

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.

Please Return to
City of San Diego Water Dept.
Room 903 Civic Center

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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	.79	.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	4.95	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	.771	.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	.885	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

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 Cross sections of Bay 10-11 21
 PROFILE, & BAY 10-11. 22-23.
 SEWER AND GAS LINE IN CITY CAMP AREA. 24.

SEPT. 1952.

DON LEONARD.

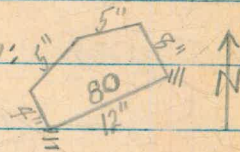
1.

SUTHERLAND DAM.
DESCRIPTION OF SEC. COR'S. FOUND.


S.W. CORNER SEC. #21. FD. WHITE GRANITE ROCK
8" X 8" X 10" HIGH, SCRIBED 08= ON SOUTH SIDE
AND ≡ ON EAST SIDE. MOUND OF GRANITE ROCKS
3 FT. WEST. OLD BARBED WIRE FENCE RUNS
TO SOUTH AND TO WEST. LIES ON HILLSIDE
SLOPING DOWN TO EAST, ABOUT 500 FT BELOW
ROAD INTO DAM. CONCRETE POWDER HOUSE
LIES N.W. ABOUT 800 FT. (ROUGH).


N.E. CORNER SEC. #21. FOUND 5 SIDED GRANITE

ROCK BURIED ON END, TOP SHARPED:
SCRIBED 08 ON TOP, AND THREE
DASHES CUT INTO BOTH THE EAST AND SOUTH
CORNERS. MOUND OF GRANITE ROCKS 4 FT. WEST.
OLD BARBED WIRE RUNS TO NORTH AND EAST,
WITH CORNER POST ABOUT 1 FT. N. OF CORNER.
CORNER LIES ON STEEP HILLSIDE EAST OF RIVER
BED AND ABOUT 100 FT ABOVE 2073 CONTOUR.



S¹/₄ CORNER OF SEC. #21. FOUND GRANITE ROCK
 9" X 9" X 16" HIGH, SCRIBED 08 ON TOP, AND ¹/₄ ON
 N. SIDE. MOUND OF GRANITE ROCKS SET. NORTH.
 LIES ON HILLSIDE SLOPING SOUTH, WITH SMALL GULLYS
 BOTH EAST AND WEST OF CORNER. BELOW THE
 20 FT. CONTOUR, ABOUT 300 FT. DISTANT.
 APPROXIMATE ELEVATION OF COR. IS

S.E. CORNER SEC. #21. FOUND CHISELED + ON
 EASTERN END OF HUGE GRANITE SURFACE ABOUT
 75 FT. LONG, E-W, AND 20 TO 30 FT. WIDE, N-S,
 AT GROUND LEVEL. SCRIBED: $\begin{matrix} 08 \\ + \\ III \\ = \end{matrix}$ 

MOUND OF GRANITE ROCKS SET. WEST.
 NEAR CREST OF SADDLE ON EAST SLOPE.
 FOUND ARRANG. OF ROCKS  ABOUT 100 FT. WEST,
 POINTING TOWARD CORNER. NEW PIONEER ROAD
 TO EAST ARM OF BASIN PASSES ABOUT 75 FT. NORTH

E. 1/4 CORNER SEC. #21. FOUND GRANITE ROCK
 4" X 12" X 12" HIGH, SCRIBED 1/4 ON WEST FACE
 AND 08 ON EAST FACE. LIES IN BRASSY FIELD
 ABOUT 100 FT SOUTH OF SMALL CREEK BED, AND
 250 FT. WEST OF OLD STONE HOUSE FOUNDATION.
 TWO OLD FENCE POSTS STANDING ABOUT 5 FT. APART
 IN CENTER OF FIELD, ARE ABOUT 90 FT. SOUTH OF
 CORNER. CORNER LIES ABOVE THE 2073 CONTOUR.

S. 1/4 CORNER SEC. #22. FOUND LIGHT GRANITE
 STONE WEDGE SHAPED, 20" LONG, E-W, 3" TO 4"
 WIDE AT GROUND LEVEL, TAPERED TO A SHARP
 RIDGE 4" ABOVE GROUND; SCRIBED 1/4 ON NORTH
 FACE AND 08 ON SOUTH FACE. MOUND OF
 7 LARGE GRANITE SLABS 4 FT. NORTH. LIES ON
 SLOPE ABOUT 100 FT. WEST OF RIVER BED.
 JUST BELOW THE 2073 CONTOUR. A LARGE
 ROCK BALANCED ON TOP OF ANOTHER ROCK,
 10 FT. HIGH, LIES ABOUT 10 FT. SOUTH OF COR.

S.E. CORNER SEC. #22. FOUND 3 SIDED GRANITE
ROCK 11" X 7" AT GROUND LEVEL, TAPERING TO A
POINT 8" ABOVE GROUND. SCRIBED = 08 ON
EAST FACE AND = ON SOUTH FACE. MOUND
OF GRANITE ROCKS 5 FT WEST. RAPPED WIRE
FENCE RUNS NORTH AND EAST, WITH CORNER
POST ABOUT 10 FT. SOUTH OF CORNER. LIGS
ON TOP OF ROUND HILL, EAST OF 3 FT. OAK
GROWING OUT OF ROCK PILE ON CREST OF HILL.
ABOUT 300 FT ABOVE 2073 CONTOUR IN ELEV.

W. 1/4 CORNER SEC. #21. LOST. THIS CORNER
CANNOT BE FOUND, AND APPARENTLY WAS
DESTROYED BY ROLL DOZER OPERATIONS
EARLY IN AUGUST OF THIS YEAR, DURING
THE LEVELING OFF OF THE AREA USED
FOR A STEEL STORAGE YARD. APPROXIMATE
LOCATION OF CORNER IS IN 10 FT. CUT IN
S.W. CORNER OF STEEL YARD.

N. $\frac{1}{4}$ COR. SEC. #21: FOUND GRANITE ROCK,
 WEDGE SHAPED, 7"X10"X14" HIGH, SCRIBED $\frac{1}{4}$ ON
 NORTH FACE AND 08 ON EAST FACE. MOUND
 OF ROCKS 4 FT. NORTH. CORNER IS ABOUT
 10 FT. BELOW CREST OF HILL, ON EAST SLOPE.
 MANY LARGE ROCKS ABOUT 50 FT. SOUTH OF COR.
 CREST OF HILL OBSCURES VIEW TO WEST AND
 SOUTH, EXCEPT HIGH POINTS. OPEN VIEW
 TO EAST. LIMITED VIEW TO NORTH.

N. $\frac{1}{4}$ COR. SEC. #22: FOUND REDDISH-GRAY
 GRANITE ROCK 8"X8"X9" HIGH, SCRIBED $\frac{1}{4}$ ON
 NORTH SIDE AND 08 ON EAST SIDE. MOUND
 OF ROCKS 3 FT. NORTH. LOCATED ON WEST
 SLOPE OF LONG HILL, ABOUT 50 FT. NORTH OF
 EDGE OF SOUTH SLOPE. 3 STRANDS OF BARBED
 WIRE RUNS E-W, ON GROUND, POSTS BURNED DOWN.
 TWO 24" OAKS STAND IN GULLY 150 FT. N.W. OF
 CORNER. TWO BURNT OAKS STAND 400[±] AND 500[±]
 FT. WEST OF CORNER.

OCT. 27, 1952.

DON LEONARD.

6,

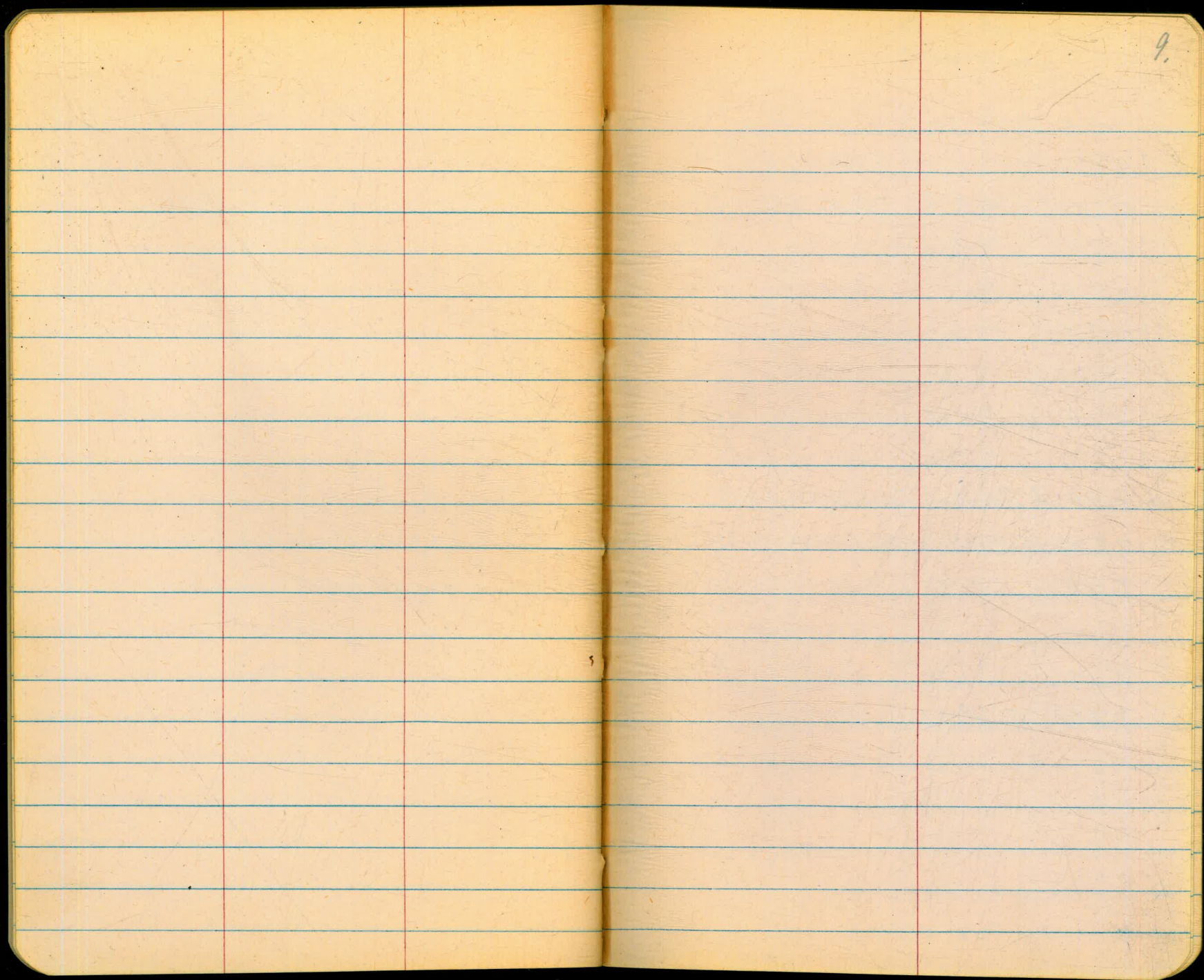
E $\frac{1}{4}$ COR. SEC. #22:

FOUND GRANITE ROCK
8" X 12" X 24" HIGH SCRIBED $\frac{1}{4}$ " ON ONE FACE AND
"08" ON OPPOSITE FACE, LAYING ON THE SIDE
SCRIBED $\frac{1}{4}$ ". ABOUT A DOZEN SMALLER ROCKS
SCATTERED AROUND WITH A 10 FT. AREA. I
STOOD THE CORNER ROCK UP ON ITS END
AND PILED THE OTHER ROCKS AROUND IT
TO HOLD IT UPRIGHT. THE $\frac{1}{4}$ " IS FACING
EAST. AN OAK WITH FIVE TRUNKS STANDS
ABOUT 25 FT. EAST OF THE CORNER, AND HAS
TWO STRANDS OF BARBED WIRE FENCE, RUNNING
NORTH AND SOUTH, NAILED TO IT. AN OAK
30" IN DIAMETER STANDS ABOUT 35 FT. WEST
OF THE CORNER. A CREEK BED RUNNING
SOUTH IS ABOUT 100 FT. WEST. AN OLD
STONE CELLAR IN EAST BANK OF CREEK
LIES ABOUT 150 FT. N. W. OF THE CORNER.

E $\frac{1}{4}$ COR. SEC. #27.

7.
FOUND GRANITE ROCK

8" X 12" X 12" HIGH SCRIBED $\frac{1}{4}$ " AND "08" BOTH
ON WEST FACE. 30" HIGH MOUND OF GRANITE
ROCKS ARE PILED UP 4 FT. WEST OF CORNER.
CORNER LIES ON HILLSIDE, BELOW MASSIVE
CLIFF
GRANITE ~~X~~ OUTCROPPING, IN VERY DENSE
BRUSH 8 TO 10 FT. HIGH. TWO LARGE
GRANITE ROCKS ABOUT 10' X 30' IN SIZE
LIE ABOUT 40 AND 50 FT, RESPECTIVELY
N.W. OF THE CORNER. A SMALL RAVINE
RUNS BETWEEN TWO LARGE GRANITE
BOULDERS, ABOUT 200 FT NORTH OF THE
CORNER.



9.

August, 1952. D. LEONARD, T & NOTES.
T. LEONARD - ROD.

10.

LEVEL NOTES FOR SETTING 2075 CONTOUR FLAGS.

R.M. CONC. MONUMENT AT 8+00 ON AXIS. TOP OF NAU.
GOING UP N.E. ARM OF BASIN.

R.M. +6.03	2090.07		2084.04 R.M.
+2.67	2086.26	- 6.48	2083.59
+8.86	2086.03	- 9.09	2077.17
+6.99	2087.00	- 6.02	2080.01
+5.57	2084.25	- 8.32	2078.68
+12.99	2090.72	- 6.52	2077.73
+ 2.19	2081.31	-11.60	2079.12
+ 9.19	2079.90	-10.60	2070.71

T.R.M. TOP 12' BOULDER. EAST OF OLD HOUSE, NEAR
FENCE COR. IN GROUP OF FOUR BOULDERS. PAINTED 2078 5

+5.60	2084.06	- 1.44	2078.46 T.R.M.
+0.85	2072.86	-12.05	2072.01
+12.01	2076.08	- 8.84	2064.02
+12.86	2079.27	- 9.62	2066.41
+8.46	2081.86	- 5.87	2073.40

T.R.M. ON 8' X 30' BOULDER SW. OF OLD HOUSE.

+94.27		-2.70	2079.16 T.R.M.
		-99.15	
		+94.27	2084.04
		-4.88	- 4.88
			2079.16 CH.

AUGUST, 1952.

D. LEONARD, & 2 WIVES. 11.
T. LEONARD, ROO.

B.M. 2x2" HUB SET BY KING, MARKER 2074 ELEV.

RESIDE OLD ROAD IN SW COR. OF BASIN.

GOING UP S.E. ARM OF BASIN. DENSE BRUSH.

SET 1" REDWOOD HUB, T.P., LONG BACKSIGHT.

ON 4 FT. ROCK IN SADDLE, SOUTH OF ISLAND.

USING ONE OF CONTRYS MEN FOR FOREMAN.

MANY LARGE OAKS.

B.M.	+ 3.71	2077.71	-	2074.00 B.M.
	+ 12.50	2080.80	- 9.41	2068.30
	+ 4.10	2077.99	- 6.91	2075.89
	+ 12.04	2080.65	- 9.40	2068.59
	+ 8.58	2081.25	- 7.96	2072.67
	+ 12.75	2082.56	- 11.44	2069.81
	+ 12.78	2085.78	- 9.56	2075.00 ^{SET HUB.}
SET T.O.M.			- 12.30	2073.48 T.O.M.
	+ 3.79	2077.27	- 9.45	2067.82
	+ 4.92	2072.74	- 0.70	2072.04
	+ 8.62	2080.66	- 7.86	2072.80
	+ 10.32	2083.12	- 8.03	2075.09
	+ 10.92	2086.01	- 10.07	2075.94
	+ 2.90	2078.84	- 8.24	2070.60
	+ 5.88	2076.98	- 0.47	2076.01
	+ 8.93	2084.94	- 4.46	2080.48
	+ 11.17	2091.65	- 12.95	2078.70
	+ 1.68	2080.38	- 12.91	2067.47
	+ 4.13	2071.60	- 10.92	2060.68
	139.72		153.04	

153.04 2074.00
139.72 - 13.32
18.32 2060.68

GOING UP SOUTH SIDE OF S.E. MOUNTAIN

			2060.68	
+	13.11	2073.79	-11.27	2062.52
	+0.24	2062.76	-9.21	2053.55
	+12.60	2066.15	-0.27	2065.88
	+10.08	2075.96	-13.06	2062.90
	+10.84	2073.74	-0.09	2073.65
	+12.95	2086.60	-9.27	2077.33
	+8.46	2085.79	-6.82	2079.97
	+3.04	2083.01	-2.45	2080.56
	+10.36	2090.92	-12.23	2078.69
	+0.31	2079.00	-10.61	2068.39
	+6.90	2075.29	-0.57	2074.72
	+0.26	2074.98	-7.72	2067.26
	+8.00	2075.26	-10.67	2064.59
	+0.43	2065.02	-12.59	2052.43
	+6.23	2058.66	-2.23	2056.43
	+12.04	2068.47	-0.70	2067.77
	+11.24	2079.01	-7.75	2071.26
	+9.75	2080.99	-4.30	2076.69
	136.82		120.81	

T.O.M.

OK

SET T.O.M.

2060.68
+16.01
2076.69

GOING UP S. SIDE OF S.E. COR. DENSE BRUSH AND
LARGE OAKS.

			2076.69
+ 9.56	2086.25	- 0.10	2086.15
+ 12.78	2098.93	- 4.41	2094.52
+ 0.21	2094.72	- 12.76	2081.97
+ 4.14	2086.11	- 11.67	2074.44
+ 4.13	2078.57	- 3.97	2074.60
+ 0.16	2074.76	- 10.52	2064.24
+ 12.32	2076.56	- 0.64	2075.92
+ 12.77	2088.69	- 13.09	2075.60
+ 8.98	2084.58	- 7.57	2077.01
+ 11.02	2088.02	- 9.65	2078.38
+ 10.61	2088.99	- 8.45	2080.54
+ 3.90	2084.44	- 10.79	2073.65
+ 8.21	2081.86	- 7.48	2074.38
+ 8.82	2083.25	- 9.21	2074.04
+ 0.30	2074.34	- 12.29	2062.05
+ 2.15	2064.20	- 0.65	2063.55
+ 12.99	2076.54	- 2.78	2073.76
+ 2.23	2075.99	- 2.47	2073.52
125.28		128.45	

+ 125.45
+ 125.28
- 3.17
2073.52

GOING UP EAST SIDE OF S.E. ARM OF BASIN.

			2073.52
+ 9.17	2082.69	- 7.99	2074.70
+ 1.75	2076.45	- 8.88	2067.57
+ 10.11	2077.68	- 2.71	2074.97
+ 9.82	2084.79	- 5.44	2079.35
+ 9.30	2088.65	- 12.69	2075.96
+ 5.66	2081.62	- 12.85	2069.27

SET T.B.M. ON W. END OF 60' ROCK NEAR SEP. LINE E-W.

+ 10.98	2080.25	- 3.76	2076.49 T.B.M.
+ 5.57	2082.06	- 3.26	2078.80
+ 3.61	2082.41	- 12.27	2070.14
+ 3.45	2078.59	- 1.14	2072.46
+ 5.63	2078.08	- 4.03	2074.05
+ 3.06	2077.11	- 6.55	2070.56

SET LAST FLAG AT END OF CONTOUR ON LARGE ROCKS IN RIVER BED.

+ 7.40	2077.96	- 7.40	2070.56
--------	---------	--------	---------

SET T.B.M. ON ROCK WITH 5 FT. ROUND POT HOLE, SET SOUTH, IN BOTTOM OF STREAM BED. HUGE ROCKS TO WEST.

+ 11.58	2082.14	- 2.60	2079.54 T.B.M.
---------	---------	--------	----------------

RETURNING ALONG WEST SIDE OF CANYON, S.E. ARM.

+ 9.69	2089.23	- 12.65	2076.58
+ 4.34	2080.92	- 9.75	2071.17
+ 5.57	2076.74	- 8.60	2068.14
+ 7.17	2075.51	- 0.81	2074.50

SET T.P.M. ON 5' HIGH WHITE ROCK.

SET SPINE IN TRUNK OF 6" DEAD MANZANITA, T.P.

				2074.50
	+ 4.35	2078.85	- 1.35	2077.50 <i>T.P.M.</i>
	+ 5.02	2083.87	- 10.07	2073.80 <i>SPINE</i>
	+ 10.58	2094.45	- 6.59	2076.64
	+ 10.88	2087.52	- 11.69	2075.83
	+ 7.79	2082.62	- 8.40	2075.22
	+ 4.56	2079.78	- 10.80	2068.98
	+ 1.78	2070.76	- 3.89	2066.87
	+ 12.60	2079.47	- 3.72	2075.75
	+ 1.84	2077.59	- 8.74	2068.85
	+ 6.02	2074.87	- 9.92	2064.95
	+ 6.52	2071.47	- 2.96	2068.51
	+ 6.74	2075.25	- 0.26	2074.99
SET T.P.M. TOP 40' LONG ROCK.	+ 4.03	2079.02	- 3.05	2075.97 <i>T.P.M.</i>
	+ 5.10	2081.07	- 9.85	2071.22
	+ 12.66	2093.88	- 11.31	2072.57
	+ 5.09	2077.66	- 2.36	2075.80
	+ 6.84	2082.14	- 6.53	2075.61
	+ 9.59	2085.20	- 12.26	2072.94
	+ 12.59	2085.59	- 12.58	2072.95

SET T.B.M. ON LARGE ROCK ABOUT 300 FT. N.E. OF T.B.M. RECORD.

+ 5.36 2078.31 - 3.04 2072.95
2076.27 T.B.M.*

+ 4.75 2080.02 - 11.13 2068.89

SET T.B.M. TOP EDGE 100' X 60' GRANITE SLAB NORTH OF OAKS
IN VALLEY, NEAR E. LINE SEC. 28, NORTH OF RIVER.

+ 1.63 2070.52 - 5.63 2064.89 T.B.M.

+ 8.86 2070.75 - 7.87 2062.88

+ 12.87 2078.75 - 8.78 2069.97

+ 12.82 2082.79 - 5.97 2076.82

+ 12.00 2088.82 - 11.95 2076.87

+ 8.80 2085.67 - 10.31 2075.36

SET T.B.M. TOP OF 20' LONG ROCK 500' NW. OF ISLAND

+ 3.20 2078.66 - 4.25 2074.41 T.B.M.

+ 4.07 2078.48 - 11.22 2067.26

+ 6.10 2073.36 - 0.67 2072.69

ROCK ON S. SIDE OF RIVER, - 3 ROCKS IN A GROUP.

+ 10.45 2083.14 - 11.43 2071.71

+ 1.09 2072.80 - 4.34 2068.46

+ 12.95 2081.41

CHECK ORIGINAL B.M. 2' X 2" HARD WYKING, MARKED 2074.

- 2.48 2073.89 = 2074.00

0.07 low.

10/2/52

WILLIE.
DAVE.

17.

SEE PAGE 10 FOR B.M. LOCATION.

B.M.			2078.46
+1.67	2080.13	-0.75	2079.38
+11.90	2091.28	-0.20	2091.08
+12.29	2103.37	-0.66	2102.71
+12.71	2115.42	-1.48	2113.94
+6.39	2120.33	-12.76	2107.57
+0.65	2108.22	-12.82	2095.40
+0.52	2095.92	-6.77	2089.15
+3.10	2092.25	-5.71	2086.54
+2.21	2088.75	-4.36	2084.39
+11.64	2096.03		
		-7.53	2088.50
		-9.08	2086.95
+9.88	2096.83	-12.85	2083.98
+4.98	2088.96	-12.36	2076.60
+2.72	2079.32	-6.25	2073.07
+6.00	2079.07	-0.30	2078.77
+1.80	2080.57		

#1

B.M. ON ROCK RT. END OF ROAD NEAR BRIDGE WHITE FLAG

#2

B.M. ON N.E. ARM INDIAN RES. ROCK
EAST SIDE CREEK

-7.00 2073.57

10-2152

18.

+4.01	2077.58	-5.63	2071.95
+1.05	2073.00	-9.35	2063.65
+4.26	2067.91	-7.17	2060.74
+10.83	2070.77	-2.78	2067.99
+9.80	2077.79	-13.00	2064.79
+0.55	2065.34	-12.97	2052.37
+4.26	2056.63	-1.70	2054.93
+12.89	2067.82	-0.63	2067.19
+12.74	2079.93	-0.55	2079.38
+12.59	2091.97		
CHECK TO B.M. #1	2088.50	-3.54	2088.43

19.

The image shows an open notebook with two pages. The pages are cream-colored and feature blue horizontal ruling. The right page has a red vertical margin line and a faint grid pattern. The number '20.' is written in the top right corner of the right page. The notebook is set against a black background.

Oct. 1, 1952

GERICKE - P.D.
BERGMAN - TAPE
LEONARD - X

01630.0

22.

PROFILE

X-SECTIONS BETWEEN BUTTRASS #10 AND #11.

B.M.	+5.05	1945.33 ✓	1940.28
L 1151.0	1916.30	-8.30	1937.0 ✓ CON.
L 1146.5	"	-5.50	1939.8 ✓
L 1139.6	"	-7.00	1938.3 ✓
L 1128.6	"	-7.4	1937.9 ✓
L 1117.5	"	-8.7	1936.6 ✓
L 1106.5	"	-8.0	1937.3 ✓
L 1100	"	-8.8	1936.5 ✓
L 1090	"	-10.2	1934.1 35'
L 1070	"	-9.1	1936.2 ✓
L 1050	"	-8.2	1937.1 ✓
L 1030	"	-8.5	1936.8 ✓
L 1013	"	-7.8	1937.5 ✓
Axis	"	-9.2	1936.1 ✓
L 990	"	-9.5	1935.8 ✓
L 975	"	-9.2	1936.1 ✓

ON FILE

H.d.	1945.33			37	ON FILL.
L950	D1630	-8.2	1931.1		
L931	h	-7.0	1938.3 ✓		h
L915	h	-6.6	1938.7 ✓		h
L900	h	-5.4	1939.9 ✓		h
L881	h	-6.8	1938.5 ✓		h
L870	h	-10.0	1935.3 ✓		h
L850	h	-14.7	1930.6 ✓		h ABOUT 10 FT. DEEP.

H. d.	1945.33		1931.1	32	ON FILL.
L950	D1650	-8.2	1931.1	32	ON FILL.
L931	n	-7.0	1938.3	✓	n
L915	n	-6.6	1938.7	✓	n
L900	n	-5.4	1939.9	✓	n
L881	n	-6.8	1938.5	✓	n
L870	n	-10.0	1935.3	✓	h
L850	n	-14.7	1930.6	✓	n ABOUT 10 FT. DEEP.

Oct. 13, 1952.

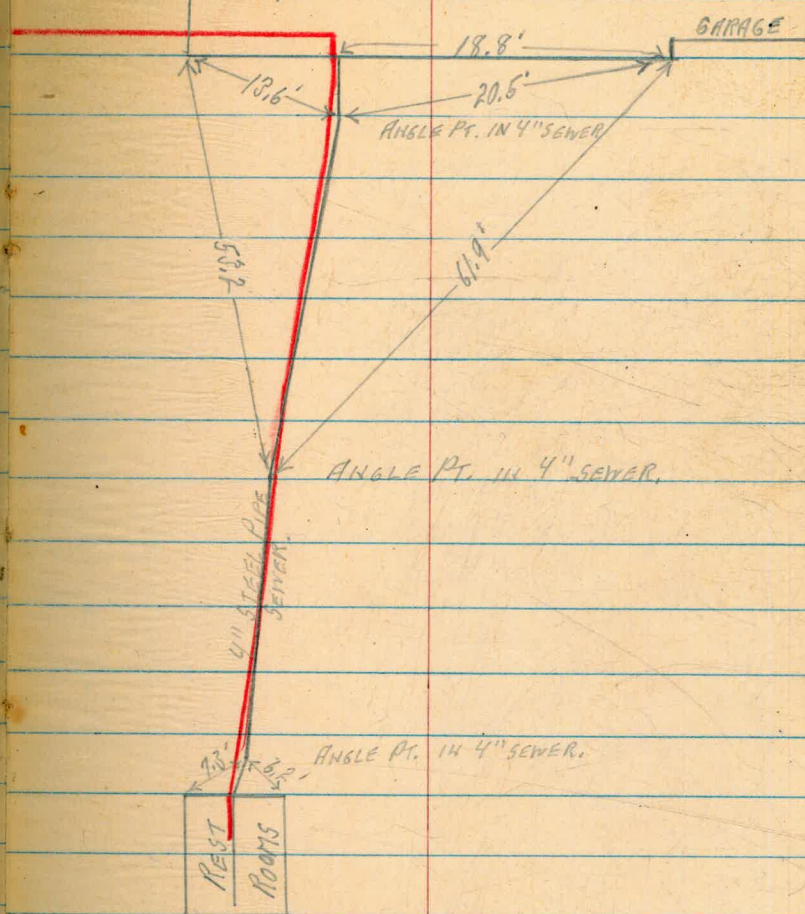
LEONARD,
HOGGLAND.

29.

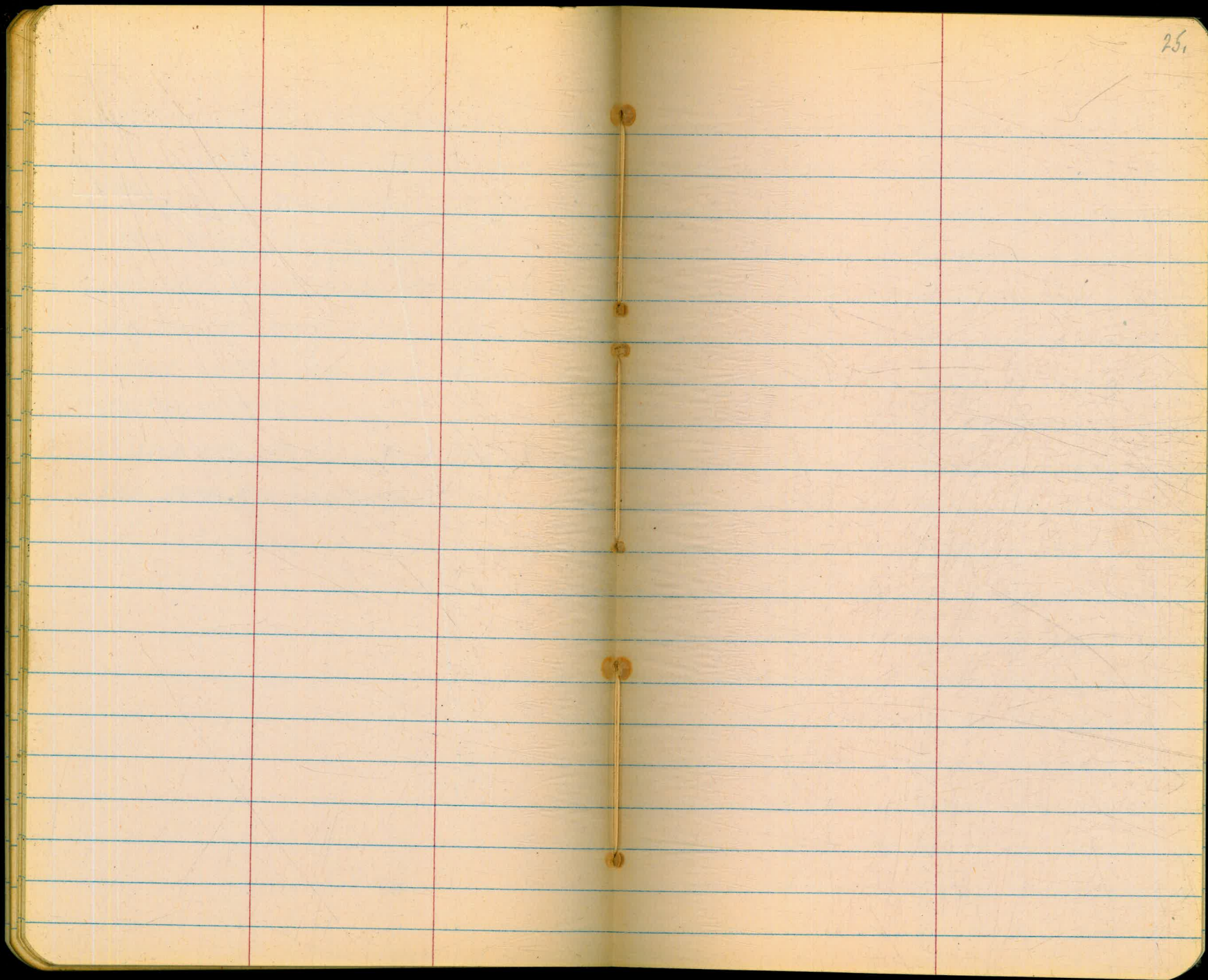
NOTE: CAST IRON SOIL PIPE EXTENDS 6.9' BEYOND
FACE OF HOUSE, SOUTH, THEN LINE IS 4"
STEEL PIPE, WELDED JOINTS, INTO C.I. FITTINGS
2.0' NORTH OF SHOWER HOUSE. LINE ENTERS
SHOWER HOUSE ON WEST EDGE OF CENTER
CONCRETE PIER.
1" GALV. PIPE FOR GAS LINE IN SAME DITCH,
BOTH LINES ABOUT 1 FT. DEEP.

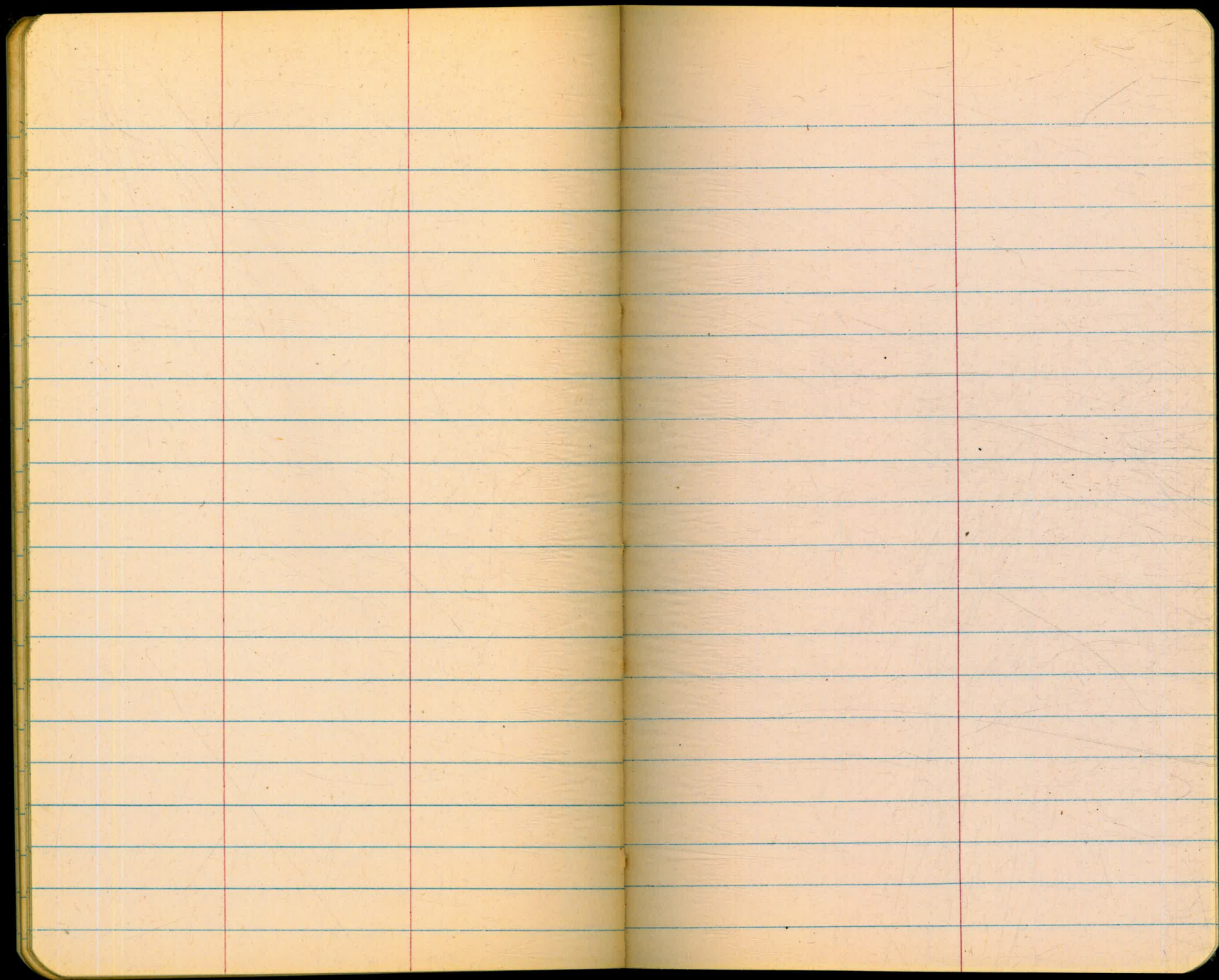
SEWER LINE FROM HOUSE TO SHOWER HOUSE.

RESIDENT ENG'S HOUSE

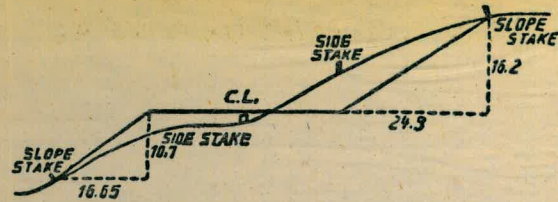


RED = 1" GAS LINE.





Please Return to
 City of San Diego Water Dept.
 Room 903 Civic Center



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE 1 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	71.20	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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