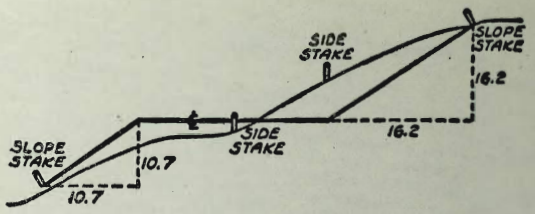
3b5-G
G365
TRANSFER BOOK



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.

G 365

MICROFILMED

APR 16 1965

IMPROVED TABLES
AND
INFORMATION

Table XIII—Corrections for Tangents and Externals

These corrections are to be added to the approximate values, found by dividing the tangent, or external, for a 1° curve (Table VIII) by the degree of curve, in order to obtain the true tangents, or externals. Intermediate values may be obtained by interpolation.

For Tangents Add

Central Angle	Degree of Curve													
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°	03	.06	09	13	16	19	.22	.25	.28	.31	.34	38	42	.46
15°	04	10	14	19	24	.29	.34	.39	45	.51	.53	58	.63	.68
20°	06	.13	19	.26	.32	.39	.45	.51	.58	.65	.72	79	.84	.90
25°	.08	16	24	.33	40	49	.58	67	.75	.83	90	.99	1.06	1.14
30°	10	19	.29	39	49	.59	.69	79	.89	.99	1.09	1.20	1.29	1.39
35°	11	22	.34	47	.58	.69	.70	.81	.92	1.04	1.29	1.42	1.54	1.66
40°	13	.26	.40	.53	.67	.80	.93	1.06	1.20	1.34	1.49	1.64	1.79	1.94
45°	15	.30	44	60	76	91	1.06	1.21	1.37	1.52	1.70	1.87	2.04	2.21
50°	17	.34	.51	.68	.85	1.02	1.19	1.36	1.54	1.72	1.91	2.10	2.29	2.48
55°	19	38	.57	76	.95	1.14	1.32	1.52	1.72	1.92	2.14	2.35	2.56	2.77
60°	.21	42	.63	.84	1.05	1.27	1.49	1.71	1.94	2.17	2.38	2.60	2.83	3.07
65°	23	46	.69	.93	1.16	1 40	1.64	1.88	2.13	2.38	2.63	2.88	3.13	3.39
70°	25	.51	76	1.02	1.28	1.54	1.80	2.06	2.33	2.60	2.88	3.16	3.44	3.72
75°	.27	.56	.83	1.12	1.40	1.69	1.98	2.27	2.57	2.87	3.16	3.47	3.78	4.09
80°	30	.61	.91	1.22	1.53	1.84	2.15	2.46	2 78	3.10	3.44	3.78	4.12	4.46
85°	33	66	1.00	1.33	1.68	2.02	2.36	2 70	3.05	3.40	3.77	4.14	4.55	4 89
90°	36	.72	1.09	1.45	1.83	2.20	2.57	2.94	3.32	3.70	4.10	4.50	4.91	5.32
95°	39	79	1.19	1.55	2.00	2.40	2.80	3.20	3.61	4.02	4.40	4.98	5.38	5.83
100°	.43	.86	1.30	1.74	2.18	2.62	3.06	3.50	3.95	4.40	4.88	5.37	5.85	6.34
110°	51	1.03	1.56	2.08	2.61	3.14	3.67	4.21	4 76	5.31	5 86	6.43	7 01	7 60
120°	62	1.25	1 93	2.52	3.16	3.81	4 45	5.11	5.77	6 44	7 12	7.80	8.50	9 22

For Externals Add

Central Angle	Degree of Curve													
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°	.001	.003	.004	.006	.007	.008	.009	.011	.012	.014	.015	.017	.018	.020
15°	.003	.007	.010	.014	.018	.023	.027	.029	.032	.035	.039	.043	.047	.051
20°	.006	.011	.017	.022	.028	.034	.038	.045	.051	.057	.063	.070	.076	.083
25°	.009	.018	.027	036	.046	.056	.065	.074	.083	.093	.106	120	127	135
30°	.013	.025	.038	.051	.065	.078	.090	.103	.116	.129	.149	.170	.179	.188
35°	.018	.035	.054	.072	.086	.109	.131	.153	.175	.197	.213	.230	.247	.264
40°	.023	.046	.070	.093	.117	.141	.172	.203	.234	.265	.277	.290	.315	.341
45°	.030	.060	.093	.119	.153	.184	.216	.254	.289	.325	.351	.378	.411	.445
50°	.037	.075	.116	.151	.189	.227	.266	.305	.345	.384	.425	.467	.508	.550
55°	.046	.093	.142	.188	.236	.283	.332	.381	.420	.479	.530	.582	.641	.700
60°	.056	.112	.168	.225	.283	.340	.398	.457	.516	.575	.636	.697	.774	.851
65°	.067	.135	.204	.273	.343	.412	.483	.554	.625	.697	.711	.845	.922	1.01
70°	.080	.159	.240	.321	.403	.485	.568	.652	.735	.819	.906	.994	1.08	1.17
75°	.095	.182	.286	.383	.480	.578	.678	.777	.877	.977	1.07	1.18	1.29	1.39
80°	.110	.220	.332	.445	.558	.671	.787	.903	1.02	1.13	1.25	1.38	1.50	1.62
85°	.128	.259	.391	.524	.657	.790	.926	1.06	1.20	1.34	1.47	1.62	1.76	1.91
90°	.149	.299	.450	.603	.756	.910	1.07	1.22	1.38	1.54	1.70	1.87	2.03	2.20
95°	.174	.350	.522	.706	.985	1.06	1.25	1.43	1.62	1.80	1.99	2.18	2.38	2.58
100°	.200	.401	.604	.809	1.01	1.22	1.43	1.64	1.85	2.06	2.28	2.50	2.73	2.96
110°	.268	.536	.806	1.08	1.35	1.63	1.91	2.20	2.48	2.76	3.05	3.35	3.66	3.96
120°	.360	.721	1.08	1.45	1.82	2.19	2.57	2.95	3.33	3.72	4.11	4.50	4.91	5.32

~ INDEX ~

0

GRADES - ROANOKE ST.
from RACHEL
TO REO DRIVE.

Walker
Taylor
Johns
Elmore
5-22-1956

WO 32538

Cont. P-2

0+22.65 on Rt.
Part 4 - B.C. on Rachel

0+04.17
0+01.51 On Lt.
Part 4 - B.C. cb Rt. on ROANOKE

0+00 = E Line Rachel

Part 3 Lt & Rt

Part 2 Lt & Rt.

Part 1 Lt & Rt.

E.C on Rachel

TP #2

TP #1

	Lt	Rt. 1
		160.50
		159.90
		F 0.60
	161.24 ~~161.20~~	
	164.65 (~~164.8~~)	
	C 3.41 C ~~3.61~~	
	161.18 ~~161.15~~	160.30
	161.12	160.02
	161.18 ~~161.20~~	159.72
161.25	~~161.27~~ 2 cb	159.41 159.41
165.31	164.81 on ~~Edmos~~	158.92 ~~159.41~~
C 4.06	C ~~2.54~~	F 0.5 F ~~0.20~~
164.45	NE Cor. Motor Box.	
155.33		
147.04	BM. NE. R.P. RACHEL & WINCHESTER	

CURB GRADES ~ ROANOKE ST.

from RACHEL
TO REO DRIVE

STATIONS	Lt.	℄	Rt. 2
1+40	163.71 165.27 C 1.56	163.42	163.21 161.13 F 2.08
1+20	163.13	162.84	162.63
1+00 = PVC	162.66 163.58 C 0.92	162.37	162.16 159.69 F 2.47
0+60	162.07 163.28 C 1.2	~~161.44~~ 161.66	161.32 160.06 F 1.26
0+35	161.70 163.14 C 1.44	~~160.99~~ 161.21	160.78
.7365 Cb 0+22.81 BC. Rt on Rd		160.78	
0417 0+14.81 = BC. Cb Rt. on Lt	161.20 163.81 C 2.61	~~160.40 = 0.40~~	160.50 ~~Rep at~~ on Rod 159.21 F 1.19
0+00 = E.L. RACHEL		~~160.40~~ 160.40	
0-10			

Cont. from P. 1

ROANOKE 57

℄ STATIONS			Lt	℄	Rt. 3
		Δ = 33°26'30"			
		℄ R = 1520			
		T = 456.62			
		℄ L = 887.17			
		Def per foot 1.1308377			
3+00	0°33.05		171.44 175.14 C 3.7	171.15	170.94 169.85 F 1.09
2+70.80 = B.C.	0° 0'		169.88 172.85 C 2.97	169.59	169.38 167.81 F 1.57
2+60			169.36 172.31 C 3.01	169.01	168.80 167.14 F 1.66
T.P.	16651		167.13 169.76 C 2.63	166.84	16663 165.60 F 1.03
2+20 = E.V.C.					
2+00			16611 = 2+00	165.82	16561
1+80			16520 167.26 C 2.06	164.91	164.70 163.67 F 1.03
1+60			164.40	164.11	163.90

ROANOKE ST

℄ STATIONS			Lt.	℄	Rt.
4+20	2°48.74		178.91 182.61 C 3.7	178.62	178.41 176.40 F 2.01
4+00	2°26.13		177.40	177.11	~~177.41~~ 176.90
3+80	2°03.51		176.01 179.05 C 3.04	175.72	175.51 175.74 C 0.23
3+60	1°40.89		174.75	174.46	174.25
3+40 = P.V.C.	1°18.27		173.61 176.49 C 2.88	173.32	173.11 172.67 F 0.44
3+20	0°55.66		172.53	172.24	172.03
T.P. on stub 3+00	28'Lt.	175.14			

℄ STATIONS					
5+60	5°27.04		191.23	190.94	190.73
5+40 = P.V.C.	5°04.43		189.54 194.85 C 5.3	189.25	189.04 191.26 C 2.22
5+20	4°41.81		187.73	187.44	187.23
5+00	4°19.2		185.92 190.44 C 4.52	185.63	185.42 185.89 C 0.47
4+80	3°56.58		184.11	183.82	183.61
T.P. #6 Nail in Fence Post West end Corral		192.85			
T.P. #5		183.96			
4+60 = P.V.C.	3°33.97		182.30 186.47 C 4.17	182.01	181.80 181.09 F 0.71
4+40	3°11.35		180.54	180.25	180.04

ROANOKE ST

			Northwest Curb Ret.			South-West Curb Ret.
Part 4 E.C. on ~~Roanoke~~ Hopkins			194.04 200.58 C 6.54	North West cb Ret	SW cb Ret	193.39 198.94 C 5.55
Part 2			193.95			193.44
Part 1			193.75			193.18
TP #7 = PK in Fence Post ~~#~~ SE Cor. Corn.		200.80				
5+98.24	6° ~~09.73~~ 6°10.28'					192.75 ~~192.75~~ 198.24 ~~197.95~~ C 5.5 C ~~5.2~~
~~5+97.77~~ = P.R.C cb Ret on Rt	6°08.81					
5+96.95 = PCC cb Ret. on Lt. ✓ OK			193.75 193.25 199.76 199.50 C 6.01 C 6.25 on Radius Stake			
5+80	5° 49.66'		192.51 197.95 C 5.44		192.22	192.01 196.31 C 4.3

ROANOKE ST

6+74.88 = P.C.C. cb Rot. North	~~7°36.2~~ 7°37'		193.68 202.77 C 9.09	
6+72.57 = P.R.C. cb Rot. South ~~ck~~	7°34.38			stk 201.96
~~6+74~~ ~~6+80~~				
6+60	7°20.17	203.09 = stk.	193.75	stk = 201.91
6+40	6°57.55	193.64 Pov.	193.90	Pov. = 193.20
6+35.84 = ℄ Hopkins	6°52.84			
6+20	6°34.93	200.95 = stake	193.70	
6+00	6°12.31		193.14	

ROANOKE ST

		Lt.	℄	Rt.
7+00	8° 05.39	192.65 200.93 = stk C 8.28	192.36	192.15 200.49 C 8.34
6+80	7° 42.78	193.52	193.23	
6+74.4883 Part 3 = PCC cb Ret. on Lt.	7° 36.2	193.68 203.61 C 9.93		~~193.18~~
6+72.57 Part 3 = PRC. cb Ret. on Rt.	7° 34.38	~~193.68~~		193.18 202.09 C 8.91
Part 2		193.88		193.44
Part 1 BC. Ret. on Hopkins		194.00 194.04 203.21 C 7.17		193.50 193.39 202.02 C 8.63

ROANOKE ST

	def. Δ		Lt.	℄	Rt.
8+20	10°21.05		187.04 183.60 F 3.44	186.75	186.54 177.51 F 9.03
8+00	9°58.43		187.56	187.27	187.06
TP #9		184.83			
7+80 P.V.C	9°35.82		188.43 189.44 C 1.01	188.14	187.93 187.56 F 0.37
7+60	9°13.21		189.48	189.20	188.99
TP #8		193.96 on Rock			
7+40	8°50.6		190.54 196.26 = stk C 5.72	190.25	190.04 stk = 194.80 C 4.76
7+20	8°28'		191.59	191.31	191.10

Part 1 cb Ref = Cont, P-11

			Lt	℄	Rt
9+33.72 = P.R.C. cb Ref.	12°29.32' (.60) ~~12°29.46~~ .32		~~189.16~~ 189.70	189.41	~~189.16~~ 189.20
9+25	12°19.80'		189.37 191.09 = stk C 1.72	189.08	188.87 stk. 192.04 C 3.17
TP. #10		189.30			
9+00	11°51.53 ~~12°19.8~~		188.42 188.19 = stk F 0.23	188.13	187.92 stk 188.80 C 0.9
8+80 EVC	11°28.91		187.67 186.00 F 1.67	187.38	187.17 185.36 F 1.81
8+60	11°06.29		187.10 186.39 F 0.71	186.81	186.60 183.04 F 3.56
8+40	10°43.67 ~~10°43.67~~		186.89	186.60	186.39

ROANOKE ST

		Lt.	℄	Rt.
9+75	13°16.34	191.25 195.55 = stk c 4.3	190.96	190.75 stk. 197.71 c 6.96
9+70.~~80~~ .53 = P.O.C. = ℄ Deauville	13°11.27	191.10	190.80	190.60
9+50 on Lt.	12°48.09	190.31 192.73 = stk. c 2.42	190.02	189.81
Pvt 3 = E.C. Rd. on ~~Morningside~~ DEAUVILLE ST.				190.32
Pvt 2				189.93
Pvt Cb Rd				189.54

ROANOKE ST

			Lt.	℄	Rt 12
11+00	15°37.69		195.97 193.71 = stk F 2.26	195.67	195.47 stk = 196.81 C 1.34
10+75	15°09.42		195.03 194.09 stk. F 0.94	194.73	194.53 stk = 196.17 C 1.64
10+50	14°41.15		194.08 193.97 stk. F 0.1	193.79	193.58 stk. 197.93 C 4.35
10+25	14°12.88'		193.14 195.27 = stk C 2.13	192.84	192.64 stk 200.21 C 7.57
TP Rim MH +08.13 10+07.88	Cb 13°53.5 13°53.78 E C Rt. on Rt.	195.80	192.49	192.20	191.99
10+00	13°44.61'		192.20 196.17 = stk C 3.97	191.90	191.70 stk 199.69 C 8.0

		Lt	℄	Rt
11+80		198.28 197.74 stk. F 1.24	198.69	198.48 stk 198.68 C 0.2
11+59.96 = EC	16°43.25	198.15 195.79 = stk F 2.36	197.86	197.65 stk. 196.57 F 1.08
11+40	16°22.92	197.48 195.47 = stk F 2.0	197.18	196.98 stk 196.87 F 0.1
11+20	16°00.31	196.72 194.18 = stk F 2.54	196.42	196.22 stk. 196.79 C 0.57

13+34		207.35 208.68 = stk C 1.33	207.06	206.85 stk. 207.70 C 0.85
12+97		205.12 205.32 stk C 0.2	204.83	204.62 stk 206.04 C 1.42
T.P. #12 on Rock 12+60 E/C	205.03	202.89 203.02 = stk C 0.13	202.60	202.39 stk. 202.90 C 0.5
12+40		201.75	201.46	201.25
12+20		200.72 199.33 stk. C 1.4	200.42	200.22 stk. 200.52 C 0.3
12+00		199.80	199.51	199.30

+20			218.08 217.70 = stk. F 0.38	217.79	217.58 218.91 stk C 1.33
15 +00			217.23	216.74	216.73
14+80 = PVC.			216.15 216.13 = stk. 00	215.86	215.65 216.88 = stk C 1.23
14 +45			214.04 214.40 = stk C 0.36	213.75	213.54 215.39 = stk C 1.85
14+08			211.86 212.67 = stk C 0.86	211.52	211.31 214.04 = stk. C 2.73
T.P. 28' Rt 14+08 = on cut stub		214.04			
13 +71			209.58 212.25 stk C 2.67	209.29	209.08 stk = 211.20 C 2.12

ROANOKE ST

			Lt.	℄	Rt.
16+40			218.28 218.18 = stk F 0.1	217.99	217.78 218.46 = stk. C 0.7
+20			218.83	218.54	218.33
16+00			219.15 219.24 = stk C 0.1	218.86	218.65 220.09 = stk C 1.44
15+80			219.23	218.94	218.73
DOT. = 15+65.95 = TP	50' RP Hub on Rt.	219.00 = Hub 75' Rt. 219.22 = 50' Rt of ℄	219.00 219.22 = stk C 0.2	218.79	218.58 219.90 stk C 1.32
15+60					
15+40			218.70	218.41	218.20

ROANOKE ST

	Lt.	℄	Rt.
17+60	211.05 212.66 stk. C 1.6	210.76	210.55 213.66 = stk. C 3.1
17+40	212.27	211.98	211.77
17+20	213.75 215.02 = stk. C 1.27	213.46	213.25 stk. 215.97 C 2.72
17+00	215.23	214.94	214.73
16+80	216.48 217.54 = stk C 1.1	216.19	215.98 217.38 = stk. C 1.4
16+60	217.50	217.21	217.00

ROANOKE ST

18+20 — 208.56

18+17.72 = ℄ Morningside — 209.10 = Pav. Grade 38' Lt. — 38' Rt. = Pav. 207.70

17+99.72
Part 3 = E.C. on Morningside — 209.84 = NE Rad. — 209.04 — SE Rad. = 208.00

Part 2

Part 1

← N.W. & SW Radius

C
210.07
211.16 = Stk Radius
C 1.09
17+79.72 = BC 20' cb Rad. — 209.78 — 209.57 Rad. Stk = 212.52

T.P. on 20' cb Radius 38' Rt. 17+79.72 = 212.52

ROANOKE ST

	Lt	℄	Rt.
see page 21			
19+00.~~88~~ = BK	208.28 209.461+K C 1.18	207.99	207.78 206.12 F 1.27
18+80			
18+55.72 Part 3 = E.C. ch Rd. on Roanoke st.	208.53 209.87 C1.34		207.90 208.67
Part 2	208.58		207.83
Part 1	208.65		207.78
18+35.72 = BC. 20' ch Rd. on Morningside	209.00		207.60

ROANOKE ST

			Lt	℄	Rt.
					21
19+75	3°31.89		207.95 207.29 F0.66	207.65	207.45 200.28 F7.17
19+69.88 = opp. swr Car Alley	3°17.29				Alley cb at P.O. = 207.63
19+68.09 = B.C. 2 Alley R	3°12.13	Δ 19°45'45 ℄R = 601.31 L = 207.41 T = 104.74' det. per ft. = 2.858547			207.48
19+50	2°20.42		208.06 208.19 C0.13	207.76	207.56 202.98 F4.58
19+25	1°08.95		208.17 208.87 C0.70	207.87	207.67 205.50 F2.17
19+00.88 = B.C. Rt.			208.27 209.43 C1.16	207.98	207.77 206.54

ROANOKE ST

moved 5' WLy

20+77.13 25ch R on Lt. Rot. Cont. P-24

20+82.13 = B.C. 8° 38.11 on Lt.

20 V1

		Lt	℄	Rt.
		207.60	207.18	
			207.21	207.09 206.37 F 0.74
+75	8°17.7 15.67	207.53 = Brk. ~~203.27~~ 203.81 F 3.72	207.24	207.08
20 69.52 ~~20+70~~ Brk.	8° 02.03 55.80			
+50	7°06.23	207.62 ~~201.37~~ 201.11 F 6.51	207.32	207.16 ~~205.55~~ 205.45 F 1.71
+25	5°54.76	207.73 201.45 F 6.28	207.43	207.27 204.19 F 3.08
20+00	4°43.29	207.84 203.07 F 4.77	207.54	207.38 199.84 F 7.54
	4°23.74 19+93.14 = 2' Lb Rad. E. side Alley			207.40
opp. S.E. Cor Alley 19+91.84	4°20.03			207.55

ROANOKE ST

TP. Set Temp BM. 100' Lt 21+08.29 = 209.97

Part 2 = cb E.C. on Rec or SW Cor. on Rt. 206.77

Part 1 on SW cb Rt 206.81

21+15.07 = B.C. 20' cb R on Rt. on 20' R = 38' Rt 206.86
20676

21+08.29 = E.C. 9° 52'.86 206.88
206.97
C 0.09

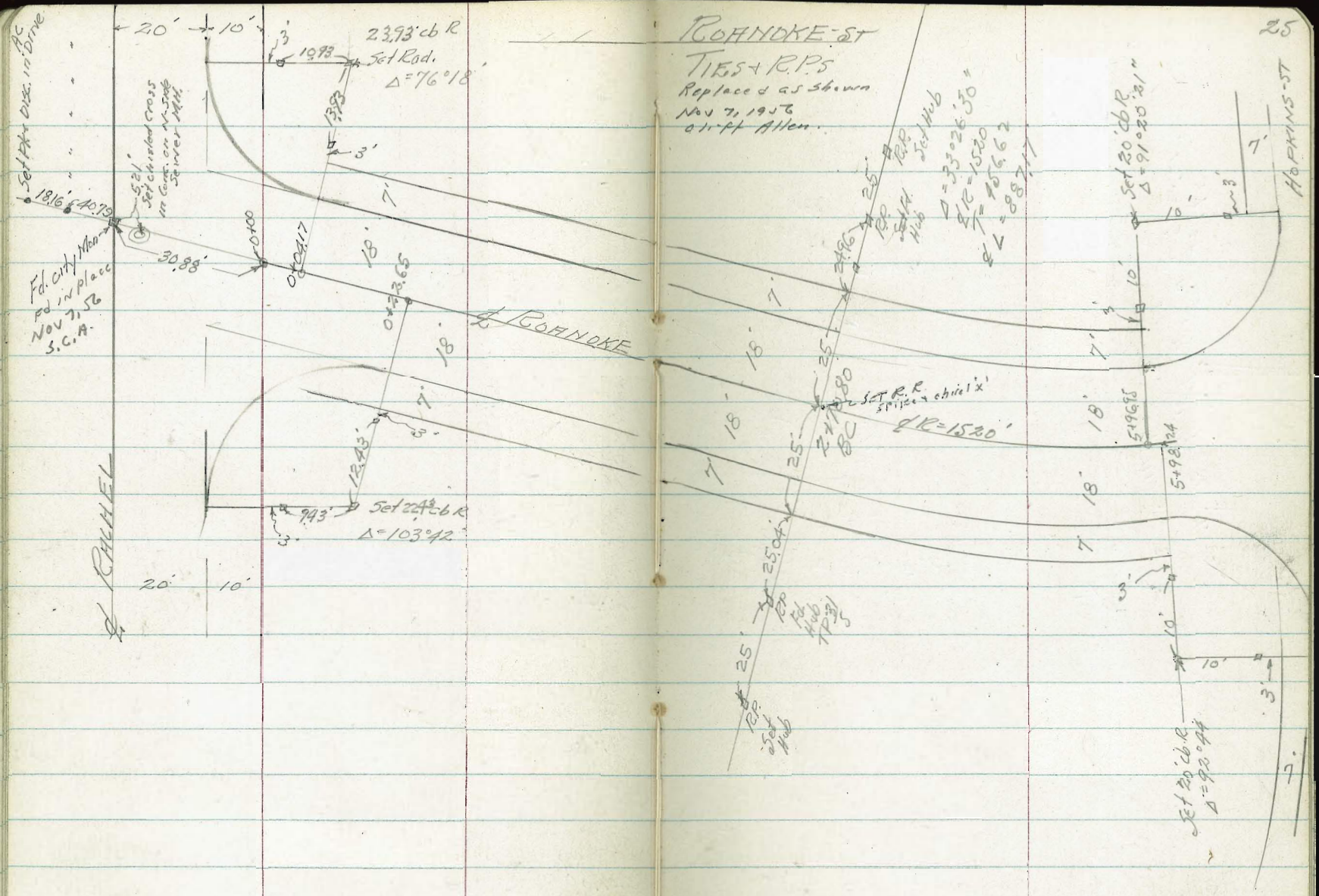
21+00 9°29.17 207.11 206.91
206.64
F 0.27

ROANOKE ST | Lt | ℄ | Rt | 24

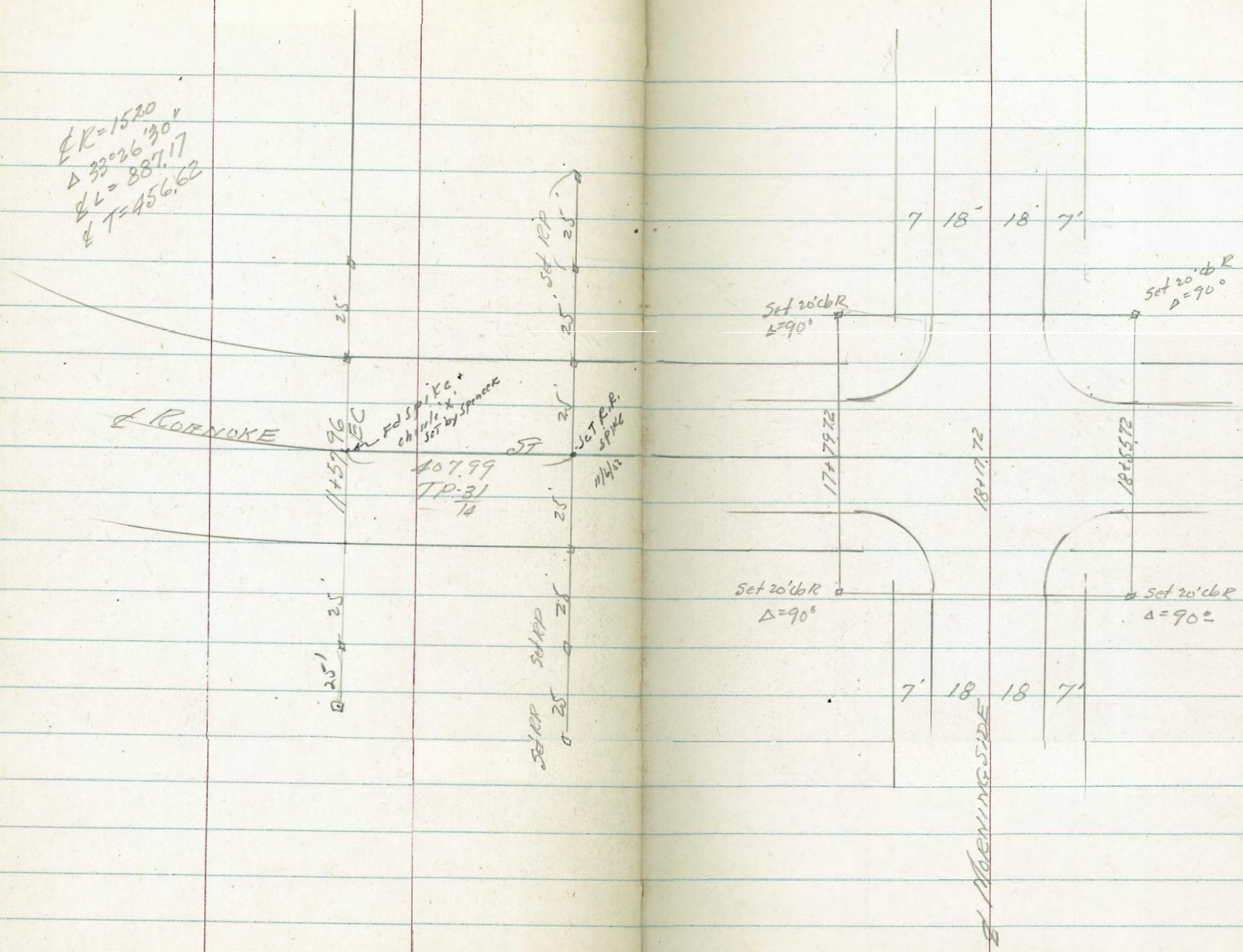
Part 4 = cb E.C. on • REO DR N.W. COR.		208.72	
Part 3		208.40	
Part 2		208.12	
Part 1		207.80	

ROANOKE-ST

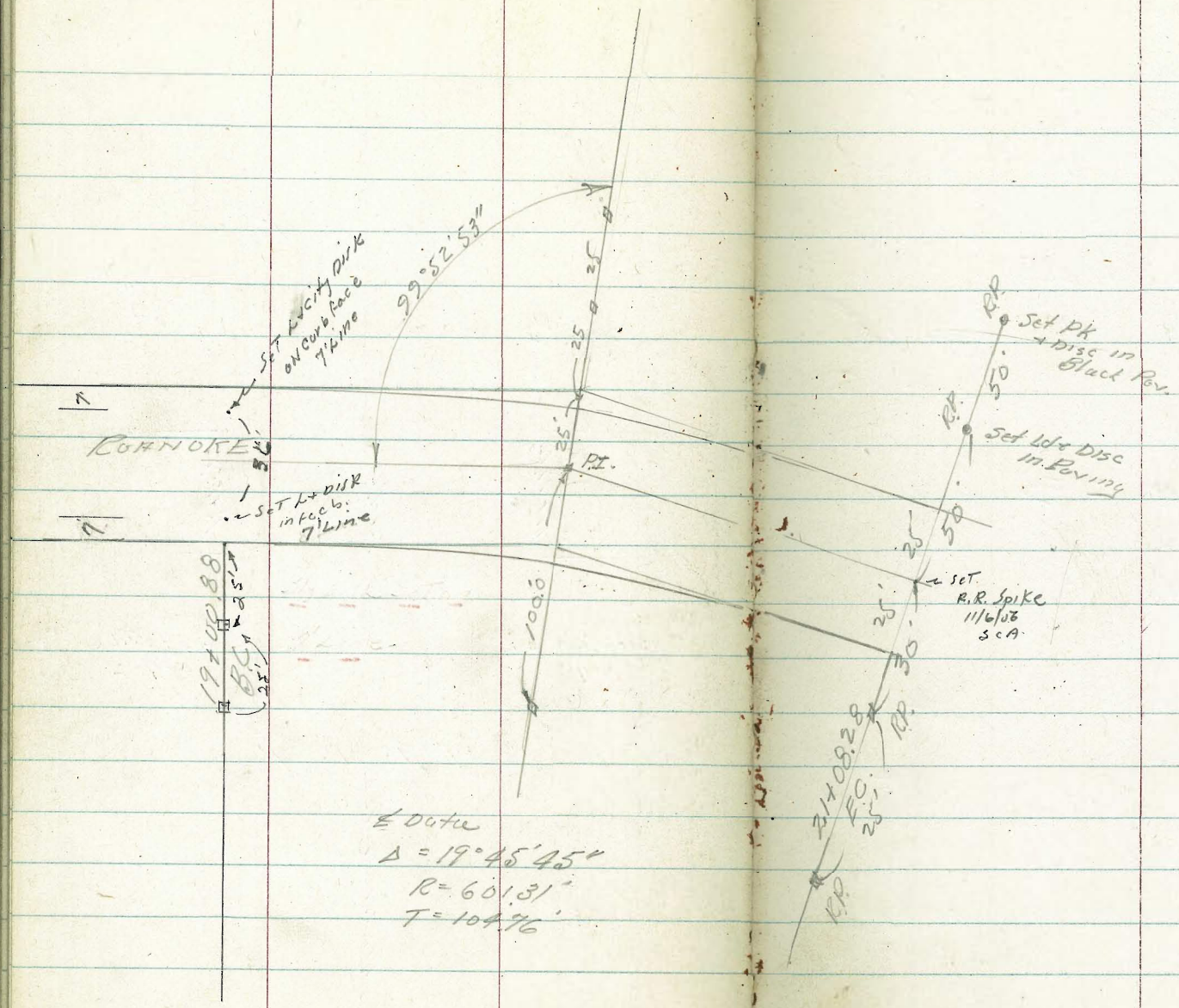
TIES + R.P.S
Replaced as shown
Nov 7, 1956
Clifft Allen.



ROANOKE
℄ R=1520'
9+33.60
10+08.13
℄ DEHUVILLE
18'
7'
3'
10'
Δ=88°22'
cb R=20'
Δ=89°26'
cb R=20'
Δ=85°54'40"
cb R=20'
set R
Δ=91°32'10"
set 20' cb R
Δ=91°20'21"
set 20' cb R
6+17.37
6+19.88
5+96.95
5+98.94
Hopkins
ST


℄ R = 1520
Δ 33°26'30"
℄ L = 887.17
℄ T = 456.62
℄ ROANOKE
11+57.96 EC
Fd spike + chiselled set by spencer
ST
407.99
TP-31
14
Set R.P. spike 11/4/32
25'
Set R.P.
Set R.P.
Set R.P.
Set 20' cb R Δ=90°
Set 20' cb R Δ=90°
Set 20' cb R Δ=90°
Set 20' cb R Δ=90°
17+79.72
18+17.72
18+65.72
7' 18' 18' 7'
℄ MORNINGSIDE

ROANOKE ST.

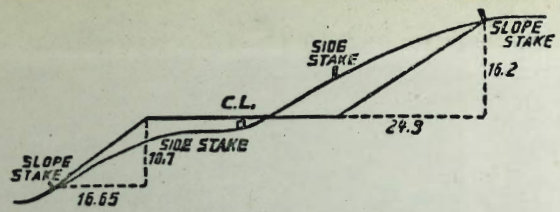


∡ Data
Δ = 19°45'45"
R = 601.31'
T = 104.76'

TORREY PINES PARK

SLY From Cor. #25

Stadia	From Int. Line Az	V∆	Corr. Horiz	Horiz.	Total	Cor #0
244	150°45'	1°30	0	244	244	
417		3°	-1	416	416	
					660	#24
	From 24 SLY					
213	195°27	3°35	-1	212	212	
				25	25	
					237.0	#23
	From 23					
555	64°30	5°50	-6	549	549	P.O.T. Hub
668		2°55	-1	667	667	
					1216	= POT Hub
394		0		394	394	
					1610	P.O.T. on Line = Int. Line from (23-22 + 21-20)
					225	
	From Int. Line 22-23-20-21				1385	Cor #22
525	279°				525	= POT
				140	-140	Cor #21
					385	
					95	
					480	



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE 1½ 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	71.20	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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