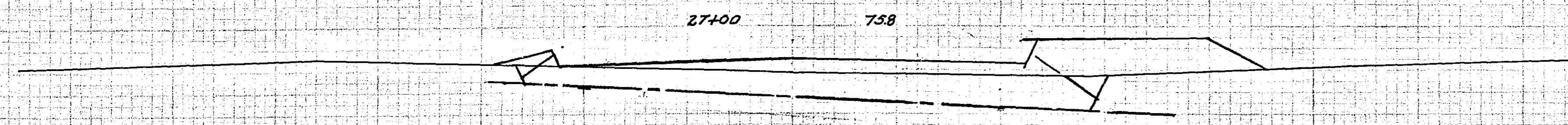
CROSS SECTIONS SCALE 1" = 10'
6835

STATION-ELEVATION
⊕

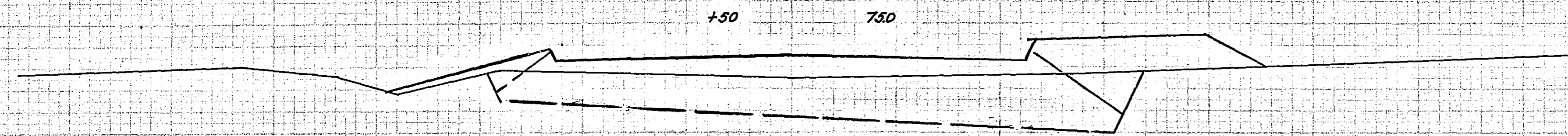
EXCAVATION | EMBANKMENT
SHR TOTALS CU. YDS. CU. YDS. SHR TOTALS

STATION-ELEVATION
⊕

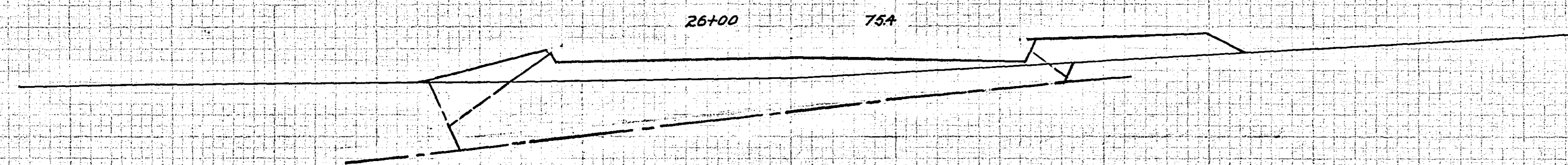
EXCAVATION | EMBANKMENT
SHR TOTALS CU. YDS. CU. YDS. SHR TOTALS



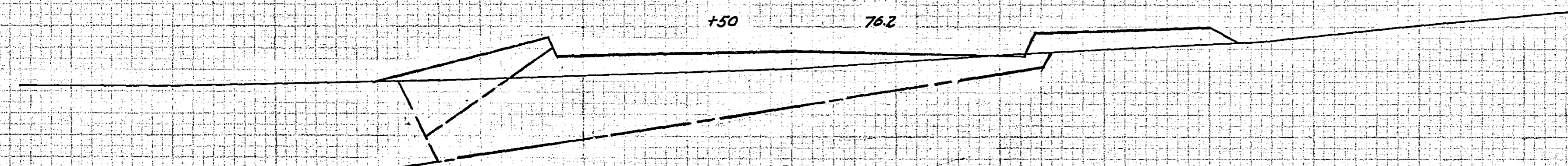
0 565



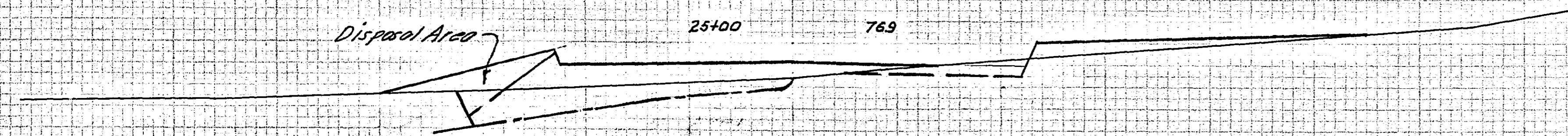
0 551



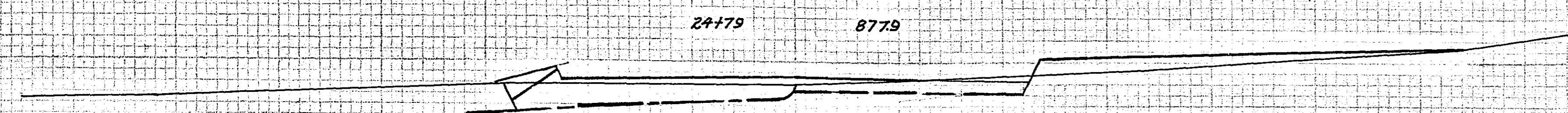
0 569



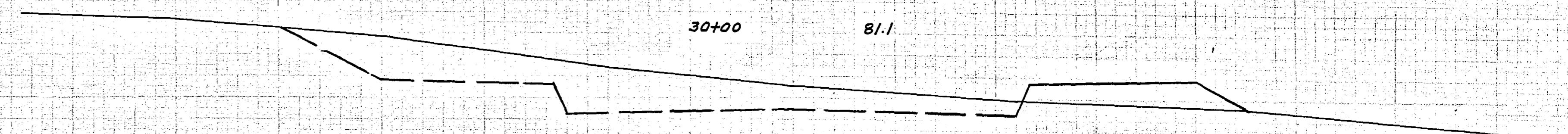
0 431



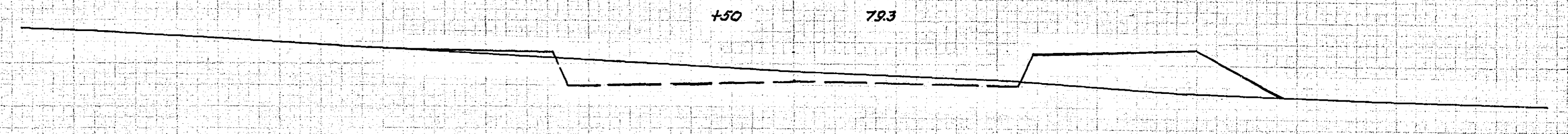
0 105



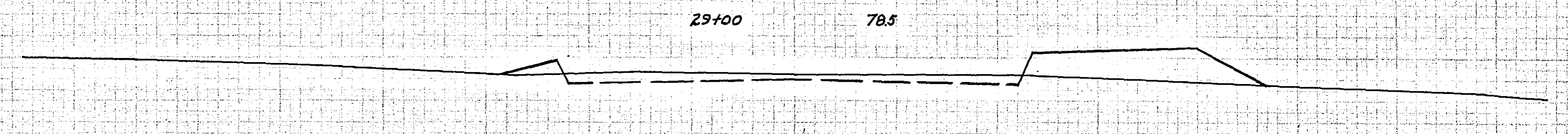
0 170



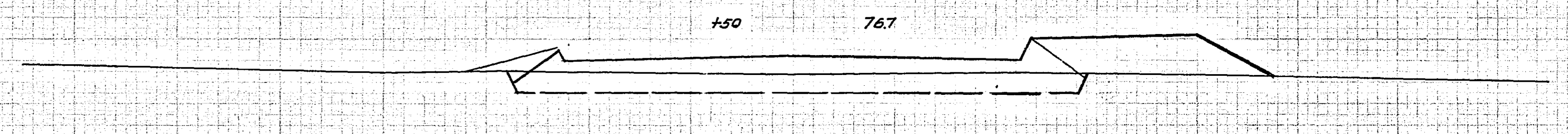
250 194



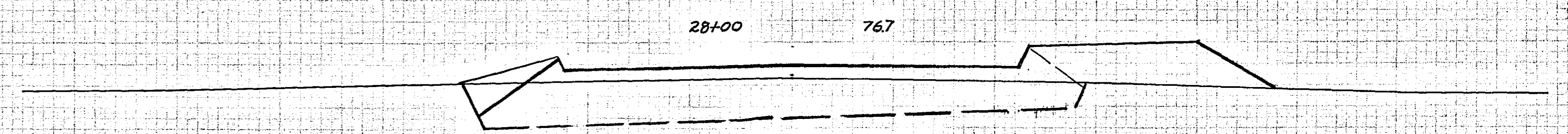
88 170



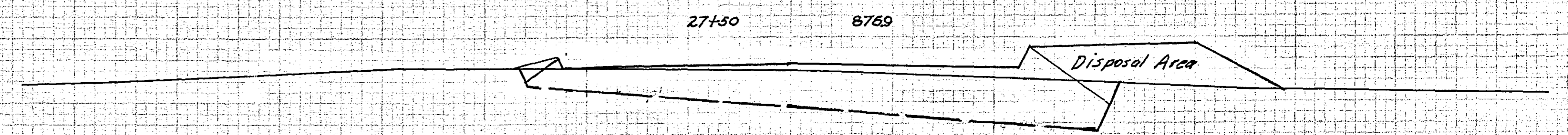
134 290



102 563



0 622



0 567

NO. 1
DATE
BY
CHECKED
APPROVED

NO. 2
DATE
BY
CHECKED
APPROVED

CROSS SECTIONS

SCALE 1" = 10'

6835

STATION-ELEVATION
⊕

EXCAVATION | EMBANKMENT
SUB TOTALS CU. YDS. | CU. YDS. SUB TOTALS

STATION-ELEVATION
⊕

EXCAVATION | EMBANKMENT
SUB TOTALS CU. YDS. | CU. YDS. SUB TOTALS

32+00 86.9

808 94

+50 88.8

603 41

+25 90.3

802 41

31+00 90.0

+75 88.8

833 44

30+50 88.2

646 56

702 149

35+00 91.3

711 93

+50 89.2

312 173

34+00 89.4

57 388

+50 81.7

3 427

33+00 81.6

262 231

32+50 88.1

583 125

CROSS SECTIONS SCALE 1" = 10'
6835

| | |
|----------|--|
| DATE | |
| BY | |
| CHECKED | |
| APPROVED | |

| | |
|----------|--|
| NAME | |
| LEVEL | |
| POSITION | |
| DATE | |
| BY | |
| CHECKED | |
| APPROVED | |

STATION-ELEVATION

⊕

EXCAVATION | EMBANKMENT
SUB TOTALS CU. YDS. | CU. YDS. SUB TOTALS

STATION-ELEVATION

⊕

EXCAVATION | EMBANKMENT
SUB TOTALS CU. YDS. | CU. YDS. SUB TOTALS

36+26 86.3

53,929 39,127
10,576 0 90 7,727

36+06 82.6

3 37

36+00 84.5

138 36

35+90 93.7

393 47

35+75 94.7

754 62

35+45 895.0

965 75

36+44 885.0

CROSS SECTIONS SCALE 1" = 10'

DATE: 11/15/50
BY: J. J. ...
CHECKED: ...
APPROVED: ...

DATE: 11/15/50
BY: J. J. ...
CHECKED: ...
APPROVED: ...

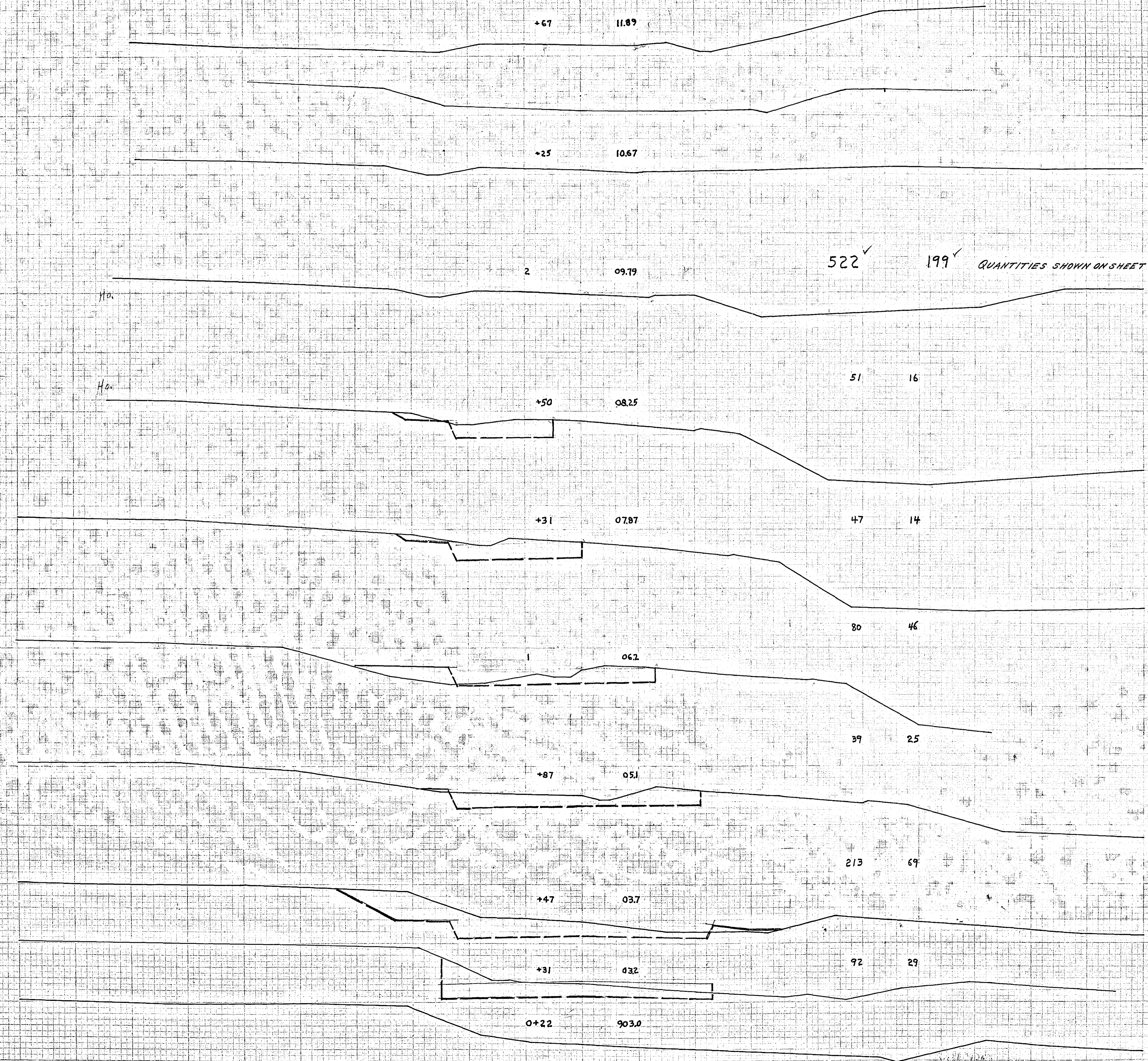
K.L. STATION-ELEVATION

ELEVATION EMBANKMENT
SUB TOTALS - CUTS OF VEE SUB TOTALS

100

110

50



QUANTITIES SHOWN ON SHEET 5

Vertical text on the left margin, possibly a title or reference.

Vertical text on the left margin, possibly a title or reference.

CROSS SECTIONS SCALE 1" = 10'
6835
NEW BRIGHTON ROAD