

MINNESOTA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN FOR GRADING, BASE & BITUMINOUS

LOCATED ON CTY. RD. # 83 FROM U.S. # 10 TO A POINT 40' BEYOND C. OF 161ST AVE. N.

CTY. PROJ. NO. 87-04-83
 MINN. PROJ. NO. _____
 GROSS LENGTH 10419 FEET 1.97 MILES
 BRIDGES-LENGTH FEET MILES
 EXCEPTIONS-LENGTH FEET MILES
 NET LENGTH 10419 FEET 1.97 MILES
 MILE POINT N/A TO MILE POINT N/A

STATE PROJ. NO. _____
 MINN. PROJ. NO. _____
 GROSS LENGTH FEET MILES
 BRIDGES-LENGTH FEET MILES
 EXCEPTIONS-LENGTH FEET MILES
 NET LENGTH FEET MILES
 MILE POINT TO MILE POINT

FED. PROJ. NO. _____

GOVERNING SPECIFICATIONS

THE 1983 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATION FOR CONSTRUCTION" AND SUPPLEMENTAL SPECIFICATIONS, DATED MAY 19, 1987, SHALL GOVERN

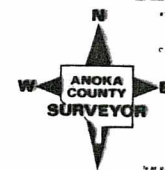
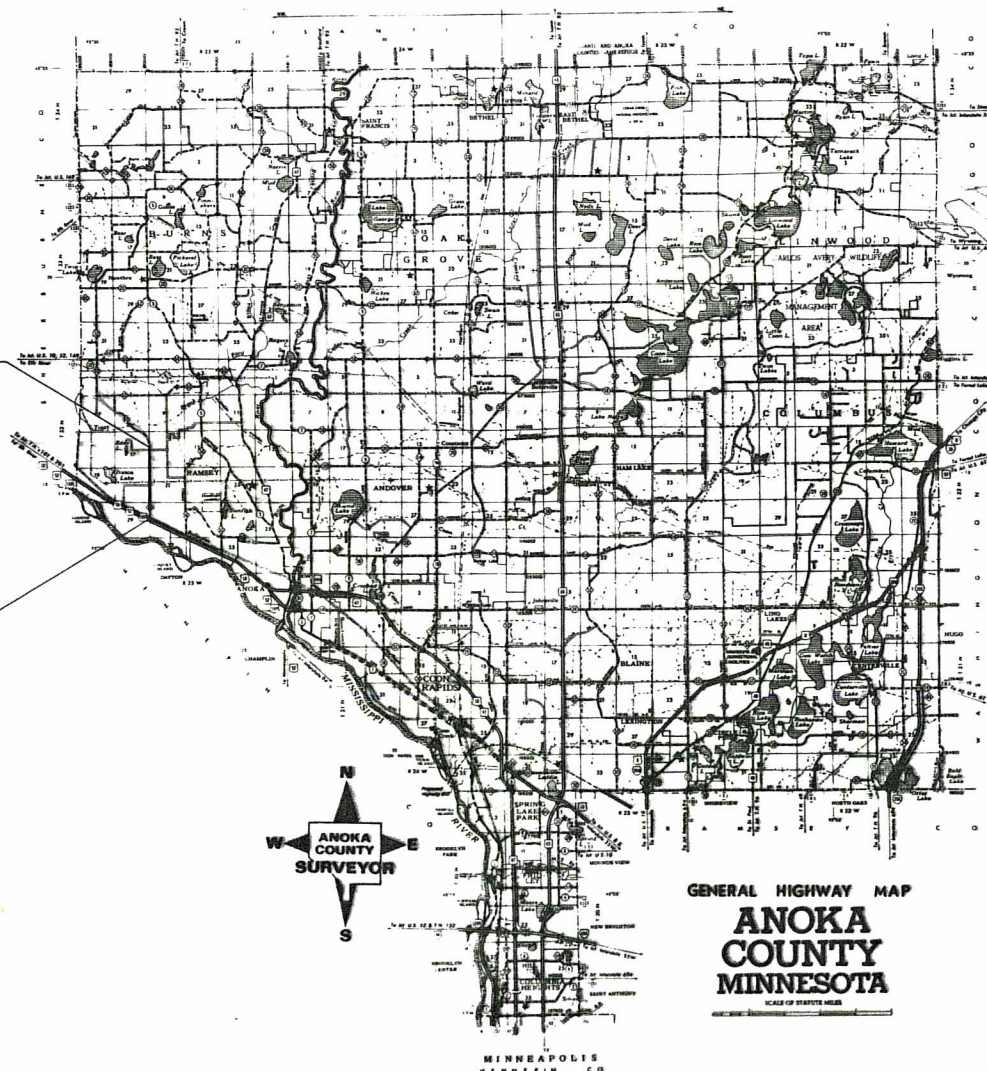
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SHEET NO. 1	TITLE SHEET & INDEX MAP
" 2	ESTIMATED QUANTITIES & MISC. CHARTS
" 3	DRAINAGE & MISC. CHARTS
" 4	TYPICAL SECTIONS & CONST. DETAILS
" 5	EROSION CONTROL
" 6-14	PLAN & PROFILE
" 15	DITCH CONSTRUCTION STA. 65+77 RT.
" 16-35	CROSS SECTIONS

*Cleave & grub
 42' Left
 52' Right*

END PROJECT C.P. 87-04-83
 STATION 106+82

BEGIN PROJECT C.P. 87-04-83
 STATION 2+63



GENERAL HIGHWAY MAP
ANOKA COUNTY
 MINNESOTA

SCALE

INDEX MAP	2.00 Mi.
PLAN & PROFILE	HORIZ. 100'
	VERT. 10'
CROSS SECTIONS	10'

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.
 DATE Apr. 13, 1988 REG. NO. 6549 ENGR. Lawrence K. Lund
 COUNTY ENGINEER

DESIGN SQUAD _____
 Right of Way Approval _____ 19 _____
 DIRECTOR, RIGHT OF WAY OPERATIONS
 Recommended for Approval _____ 19 _____
 Recommended for Approval _____ 19 _____
 Recommended for Approval _____ 19 _____
 DISTRICT ENGINEER
 Recommended for Approval _____ 19 _____
 TRANSPORTATION PLANS ENGINEER
 Recommended for Approval _____ 19 _____
 DESIGN SERVICES DIRECTOR
 Approved _____ 19 _____
 ASSISTANT DIVISION DIRECTOR
 TECHNICAL SERVICES DIVISION

DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 APPROVED _____
 DIVISION ADMINISTRATOR DATE

FOR PLANS AND UTILITIES SYMBOLS SEE TECHNICAL MANUAL

STATE PROJ. NO.	AREA	JOB



PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

ADT (Current Year) _____
 ADT (Future Year) _____
 DNV (Design Hr. Vol.) _____
 D (Directional Distr.) _____
 T (Heavy Commercial) _____
 Soil Factor _____

DESIGN DATA
 Design 9 Ton
 Design Speed 55 MPH
 Based on STOPPING Sight Distance
 Height of eye 3.5' Height of object 0.50'
 Design Speed not achieved at: _____
 STA. _____ TO STA. _____ MPH
 STA. _____ TO STA. _____ MPH

STATE AID PROJ. NO. _____ COUNTY PROJ. NO. 87-04-83
 STATE PROJ. NO. _____ SHEET NO. 1 OF 35 SHEETS

I HEREBY CERTIFY THAT THE FINAL FIELD REVISIONS, IF ANY, OF THIS PLAN WERE MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 DATE _____ REG. NO. _____

DRAINAGE CHART

STATION	LOC.	INPLACE	REMARKS	SODDING CULV. END SQ. YD.	REMOVE CULV. PIPE LIN. FT.	SALVAGE CULV. PIPE LIN. FT.	INSTALL				CULVERT				FURNISH AND INSTALL CULVERTS																	
							15" CMP								15" CMP		18" CMP		18" RCP		24" RCP		22" RCP-A									
							AP.	AP.	AP.	AP.	AP.	AP.	AP.	AP.	AP.	AP.	AP.	AP.	AP.	AP.	AP.	AP.	AP.	AP.	AP.	AP.						
2+15	C/L			23																	64	2										
3+13	LT.			17																												
5+27	LT.		COMMERCIAL ENT.	17											32	2																
6+88	LT.		COMMERCIAL ENT.	17											38	2																
8+25	LT.	15"x66' CMP	146 AVE.	23		66	2											60	2													
13+01	RT.		FIELD ENT.	17											32	2																
13+25	LT.	15"x66' CMP	147 AVE.	23		66	2											60	2													
22+65	LT.	15"x48' CMP		23		48												46	2													
23+86	C/L	24"x32' RCP		29	32																					62	2					
25+93	RT.		FIELD ENT.	17											32	2																
26+50	RT.	12"x30' CMP	FIELD ENT.	17	30										30	2																
29+04	RT.	15"x44' CMP	149 LANE	17		44	44																									
37+57	RT.		150 LANE	17																												
38+00	LT.		FIELD ENT.	17											44	2																
41+38	LT.		NO CULVERT REQ'D												32	2																
47+72	LT.		152 LANE NO CULVERT REQ'D																													
47+74	RT.		152 LANE NO CULVERT REQ'D																													
50+44	C/L	18"x50' CMP		21	50																											
52+34	LT.	12"x24" CMP	INSTALL 37' LT. STA 52+12 TO STA 53+76	17	24																											
53+32	LT.	15"x102' CMP	153 AVE. ①			102									164	2																
55+58	RT.			17											32	2																
61+78	LT.			17											32	2																
62+25	RT.			17											36	2																
64+74	LT.		154 LANE	23																												
67+96	RT.			17											36	2			50	2												
68+72	C/L			21																												
73+05	RT.		156 AVE.	23																												
73+88	LT.		FIELD ENT.	17											32	2										56	2					
75+61	LT.			17											32	2																
77+40	LT.			17											32	2																
79+60	RT.		157 AVE.	23																												
80+31	LT.			17											36	2																
88+27	RT.		158 AVE.	23																												
90+73	LT.	18"x40' CMP	158 LN. CULV. TO REMAIN IN PL.																													
92+96	LT.		FIELD ENT.	17											32	2																
97+38	RT.	15"x70' CMP	159 A. NO CULV. REQ'D			70																										
99+33	LT.		NO CULV. REQ'D																													
106+37	LT.		161 AVE.	23															50	2												
106+37	RT.		161 AVE.	23															50	2												
TOTAL				62.4	136	396	4	44							742	38	366	14	78	2	62	2	120	4								

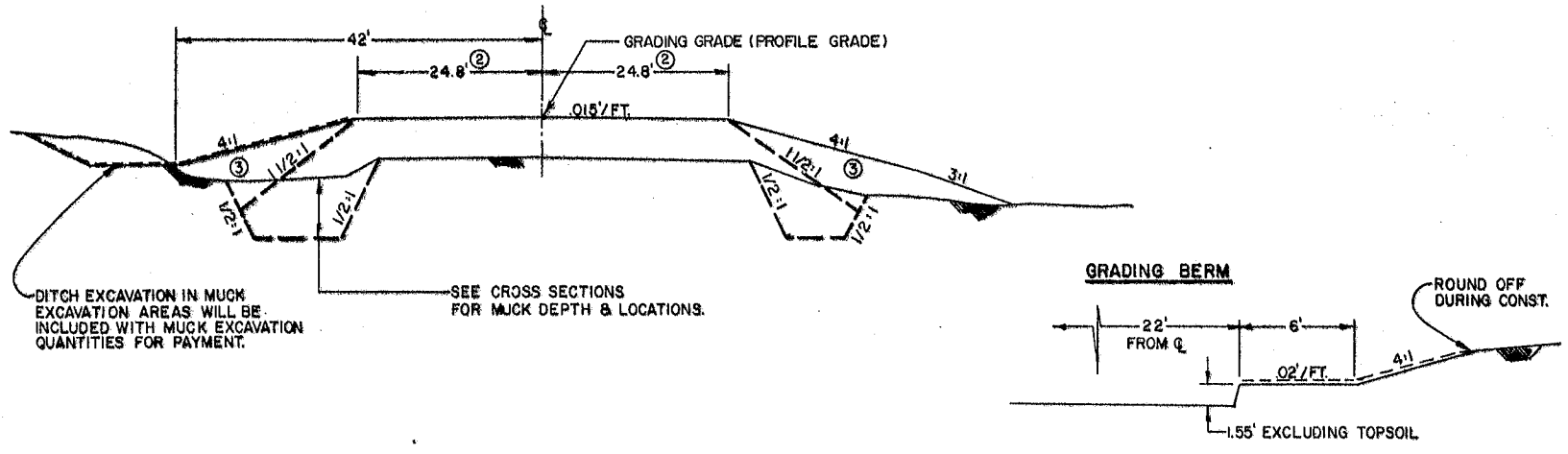
SALVAGE & INSTALL FENCE				
STATION	LOCATION	SALVAGE	INSTALL	REMARKS
6+27 TO 22+50	40' RT.	1623'	1623'	
35+25 TO 36+60	33' RT.	189'	135'	
38+34 TO 39+85	37' RT.	197'	151'	
51+89 TO 52+95	35' LT.	106'	106'	PICKET FENCE LINE FENCE
53+21	33' RT.	27'	-	
56+52 TO 61+26	34' RT.	474'	474'	INCLUDES GATE
64+83 TO 66+46	36' RT.	163'	163'	
66+42 TO 74+35	36' LT.	817'	793'	
73+81	35' LT.	25'	-	
78+30 TO 84+29	34' LT.	623'	599'	LINE FENCE INCLUDES GATE SPLIT RAIL WOOD
94+42 TO 94+62	20' RT.	20'	20'	
TOTAL		4264'	4064'	

SAWING BIT. PAVEMENT			
STATION	LOCATION	LIN. FT.	REMARKS
2+64	C/L X-ING	24	BEG./CONST.
5+27	LT.	24	ENT.
6+88	LT.	24	RNT.
8+25	LT.	40	146 AVE.
13+25	LT.	40	147 AVE.
29+04	RT.	24	149 AVE.
37+57	RT.	24	150 AVE.
41+83	LT.	14	ENT.
47+72	RT.	24	152 AVE
47+74	RT.	20	152 LANE
53+32	LT.	32	153 LANE
64+74	LT.	25	154 LANE
73+05	RT.	25	156 AVE
90+73	LT.	24	158 LANE
97+38	RT.	30	159 LANE
106+37	LT.	30	161 AVE
106+37	RT.	20	161 AVE
TOTAL		454 LIN. FT.	

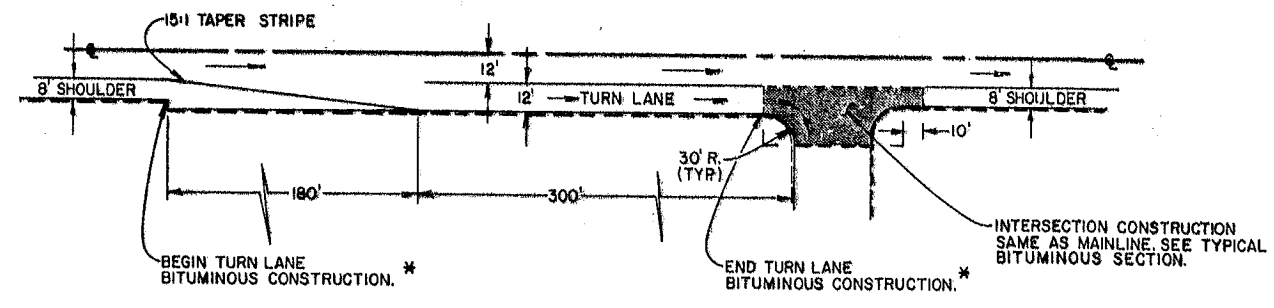
REVISIONS			
DATE	BY	DATE	BY

QUANTITIES & CHARTS

GRADING SECTION - MUCK EXCAVATION AREAS

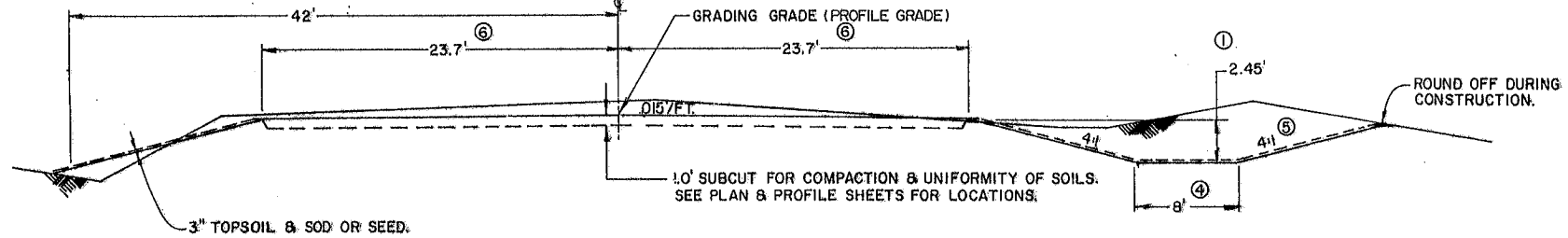


TYPICAL RIGHT TURN LANE

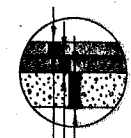


* SEE DETAIL 'A' FOR BASE AND BITUMINOUS CONSTRUCTION.

GRADING SECTION



DETAIL 'A' RIGHT TURN CONST.

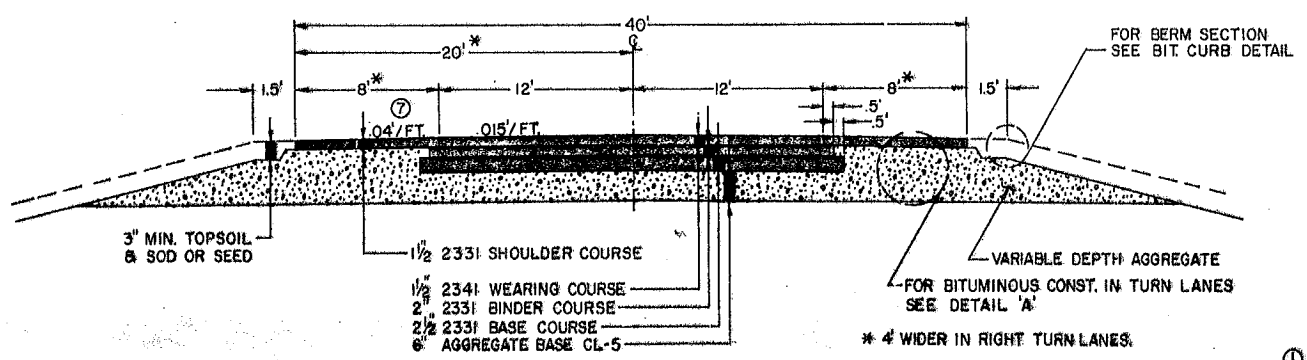


1 1/2" 2341 WEARING COURSE
2" 2331 BINDER COURSE
VARIABLE DEPTH CL-#5

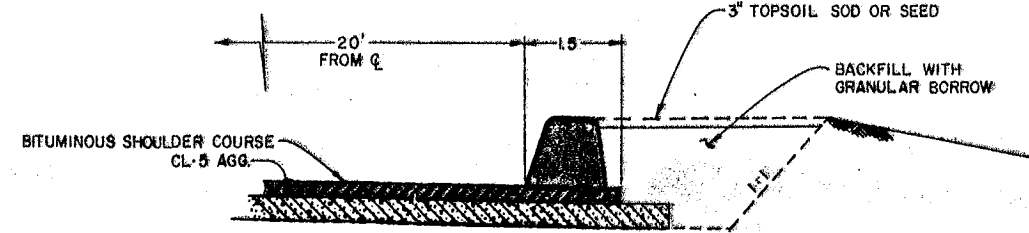
RIGHT TURN LOCATIONS

- STA. 2+63 - STA. 18+25 LT.
- STA. 24+12 - STA. 29+90 RT.
- STA. 32+65 - STA. 37+44 RT.
- STA. 42+84 - STA. 47+58 RT.
- STA. 47+85 - STA. 58+28 LT.
- STA. 64+88 - STA. 69+67 LT.
- STA. 68+12 - STA. 79+44 RT.
- STA. 83+31 - STA. 88+10 RT.
- STA. 80+87 - STA. 95+63 LT.
- STA. 92+42 - STA. 97+23 RT.
- STA. 101+42 - STA. 106+22 RT.

TYPICAL BASE & SURFACING SECTION



BITUMINOUS CURB DETAIL
STD. P.L.T. DETAIL 7065 C



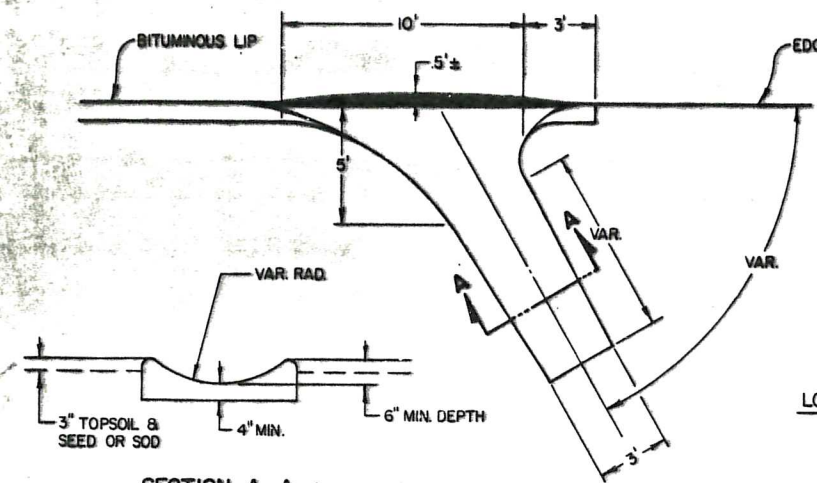
CURB LOCATIONS
STA. 39+00 TO STA. 47+58 LT.
STA. 52+38 TO STA. 53+10 LT.

- ① FOR SPECIAL DITCHES SEE PLAN & CROSS SECTIONS.
- ② 4.8' WIDER IN TURN LANE AREAS.
- ③ FILL WITH SWAMP EXCAVATION MATERIAL.
- ④ FOR MODIFIED DITCH WIDTHS SEE CROSS SECTIONS.
- ⑤ SEE CROSS SECTIONS FOR MODIFIED DITCH SLOPES.
- ⑥ 28.3' FOR RIGHT TURN LANES.
- ⑦ .02' / FT. IN RIGHT TURN LANES.

REVISIONS			
DATE	BY	DATE	BY

TYPICAL SECTIONS

TYPICAL BITUMINOUS FLUME



DENOTES AREA OF INCREASED SLOPE TO DIVERT WATER FLOW INTO FLUME. THIS MUST BE ACCOMPLISHED DURING SHOULDER PAVING OPERATIONS.

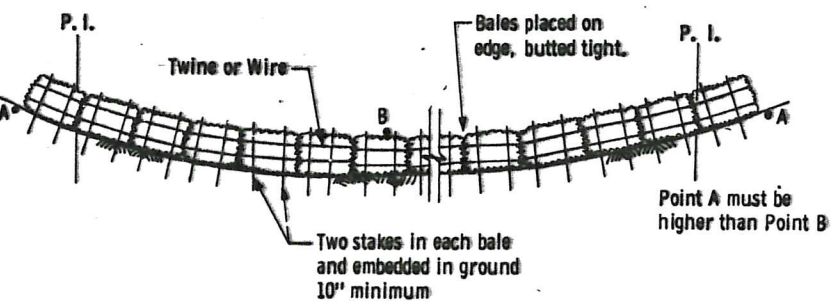
FLUME DESIGN MAY BE MODIFIED TO MATCH EXISTING CONDITIONS UPON APPROVAL OF THE ENGINEER.

LOCATION *

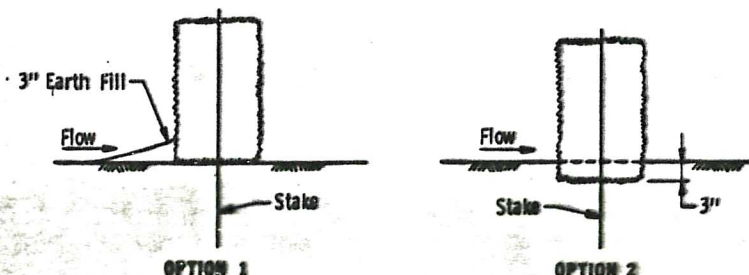
* LOCATIONS ARE APPROX. EXACT LOCATIONS ARE TO BE DETERMINED IN THE FIELD DURING CONST.

BIT. DRAINAGE FLUMES

STATION	LOCATION	SQ. YD.
8+00	LT.	7
8+50	LT.	7
13+00	LT.	7
13+50	LT.	7
39+00	LT.	7
52+20	LT.	7
TOTAL		42

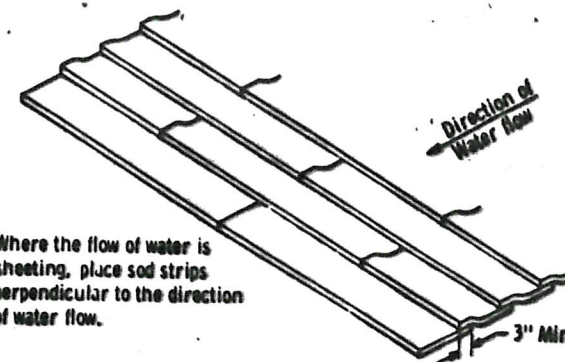


BALE HAY OR STRAW DITCH CHECK



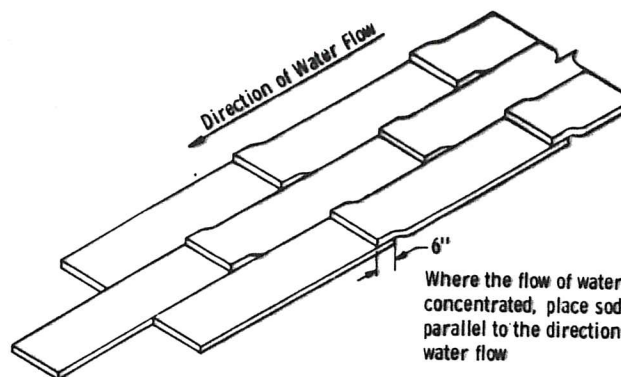
DITCH CHECK SECTIONS

STATION	LOCATION	QUANTITY
22+00	LT. & RT.	10
25+00	RT.	5
27+25	LT.	5
50+25	LT.	5
50+75	LT.	5
54+00	LT.	5
7+50	OFF TAKE DITCH	5



Where the flow of water is sheeting, place sod strips perpendicular to the direction of water flow.

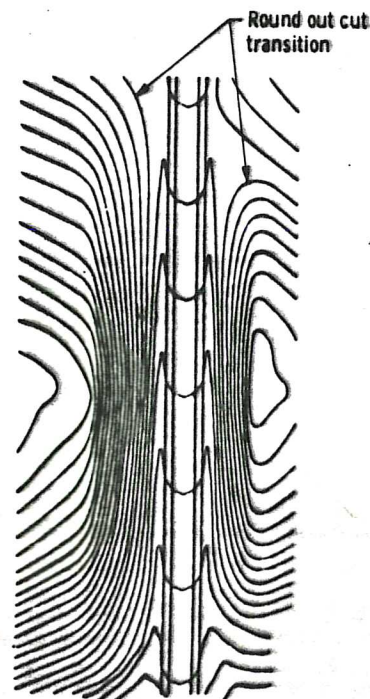
SMINGLING SOD



Where the flow of water is concentrated, place sod strips parallel to the direction of water flow.

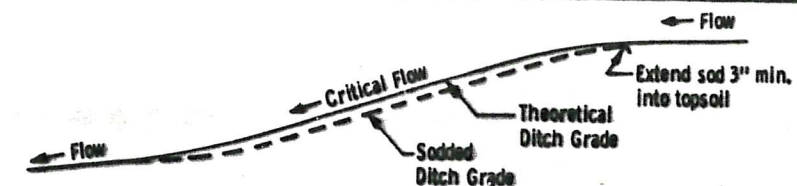
OVERLAPPING SOD

SPECIAL SOD PLACEMENT TECHNIQUES



CONTOURING ROAD CUTS

Fed. Project No. _____

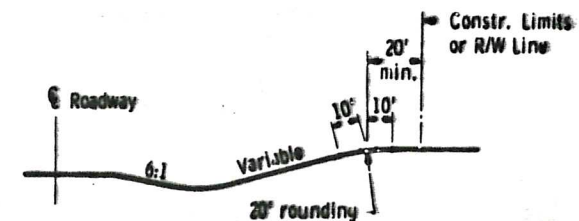


NOTE: APPLIES TO DITCH GRADES 2.0% OR GREATER.

DITCH PROFILE

SODDED DITCH DETAILS

SODDING			
STATION	LOCATION	SQ. YD.	
4+90 TO 7+15	LT.	660	
37+69 TO 39+50	RT.	504	
41+00 TO 42+50	LT.	417	
46+00 TO 47+60	LT.	379	
51+75 TO 53+00	LT.	313	
55+00 TO 56+50	RT.	506	
64+07 TO 66+40	LT.	472	
67+00 TO 68+50	RT.	504	
75+00 TO 76+50	LT.	393	
95+50 TO 97+25	RT.	417	
98+00 TO 100+00	LT.	343	
2+00 TO 5+50	OFF TAKE DITCH	622	
CULVERT ENDS			624
TOTAL			6154



ROUNDING BACK SLOPES

REVISIONS		
DATE	BY	DATE

EROSION CONTROL

B.M. # 1 ELEV 880.97
 R/R. SPK. IN P/P
 STA. 3+40 LT. 80'
 OR P.I. 2+52.19 =
 SURV. P.O.T. 2+50.29

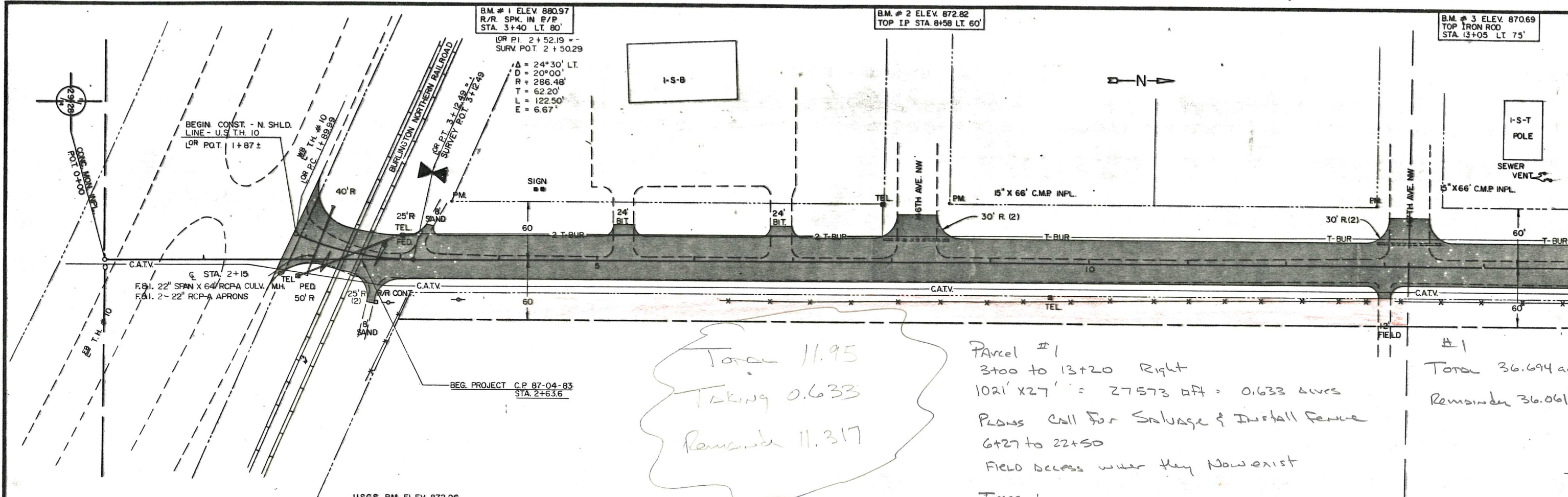
B.M. # 2 ELEV. 872.82
 TOP IP STA. 8+58 LT. 60'

B.M. # 3 ELEV. 870.69
 TOP IRON ROD
 STA. 13+05 LT. 75'

$\Delta = 24^{\circ}30'$ LT.
 $D = 20^{\circ}00'$
 $R = 286.48'$
 $T = 62.20'$
 $L = 122.50'$
 $E = 6.67'$

I-S-B

I-S-T
 POLE
 SEWER VENT



Total 11.95
 Taking 0.633
 Remainder 11.317

Parcel #1
 3+00 to 13+20 Right
 $1021' \times 27' = 27573 \text{ sq ft} = 0.633 \text{ acres}$
 Plans call for Salvage & Install fence
 6+27 to 22+50
 Field access with key now exist

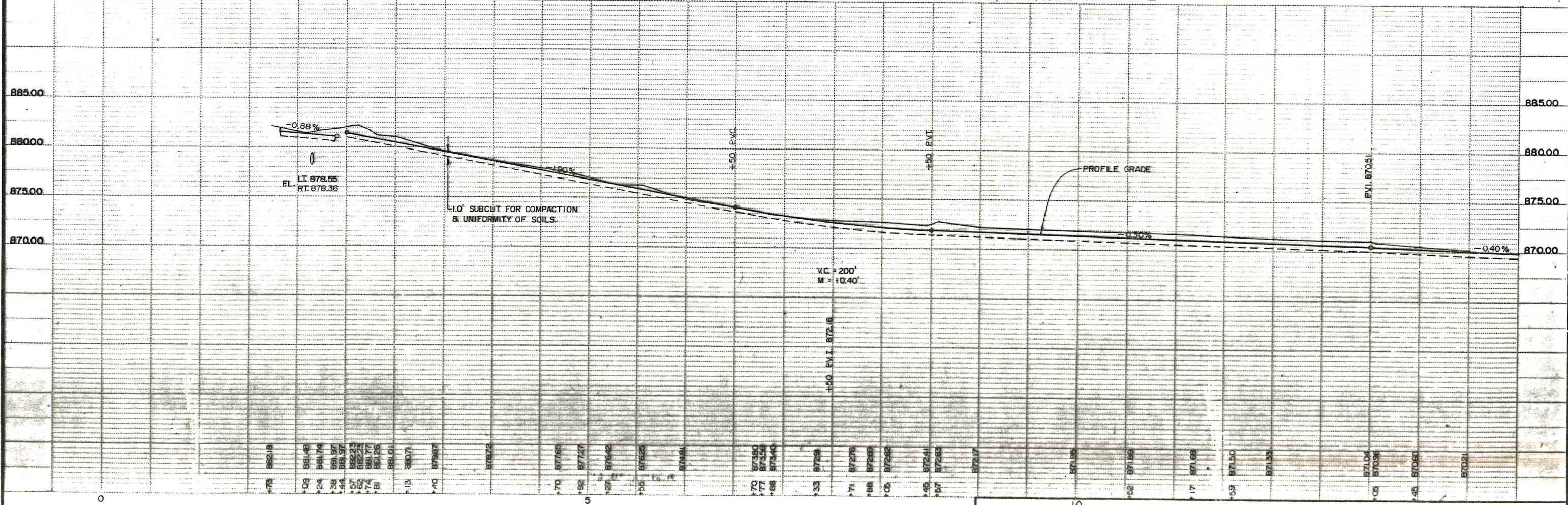
#1
 Total 36.694 acres
 Remainder 36.061

Trees:
 Structures None

U.S.G.S. B.M. ELEV. 872.96

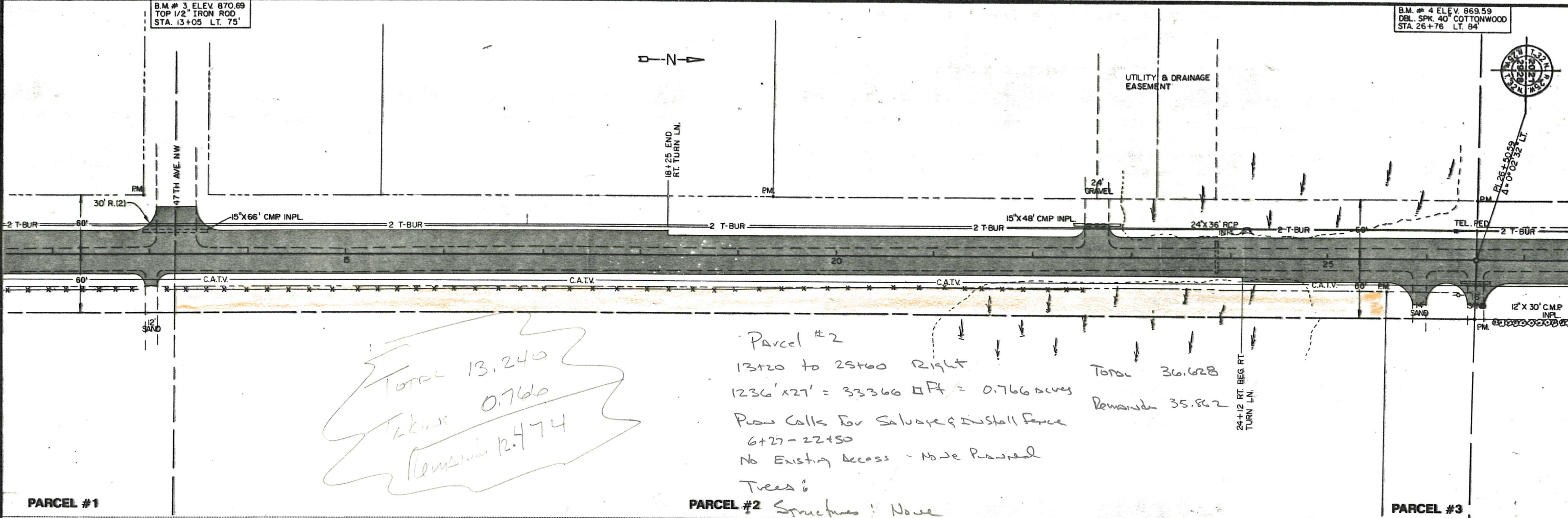
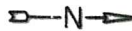
PARCEL #1

PARCEL #2



B.M. # 3 ELEV. 870.69
TOP 1/2" IRON ROD
STA. 13+05 LT. 75'

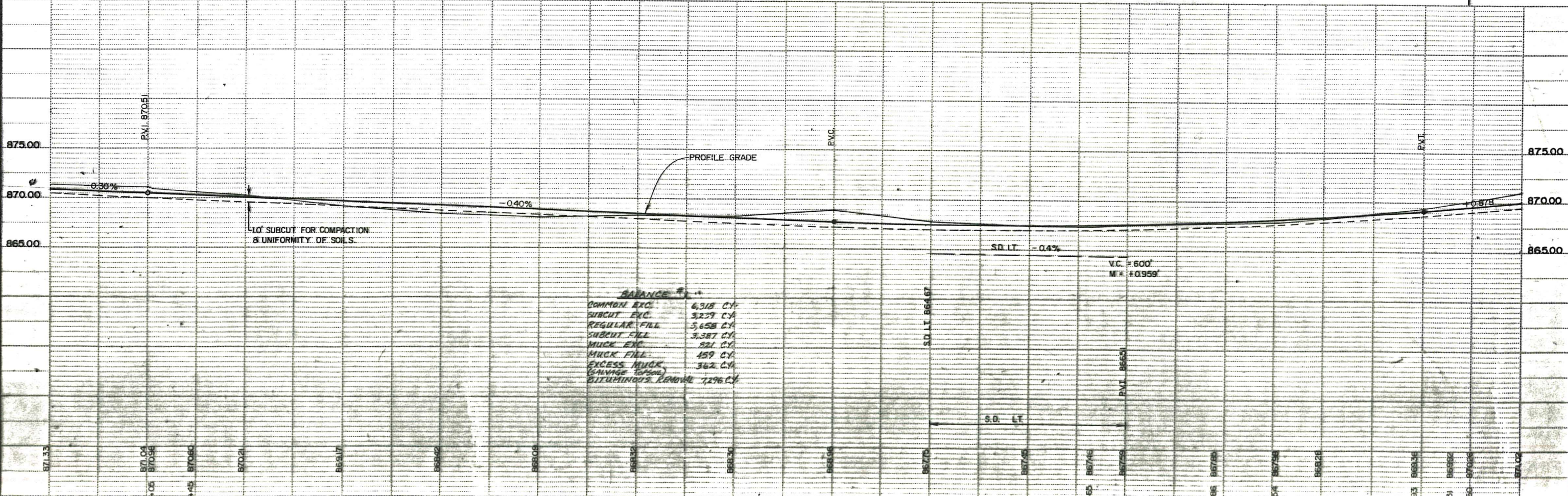
B.M. # 4 ELEV. 869.59
DBL. SPR. 40' COTTONWOOD
STA. 26+76 LT. 84'



*Total 13.240
Trees 0.766
Remainder 12.474*

*Parcel #2
13+20 to 25+00 Right
1236'x27' = 33366 sq ft = 0.766 acres
Plan calls for Salvage & Install Fence
6+27 - 22+50
No Existing Access - None Planned
Trees:*

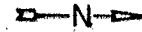
PARCEL #2 Structures: None



B.M. # 4 ELEV. 869.59
 DBL. SPK. DBL. 40' COTTONWOOD
 STA. 26+78 LT. 84'

PARCEL #4

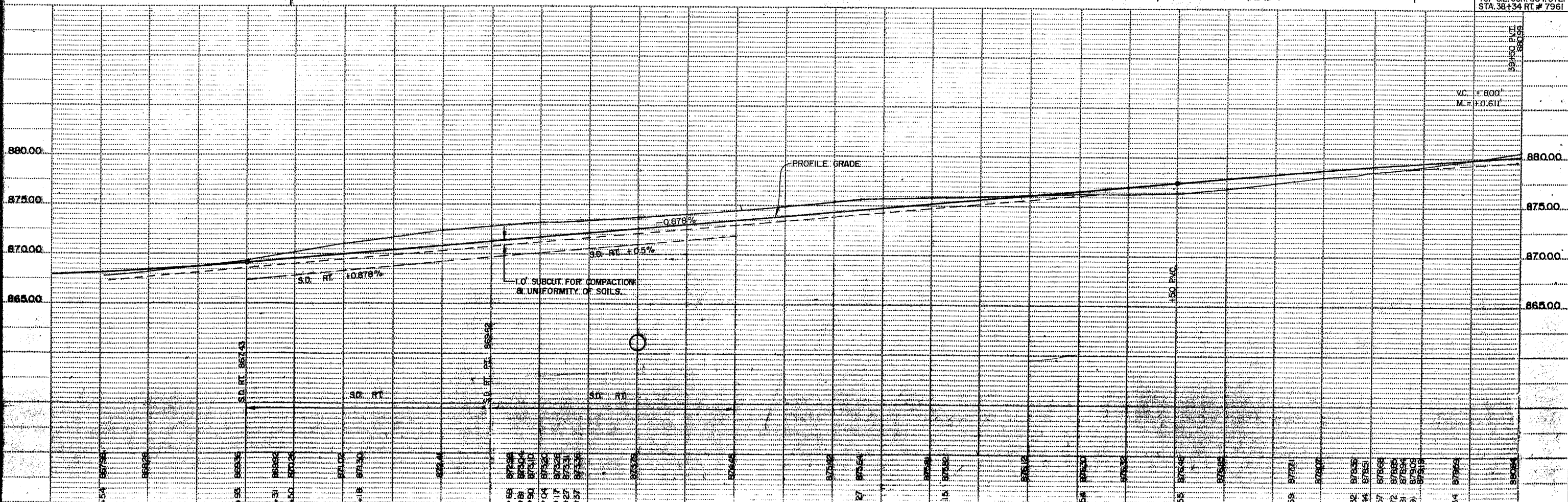
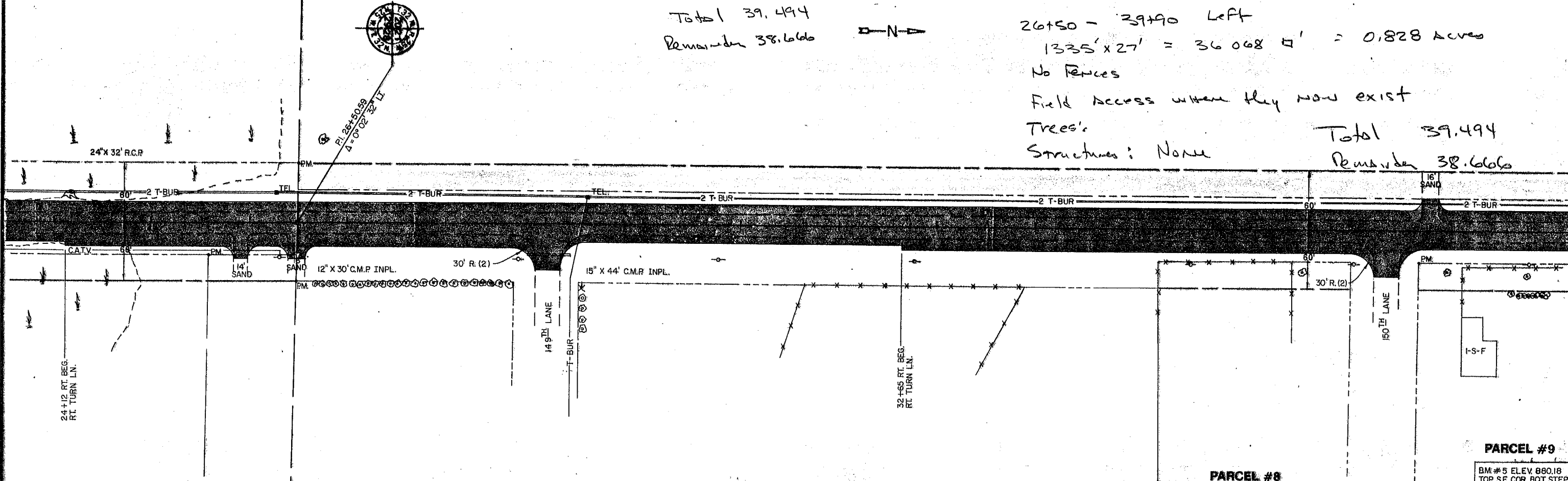
Total 39.494
 Remainder 38.666



Parcel #4

26+50 - 29+90 Left
 $1335' \times 27' = 36,068 \text{ sq ft} = 0.828 \text{ Acres}$
 No Fences
 Field Access where they now exist
 Trees:
 Structures: None

Total 39.494
 Remainder 38.666



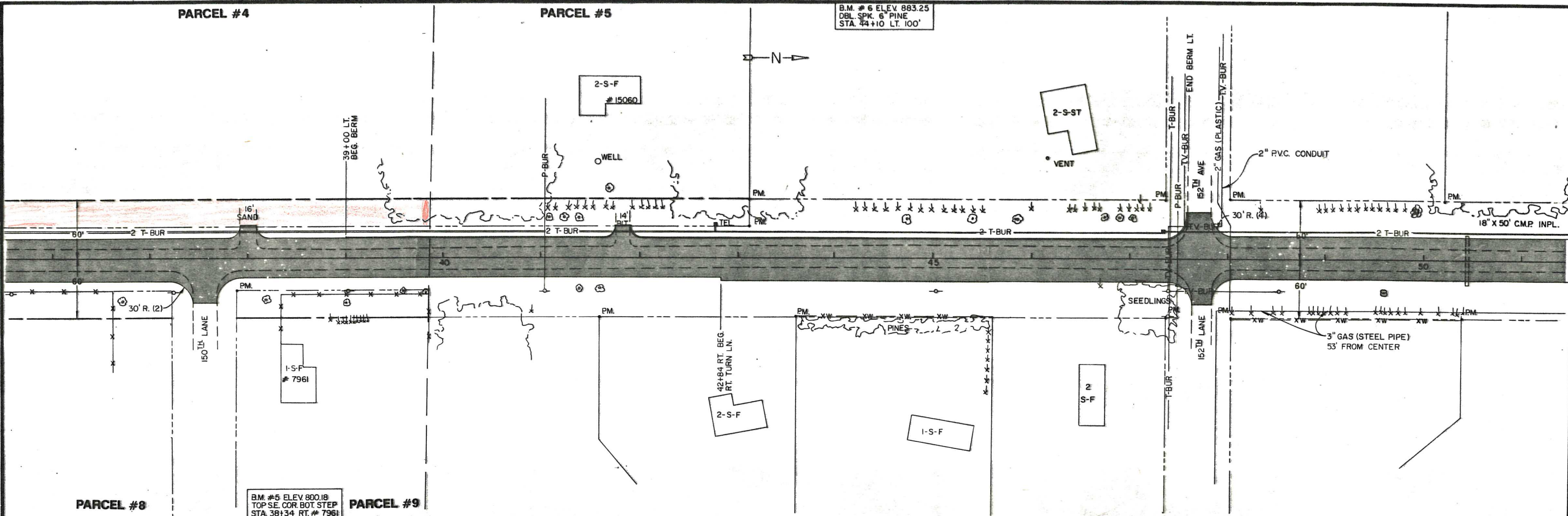
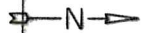
PARCEL #9

B.M. # 5 ELEV. 880.18
 TOP S.E. COR. BOT. STEP
 STA. 38+34 RT. # 7961

PARCEL #4

PARCEL #5

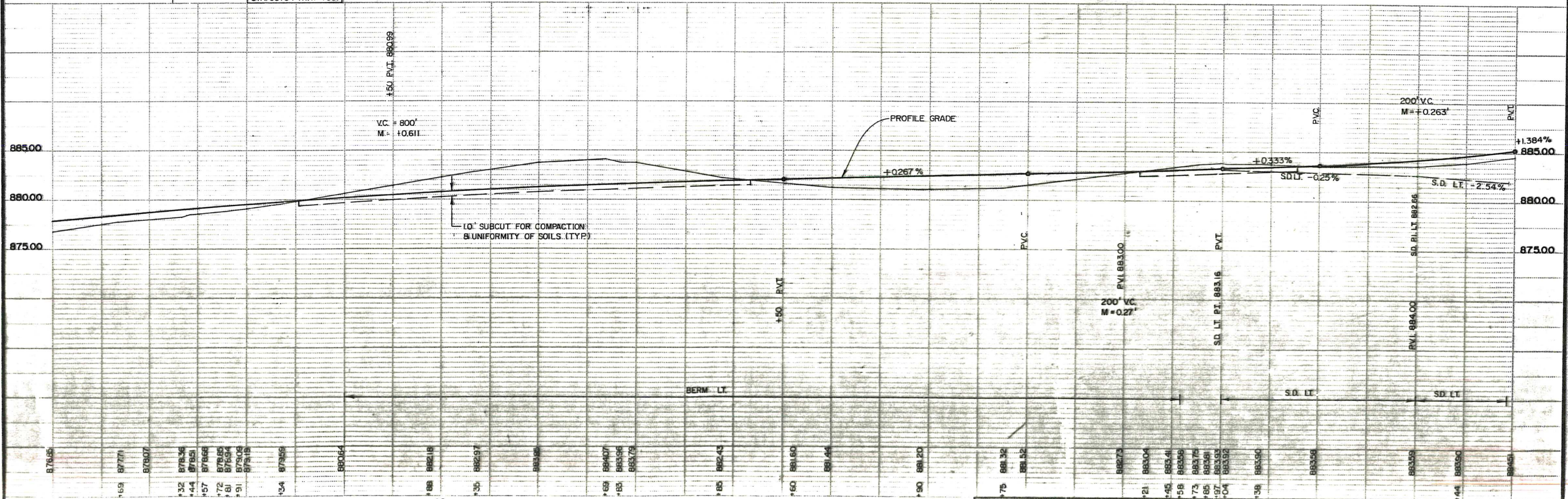
B.M. #6 ELEV 883.25
DBL. SPK. 6" PINE
STA. 44+10 LT. 100'



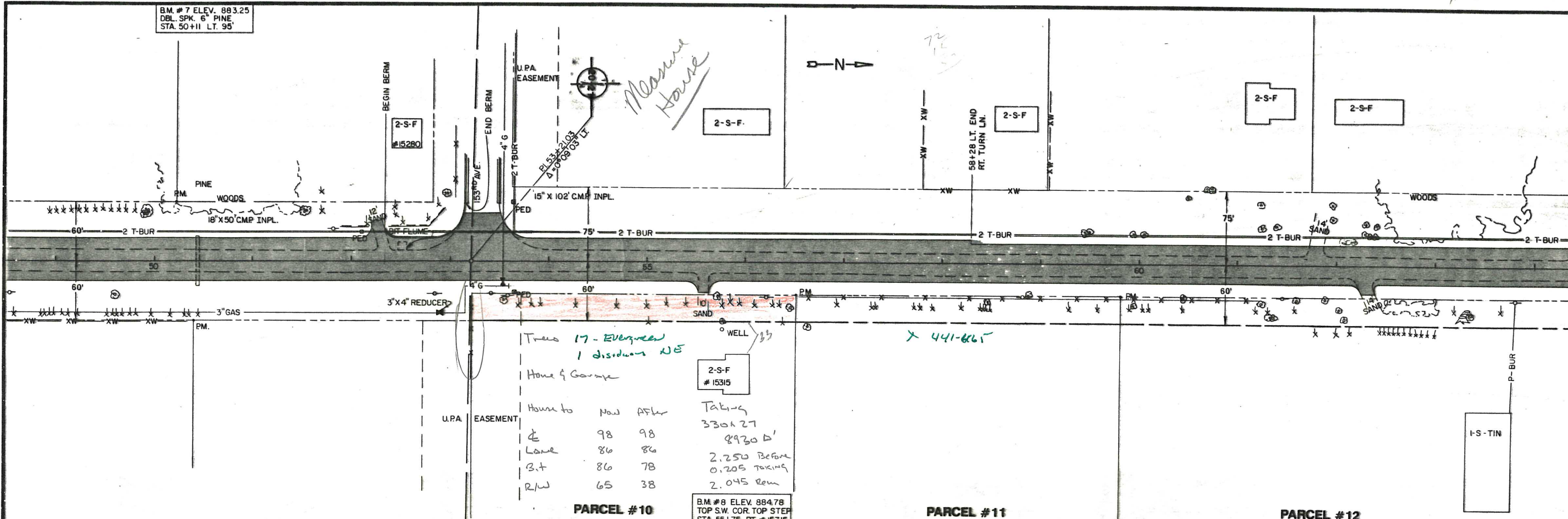
B.M. #5 ELEV 800.18
TOP SE. COR. BOT. STEP
STA. 38+34 RT. # 7961

PARCEL #8

PARCEL #9



B.M. # 7 ELEV. 883.25
 DBL. SPK. 6" PINE
 STA. 50+11 LT. 95'



*Trans 17 - Evergreen
 1 disiduum NE*

Home & Garage

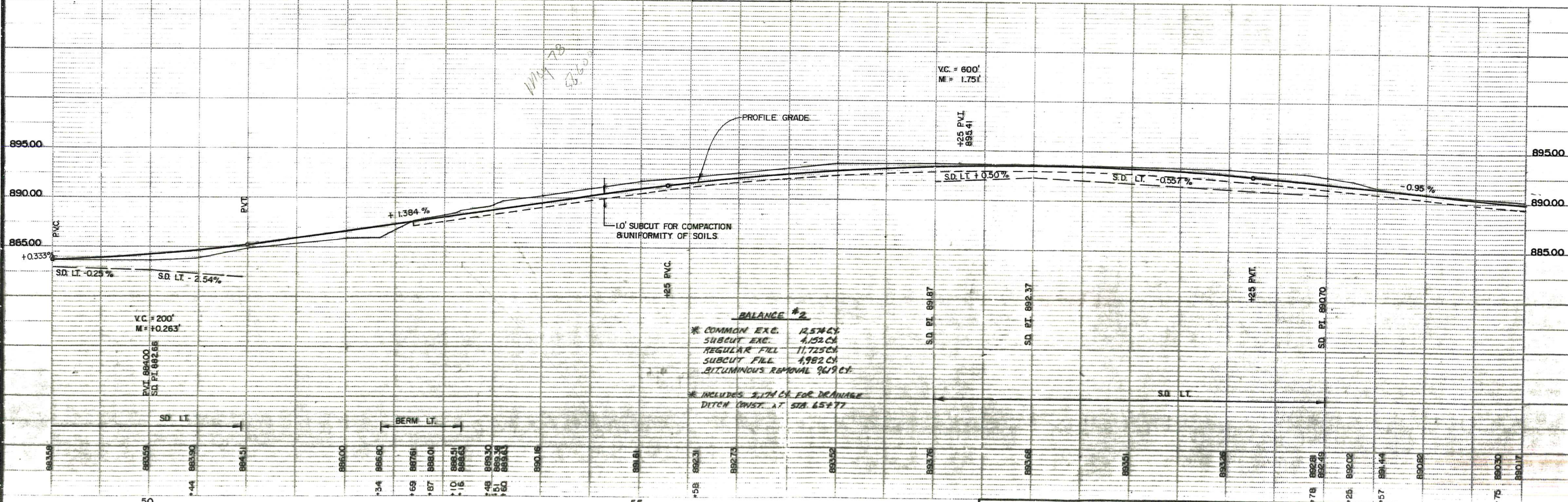
Home to	Now	After	Taking
±	98	98	330x27
Lane	86	86	8930 D'
B.t	86	78	2.250 Before
R/W	65	38	0.205 Taking
			2.045 Rem

PARCEL #10

B.M. # 8 ELEV. 884.78
 TOP S.W. COR. TOP STEP
 STA. 55+75 RT. # 15319

PARCEL #11

PARCEL #12



B.M. # 9 ELEV. 887.20
TOP S.W. COR. GAR. APRON
STA. 65+46 LT. 137 # 8013

PARCEL #6

PARCEL #7

*Let the manure
- 1 1/2'
40' TOP
seeding would
be acceptable*

Call before starting work

55

*53+63
53+76*

CONST. DITCH BLOCK
@ STA. 68+60 ± LT.
6:1 SLOPES.

68+67 LT. END
RT. TURN LN.

SURV. PQT. 65+77 =
LT. PQT. 0+00

SEE SHEET NO. 15 FOR
DRAINAGE EASEMENT &
CONST. DETAILS.

*Trees 12 evergreen
15' average*

*24 Evergreen Cedar 15-20
6 Birch & Poplar 10-15'*

HOME
& detached
Garage

TAKING
313' x 27'
8450 sq ft
CORRAL

House to

	Now	After
E	109	109
Lane	97	97
Bit	95	89
R/W	76	49

Total 4.512
Taking 0.194
Rem. 4.318

	Now	Later
E	107	107
Lane	95	95
Bit	95	87
R/W	74	47

*Trees: 25 Evergreen 20'+
1 Disbrowns*

Taking 296 x 27
8015 sq ft

1.343 Total
0.184 Taking
1.19 Rem

PARCEL #12

PARCEL #13

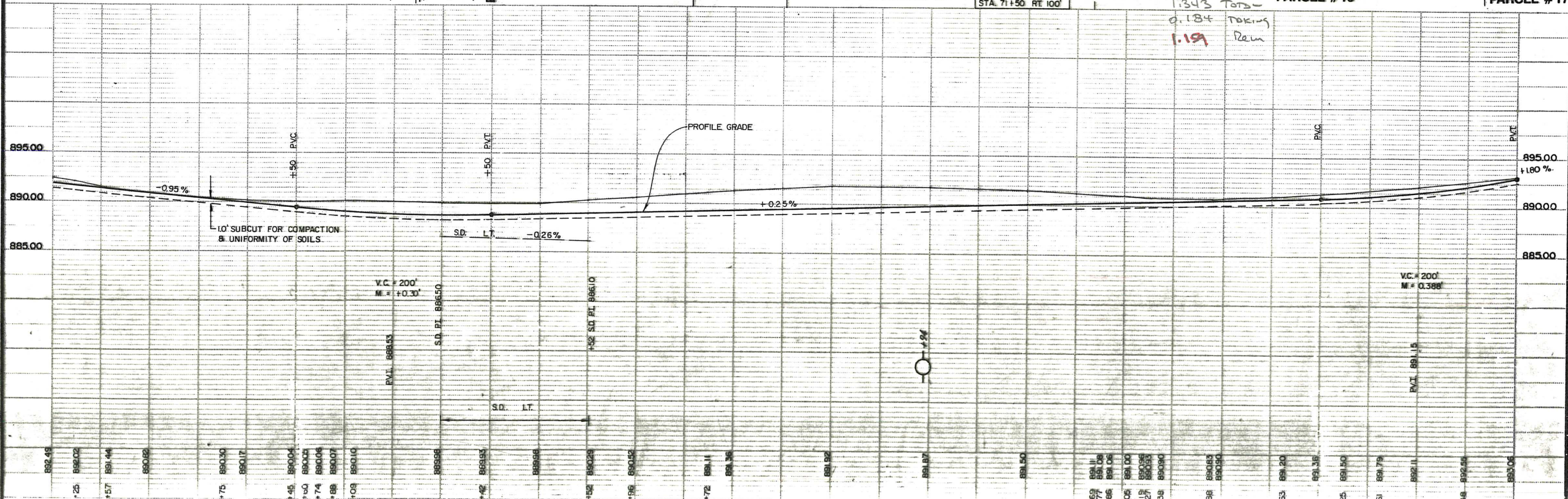
PARCEL #14

PARCEL #15

B.M. #10 ELEV. 889.61
DBL. SPK. IN R/P
STA. 71+50 RT. 100'

PARCEL #16

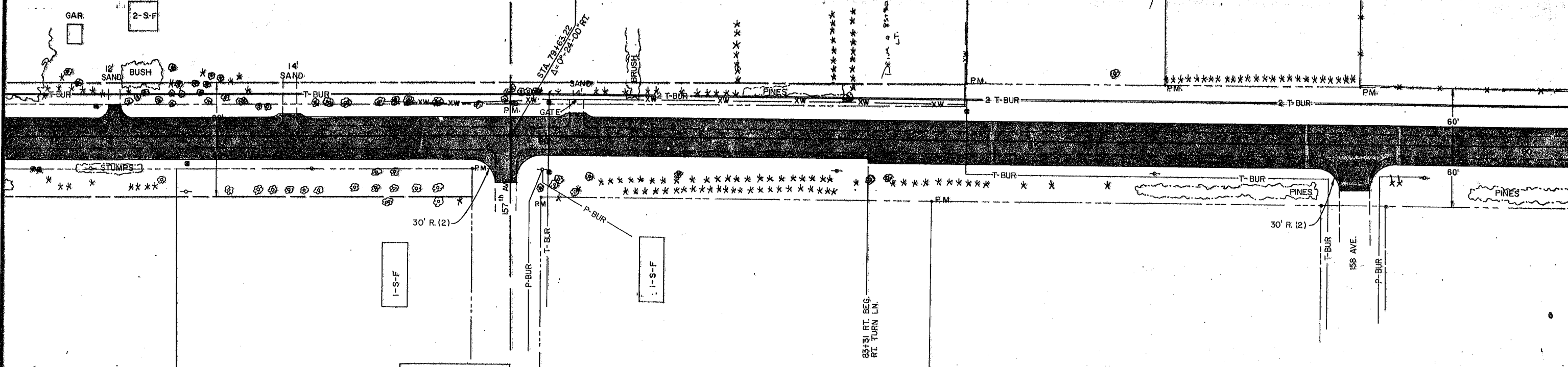
PARCEL #17



PARCEL #7

PARCEL #18

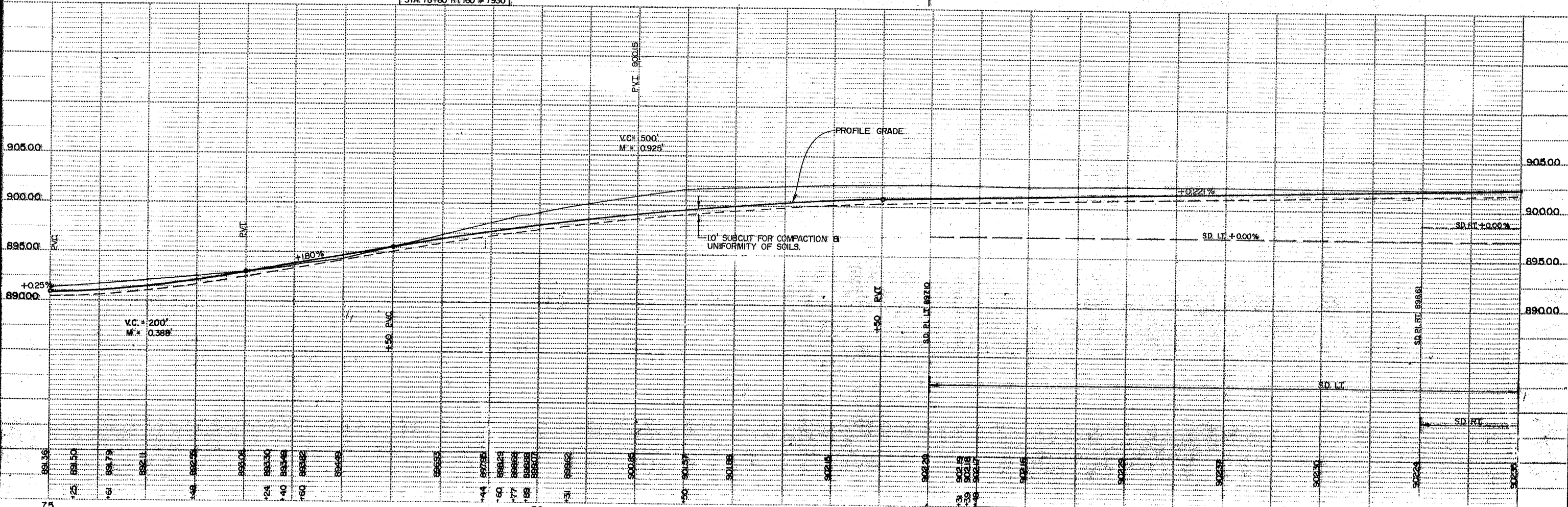
B.M. # 12 ELEV. 901.13
TOP N.E. COR. CONC. SLAB
STA. 86+85 LT. 300'



PARCEL #16

PARCEL #17

B.M. # 11 ELEV. 899.06
TOP N.W. COR. TOP STEP
STA. 78+60 RT. 160' # 7930



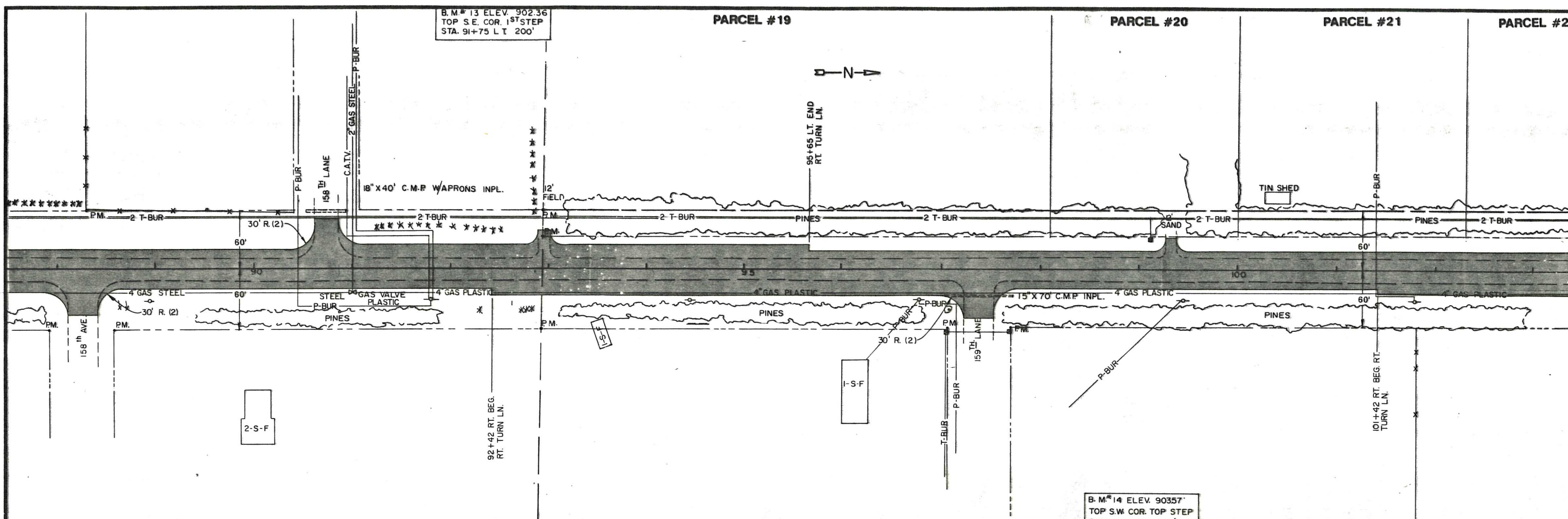
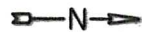
PARCEL #19

PARCEL #20

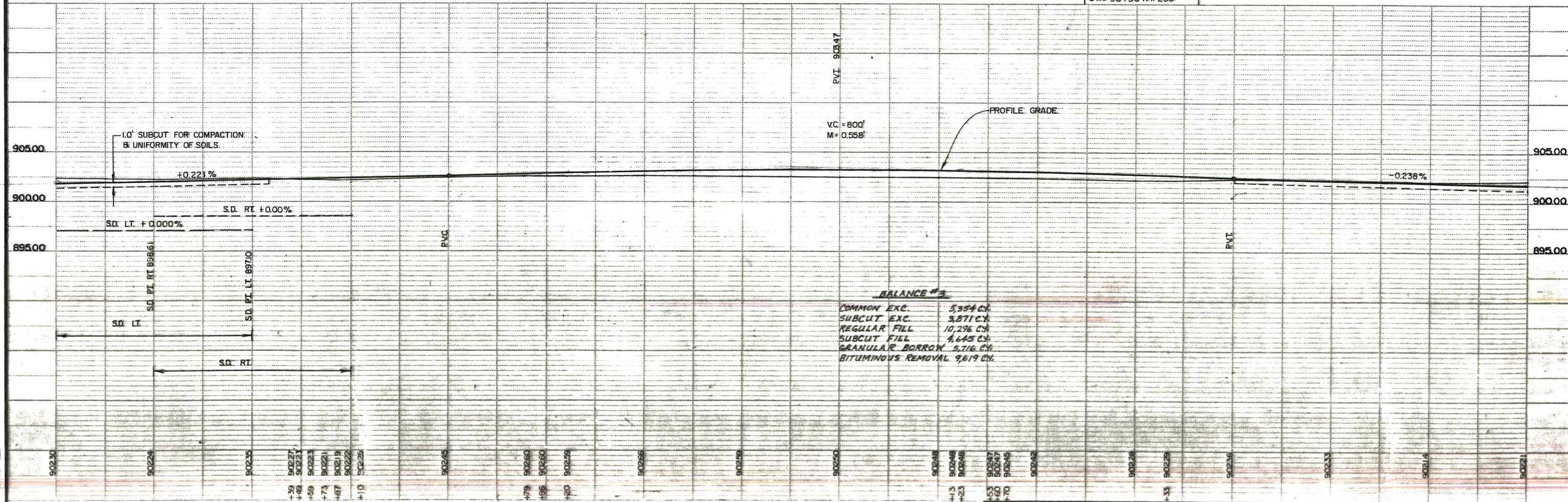
PARCEL #21

PARCEL #22

B.M.# 13 ELEV. 902.36
TOP S.E. COR. 1ST STEP
STA. 91+75 LT 200'



B.M.# 14 ELEV. 903.57
TOP S.W. COR. TOP STEP
STA. 98+50 RT. 250'



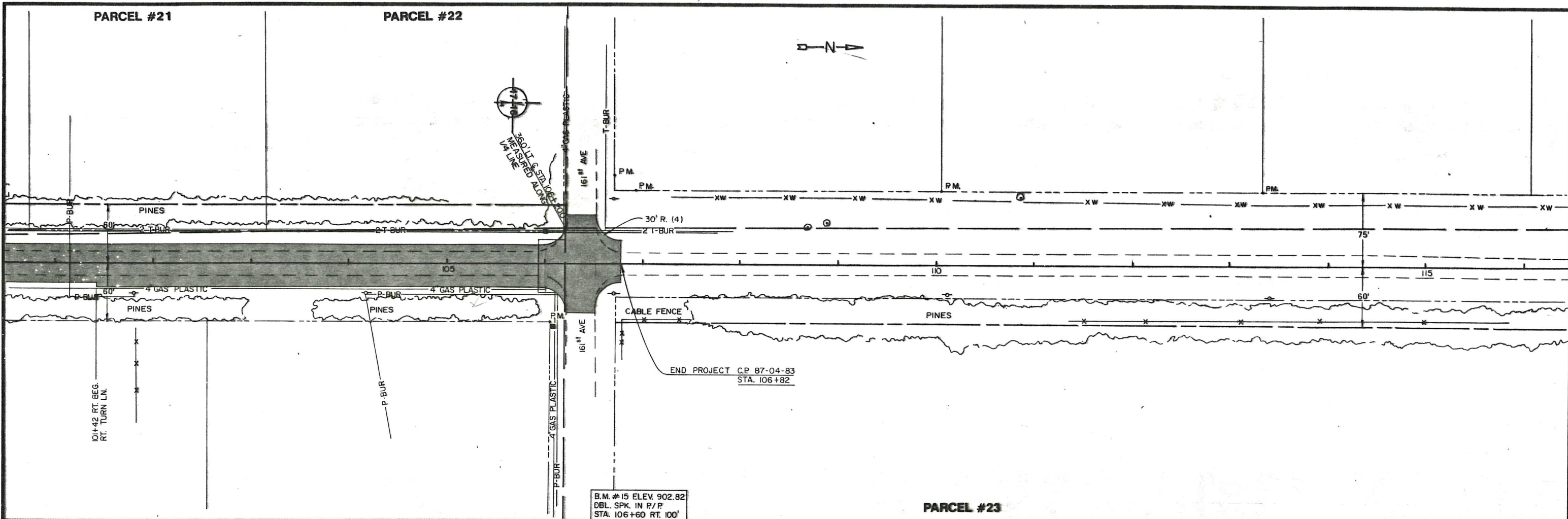
BALANCE #3

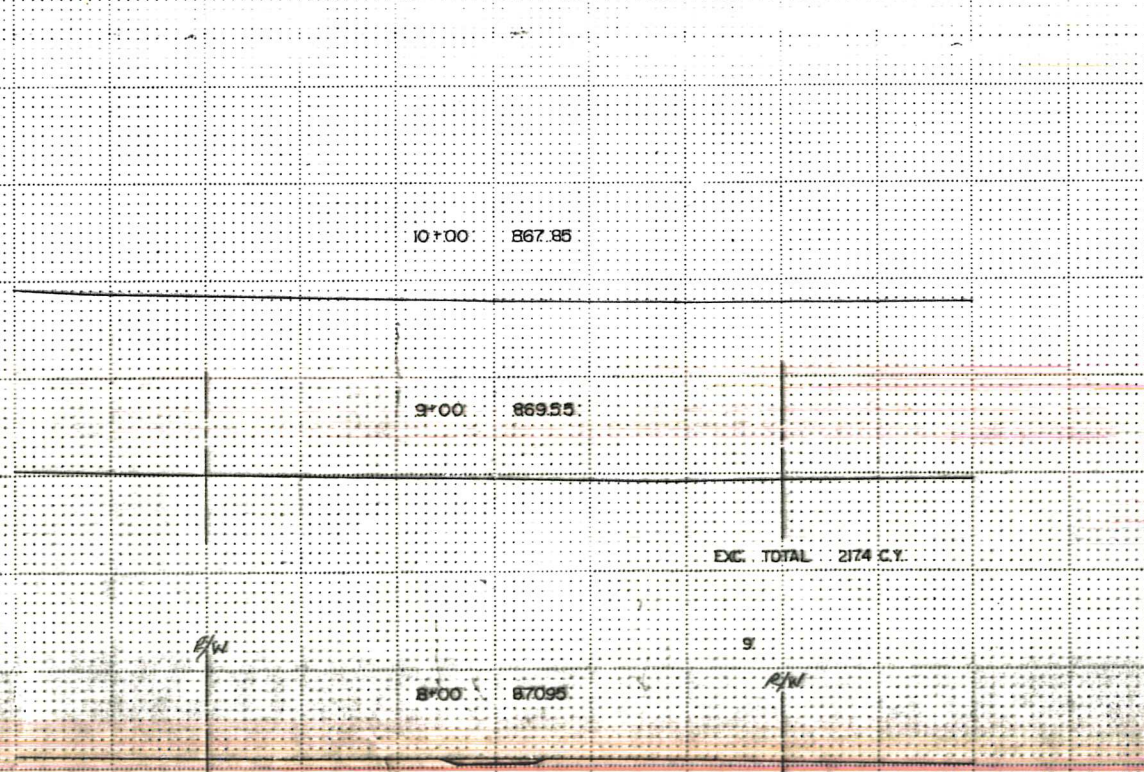
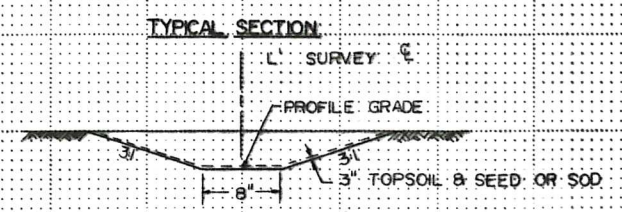
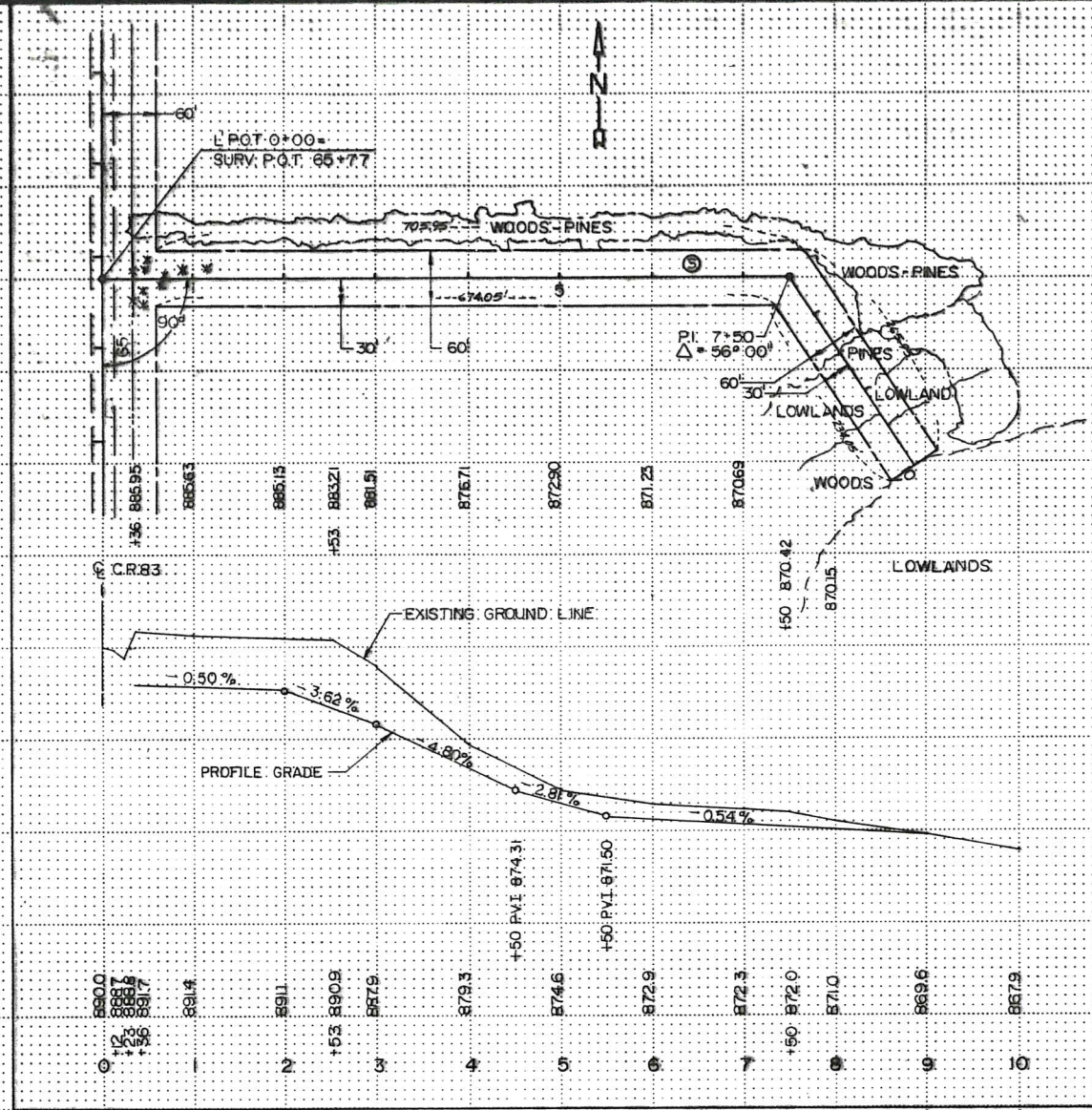
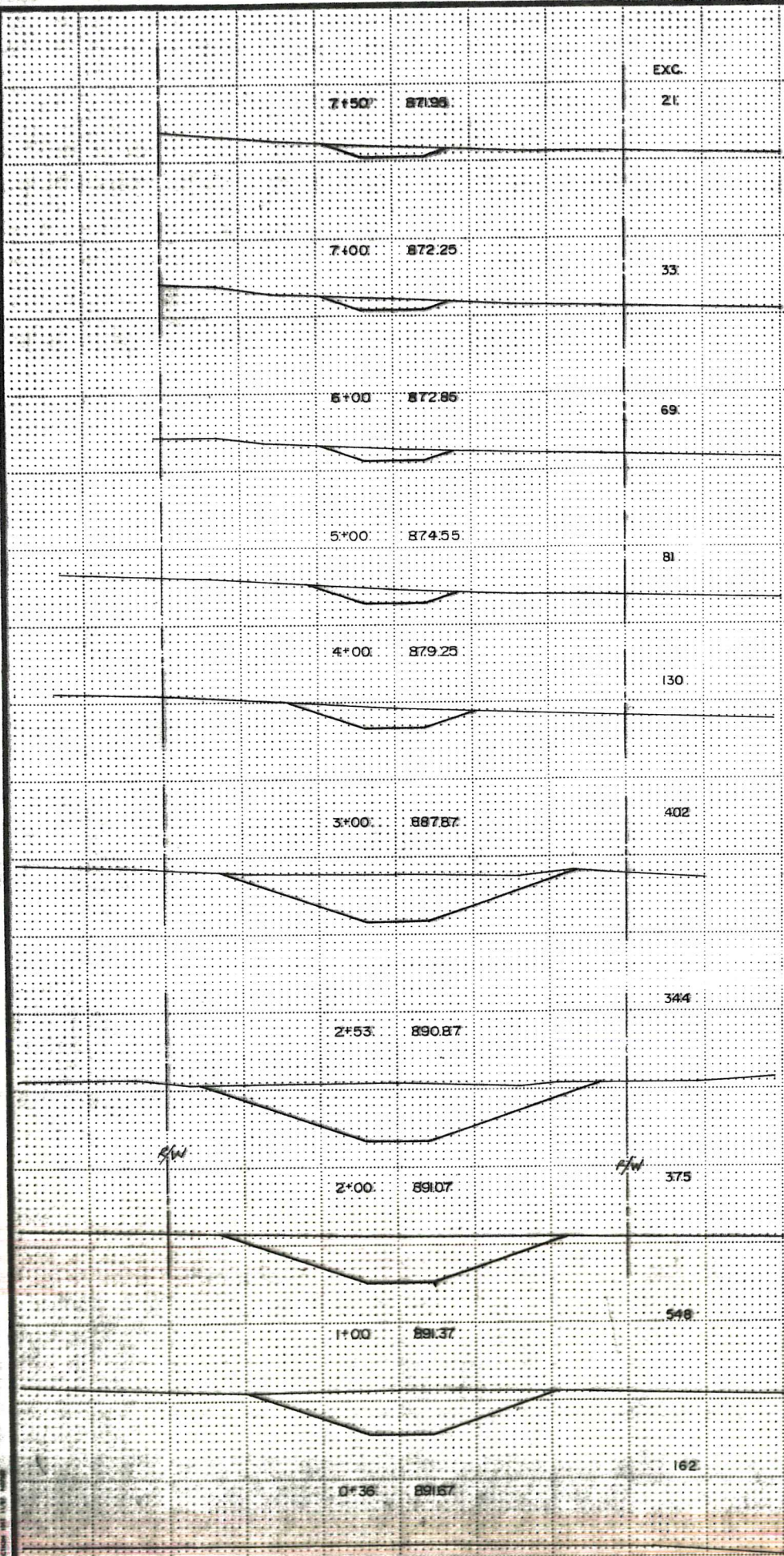
COMMON EXC.	5,354 CY
SUBCUT EXC.	3,871 CY
REGULAR FILL	10,296 CY
SUBCUT FILL	4,645 CY
GRANULAR BORROW	5,716 CY
BITUMINOUS REMOVAL	9,619 CY

PARCEL #21

PARCEL #22

PARCEL #23





EXCAVATION EMBANKMENT

SUB-TOTALS CU.YDS. CU.YDS. SUB-TOTALS

2+57 882.23
= OR 2+56.65

2+44 881.97
= OR 2+43.33

OR TRACK INTERSECT 2+41
2+41: C-00

S TRACK - BN. R.R. X-ING
2+38 881.97
= OR 2+37.13

DENOTES NEW ROAD WIDTH
IN TRACK AREA

CONST. TO MATCH INPLACE R.R. GRADE LT. & RT.

26 0

2+24 881.74
= OR 2+22.53

SD 87859

SD 87840

0.50%

OR C (TYP)

32 8

0.50%

2+09 881.48
= OR 2+06.61

SD 87971

FL 87855

SD 8790

FL 87836

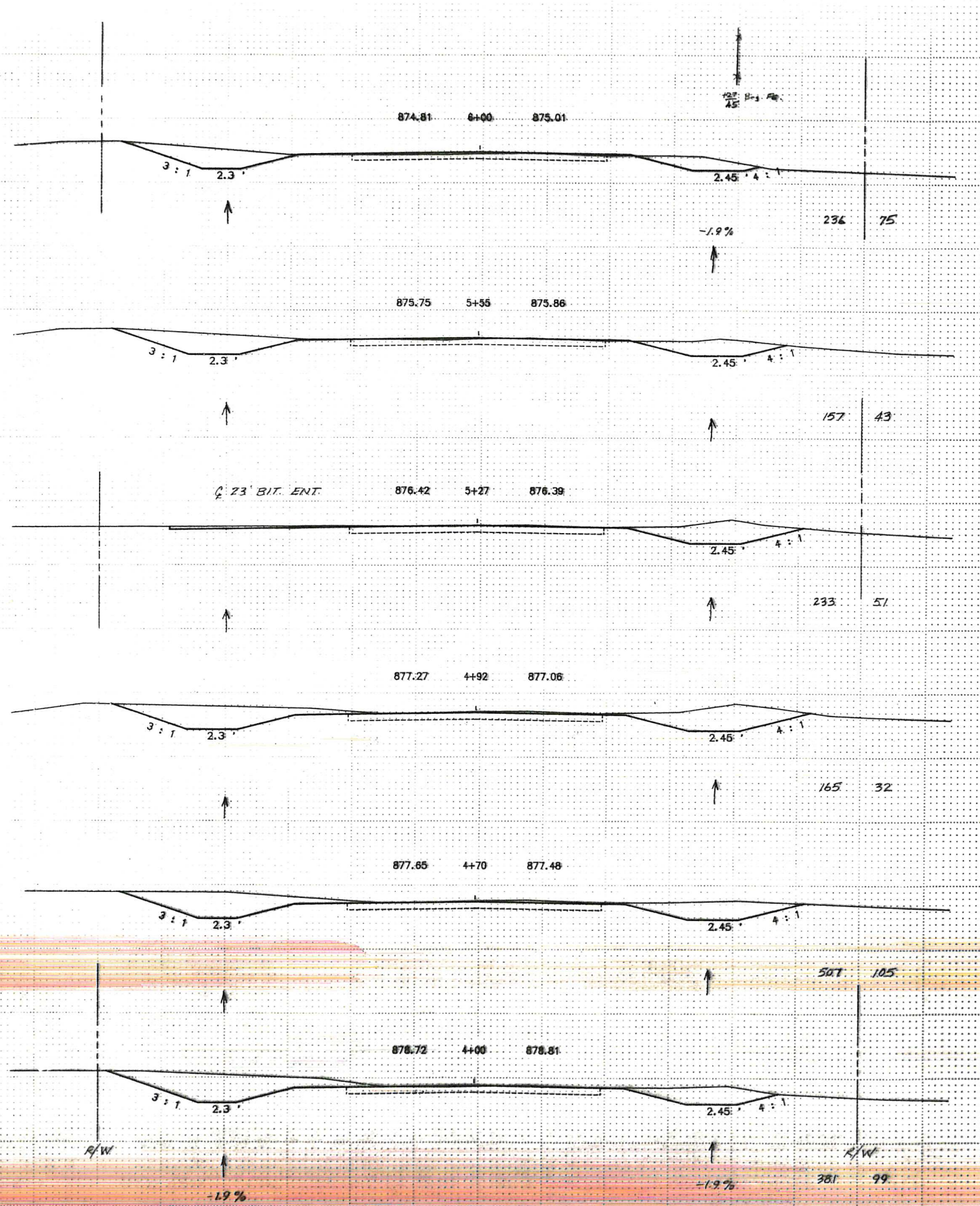
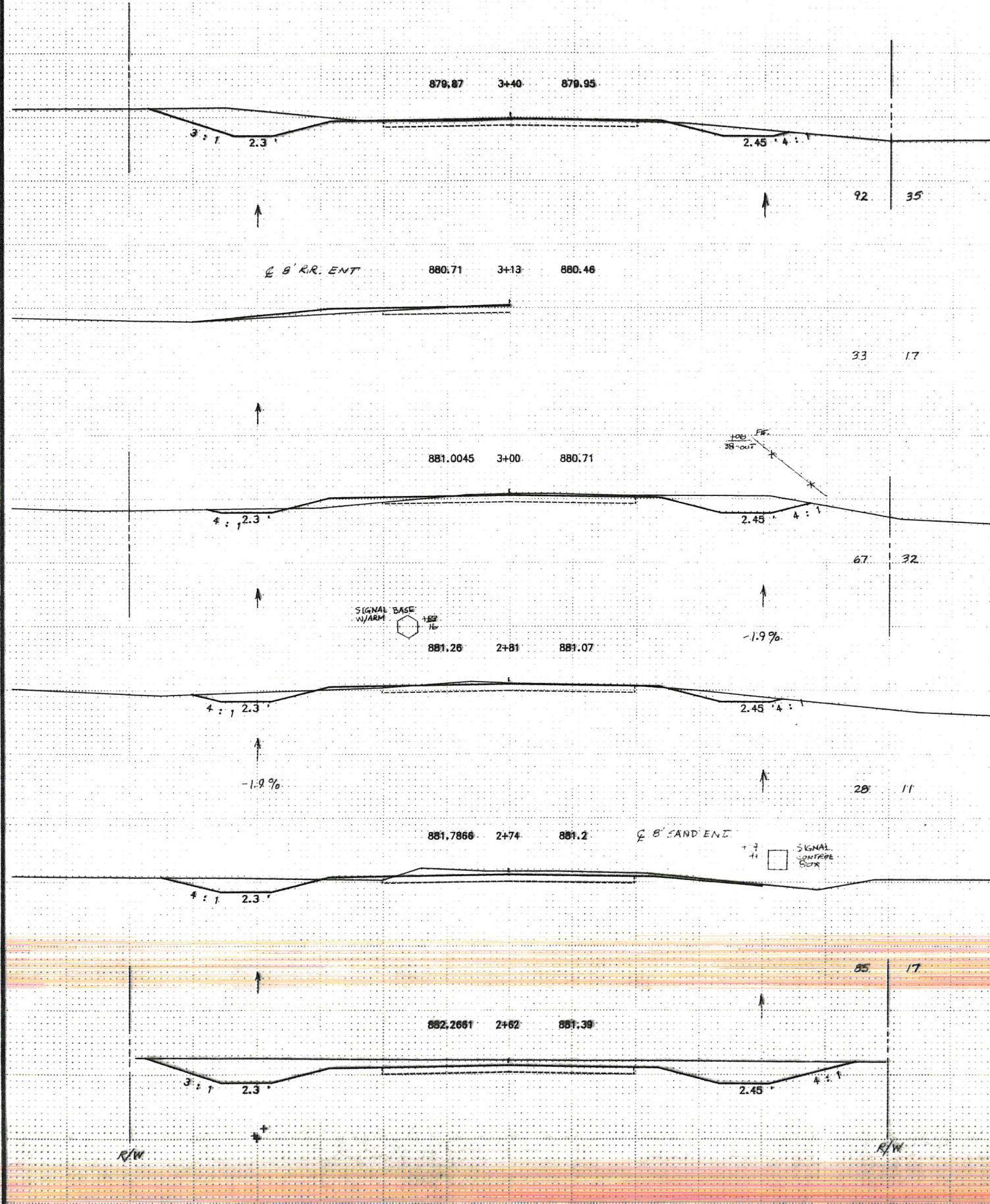
15 12

DENOTES CROSS SECTION
AT C PIPE CONST. STA. 2+15

STA. 2+15
FB 1: 22' SPAN X 64' RCP-A CULV., 0.25%
FB 1: 2-22' RCP-A AFFRONS
TH. 10 SHLD. INTERSECT STA. 1+82 ± P.A. PT. 28.97' LT. 8' 1" TO SURV. POT. 1+86.71
N SHLD. - TH. 10
1+73 882.18

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

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

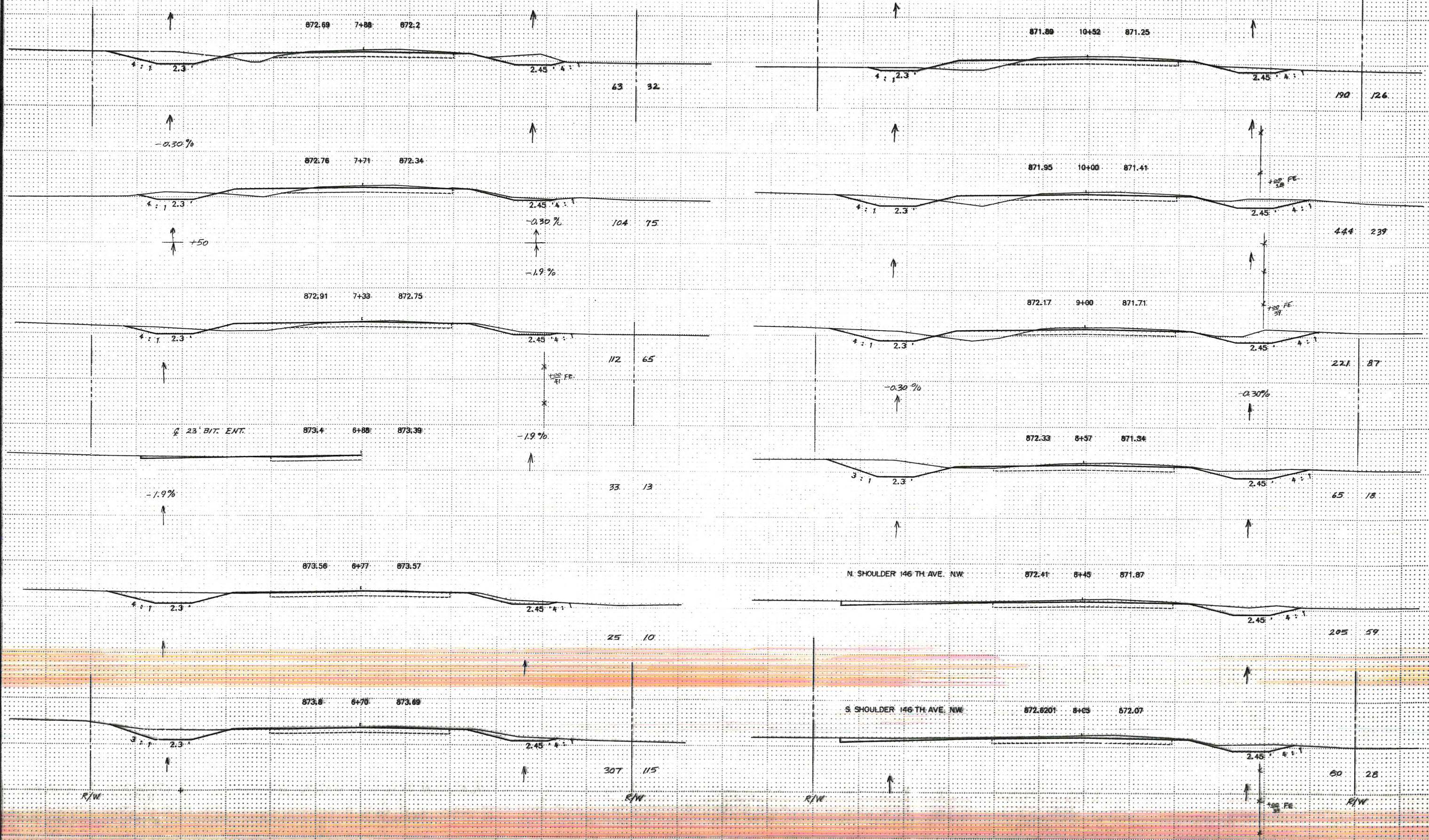


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 2+62 TO STA. 6+00

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

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

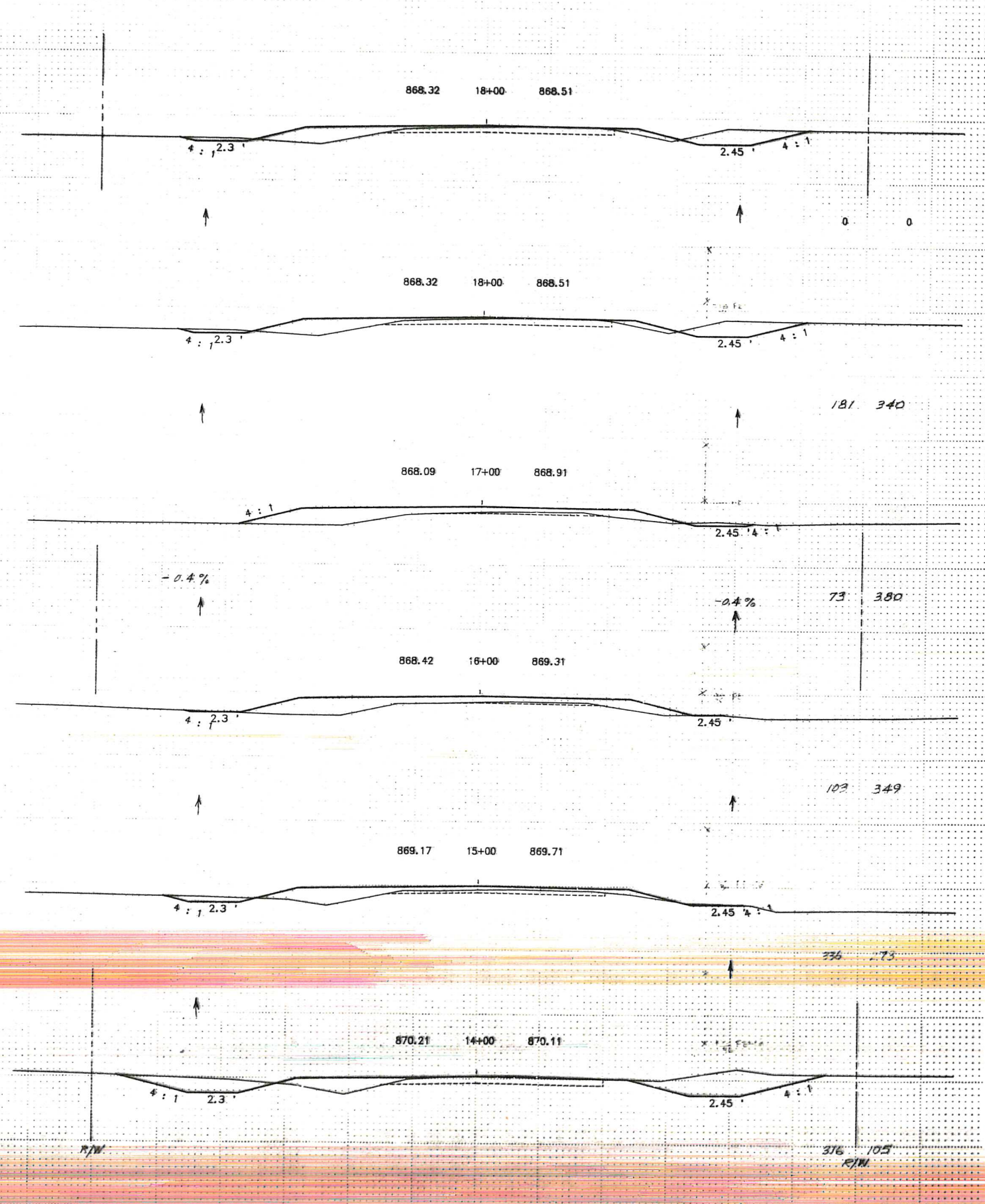
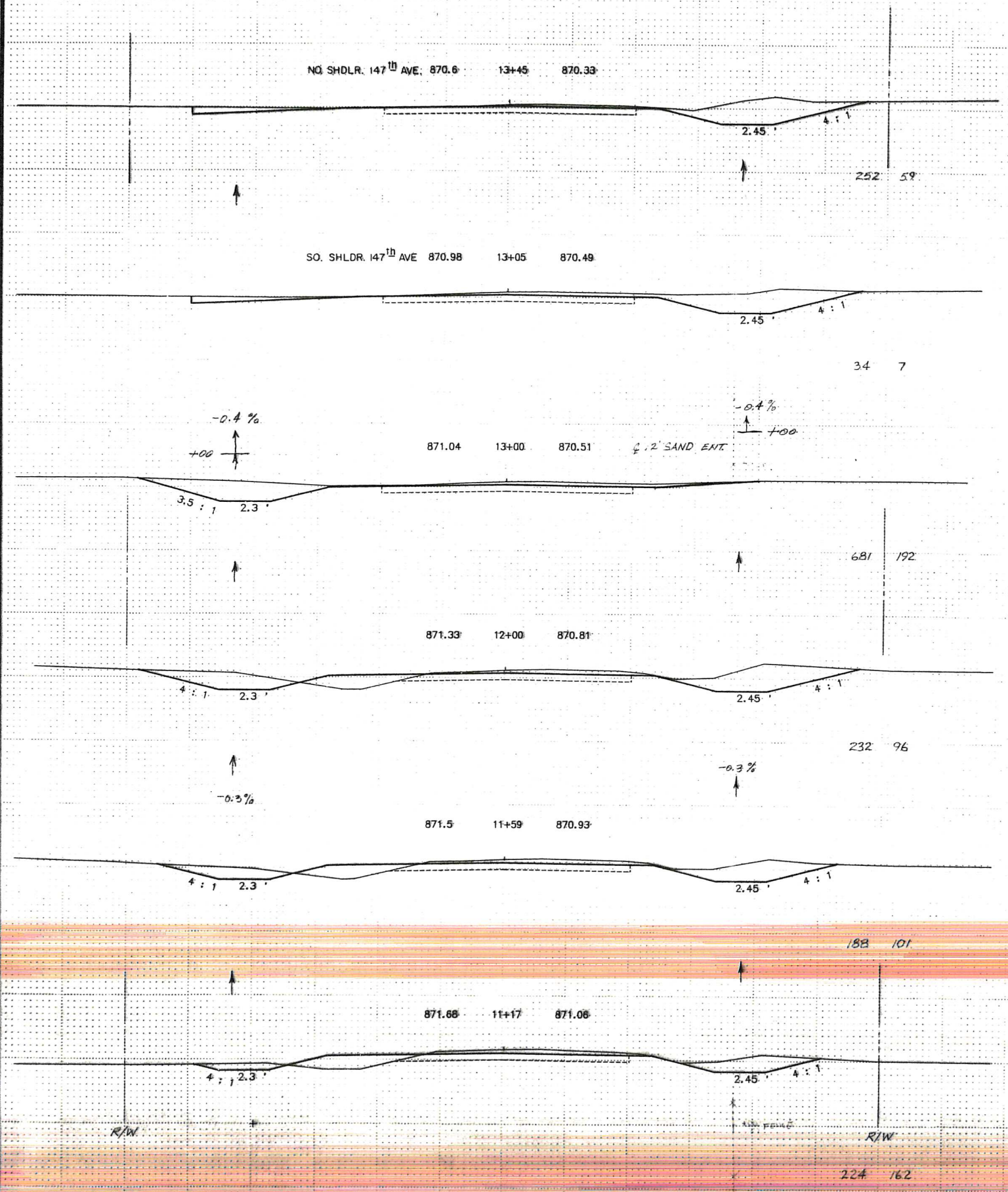


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 6+70 TO STA. 10+52

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

Fed. Proj. No.
EXCAVATION EMBANKMENT
 SUB-TOTALS CU.YDS. CU.YDS. SUB-TOTALS

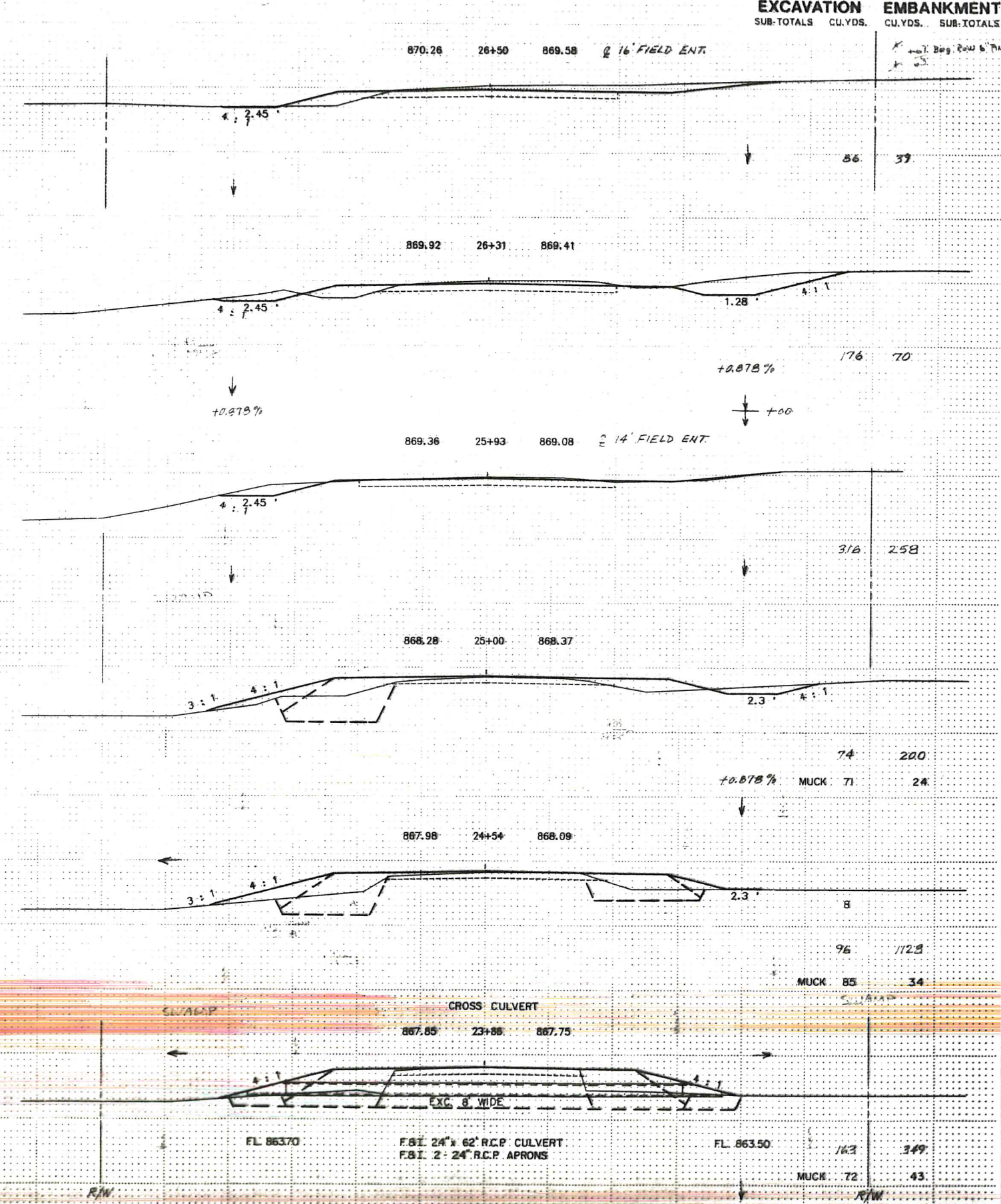
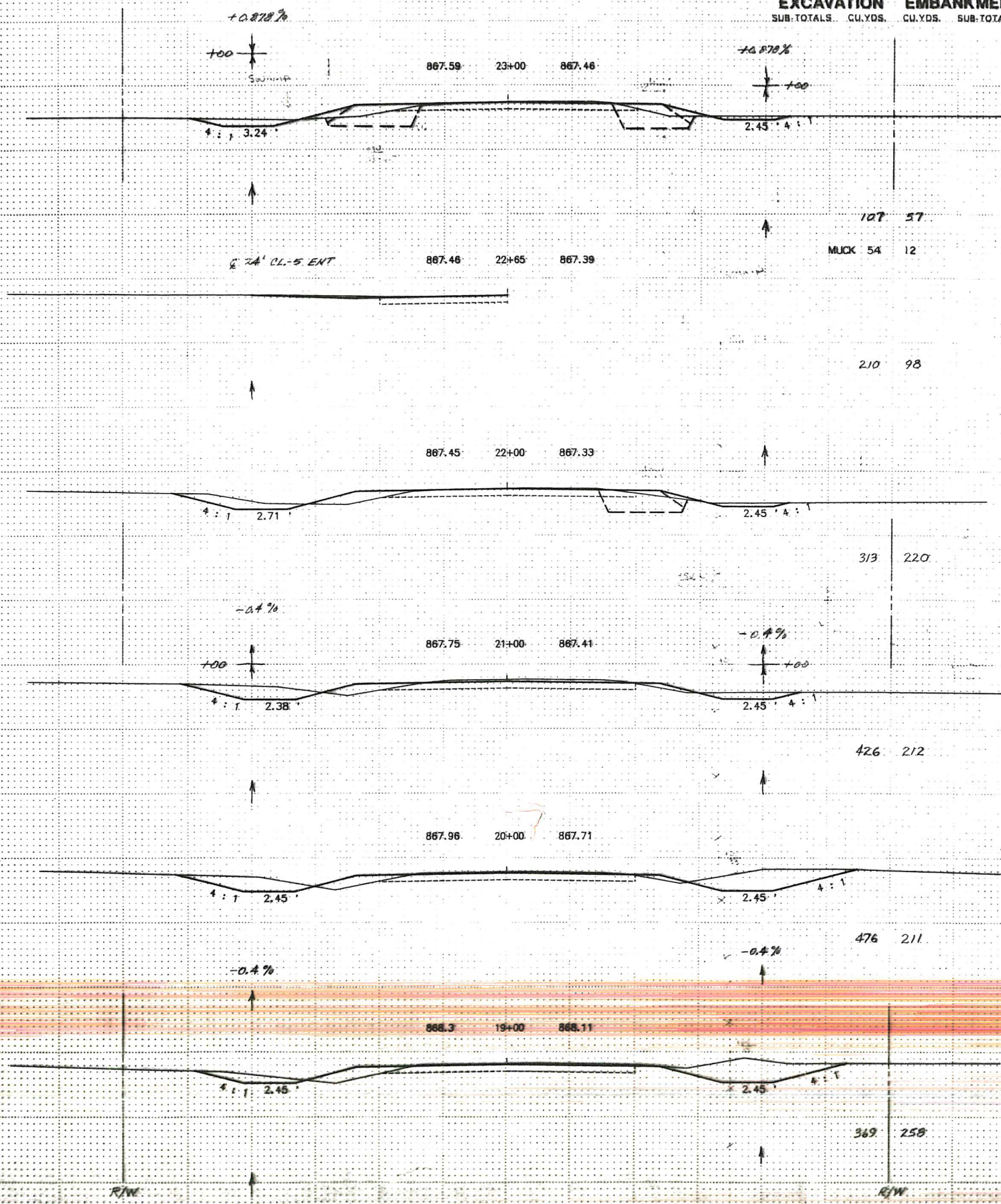


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 11+17 TO STA. 18+00

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

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

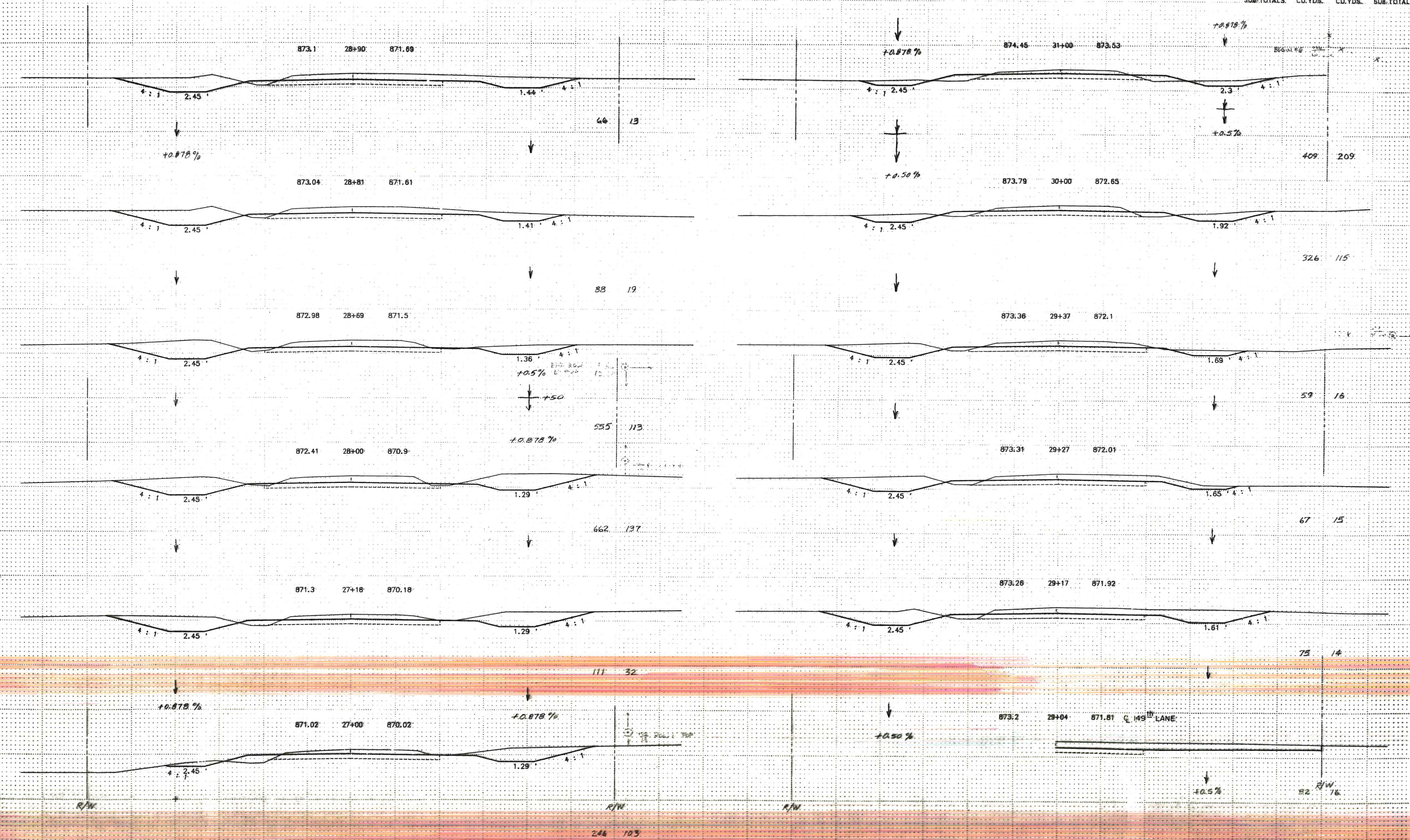


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 19+00 TO STA. 26+50

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

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

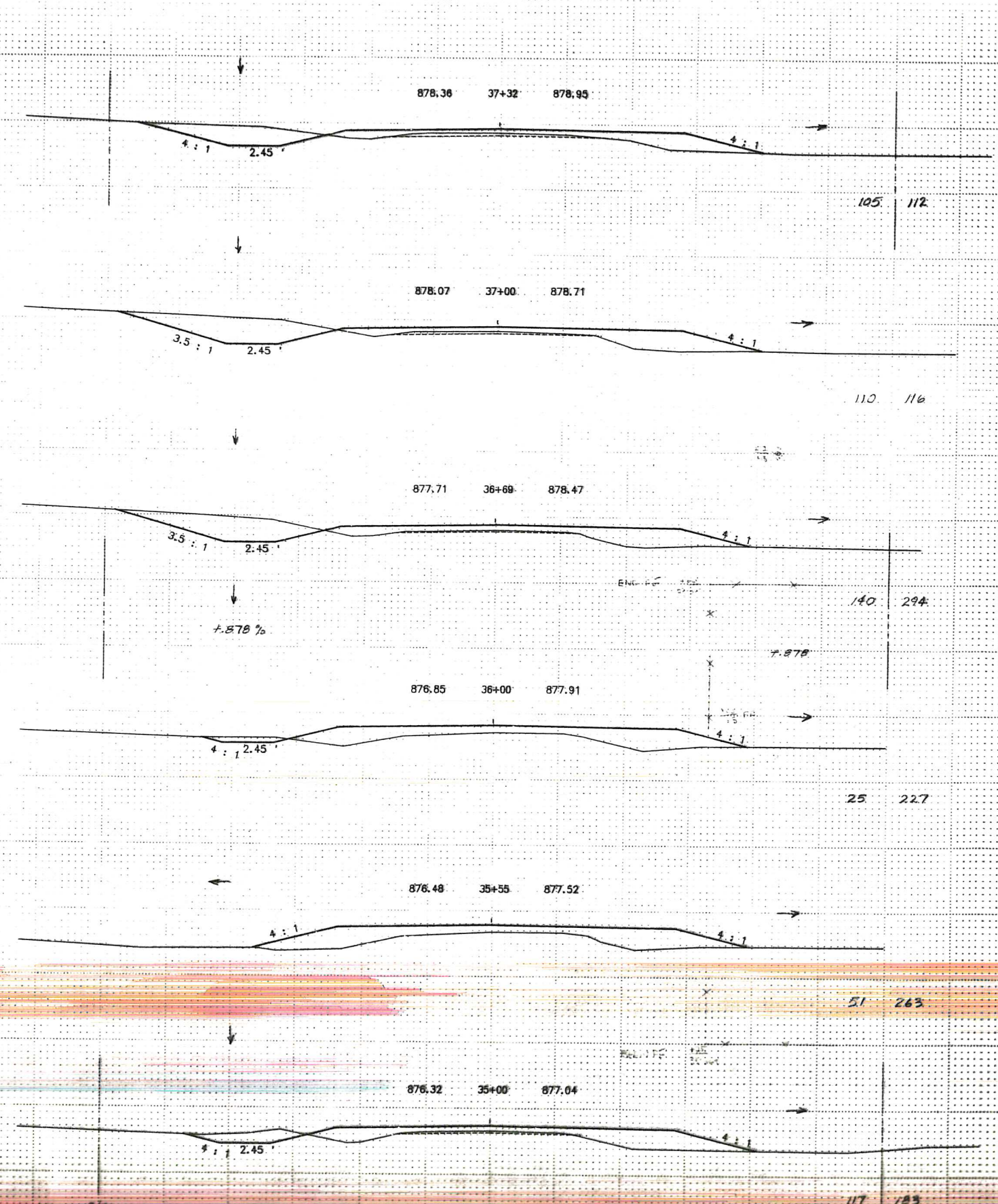
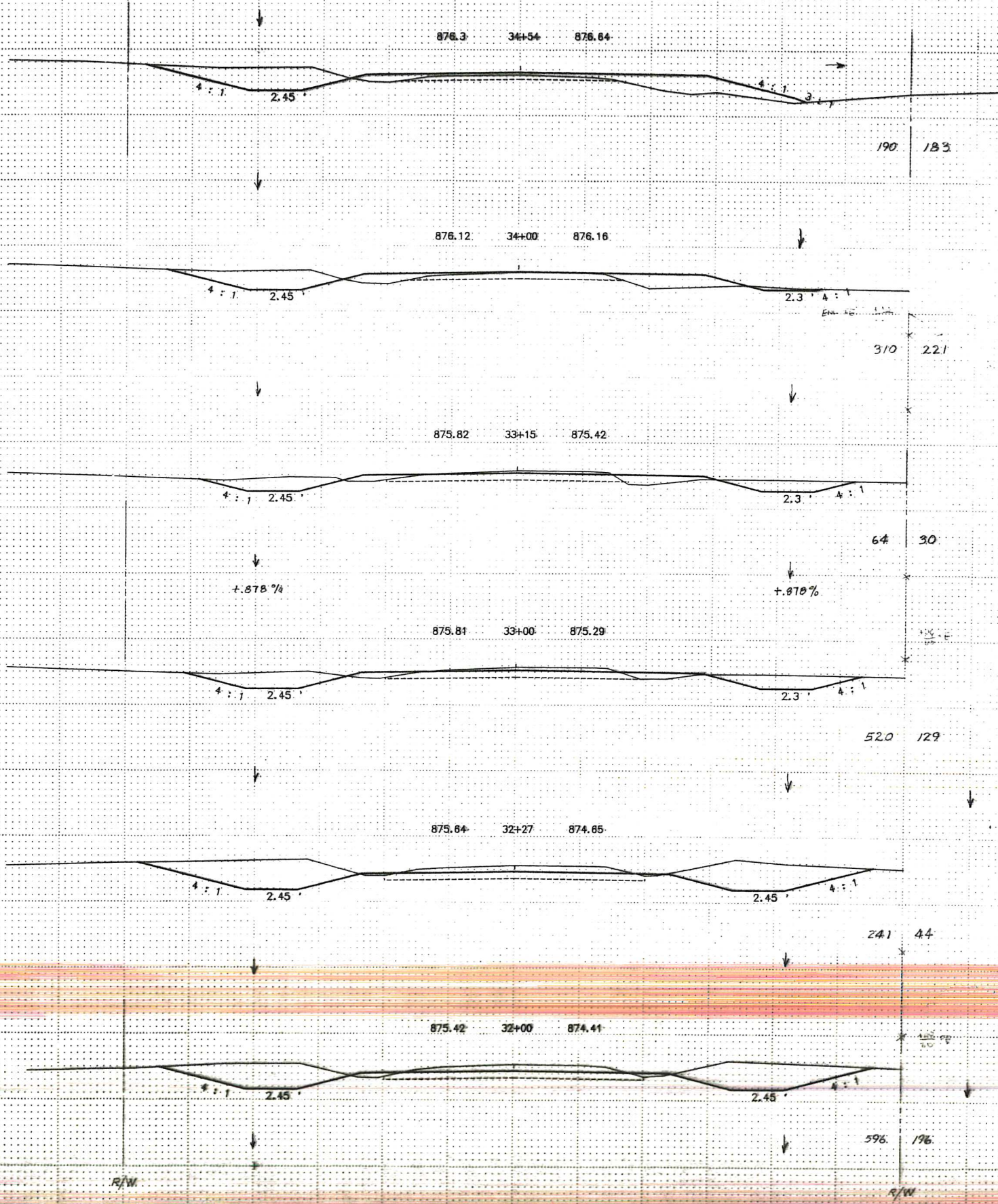


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 27+00 TO STA. 31+00

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

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

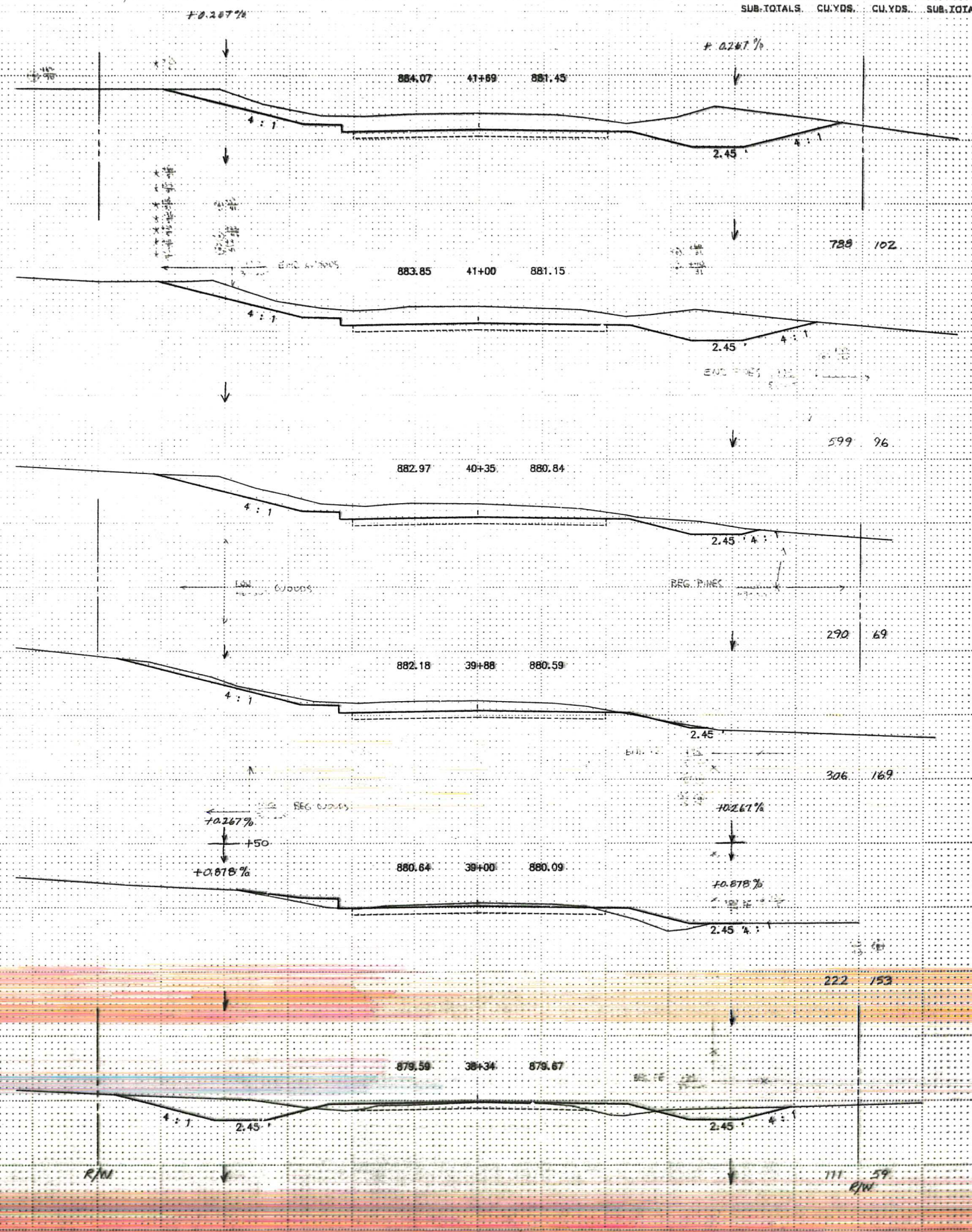
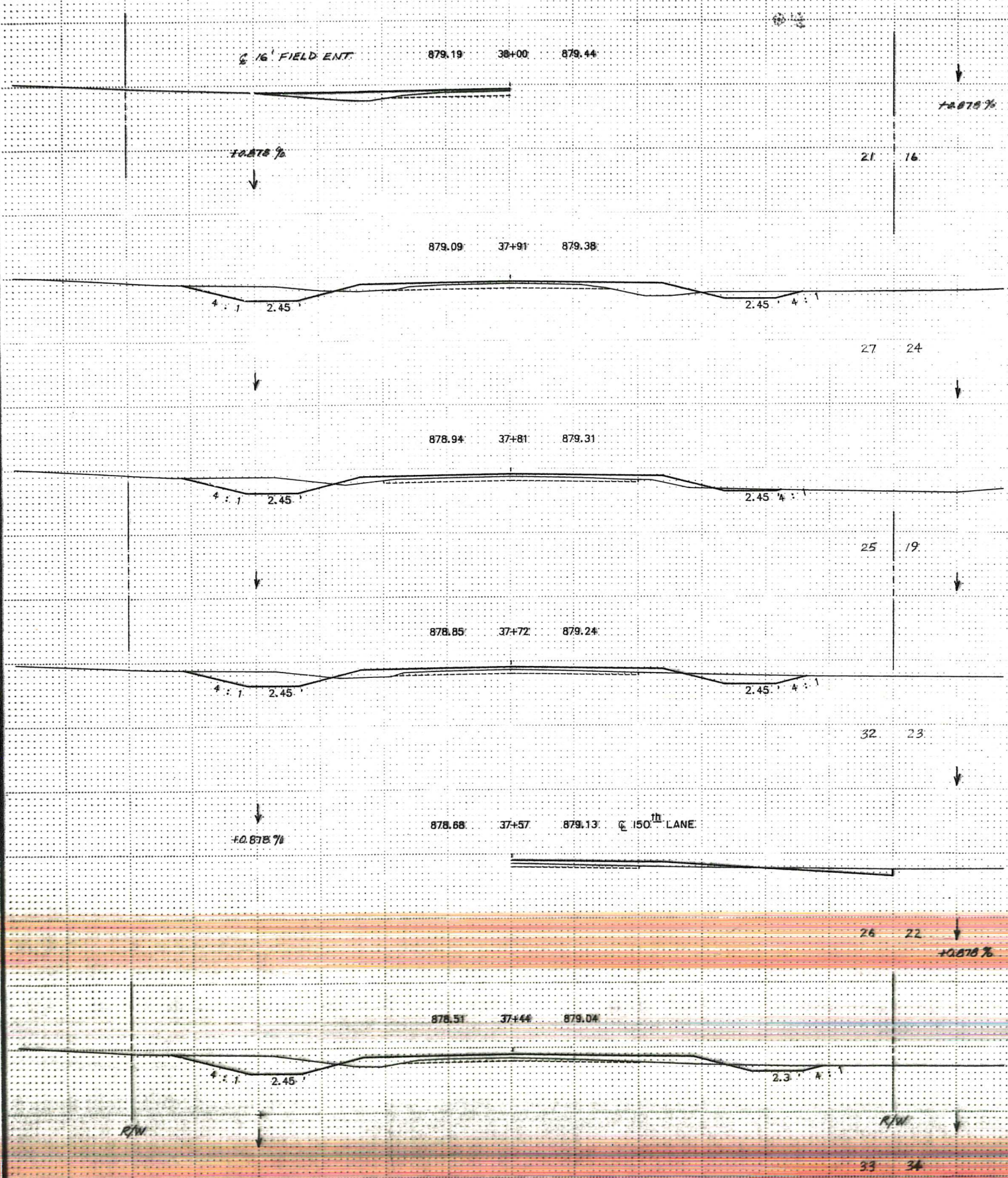


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 32+00 TO STA. 37+32

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

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

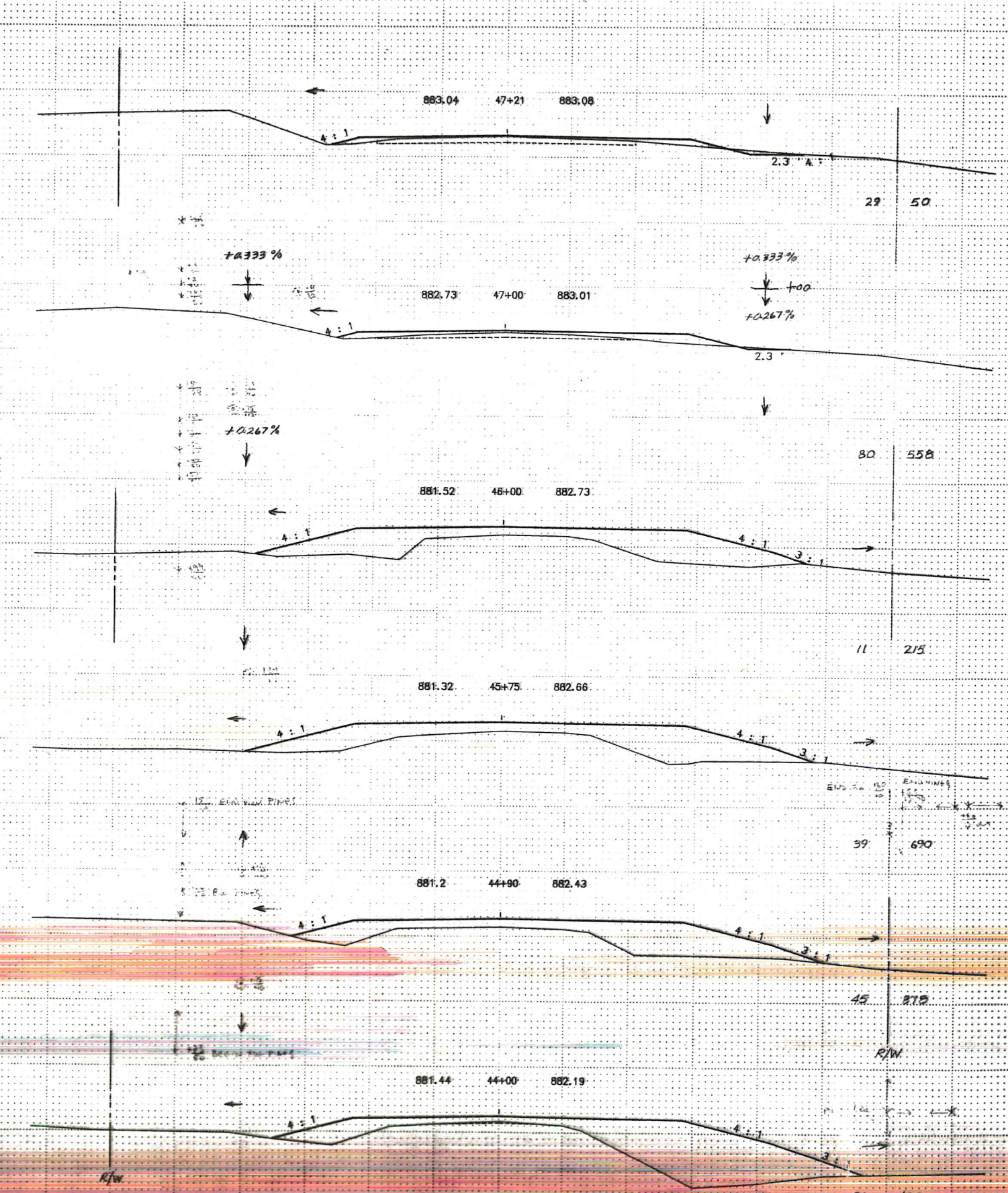
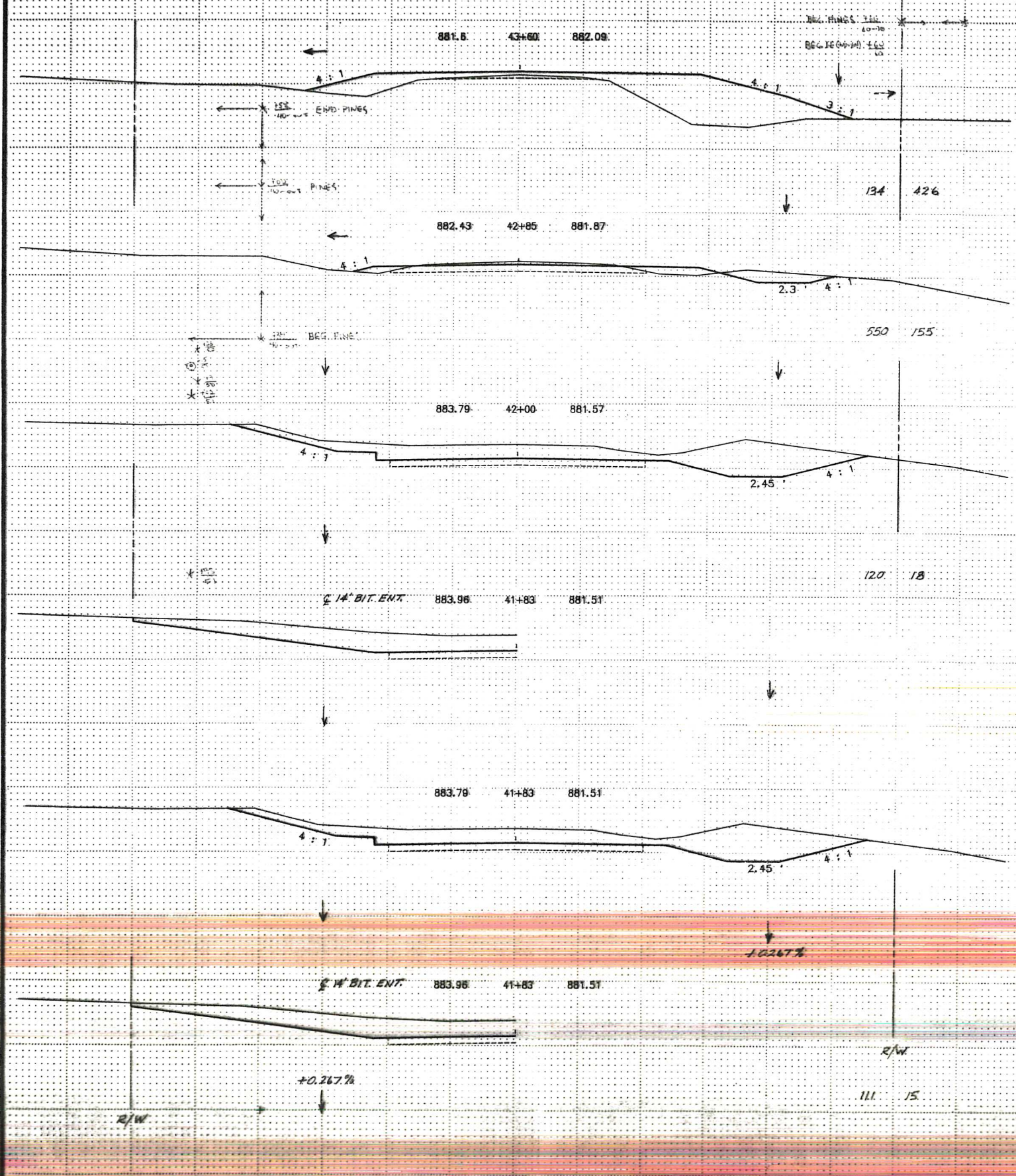


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 37+44 TO STA. 41+69

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

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

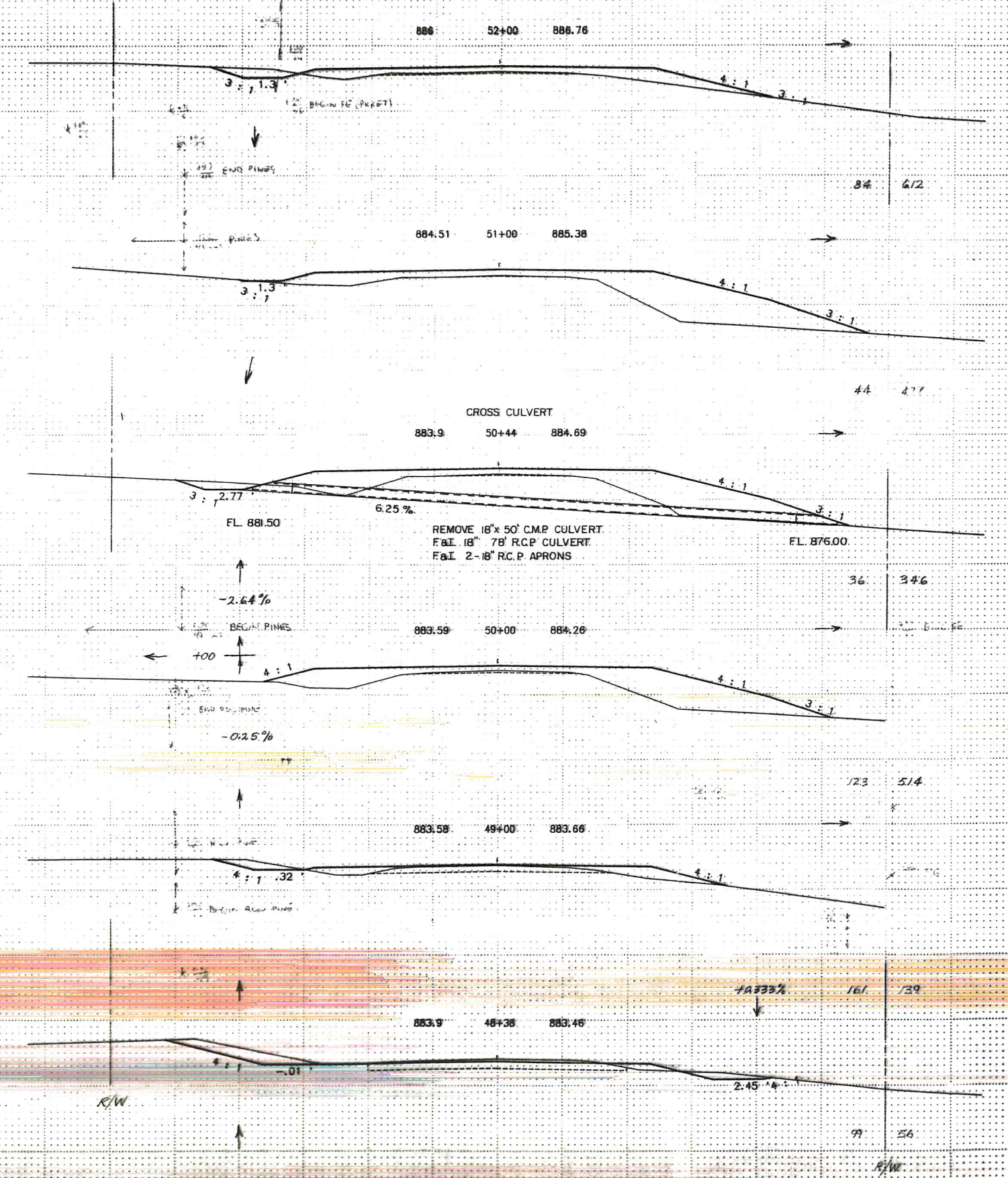
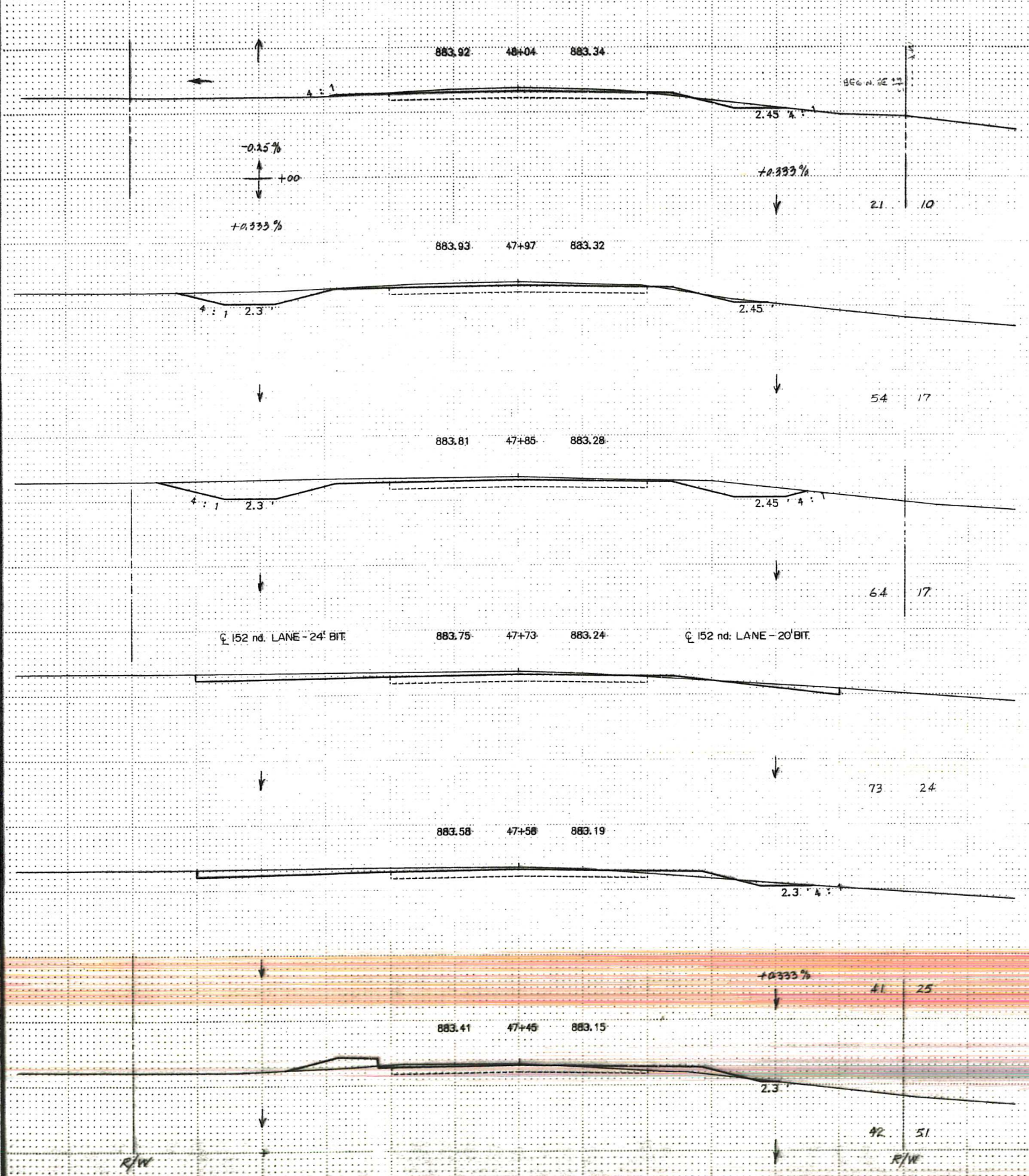


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 41+83 TO STA. 47+21

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

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

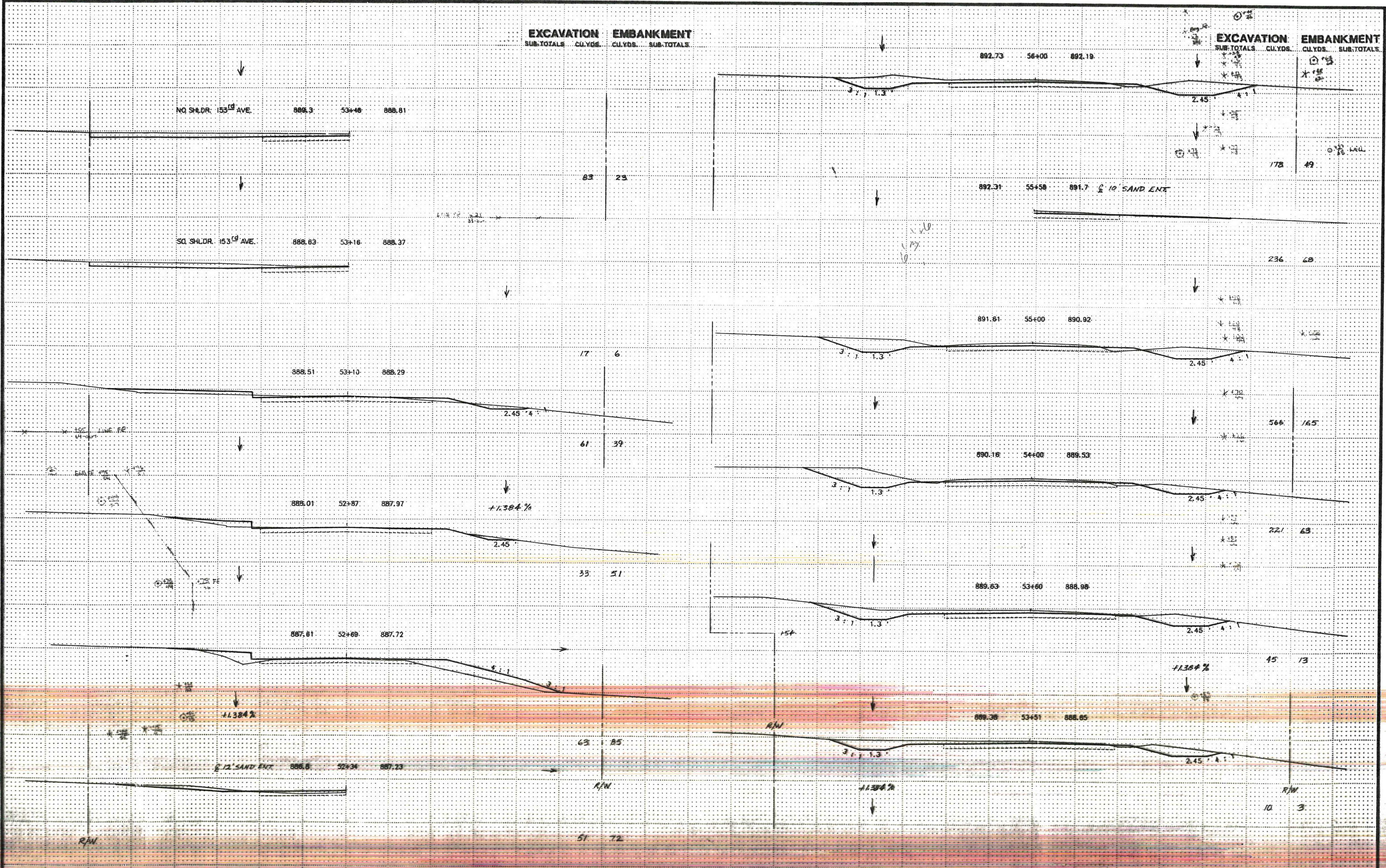


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 47+45 TO STA. 52+00

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

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



NO SHLDR. 153RD AVE. 888.3 53+48 888.61

SO SHLDR. 153RD AVE. 888.63 53+16 888.37

888.51 53+10 888.29

888.01 52+87 887.97

887.61 52+68 887.72

886.5 52+34 887.23

892.73 56+00 892.19

892.31 55+58 891.7 10' SAND ENT

891.61 55+00 890.92

890.16 54+00 889.53

889.63 53+60 888.96

889.38 53+51 888.65

178 49

236 68

17 6

566 165

221 63

45 13

10 3

SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 52+34 TO STA. 56+00

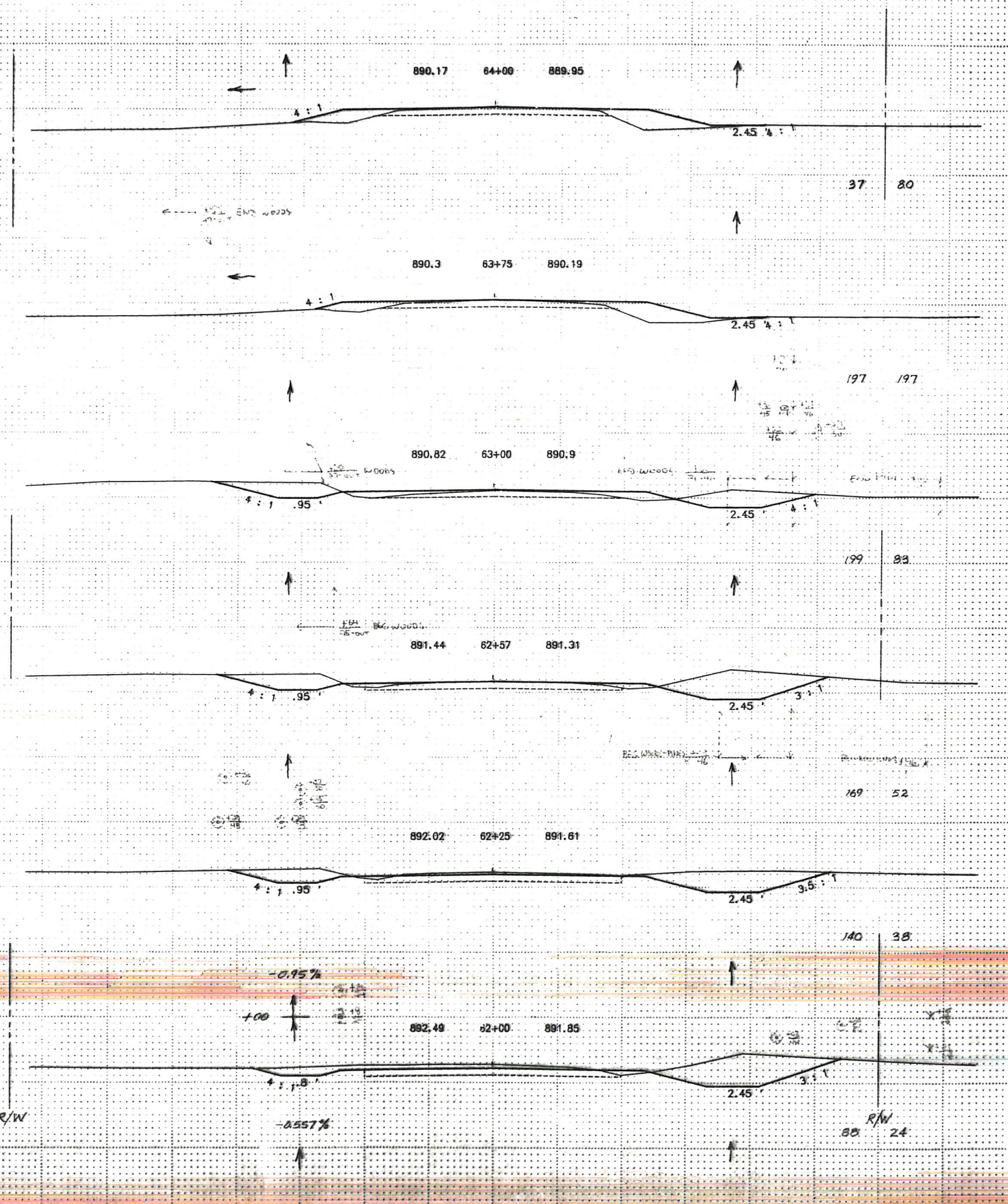
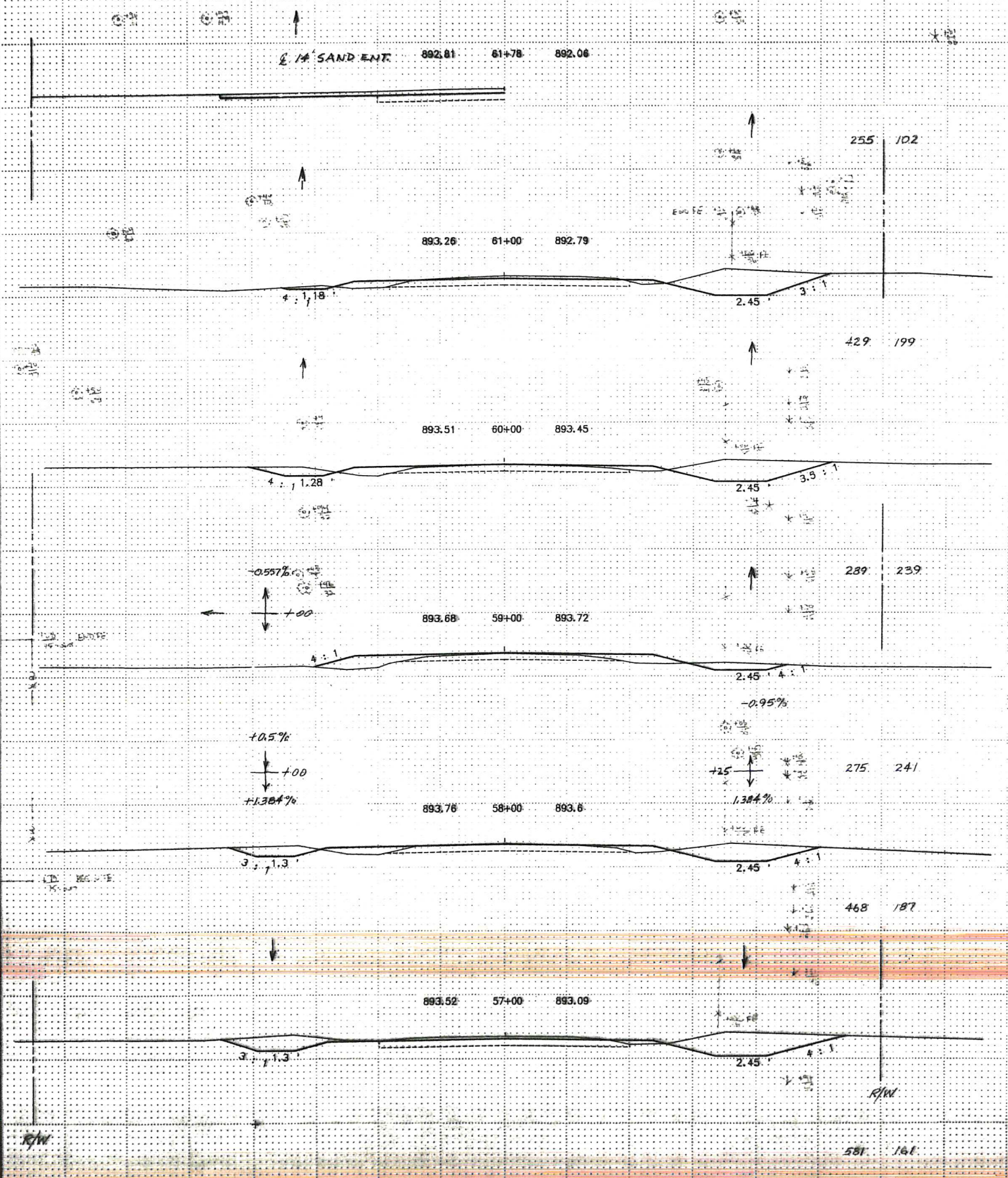
State Proj. No.

C.P. 87-04-83

Sheet No. 26 of 35 Sheets

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

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

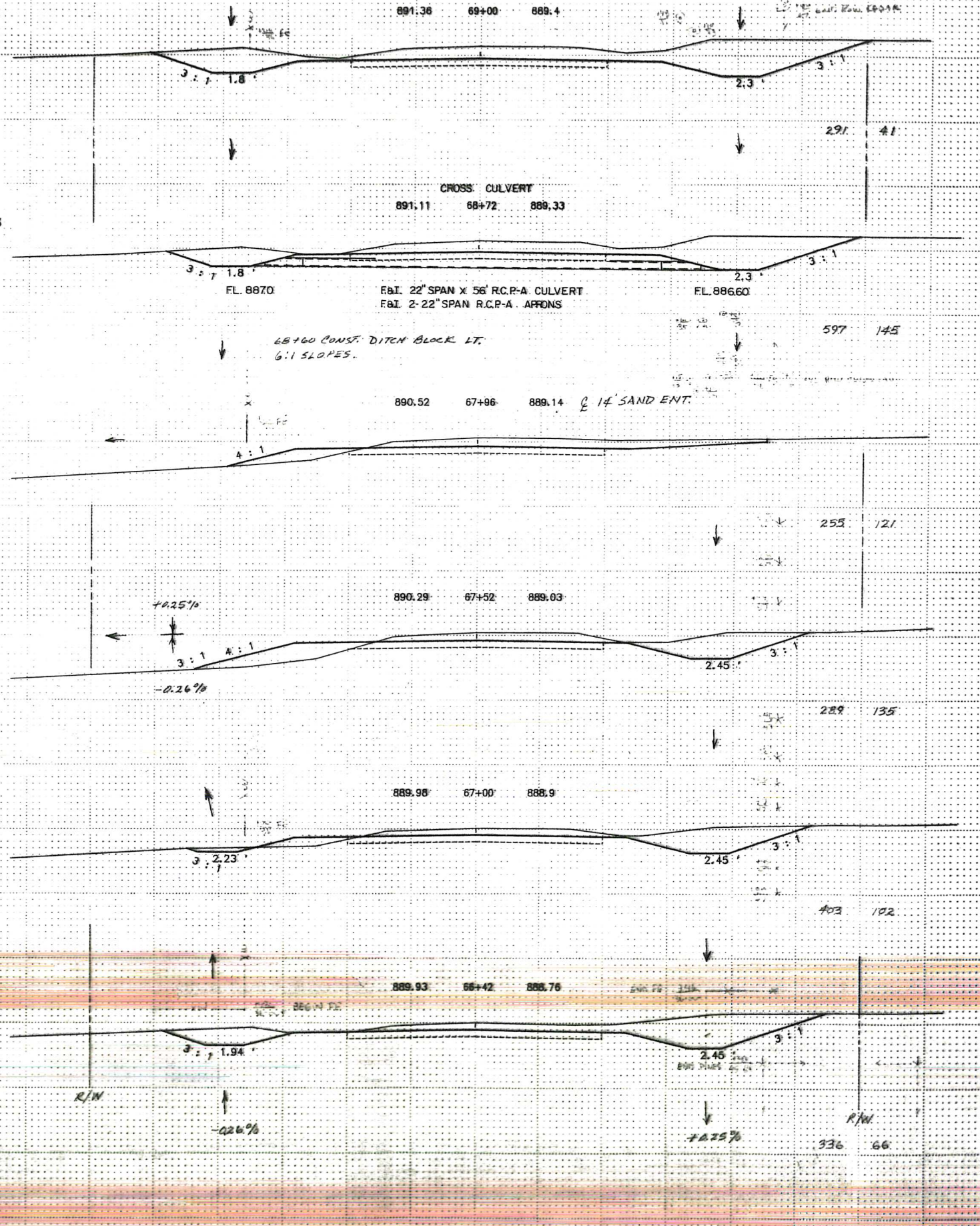
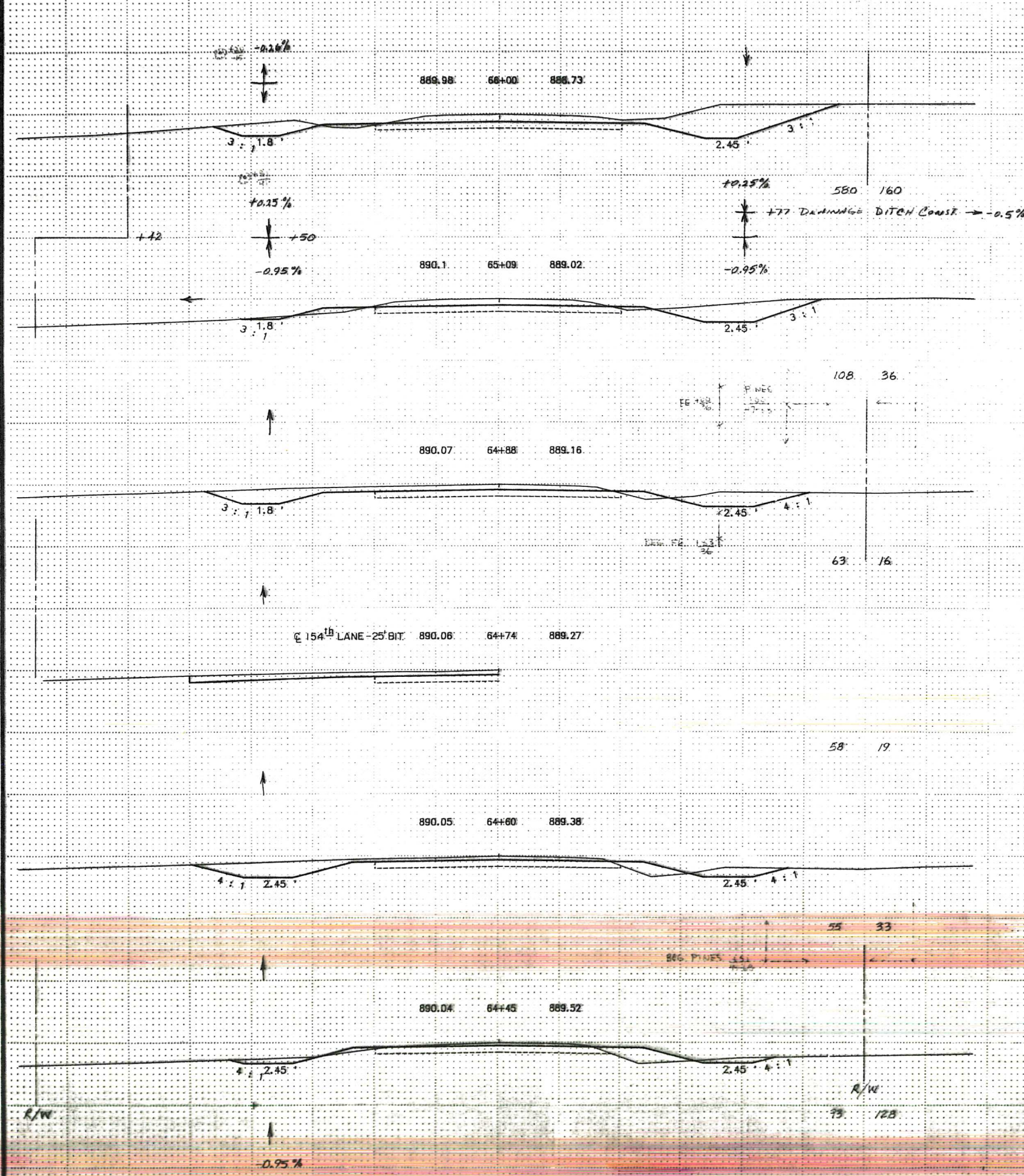


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 57+00 TO STA. 64+00

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

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

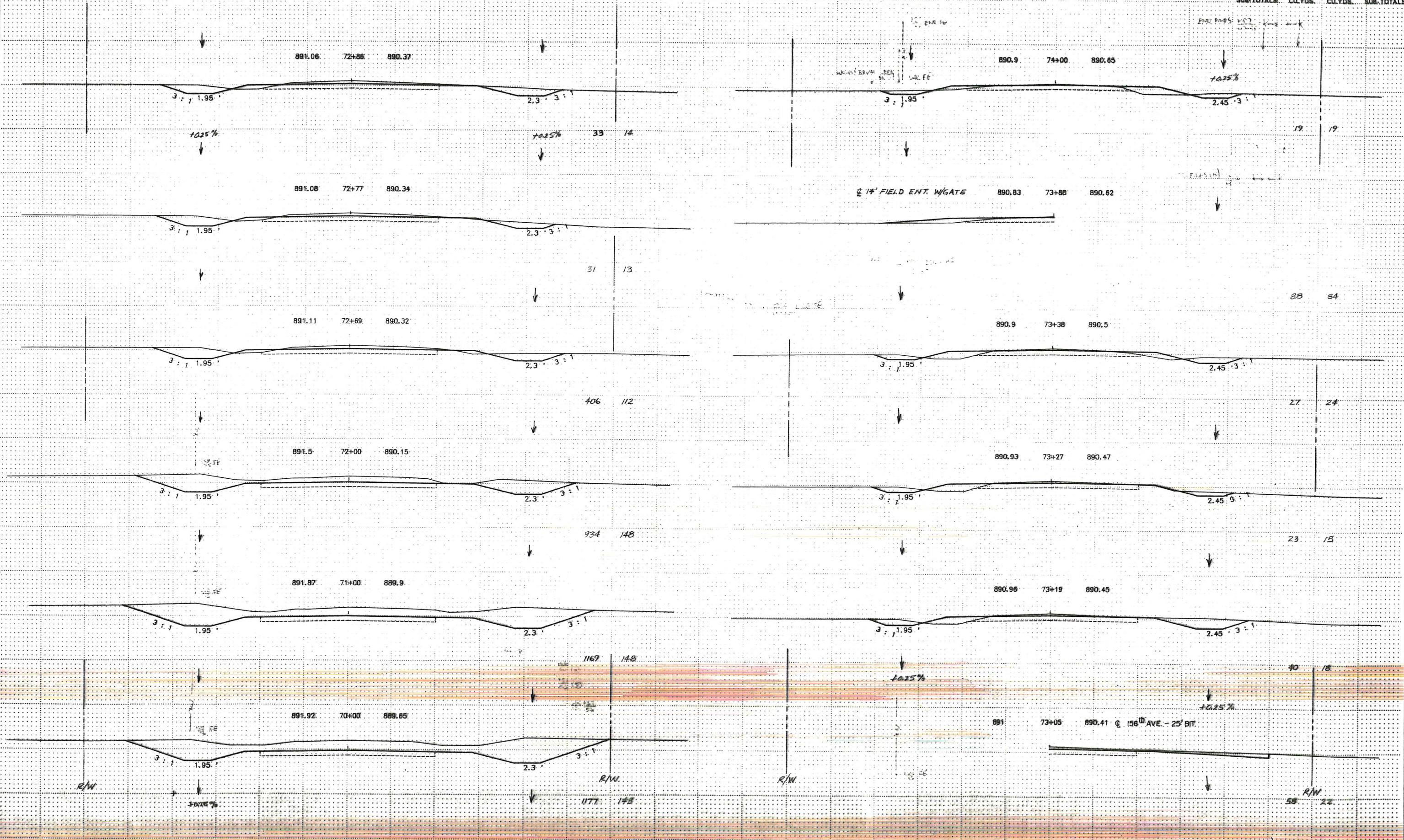


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 64+45 TO STA. 69+00

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

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

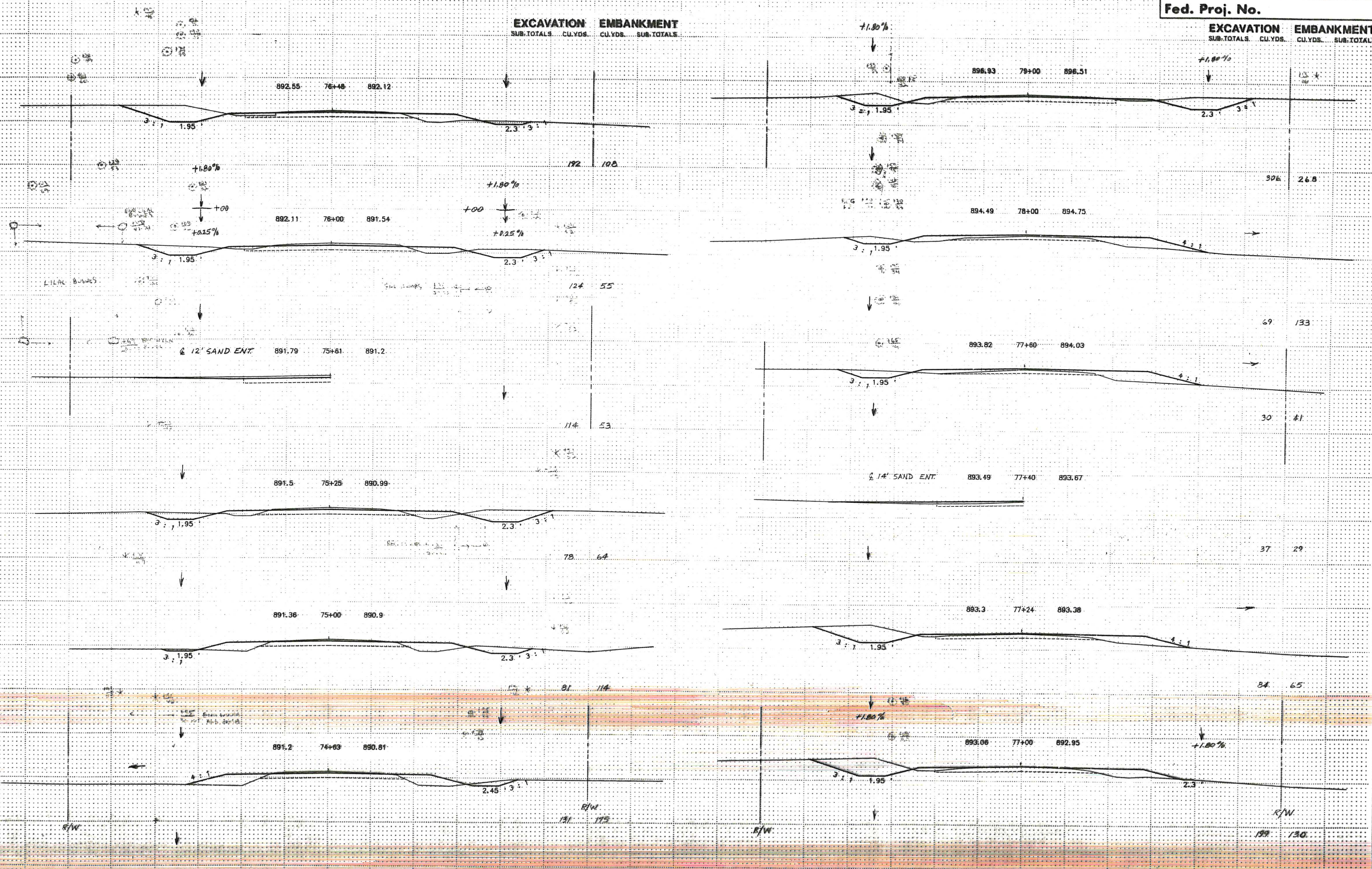


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 70+00 TO STA. 74+00

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

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

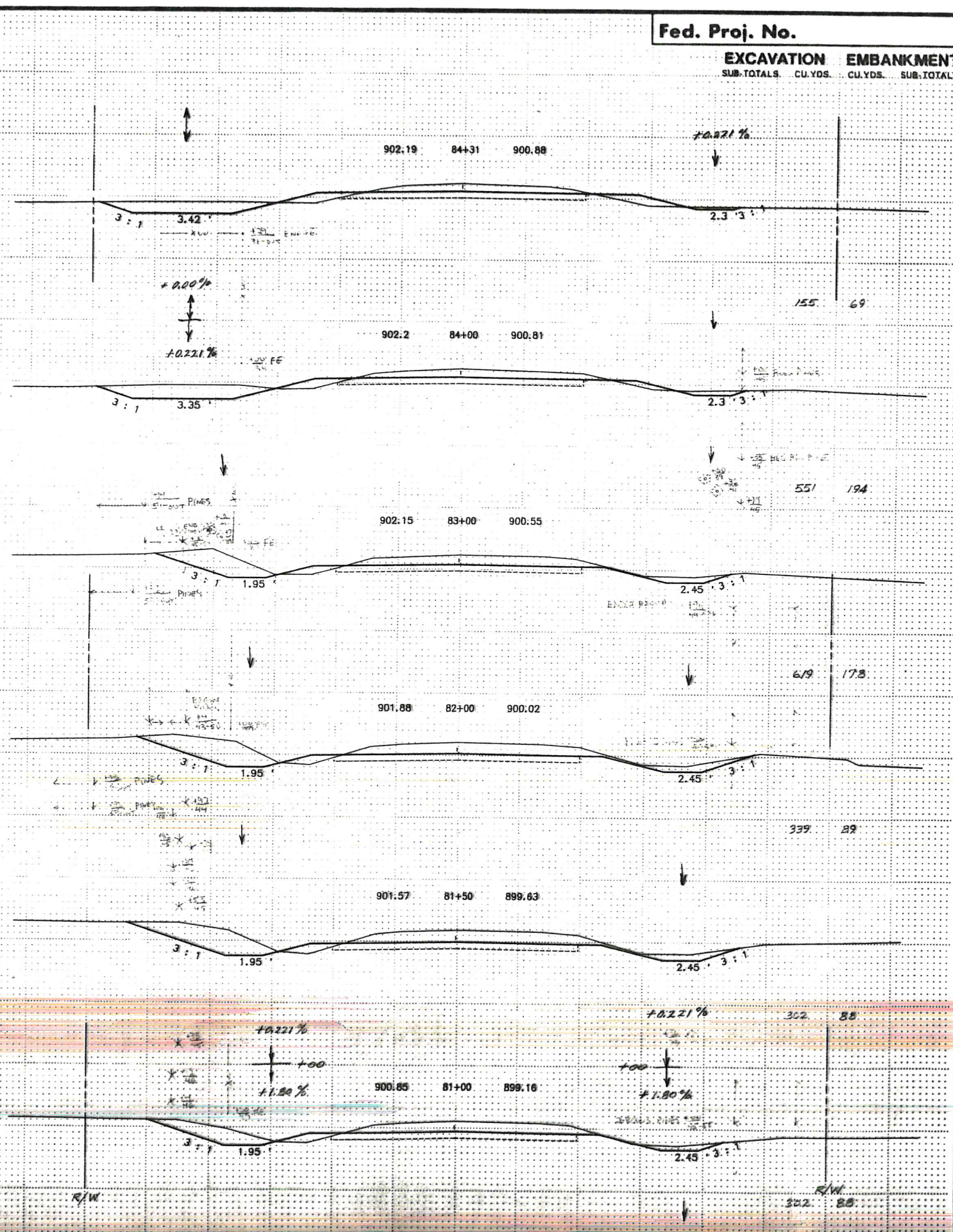
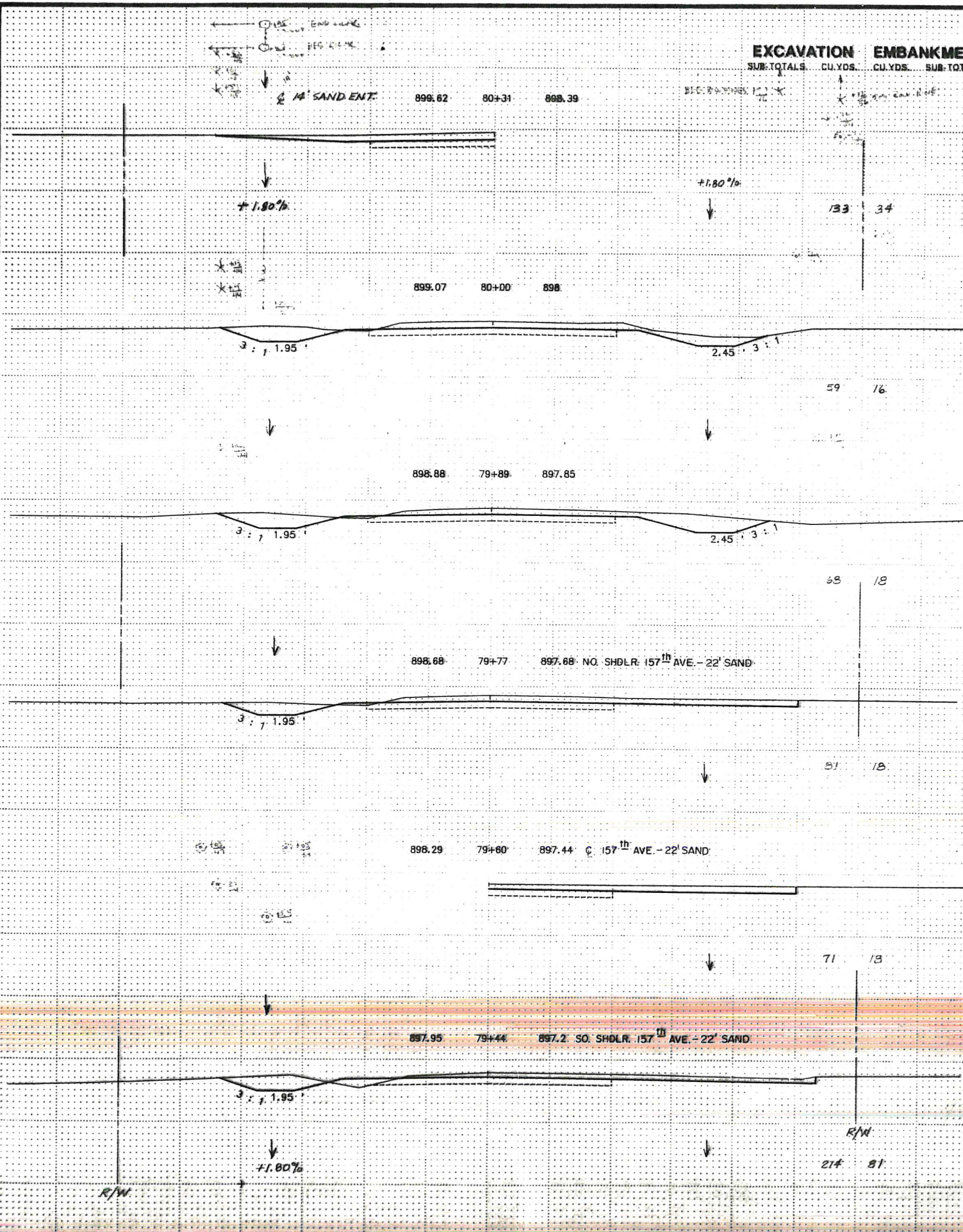


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 74+00 TO STA. 79+00

EXCAVATION		EMBANKMENT	
SUB-TOTALS	CU. YDS.	CU. YDS.	SUB-TOTALS
133	34	155	69
59	16	551	194
68	18	619	173
51	18	339	89
71	18	302	88
214	81	302	88

EXCAVATION		EMBANKMENT	
SUB-TOTALS	CU. YDS.	CU. YDS.	SUB-TOTALS
133	34	155	69
59	16	551	194
68	18	619	173
51	18	339	89
71	18	302	88
214	81	302	88

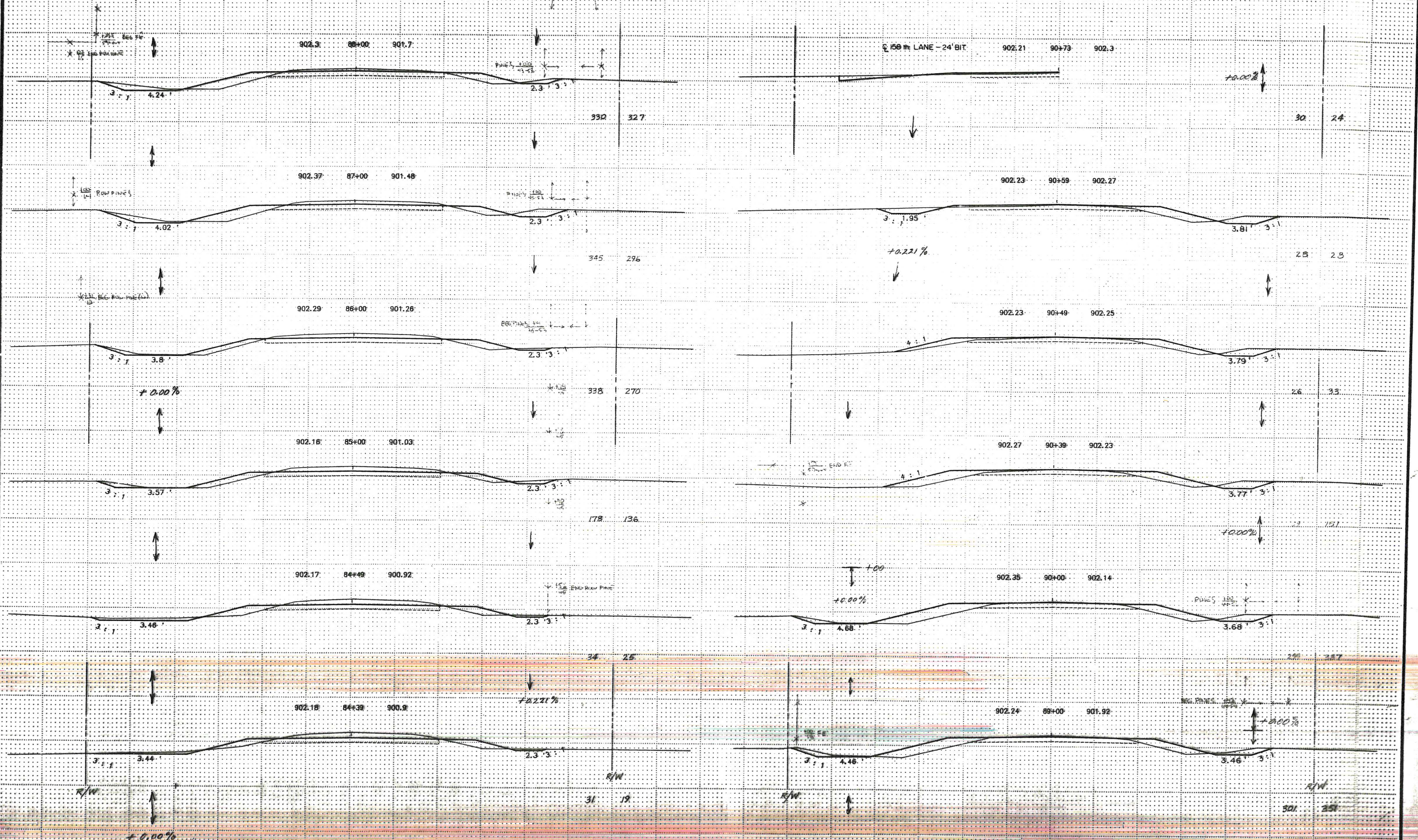


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 79+44 TO STA. 84+31

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

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

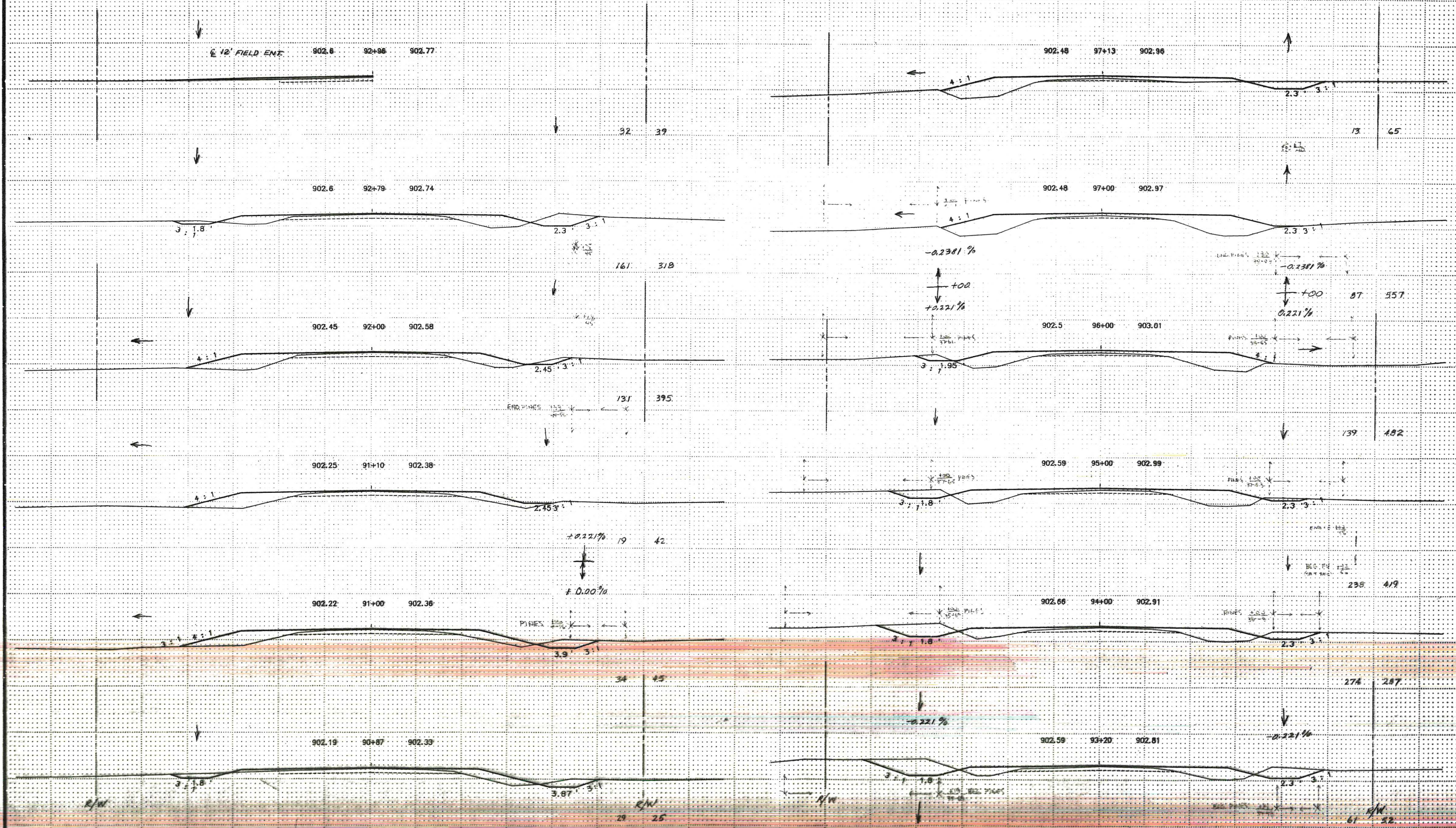


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 84+39 TO STA. 90+15

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

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



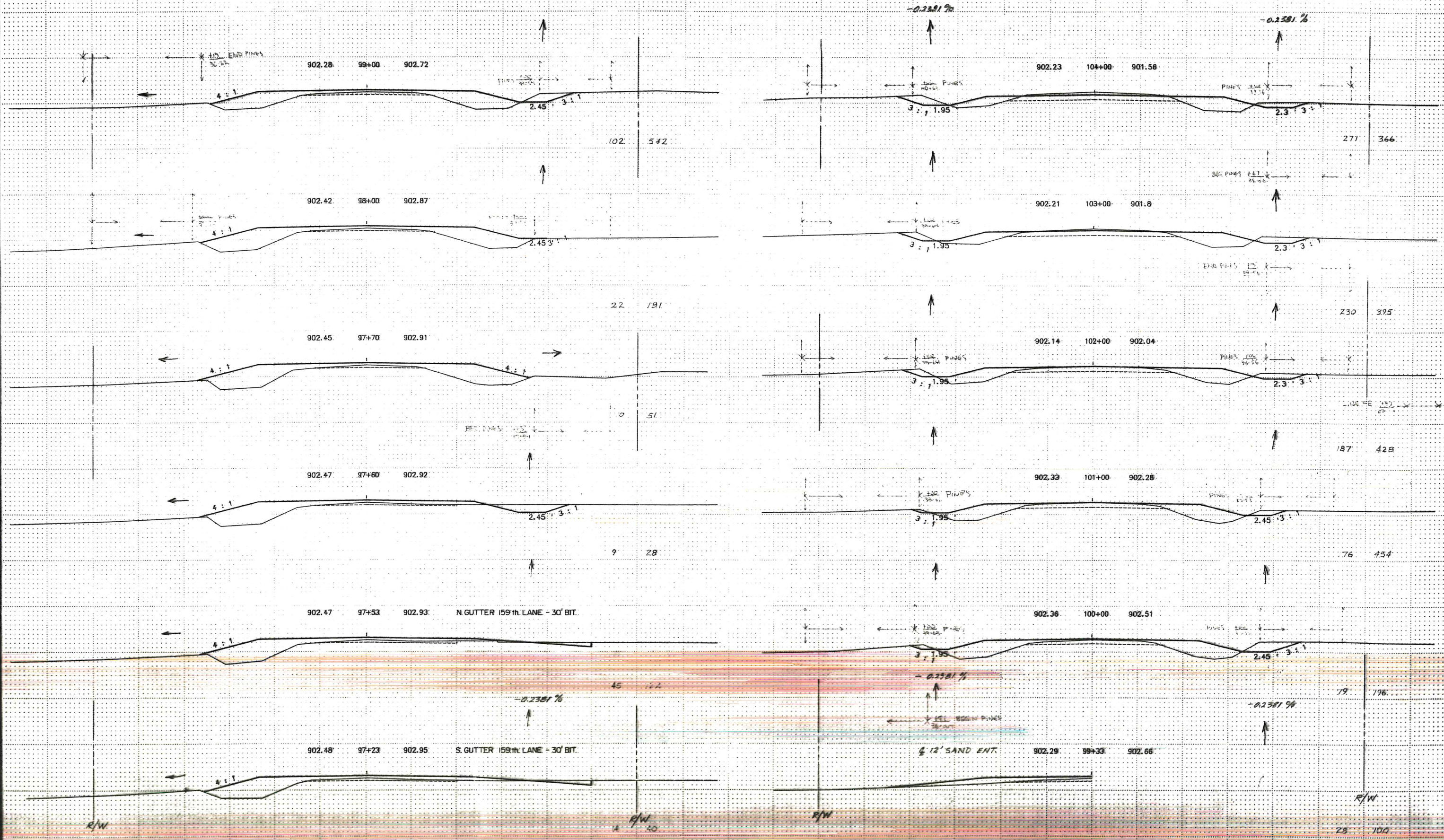
SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 90+87 TO STA. 97+13

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

Fed. Proj. No.

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



SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

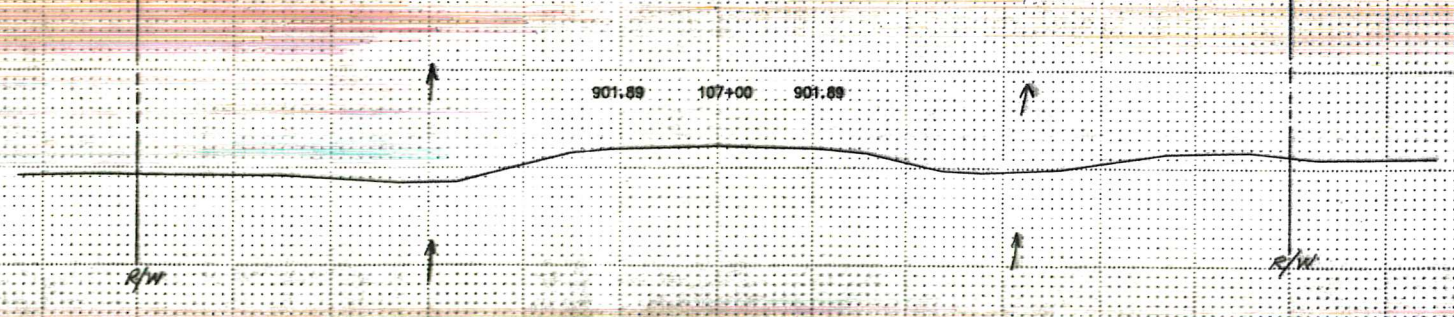
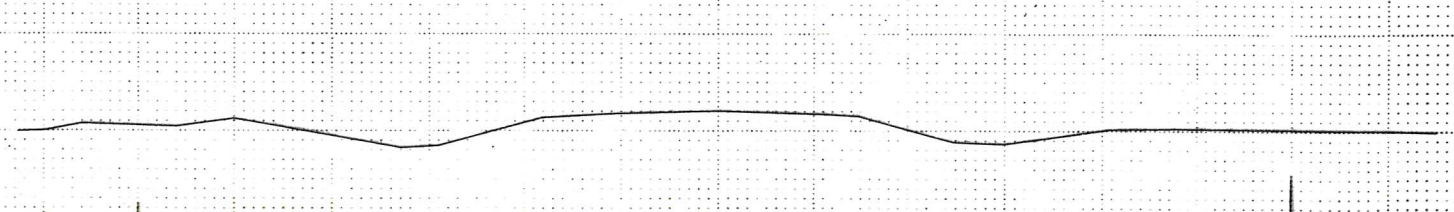
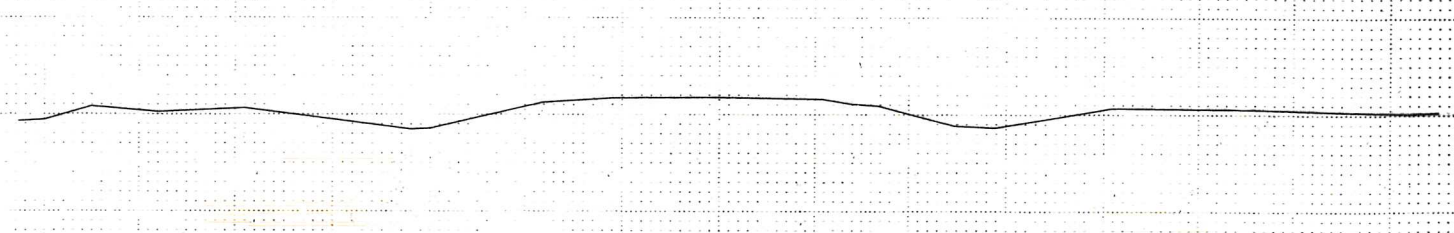
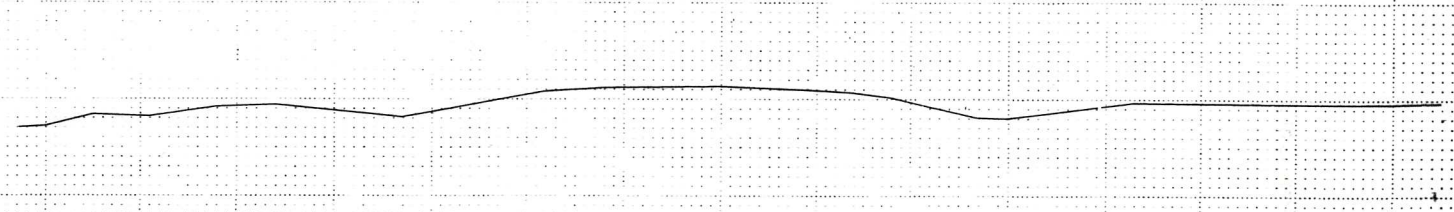
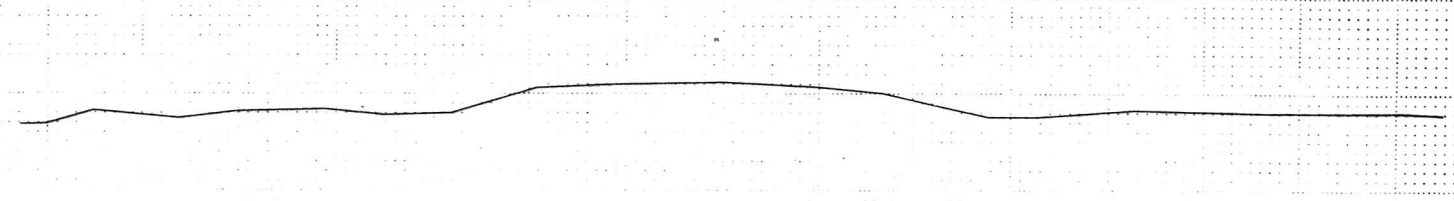
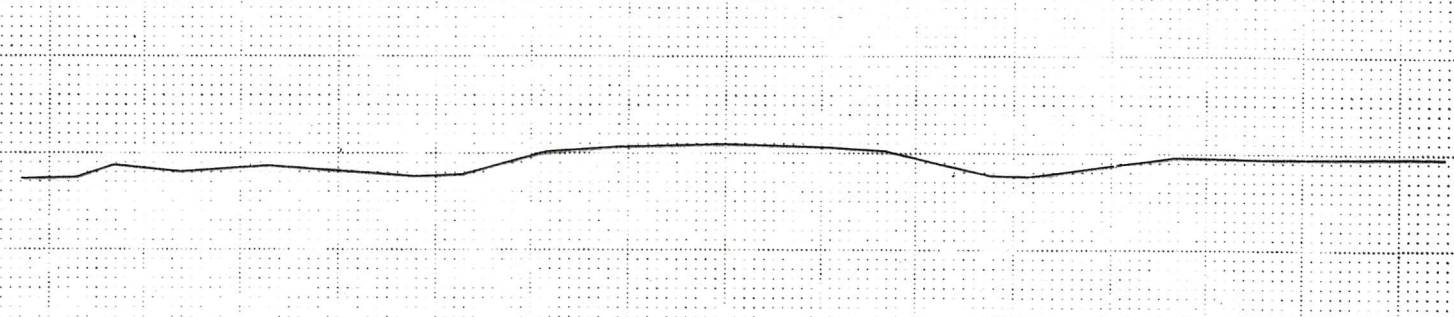
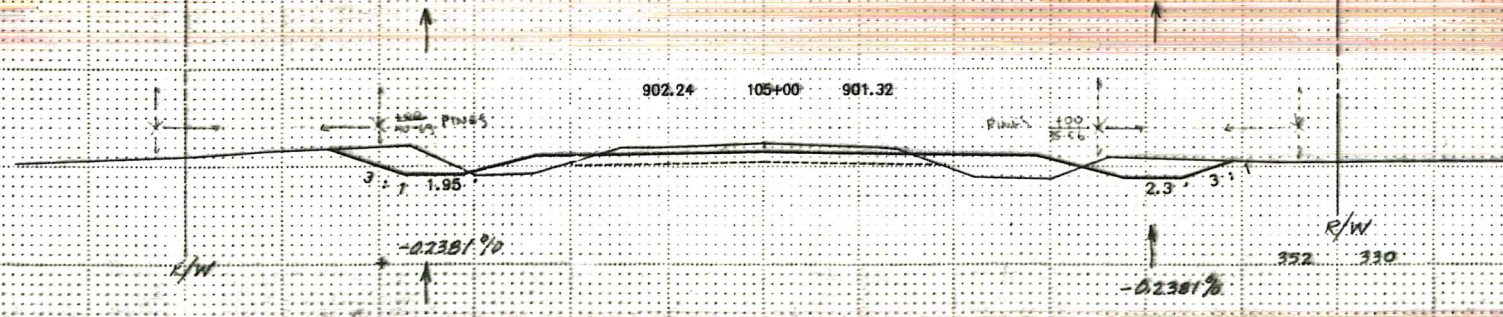
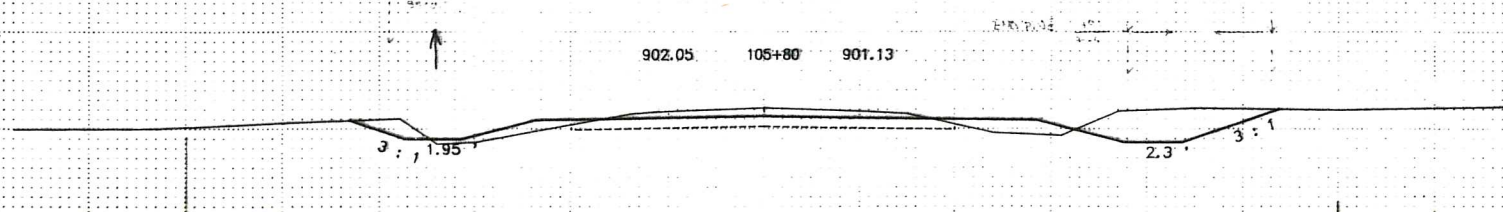
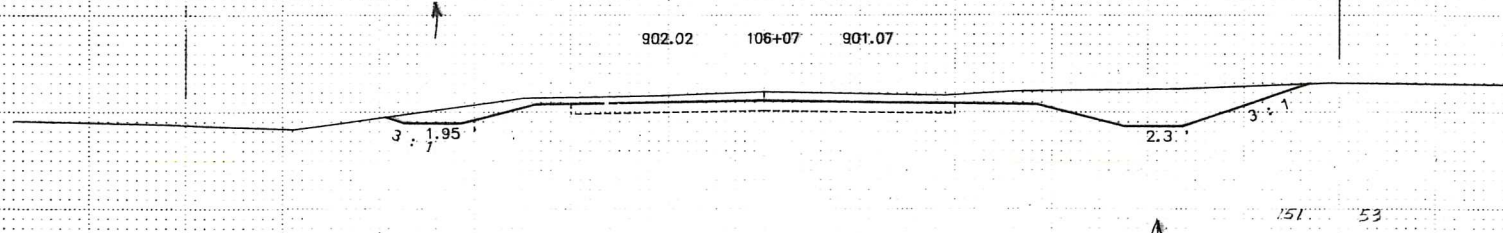
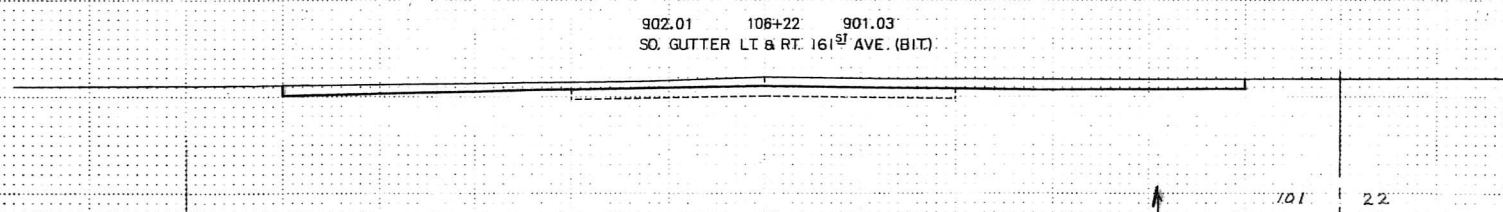
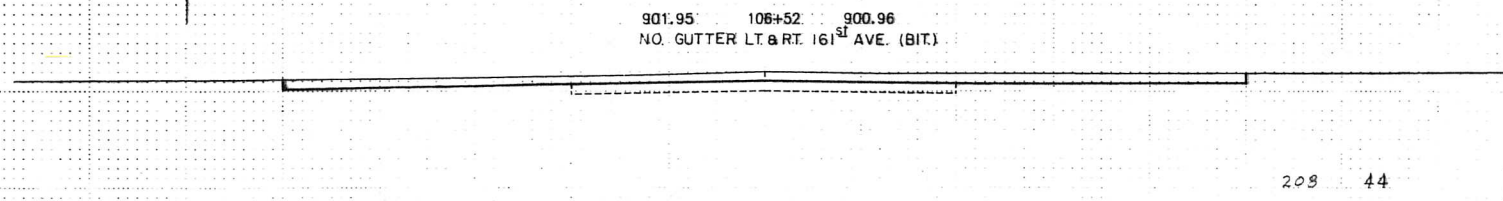
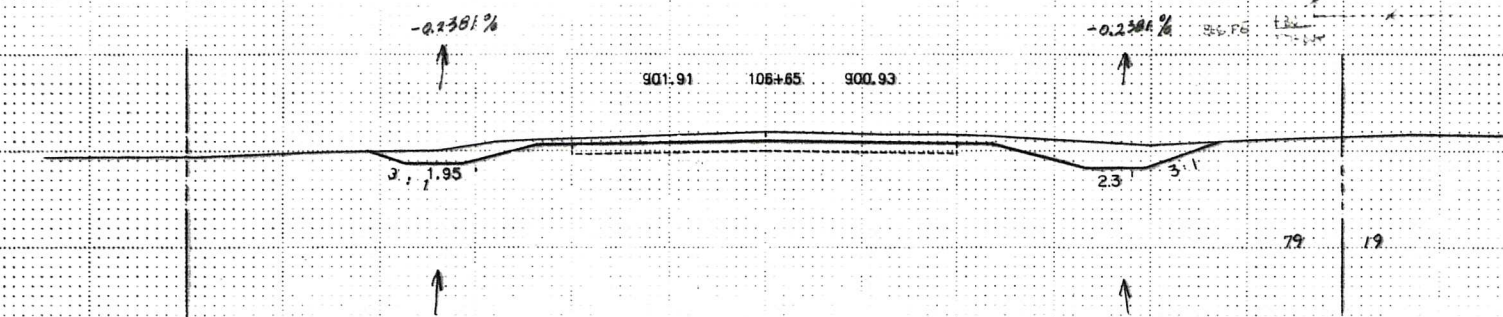
STA. 97+23 TO STA. 104+00

State Proj. No.

C.P. 87-04-83

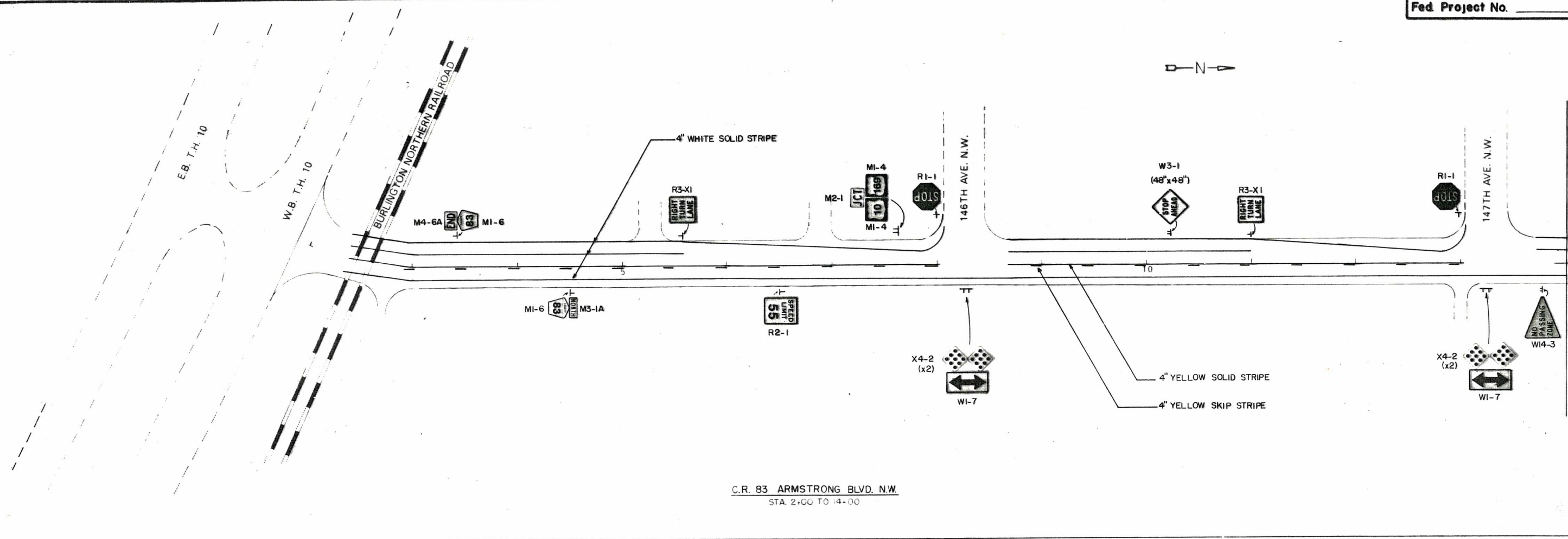
Sheet No. 34 of 35 Sheets

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

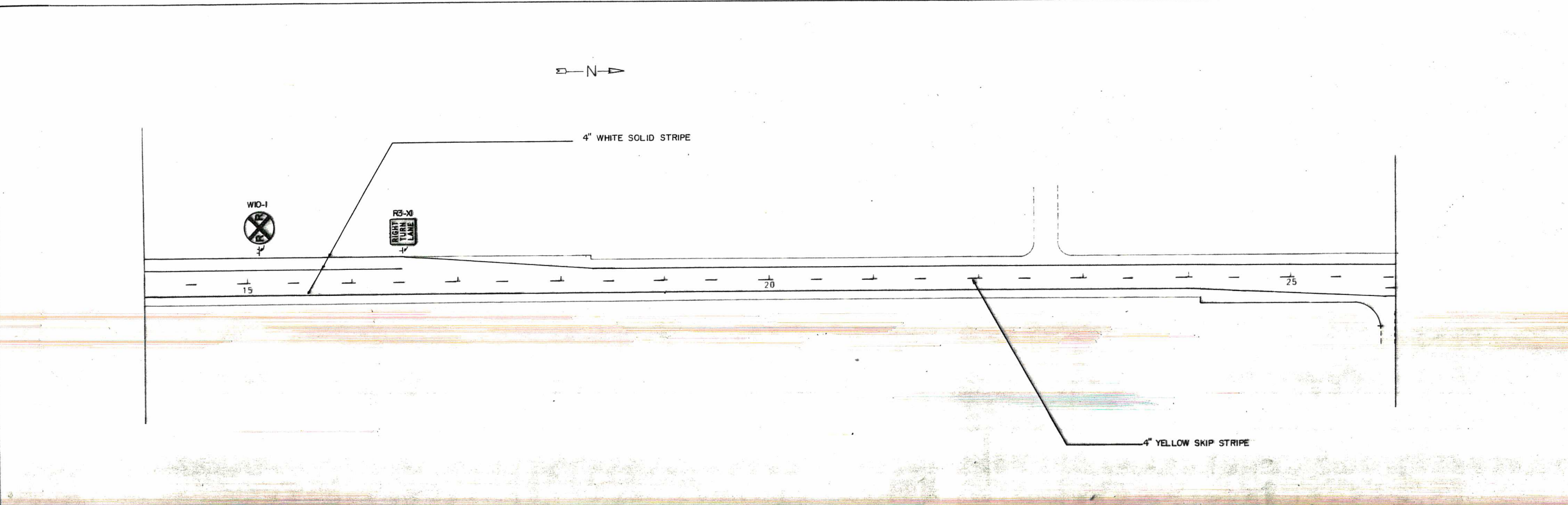


SUBCUT & TOPSOIL QUANTITIES ARE INCLUDED WITH REGULAR EXCAVATION & EMBANKMENT QUANTITIES SHOWN.

STA. 105+00 TO STA. 107+00



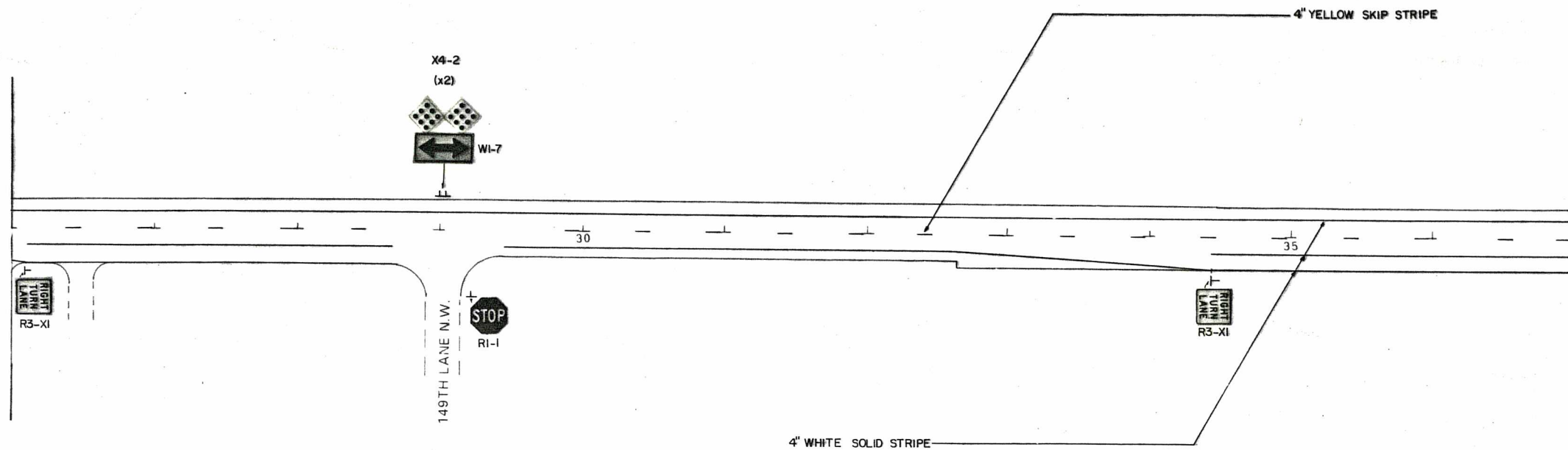
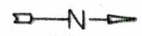
C.R. 83 ARMSTRONG BLVD. N.W.
STA. 2+00 TO 14+00



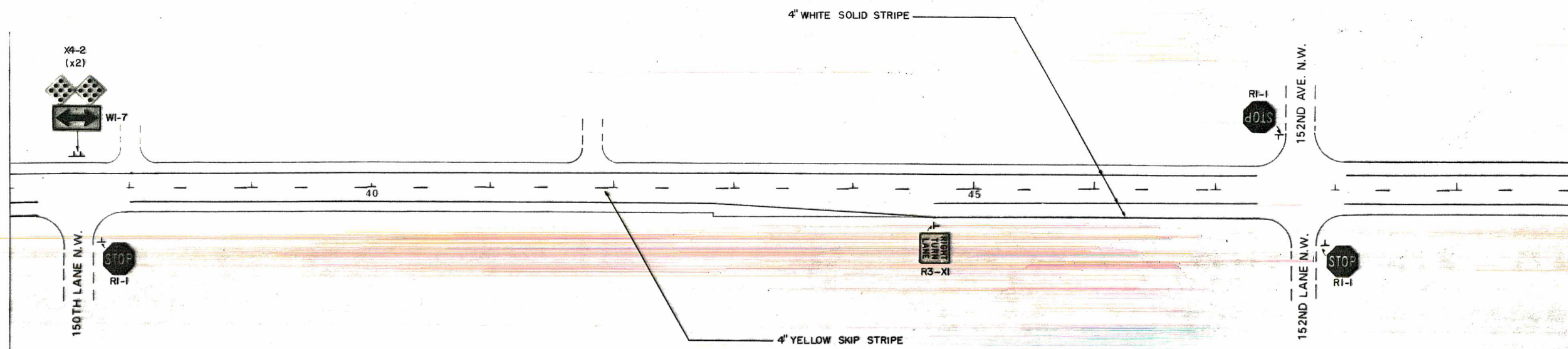
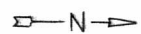
C.R. 83 ARMSTRONG BLVD. N.W.
STA. 14+00 TO 26+00

REVISIONS			
DATE	BY	DATE	BY

S.A.P. _____ S.P. _____ C.P. 87-04-83



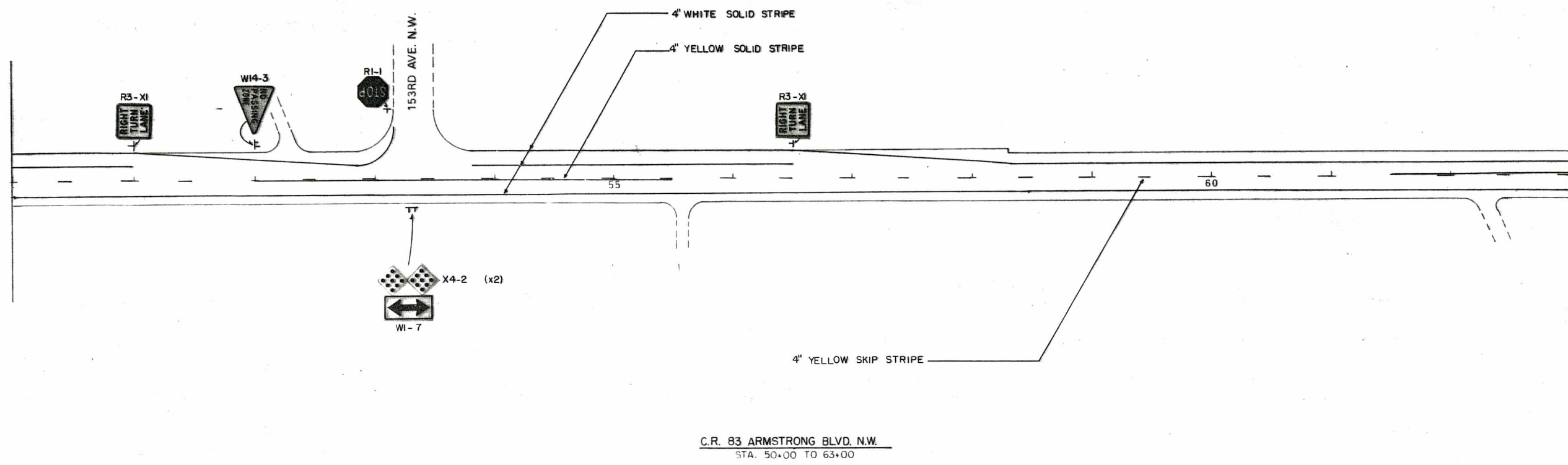
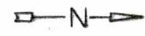
C.R. 83 ARMSTRONG BLVD. N.W.
STA. 26+00 TO 37+00



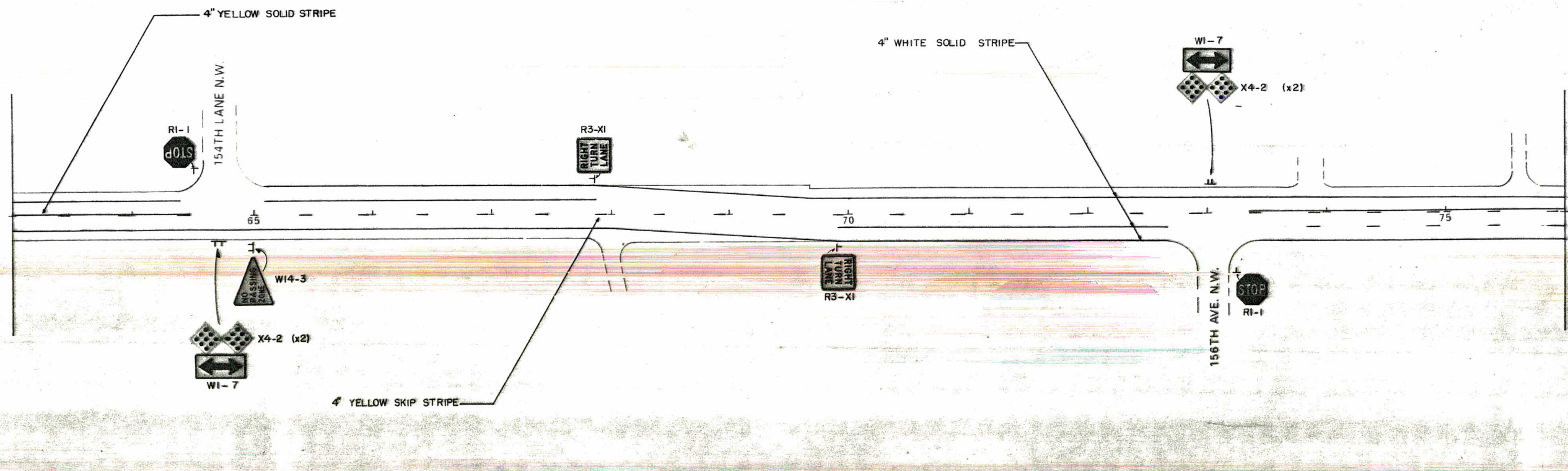
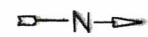
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STA. 37+00 TO 50+00

REV. SHEETS	
DATE	BY

S.A.P. S.P. C.P. 87-04-83



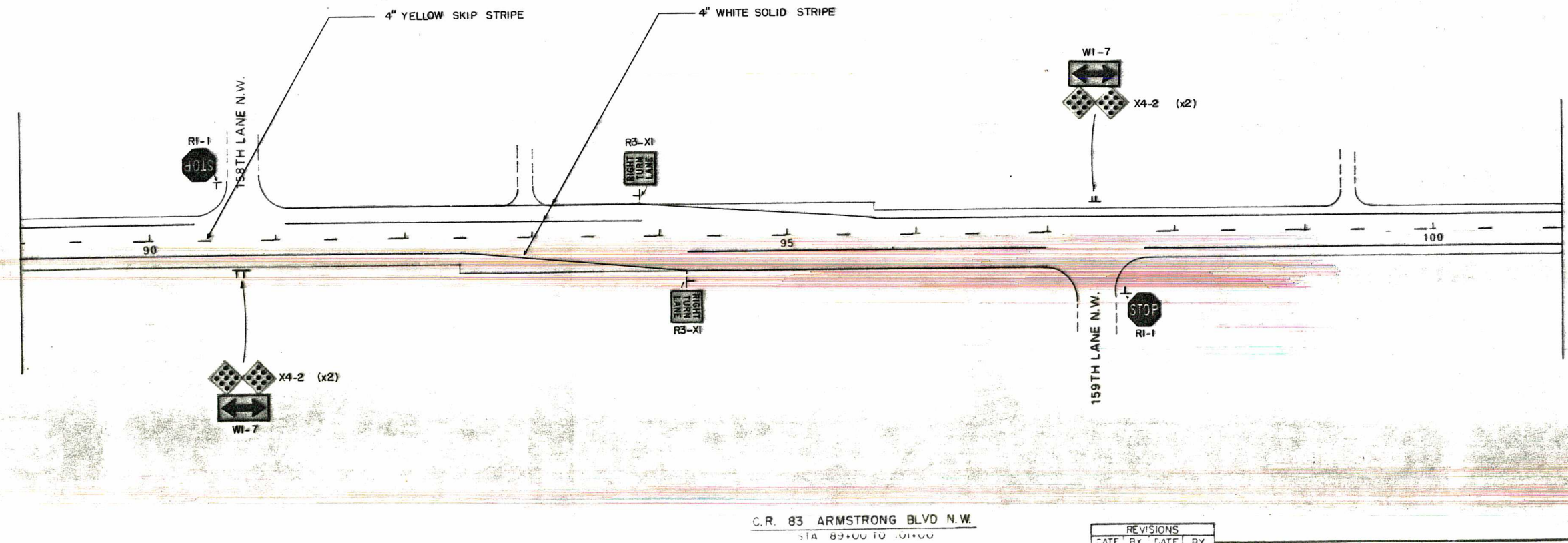
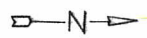
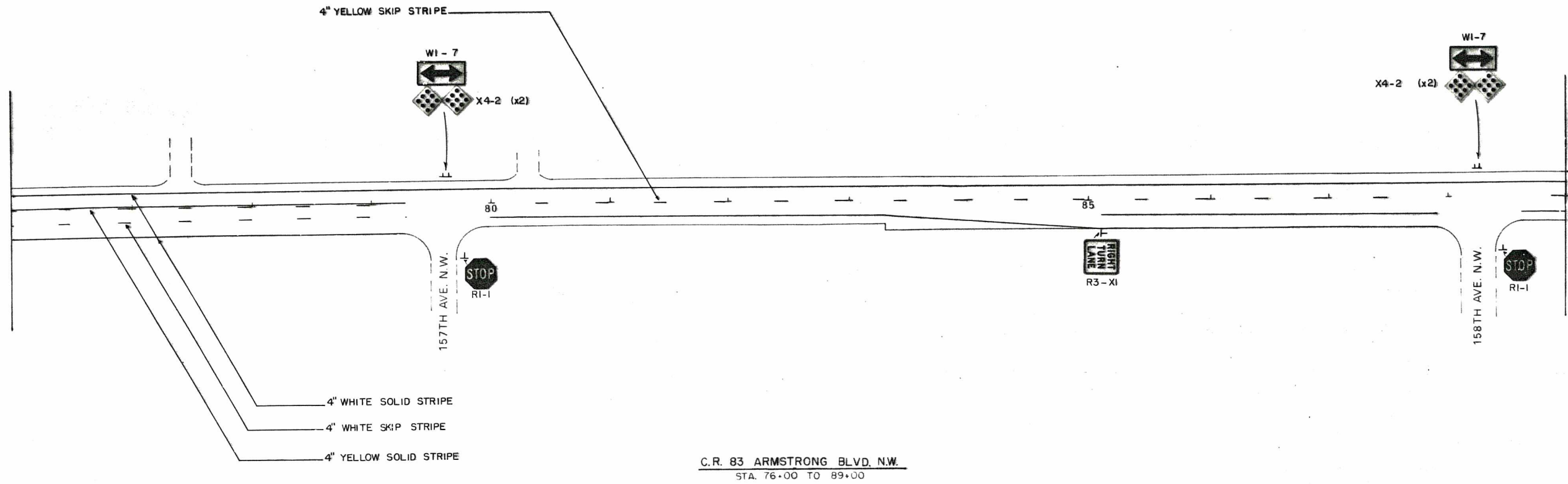
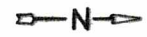
C.R. 83 ARMSTRONG BLVD. N.W.
STA. 50+00 TO 63+00



C.R. 83 ARMSTRONG BLVD. N.W.
STA. 63+00 TO 76+00

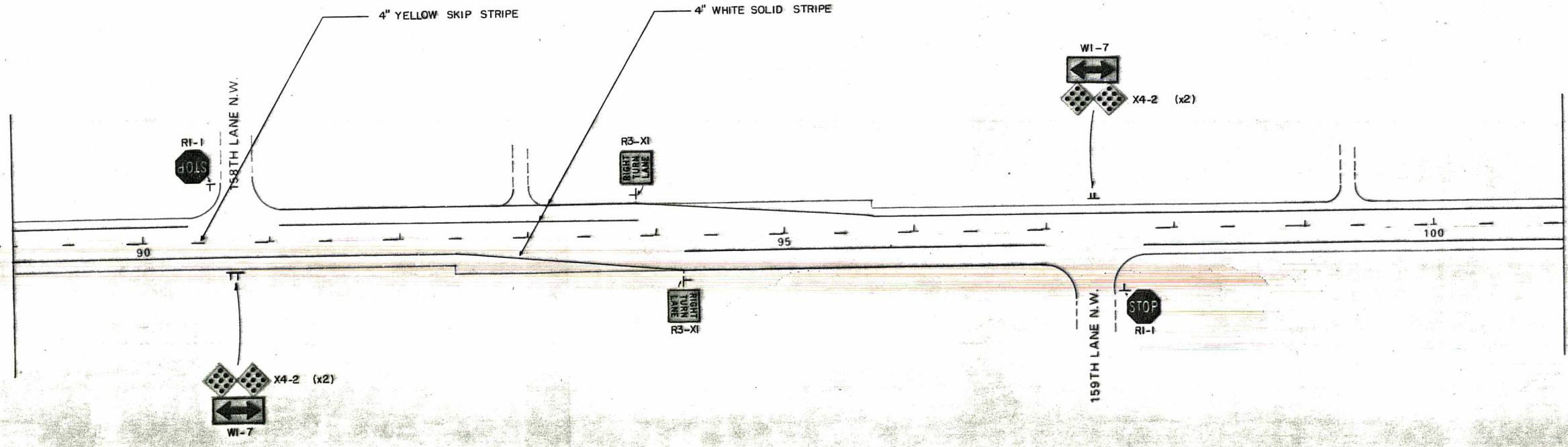
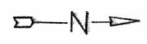
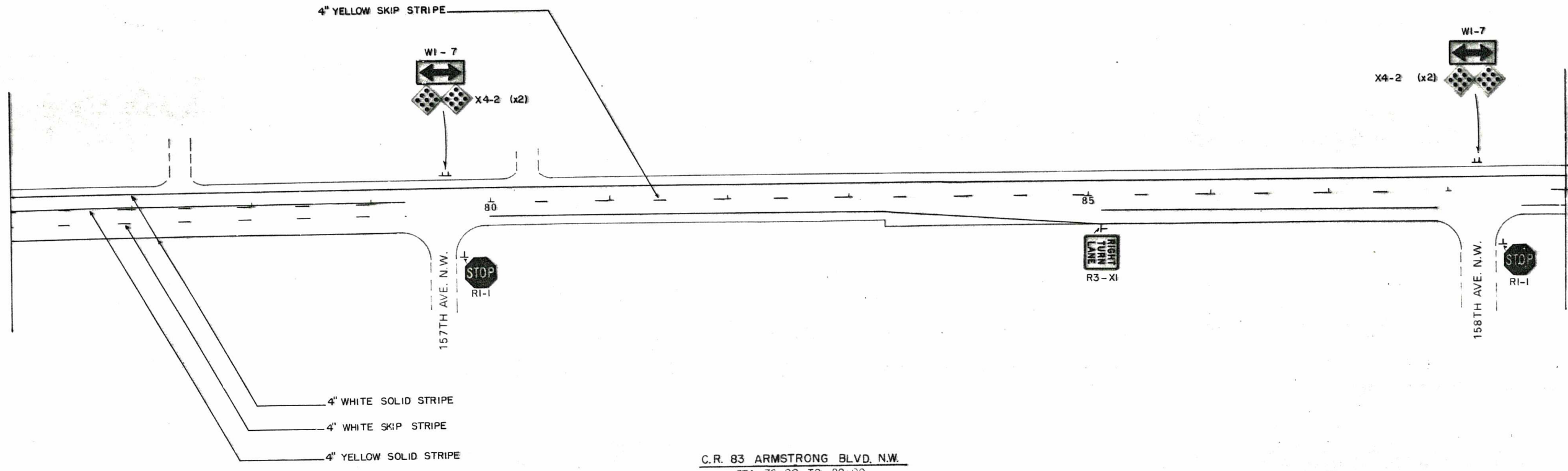
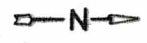
REVISIONS			
DATE	BY	DATE	BY

S.A.P. _____ S.P. _____ C.P. 87-04-83



REVISIONS			
DATE	BY	DATE	BY

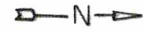
S.A.P. SP C.P 87-04-83



C.R. 83 ARMSTRONG BLVD N.W.
STA. 89+00 TO 101+00

REVISIONS			
DATE	BY	DATE	BY

S.A.P. SP C.P. 87-04-83



4" WHITE SOLID STRIPE



161ST AVE. N.W.

105



4" YELLOW SKIP STRIPE

C.R. 83 ARMSTRONG BLVD. N.W.
STA 101+00 TO 106+00

REVISIONS			
DATE	BY	DATE	BY

S.A.P

S.P

C.P 87-04-83

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