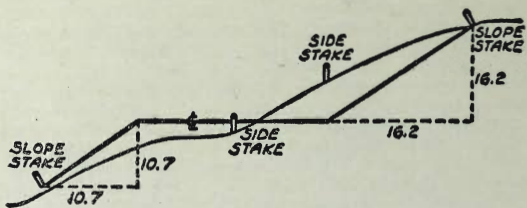


G-390



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING
SLOPE 1 TO 1. ROADWAY OF ANY WIDTH

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0
1	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	1
2	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	2
3	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90	3
4	4.00	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	4
5	5.00	5.10	5.20	5.30	5.40	5.50	5.60	5.70	5.80	5.90	5
6	6.00	6.10	6.20	6.30	6.40	6.50	6.60	6.70	6.80	6.90	6
7	7.00	7.10	7.20	7.30	7.40	7.50	7.60	7.70	7.80	7.90	7
8	8.00	8.10	8.20	8.30	8.40	8.50	8.60	8.70	8.80	8.90	8
9	9.00	9.10	9.20	9.30	9.40	9.50	9.60	9.70	9.80	9.90	9
10	10.00	10.10	10.20	10.30	10.40	10.50	10.60	10.70	10.80	10.90	10
11	11.00	11.10	11.20	11.30	11.40	11.50	11.60	11.70	11.80	11.90	11
12	12.00	12.10	12.20	12.30	12.40	12.50	12.60	12.70	12.80	12.90	12
13	13.00	13.10	13.20	13.30	13.40	13.50	13.60	13.70	13.80	13.90	13
14	14.00	14.10	14.20	14.30	14.40	14.50	14.60	14.70	14.80	14.90	14
15	15.00	15.10	15.20	15.30	15.40	15.50	15.60	15.70	15.80	15.90	15
16	16.00	16.10	16.20	16.30	16.40	16.50	16.60	16.70	16.80	16.90	16
17	17.00	17.10	17.20	17.30	17.40	17.50	17.60	17.70	17.80	17.90	17
18	18.00	18.10	18.20	18.30	18.40	18.50	18.60	18.70	18.80	18.90	18
19	19.00	19.10	19.20	19.30	19.40	19.50	19.60	19.70	19.80	19.90	19
20	20.00	20.10	20.20	20.30	20.40	20.50	20.60	20.70	20.80	20.90	20
21	21.00	21.10	21.20	21.30	21.40	21.50	21.60	21.70	21.80	21.90	21
22	22.00	22.10	22.20	22.30	22.40	22.50	22.60	22.70	22.80	22.90	22
23	23.00	23.10	23.20	23.30	23.40	23.50	23.60	23.70	23.80	23.90	23
24	24.00	24.10	24.20	24.30	24.40	24.50	24.60	24.70	24.80	24.90	24
25	25.00	25.10	25.20	25.30	25.40	25.50	25.60	25.70	25.80	25.90	25
26	26.00	26.10	26.20	26.30	26.40	26.50	26.60	26.70	26.80	26.90	26
27	27.00	27.10	27.20	27.30	27.40	27.50	27.60	27.70	27.80	27.90	27
28	28.00	28.10	28.20	28.30	28.40	28.50	28.60	28.70	28.80	28.90	28
29	29.00	29.10	29.20	29.30	29.40	29.50	29.60	29.70	29.80	29.90	29
30	30.00	30.10	30.20	30.30	30.40	30.50	30.60	30.70	30.80	30.90	30
31	31.00	31.10	31.20	31.30	31.40	31.50	31.60	31.70	31.80	31.90	31
32	32.00	32.10	32.20	32.30	32.40	32.50	32.60	32.70	32.80	32.90	32
33	33.00	33.10	33.20	33.30	33.40	33.50	33.60	33.70	33.80	33.90	33
34	34.00	34.10	34.20	34.30	34.40	34.50	34.60	34.70	34.80	34.90	34
35	35.00	35.10	35.20	35.30	35.40	35.50	35.60	35.70	35.80	35.90	35
36	36.00	36.10	36.20	36.30	36.40	36.50	36.60	36.70	36.80	36.90	36
37	37.00	37.10	37.20	37.30	37.40	37.50	37.60	37.70	37.80	37.90	37
38	38.00	38.10	38.20	38.30	38.40	38.50	38.60	38.70	38.80	38.90	38
39	39.00	39.10	39.20	39.30	39.40	39.50	39.60	39.70	39.80	39.90	39
40	40.00	40.10	40.20	40.30	40.40	40.50	40.60	40.70	40.80	40.90	40
41	41.00	41.10	41.20	41.30	41.40	41.50	41.60	41.70	41.80	41.90	41
42	42.00	42.10	42.20	42.30	42.40	42.50	42.60	42.70	42.80	42.90	42
43	43.00	43.10	43.20	43.30	43.40	43.50	43.60	43.70	43.80	43.90	43
44	44.00	44.10	44.20	44.30	44.40	44.50	44.60	44.70	44.80	44.90	44
45	45.00	45.10	45.20	45.30	45.40	45.50	45.60	45.70	45.80	45.90	45
46	46.00	46.10	46.20	46.30	46.40	46.50	46.60	46.70	46.80	46.90	46
47	47.00	47.10	47.20	47.30	47.40	47.50	47.60	47.70	47.80	47.90	47
48	48.00	48.10	48.20	48.30	48.40	48.50	48.60	48.70	48.80	48.90	48
49	49.00	49.10	49.20	49.30	49.40	49.50	49.60	49.70	49.80	49.90	49
50	50.00	50.10	50.20	50.30	50.40	50.50	50.60	50.70	50.80	50.90	50

Distance of slope stake from side or shoulder stake for any width roadway, slope 1 to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

MICROFILMED

APR 19 1965

DIRECTIONS FOR USE OF TABLES

TABLE No. XIV

Distance of slope stake from side or shoulder
stake for any width roadway, slope 1 1/2 to 1
If ground is nearly level, the cut or fill at

IMPROVED TABLES
AND
INFORMATION

cut stake. If it does not make the slight ad-
justment necessary, it is better to make it

TABLE No. VIII

To find tangent and distance for curve of
any other degree, divide by degree of curve and
add correction found in column of corrections.
Degree of curve with a given L may be found
by dividing tangent (or distance) opposite L by
a given tangent (or distance).
The distance from a point on the tangent to
the curve is very nearly the square of the tangent
length divided by twice the radius.

Law of Tangents
 $(\frac{a}{b}) = \frac{\sin(A+B)}{\sin(A-B)}$

Roberts
Moralet
Craig

NO. #21557
8-30-57

Grades For Drain in 45th St.
University to Folk

4660-D

2+50

35230
342.30
C10.00

5+50

34972
343.80
C5.92

2+00

35269
342.05
C10.64

5+00

35040
343.55
C6.85

1+50

35316
341.80
C11.36

4+50

35077
343.30
C7.47

1+00

35343
341.55
C11.88

4+00

35115
343.05
C8.10

0+50

35337
341.30
C12.07

3+50

35154
342.80
C8.74

0+00

Type "G" Cleanout

35393
341.05
C12.88

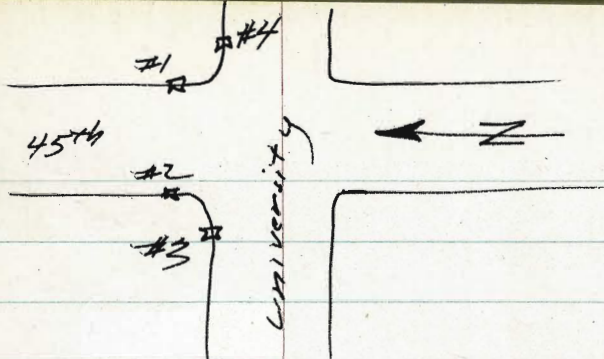
3+00

35198
342.55
C9.43

NE Corner
Inlet
#4

34980
cb 349.61
C0.19

349.80
INV 344.62
C5.18



NW Corner
6 + 75.98 Inlet
#3

34959
INV 344.64
C4.95

34959
cb 349.56
C0.03

NW corner
6 + 43.96 Inlet
#2

349.67
IN 344.25
C5.42

34967
OUT INV 344.50
C5.17

34967
cb 349.54
C0.13

E St.

34980
15
344.25
C5.65

34406
34425
31

NE Corner
6 + 07.16 Inlet
#1

349.72
INV. 344.31
C5.41

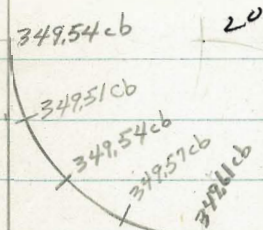
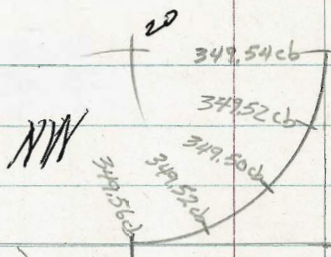
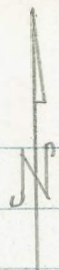
349.72
INV. 344.06
C5.68

34972
cb 349.54
C0.18

5 + 87.34 BC

34970
INV. 343.98
C5.72

45th St.



349.67
349.54-
C 0.13

349.68
349.52-
C 0.16

University

349.71
349.50-
C 0.21

349.70
349.52-
C 0.18

349.17
348.98-
C 0.27

349.59
349.56
C 0.03

349.12
348.93-
C 0.19

349.12
348.95-
C 0.17

349.11
348.98-
C 0.13

NW

SW

15

349.00cb
348.98cb
Meet

348.95cb
348.93cb

348.90cb

348.85cb
Gut = 348.25

(347.76)

Gut = 347.71 Exist

SE {
349.24
349.03-
C 0.21
349.21
349.06-
C 0.15
349.43
349.09-
C 0.34

NE

349.72
349.54-
C 0.18

349.67
349.51-
C 0.16

349.71
349.54-
C 0.17

349.69
349.57-
C 0.12

349.80
349.61-
C 0.19

Meet 349.11cb
349.09cb
349.06cb
349.03cb
Meet 349.00cb
Gut = 348.50

SE

20

Gut = 347.79 Exist

(347.83)

Roberts
Morales
Craig
9-6-57
W.O.# 21346

Grades For Midway Drain

See GB-382 pg. 78

See 4386-D

9+00

153.72
146.03
C 7.69

11+94.84 E.C.

176.06
165.64
C 10.42

8+50

151.21
143.25
C 7.96

North Edge of
11+55.14 B.C. Cleanout.

169.83
162.43
C 7.40

Nail
in
File

8+00

148.85
140.48
C 8.37

11+00

165.48
158.25
C 7.23

7+50

145.57
137.70
7.87

10+50 Break

162.01
154.35
C 7.66

7+00

142.78
134.93
C 7.85

10+00

159.38
151.58
C 7.80

6+49.8 "F" Cleanout

139.78
132.12 ←
C 7.66

9+50

156.80
148.80
C 8.00

13+63.94 EC.

178.15
172.80
C 5.35

13+52.50 BC.

177.72
172.34
C 5.38

13+00

183.51
170.24
C 13.27

12+50

185.15
168.24
C 16.91

12+09 BREAK

178.37
166.60
C 11.77

12+01 Break

176.86
166.13
C 10.73

EC + 540'
END OF
INTAKE
APRON

180.48
Lt. 177.42
C 3.06

180.48
Rt. 177.42
C 3.06

Roberts Grades Alley in Block 197,
9-10-57 City Heights.

W.O.# 32057

4160-D

1+00 EVC	36977 369.42 C 0.35	36922 36890 F 0.32	2+50	36743 367.23 C 0.20	36752 367.03 C 0.49
0+80	37003 369.66 C 0.37	3 36946 36935 F 0.11	2+25	36813 367.59 C 0.54	36782 367.39 C 0.43
0+60	36994 369.81 C 0.13	37016 369.61 C 0.55	2+00	36833 367.96 C 0.37	36824 367.76 C 0.48
0+40	37047 369.86 C 0.61	37022 369.66 C 0.56	1+75	36856 368.32 C 0.24	36889 368.12 C 0.77
0+20	37049 369.81 C 0.68	37078 369.61 C 1.17	1+50	36992 368.69 C 1.23	36970 368.49 C 1.21
0+00	PK 37099 37008 369.55 C 0.53	36997 369.51 C 0.46	1+25	36993 369.05 C 0.88	36917 368.85 C 0.32

4+00	36591 365.04 C 0.87	36618 364.84 C 1.34	5+40	36356 362.78 C 0.78	36267 362.58 C 0.09
------	---------------------------	---------------------------	------	---------------------------	---------------------------

3+75	36630 365.40 C 0.90	36577 365.20 C 0.57	5+20	36400 363.23 C 0.77	36374 363.03 C 0.71
------	---------------------------	---------------------------	------	---------------------------	---------------------------

3+50	36668 365.77 C 0.91	36611 365.57 C 0.54	5+00 PK	36416 363.58 C 0.58	36464 363.38 C 1.26
------	---------------------------	---------------------------	---------	---------------------------	---------------------------

3+25	36755 366.13 C 1.42	36622 365.93 C 0.29	4+75	36460 363.94 C 0.66	36418 363.74 C 0.44
------	---------------------------	---------------------------	------	---------------------------	---------------------------

3+00	36754 366.50 C 1.04	36630 366.15 F 0.15	4+50	36573 364.31 C 1.42	36436 364.11 C 0.25
------	---------------------------	---------------------------	------	---------------------------	---------------------------

2+75	36691 366.86 C 0.05	36713 366.66 C 0.47	4+25	36544 364.67 C 0.77	36564 364.47 C 1.17
------	---------------------------	---------------------------	------	---------------------------	---------------------------

358.86 NWBP Swift & University

5+99.17	University	36103 P Mail	36069 Top Cb
		360.83	360.61
		C 0.20	C 0.08

5+80		36205	36172
		361.54	361.34
		C 0.51	C 0.38

5+60		36293	36258
		362.21	362.01
		C 0.72	C 0.57

Roberts
9-11-57
W.O. # 20020

Curb Stakes Virginia Way
13249-L

S.E. half of

#5

15602
154.30
C 1.72

#4

15645
154.88
C 1.57

#3

15664
155.60
C 1.04

#2 P.R.C.

15701
C 0.55

15715
156.50
C 0.65

#7 E of Street

153.60
15000
F 3.60

#1 B.C.

15768
C 0.10
6/15 15758
15733
F 0.25

15890
3/15 15758
C 1.22

#6

153.85
15322
F 0.63

158.17 Nail
157.48 Grate

* Roberts
No. 2161
9-23-57

Grade Stakes For Drain
in lot 11, BIR 244 Pac. Bch.

6764-B

1+20

536
3.15
C 2.21

0+96

535
3.24
C 2.11

0+72

565
3.33
C 2.32

0+48

557
3.42
C 2.15

0+24

562
3.51
C 2.11

First
0+00 36" RCP

3.60
✓

1+44 END

533
3.06
C 2.27

W.O. # Grade stakes So. side
20020 So. side Vanderer
Rorer
10-4-57

	72.77	
2+00	72.34	C 0.43
	73.60	
1+60	72.92	C 0.68
	76.22	
1+20	73.50	C 2.72
0+80	78.09 75.37	F 2.72
0+40	82.67 77.78	F 4.89
0+20	84.20 79.29	F 4.91
0+00	84.55 80.04	F 4.51
B.M. ± Miss. G. Rd + Vanderer	87.44	

Grade stakes West side
Mission Gorge Road
Vanderer So. 450'

10-457

3+20 80.16 F 2.29
77.87

2+80 80.60 F 1.88
78.72

2+40 EVC 81.06 F 1.89
79.17

2+00 81.55 F 1.73
79.82

1+60 82.15 F 0.56
81.59

1+20 82.84 F 1.33 4+50 78.92 F 2.50
81.51 76.42

0+80 83.63 F 2.67 4+20 79.17 F 2.5
80.96 76.7

0+40 84.53 F 4.41 3+80 79.50 F 2.48
80.12 77.02

0+00 Prop Vanderer 85.56 F 4.46 3+60 79.72 F 2.36
81.10 77.36

check 79.44 PK

Grade stakes East side
Power St. (Fairmount Ext)
225' South of S.L. Vandever

10-9-57

2+25

69.08 F 0.07
69.01

1+80

69.24 F 0.10
69.14

69.42

1+40

69.38 C 0.04

69.73

1+00

69.52 C 0.21

69.68

0+60

69.66 C 0.02

70.84

0+20

69.80 C 1.04

70.15

0+00

225' So

S.L. Vandever

69.87 C 0.28

BM \oplus Fairmount Ex & Vandever

65.78

Roberts Paving Morningside St.
 Calle. Cumbe to Rancho Hills Dr.
 4186-D 4187-D 4188-D

	Rough	Curb	Curb	Rough
2+25.00 BC ✓	199.11 2017 C2.6	199.11 19850 F0.61	199.28 199.11 C0.17	2006 199.11 C1.5
2+00 ✓	2031 199.23 C3.9	19935 199.23 C0.12	199.23 19900 F0.23	2014 199.23 C2.2
1+75		199.36 19933 F0.03	199.36 19916 F0.20	
1+50 ✓	2037 199.49 C4.2	199.49 19926 F0.23	199.49 19943 F0.06	2016 199.49 C2.1
1+25		199.62 19928 F0.34	199.62 19947 F0.15	
1+12.50 Begin Curbs ✓	2032 199.68 C3.5	199.68 19962 F0.06	199.68 19920 F0.48	199.68 1996 F0.1

Rough

curb

curb

Rough

3 + 03.54 EC. ✓
1996
198.72
C0.3

198.72
19770
F 1.02

19887
198.72
C0.15

198.72
1943
F 4.4

#5

198.79
19857
F0.22

#4

198.85
19793
F0.92

19890
198.85
C0.05

#3

19899
198.92
C0.07

#2

198.98
19823
F0.75

19905
198.98
C0.07

#1

19914
199.05
C0.09

	Rough	curb	curb	Rough
4+50	200.8 198.69 C 2.1	19902 TP 198.69 C 0.33	19890 198.69 C 0.21	198.69 1944 F 4.3
4+25		198.56 19828 F 0.28	19870 198.56 C 0.14	
4+00	198.44 1961 F 2.3	198.44 19770 F 0.74	19899 198.44 C 0.55	198.44 190.9 F 7.5
3+80 & Inlet		198.34	198.34 198.30	
3+50	198.49 1941 F 4.4	198.49 19789 F 0.60	19865 198.49 C 0.16	198.49 1973 F 11.2
3+25		198.62 19750 F 1.12	19919 198.62 C 0.57	

50
25
2

Rough

curb

curb

Rough

6+10 PVC ✓
2003
199.49
C 0.8

199.49
19913
F 0.36

199.49
19922
F 0.27

199.49
1961
F 3.4

5+75

19985
199.31
C 0.54

199.31
19916
F 0.15

5+50 ✓

2030
199.19
C 3.8

19994
199.19
C 0.75

199.19
19868
F 0.51

199.19
1954
F 3.8

5+25 ✓

2009
199.06
C 1.03

199.06
19894
F 0.12

5+00 ✓

20287
198.94
C 3.9

19970
198.94
C 0.76

19900
198.94
C 0.06

198.94
1958
F 3.1

4+75

19889
198.81
C 0.08

19886
198.81
C 0.05

Rough

curb

curb

Rough

EC Calle
Ret Costa

2012
199.33
C1.9

20001
199.33
C0.68

2

199.42
19855
F0.87

1

199.52
198.86
F0.66

6+53.65 (Lt. Only)
BC Ret.

2004
199.56
C0.8

199.56
19908
F0.48

6+50 (Rt. Only)

~~199.57~~

199.57
19910
F0.47

199.57
1983
F1.3

6+30

199.55
19906
F0.49

199.55
19948
F0.07

Rough

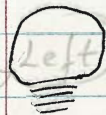
curb

curb

Rough

#2

198.03
198.88
F0.15



#1

198.96
198.36
F0.60

BC Ret Calle Corta

198.83
198.76
F 0.07

1998
198.83
C1.0

7+03.65 E Calle Corta
(Rt. only) ✓



199.00
199.33
F0.33

19929
198.82
N/A = 47199.33
1992
F0.1

6+90 EVC (Rt only)



199.47
199.42
C0.05

6+70 (Rt only)



199.70
199.52
C0.18

	Rough	curb	curb	Rough
8+78.65		19761 19817 F0.56	19866 19817 C0.49	
8+53.65	✓ 198.34 1963 F2.0	198.34 19770 F0.64	19874 198.34 C0.40	2001 198.34 C1.8
8+28.65		198.50 19792 F0.58	19924 198.50 C0.74	
8+03.65	✓ 198.67 1985 F0.2	198.67 19806 F0.61	19923 198.67 C0.56	2008 198.67 C2.1
7+78.65		198.83 19853 F0.30	19918 198.83 C0.35	
7+53.65	EC Ret. Lt. Calle Corta ✓ 2002 199.00 C1.2	199.00 19862 F0.38	19900 199.00 GRADE	2002 199.00 C1.2

Rough

curb

curb

Rough

BC Ret Casas Bunitas

~~197.35~~ 197.43
19694
F 0.49

1979
197.35
C 0.5

9+53.62 & Casas
Bunitas ✓

197.68
1958
F 1.9

197.68
19689
F 0.79

EC Ret Casas Bunitas

~~196.55~~ 197.43
19657
F 0.86

1983
196.85
C 1.4

#2

~~197.35~~ 197.62
19722
F 0.40

#1

~~197.75~~ 197.80
19780
GRADE

BC Ret. Bk
9+03.62 Casas Bunitas ✓

198.00
1958
F 2.2

198.00
19793
F 0.67

198.00
19797
F 0.03

1991
198.00
C 1.1

Rough

curb

curb

Rough

10775

196.87
19584
F 1.03

19772
196.87
C 0.85

10750

✓ 197.04
1949
F 2.1

197.04
19584
F 1.20

19774
197.04
C 0.70

1994
197.64
C 2.4

10725

197.20
19645
F 0.75

19779
197.20
C 0.59

10703.62 EC Ret
Casas ✓
Bonitas
66

197.34
1946
F 2.7

197.34
19659
F 0.75

19734
197.34
GRADE

1990
197.34
C 1.7

#2

19753
197.45
C 0.08

#1

1
197.50
19690
F 0.60


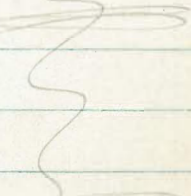

	Rough	curb	curb	Rough
24° 52.70'				
12 + 23.44 ✓	195.89 1898 F6.1	195.89 195.80 F0.09	195.89 195.74 F0.15	1969 195.87 C1.0
20° 27.25'				
12 + 28.45 ✓	196.05 1929 F3.2	196.05 19590 F0.15	19671 196.05 C0.66	1985 196.05 C2.4
16° 21.80'				
11 + 23.46 ✓	196.22 1951 F1.1	196.22 19564 F0.58	19737 196.22 C1.15	1995 196.22 C3.3
12° 16.35'				
11 + 63.56 MH	19599 19580			
11 + 48.47 ✓	F0.20 196.38 1963 F0.1	196.38 19593 F0.45	19710 196.38 C0.72	2000 196.38 C3.6
8° 10.90'				
11 + 23.48 ✓	196.55 1956 F1.0	196.55 19568 F0.87	19669 196.55 C0.14	2001 196.55 C3.5
4° 05.45'				
Chords = 24.96'				
10 + 98.49 BC ✓	196.71 1962 F0.5	196.71 19605 F0.66	19717 196.71 C0.46	1999 196.71 C3.2

	Rough	curb	curb	Rough
13+73.38 EC ✓ 45°	194.88 191.9 F 3.0	195.35 194.88 C 0.47	194.91 194.88 C 0.03	1953 194.88 C 0.4
13+78.39 ✓ 40° 54.50'	195.06 1910 F 4.1	195.06 3.45 F 1.61	195.62 195.06 C 0.56	1951 195.06 GRADE
13+83.40 ✓ 36° 49.05'	195.23 1910 F 4.2	195.59 195.23 C 0.36	195.60 195.23 C 0.37	1954 195.23 C 0.2
13+08.31 MH 12+98.41 ✓ 32° 43.60'	195.09 19504 GRADE 195.39 1911 F 4.3	195.46 195.39 F 0.09	195.39 195.15 F 0.24	195.39 1953 F 0.1
12+93.42 ✓ 29° 38.15'	195.56 1893 F 6.3	195.56 194.98 F 0.58	195.56 195.31 F 0.25	195.56 1950 F 0.6
12+48.43 ✓	195.72 1891 F 6.6	195.72 195.57 F 0.15	195.72 195.68 F 0.04	1954 195.72 F 0.3

	Rough	curb	Curb Rough	Rough curb
15+20		194.84 194.60 C0.24	195.32 195.10 C0.22	
15+00	✓ 31 189.1 F5.3	194.48 194.40 194.40 C0.08	194.66 194.62 C0.04	194.62 194.4 F0.2
14+85				
14+85		194.31	194.39	
14+60 PKC	✓ 36 189.6 F4.7	194.30 194.30	194.30 194.57 194.44 C0.13	194.30 194.2 F0.1
14+38.33		194.44 194.01 F0.43		
14+16.68	✓ 194 194.59 190.4 F4.2	194.59 194.31 F0.28	194.59 194.19 F0.41	194.7 194.59 C0.1
13+95.03		195.11 194.73 C0.38	194.73 194.66 F0.07	

	Rough	curb	curb	Rough
16+75		198.61 198.45 C 0.16	199.79 198.95 C 0.84	
16+50	✓ 1999 197.83 C 1.1	198.17 197.83 C 0.34	199.24 198.83 C 0.91	2010 198.33 C 2.7
16+25		197.21 197.18 F 0.03	198.34 197.71 C 0.63	
16+00	✓ 196.59 196.3 F 0.3	196.59 196.34 F 0.25	197.80 197.09 C 0.71	1985 197.09 C 1.4
15+75		195.97 195.52 F 0.45	196.69 196.47 C 0.22	
15+50	✓ 195.35 1917 F 3.7	195.35 194.90 F 0.45	196.31 195.85 C 0.46	1964 195.85 C 0.5

	Rough	curb	curb Rough	Rough Rough
17+68.45 \checkmark	2035 200.77 C28	20106 200.77 C0.29	_____	
EC ^{Ret} Salida del Sol		_____	20107 200.50 C0.57	2021 200.50 C7.6
#2		_____	20129 200.75 C0.55	
#1		_____	20100 200.50 C0.50	
17+21.45 ^{El. Ret. Rt.} Salida del Sol \checkmark	2028 199.62 C3.2	19992 199.62 C0.30	20027 200.12 C0.15	2023 200.12 C2.2
17+00 \checkmark	2007 199.07 C1.6	19941 199.07 C0.34	20022 199.57 C0.65	2020 199.57 C2.4

	Rough	curb	curb Rough	curb Rough
2° 30.98'				
25'				
18+50		203.77 202.83 20268 F0.15	203.33 203.16 F0.17	
0° 47.71'				
11.55				
18+38.45 BC ✓	2034 202.54 C0.9	202.54 20235 F0.19	203.04 20284 F0.20	
18+15.45	EC. Ret. Rt Salida del Sol ✓ 2031 201.97 C11	20247 201.97 C0.50	202.47 20238 F0.09	2031 202.47 C0.6
#2			202.00 201.72 F0.28	
#1			201.50 20145 F0.05	
BC Ret. Salida del Sol			201.00 20091 F0.09	2019 201.00 C0.9

204.97 Top F.H.
Calle Salida Del Sol

	Rough	curb	curb	Rough
19+77.92 E.C. ✓	2067 205.96 C0.7	205.96 20582 F0.14	20700 206.46 C0.54	2081 206.46 C1.6
9° 35.7' 15.97'				
19+61.95		20600 205.57 20553 F0.04	20682 206.07 C0.75	
8° 30.15' 11.95'				
19+50		205.27 20491 F0.36	20650 205.77 C0.73	
7° 40.79' 25'				
19+25 ✓	2057 204.66 C1.0	204.66 20439 F0.27	20554 205.16 C0.38	2063 205.16 C1.1
5° 57.52'				
19+00		204.05 20383 F0.22	20488 204.55 C0.33	
4° 14.25'				
18+75 ✓	2042 203.45 C0.7	203.45 20328 F0.17	20328 203.95 20378 F0.17	2046 203.95 C0.6

	Rough	curb	curb	Rough
4° 38.14'				
1 21+02.81 ✓	2059 205.43 C0.5	205.43 20510 F0.33	206.48 205.93 C0.55	2068 205.93 C0.9
3° 27.14'				
1 20+81.95 ✓	2065 205.87 C0.6	205.87 20576 F0.11	20714 206.37 C0.77	2077 206.37 C1.3
2° 16.14'				
1 20+61.95 ✓	2065 206.20 C0.3	206.20 20579 F0.41	20722 206.70 C0.52	2085 206.70 C1.8
1° 08.07'				
1 20+41.95 B.C. ✓	2067 206.37 C0.3	206.37 20637 GRADE	20716 206.87 C0.29	2091 206.87 C2.2
1 20+21.95 ✓	2069 206.40 C0.5	206.40 20636 F0.04	20711 206.90 20669 F0.21	2094 206.90 C2.5
1 20+01.95 ✓	2072 206.27 C0.9	206.27 20595 F0.32	20692 206.77 C0.15	2089 206.77 C2.0

Rough

curb

curb

Rough

22+46.78

22+59.01

202.27
2009
F1.4

202.49
20190
F0.59

#1

201.71
20169
F0.02

22+19.66

22+42.20

202.64
2015
F1.1

203.04
20291
F0.13

0+17.96 BC.

202.25
201.80
C0.45

204.9
201.80
C3.1

21+92.54

22+00

203.46
2031
F0.4

203.59
20355
F0.04

calle
0+00 arriba

203.22
201.75
C1.47

204.3
201.75
C2.5

21+65.42

21+50

2051
204.46
C0.6

204.14
20403
F0.11

21+38.30

BC. 27

✓

2056
204.69
C0.9

204.69
20464
C0.05

21+23.68

EC. Lt.
P.R.C. R.
cases
Bonitas

✓

2059
205.00
C0.9

205.28
205.00
C0.28

205.50

2076
205.50
C2.1

Rough

curb

curb

Rough

21° 43.74'

24+00 ✓

20° 18.65'

23+75

18° 53.56'

23+50 ✓

17° 28.47'
(21.86)

23+28.14 P.C. Lt
P.R. Rt

23+01.02

22+73.90

1997
199.40
C0.3

200.40
2000
F0.4

200.84
2000
F0.8

22+89.51
201.67-
2003
F1.4

199.40
199.28
F0.12

200.05
199.90
C0.15

200.40
200.32
F0.08

200.84
200.63
F0.21

201.39
200.88
F0.51

201.94
201.18.
F0.76

199.90
199.66
F0.24

200.40
200.40
GRADE

200.90
200.63
F0.27

201.34
201.07.
F0.27

201.48
201.22
F0.26

201.62
201.26
F0.36

2046
199.90
C4.7

2029
200.90
C2.0

2037
201.34
C2.4

← PRL

#3

#2
Midpoint

	Rough	curb	curb	Rough
30° 14.28'				
25+50 ✓	196.40 1959 F0.5	196.40 19634 F0.6	196.90 19647 F0.43	1987 196.90 C1.8
28° 49.19'				
25+25		196.90 19680 F0.10	197.40 19679 F0.61	
27° 24.10'				
25+00 ✓	197.40 1973 F0.1	19747 197.40 C0.07	197.90 19737 F0.51	2000 197.90 C2.1
25° 59.05' 25° 59.01'				
24+75		19790 197.90 GRADE	198.40 19779 F0.61	
24° 33.92'				
24+50 ✓	1992 198.40 C0.8	19849 198.40 C0.09	198.90 19848 F0.42	2053 198.40 C6.9
23° 08.83'				
24+25		198.90 19880 F0.10	199.40 19916 F0.24	

	Rough	curb	curb	Rough
#2 Midpoint		204.85 203.95 F0.90		
#1		205.17 204.69 F0.48		
21+23.68 B.C. Ret	205.50 C2.1	205.68 205.50 C0.18		
26+37.48 E.C. Exit Rancho Hills Dr.		194.60 194.34	195.10 195.02	
26+17.48		195.00 195.00 GRADE	195.50 195.14 F0.36	
25+96.90 E.C. ✓	195.41 194.9 F0.5	195.41 195.41 GRADE	195.91 195.41 F0.50	196.7 195.91 C0.8
31° 28.9' (21.90)				
25+75		195.90 195.81 F0.09	196.40 195.85 F0.55	

Rough

curb

0740

2067
203.80
C2.9

20480
203.80
C1.00

0720

2069
203.90
C3.0

20413
203.90
C0.23

0700

2064
203.80
C2.6

~~20380~~ →

20405
20364
F0.41

fly corner Morningside & Casas Bonitas

EC. cb Ret
Casas
Bonitas

2067
204.30
C2.4

~~204204.30~~ →

204.05
20343
F0.62

#3

~~20459~~ →

204.45
20328
F1.17

Rough

curb

↓ Ely corner Calle Arriba & Casas Bonitas

EC Ret.
Calle
Arriba

2043
201.50
C 2.8

20234
201.50
C 0.84

#3

20203
201.84
C 0.19

#2 midpoint

202.17
201.87
F 0.30

#1

202.50
202.20
F 0.30

0+93.29 B.C. Ret

2048
202.83
C 2.0

20318
202.83
C 0.35

0+60

2058
203.50
C 2.3

20408
203.50
C 0.58

W.D. 32706
12-10-57

Beverly Sewer
4056-D thru 4060-D

1+62.65

136.83
130.43
C 6.40
5.70

3+48.31 MH#5

150.50
139.00
C 11.50
11.00

1+31.71 MH#6

136.65
129.00
C 7.65
7.15

3+17.35

145.57
137.58
C 7.99
7.49

0+98.86

133.37
126.96
C 6.41
5.91

2+86.41

145.01
136.15
C 8.86
8.36

0+65.84

0.5' less
cut

132.17
124.93
C 7.24
6.74

2+55.47

141.97
134.72
C 7.25
6.75

0+32.92

130.10
122.90
C 7.20
6.70

2+24.53

139.92
133.29
C 6.63
6.13

Existing MH
0+00 Elwood & Hilltop

120.87

1+93.59

137.71
131.86
C 5.85
5.35

4 + 76.92 MH #7 = 0+00 see page 152.50
to MH #1

163.59
C 11.09

1 + 57.99

160.00
140.00
C 20.00
19.50

4 + 44.05

165.09
165.55
149.65
C 15.90
15.40

1 + 26.74

162.35
139.50
C 22.85
22.35

4 + 11.18

163.69
146.79
C 16.90
16.40

0 + 95.49

161.32
139.00
C 22.32
21.82

3 + 78.31 BRK

154.57
143.93
C 10.64
10.14

0 + 64.24

153.40
138.50
C 14.90
14.40

3 + 68.31 BRK

152.27
142.73
C 9.54
9.04

0 + 32.99 MH #7

144.43
138.00
C 6.43
5.93

3 + 58.31 BRK

150.50
141.00
C 9.50
9.00

0 + 00 MH #6

136.65
129.00
C 7.65
7.15

3+47.61

151.55
144.00
C 7.55
7.05

To Dead End
~~0+00 MH#9~~

149.00

3+15.30

151.97
143.00
C 8.97
8.47

5+09.19 MH#9

159.08
149.00
C 10.08
9.58

2+82.99 MH#8

151.19
142.00
C 9.19
8.69

4+76.85

158.37
148.00
C 10.37
9.87

2+51.74

152.67
141.50
C 11.17
10.67

4+44.54

158.29
147.00
C 11.29
10.79

2+20.49

154.37
141.00
C 13.37
12.87

4+12.23

155.57
146.00
C 9.57
9.07

1+89.24

157.30
140.50
C 16.80
16.30

3+79.92

153.95
145.00
C 8.95
8.45

5+70.31

16201
151.00
C 11.01
10.51

5+39.75

16015
150.00
C 10.15
9.65

From MH#9 to MH#10

6+92.57 MH#10

155.00

1717 Dead End.

156.87
149.97
C 6.90
6.40

6+61.99

160.67
154.00
C 6.67
6.17

0+78

149.64
148.16
F 1.48
1.98

6+31.43

160.67
153.00
C 7.67
7.17

0+39

158.04
149.32
C 8.72
8.22

6+00.87

162.88
152.00
C 10.88
10.38

Winston Sky MH#2 to MH#1
2+10

158.47
153.84
C 4.63

1+75

157.61
153.70
C 3.91

1+40

158.20
153.56
C 4.64

1+05

160.81
153.42
C 7.39

3+50 M.H.#1

159.33
154.40
C 4.93

0+70

164.39
153.28
C 11.11

3+15

160.74
154.26
C 6.48

0+35

166.18
153.14
C 13.04

2+80

161.72
154.12
C 7.60

0+00 MH#2

163.59
153.00
C 10.59

2+45

160.29
153.98
C 6.31

MH #3 to MH #4

Winston N.Y. Hilltop

1+80

186.96

174.22

C 12.74

1+50

187.81

174.10

C 13.71

1+20

188.36

173.99

C 14.38

0+90

188.54

173.86

C 14.68

0+60

188.56

173.74

C 14.82

2+70 MH #4

184.02

174.58

C 9.44

0+30

188.13

173.62

C 14.51

2+40

185.71

174.46

C 11.25

0+00 MH #3

173.50

2+10

186.27

174.34

C 11.93

Winston Sly M.H.#3 to MH#2

1+70

~~16111
155.20
C 5.91~~

~~16113
155.20
C 5.93~~

1+60

~~16156
156.09
C 5.47~~

~~16166
156.09
C 5.57~~

1+20

~~16613
160.44
C 5.69~~

~~16630
160.44
C 5.86~~

0+80

~~17389
164.79
C 9.10~~

~~17395
164.79
C 9.16~~

2+31.96 MH#2

163.59

152.50

0+40

~~18138
169.14
C 12.24~~

~~18148
169.14
C 12.34~~

2+05.98

~~16136
153.60
C 9.76~~

~~16150
153.60
C 7.90~~

0+00 MH#3

~~18683
173.50
C 13.33~~

1+80

~~160.81
154.69
C 6.12~~

~~160.92
154.69
C 6.23~~

Hilltop Dr. Winston Eastly ^{210.17} MH #3 to plug
1+50 199.50
C 10.67

1+25 ^{205.28}
195.25
C 10.03

1+00 ^{200.08}
191.00
C 9.08

0+75 ^{194.88}
186.75
C 8.13

0+50 ^{189.91}
182.50
C 7.41

0+25 ^{186.22}
178.25
C 7.97 2+00 plug

0+00 MH #3 ^{217.47}
^{208.00}
^{C 9.47}
^{214.55}
^{203.75}
C 10.80
1+75

12-15-57
Friday

Grades For Storm Drains Morningside Street

Drain south of Calle Corta

0+68

181.55
181.45
C0.10

0+58

187.22
184.66
C2.56

0+48

194.43
187.47
C6.96

0+36

Ely curb line

No. Stake 19836
cb 19834
C0.02

198.52
So. Stake 19852
199.67 I.E. ch. 198.34
C8.85 C0.18

1+21.74 END

172.40
161.70 1970
C10.70

0+00

3+80st. Station

Wly curb line

No. Stake
cb 19834
19828
F0.06

198.09
So. Stake
193.77 I.E. cb 198.34
198.09
C4.38 F0.25

0+78

178.99
177.85
C1.14

Drain West of Calle Salida del Sol

1+10.06 EC

181.59
178.22
C 3.37

0+86.50 BC

183.96
181.14
C 2.82

0+61.25

189.30
184.27
C 5.03

1+40.13 END

169.63
167.66
C 1.97

0+36 Nly Curb
Line

East 19478
Curb 19430
C 0.48

West 19447 19447
Curb 19430 187.40 IE
C 0.17 C 7.07

1+17.94 BRK

179.69
176.81
C 2.88

0+00 Sly Curb
line

East
Curb 19448
19386
F 0.62

West 19345
Curb 19432 188.20 IE
19345 C 5.25
F 0.87

1+14.03 BRK

181.02
177.67
C 3.35

1+73.38 St. Station

Roberts

12-16-57

Grades Roanoke St.

Winchester to Agua Dulce

4011-D

A

Rough

curb

curb

Rough

0+35BRK

285.05

284.94

F 0.11

0+25EC

2871
285.01
C 2.1

285.01

285.01

284.91

F 0.10

#3

285.53

284.95

C 0.58

#2

286.49

285.30

C 1.19

#1

286.94

286.20

C 0.74

B.C. Winchester

286.94

Rough

curb

curb

Rough

1785

285.65
285.65
GRADE

1760

2880
285.55
C 2.4

285.55
285.46
F 0.09

1735

285.45
285.32
F 0.13

1710

2875
285.35
C 2.1

285.35
285.25
F 0.10

0785

285.25
285.02
F 0.23

0760

2875
285.15
C 2.3

285.15
285.10
F 0.05

Rough

curb

curb

Rough

0+60

2892
285.47
C 3.7

28575
285.47
C 0.28

0+40 PVC

28585
285.80
C 0.05

0+25 E.C. cb
Agua Dulce

2899
285.88
C 4.0

28595
285.88
C 0.07

2+2487 E.C. cb
Agua Dulce

2901
285.82
C 4.3

28582
28571
F 0.11

2+10

28575
28546
F 0.29

Rough

curb

curb

Rough

1420

281.74

1400

287.6
283.44
C 4.1

283.72
283.44
C 0.28

0780

284.90
284.64
C 0.26

Grades Calle Agua Dulce

4012A-D
Winchester to Cumberland

Rough

curb

curb

Rough

D+44.71

359 60

19.71 - 1° 36.04'

358 24

0+25 PCC Left
PRC Right

2923
2892.0
C 3.1

29173
291.50
C 0.23

28924
289.20
C 0.04

29302
292.50
C 0.52

29007
289.70
C 0.37

2916
289.70
C 1.9

#3

28800
287.75 →
C 0.25

~~288.70~~

288.70
288.31
F 0.39

#2

286.90 →
286.60
F 0.30

~~287.50~~

287.50
287.08
F 0.42

#1

286.26
286.10 →
C 0.16

~~286.40~~

286.40
286.38
F 0.02

curb Return on
BC Roanoke

285.82 →

~~285.88~~

285.88

359 60
12° 48.24'
347° 11.8'

1+62.97

359 60
11° 12.21'
348° 47.8'

1+43.26

359 60
9° 36.18'
350° 23.8'

1+23.55

359 60
8° 00.15'
351° 59.9'

1+03.84

359 60
6° 24.12'
353° 35.9'

0+84.13

359 60
4° 48.09'
355° 11.9'

0+64.42

359 60
3° 12.06'
356° 48'

Rough

301.35
3012
F0.2

2983
297.58
C 0.7

2956
293.70
C 1.9

curb

303.05
30289
F0.17

30155
301.35
C0.20

29975
299.52
C0.23

29769
297.58
C 0.11

29580
295.52
C0.28

293.70
293.55
F0.15

curb

304.05
30389
F0.17

302.35
30207
F0.28

30073
300.52
C 0.21

298.58
298.55
F0.03

296.58
296.52
C 0.06

294.70
294.66
F0.05

Rough

303.5
302.35
C 1.1

299.56
298.58
C 1.0

296.0
294.70
C 1.3

	Rough	curb	curb	Rough
359 60 22° 25.02' 337° 35.0'		310.81 310.76 C0.05	311.81 311.76 C0.05	
2 + 81.23				
359 60 20° 48.69' 339° 11.3'		309.78 309.78 GRADE	310.82 310.78 C0.04	313.8 310.78 C3.0
2 + 61.52	309.78 3090 F0.8			
359 60 19° 12.36' ✓ 340° 47.6'		308.46 309.78 308.67 C0.11 F0.21	309.67 309.54 F0.13	
2 + 41.81	309.78 1.31 308.46			
359 60 17° 26.35' ✓ 342° 23.7'		307.4 307.44 GRADE F0.07	308.64 308.44 C0.20	311.0 308.44 C2.6
2 + 22.10	3074 307.44 GRADE			
359 60 16° 00.30' 343° 59.7'		306.13 306.10 C0.03	307.25 307.10 C0.15	
2 + 02.39				
359 60 14° 24.27' 345° 35.7'		304.63 304.55 F0.08	305.94 305.63 C0.31	306.6 305.63 C1.0
1 + 82.68	304.63 3043 F0.3			

	Rough	curb	curb	Rough
4+00.63 E.V.C.	314.45 3143 F0.2	314.52 314.45 C0.07	314.95 314.95 GRADE	317.8 314.95 C2.8
3+80.63		313.99 313.88 C0.11	314.73 314.62 F0.11	
3+60.63	313.50 3129 F0.6	313.63 313.50 C0.13	314.29 314.40 F0.11	317.1 314.40 C2.7
3+40.63		312.99 312.99 GRADE	314.12 313.99 C0.13	
3+20.63 E.C. 359° 60' 31" 24° 00.37' 335° 59.6'	312.36 3120 F0.4	312.36 312.36 GRADE	313.50 313.36 C0.14	316.6 313.36 C3.2
3+00.93	311.62 3112 F0.4	311.62 31141 F0.21	312.80 312.62 C0.18	316.12 312.62 C3.5

	Rough	curb	curb	Rough
26.49-4°24.06				
5+65.29	316.15 3142 F2.0	316.15 316.03 F0.12	316.68 316.65 C0.03	3188 316.65 C2.1
26.49-2°56.04				
5+38.80		315.88 315.79 F0.09	316.46 316.38 C0.08	
26.49-1°28.02				
5+12.31 B.C.	315.61 3136 F2.0	315.61 315.61 GRADE	316.14 316.11 C0.03	3189 316.11 C2.8
4+84.39		315.46 315.32 C0.14	316.03 315.82 C0.21	
4+56.47	315.03 3148 F0.2	315.07 315.03 C0.04	315.60 315.53 C0.07	3186 315.53 C3.1
27.92				
4+28.55		315.09 314.74 C0.35	315.40 315.41 315.24 315.24 C0.16	31560

	Rough	curb	curb	Rough
20 - 12° 05.49'			31822	
			31852	32035
7 + 10.64'	317.67	317.67	318.17	318.17
	3163	31747	F0.35	C R.2
	F 1.4	F 0.20	C 0.05	
12.87 - 10° 59.03'				
			31916	31816
			318.02	31822
6 + 97.77 PVC		317.52	(0.14)	
		31734		
		F 0.18		
26.50 - 10° 16.26'				
			31777	3195
			317.73	317.73
			C 0.04	C 1.8
6 + 71.27	317.23	317.23		
	3151	31588		
	F 2.1	F 1.35		
26.50 - 8° 48.26'				
		31570	31757	
		316.76	317.46	
		31632	C 0.11	
		F 0.64		
		F 1.26		
6 + 44.77	315.78 315.19 70			
26.50 - 7° 20.14'			31729	3201
			317.19	317.19
			C 0.10	C 2.9
6 + 18.27	316.69	316.69		
	3132	31645		
	F 3.5	F 0.24		
26.49 - 5° 52.08'				
		316.42	316.92	
		31539	31686	
		F 1.03	F 0.06	
5 + 91.78				

	Rough	Curb	Curb	Rough
18° 44.25'				
8+30.64	317.97 3171 F0.9	31800 317.97 C0.03	31871 318.47 C0.24	3209 318.47 C2.4
17° 37.77'				
8+10.64		318.28 31803 F0.25	31905 318.78 C0.27	
16° 31.33'				
7+90.64	318.38 3167 F1.7	318.38 31836 F0.02	31910 318.88 C0.22	3214 318.88 C2.5
15° 24.87'				
7+70.64		318.28 31794 F0.34	31893 318.78 C0.15	
14° 18.41'				
7+50.64	318.06 3165 F1.6	318.06 31784 F0.22	31872 318.56 C0.16	3215 318.56 C2.9
13° 11.95'				
7+30.64		317.86 31767 F0.19	31890 318.36 C0.54	

Rough

Curb

Curb

Rough

2.15 - 23° 58.75'

P.C.C. Curb
9+43.14 Right Only

15.18 - 23° 51.62'

9+27.96

17.32 - 23° 01.18'

9+10.64 EVC

20 - 22° 03.63'

8+90.64

20° 57.17'

8+70.64

19° 50.71'

8+50.64

314.70
3140
F0.7

316.75
3159
F0.9

313.04
312.93
F0.11

314.70
314.70
GRADE

315.94
315.82
C0.12

316.83
316.75
C0.08

317.46
317.42
F0.04

312.45
311.70
C0.75

313.75
313.54
C0.21

315.20
315.14
F0.06

316.65
316.32
C0.33

317.27
317.25
C0.02

318.14
317.96
C0.18

315.3
311.70
C3.6

316.9
315.20
C1.7

319.7
317.25
C2.4

Rough

curb

curb

Rough

10+65.53

302.74
302.68
C 0.06

303.18

10+37.29 EC. Curb
on Right

304.70
303.7
~~304~~
F1.0

304.73
304.70
C 0.03

305.20 ✓

305.20 ✓

10+20.29

306.09
305.93
C 0.16

9+95.29

308.0
307.72
C 0.3

307.81
307.72
C 0.09

9+70.29

309.79
309.50
C 0.29

9+45.29 EC. Left
Only

311.4
311.38
GRADE

311.40
311.38
C 0.02

Rough

Curb

Curb

Rough

12+34.97 Bk Curb
Return2917
290.50
C1.2290.53
290.50
C0.0329113
291.00
C0.132939
291.00
C2.9

12+06.73

2932
292.53
C0.7292.53
292.49
F0.0429307
293.03
C0.042953
293.03
C2.7

11+78.49

29470
294.56
C0.1429506
295.06
GRADE

11+50.25

2976
296.59
C1.0296.78
296.59
C0.19297.09
297.00
F0.092985
297.09
C1.4

11+22.01

298.62
297.90
F0.72299.12
299.02
F0.10

10+93.77

300.65
2989
F1.8300.70
300.65
C0.05301.19
301.15
C0.043016
301.15
C0.4

~~Rough~~

~~Curb~~

~~Curb~~

~~Rough~~

Lt

Rt

EC. ^{Curb Return}
on Cumberland

287.60

290.90

#3

288.50
288.05
C0.45

291.25
290.55
C0.70

#2

289.75
288.75
C1.00

291.40
290.40
C1.00

#1

289.88
289.60
C0.28

291.88
290.50
C1.38

Grades Calle Tocon

4011A-D

Rough

Curb

0+60

3136
310.73
C 2.9

31259
310.73
C 1.86

46° 09.84'

#3

23° 04.92'

0+25 E.C.

Curb Return

3135
309.93
C 3.6

30999
309.93
C 0.06

#2 PRC

3163
312.60
C 3.7

31307
312.71
C 0.36

31268
312.60
C 0.08

#3

31008
309.70
C 0.38

#1

23° 05.6'

312.46
312.35
F 0.11

#2

31071
309.93
C 0.78

1+38.85 BC

3159
312.32
C 3.6

312.32
312.10
F 0.22

#1

31154
310.60
C 0.94

1+16.92

31312
311.92
C 1.20

BC Curb Return on
Agua Dulce

311.70

0+95 BRK

3158
311.53
C 4.3

31173
311.53
C 0.20

Rough curb

#6 Existing

313.04

99° 26.2'

#5

31308
312.94
C 0.14

76° 10.2'

#4

3171
312.83
C #3

31307
312.83
C 0.24

12-23-57
W.O. 32700

Sewer in Morningside
See 4186-D, 4187-D & 4188-D

1+08 (1) Rt

19685
191.85
C 5.00

1+96 (3) Rt.

19909
188.45
C 10.64

1+00

19558
186.95
C 8.63

1+75

19695
187.17
C 9.78

0+75

19498
186.82
C 8.16

1+50

19645
187.09
C 9.36

0+50

19444
186.74
C 7.70

1+35 MH#1

19627
187.03
C 9.24

0+25

19408
186.65
C 7.43

1+25

19611
187.00
C 9.11

Existing Dead End
0+00 at Rancho Hills Drive

186.56

1+15 (2) Lt.

19768
192.34
C 5.34

18638 IE.
Exist. M.H.

18638
18635
19413

2+75

19908
187.52
C 11.56

3+62 (8) Rt.

20051
189.85
C 10.66

2+65 (5) Lt.

20388
195.42
C 8.46

3+50

20039
187.79
C 12.60

2+61 (4) Rt.

19996
189.83
C 10.13

3+25

20005
187.70
C 12.35

2+50

19844
187.44
C 11.00

3+12 (7) Rt.

19981
188.89
C 10.92

2+25

19796
187.35
C 10.61

3+06 (6) Lt.

20353
196.19
C 7.34

2+00

19745
187.26
C 10.19

3+00

19943
187.61
C 11.82

0+75

20221
188.21
C 14.06

4+75

20322
188.22
C 15.00

0+50

20204
188.13
C 13.91

4+50

20255
188.14
C 14.41

0+38 (10) Lt.

20516
198.05
C 7.11

4+28 (9) Rt.

20264
191.02
C 11.62

0

4+25

20168
188.05
C 13.63

0+25

20170
188.04
C 13.66

Calle Casas Bonitas

1+21.41 D.E.

20368
188.37
C 15.31

0+00 in Calle Casas Bonitas

20111
187.95
C 13.16

10

3+98.41 N/A #2

1+00

20234
188.30
C 14.04

3+75

20084
187.87
C 12.97

0+80 (12) Lt.

20716
198.83
C 8.33

5+75

20484
188.57
C16.27

6+50

20443
188.84
C15.59

5+50

20469
188.49
C16.20

6+34 (18) Rt.

20624
199.34
C6.90

5+33 (14) Lt.

20642
200.77
C5.65

6+29 (17) Lt.

20826
201.79
C6.47

5+28 (13) Rt.

20575
198.14
C6.61

6+25

20480
188.75
C16.05

5+25

20433
188.40
C15.93

5+99.72 MH #3

20505
188.66
C16.39

5+00

20381
188.31
C15.50

5+86 (16) Lt.

20854
201.73
C6.81

4+78 (11) Rt.

20454
194.08
C10.46

5+78 (15) Rt.

20630
199.15
C7.15

7+32 (22) Rt.

20485
197.26
C 7.59

8+25

20075
189.45
C 11.30

7+25

20450
189.10
C 15.40

8+20 (25) Lt.

20275
197.67
C 5.08

7+24 (2) Lt.

20555
199.94
C 2.61

8+00

20165
189.36
C 12.29

7+00

20494
189.01
C 15.93

7+83 (24) Rt.

20345
195.94
C 7.21

6+84 (20) Rt.

20595
198.57
C 6.38

7+76 (23) Lt.

20393
198.75
C 5.18

6+79 (19) Lt.

20134
201.05
C 6.29

7+75

20302
189.27
C 13.75

6+75

20450
188.92
C 15.58

7+50

20384
189.19
C 14.65

9425

19863
189.80

C 8.83

10410 (32) Lt.

19936
192.80

C 6.56

9411 (28) Lt.

200.1
22

2024
195.42

C 7.0

10400

19676
190.07

C 6.67

9400

19916
189.72

C 9.44

9486 (31) Rt.

19976
190.93

C 8.83

8485 (27) Rt.

200.4
15

2022
193.42

C 8.8

9475

19740
189.98

C 7.42

8470.69 MH #4 E Calle Salido del Sol

19985
189.61

C 10.24

9456 (30) Lt.

1991
23
215

2013
194.11

C 7.2

8450

19995
189.54

C 10.41

9450

19795
189.89

C 8.06

8432 (26) Rt.

20343
194.67

C 8.76

9436 (29) Rt.

1993
13
216

2006
192.17

C 8.4

10+95.69 MH #5

19435
190.39
C 3.96

11+85 (39) R.

19429
191.51
C 2.78

10+87 (35) R.

19508
191.16
C 3.92

11+75

19335
190.68
C 2.67

10+75

19481
190.33
C 4.48

11+72 (38) Lt.

19438
191.47
C 2.91

~~19396~~
191.47
C 2.49

10+63 (34) Lt.

19731
191.49
C 5.82

11+50

19385
190.59
C 3.26

10+50

19558
190.24
C 5.34

11+35 (37) R.

19525
191.33
C 3.92

10+37 (33) R.

19631
190.98
C 5.33

11+25

19421
190.50
C 3.71

10+25

19626
190.15
C 6.11

11+15 (36) Lt.

19514
191.26
C 3.88

~~19478~~
191.26
C 3.52



12+75

19406
191.03
C 3.03

13+69 (45) Rt.

77
195.39
38

19524
192.13
C 3.11

12+72 (42) Lt.

19501
191.82
C 3.19

19488
191.82
C 3.06

13+50

19482
191.29
C 3.03

12+50

19272
190.74
C 2.78

13+34.00 NH*6

19502
Finish 194.90
C 3.12

19433
191.23
C 3.10

12+37 (41) Rt.

19420
191.68
C 2.72

13+29 (44) Rt.

19494
191.79
C 3.15

12+25

19346
190.85
C 2.61

13+25

19431
191.20
C 3.11

12+20 (40) Lt.

19463
191.63
C 3.00

19443
191.63
C 2.80

13+00

19425
191.12
C 3.13

12+00

19339
190.77
C 2.62

12+84 (43) Rt.

19467
191.84
C 3.23

14+65 (48) R.

19578
192.39
C 3.39

15+50

19573
191.99
C 3.74

14+50

19549
191.64
C 3.85

15+47 (50) R.

19628
192.77
C 3.51

14+25

19505
191.55
C 3.50

15+25

19549
191.90
C 3.58

14+20 (47) R.

19697
192.27
C 4.50

19715
192.27
C 4.88

15+00

19547
191.82
C 3.65

14+17 (46) R.

19539
192.37
C 3.02

14+96 (49) R.

19670
192.42
C 4.28

14+00

19439
191.47
C 2.92

14+84.97 NH #7

19561
191.76
C 3.85

13+75

19423
191.38
C 2.85

14+75

19546
191.73
C 3.73

16+50

19605
192.34
C 3.71

17+75

19702
192.78
C 4.24

16+25

19590
192.25
C 3.65

17+50

19687
192.69
C 4.18

16+22 (53) Rt.

19670
193.11
C 3.59

17+43 (56) Rt.

19780
193.46
C 4.34

16+00

19584
192.17
C 3.67

17+38 (55) Lt.

19804
193.48
C 5.16

15+75

19577
192.08
C 3.69

17+25

19677
192.60
C 4.17

15+72 (52) Rt.

19648
192.94
C 3.54

16+ 98.16 NH #8 & Calle Casas Bonitas

19657
192.50
C 4.02

15+62 (51) Lt.

19992
192.90
C 7.02

16+72 (54) Rt.

19679
192.43
C 3.86

19706
193.29
C 3.77

18+50

19718
193.04
C4.14

{ 0+00 MH#9
19+48.16 MH#9 Calle Corta

19760
193.35
C4.25

18+43 (60) Lt.

19859
193.81
C4.76

19+38 (63) Lt.

19906
194.14
C4.92

18+38 (59) Lt.

20052
193.79
C6.73

19+25

19755
193.30
C4.25

18+25

19720
192.95
C4.25

19+00

19740
193.22
C4.18

18+00

19717
192.87
C4.30

18+93 (62) Rt.

20009
193.99
C6.05

17+93 (58) Rt.

19807
193.64
C4.43

18+88 (61) Lt.

19992
193.97
C5.95

17+88 (57) Lt.

19972
193.62
C6.10

18+75

19724
193.13
C4.11

20+25

19819
193.65
C4.54

21+00

19820
193.91
C4.29

20+00

19810
193.56
C4.54

20+93 (69) Rt.

20288
194.69
C8.19

19+94 (65) Rt.

19988
194.35
C5.53

20+88 (68) Lt.

19920
194.67
C4.53

19+88 (64) Lt.

19900
194.32
C4.68

20+75

19831
193.82
C4.49

19+75

19796
193.47
C4.49

20+50

19834
193.74
C4.60

0+50 RE. in Calk Corta

19859
193.53
C5.06

20+43 (67) Rt.

20026
194.51
C5.75

0+25

19774
193.44
C4.30

20+38 (66) Lt.

19920
194.51
C4.69

21+93 (73) Lt.

200.84
195.04
C 5.80

22+88 (76) Lt.

19817
195.37
C 2.80

~~19832
195.37
C 2.95~~

21+88 (72) Lt.

19792
195.02
C 2.90

~~19849
195.02
C 3.47~~

22+75

19679
194.52
C 2.27

21+75

19788
194.17
C 3.71

22+50

19796
194.44
C 3.52

21+50

19810
194.09
C 4.01

22+43 (75) Rt.

19776
195.21
C 2.55

21+43 (71) Rt.

20262
194.86
C 7.76

22+38 (74) Lt.

19857
195.19
C 3.38

~~19823
195.19
C 3.04~~

21+38 (70) Lt.

19893
194.84
C 4.09

22+25

19740
194.35
C 3.05

21+25

19822
194.00
C 4.22

22+00

19779
194.26
C 3.53

23+75

197.60
194.87
C 2.73

24+66 (83) Lt.

195.99

20079¹⁰¹
195.79
C 4.80

23+73 (79) Lt.

198.63
195.90
C 2.73

~~198.97~~
~~195.90~~
~~C 3.07~~

24+50

197.71
195.14
C 2.57

23+50

197.05
194.79
C 2.26

24+46 (82) Rt.

20292
195.92
C 7.00

23+28 (78) Lt.

195.70

198.53
195.70
C 2.83

24+25

197.75
195.05
C 2.70

23+25

196.79
194.70
C 2.09

24+21 (87) Lt.

195.83

20041
20020
195.83
C 4.37

22+98.16 NH #10

196.95
194.60
C 2.35

24+01.24 NH #11

197.71
194.96
C 2.75

22+93 (77) Rt.

197.86
195.39
C 2.49

23+88 (80) Lt.

199.58
195.77
C 3.81

~~199.05~~
~~195.77~~
~~C 3.28~~

25+38.74 D.E. at Calle Cumbre

19868
195.45
C 3.23

25+25

19778
195.40
C 2.38

25+16 (84) Lt.

196.17

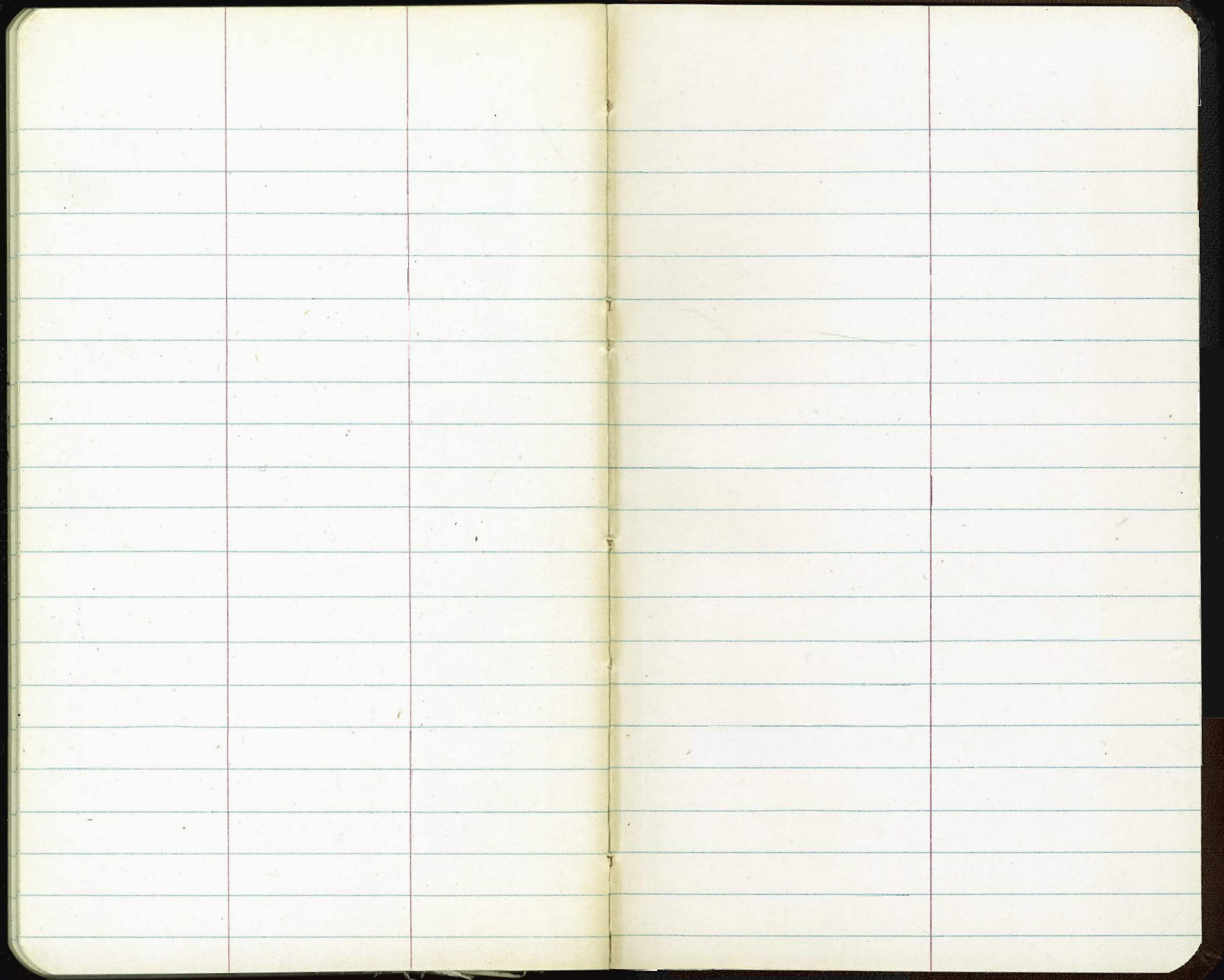
20038
196.17
C 4.21

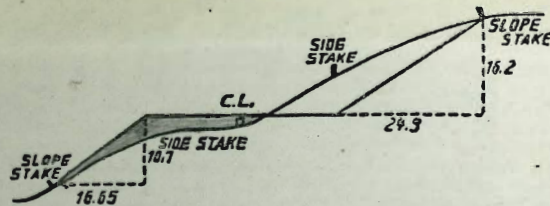
25+00

19794
195.31
C 2.63

24+75

19776
195.22
C 2.34





DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE $1\frac{1}{2}$ TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.00	0.15	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	0
1	1.50	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	1
2	3.00	3.15	3.30	3.45	3.60	3.75	3.90	4.05	4.20	4.35	2
3	4.50	4.65	4.80	4.95	5.10	5.25	5.40	5.55	5.70	5.85	3
4	6.00	6.15	6.30	6.45	6.60	6.75	6.90	7.05	7.20	7.35	4
5	7.50	7.65	7.80	7.95	8.10	8.25	8.40	8.55	8.70	8.85	5
6	9.00	9.15	9.30	9.45	9.60	9.75	9.90	10.05	10.20	10.35	6
7	10.50	10.65	10.80	10.95	11.10	11.25	11.40	11.55	11.70	11.85	7
8	12.00	12.15	12.30	12.45	12.60	12.75	12.90	13.05	13.20	13.35	8
9	13.50	13.65	13.80	13.95	14.10	14.25	14.40	14.55	14.70	14.85	9
10	15.00	15.15	15.30	15.45	15.60	15.75	15.90	16.05	16.20	16.35	10
11	16.50	16.65	16.80	16.95	17.10	17.25	17.40	17.55	17.70	17.85	11
12	18.00	18.15	18.30	18.45	18.60	18.75	18.90	19.05	19.20	19.35	12
13	19.50	19.65	19.80	19.95	20.10	20.25	20.40	20.55	20.70	20.85	13
14	21.00	21.15	21.30	21.45	21.60	21.75	21.90	22.05	22.20	22.35	14
15	22.50	22.65	22.80	22.95	23.10	23.25	23.40	23.55	23.70	23.85	15
16	24.00	24.15	24.30	24.45	24.60	24.75	24.90	25.05	25.20	25.35	16
17	25.50	25.65	25.80	25.95	26.10	26.25	26.40	26.55	26.70	26.85	17
18	27.00	27.15	27.30	27.45	27.60	27.75	27.90	28.05	28.20	28.35	18
19	28.50	28.65	28.80	28.95	29.10	29.25	29.40	29.55	29.70	29.85	19
20	30.00	30.15	30.30	30.45	30.60	30.75	30.90	31.05	31.20	31.35	20
21	31.50	31.65	31.80	31.95	32.10	32.25	32.40	32.55	32.70	32.85	21
22	33.00	33.15	33.30	33.45	33.60	33.75	33.90	34.05	34.20	34.35	22
23	34.50	34.65	34.80	34.95	35.10	35.25	35.40	35.55	35.70	35.85	23
24	36.00	36.15	36.30	36.45	36.60	36.75	36.90	37.05	37.20	37.35	24
25	37.50	37.65	37.80	37.95	38.10	38.25	38.40	38.55	38.70	38.85	25
26	39.00	39.15	39.30	39.45	39.60	39.75	39.90	40.05	40.20	40.35	26
27	40.50	40.65	40.80	40.95	41.10	41.25	41.40	41.55	41.70	41.85	27
28	42.00	42.15	42.30	42.45	42.60	42.75	42.90	43.05	43.20	43.35	28
29	43.50	43.65	43.80	43.95	44.10	44.25	44.40	44.55	44.70	44.85	29
30	45.00	45.15	45.30	45.45	45.60	45.75	45.90	46.05	46.20	46.35	30
31	46.50	46.65	46.80	46.95	47.10	47.25	47.40	47.55	47.70	47.85	31
32	48.00	48.15	48.30	48.45	48.60	48.75	48.90	49.05	49.20	49.35	32
33	49.50	49.65	49.80	49.95	50.10	50.25	50.40	50.55	50.70	50.85	33
34	51.00	51.15	51.30	51.45	51.60	51.75	51.90	52.05	52.20	52.35	34
35	52.50	52.65	52.80	52.95	53.10	53.25	53.40	53.55	53.70	53.85	35
36	54.00	54.15	54.30	54.45	54.60	54.75	54.90	55.05	55.20	55.35	36
37	55.50	55.65	55.80	55.95	56.10	56.25	56.40	56.55	56.70	56.85	37
38	57.00	57.15	57.30	57.45	57.60	57.75	57.90	58.05	58.20	58.35	38
39	58.50	58.65	58.80	58.95	59.10	59.25	59.40	59.55	59.70	59.85	39
40	60.00	60.15	60.30	60.45	60.60	60.75	60.90	61.05	61.20	61.35	40
41	61.50	61.65	61.80	61.95	62.10	62.25	62.40	62.55	62.70	62.85	41
42	63.00	63.15	63.30	63.45	63.60	63.75	63.90	64.05	64.20	64.35	42
43	64.50	64.65	64.80	64.95	65.10	65.25	65.40	65.55	65.70	65.85	43
44	66.00	66.15	66.30	66.45	66.60	66.75	66.90	67.05	67.20	67.35	44
45	67.50	67.65	67.80	67.95	68.10	68.25	68.40	68.55	68.70	68.85	45
46	69.00	69.15	69.30	69.45	69.60	69.75	69.90	70.05	70.20	70.35	46
47	70.50	70.65	70.80	70.95	71.10	71.25	71.40	71.55	71.70	71.85	47
48	72.00	72.15	72.30	72.45	72.60	72.75	72.90	73.05	73.20	73.35	48
49	73.50	73.65	73.80	73.95	74.10	74.25	74.40	74.55	74.70	74.85	49
50	75.00	75.15	75.30	75.45	75.60	75.75	75.90	76.05	76.20	76.35	50

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