R:\xsc\EAR_U4009L.log

PROJ. REFERENCE NO.	SHEET NO.
U-4009	X-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CROSS-SECTION SUMMARY

Quantities are approximate only. The Resident Engineer will recross-section the work accurately when the project is staked

NOTE: EMBANKMENT COLUMN INCLUDES BACKFILL FOR UNDERCUT

Station L	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
87+50.00	0	0
88+00.00	33	0
88+50.00	35	0
89+00.00	36	0
89+50.00	37	0
90+00.00	38	0
90+50.00	39	0
91+00.00	40	0
91+50.00	39	0
92+00.00	41	0
92+50.00	40	0
93+00.00	37	0
93+50.00	38	0
94+00.00	37	0
94+50.00	39	0
95+00.00	45	0
95+50.00	47	0

Station Y2	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
14+50.00	14	0
15+00.00	26	1
15+50.00	25	4
16+00.00	32	3
16+50.00	43	2
17+00.00	56	1
17+50.00	56	3
18+00.00	41	10
18+50.00	23	8
19+00.00	15	0
19+50.00	21	0
20+00.00	24	7
20+50.00	24	13
21+00.00	25	9
21+50.00	25	8
22+00.00	16	14
22+50.00	11	10
23+00.00	8	11
23+50.00	25	11

Station Y2	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
10+50.00	0	0
11+00.00	39	0
11+50.00	58	0
12+00.00	66	0
12+50.00	41	0
13+00.00	12	0
13+50.00	26	0
14+00.00	54	0
14+50.00	68	0

Station Y2	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
15+00.00	65	0
15+50.00	32	0
16+00.00	3	0
16+50.00	7	3
17+00.00	15	3
17+50.00	11	1
18+00.00	1	2
18+50.00	1	3
19+00.00	1	1
19+50.00	5	0
20+00.00	11	0
20+50.00	6	0
21+00.00	3	0
21+50.00	6	0
22+00.00	3	0
22+50.00	2	0
23+00.00	5	5
23+50.00	25	7

Station Nsr1	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)
10+50.00	0	0	0
11+00.00	71	27	0
11+50.00	18	73	0
12+00.00	5	128	0
12+50.00	4	187	0
13+00.00	2	377	74
13+50.00	0	593	161
14+00.00	0	664	143
14+50.00	0	543	123
15+00.00	0	240	67
15+50.00	19	41	0
16+00.00	22	26	0
16+50.00	18	28	0
17+00.00	28	26	0

Station Nsr2	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)
10+50.00	0	0	0
11+00.00	79	16	0
11+50.00	56	27	0
12+00.00	53	24	0
12+50.00	34	56	0
13+00.00	21	127	49
13+50.00	33	149	94
14+00.00	24	150	87
14+50.00	9	168	91
15+00.00	9	152	86
15+50.00	12	134	81
16+00.00	10	94	45
16+50.00	6	67	0

Station Nsr2	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)
17+00.00	0	77	0
17+50.00	2	90	0
18+00.00	3	102	0
18+50.00	48	48	0

8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-2

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

275

270

272.987

88+50.00

275

270

272.317

88+00.00

270

271.904

87+50.00

270

271.614

87+00.00

270

270.877

86+50.00

-L-

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

20-FEB-2004 07:06
R:\xsec\U4009l.XPL
ofarr
AT RD206394

RD206394 Friday February 20 2004 l-x2 ofarr rd-09oce34

8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-3

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

280
275
270

274.414

90+00.00

280
275
270

274.005

89+50.00

280
275
270

273.537

89+00.00

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

20-FEB-2004 07:06
R:\xsc\U4009LX.PL
ofarr AT RD206394

RD206394 Friday February 20 2004 l-x3 ofarr rd-09oce34

8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-4

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

280
275
270

274.538

92+00.00

280
275

274.502

91+50.00

280
275

274.535

91+00.00

280
275

274.661

90+50.00

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

20-FEB-2004 07:06
R:\xsc\U4009L.XPL
ofarr AT RD206394

RD206394 Friday February 20 2004 l-x4 ofarr rd-09oce34

8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-5

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

275
270
272.099
95+00.00
275
270
272.617
94+50.00
275
275
273.163
94+00.00
275
275
273.571
93+50.00
275
270
274.270
280
275
274.378
92+50.00

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

20-FEB-2004 07:06
R:\xsc\U4009LXPL
ofarr AT RD206394

RD206394 Friday February 20 2004 l-x5 ofarr rd-09oce34

8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-6

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

270

271.722

275

96+50.00

270

265

272.323

96+00.00

275

270

272.177

95+50.00

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

20-FEB-2004 07:06
R:\sc\U4009l.XPL
ofarr
A1 RD206394

8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-7

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

260
255

257.446
11+55.00

2:1

260
255

257.522
11+00.00

2:1

260
255

257.734
10+50.00

265
260

257.841
10+00.00

Y2

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

24-FEB-2004 12:30
E:\xsc\U4009Y2.XPL
TCovington
AT RD196588

8/23/95

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-8

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

260

258.315
13+50.00

2:1

260

260

257.778
13+00.00

2:1

260

260

257.379
12+50.00

2:1

260

255

255

260

257.359
12+00.00

2:1

260

255

255

Y2

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

24-FEB-2004 12:30
R:\xsc\U4009Y2.XPL
TCovington AT RD196588

8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-9

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

270
265
260
255
250

4:1 0.0200 0.0200 0.0200 2:1

260.923
15+50.00

4:1 0.0200 0.0200 0.0200 2:1

260.229
15+00.00

260

2:1 0.0200 0.0200 0.0200 2:1

259.514
14+50.00

260

2:1

258.897
14+00.00

Y2

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

24-FEB-2004 12:28
R:\xsc\U4009Y2.XPL
TCovington A1 RD196588

8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-10

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

265

4%

0.0200

266.06
18+50.00

0.0200

4%

265

265

13.8%

0.0200

265.51
18+00.00

0.0200

4%

265

265

10.8%

0.0200

264.282
17+50.00

0.0200

4%

265

265

5%

0.0200

263.342
17+00.00

0.0200

4%

265

265

5.27%

2%

0.0200

262.44
16+50.00

0.0200

4.4%

265

260

270

265

7%

2%

0.0200

261.646
16+00.00

0.0200

4%

260

255

250

Y2

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

24-FEB-2004 12:28
R:\sc\U4009\2\XPL
TCovington AT RD196588

RD196588 Tuesday February 24 2004 -y2-x10 TCovington rd-09oce34

8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-11

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

270 4.8:1 0.0200 0.0200 0.0200 2:1 270
270.28
21+50.00

270 0.0264 4:1 0.0200 0.0200 0.0200 2:1 270
269.809
21+00.00

270 9.869:1 0.0200 0.0200 0.0200 4:1 270
269.082
20+50.00

270 4.8:1 0.0200 0.0200 0.0200 2:1 270
268.444
20+00.00

270 4:1 0.0200 0.0200 0.0200 2:1 270
267.778
19+50.00

270 265 4:1 0.0200 0.0200 4:1 270 265
266.973
19+00.00

Y2

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

24-FEB-2004 12:28
R:\xs\U4009\Y2.XPL
TCovington AT RD196588

RD196588 Tuesday February 24 2004 -y2-x11 TCovington rd-09oce34

8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-12

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

270

271.522
24+00.00

0.0200 0.0200 0.0200

271.372
23+50.00

0.0200 0.0200 0.0200

271.215
23+00.00

0.0200 0.0200 0.0200

270.945
22+50.00

0.0200 0.0200 0.0200

270.609
22+00.00

Y2

24-FEB-2004 12:27
R:\SUP\U4009\Y2.XPL
TCovington AT RD196588

RD196588 Tuesday February 24 2004 -y2-x12 TCovington rd-09oce34

8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-13

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

265
260

4:1 0.0200 0.0200 6:1

258.606
12+00.00

265
260

6:1 0.0200 0.0200 4.85:1

259.349
11+50.00

265
260

0.0990 0.0200 0.0200 0.0320

261.003
11+00.00

265
260

0.0263 0.0200 0.0200 0.0579

261.836
10+50.00

260

261.410
10+00.00

NSR1

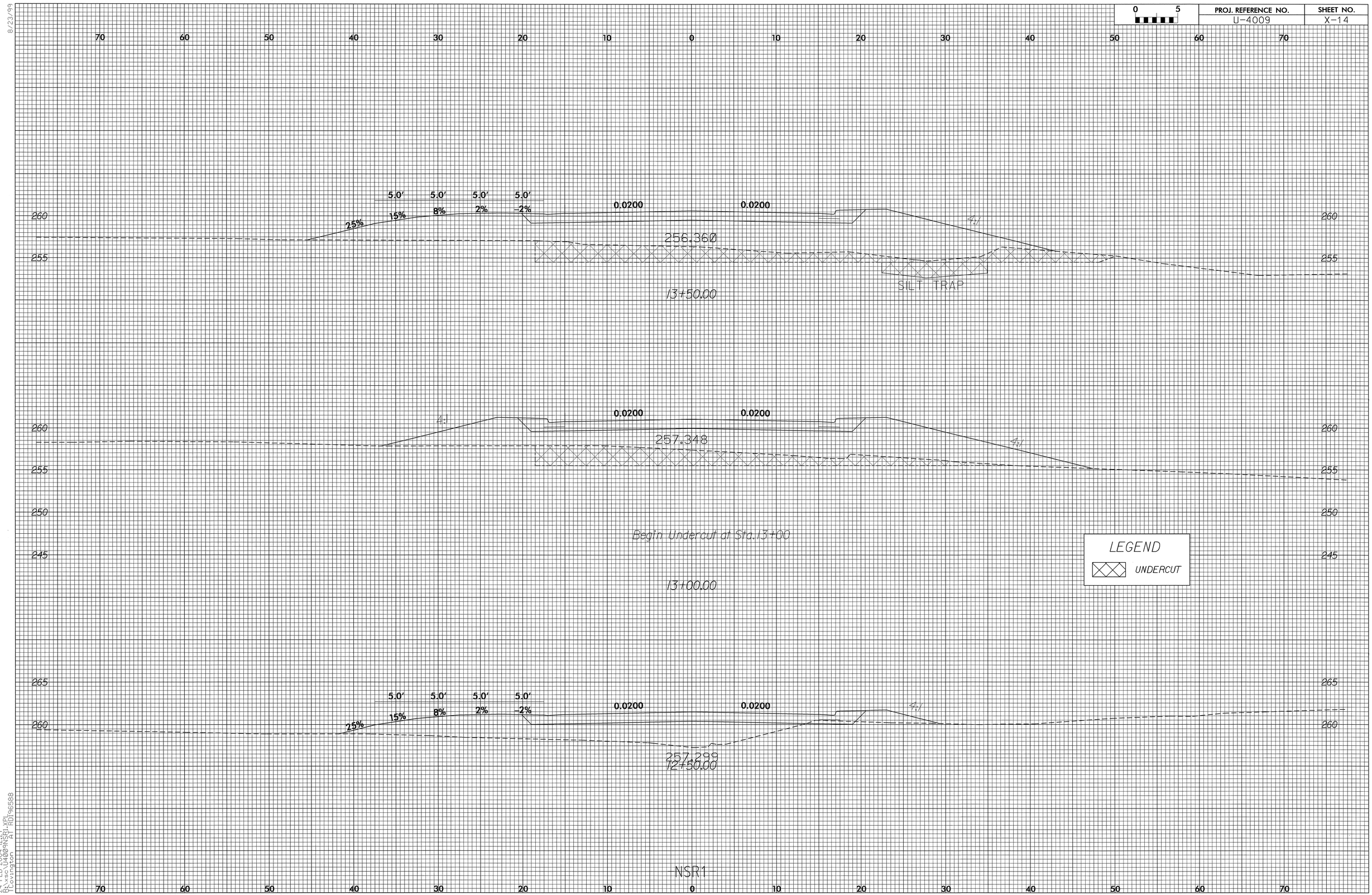
70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

24-FEB-2004 12:27
R:\xsc\U4009NSR1.XPT
TCovington AT RD196588

RD196588 Tuesday February 24 2004 -nsr1-x13 TCovington rd-09oce34

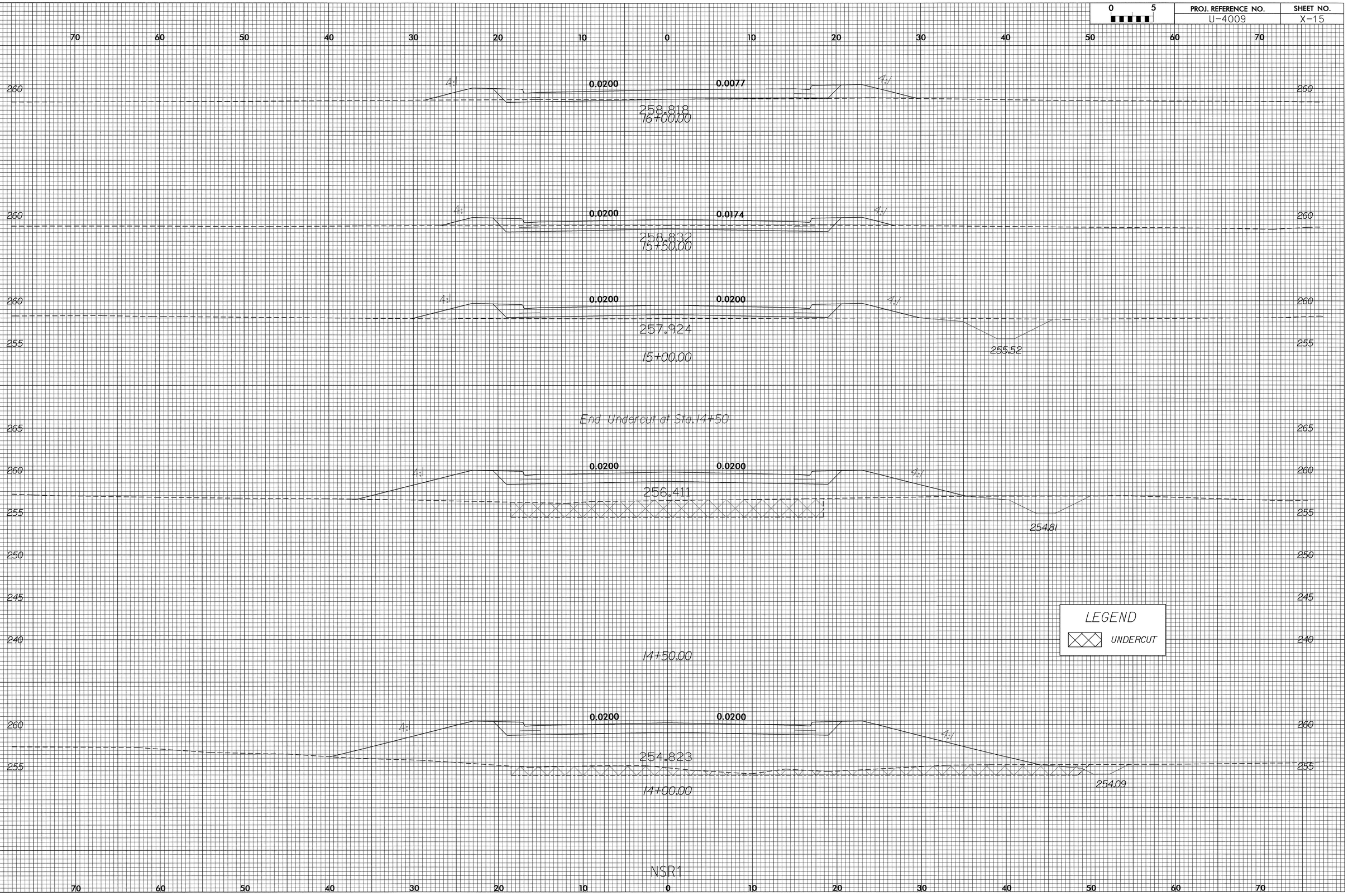
8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-14



24-FEB-2004 12:27
R:\vss\U4009NSR1.XPL
TCovington AT RD196588

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-15



8/23/99

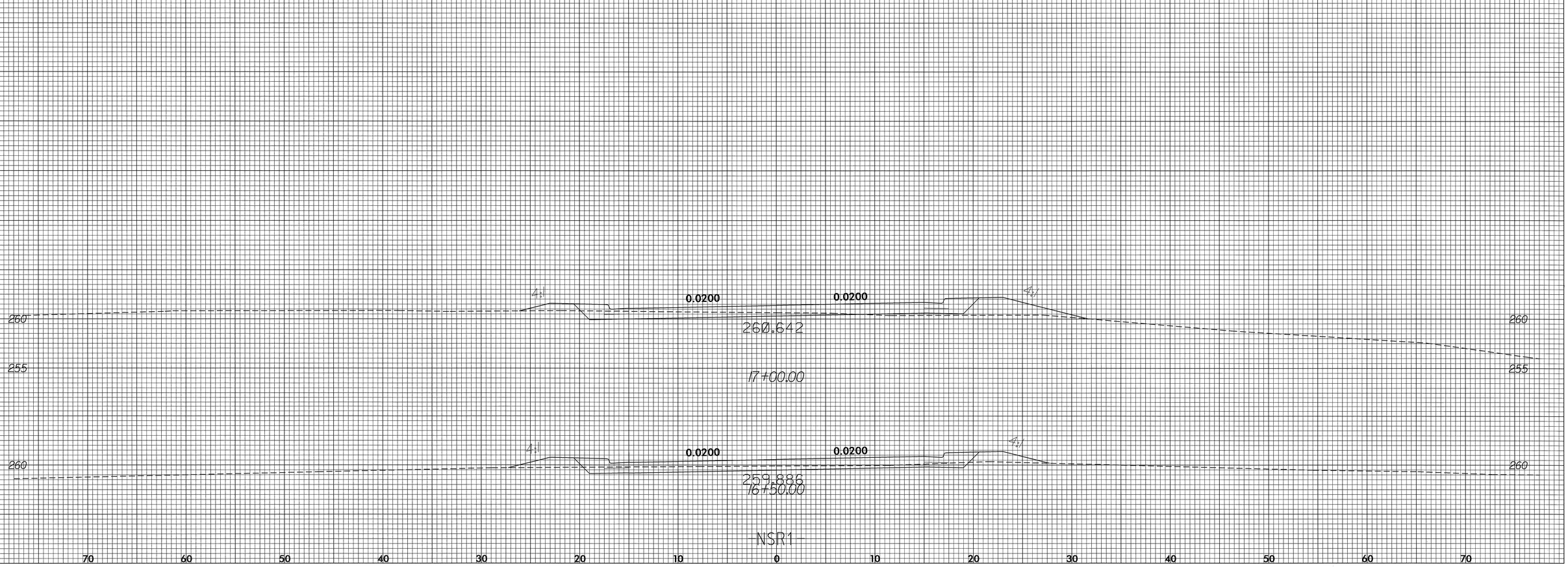
24-FEB-2004 12:26
R:\sc\U4009\NSR1.XP
TCovington AT RD196588

RD196588 Tuesday February 24 2004 -nsr1-x15 TCovington rd-09oce34

8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-16

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70



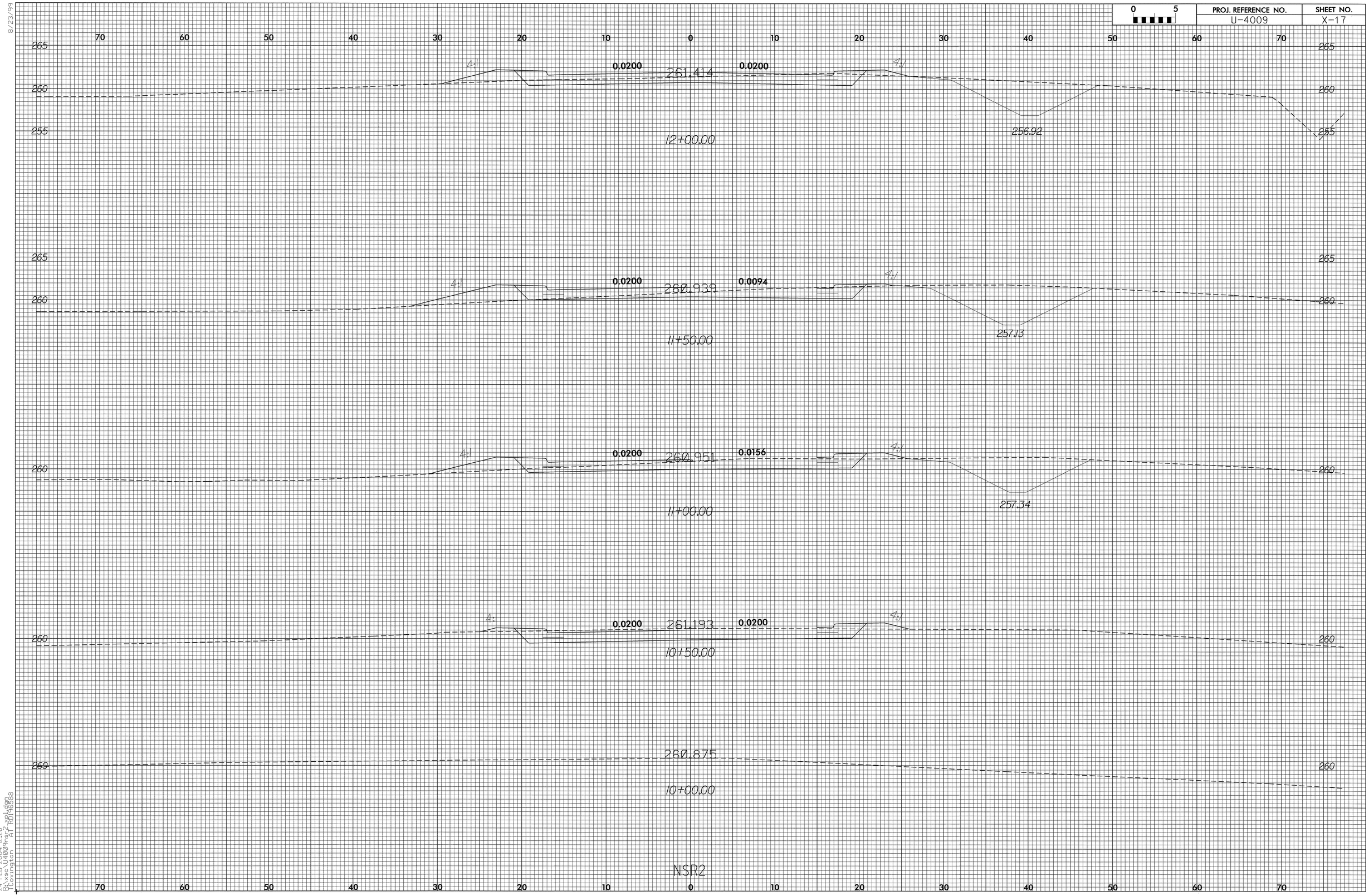
70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

24-FEB-2004 12:26
R:\sec\U4009NSR1.xpt
TCovington AT RD196588

RD196588 Tuesday February 24 2004 -nsr1-x16 TCovington rd-09oce34

8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-17



24-FEB-2004 12:26
R:\sc\D4009nsr2_xpl.dgn
TCovington AT RD196588

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-18

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

265
260

4:1 0.0200 262.632 0.0200 4:1

14+00.00

265
260

4:1 0.0200 262.363 0.0200 4:1

13+50.00

265
260
255
250

4:1 0.0200 261.980 0.0200 4:1

Begin Undercut at Sta. 12+75

13+00.00

LEGEND

UNDERCUT

265
260

4:1 0.0200 261.156 0.0200 4:1

12+50.00

NSR2

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

8/23/99

24-FEB-2004 12:26
R:\xs\U4009nsr2-xplugn
TCovington AT RD196588

RD196588 Tuesday February 24 2004 -nsr2-x18 TCovington rd-09oce34

8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-19

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

270
265
275

4:1 0.0200 0.0200 4:1

266.878
17+00.00

265.340
16+50.00

264.726
16+00.00

End Undercut at Sta. 15+85

263.954
15+50.00

263.467
15+00.00

262.518
14+50.00

NSR2

24-FEB-2004 12:26
R:\xsc\U4009nsr2.xrb dgn
TCovington AT RD196588

RD196588 Tuesday February 24 2004 -nsr2-x19 TCovington rd-09oce34

8/23/99

0 5	PROJ. REFERENCE NO.	SHEET NO.
	U-4009	X-20

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

275

270

4%

0.0200 272.925 0.0200

18+50.00

0.045%

0.0200 269.929 0.0200

18+00.00

3.683%

NSR2= Sta. 17+40 +/-
DRIVEWAY GRADE = 20%

0.0122

0.0200 268.461 0.0200

17+50.00

NSR2

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

24-FEB-2004 12:26
R:\xsc\U4009nsr2.xplugin
TCovington Alt RD196588

D196588 Tuesday February 24 2004 -nsr2-x20 TCovington rd-09oce34