

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. B. 395

MICROFILMED

APR 19 1965

DIRECTIONS FOR USE OF TABLES

TABLE No. XIV

Distance of slope stake from side of shoulder
stake for app. within roadway, slope 1 1/2 to 1.
If ground is nearly level, the cut or fill on side

IMPROVED TABLES
AND
INFORMATION

cut stake. If it does not make the slight ad-
justment necessary.

TABLE No. VIII

To find tangents and distance for curve of
any other degree divide by degree of curve and
add corrected tangent to column of correction.
Degree of curve with a given L may be found
by dividing tangent (or extension) opposite L by
given tangent (or extension).

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.

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	.55	.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	4.98	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	.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	.266	.353	.440	.528	.618	.707	.797	.887	.977	1.07	1.18	1.29
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

Pave Monmouth, Emelene, Pullingwood, Loring,

Jewell, Kendall-in Congress Hts 4-19

Pave Jewell EMERALD TO DIAMOND -20-21

" DAWES, TOURMALINE TO Turquoise 22-23

Pave Balboa Ave-GRAND TO GARNET 23+etal

" ALLEY BLK 329, Choater add 32-35

DRAIN in Linda way 35

SEWERS ALLEYS 85-96. E.W. MORLES SUB 36-

" ALLEY BLK 66 " " 37

Sewer San Luis To 28th SLY of TREAT ST 37

24" DRAIN NLY of GARNET & ELY of Balboa 38-

Pave Sterne Rosecrans TO LOCUST 44-45

Pave Alley 114, Pacific Beach 46-47-

Relocation of Sewer Highway 94- 58-

TO COURTS
Pave Hancock ST- Sutherland 72-76

Pave Dickens ST- Willow to Plum 78-79

See page

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VOID

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2

23 34 16
26 25 48
49 59 60

VOID

17 40

PAVE MONMOUTH DRIVE
LTS 517

DIST
FROM
ROUGH
GRADE
STAKE
TO
F.C.
PLAN.

Station	ROUGH GRADE	TOP OF GRADE	CURB STAKE GRADE	
1+60 ⁶⁰	F164 186.06	187.70	187.70	
1+30 ⁶⁰	F286 186.24	189.10	189.32	
RIGHT 47 Rad POINT ON 1+12 ⁰² = 130 OF				
IN SLY CURB 1+00 ⁶⁰ E.C.	F169 188.81	190.50	190.68	12 ⁰⁰
Def 13°06'00" - Chord =		25.14'		
0+70 ⁻⁴⁵	X 5' BR F204 189.11	191.15	191.19	11 ⁸
Def 9°49'30" - Chord		25.14'		
0+50 ³⁰	F296 188.84	191.80	190.58	9 ³
Def = 6°33'00" Chord =		25.14'		
0+25 ¹⁵	F305 189.43	192.48	192.42	13 ²
Def = 3°16'30" - Chord =		25.14'		
DP FOR 220' R = 7.81306' RUN ON BASE LINE 15' NLY OF SLY CURB Rad = 205 - D = 26012				
Collingwood AT 1+54 ²¹ ON 0+00 = CURB BC	F348 189.63	193.11	193.39	15 ⁰⁰

Collingwood To Congress Hts
RT = NLY.
Dist 94129-D

#

ROUGH GRADE	TOP CURB GRADE	CURB STAKE
C801 196.68	188.67	C063 189.30
C565 195.95	190.30 ✓	C018 190.48
C137 ON RR 192.67	191.30	C026 191.56

PAVE MANIMOUTH
LT=54.

DRIVE CONT
~~RT~~ RT=NH4

5

Station	Rough grade	Topcb grade	curb Stake
L=44.60 cb R=245' Δ=1626' Run along cb line 6" NH4 curb (RT)	F0 L	181.3	C0 41
3+6335-C6BC	181.3	181.43	81.84
3+41.41		182.62	C0 42
			183.04
3+19 48=EVC	C0 39	184.12	C0 28
	184.12	183.82	184.10
2+99 48	C0 62	185.42	C0 15
	185.42	184.80	184.95
2+79 48	C0 23	185.79	C0 04
	185.79	185.56	185.60
2+69 48		185.83	C0 01
			185.84
2+59 48	C0 02	186.02	C0 13
	186.02	186.00	186.13
2+39 48	C0 12	186.32	C0 28
	186.32	186.20	186.48
2+00 60 EVC	F0 20	186.30	C0 07
	186.30	186.50	186.57
1+80 60	x's back F0 57	186.33	C0 21
	186.33	186.90	187.11

Station	Rough grade	Topcb grade	curb Stake
38% slope	C9 10	182.43	C0. 19
	191.53		182.62
		183.62	F0 07
			183.55
	C9 L	184.82	F0 42
	193.9		184.40
	C8 50	185.80	F0. 42
	194.30		185.38
	C7 93	186.56	F0. 25
	194.49		186.31
		186.83	F0 17
			186.66
	C7 51	187.00	C0 27
	194.51		187.27
	C9 30	187.20	C0 20
	196.50		187.49
	C8.47	187.75	C0 04
	196.22		187.79
	C8 86	188.00	C0 42
	196.86		188.42

Place 2 of city
BUILT DRIVE AT
2+00 60

Station	Rough grade	TOPCS grade	Curve Stake
Tangent 4+5394 RTonly	Det = 4° 12.39		ONLY TO LOCATE → grade BRKJ ON TAN
Tangent 4+3394 -RTonly	Det = 2° 54.08		
5° 13' 00"		79.83'	L = 49.94
Def = 5° 30.70	chord = 84.33'		
= ABC -	R = 439.3.915429		
Return to 3+8948	-DPF ON	Between	chs

Part #4 + EC = 4+07 95

Def = 5° 13' - chord = 14.19' - 4+07 95

Part 3 = 3+93 76

Def 3° 33.36' - chord = 4.31

Part 2 = 3+8945

Def 3° 03.12' - chord 13.05

Part #1
BE + 13° 5' 3+76.40

Def = 1° 31.56' - chord = 13.05

DPF = 7.015809'

R = 240'

on curb line

on NLY - run

3+6335 = c6BC

Δ = 31° 35' 12"

Jewell - R = 30'

LT. SEYCOR

3+8948 = CAB C	C11	180.00	C014
	181.11		180.14

Rough grade	TOPCS grade	Curve Stake
208 BK FCCB C925		C016
188.25	179.00	179.16
22 BK FCCB C895		C034
88.41	179.46	179.80

24 BK FCCB C884		C054
189.10	180.26	180.80

		C029
	180.96	181.25

26 BK FCCB C881		C031
189.81	181.00	181.31

28 BK FCCB C875		C025
190.46	181.71	181.96
	182.43	

28 BK FCCB C919		
191.53	182.43	

Station	Rough Grade	Top cb grade	cb stake	Rough Grade	Top cb grade	cb stake
6+33 ⁹⁴	F6 ³³ 177.74	184.27 184.07	C006 84.33	C429 89.36	185.57 185.27	F047 185.10
20° - Def = 15° 57.18'						
6+13 ⁹⁴	F6 ³¹ 176.53	182.94 182.84	F0.23 182.71	C450 88.34	184.10 183.84	F0.15 183.95
20° - Def = 14° 38.87'						
5+93 ⁹⁴	F6 ⁶³ 174.88	181.50	C006 181.56	C409 186.59	182.50	C026 182.76
20° - Def = 13° 20.56'						
5+73 ⁹⁴	F6 ³⁷ 173.91	180.28	C0.39 180.67	C5.08 86.36	181.28	C0.23 181.51
20° Def = 12° 02.29'						
5+53 ⁹⁴	Chisel X 0.4 in Street F2.04 177.26	179.30	C061 179.91	C647 186.77	180.30	C008 180.38
20° Def = 10° 43.94'						
5+33 ⁹⁴	Chisel X 0.6 in Street F1.31 177.25	178.56	C0.32 178.88	C734 186.90	179.56	C032 179.88
20° - Def = 9° 25.63'						
5+13 ⁹⁴	Nat 10.3m St C0.05 178.01	177.96	C029 178.25	Chisel BK R C744 86.40	178.96	C037 179.33
20° Def = 8° 07.32'						
4+93 ⁹⁴	Copy Nat 10.0m St C0.20 178.88	177.80	C023 178.05	Nat 10.0m St C762 86.42	178.80	C045 179.25
14.42 - Def = 6° 49.01'						
LT = R = 30'						
4+79 ⁹⁴	X 1.0m St F0.32 177.33	177.74 177.70	C017 177.91 } 'x' gutter C003 177.73			C081 = 'x' gutter 179.54
10.10 - Def = 5° 52.55'						
4+69 ⁹⁴	CB AC RT 177.70			Nat 4.2 in C792 186.70	178.78	C072 179.00
From BC GT 3+89 ⁹⁴		180.00			181.00	

Station	Rough grade	Top of grade	cb Stake	Rough grade	Top of grade	cb Stake
8+33 94	^{x'05.114} F6 94 183.20	190.14	C013 190.27	C454 95.68	191.14	F013 191.01
2000 - 29000.28'						
8+13 94	^{x'04.114} F6 59 183.27	189.86	F013 189.73	C614 197.00	190.86	C001 190.87
2000 - 27041.97'						
7+93 94	^{x'04.114} F4 48 184.98	189.46	F008 89.38	C566 196.12	190.46	F044 190.02
2000 Det = 26023.66'						
7+73 94 = BVC	^{x'04.114} F3 9 185.0	188.94	F040 88.54	C648 96.42	189.94	F008 189.86
2000 - Det = 25005.35'						
7+53 94	^{x'10.162} F3 40 84.96	88.41	C014 88.55	^{7+72 = #7 RT} 185.2 C749 196.85	C115 189.48	F001 189.36 189.47
2000 Det = 23047.04'						
7+33 94	^{x'05.114} F4 0 83.8	87.88	F006 87.82	C767 196.45	189.03 188.78	F028 188.75
2000 22028.73'						
7+13 94	^{x'10.162} F3 3 83.9	87.35	F008 87.27	^{x'5.104} C584 194.04	188.57 188.20	F005 188.52
2000 - Det = 21010.42'						
6+93 94 = EVC	^{x'05.114} F2 90 83.72	186.82	C010 186.92	^{x'5.104} C616 193.78	188.12 187.62	F030 187.82
192000 - Det = 19052.11'						
6+73 94	^{x'05.114} F2 32 83.63	186.15	C007 186.22	C445 191.40	187.45 186.95	F033 187.12
2000 Det = 18033.80						
6+53 94	F6 81 78.29	185.30 185.10	F003 185.28	C407 190.17	186.60 186.10	F051 186.09
2000 - Det = 17015.49'						

Station	Rough Grade	Top of grade stake		Rough grade	Top of grade	C.C. Stake
10+43.81					(20.00) 186.86	
10+15.54		(15.00) 187.36		C 311 91.71	118.77 188.60	F046 188.14
9+95.54	F265 185.55	(18.84) 188.20	PK 216K F161 186.59	C 827 98.00	(17.89) 189.73	F018 189.55
9+75.54	PK F658 182.70	(17.67) 189.28	C 008 26K 189.36	C 654 97.14	(17.01) 190.60	F016 190.74
9+55.54	PK F905 181.00	(16.55) 190.05	C 013 216K 190.18	C 536 96.55	(16.13) 191.19	C 002 191.21
9+35.54	PK F971 80.76	(15.33) 190.47	C 001 26K 190.48	C 512 96.62	(15.25) 191.50	F003 191.47
9+29.90		189.38	C 008 216K 189.46			
9+29.90 Curbs Begin	PK F973 80.77	(15.07, 11) 190.49	C 011 216K 190.38	C 283 94.34	(15.00) 191.51	F018 191.33
9+15.54 = BVC	PK 516K F953 180.98		216K C 005 90.58	C 285 "X" 94.38		F021 191.22
8+88.27	PK 416K F689 183.54		26K C 002 190.45	C 469 96.12		F025 191.18
8+61.00 = E.C.	F1028 180.05		316K C 009 190.37	C 407 95.40		F008 191.25
7.06 - Det = 30°47' ±						
8+53.94		190.30	F014 190.16	C 407 95.40		F030 191.00
200° - Det = 30°18'59'						

Pave Jewell ST - Beryl to Monmouth Dr - Nov 20, 57 Wb # 22303 10
 Proj 41284 4129-D

Station	Rough grade	Top cb grade	cb Stake	Rough grade	Top cb grade	cb Stake
SELY to MONMOUTH 1454° = 90° TO					179.80	
RT- 3' Rad 1448° = alley BC ON				C237 81.14	178. 75 65	
OF alley TO ELY. 1450° = NLY Line					178.30	
OF ALLEY TO ELY. 1425° = SLY Line MONMOUTH 1424° = 90° TO SWLY COR		176.25			176.65	
LT = 3' Rad 1422° = alley BC				LINWELL 15' IN ST C089 177.24	176.35	F075 TO ALLEY 175.96 - F075 ST
LT- 30' Rad 1406° = CB BC	F145 172.56	174.01	F010 173.91	C047 175.17	174.70	F018 174.52
0+74	11' back C083 171.00	170.17	F015 170.02	C198 172.84	170.86	C-009 170.95
0+42	C190 68.23	166.33	C022 166.55	C33 170.3	167.02	C018 167.20
30' Rad 0+10 = CB BC U	C384 66.33	162.49	F008 62.41	C535 168.53	163.18 143	F011 163.07
Beryl ST 0+00 = NLY R		161.29	MEET (12')		161.98	161.99 (MEET)

Pave boring ST
LT=NL7

Dwg 4/29+30-

RT=514.

11

Station	Rough grade	Top cb grade	cb stake	Rough grade	Top cb grade	cb stake
44 1+54 = EC.	C783 47.45	239.62	C056 240.18		239.12	C046 239.58
1. Def = 13° 11' 40" - chord = 20.00 Point of curve 1+34 1/2 = MH	C750 47.00	239.50	C058 240.08		239.00	C039 239.39
1. Def = 6° 35' 50" - chord = 20.00 R = 87.00 Δ = 26° 23' 18" ΔL = 40.07						
1. 1+14 3/4 = BC	C561 244.99	239.38	C016 239.54		238.88	C044 239.32
1. 0+92 2/2	C457 43.48	238.91	C082 239.73		238.64	C077 39.41
1. 0+70 0/2 = EC	C453 43.00	238.47	F016 38.31		238.41	C041 38.82
1. Def = 20° 59' 02" - chord = 16.02' Point of curve 0+53 9/5 = Mid	C355 41.41	237.86	F018 37.68		237.83	C042 38.25
1. Def = 10° 29' 31" - chord = 16.02' R = 44.00 Δ = 41° 58' 06" ΔL = 32.23						
0+37 8/4 = BC	C379 41.04	237.25	F013 37.12		237.25	F035 36.90
0+18 9/2	C624 42.64	236.40	C080 37.20		236.39	C038 36.77 30
Windsor Road 1. Paving Pavu Flyot 0+00 = Flyedge of		235.56			235.53	1 meet 35.63

Pave Loring Court

NT=NLy.

Rough Topob cb
grade grade stake

Station 3+84.75 = PRC
(26.10) Def = 26.05
C123 45.63
243.80 = 3+26.21
chord = 26.05 - 4273 F007

on colling road

3+58.65
C099 243.49 242.50 F018 42.32

(26.11) Def = 19.0 39.45" - chord = 26.05

3+32.54
C126 42.56 241.30 C031 41.61

(26.11) Def = 13.0 06'30" - chord = 26.05

3+06.73
C103 41.68 240.65 C018 40.83

(26.10) Def = 6.0 33'15" chord = 26.05

2+80.33 = BC
C130 41.68 240.38 C030 40.68

Note above curb Run along curb line

5 by 28' road 2115
2+98.28 = cb RC

ON RAD POINT
C123 TO NLy
241.23
C033 TO ELY.

240.00 F021 239.79

on NLy.
2+80.33 = cb BC

C130 41.68 240.38 C030 40.68

239.88 Grade 239.88

2+55.16

C367 43.89 240.22 C016 240.58

239.72 C003 39.75

2+29.98

C580 45.87 240.07 C014 240.21

239.57 C042 39.99

2+04.80

C598 45.90 239.92 C031 240.23

239.42 C061 40.03

1+79.62

C692 46.69 239.77 C046 240.23

239.27 C089 240.76

RT=J14.

Pave Middleme St Beryl To
 DWG 4127-D - Nov 21, 57
 LT = WLY.

Malden - Invol 32303 - C.13
 RT = ELY

13

Station	Rough grade	Top of grade	cb Stake	Rough grade	Top of grade	cb. Stake
1+80	^{45K} C232 183.12	180.80	C022 181.02	F008 180.22	180.30	F003 180.27
1+90 = #5 RT					180.75	176.9 C36
Move to 1+90					774.0	
1+60 = BVC	C208 81.38	179.30	C168 180.98	C002 178.82	178.80	C015 178.95
1+40 @ RT					177.18	F017 177.01
1+29	C312 79.92	176.80	F002 176.78	C022 176.52	176.30	F005 176.25
1+10 #6 RT					170.60	75.0 C44
0+98	C228 76.60	174.72	F035 73.97	X135KPL C055 174.37	173.82	F029 173.53
0+67	C18 173.6	171.84	F002 171.82	X135K C084 72.78	171.34	C004 11.38
0+36	C261 171.97	169.36	C005 169.41	C045 169.31	168.86	C001 168.87
25' Rad. 0+05 = cb bc	C342 170.30	166.88	F035 66.53	F007 166.31	166.38	F052 165.86
Beryl 0+00 = NLY 12	exit (166.40)	166.50		existing (65.89)	166.00	

Pave Enclave ST
LT = W64

CONT
RT = ELY.

14

Station	Rough Grade	Top of cb grade	cb Stake	Rough Grade	Top of cb grade	cb Stake
3+80	C033 190.46	190.13	C009 190.22	F012 189.50	189.62	C003 189.65
3+60 #4 RT					184.8	C35 88.30
3+60						
3+60 = BVC	F006 89.12	189.18	F031 188.87	F038 88.30	188.68	F013 188.55
3+30	C077 188.69	187.92	F041 187.51	2 nd back C009 87.57	187.42	C004 187.46
3+00	C156 188.22	186.66	F034 186.32	F044 185.72	186.16	F006 186.10
2+70	C175 87.75	185.40	F014 185.26	C044 185.34	184.96	C001 184.91
2+40 = EVC	C095 85.06	184.14	C009 184.23	stop 2 nd back C037 184.57	183.64	C004 183.68
2+20	C142 84.64	183.22	C003 183.25	F059 182.13	182.72	F056 82.16
2+00	C163 83.74	182.11	C011 82.22	F037 81.24	181.61	F014 181.47
1+70 @ RT					179.55	C010 79.65

This lateral being installed by
City forces this day - Replaces 1990

Pave Emeline St
LT = Wly

cont
RT = Ely.

15

Station	Rough grade	Top cb grade	cb stake	Rough grade	Top cb grade	cb stake
R Malden						
5+42 ⁴⁵ = sly		201.90			199.75	
BC LT + RT 5+32 ⁹⁵ = cb		200.50	F085 } 199.63	F140 198.10	199.50	198.02 } F145 }
5+06 ³⁶	C008 198.76	198.68	F078 197.90	F164 196.12	197.76	F148 196.28
4+90 (W) RT					196.69	F157 C. 195.18
4+79 ⁷⁷	C018 197.03	196.85	F045 196.40	F129 194.73	196.02	F127 194.70
4+60 ^{#2} RT					190.10	C365 193.70
4+53 ¹⁸	F031 194.71	195.02	F075 194.27	F073 193.55	194.28	F080 193.48
4+40 (W) RT					193.40	already built + H ₂ O.
4+26 ⁵⁹	C025 93.44	193.19	F033 192.86	F036 192.18	192.54	F026 192.28
4+10 ^{#3} RT	OMIT already served				187.5	already built + served.
4+00 = EVC	C039 91.75	191.36	F007 191.29	C004 190.84	190.80	C015 190.95
3+90 (W) RT					190.21	F005 190.16

Pave Jewell St -
 LT = W 27 DWG 4125 + 4126 D

Collingwood To Malden
 RT = e 17

16

Station	Rough grade	Top cb grade	cb Stake	Rough grade	Top cb grade	cb Stake
R MALDEN		227.90			227.00	
1+4970 = 514						
LT + RT 1+3970 = cb 13c	C051 27.21	226.70	L Meet 6.41	F266 23.04	225.70	Meet 558
1+1376	C346 26.42	222.96	C054 23.50	C054 22.50	221.96	C005 22.01
0+8782	C373 22.95	219.22	F044 18.78	PK #86 back C082 19.04	218.22	F004 218.18
0+6188	C571 21.19	215.48	F008 215.40	C007 214.55	214.48	C020 214.68
0+3594	TBRD C666 218.40	211.74	C003 211.77	C212 212.86	210.74	C012 210.86
LT + RT 0+10 = cb 13c	C630 14.30	208.00	C027 208.27	C194 208.94	207.00	C047 207.47
Collingwood 0+00 = Nky R		207.10			205.00 207.50	

Pave Kendall - Beryl to Malden
 No 32303-013-

DWG 4128-D - No 22,57

17

Station	Rough grade	Topob Grade	ob Stake		Rough grade	Topob grade	ob Stake
3' Alley Ra c 1+47 ⁸⁶ = cb BC	nail 0 ³³ bk C071 187.53	87.09 186.82	F001 86.75	F010 F02 to alley F025 F0.34 to street	nail 0 ³³ bk C2 ²³ 189.05	F013 87.09 186.82	Call F013 186.96
Alley to Wly 1+44 ⁸⁶ = Nly Line		186.79				186.79	
Alley to Wly 1+24 ⁸⁶ = Sly Line		184.81				184.81	
Alley bc LT 1+21 ⁸⁶ = 3' Rad	F08 184.0	84.51 184.78	F028 to Bus 184.59 - F029 to tree	F030 to alley C008 to street	STON 0 ³⁰ bk F003 184.75	84.51 184.78	F032 F005 184.46
1+00 ⁸⁸	C049 182.90	182.41	F0.16 182.25		PK 041 bk C3 ²⁵ 185.76	182.41	F010 182.31
0+76 ⁷⁹	PK 036K C067 180.71	180.04	C007 180.11		PK 030bk C2 ⁸⁹ 182.93	180.04	F002 180.02
0+52 ⁸⁶	C187 179.54	177.67	C007 177.74		PK 033bk C2 ³ 180.0	177.67	C011 177.78
0+28.97	C457 179.87	175.30	C021 175.51		PK Nail 023bk C3 ⁶⁰ 178.90	175.30	F013 175.17
LT+RT 0+05 = cb BC's	C433 172.26	172.93	F004 172.89		C327 176.20	172.93	F025 172.87
Beryl ST 0+00 = Nly R		172.50	(Meet) 172.49		(Meet) 172.48	172.50	172.48 (Meet)

Station	Rough grade	Topos grade	Ob Stake	Rough grade	Topos grade	Ob Stake
2+99 ⁰⁵ = Sly R		196.30			196.30	
R = 2000 2+89 ⁰⁵ = Ob MC LT	C163 197.53	195.90	C005 195.95	F069 95.30	195.90 ✓	F009 95.81
2+65	omit	194.89	C008 194.97		194.89	C001 194.90
2+40 = EVC	nailed in C076 94.60	193.84	C010 193.94	nailed C050 194.34	193.84	C019 194.03
2+20	nailed in C090 193.78	(Grade) only 192.88	F023 } Grade 192.65 } only	C109 193.97	192.88	C014 193.02
2+00	nailed in C065 92.27	191.62	F015 191.47	at street C087 192.49	191.62	C012 191.74
1+95 = W RT					(Grade only) 191.23	C023 } Grade 191.46 } only
1+85 ⁰⁰ #11 RT					185.6	C65 193.1
1+80	nailed in C088 190.90	190.07	F010 189.97	at street C005 190.6	190.07	C016 190.23
1+59 ⁸⁸ 1+60 = BVC	omit	188.24	F007 188.17	omit	188.24	C006 188.30

Station	Rough grade	Topcb grade	cb Stake	Rough grade	Topcb grade	cb Stake
ONRT 5+32 ⁶³ =cb BC				F24 ⁶ 216.62	219.10	F065 218.45
Malden 5+0853=514R		216.95				
LT-Malden 4+98 ⁵³ =cb BC	PK ON R F002 214.98	215.00	1448 = F052	215.85	213.82	C070 214.55
4+59 ⁰⁵ =EVC	C072 209.09	208.32	F036 207.96	F028 207.42	207.70	F022 207.48
4+39 ⁰⁵	PK ON R C152 206.90	205.43	C028 205.71	F043 204.37	204.80	C034 5.14
4+19 ⁰⁵ =BVC	PK ON R C209 205.40	203.40	C062 204.02	C107 204.09	203.02	C039 203.41
3+94 ⁰⁵	NOTE ON R C315 204.25	201.40	C004 201.44	C084 201.86	201.02	C070 201.72
RT on 17. 3+79 ⁰⁵ =EVC					200.08	C030 200.38
LT-20' Rad 3+69 ⁰⁵ =cb BC	C313 202.53	199.40	C023 199.63	C095 200.35	199.40	
Collingwood 3+59 ⁰⁵ =NLY R		198.60 198.60			198.60	C032 198.92
ONRT on 17. 3+39 ⁰⁵ =BVC					197.78	C003 197.81
RT on 17 Collingwood 3+29 ⁰⁵ =2				F067 196.70	197.37	Grade 97.37

PAVE JEWELL ST EMERALD TO
 W 1/4 327 48 - DW 94282 - D.
 RT = WLY

DIRECTION Nov 25, 57

20

RT = ELY

Station	Rough Grade	Top of Grade	Ob Stake	Rough Grade	Top of Grade	Ob Stake
1+9740	^{102' back} C092 90.59	89.67	F045 89.22	^{102' back} C158 91.25	89.67	F007 89.60
1+7320	C096 89.69	88.73	F010 88.63	C067 89.40	88.73	F014 88.59
Alley Rad LT 1+49 = 130' 4'	C061 88.40	87.79	F034 to alley F026 to ST 87.53	^{102' back} C075 88.54	87.79	F035 87.44
Alley Rad LT 1+21 = 06' 30" - 4'	C062 87.32	86.70	F041 to alley F019 to ST 86.51	^{Stake 2' back} C107 87.77	86.70	F067 86.02
0+9680	C061 86.37	85.76	F024 85.52	C064 86.40	85.76	F059 85.17
(172) 0+7260	C063 85.45	84.82	F027 84.55	C082 85.64	84.82	F047 84.35
0+4840	C061 84.49	83.88	F017 83.71	C087 84.75	83.88	F050 83.38
0+2420	C071 83.65	82.94	F021 82.73	C080 83.74	82.94	F013 82.81
LT - 30' Rad 0+10 = 06' 30"	C083 83.22	82.39	82.13 - F026	C089 83.28	82.39	
EMERALD 0+00 = 51' 12"		82.00	81.58 - F042	F020 81.80	82.00	81.39 - F061

St Station	Rough grade	Top cb grade	cb Stake	Rough grade	Top cb grade	cb Stake
/						
/						
91						
/						
91						
/						
0						
0						
DIAMOND						
2+70 0/2 SLY R	Meet	92.53	92.53 (Meet)	Meet	92.53	(92.41)
0						
LT+RT-R-30	C003	F022		C066		F029
2+60 0/2 cb 13c	92.17	92.14	91.92	92.80	92.14	91.85
0						
2+45 80	C058	F037		C102		F038
	92.13	91.55	91.78	92.57	91.55	91.17
0						
2+21 60	C059	F055		C081		F029
	91.20	90.61	90.06	91.42	90.61	90.52

0

Pave Dawes - Tourmaline T.

LT = 1167

Tourmaline Cont

23

Station	Rough		Top cb grade	ob Stake	RT: Ely.		ob Stake
	grade	grade			grade	grade	
2+55 ²³ = Sky			136.60			136.60	
BC LT + RT 2+45 ²³ = OB	x 5' bk C1012 136.43		136.31	F018 36.13		C109 137.40	F028 36.03
2+34 ¹²	x 5' bk C008 136.00		135.92	F007 135.85		C107 137.02	F058 35.37
2+04 ¹²	x 5' bk C105 135.97		134.91	F031 4.60		C113 136.17	F037 134.67
1+74 ¹²	Don't C271 136.61		133.90	F026 133.64		PK 045 bk C184 135.97	F026 33.87
BC LT + RT - R = 4 1+44 ¹² = Alley	C192 134.81		132.89	F003 To alley. 132.81 - F008		Wail 025 bk C094 134.16	F048 To alley. F052 To ST 132.70
BC - 4' Rad 1+21 ¹² = Alley	C117 133.29		132.12	F022 To alley. 2.12 Grade To STree			
0+95 ⁰⁹	Wail 045 bk C175 132.96		131.21	F018 131.03			
0+65 ⁰⁶	Wail 05 bk C190 132.07		130.17	F012 130.05			
0+35 ⁰³	02' bk C169 130.81		129.12	F012 129.00			
RT 0+15 = Ob BC	C15 129.9		128.42	F006 128.36			
Saphire 0+00 = Nly R	C097 128.97		128.00				

Pave Balboa
RT = NLY.

Cont
RT = SLY.

25

Station	Rough grade	Top of grade	ob stake	Rough grade	Top of grade	ob stake
Note: Each Curb Run Separate				2 See other page for only curbs		
BC in SLY curb 15+72.5 = ob	C 2.49 33.92	31.43			31.88	F 0.28 31.60
BC in NLY cb 15+70.5 = ob	C 2.47 33.90	31.43				
15+50	C 2.09 33.86	31.86		F 2.06 30.03	32.09	F 0.28 31.81
all by 306 Rad 15+46.9		31.92	C 0.24 32.16			
15+25	C 3.06 35.44	32.38	C 0.05 32.43	F 1.89 30.44	32.33	F 0.14 32.19
15+00	C 1.2 C 2.26 35.12	32.86	C 0.05 32.90	F 1.62 30.95	32.57	F 0.19 2.38
14+75	C 1.88 35.20	33.32	C 0.01 33.33	F 1.5 31.66	32.81	F 0.05 32.76
14+50	C 1.65 35.41	33.75	C 0.18 33.93	F 1.46 31.59	33.05	GRADE 3.05
14+25	C 1.37 35.58	34.18	F 0.01 34.17	F 1.24 32.05	33.29	C 0.01 3.30
14+00	C 1.02 35.63	34.61	C 0.22 34.83	F 1.34 32.19	33.53	C 0.44 33.93

Pave Balboa Ave cont

This is sky curb

See Page 38 for Deflections on 38' offset

Line

26

Station	Rough grade	Top of Cb grade	Cb Stake	± grade LT	Station	Rough grade	Top of Cb grade	Cb Stake	± grade LT
					F87-130 20+25 ^{11.8}	F785 22.08	F34 29.93	F073 29.20	
17+75 ^{-28'}	F446 24.89	F20 29.35	C001 29.36	27.65	5011.13'				28.01
2°19.23'					F101-152 ^{15.0} 20+00	F743 22.44		F126 28.61	
17+50 ^{30.3}	F476 24.94	F22 29.70	F018 29.57	28.30	4053.94				
2°02.04'					F74-112 ^{15.5} 19+75	F639 23.29	F29 29.68	F059 9.09	Cbk F059
17+25 ^{33.5}	F463 25.47	F17 30.10	F032 29.78		4036.75				
Def=1°44.85'					F72-105 ^{11.4} 19+50	F645 22.95	F32 29.40	F046 8.94	
17+00 ^{31.5}	F400 26.48	F21 30.48	F14 29.34		4019.56				
Def=1°27.66'					F63-92 ^{11.4} 19+25	F571 23.43	F24 29.14	F032 28.82	
16+75 ^{29.6}	F381 27.01	F192 30.82	F082 30.00		4002.37				
Def=1°10.47'					F58-82 19+00	F535 23.57	F22 28.92	F002 28.90	
16+50 ^{28.0}	F358 27.55	F16 31.13	F080 30.33		Def 3045.18				
Def=0°53.28-					F5282 18+75	F502 23.78	F20 28.80	C026 9.06	
16+25 ^{26.8}	F291 28.49	F12 31.40	F041 30.99		Def 3027.99				
Def=0°36.09'					18+50 ^{21.3}	F441 24.38	607 28.79	C033 29.12	
16+00 ^{25.9}	F287 28.75	F10 31.62	F024 31.38		Def=3010.80'				
Def 0°18.90'	chord=27.49				18+25 ^{23.3}	F420 24.68	F15 28.88	C038 9.26	
					Def=2°53.61				
DPF=.6875493					18+00 ^{26.0}	F421 24.89	F13 29.08	C038 29.46	
R=2500' - Δ=15°54'30" - L=694.13 - T=349.31'									
Be in sky Cb.	F228								
18+72 ^{5'} =Cb	29.60	31.88			Def 2°36.42				

sky curb line Balboa cont

Station	Rough grade	Top of cb grade	cb Stake
1N54cb (112) 22+66.4 = EC	F88 F104 14.8 156	F2 23.98	F0.16 23.82
7°57.15'			
22+56 F102-160	F95 14.7	F32 24.24	
7°45.84'			
22+25 F114-172	F947 15.71	F42 25.18	C009 5.27
7°28.65'			
22+00 F115-172	F996 16.18	F32 26.14	C0.46 26.60
7°11.46'			
21+75 F115-172	F981 17.29	F32 27.10	C030 27.40
6°54.27'			
21+50 F109-163	F914 18.78	F32 27.92	C0.37 8.29
6°37.08'			
21+25 F112-168	F1004 18.55	F42 28.59	C0.15 8.74
6°19.89'			
21+00 F112-162	F1002 19.12	F42 29.14	F043 28.71
6°02.70'			
20+75 F113-178	F803 21.55	F32 29.58	F0.32 29.26
Def = 5°45.51'			
20+50 F92-138	F851 21.33	F42 29.84	F0.28 9.56
5°28.32'			

Curve in Nly curb of Balboa Ave 27
Between Olney - Garnet.
See page 38 for alignment on 42.50 offset

Station	Rough Grade	Top of cb grade	cb Stake
17+75	C420 31.85	202 27.65	C027 27.92
2°23.54'			
17+50	C325 31.30	222 28.05	C007 28.12
2°05.99'			
17+25	C278 31.25	222 28.47	C014 28.61
1°48.44'			
17+00	C268 31.55	222 28.87	C020 29.07
1°30.89'			
16+75	C231 31.60	222 29.29	C001 29.30
1°13.34'			
16+50	C203 31.81	222 29.78	C002 29.80
0°55.79'			
16+25	C196 32.26	222 30.30	F003 30.27
0°38.24'			
16+00	C125 33.07	222 30.82	F008 30.74
15+93 43 = EC			
0°20.69'			30.95 F005
15+75	C109 33.43	222 31.34	
Def = 0°03.14' ch = 4.49			
1N54cb	C247 33.90		C017 31.60
15+70.5 = BC			

Curve in Nly curb Balboa
only to GARNET.

By Curb of Balboa cont

21

Station	Rough grade	Topcb Grade	Ob Stake	Station	Rough grade	Topcb grade	Ob Stake
GARNET							
5° Rad Wly cor	6x5' Rad pt						
Wly cor + BCOR	F105		F097				
20 + 27.5 = FCOR	27.15	28.20	27.23				
20 + 25 = F088							
5° 20' 51"							
20 + 00	10' bk E073 27.44	28.17	F066 27.51				
5° 11.49'							
19 + 75	33' bk C174 29.72	27.98	F031 27.67				
4° 53.94'							
19 + 50	33' bk C185 29.54	27.69	F032 27.37				
4° 36.39							
19 + 25	32' bk C251 29.95	27.44	Grade 27.44	24 + 00	F03 OUT 5	18.55	
4° 18.84'					F13 OUT 22		
19 + 00	31' bk C285 30.07	27.22	F006 27.16	23 + 75	F48 OUT 72	19.43	
3° 51.29							
18 + 75	30' bk C343 30.53	27.10	F015 26.95	23 + 50	F76 OUT 114	20.37	
3° 33.74'							
18 + 50	C294 C386 30.95	27.09	F014 26.95	23 + 25	F83 OUT 124	21.33	
3° 16.19'							
18 + 25	26' bk C480 32.00	27.20	F010 27.10	23 + 00	F89 OUT 133	22.28	
18 + 00	124.8 C479 32.16	27.38	F024 27.14				
2° 41.09'				EC Page 22 + 6664 =	F104 OUT 156	23.58	

Pave Balboa Ave - Noyes

To Olney cont

30

Station	Rough grade	Top of grade	Curb stake		± grade	Rough grade	Top of grade	Curb stake
9+75	C260 43.72	41.12	F022 40.90	1.11	F023 40.83	C178 41.79	40.01	F015 39.86
9+50	C388 45.34	41.46	F015 41.31	1.11	F021 41.17	C214 42.49	40.35	F008 40.27
9+25	C432 46.12	41.80	F023 41.57	1.11	F025 41.51	C215 42.84	40.69	F019 40.50
9+00	C454 46.55	42.01	F019 41.82	.98	F069 41.85	C184 42.87	41.03	F017 40.86
8+75	C438 46.61	42.23	F050 41.73	.86	F062 42.18	C214 43.57	41.37	F028 41.09
8+50	C362 46.06	42.44	F026 42.18	.73	F019 42.48	C282 44.53	41.71	F011 41.60
8+25	C386 46.52	42.66	C007 42.73	.61	F012 42.76	C339 45.44	42.05	F016 41.89
8+00	C334 46.21	42.87	C055 43.42	.48	F007 43.01	C334 45.73	42.39	F024 42.15
7+75					F021 43.23		42.73	F020 42.53
7+70 1/3	C321 46.35	43.14	C073 43.87	.34		C369 46.49	42.80	F029 42.51

Pave Balboa Ave

Noyes to Olney.

St. Station	Rough grade	Top cb grade	cb Stake	ℓ grade	Rough Grade	Top cb grade	cb stake
LT 11+12.98 = ch PC + wly R Olney - 11+05.85 = ℓ Balboa	2.5 bk C431 43.52	39.25	F032 38 38.88	39.08			
11+00	C164 41.06	39.42	F019 39.23	F021 39.15			
PC RT 10+79.48 = ch		39.70	C082 39.82	F025 39.41	C108 (3 bk) 39.66	38.58	F008 38.50
10+75	omit	39.76	omit	39.47	omit	38.65	
10+50	C257 42.67	40.10	F015 39.95 111	F021 39.81	3.6 bk C129 40.28	38.99	F013 38.86
10+25	C278 43.22	40.44	F034 40.10 111	F025 40.15	2.6 bk C140 40.73	39.33	F012 39.21
10+00	C310 43.88	40.78	F027 40.51 111	F025 40.49	x 5.6 bk C198 41.65	39.67	F002 39.65

Pave alley in Block 329, Chester
LT only.

add. in # 32790 - DWG 4768-10.
Dec 26, 57 -

32

RT only.

Station	Nly edge alley grade	Stake	Sly edge pave grade	Stake	
2+30.92	64.35	F0 08 64.27	64.35	C2 56 66.91	
2+05.92	'X' 2' bK 66.78 46	F0 32 66.46	Stub 043 bK 66.78	C1 82 68.60	
1+80.92 = EXC	Nail 175 bK 69.21	C1 40 70.61	Stub 025 bK 69.21	C0 84 70.05	
1+60.92	70.99	C0 28 71.27	Stub 025 bK 70.99	C0 51 71.50	
1+40.92	'X' 2' back 72.42	C0 30 72.72	PK 095 bK 72.42	C0 75 73.17	
1+20.92	Stub 030 bK 73.50	C0 09 73.59	PK 088 bK 73.50	C0 98 74.48	
1+00.92 = BVC	Nail 025 bK 74.23	C1 89 76.12	PK. 083 bK 74.23	C1 54 75.77	
0+60	Stub 025 back 75.38	F0 07 75.31	75.38	C2 00 77.38	
0+20	76.50	C0 34 FP 76.84 - C0 74 RIE	2. 76.10	C1 64 78.14	C2 04 T.E.
3+72.5T 0+00 = Ely St	76.90	Meet	77.26	Meet	

Nly edge
Pave
grade

Station

Sly edge
Pave grade Stake

4+40.92=BVC Nail 205 back
53.35 C268
56.03

53.35 F212
51.23

4+20.92 53.72 C069
54.41

53.72 F157
52.15

4+00.92 St06 065 back
54.10 C118
55.28

54.10 F050
53.60

3+80.92 St06 125 bk
54.48 C136
55.84

54.48 F044
54.04

3+60.92=EVC Nail 161 bk
54.86 C144
56.30

54.86 F120
53.66

3+40.92 St06 120 bk
55.40 C116
56.52

55.40 C116
56.52

3+20.92 St06 125 bk
56.39 C073
57.12

56.39 C117
57.56

3+00.92 Nail 125 back
57.74 C068
58.42

57.74 C148
59.22

2+80.92=BVC 1' x 2' back
59.49 C059
60.88

59.49 C205
61.54

2+55.92 F077
61.92 61.15

61.92 C209
64.01

Pave Alley 329 Choater add

RT=NL4.

NL4 edge

Pave

grade

Stake

cont

RT=NL4

34

Station

Sl4 edge

Pave Grade

Stake

See Page 35 for Drain.

6+00.92

60.67

60.54

5+80.92

± 042 BK
59.90

C117 } C151 }
61.01 } 4" IE

59.50

59.90

C456 EP
64.46

C496 4" IE

5+55.92

± 035 BK
58.47

C157
60.04

58.47

C221
60.68

5+30.92

847
± 035 BK
57.03

C191
58.94

57.03

C228
59.31

5+05.92

± 035 BK
55.59

C131
56.90

55.59

C102
56.61

4+80.92 = EVC

140
54.15

C015
54.30

No. C033 BK
54.15

C295
57.10

4+60.92

Naic 225 BK
53.40

C224
55.64

No. 1.48 in alley
53.40

C239
55.79

Drain
4+47.92 = 4

Naic 225 back
53.37

C10 EP
54.37 - C152 C1

53.37

F294 EP
50.43

C043 1" EP
F242 CB

Storm Drain in Alley 229
 Cheater add. 11/10# 32790 - DWG 4768

1E Pipe

Stake

existing Pipe

Connect to

1+14.38 =

48.34

14" R.C.P.

Meet exist

0+91.52

48.68

C077
 49.45

0+68.64

49.01

F061
 48.40

0+45.76

49.34

C015
 49.49
 77

0+22.88

49.67

C139
 51.86

0+00

50.00

C378
 53.78

Alley =

D Basin in

0+00 = 1/2 type

D catch Basin

52.85 = Top of

Stake Storm Drain in 35
 Linda way. west 21652
 1-3-52 - DWG 6771-13.

Station

1E
 Drain

Stake

BM = 10.00 assumed elev of top
 of existing 18" R.C.P.

$$\Delta = 40^\circ \quad R = 225 \quad L = 16'$$

0+48

6.40

13.45 = C705

0+32

7.05

15.32 C827

0+16 = EC

chord = 79'

Def = 20°

7.69

14.85 = C716

Point Curve

0+08 = Mid

8.01

16.35 = C834

Def = 10° ch = 79'

Pipe

end existing

0+00 = BC + sk

8.33

Meet

Sewer main in alley sly of E at
 BLKS 85+96 - EW MORSE'S SUB
 NO# 21570 - Jan 14, 52 DWG 5112-D

Sewer in Alleys 85+96 EW MORSE'S
 CONT 36

Station	IF Sewer	Stake	Station	IF Sewer	Stake
2+02 ¹²	171.41	C66 ² 178.03	4+76 ³³	175.64 175.15	C67 ¹ 82.30 C66 ³ 181.78
1+78 ⁵⁷ = L.	171.32	C567 176.99	4+46.33	174.59	C689 81.48
1+56 ²⁴	171.24	C557 176.81	4+16.33	174.03	x'4' C693 80.96 C751 180.98
1+33 ⁹² Staked 4' sly	171.15	C444 175.59	3+86 ³³	173.47	C774 180.65
307 ⁵ ST 1+160 [±] ± here Stake 4' Nly to	171.06	177.07 Nly - C601 176.65 Sly - C559	3+56 ³³	172.91	C777 180.12
0+89 ²⁸	170.97	C570 176.67	3+26 ³³	172.35	C726 179.05
0+66 ⁹⁶	170.88	C713 178.01	HEV L: 20° 41' 53" 40' sly on split Staked MH#1 2+96 ³³ = 4	171.79	C742 179.12
0+44 ⁶⁴	170.79	C812 178.91	2+72 ⁷⁷	171.70	C682 178.42
0+22 ³³	170.70	C791 178.61	2+49 ²³	171.60	C677 178.28
IN BLK 85- 0+00 = EXIST MH	170.61	178.15 C754	2+25 ⁶⁷	171.51	

Sewer Main in Alley BLK 66
 E.W. MORSE'S SUB - W.O.# 21570
 1-14-58 - DWG 5112-D

Sanitary Sewer Main from
 SAN LOUIS ST to 28th ST - SOUTH 37
 of Treat ST - W.O.# 21570 -
 DWG 5111-D - 1-15-58

Station	IE Sewer	Stake
Proposed alley		
1+461 ⁹ - Plug in	174.18	C727 181.45
1+25 ²⁸	174.09	C653 180.62
1+04 ³⁹	174.01	C556 179.57
Staked 4 ² ± + 84 ⁸ on 28 th ST 0+83 ⁵ = 2 MH#1	173.93	C493 78.86
0+62 ⁷	173.85	C550 79.35
0+41 ⁸	173.77	C637 180.14
0+20 ⁹	173.69	C630 179.99
MH in 2 alley 66 0+00 = 2 EXIST	173.61	C552 179.13

Station	IE Sewer	Stake
MH#1 1+60 = 2	123.00	C1034 133.34
1+39 ¹²	122.86	C894 131.80
1+18 ²³	122.70	C805 130.75
0+97 ³⁴	122.54	C740 129.94
0+76 ⁴⁵	122.38	C668 129.06
EC 0+55 ⁵⁶ =	122.22	C721 129.43
Midpt Curve 0+47.87 ch = 76.8 pct = 2.12 BC 0+40.19 =	122.16	C692 129.08
0+40.19 =	122.10	C859 130.69
0+20	121.95	OUT
28 th ± F ST MH at 0+00 = EXIST	121.80	ON RING C1219 from RING 133.99

Alignment of Nly Curve Line in
 130/100 a ~~fe~~ on curve Between 15+70⁵¹
 + 20+35.50 on 4250 offset - Δ = 10° 41' 43"
 L = 464.99, R = 2491.00' - Rate = .6900335
 See pages 27 for grades.

Alignment of Sky Curve in
 130/100 a Between sta 15+72⁵¹ + 38
 22+56.09 - Run on 38' offset.
 See page 26 for grades.

Station	Nly Curve	20+35.50 = EC
		5° 20.85
18+00		20+25
2° 38.35		5° 13.60
17+75		20+00
20+21.10		4° 56.35
17+50		19+75
2° 03.85		4° 39.10
17+25		19+50
1° 46.60		4° 12.85
17+00		19+25
1° 29.35		4° 04.60
16+75		19+00
1° 12.10		3° 47.35
16+50		18+75
0° 54.85		3° 30.10
16+25		
0° 37.60		25.13. 18+50
16+00		3° 12.85
0° 20.35		18+25
15+70 ⁵¹ = PC		2° 55.60

Station	Sky Curve	EC
		20+50
18+00		5° 33.29
2° 38.79		20+25
17+75		5° 15.84
2° 21.34		20+00
17+50		4° 58.39
2° 03.89		19+75
17+25		4° 40.94
1° 46.44		19+50
17+00		4° 23.49
1° 28.99		19+25
16+75		4° 06.04
1° 11.54		19+00
16+50		3° 48.59
0° 54.09		18+75
16+25		3° 31.14
0° 36.64		18+50
16+00		3° 13.69
0° 19.19		18+25
15+72 ⁵¹ = PC		2° 56.24

24" DRAIN IN N.W. Q. OF GARRET + ELY
 Jan 20, 58 - WO # 21559-

of Balboa Ave. Dwg 4417-D

46

Station

17 1/2 T IE Pipe Stake

28+75 = L Type J 6.90

28+49??

28+16

26+83³³

K inlet

26+50 = 47' Type 8.00

26+00 8.88

25+71 9.39

25+42⁰⁰ = EC 9.90

25+10⁵⁹ = MID Pt 10.45

Camino Vuelta
 inlet of

24+75 = 2 Type K 11.00

Station IE Pipe Stake

31+50

3024.34'

31+25

2054.29

31+00

2024.24'

30+75

1054.19

30+50

1024.14'

30+25

Def = 0°54.09' Ch = 25'

30+00

10024.04' = DEF Ch = 20'

PPF = 1.202'

R = 1430' L = 420' Δ = 16°49' 41"

29+80 = BC

29+40

29+00

Void
 See Page 41

Void
 see Page 41

STORM DRAIN in GARNET
Cont

Station	IE Pipe	Stake
Connection + MAKE 34+00 = EC	5.00	
8°24.84'		
33+75		
7°54.79		
33+50		
7°24.74		
33+25		
6°54.69		
33+00		
6°24.64		
32+75		
5°54.59		
32+50		
5°24.54		
32+25		
4°54.49		
32+00		
4°24.44		
31+75 (3°54.39')		

Void
see facing
Page et al

STORM DRAIN in NLY of GARNET 41
+ Ely of Balboa Ave - Jan 20 -
WOT # 21559 - DWG 4417D

Station	IE Pipe	Stake
27+83.33	7.34	C7.99 15.33
27+50	7.50	C7.97 15.47
27+16.66	7.67	C7.91 15.58
26+83.33	7.83	C7.87 15.70
TYPEK inlet 26+50 = d	8.00	C7.71 15.71
26+00	8.88	C7.70 16.58
25+71	9.39	C7.15 16.54
25+42 = EC	9.90	C6.81 16.71
MIDPT curve 25+105.9	10.45	C6.37 16.82
Vuelta of Camino INLET ely TYPEK 24+75 = d	11.00	C4.91 15.91

Storm Drain in GARNET

Cont

42

Station I/Pipe Stake

1°54.19'
30+50 6.27 C7.32
13.59

1°24.14'
30+25 6.36 C7.42
13.78

0°54.09
30+00 6.45 C7.48
13.93

0°24.04'

Rate per foot = 1.202. No cuts on chis.

R=1430' L=420' A=16°49'41"
29+80=BC 6.52 C7.60
14.72

29+40 6.66 C7.83
14.49

29+00 6.81 C7.99
14.80

Type J inlet
28+75=Z 6.90 C7.94
14.84

28+49.99 7.01 C7.91
14.92

28+16 7.17 C7.94
15.11

Station I/Pipe Stake

6°54.69'
33+00 5.37 C7.84
13.21

6°24.64
32+75 5.46 C7.76
13.22

5°54.59'
32+50 5.55 C7.62
13.17

5°24.54'
32+25 5.64 C7.69
13.33

4°54.49'
32+00 5.73 C7.42
13.15

4°24.44'
31+75 5.82 C7.34
13.16

3°54.39
31+50 5.91 C7.79
13.70

3°24.34'
31+25 6.00 C7.50
13.50

2°54.29'
31+00 6.09 C7.09
13.18

2°24.25'
30+75 6.18 C7.15
13.33

Pave STORNE ST. ROSECRANS
 Div 9 13286-L Jan 24/58
 LT=SWLY

TO LOCUST - No 32327 -
 RT=NELY.

44

Station	Rough grade	Topcb Grade	Ob stake	Rough Grade	Topcb grade	Ob stake
RT 2120-#2		21.01		C6871E 27.05	21.01	
2410=EVG	C348 27.94	24.46	F025 24.21	C090 25.36	24.46	F087 23.59
1490	F001 21.61	21.62	F0477 21.15	X1 back C002 21.64	21.62	F088 20.74
1475-W LT		W- (19.50)	F0397 19.11			
1470	C019 18.98	18.79	F0297 18.50	411 in street C001 18.80	18.79	F058 18.21
1472 changed to 1470 conditions H65-#3 LT	3.3 below curb C066 17.40	15.5 14.69	C3.3701E 18.8			
1450	C066 17.40	16.74	F035 16.39	4135K C008 16.82	16.74	F030 16.44
1430=BYC	C041 15.11	14.70	F015 14.55	F004 14.66	14.70	F020 14.50
1402	C096 13.35	12.39	F028 12.11	405 in street C053 12.92	12.39	F024 12.18
0477	ON R C069 11.02	10.33	F056 9.77	NO 108 in ST C119 11.52	10.33	F050 9.83
0465-W LT		(9.34)	F053 8.81			
0452	ON R C07 9.0	8.27	F045 7.82	NO 106 in ST C124 9.51	8.27	F036 7.91
0457=OB E.C.		6.20			6.20	
ROSECRANS DFOB=NWLY		4.99			5.16	

Station	Rough Grade	Topcb grade	cb STK		Rough grade	Topcb grade	cb STK
LOCUST					C302 42.02	39.00	C020 39.20
JELYR 3400=	F254 36.46	39.00	F0.74 38.26				
2770=#1 RT		30.56			C464 35.20	30.56	
2770	F052 33.64	34.16	F062 33.49	Mixed 1.6 A	C104 TC 35.20	34.25 34.16	F007 34.18
2780=W RT						35.78	35.62 F016
2740	C012 29.43	29.31	F031 29.00		C119 20.50	29.31	F058 } 28.73 } F072 } 26.98 }
2730 W RT						27.70	

Pave alley BLK 114, Pacific Beach
1-29-58

Pacific Beach

Dwg # 4968-D. No # 32845-

46

RT = 527

LT = 427

Station	N/E edge Pave grade	Stake	E grade	KT edge Pave grade	Stake
2+86.67	PK 013 BK 60.47	C111 61.58		60.17	60.41 C0.24 17
2+53.33	PK 030 BK 59.96	C074 60.70		59.66	59.81 C015 66
2+20	Nail 040 BK 59.45	C098 60.43		59.15	60.26 59.41 10
1+86.67	Nail 040 BK 58.94	C097 59.91		58.64	C025 58.89 10
1+53.33	Nail 044 BK 58.43	C095 59.38		58.13	C012 58.25 10
1+20	Nail 043 BK 57.92	C051 58.43		57.62	C032 57.94 10
0+86.67	Nail 040 BK 57.41	C122 58.63		57.11	C019 57.30 10
0+53.33	Nail 040 BK 56.90	C239 59.29		56.60	C036 56.96
0+20	Nail 031 BK 56.39	C240 & IE 58.24-C185 EP	55.84	Nail 025 BK 56.09	C060 & IE 56.44-C035 EP
Bayard 0400-54, 1A	55.81			55.56	

Parc alley 114, P. Bel
ST-NLY

cont
RT-NLY

47

Station	Nly edge Parc grade	Stake	E grade	Sly edge Pave grade	Stake
R Cass					
5+51 ¹⁹ = WLY	64.03			63.66	
4+81 ¹⁹	63.03	C054 EP 63.57 - C124 IE	62.45	Nail 218 BK 62.71	C219 LIE 64.64 - C193 EP
4+61 ¹⁹	62.55	C056 63.11		Nail 209 BK 62.25	63.81 - C156
4+32 ⁹⁶	62.24	C039 62.63		Nail 170 BK 61.94	63.22 - C128
NLY 4+21 ¹⁹ SL#1	5' BK R ONLINE of Lateral 57.00	C575 15 62.75			
4+04 ⁷²	61.93	C014 62.07		Nail 150 BK 61.63	C114 62.77
3+76 ⁴⁸	1'x2' BK 61.62	C023 61.85		Nail 095 BK 61.32	62.07 - C075
3+48 ²⁴	1'x2' BK 61.31	C023 61.54		61.01	60.94 - F007
3+20	1'x2' BK 61.00	C042 61.42		60.70	60.55 - F015

36" Storm Drain in Balboa
at Sta 20+00

18" Storm Drain in Balboa 48
at 18+50

Station	IE	Stake
pipe		
1+39=end	16.86	20.45-C359
SKIP 1+20=Begin 3'	17.18	25.84-C866
0+99 ²	17.56	25.73-8.17
0+74 ⁴	18.02	25.21-C719
0+49 ⁶	18.48	26.10-C762
0+24.8	21.88	27.14-C526
inter in gully at 0+00=Exiting	25.08	

Station	IE	Pipe	Stake			
				C. 8		
				TYPE H		
				MEET		
			2+09 ²	17.18		
			1+82 ²	17.68	26.34	C866
			1+06 ²	18.33	26.37	C804
			1+29 ²	18.87	26.34	C747
			1+03 ²	19.42	26.40	C698
			0+76 ²	19.96	26.78	C682
			Box 0+50 ²	20.50	27.21	C674
			0+25 ¹²	21.13	27.50	C-637
			at 18+50 NLY curb 0+00=Face	21.76	C 7.34 29.10	C734

2 gutter grades Between
acc. 5' for top of grade

Olney + GARNET on Balboa 49
FOR ISLAND

Station	LT=NLY GUTTER grade	RT=Sly gutter grades	LT=NLY GUTTER	RT=Sly GUTTER
13+85	34.97 } F089 34.47 }	35.07 } F137 34.57 }	15+75 (31.78) 31.28	(31.98) 31.48 }
13+72.50	(35.18) 34.68 } F124	35.27 } F133 34.77 }	= B.C. of Island 15+70.5 31.86 } F119 31.36 }	32.00 } F126 31.52 }
Flare in NLY c6 13+60 = Begin	35.39 } F130 34.89 }	35.47 } F138 34.97 }	15+50 32.20 } F123 31.70 }	32.35 } F123 31.89 }
13+50	(35.56) 35.06 } F126	(35.63) 35.13 } F133	15+25 32.60 } F097 32.12 }	32.79 } F115 32.29 }
13+25	(35.98) 35.48 } F118	36.03 } F122 35.53 }	15+00 33.04 } F119 32.54 }	33.20 } F118 32.70 }
13+00	(36.40) 35.90 } F107	36.44 } F111 35.94 }	14+75 33.46 } F108 32.96 }	33.60 } F104 33.10 }
12+75	(36.82) 36.32 } F110	(36.86) 36.36 } F114	14+50 33.88 } F112 33.38 }	34.01 } F105 33.51 }
12+70	(36.90) 36.40 } F109	(36.94) 36.44 } F113	14+25 34.30 } F115 33.80 }	34.41 } F120 33.91 }
12+35	(37.48) F133 36.98	(37.51) 37.01 } F136	Island Begin 18' Flare 14+10 = end 34.55 } F103 34.05 }	34.67 } F129 34.17 }
Island. 11+87.81 = Begin	F104 37.78	F104 37.78	13+97.5 34.76 } F118 34.26 }	34.87 } F128 34.37 }

GUTTER grades on Island
in Balboa cont + 50 F.I.T.C.
LT=NLY RT=Sly

Station	GUTTER	GUTTER
2055.60'	27.887	28.24
18+00	27.38 } F077	27.74 } F113
2038.35'	28.15 } F021	28.51 } F067
17+75	27.65 } F021	28.01 } F067
2021.10'		
2% Super Begin Normal		
17+50	28.80 } F054	29.16 } F105
2003.85'	28.30 } F054	28.66 } F105
17+25	29.24 } F069	29.56 } F069
1046.60'	28.74 } F069	29.06 } F069
17+00	29.68 } F103	29.96 } F103
1029.35'	29.18 } F103	29.46 } F103
16+75	30.10 } F105	30.36 } F129
1012.10'	29.60 } F105	29.86 } F129
16+50	30.52 } F124	30.77 } F131
0054.85'	30.02 } F124	30.27 } F131
16+25	30.94 } F117	31.17 } F120
0037.60'	30.44 } F117	30.67 } F120
16+00	31.36 } F110	31.58 } F117
0020.35'	30.86 } F110	31.08 } F117

GUTTER grades in Island
(18') in Balboa - 50

Station	GUTTER	GUTTER
5048.10'	28.64 } F08	29.00 } F146
20+50	28.14 } F08	28.50 } F146
5030.85'	28.73 } F14	29.09 } F140
20+25	28.23 } F14	28.59 } F140
5013.60'		
20+00	28.67 } F104	29.03 } F155
4056.35'	28.17 } F104	28.53 } F155
19+75	28.48 } F092	28.84 } F168
4039.10'	27.98 } F092	28.34 } F168
19+50	28.19 } F093	28.55 } F100
4012.85'	27.69 } F093	28.05 } F100
19+25	27.94 } F077	28.30 } F097
4004.60'	27.44 } F077	27.80 } F097
19+00	27.72 } F064	28.08 } F087
3047.35'	27.22 } F064	27.58 } F087
18+75	27.60 } F068	27.96 } F069
3030.10'	27.10 } F068	27.46 } F069
= 20.B. 18+50	27.09	27.45
3012.85'		
18+25	27.68 } F081	28.02 } F008
	27.18 } F081	27.52 } F008

GUTTER grades in ISLAND
(18') in Balboa

LT=NLy
GUTTER
grade
RT=SLy
GUTTER

Station
"B" Line
21+97.59 = EC

1
"B" Line
21+97.59 = EC
7°12.68

1
5° LT of R
= "Nose of Island"
21+82.93 = N'C

3
7°02.56'

1
21+75

0
6°57.10'

1
21+50

6°39.85'

Continue 18'± Lines

ISLAND		
1' R - Nose of		
21+35.52 =	27.45 } F125	27.487 } F128
	26.95 } F125	26.98 } F128

6°29.89'		
21+25 (26.89)	27.637 } F133	27.75 } F134
	27.13 } F133	27.25 } F134

6°22.60'		
21+00	28.00 } F184	28.287 } F134
	27.50 } F184	27.78 } F134

6°05.38		
1" NLy curb		
Begin Flare		
20+75 =	28.30 } F210	28.70 } F131
	27.80 } F210	28.20 } F131

Curb in Nly of GARNET
Sheet 4420-D .67 ch fe

Station ON Curbline	Rough grade	Topcs grade	Curb stake
(23+25) 23+14.50	C063 20.69	20.06	F029 19.77
100 44.58' (23+00) 22+90.67	C090 21.60	20.70	F045 20.25
90 32.96' (22+75) 22+66.84	C131 22.66	21.35	F039 20.96
80 21.34 (22+50) 22+43.01	C148 23.45	21.97	F031 21.66
70 09.72 (22+25) 22+19.18	C174 24.41	22.67	F002 22.65
50 58.10 (22+00) 21+95.35	C409 27.54	23.45	C005 23.50
40 46.48 (21+75) 21+71.52	C645 20.75	24.30	C020 24.50
30 34.86' (21+50) 21+47.69	C785 33.07	25.22	C015 25.37
20 23.24 (21+25) 21+23.86	C868 34.80	26.12	C007 26.19
10 11.62' - chord (21+00.03) 21+00.03 = BC	23.83 25.20 C88		

$\Delta = 27.25 \cdot 52''$ F022
-Rate = 3.005 26.97

Curb Nly of GARNET Cont 52

Station "F" Station on Curbline + End ch	Rough Grade	Topcs grade	Ch Stake
24+75.4 CB		F.C.B. = 15.57 90T 14.74	110 86.0K
24+50	C100 17.37	16.37	F041 15.96
24+25	C023 17.39	17.17	F012 17.05
24+00	C063 18.60	17.97	F028 17.69
Run on Curb Line -			
(23+85.71) = FC 23+73.86	C081 19.18	18.37	F031 18.06
130 42.56" Chord	11.75		
123+75) 23+62.16	C084 19.54	18.70	F022 18.48
130 07.82'			
(23+50) 23+38.33	C082 20.23	19.41	F013 19.28
110 56.20			

PARC Addison & Willow
LT = SWLY.

To PLUMS - DWG ~~3143~~ - W# 31403 53
3-18-58
RT = NELY.

Station	Rough grade	Top cb grade	Ob stake
---------	----------------	-----------------	-------------

2+30⁰⁹

2+10⁰⁹ = BVC

1+80⁰⁴

1+50

1+25

1+00

0+75

0+50

43' Rad
0+25 = BVC

NEWLY PLUMED
0+00 =

Rough grade	Top cb grade	CB STK
----------------	-----------------	--------

0.10
1

See page 52

15 Lane grades in Balboa

MORRELL TO NOYES

59

Station	LT=Nly Nose (Top cb) grade	RT Sly Nose Grade (Top ch)	Station	LT=Nly Nose (T.C.) grade	RT: Sly Nose grade (T.C.)
1+95 ⁰⁰	3.33 BK 5.01 } F0 ²⁸ 45.29	1 3.33 BK 4.09 } F1 ¹¹ 45.20	+ Wly 12 Noyes 5+120 ⁰⁷ = 1 st Rad	3.73 } F0 ⁸⁰ 44.53	3.73 } F0 ⁷⁶ 44.49
12.88. Bot 2 way 1+82 ⁵⁰	4.16 } F1 ¹⁶ 45.32	4.16 } F1 ⁰⁷ 45.23	4+87 ⁰⁷	3.78 } F0 ⁸⁹ 44.67	3.69 } F0 ⁸⁷ 44.56
At origin Depress cb Flare in nly cb 1+70 = Begin	4.16 } F1 ¹⁹ 45.35	4.16 } F1 ¹⁰ 45.26	Begin Flare 4+62 ⁰²	3.95 } F0 ⁸⁵ 44.80	4.03 } F0 ⁶⁰ 44.63
1+58	4.09 } F1 ²⁹ 45.38	4.09 } F1 ²² 45.31	4+50	4.05 } F0 ⁸¹ 44.86	4.12 } F0 ⁵⁴ 44.66
1+25	4.18 } F1 ²⁵ 45.43	4.18 } F1 ¹⁸ 45.36	4+25	4.08 } F0 ⁸² 44.90	3.90 } F0 ⁸² 44.72
1+00	4.24 } F1 ²⁴ 45.48	4.24 } F1 ¹⁷ 45.41	4+00	4.03 } F0 ⁹¹ 44.94	4.62 } F0 ¹⁵ 44.77
0+75	4.25 } F1 ²¹ 45.46	4.25 } F1 ¹⁴ 45.39	3+75	4.13 } F0 ⁸⁵ 44.98	4.13 } F0 ¹⁹ 44.82
0+50	4.31 } F1 ¹³ 45.44	4.31 } F1 ⁰⁶ 45.37	3+50	4.21 } F0 ⁸⁰ 45.04	4.41 } F0 ⁴⁶ 44.87
0+30	4.04 } F1 ³² 45.36	4.04 } F1 ²⁵ 45.29	3+25	4.18 } F0 ⁸⁷ 45.05	4.28 } F0 ⁶⁴ 44.92
0+10 line only	4.52 } F0 ⁷³ 45.25	4.52 } F0 ⁶⁶ 45.18	3+00	4.22 } F0 ⁸⁶ 45.08	4.42 } F0 ⁵⁵ 44.97
0+00			2+75	4.28 } F0 ⁸⁴ 45.12	4.25 } F0 ¹⁷ 45.02
			2+50	4.49 } F0 ⁶⁶ 45.12	4.33 } F0 ⁷⁴ 45.07
			2+25	line only	line only
			NORRIS 18 th Lane 2+20 = Begin	4.81 } F0 ⁴² 45.23	4.42 } F0 ⁷² 45.14
			2+07 ⁵⁰	4.97 } F0 ²⁹ 45.26	4.34 } F0 ⁸³ 45.17

4' Island grades in Balboa.

Noyes To Olney.

Station	LT=Nly Nose grade Top curb	RT=Sly Nose grade - Top curb	Station	LT=Nly Nose grade (Top of curb	RT=Sly Nose grade Top curb
Flare Sly.			1' Rad	8.63 } F116	8.63 } F113
8+85 ⁸⁵ Begin	1.37 } 42.64 } F127	1.24 } 42.46 } F123	11+05 ⁸⁵	39.79 } F116	39.76 } F113
8+75	1.57 } 42.77 } F120	1.42 } 42.59 } F117	10+95 ⁸⁵	8.73 } 39.82 } F109	8.73 } 39.78 } F105
8+50	1.90 } 43.05 } F115	1.78 } 42.91 } F113	10+75	8.88 } 40.10 } F122	8.88 } 40.06 } F118
8+25	2.26 } 43.31 } F105	2.00 } 43.21 } F121	10+50	9.23 } 40.44 } F121	9.23 } 40.40 } F117
8+00	2.55 } 43.55 } F109	2.23 } 43.46 } F123	10+25	39.57 } 40.77 } F120	9.57 } 40.73 } F116
			10+00	39.87 } 41.10 } F123	39.87 } 41.06 } F119
7+75	2.89 } 43.77 } F088	2.58 } 43.68 } F110			
7+50	3.07 } 43.96 } F089	2.88 } 43.87 } F098	9+75	0.11 } 41.44 } F133	0.11 } 41.40 } F129
7+25	3.39 } 44.14 } F075	3.13 } 44.05 } F092	9+50	40.41 } 41.77 } F136	40.41 } 41.73 } F132
7+00	3.41 } 44.28 } F087	3.33 } 44.19 } F086	Begin 4' Island enclosure +		
6+75	3.65 } 44.40 } F075	3.50 } 44.30 } F080	9+35 ⁸⁵	40.70 } 41.96 } F126	40.70 } 41.92 } F122
6+50	3.81 } 44.51 } F070	3.67 } 44.33 } F066			
in Noyes curb			9+23.35	40.80 } 42.13 } F133	40.80 } 42.07 } F127
6+44 ⁰³ Flare	3.81 } 44.53 } F072	3.65 } 44.35 } F070			
in Sly curb			9+10 ⁸⁵	1.06 } 42.30 } F124	1.06 } 42.19 } F117
6+19 ⁰³ Flare	3.93 } 44.55 } F062	3.81 } 44.42 } F061			
1' Rad.			8+98 ³⁵	1.20 } 42.47 } F127	1.09 } 42.31 } F122
5+94 ⁰³	4.02 } 44.59 } F057	4.02 } 44.55 } F053			

Pave Addition ST. Willow

To Plum - DWG 13303-L-110# 31403-56

LT = SWCY

RT = NELY

13M = SWBP
Willow & Addition
71.56

Station	Rough grade	Top of curb grade	C&S+K	Rough grade	Top of curb grade	C&S+K
2+30.09	F150 83.68	85.18	517 FO01	C009 85.77	85.68	559 FO09
2+10.09 = BVC	F272 81.32	84.04	395 FO09	C036 84.91	84.54	457 C003
1+80.04	F686 75.52	82.42	208 FO34	C139 84.30	82.91	282 FO09
1+50	F693 73.86	80.79	8024 FO55	1.32 Meet	81.29	81.32 v
1+25	F580 73.63	79.43	907 FO36	Meet	79.77	
1+00	F588 72.20	78.08	810 C003	Meet	78.65	
0+75	F512 71.60	76.72	624 C003	Meet	77.33	
0+50	F494 70.42	75.36	7542 C026	Meet	76.01	Meet
43' Rad. 0+25 = Bc	F410 69.90	74.00	407 C007	2' in street 75.64 C114	74.50	472 C022
1/2 Meet		73.27	350 C023		74.07	413 C010
WILLOW 0+00 = NELY R		72.61			74.16	

Pave Addition ST
LT = SWLY.

cont
RT = NWLY

Station	Rough grade	Top of grade	cb 5+K	Rough Grade	Top of grade	cb 5+K
AP PLUITT 3+00.09 = 3L4	C416 94.16	90.00	9018 C018	C091 91.41	90.50	9127 C077
only - 2+90.09 LT	4'6"K C344 92.68	89.24	908 F016		89.53	9054 C101
1/2 on RT RT 2+75.09 = Bc	4'6"K			C229 90.91	88.62	971 C107
2+70.09	3'6"K C304 90.82	87.78	859 C081	C228 90.56	88.28	902 C074
2+50.09	3'6"K C153 87.95	86.42	744 C102	C006 86.98	86.92	711 C019

Stake Sewer Main - 12' 6" ST Between 26th
 Paulik + Loomis Sub - DWG 5366-D -
 Stake 45' LT of Main Looking Upstream

+ 27th ST Thence NLY in alley 131K 38,
 W 0# 21570 - 3-26-88

Station	IE Sewer	Stake	Station	IE Sewer	Stake
4+00	119.08	C344 } 22.52 }	= FVC		C582 }
3+662	118.54	C219 } 120.73 }	7+80.35	156.67	162.49 }
3+3199 = E.C.	117.98	C282 } 120.80 }	7+70.25	155.48	C563 } 61.11 }
+ BC/100' Rad		90° WLY Tan 20.68 - C321	7+60.35	153.96	C651 } 60.47 }
3+007 = 2 SMH #4	117.47	NLY 90° to Tan - 20.99 - C352	7+50.35	152.11	C750 } 59.61 }
2+6000	122.74	C365 } 26.39 }	7+40.35	149.94	C653 } 56.47 }
2+1977 = EVC	127.94	C608 } 34.02 }	7+30.35	147.43	C647 } 153.90 }
2+0977	129.40	C624 } 35.64 }	7+20.35	144.61	C657 } 151.18 }
1+9977	131.02	C665 } 37.68 }	7+10.35	141.45	C737 } 48.82 }
1+8977	132.82	C646 } 39.28 }	7+00.35 = PVC	137.97	C789 } 145.86 }
1+7977 = BVC	134.77	C601 } 40.78 }	MH # 5		C1089 } 34.20 }
1+50	141.10	C515 } 146.25 }	6+6185 = E	123.31	C1198 } 135.29 }
1+00	151.71	C378 } 155.49 }	= B.C. 100' R		C1014 } 132.96 }
0+50	162.32	C575 } 168.07 }	6+30.63	122.82	C952 } 31.84 }
in 6' ST + alley			6+00	122.32	C920 } 30.98 }
0+00 = 2 MH #3	172.93	C828 } 181.21 }	5+667	121.78	C869 } 29.93 }
			5+33.3	121.24	C758 } 128.28 }
			5+00	120.70	C625 } 126.41 }
			4+667	120.16	C481 } 24.43 }
			4+33.3	119.62	

90° to SLY Tan
 90° to ELY Tan

Stake Sewer Main in 'G'
ST Cont

Station	IE Sewer	Stake
lateral #5 8+86.85 = end		
8+64.35		
To S ELY - #5. + Begin Lateral MH # 6. 8+41.85 = ϕ	162.00	C 6.82 168.82
8+10.35	159.27	C 9.31 168.58

Stake Sewer Main in DLK 24,
Breed & Chase Sub. Between 'F' & 'G'
City of Glendale ST - DWG 5366-D-WO 21570
3-26-58

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Station	IE Sewer	Stake
2 + E.C. 3+81.14 = ϕ MH #	122.54	33.28 C10 ⁷⁴
3+65.26 = Mid Pt Curve	123.34	32.88 - C9 ⁵⁴
3+49.38 = P.C. 100' Rad	124.12	33.51 - C9 ³⁹
encasement 3+40.57 = end	124.56	34.92 - C10 ³⁵
3+15	125.81	36.55 - C10.74
2+75	127.77	37.42 - C9 ⁶⁵
2+35	129.73	35.40 - C5 ⁶⁷
1+95	131.69	37.04 - C5 ³⁵
1+55	133.65	38.18 - C4 ⁵³
1+15	135.61	39.99 - C4 ³⁸
0+75	137.57	40.50 - C2 ⁹³
0+35 ⁵⁷ Begin encase -		
0+31.76 = E.C. 100' Rad	139.69	47.03 - C7 ³⁴
0+15.88 = Mid Pt Curve	140.47	46.88 - C6 ⁴¹
Glendale STS exist MH # "F" + BC 0+00 = connect to 100' R	141.25	Meet

Stake Sewer Main
 DWGS 5366-D + 5368-D
 Chisel 'x' 5' 5L7

in MARKET
 WO# 21570

ST WLY of 29TH ST
 3-26-58

60

Station	IE Sewer	Stake
2+86.0	125.14	C12.64 137.78
2+68.5	125.07	C12.68 137.75
2+51 = 4' MH #7	125.00	C12.28 137.28
2+15	123.60	C11.75 135.35
1+79	122.20	C10.69 132.89
1+43	120.80	C9.55 130.35
1+07	119.40	C8.44 127.84
0+71 = 4' MH #8	118.00	C7.65 125.65
0+35.5	114.17	C10.81 124.98
29th + Market		
0+00 = 4' SMH #9 at	110.35	C14.27 124.62

Station	IE Sewer	Stake
LAT #1 = #1	128.56 at R	33.34 C478 IE
Lateral plug +		
4+26 =	125.70	C564 31.34
4+085	125.63	C689 132.62
3+91 =	125.56	C8.37 33.93
3+735	125.49	C964 35.13
3+56 =	125.42	C1083 36.25
3+385	125.35	C11.72 137.07
3+315 Elev at R = meet existing 3+30 = SL #2 RT		
3+21 =	125.28	C12.36 137.64
3+035	125.21	C12.71 137.92

Relocation of Sewer main in "F" ST
 W0# 21570 - 7-26-58

215 to 247 DWG 5369-D + 5367-D 61

Station	IE Sewer	Stake	Station	IE Sewer	Stake
2 2+55.51	128.29	138.70-C10 ⁴	MH# 12		
			7+58 ⁸⁰ = 4	149.66	57.50-C7 ⁸⁴
2 2+23.48	126.61	136.36-C9 ⁷⁵	7+20	148.90	56.72-C7 ⁸²
0 1+91.45	124.93	133.32-C8 ³⁹	6+90	148.32	55.98-C7 ⁶⁶
			6+60	147.74	55.26-C7 ⁵²
0 1+59.42	123.25	130.30-C7 ⁰⁵	6+30	147.16	54.54-C7 ³⁸
			6+00	146.58	53.76-C7 ¹⁸
1 1+27.39-E.C.	121.57	127.19-C5 ⁶²	5+70	146.00	52.98-C6 ⁹⁸
15°00' - 26.16			MH# 11		
1 1+01.21	120.20	124.80	5+53.01= 4	145.72	52.61-C6 ⁸⁹
07°21' - 26.16		C4 ⁶⁰	5+25	144.09	51.75-C7 ⁶⁶
1 0+75.03	118.43	122.28-C3 ⁸⁵	5+00	142.60	50.45-C7 ⁸⁵
7°03' - 26.16			4+60	140.22	48.08-C7 ⁸⁶
0 0+48.85	117.46	119.72 ^{C226}	4+20	137.84	45.64-C7 ⁸⁰
Def = 3°45' - chord = 26.16			3+80	135.46	43.23-C7.77
0 0+22.67 - R=200'	116.09 -	118.68 C-259	3+40	133.08	40.90-C7 ⁸²
$\Delta = 30^\circ$ L = 104.72 - 4 Parts 26.18			3+00	130.70	39.50-C8 ⁸⁰
Def = 3°45' - chord = 26.16					
4 parts of 26.18			MH# 10		
2 MH 21574 "F" - R=200', $\Delta = 30^\circ$ L = 104.72			2+87.04= 4	129.96	39.29-C9 ³³
0 0+00 = EXIT	114.90				

Sewer Main Relocation in 1st St
From 25th St to 180' Ely.

Station	IE Sewer	Stake
existing		
1480=Meat	159.00	63.42 - C44 ²
1460	161.21	165.92 - C47 ¹
1420	164.00	71.00 - C70 ⁰
0480	166.79 179	75.91 - C91 ²
0440	169.58	179.43 - C98 ⁵
#1		C7.62
0400=2MH	172.38	180.00

Stake Sewer Re-Location
IN 911th BLK 147. CHOATES Add 6²
Staked but level not run 3-23-58

Station	IE Sewer	Stake
3+47 ⁵ 9=PLUG	113.30	66.56 119.86
3+25	112.16	66.55 118.71
3+00	110.91	66.55 117.46
2+77 ⁵ 9=E.C.	109.79	66.78 116.57
Det=15° 21' 06"		
2+59.72	108.90	66.73 115.63
Det=10° 14' 04" chord=17.84		
2+41 ⁸ 6	108.01	66.32 114.33
Det=5° 07' 02" chord=17.84		
Rad=100' Δ=36° 42' 12" L=53.59		
2+24=2MH#14+PC	107.12	66.74 117.91
2+00	107.00	67.06 114.06
1+75	106.87	67.33 114.20
1+50	106.75	68.15 114.90
1+25	106.62	68.56 115.18
1+00	106.50	67.75 114.25
0+75	106.37	66.84 113.21
0+50	106.25	67.32 113.57
0+25	106.12	68.71 114.83
0+00=2MH#13-	106.00	67.97 113.97

Relocate Sewer Main in 32nd

ST. Broadway to alley sly of 'E' 63

Station IE Sewer Stake

Station	IE Sewer Stake
encasement	
2+68 ²² = end	117.23
2+44-	114.42
2+20 = EVC	111.64
2+10	110.52
2+00	109.46
1+98 ²² = Begin conc encasement	
1+90	108.45
1+80	107.49
1+70	106.57
1+60	105.71
1+50	104.89
1+40 = BVC	104.12
1+05	101.60
0+75	99.44
0+45 ¹⁰ = EC	97.29
12° 55' 14" ch = 22.50	
0+22.55	95.67
Def = 6° 27' 37" chord = 22.50	
R = 100' - Δ = 25° 50' 28" - L = 45.10'	
17 + BC	
0+00 = LNH	94.05

void
see

Station IE Sewer Stake

20 ft 6 in

# 17	
4+38 ²² = LNH	136.94
12° 55' 14" chord = 22.50	
4+15 ⁶³ CURVE MID PT	134.32
def = 6° 27' 37" ch = 22.50	
100' R - Δ = 25° 50' 28" - L = 45.10	
2+93 ¹² = BC	131.71
3+60	127.87
3+30	124.39
3+00	120.91

Re-locate Sewer main in

32nd ST Between Broadway +
'E' STS

64

Station	IE Sewer	Stake	Station	IE Sewer	Stake
2+78 ²²	105.71	111.11 C540			
2+68 ²²	106.57	111.80 - C523			
2+58 ²²	107.49	112.68 - C519			
2+48 ²²	108.45	113.79 - C534			
2+38 ²²	109.46	114.71 - C525			
2+28 ²²	110.52	115.68 - C516			
2+18 ²² = BVC	111.64	116.79 - C515	17 + EC		
2+00	113.74	118.64 - C490	4+38 ²² = 2 MH #	94.05	C403 98.08
1+98 ²² ^{encase} Begin	No grade	✓	Def = 12° 55' 14" CL = 22.50		
1+70	117.22	121.59 - C437	4+15 ⁶⁷ = Mid Point	95.67	C778 103.45
1+35	121.28	125.73 - C445	def = 6° 27' 37" CL = 22.50		
1+05	124.76	133.89 - C913	R = 100' Δ = 25° 50' 28" L = 45.10		C14.43
0+75	128.24	140.19 - C1195	3+93 ¹² = P.C. L = 45.10	97.29	111.72
			3+60	99.67	C12.16 111.83
0+45.10 = EC	131.71	143.38 - C1167			
Def = 12° 55' 14" Chord = 22.50			3+30	101.83	C534 107.17
MID POINT					
0+22.55	134.33	145.89 - C1156			
Def = 6° 27' 37" Chord = 22.50			2+98 ²² = EVC	104.12	C552 109.84
R = 100' Δ = 25° 50' 28" L = 45.10					
SMH # 18413C					
0+00 = 2	136.94	143.94 - C700	2+88 ²²	104.89	C536 110.25

Station	IE Sewer	Stake			
2+50	79.55	86.70-C715			
2+15	78.54	85.66-C712	See page 66 for 12' Branch sewer from MH# 19		
1+80	77.53	85.05-C752			
1+45	76.52	84.77-C825			
1+10	75.51	82.75-C724	+ MH# 20		
			4+07.3 = EC	84.12	C1018 94.30
			Def = 12° 55' 14" - ch = 22.50		
<i>encase</i> <i>0+80 = Begin</i>					
0+75	74.50	81.94-C744	3+85.08 = M.P. of curve	83.45	C1067 94.12
			Def = 6° 27' 37" - ch = 22.50		
0+48.10 = EC	73.64	81.76-C812	2+62.53 = P.C. R=100' Δ =	82.80	91.07-C827
			Def = 12° 55' 14" - ch = 22.50	25° 50' 28"	L = 45.10
0+22.55	72.99	82.03-C904	3+55	82.58	C854 91.12
			Def = 6° 27' 37" - ch = 22.50		
			<i>3+50 = end encase</i>		
R=100' Δ = 25° 50' 28" - L = 45.10			3+20	81.57	C6.43 88.00
MH# 19+130					
0+00 = &	72.34	80.52-C818	2+85	80.56	C741 87.97

Branch Sewer main to NELY for
 128' from MH #19 in E'ST Wly of
 33rd DWG 5367-D + 5369-D

Stake Relocation of 21" Sewer at
 35th + Pickwick to NELY to
 Connection to existing 21" Sewer
 DWG - 5367-D 66

Station	IF Sewer	Stake	Station	IF Sewer	Slope
			EXISTING 21" Sewer		C14.91
			2+37.27 = Meet	45.75	60.66
			2+30	45.70	14.98 60.68
1+28 = PLUG	85.98	94.98 - C900	2+05	45.49	C12.56 58.05
1+10 = EVC	82.29	94.02 C1173	1+80	45.29	C1141 56.70
1+00	80.52	90.52 - C1000	1+55	45.08	C1055 55.63
0+90	79.03	86.80 C777	+ Begin Conc Backfill		C1460
			1+30 = end encasement	44.88	59.48
0+80	77.82	82.81 - C499	0+95	44.59	C900 53.59
0+70 = BVC	76.89	81.12 - C423	+ Begin encasement		C890
			0+60 = end Conc Backfill	44.30	53.20
0+35	74.61	80.70 - C609	0+30	44.06	C938 53.44
MH #19			+ Begin Conc Backfill		C915
0+00 = 2	72.34	80.52 - C818	0+00 = 2 MH #15	43.81	52.96

see upper
 changed see
 page 77
 24m 35

Stake Relocation of Sewer Main
 357+ Pickwick Between MH #15
 +16 - DWG 5367-D - 5369-D

Station IE Sewer Stake

#16		C 688
1+32 = 1st MH	54.40	61.28
1+00	52.12	C 728 59.40
0+75	50.34	C 726 57.60
0+59.5 encasement	49.23	C 676 55.99
0+49.5 end	48.52	
Conc encase		C 704
0+29.5 = Begin	47.09	54.13
0+24.5 = 1.603.5 LI	46.73	C 662 53.35
0+00 = 2nd MH #15	44.98	C 798 52.96

Pave Hartford Court - W of #32666
 No Ruff grades

- DWG 4606-D-3-31-57-

68

Station	Top curb grade	Curb Stake	Topcb grade	Curb Stake
1452.38=EC	188.95	89.25-C030	189.35	89.10=F025
Det=17°56'30" chord 19.97				
1432.38-ch	188.20	88.24-C004	188.60	88.54-F006
Det=13°13.32' chord=19.97				
1412.38	187.40	87.60-C020	187.80	187.55=F025
Det=8°36.08' chord=19.97				
0+92.38	186.35	86.53-C018	186.75	86.65-F010
Det=3°58.84' chord=17.20				
R=124(2) Δ=35°41'				
0+75.15=130	185.40	85.27-F013	185.80	85.55-F025
0+52.15	183.95	83.76-F019	184.35	84.06-F029
0+32.15	182.65	82.71-C006	183.25	183.20-F005
30' Rad				
0+20=C6B6	181.90	181.90=Grade	182.65	82.75-C010
Returns				
0+10 on curb	181.18 TOT=180.66	181.27-C009	182.41 TOT=181.86	182.77-C036
Chapinmont Dr				
0+00=NL712				

Pave HARTFORD
LT = WLS

COURT CONT
RT = Ely

29

Station Top Curb grade Curb Stk

Top curb grade Curb Stake

3+52³⁸ 188.30 88.43. C0¹³

188.70 88.68 - F0⁰²

3+32³⁸ 189.30 89.34 - C0⁰⁴

189.70 88.70 - F1⁰⁰

3+12³⁸ 190.20 90.74 - C0⁵⁴

190.60 88.85 - F1⁷⁵

2+92,38 190.80 91.24 - C0⁴⁴

191.20 89.65 - F1⁵⁵

2+72³⁸ 191.10 91.10 GRade

191.50 91.07 - F0⁴³

2+52³⁸ 191.15 91.10 - F0⁰⁵

191.55 91.20 - F0³⁵

2+32,38 191.00 90.73 - F0²⁷

191.40 90.95 - F0⁴⁵

2+12,38 190.65 90.58 - F0⁰⁷

191.05 90.79 - F0²⁶

1+92,38 190.15 90.45 - C0³⁰

190.55 90.70 - C0¹⁵

1+72³⁸ 189.58 89.37 - F0¹⁸

189.95 90.18 - C0²³

1' on wat side

PAKE HARTFORD
LT=ELY.

COUNT COST
RT=ELY.

76
=

See Plans for BANTO.

4+24⁰⁸-BULT 184.57 84.94 C037

4+19⁴⁴-BORT

185.20 85.62-C042

4+12³⁸ 185.02 85.04-C002

185.42 85.87 C045

3+92³⁸ 186.15 86.30-C015

186.55 6.42 F013

3+72.38 187.25 87.20 F005

187.65 87.94-C029

'X' on work 31b

Stake Curbs in front of
 Wake house in 5500 Block Market St
 owner DG Mc Kinney - permit # 1606
 6' curbs.

Station	Top curb grade	Stake + Fill
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MANOR

LOT 7, Victory

1+40 = Ely R	156.33 154.66	F 550 150.83
--------------	-----------------------------	-----------------

1+42	155.74 154.12	F 624 149.50
------	------------------	-----------------

0+84	155.20 153.59	F 572 149.48
------	------------------	-----------------

0+56	154.70 153.06	F 694 147.76
------	------------------	-----------------

0+28	154.16 152.53	F 726 146.90
------	------------------	-----------------

MANOR

Pl. LOT 6, Victory

0+00 = Wly	153.64 152.00	F 748 145.96
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Pave Hancock ST - SUTHERLAND ST
 5-21-58- DWG 4637A-D + 4638A-D
 LT=SWLY

TO COUTS ST WOOD 32745-E-19

72

RT=HELY

Station	Rough grade	Topob grade	2 grade ±5±K	1/3	1/3	Rough grade	Topob grade	4'6" K Foot ob Stake
Noell 3401 ⁶² =ELY R		25.57					26.57	
Hancock Noell R=20-SELY Cor 2495 ⁶² =BC		25.60	26.21	25.94	26.33	H-516R C215 28.75	26.60	F017.7P 26.43
2481		25.68	26.27				26.68	F005 26.63
2456		25.82	26.41			D-111N ST C135 28.17	26.82	C006 26.88
2431		25.96	26.55				26.96	F005 26.91
2406		26.10	26.69			D-111N ST C126 28.36	27.10	F014 26.96
1481		26.24	26.83				27.24	F009 27.15
1456		26.38	26.97			NOE O51N ST C156 28.94	27.38	C014 27.52
1431		26.52	27.11				27.52	C034 27.86
1406		26.66	27.25			H-516R C258 30124	27.66	C052 28.18
0481		26.80	27.39				27.80	X-45R 28.36 C056
0456		26.94	27.53			X-ON R C112 29.06	27.94	X-45R C048 28.42
0431		27.09	27.67				28.09	X-45R C041 28.50
on NLY Cor 0406=06BC		27.22	27.81	27.53	27.94	X-ON R C084 29.06	28.22	X-ON DRIVE C042 28.64
#SUTHERLAND 0400=NWLY		27.25					28.25	

This ob existing - 5' in 1995 - grade Raked

LT = SWLY

For 2 grade see Page 80

RT = NELY

Station	Rough grade	Top cb grade	cb 1/3	1/3	Rough grade	Top cb grade	cb 1/3
ESTUDILLO 3+01 ³⁰ = SELY R/L		24.50				25.50	
RT 2+95 ³⁰ = ch BC			(-0.24)	24.99	(+1.09)	25.32	25.26
2+75						25.53	F0.27
2+50					C160 27.13	25.53	25.26
2+25						25.61	F0.28 25.53
2+00					C118 26.88	25.70	F0.36 25.34
1+75						25.80	F0.30 25.50
1+50					C284 28.73	25.89	F0.43 25.46
1+25						25.99	F0.14 25.85
1+00					C173 27.81	26.08	F0.30 25.78
0+75					WAIL 06 BK R C3 ⁵⁶ 29.83	26.18	F0.12 26.06
0+50 = Begin		25.46				26.27	F0.20 26.07
0+28		25.54	25.26 - F0.28			26.37	F0.25 26.12
0+06 = ch BC	F0.48 25.15	25.63	25.41 - F0.22 (-24)	26.09	WAIL 08 BK R C3.32 29.78	26.46	F0.09 26.37
R Noell 0+00 = NWLY		25.65		26.42 (+0.9)	WAIL 120 BACK R C314 29.77	26.54	F0.08 26.46
						26.63	F0.27 26.36
						26.65	

EXISTING CURVE

Pave Hancock ST. ESTUDILLO
See page 80 for 2

TO WRIGHT. See page 72-74

Station	Rough Grade	Top of grade	Ob Stk $\frac{1}{3}$	$\frac{1}{3}$	Rough grade	Top of grade	Ob Stk
ST R Wright							
3+02.96-JELY						24.50	
BC RT 2+96.96-ch			(+0.28) 23.84	24.24 (+.12)	C619 30.71	24.52	C013 24.65
2+70					C619 30.79	24.60	F044 24.16
2+40					C551 } 30.18 }	24.67	F032 24.35
2+10					065 IN ST } C103 } 25.77 }	24.74	F038 24.36
1+80					C572 } 30.54 }	24.82	F034 24.48
1+50					C591 } 30.80 }	24.89	F041 24.48
1+30.54 RT					C100 IE 29.29	19.3 (IE)	staked on prop line
Water Right 1+20					C641 } 31.37 }	24.96	F029 24.67
0+90					C590 } 30.94 }	25.04	F026 24.78
0+60					C551 } 30.62 }	25.11	F010 25.01
0+30					C214 } 27.32 }	25.18	F049 24.69
RT 0+06 C6 BC			(-0.27) 24.56	(+0.12) 24.95	C177 } 27.01 }	25.23	F010 25.13
ESTUDILLO ST							
0+00 = NWLY						25.20	

TYPE 6 CURB IN PLACE

PAVE Hancock. WRIGHT TO
 LT=SWLY

BANDINI - Sec page 73
 RT=NELY.

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Station	Rough Grade	Top of grade	cb STK		Rough grade	Top of grade	cb STK
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For 1/4" Stakes Sec 6B 400-20.

Bandini
 Swly R

2+99 ^{1/2} =		17.50				18.50	
OBCLTART 2+93 ^{1/2} =	F132 16.30	17.62	F024 17.38	18.06	18.40	X' 2' 5K C 401 22.63	C046 19.08
2+70	F124 16.81	18.05	F008 17.97			X' 4' 5K 23.82 C 477	F051 18.54
2+40	F130 } 17.30	18.60	F016 18.44			X' 1' 5K C 288 } 22.48	F045 19.15
2+10	F072 18.43	19.15	F017 18.98			X' 5' 5K C 297 } 23.84	F031 19.84
1+80	F043 } 19.27	19.70	F031 19.39			WELL 2' 5K C 465 } 25.35	F005 20.65
1+50	F017 } 20.08	20.25	F032 19.92			WELL 1' 50 BK C 467 } 25.92	C020 21.45
1+20	F014 20.66	20.80	F009 20.71			X' 1' 5K C 394 } 25.74	F042 21.38
0+90	F027 21.02	21.35	F010 21.25			DE INQUIRY 11 10 10 C 353 } 25.88	F031 22.04
0+60	C038 22.28	21.90	F027 21.63			PK INQUIRY ON R C 340 } 26.30	F025 22.65
0+30	C058 } 23.03	22.45	F048 21.97			PK 5' 11 C 372 } 29.18	F027 23.18
BCCLTART 0+06 = Cb	C079 23.68	22.89	22.31 - F058 (+25) 23.34	23.68		C 491 PK 28.80	F023 23.66
R WRIGHT 0+00 = NWLY		23.00					24.00

Pave Hancock St -

See Page 72

LT = SWLY

Bandini To Courts St

76

RT = NELY

Station	Rough grade	Topch grade	ChstK			Rough grade	Topch grade	ChstK
12 Courts 3+01 ¹ / ₂ = SFLY		10.60					11.60	
LT+RT 2+95 ¹ / ₂ = BC	F039 10.35	10.65	F032 10.33	11.10		9316K C111 12.76	11.65	F029 11.36
2+76 ¹ / ₂	F051 10.34	10.85	F040 10.45	11.30		C092 12.77	11.85	F033 11.52
2+51 ¹ / ₂ EVC	F049 10.61	11.10	F023 10.87	11.55		C073 12.8	12.10	F018 11.92
2+31 ¹ / ₂	F040 10.92	11.32	F015 11.17	11.77		11' back C086 13.18	12.32	F034 11.98
2+11 ¹ / ₂	F065 10.96	11.61	C006 11.67	12.06		C071 12.32	12.61	F041 12.20
1+91 ¹ / ₂	F064 11.31	11.95	F014 11.81	12.41		C062 13.62	12.95	F054 12.41
1+71 ¹ / ₂ = BC	02' BE F067 11.68	12.35	C075 13.10	12.81		11' back C057 13.92	13.35	F041 12.94
1+50	F046 12.34	12.80	C011 12.91	13.25		C048 14.28	13.80	F029 13.51
1+20	F138 12.06	13.44	F019 13.25	13.89		C043 14.87	14.44	F023 14.21
0+90	F108 13.00	14.08	F011 13.97	14.53		4' 5" back C920 24.28	15.08	F005 15.03
0+60	F130 13.42	14.72	F051 14.21	15.17		5' 5" back C855 24.27	15.72	F041 15.31
0+30	F159 13.77	15.36	F036 15.00	15.81		5' 5" back C798 24.34	16.36	C012 16.48
CB BC LT+RT 0+06	F149 14.38	15.87	F047 15.40	16.33		5' 5" back C733 24.20	16.87	F002 16.85
R Bandini 0+00 = Nwly		16.00					17.00	

Sewer Relocation 21" Sewer of
35th + Pickwick & NW 47th
Connect to existing 21" sewer
DWG 5367-D

Station 21" sewer to existing	IE Sevier	Stake
2+35=Connect	45.75	
2+00	45.45	55.70-C1025
1+75	45.24	55.99-C1075
1+50	45.04	55.80-C1076
1+25	44.84	54.66-C982
1+00	44.63	53.50-C887
0+75	44.42	53.12-C870
0+50	44.22	52.86-C864
0+25	44.01	53.04-C903
+ Pickwick # 13 near 35th 0+00=2 MH	43.81	

Station	Pave Dickens		cb JTK
	Rough grade	Top cb grade	
SELY PLUM 3700 14		127.96	
35.29 4 F0 60			
2+80 14 (W) LT		125.47	
18.17 4 LT F0 46		F0 46	
2+85 14 (W) LT	126.14	125.68	
2+75 15 LT RT F0 60	124.03	124.63	F0 87
2+75 15 cb BC			123.76
2+70 #1 RT			
2+65 #4 LT OUT		118.0	
2+44 12	C1 08 121.02	119.94	F1 09 118.85
2+30 (W) RT OUT			
2+25 (W) LT OUT		117.05	
2+20 #2 RT OUT			
2+15 #5 LT		110.0 12	C 93 119.3
2+13 09	C 406 119.31	115.25	F0 76 114.79
1+82 06	C 630 116.87	110.57	C0 25 110.82
1+85 (W) LT		111.02	F0 39 110.63
1+80 (W) RT			
1+75 (W) LT			

cont			79
Rough grade	RT=NELY		cb JTK
	Rough grade	Top cb grade	
		126.63	
F7 54 116.09	123.63		F0 56 123.07
		110.0	C3 5 113 5
F12 48 106.46	118.94		C0 20 119.14
		116.80	
		100.9 14	
F13 67 90.58	114.25		F0 33 113.92
F12 21 97.36	109.57		F0 01 109.26
	109.26		C0 48 109.74

2 grades Pave Hancock -
NOELL TO ESTUDILLO - See page
73 for curves

JR ESTUDILLO
3+01.32 = SELY

RT
2+95.30 = CBBC 25.22

2+75 25.31

2+50 25.41

2+25 25.50

2+00 25.60

1+75 25.69

1+50 25.79

1+25 25.88

1+00 25.98

0+75 26.07

CB+90 RT LT
0+50 = Begin 26.17

0+28 26.25

LT + RT
0+06 = CBBC 26.33

NOELL
0+00 = NWLY R

2 grades Pave Hancock
ESTUDILLO TO WRIGHT

80
-

WRIGHT
3+42.96 = Q

WRIGHT
3+02.96 = SELY R

CBBC RT
2+96.96 24.12

2+70 24.21

2+40 24.28

2+10 24.35

1+80 24.42

1+50 24.49

1+20 24.56

0+90 24.63

0+60 24.70

0+30 24.77

0+06 = CBBC RT 24.83

ESTUDILLO ST
0+00 = NWLY R

4 Pave graces Hancock
WEIGHT TO Bending

JR
3+

R.
2+

2

2

2

1+

1+

1+

1+

0+

16+

0+

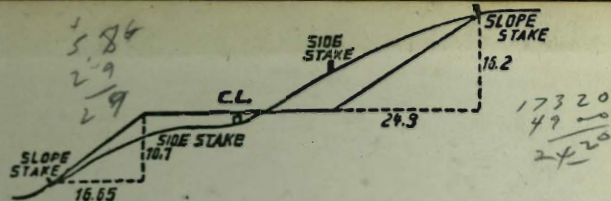
0

2+

0+

1+

0+



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	71.25	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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