BEFORE THE RANLROAD COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Investigation, upon the Commission's own motion, of the reasonableness and adequacy of facilities and of the reasonableness of the rates of the EAST BAY WATER COMPANY in the service of water to municipalities.

Case No. 1977.

Loon E. Gray, for City of Oakland.
G. N. Richardson, for City of Piedmont.
Matthew C. Lynch, City Attorney, and
Earl J. Sinclair, Assistant City Attorney,
for City of Borkeley.

W. J. Locke, City Attorney, for City of Alameda.

J. Allison Bruner, City Attorney, for City of San Leandro.

D. J. Hall, City Attorney, for City of Richmond.

R. S. Hawley, City Attorney, for City of Emeryville.

E. O. Edgerton, for East Bay Water Company. Miss M. A. Ross, in propria persona.

SEAVEY. Commissioner:

OPIMION

This is a proceeding on the Commission's own motion dealing with the adequacy of facilities and reasonableness of rates of the East Bay Water Company in the service of water to municipalities for public use.

It was not intended by the Commission to deal in this proceeding with all phases of the utility's service nor to review generally its rates. The proceeding is rather of an emergency character to determine what, if any, additional facilities should be immediately installed to meet the needs of the various cities served by the utility, and to fix a proper rate for this character of service pending a general consideration

of the utility's rate structure which would be undertaken in a future proceeding.

The Commission, by its Decision No. 10.347, rendered April 22, 1922, dealing with the rates of the East Bay Water Company, gave consideration to the proposal of the municipalities that certain improvements be ordered in the distribution facilities of the company in order to improve the service of water for fire protection, and concluded, upon the evidence then presented, that an order directing the installation of such facilities and the inclusion of the cost thereof in the rate base, was not justified. The recommendation was made, however, that the utility and the municipalities endoavor, by negotiation and conference, to work out a solution of the problem in a manner that would be mutually satisfactory.

Subsequently, the question of providing the desired facilities was taken up by the utility and the various cities, and in both Alameda and Richmond contracts were executed for the installation of additional mains and for the payment by the cities of an annual charge intended to cover substantially the cost of such installation. The work of installation was immediately commenced, and at the time of the hearing in this proceeding had been practically completed. Similar contracts have been under consideration by the cities of Borkeley, Oakland, Piedmont, Emeryville and San Leandro, but with the exception of the City of Berkeley, where the contract, after being signed, was held up pending the possibility of a referendum, no definite results were In all of these negotiations it was recognized, and the contracts which were executed expressly provided, that the Commission would have full jurisdiction to require the installation of added facilities reasonably required for the rendition of good service by this utility and to fix the rates for such

service regardless of any agreement or contract which the utility and the cities should make.

The ability of the cities to pay, out of the funds raised by taxation, any proper rate for the service of water for public use, has always been an important factor in the determination of the question of what additional facilities should be installed for this particular service. In reaching a definite basis on this point, these direct negotiations between the cities and the utility have served a useful purpose notwithstanding the Commission's undoubted jurisdiction to make an order which might supersede the contracts.

Hearings were had in this proceeding on February 29, and March 7, 1924, and evidence submitted on behalf of the cities of Alameda, Berkeley, Oakland, Richmond, Piedmont, Emeryville and San Leandro, showing the nature and extent of additional facilities desired by each of these cities for the service of water for public use and the urgency for the immediate installation of such facilities. Where contracts had been negotiated copies of these contracts were filed, in addition to engineering reports which had been made preparatory to the execution of the contracts. Reports of the National Board of Fire Underwriters' committee on fire prevention and engineering standards dealing with the cities of Alameda, Berkeley, Oakland and Richmond, were also filed. At these hearings the parties completed their chowing relative to the nocessity for added facilities, and at the conclusion of the hearing on March 7, it was stipulated that the matter could be deemed submitted on this phase of the proceeding and that the Commission might proceed at once to make its order thereon, reserving for later consideration the determination of the reasonable rate to be paid for water served for public use by means of the added fecilities required by such order. The Commission has concluded to adopt the plan suggested by this stipulation.

The evidence shows that unless the East Bay Water Company is advised at an early date of the extent of the new installations required, it will be unable to place its orders for steel pipe in time to procure delivery which will enable its installation before the approaching dry season. It is expedient, therefore, that the delay incident to receiving further evidence and reaching a decision on the question of rates be avoided. Practically all of the new installation contemplated will become a part of the general distribution of the utility. Its use, therefore, will not be restricted to the service of water to municipalities alone, and, as in the case of the mains already installed, some portion of the cost is attributable to the general service of the utility for domestic and industrial uses. It is recognized that these questions will require careful consideration by the Commission, and they will therefore be deferred for a later hearing.

ORDER

A proceeding having been instituted on the Commission's own motion for the purpose of investigating the reasonableness and adequacy of rates of the East Bay Water Company, a public utility, for the service of water for public use, public hearings having been held and the matter having been submitted on the question of the reasonableness and adequacy of facilities,--

THE RAILROAD COMMISSION HEREBY FINDS that the equipment, facilities and distribution system of the East Bay Water Company, a public utility, are inadequate and insufficient for the service of water to the municipalities of Alameda, Richmond, Berkeley, Oakland, Piedmont, Emeryville and San Leandro, and that additional equipment and facilities of the kind and description herein directed to be installed are reasonably required for the main-

tenance of reasonable, adequate and sufficient and proper service of water by such utility to said municipalities for public use; and basing its order upon said findings of fact and additional statements and findings of fact included in the opinion preceding this order,

IT IS HERKBY ORDERED, that the EAST BAY WATER COMPANY do proceed immediately with the acquisition of the necessary materials and the doing of the work hereafter described and constituting the improvements in, extensions of and additions to the distribution system and facilities of said utility required in the service of water for public use:

ALAMEDA: In the City of Alameda there shall be installed all those facilities listed, specified and enumerated in that certain schedule attached hereto and marked
"Exhibit A," which schedule is hereby made and declared to
be a part hereof, the same as if herein set forth in full.

EMPREMENT: In the City of Berkeley there shall be installed all those facilities listed, specified and enumerated in that certain schedule attached hereto and marked "Exhibit B," which schedule is hereby made and declared to be a part hereof, the same as if herein set forth in full.

OANDAND: In the City of Oakland there shall be installed all those facilities listed, specified and enumerated in that certain Schedule attached hereto and marked
"Exhibit C." which schedule is hereby made and declared to
be a part hereof, the same as if herein set forth in full.

RICHMOND: In the City of Richmond there shall be installed all those facilities listed, specified and enumerated in that certain schedule attached hereto and marked "Exhibit D," which schedule is hereby made and declared to be a part hereof, the same as if herein set forth in full.

SAN LEANDRO: In the City of Sen Leandro there shall be installed all those facilities listed, specified and enumerated in that certain schedule attached hereto and marked "Exhibit E," which schedule is hereby made and declared to be a part hereof, the same as if herein set forth in full.

EMERYVILLE: In the Town of Emeryville there shall be installed all those facilities listed, specified and enumerated in that certain schedule attached hereto and marked "Exhibit F," which schedule is hereby made and declared to be a part hereof, the same as if herein set forth in full.

PTEDMONT: In the City of Piedmont there shall be installed all those facilities listed, specified and enumerated in that certain schedule attached hereto and marked "Exhibit G," which schedule is hereby made and declared to be a part hereof, the same as if herein set forth in full.

days from and after the effective date of this order the East Bay Water Company shall report to this Commission all steps then taken in compliance therewith, and thereafter shell file progress reports at intervals of thirty (30) days, until the completion of the work contemplated by this order, advising this Commission in each such report of all such work done since the then last preceding report; provided, however, that if any portion of the work hereinabove ordered shall have been done, or any of the installations herein contemplated made prior to the making of this order, the East Bay Water Company shall, within ten (10) days from and after the effective date

of this order, report to this Commission the fact and extent of any and all such completed work, which shall thereupon be accepted as compliance with this order as to such portion of the work.

This proceeding shall be held open for the taking of additional testimony and the making of such order or orders relative to the determination of the reasonable rate to be charged for the service of water for municipalities for public use as the Commission may find to be just and proper.

The effective date of this order is hereby fixed as April 20, 1924.

The foregoing opinion and order are hereby approved and ordered filed as the opinion and order of the Railroad Commission of the State of California.

Dated at San Francisco, California, this 27 day of March, 1924.

Commissioners.

EXELEIG "A"

ACEMALA TO YTIO

| <u>Street</u> | <u>Between</u> | Approx- imate Length Feet. | Size and Kind | |
|----------------|-----------------------------------|-------------------------------------|---------------|--|
| Lincoln Ave. : | Park St Webster St. | 11300 | 20" S.I. | |
| Lincoln Eve. | Webster - Third St. | 3280 | 8" C.I. | |
| San Jose Ave.: | Park St Morton St. | 5480 | 8" C.I. | |
| Morton St. | San Jose AvSan Antonio Ave | 370 | 8" C.I. | |
| StCharles St. | San Antonio- Pacific Ave. Ave. | 2390 | 8" C.I. | |
| Chestnat St. | San Antonio- Eagle Ave. Ave. | 3160 | 8" C.I. | |
| Crove St. | Encinal AveCentral Ave. | 960 | 6" C.I. | |
| Pearl St. | Lincoln AveFermside Blvd. | 1380 | 6" C.I. | |
| Clement Ave. : | Pearl StBroadway | 490 : | 6" C.I. | |
| Taylor Ave. | St. Charles -Webster | 3160 | 6" C.I. | |
| Taylor Ave. : | Sixth St Third St. | 1900 | 6" C.I. | |

EXPIBIT "B".

| Street | Between | Approx. Length Feet. | Size & kind |
|----------|----------------------|----------------------------|-------------------|
| Earrison | Fourth & Second | 680 | em ci |
| Cilman | TT TT | 680 | 6" CI |
| Page | Sixth & Second | 1340 | 6" CI |
| Cedar | California & McGee | 680 | 6" CI |
| Virginia | Fourth & Second | 680 | 8" CI |
| π | San Pablo & Fourth | 2280 | 8 ⁺ CI |
| · # | Acton & San Pablo | 2560 | 10" CI |
| Ħ | California & Grant | 1320 | 6" CI |
| # | Milvia & Shattuck | 680 | 6" CI |
| Delaware | San Pablo & Acton | 2440 | 6" CI |
| Borkeley | Grant & Shattuck | 2050 | 10" CI |
| , | Grove & Grant | 670 | 8" CI |
| Bancroft | Fourth & San Pablo | 2280 | 8" CI |
| | Sacramento & Calif. | 660 | 6# CI |
| W | Oxford & Telegraph | 1660 | 10" CI |
| tr | Telegraph & Bowditch | 660 | 8" CI |
| Channing | Milvia & Shattuck | 750 | 8" CI |
| Parker | Third & San Pablo | 2580 | 8" CI |
| Parker | Hillegas & Benvenue | 380 | 6" CI |
| Stuart | Grove & Ellsworth | 28,00 | 8" CI |
| Snyder | Third & Fourth | 340 | 8" CI |
| Russell | Telegraph & College | 1860 | 8" CI |
| Ashby | San Pablo & Acton | 1600 | 8 " C I |
| 17 | Acton & Sacramento | 670 | 6" CI |

| | Stroot | Botwoon | Approx. Length Foot | Size & <u>Kind</u> |
|---|------------------------|---------------------------------------|---------------------------|-----------------------|
| | Ashby | California & Ellis | 1100 | 6" CI |
| | Folger | Seventh & San Pablo | 1330 | 8# CI |
| | Prince | Adeline & Telegraph | 2800 | 8m ci |
| | Woolsey | California & Adeline | 1850 | 8" CI |
| | # | College & Claremont | 1270 | 6 [#] CI |
| | Thousand Oaks | Peralta & The Alameda | 1250 | 6" CI |
| | | Cabrillo & The Alameda | 500 | 6" CI |
| | Walk | Solano & Colusa | 2100 | 6" CI |
| | -Peralta | | | 67 CI |
| | Montrose | Santa Barbara & Spruce | 350 | |
| | Santa Barbara Rd. | Montrose to Northhampton Av. | 1220 | 6" CI |
| | San Iuis | Montrose to Indian Rock | 1340 | 6" CI |
| | Spruce | Regal to Halkin | 1350 | 8" CI |
| | Solano | Fresno to The Alameda | ∴ 280 | 10" CI |
| | Fresno | Sonoma to Solano | 2180 | 10" CI |
| | Sonoma | Josephine to Fresno | 370 | 10" CI |
| | Sonoma | Fresno to Colusa | 370 | 6 ^m CI |
| | Colusa) and) Posen) | Sonoma to Posen) Colusa to Monterey) | 1250 | 6" CI |
| | Hopkins | Rose to The Alameda | 5450 | 6" CI |
| | :Milvia | Rose to Hopkins | 1980 | 6m CI |
| | w | Channing to University | 2350 | IO. #8 |
| , | Sutter | Los Angeles to Amador | 500 | 8" CI |
| | Ter. Walk | Sutter to Walnut | 800 | 8" CI |
| | Eunice | Milvia to Walnut | 1000 | 6" CI |
| | Walnut | Rose to Eunice | 1320 | lo" CI |
| | | Eunice to Ter. Walk | _ 860 | 8# C1 |
| | Shattuck | Ter. Walk to Los Angeles | 570 | 6 [#] CI |
| | · Codar | Oxford to Euclid | 1700 | 6" CI |
| | | • | | , |

| Street | Between | Approx. Longth Foot. | Size & Kird. |
|-----------------|-----------------------------|----------------------|--------------------|
| Cedar | Euclid to Leroy | <u></u> 680 | 87 CI |
| Hearst | Shattuck to Oxford | 670 | lo ^m cr |
| Hearst | Oxford to Spruce | 300 | 10 01 12" CI |
| # ' · | Loroy to La Loma | 500 | 8" CI- |
| Spruce · | Hearst and Rose | 3000 | 12" CI |
| m | Rose & Summer | 1000 | 6" CI |
| Scenic | Cedar & LeConte | 1150 | 67 CI |
| Euclid - | Buena Vista & Hawthorne | 760 | 6" CI |
| Vine | Euclid & Hawthorne | 320 | 6" CI |
| | * | | 8" CI |
| Leroy | Cedar & Hearst | 1830 | • |
| Shattuck | Addison & Allston | 710~ | 10" CI |
| Addison | Shattuck & Oxford | 450 | 10" CI |
| Oxford | Hearst & Allston | 1650 | 10" CI |
| Atherton | Allston & Bancroft | 670 | 10"-CI |
| Allston | Oxford & Atherton | 200 | 10" CI |
| Ellsworth | Carlton & Dwight | 1020 | 8m CI |
| Ellsworth | Prince & Ashby | 800 | 8" CI |
| Dana | Bancroft & Durant | 330 | 6". CI |
| Hillegas | Russell & parker | 2000 | 87 CI |
| Prospect | Dwight & Conon Rd: | 1300 | 6" CI |
| Claremont Blvd. | Claremont & Garber | 1700 | 6" CI |
| Claremont Rd. | Claremont & Garber No. 2 | 1750 | 6 [₩] CI |
| ** | Claremont Rd. & Claremont | 700 | 67 CI |
| Walk | The Uplands & Hillcrest Rd. | 375 | 6 [#] CI |
| Hillcrest Rd. | Walk & Uplands | 1100 | 6" CI |
| The Uplands | Hillcrest Rd. & Tunnel Rd. | 1630 | 6" C I |
| Tunnel Rd. | Uplands & Short Cut | 1040 | 6" CI |
| Adeline | 62nd St. & Alcotraz | 750 | 6" CI |
| · # | Alcatraz & Prince | 1500 | 8" CI |
| | | | |

762

| Street | Between | Approx. Length Feet. | Size & Kind |
|------------|--------------------------|----------------------------|-------------|
| Grant | Carlton & University | 4000 | 12" CI |
| # ** | University & Rose | 3650 | 10" CI |
| California | Prince & Stuart | 2000 | 8" CI |
| π | Ward & University | 4650 | 8" CI |
| नः . च | Delaware & Cedar | 1320 | 6" CI |
| Acton | Alcatraz & Ashby | 2250 | 8" CI |
| TTP . | Ashby & Russell | 620 | 6" CI |
| π | Carlton & Virginia | 5680 | IO" CI |
| Mabel | Carlton & Dwight) | 7.000 | O# AT |
| Bonar | Dwight Way & Channing } | 1820 | 8" CI |
| 19 | Channing & University | 2300 | 6" CI |
| Seventh | Snyder & Parker | 1880 | 6" CI |
| Fourth | Parker & Dwight Way | 650 | 6" CI |
| # | Camelia & N. City Limits | 1850 | 6" CI |
| Third | Snyder & Parker | 1900 | 87 CI |
| Euclid | Eunice & Keith | 1500 | 6" CI |
| College | Channing & Bancroft | 6 60 | 12" CI |
| AŢŭe | Hawthorne & Scenic | 300 | 6" CI |
| Bancroft | College & Piedmont | 660. | 12" CI |
| Piedmont | Back of University | 1320 | 12" CI |
| Enclid | Marin. | 10000 | 6" CI |

EXHIBIT "C"

CITY OF OAKLAND.

| Stroot | Betwee | <u>n</u> | Approx. Length | Size & <u>Find</u> |
|---|---------------|-----------------------|-------------------|-----------------------|
| | | | • | · |
| Foothill Blvd. | 25th Ave. | Seminary | 14,740 | 20" s.i. |
| 24th St., Mead,) San Pablo Ave.) Sycamore, Tele-) graph Ave. and) | | | r. 070 | |
| 26th St.) | Adeline | Broedway | 5,830 | 24" s.1. |
| 36th St.,West,) 53rd & Dover Sts) | San Pablo Av. | City line Berkeley | 11,025 | 20" s.1. |
| 10th Street | Peralta | Wood | 1,340 | 12" s.i. |
| Wood St. | loth St. | 7th St. | 1,360 | 12" s.i. |
| E. 11th St. | 23rd Ave. | 29th Ave. | 2,020 | 12" 8.1. |
| 29th Ave. | E. 11th St. | Elmwood | 625 | 12" s.i. |
| Elmwood | 29th Ave. | Fruitvale | 1,675 | 12" s.i. |
| 29th Ave. | Elmwood | 23rd Ave. | 1,480 | 6" c.i. |
| 27th Ave. | E. 11th St. | E. 9th St. | 520 | 6 ^m c.i. |
| E. 9th St. | 27th Ave. | 29th Ave. | 1,370 | 6" c.i. |
| Glascock | 29th Ave. | Deroy | 1,080 | 6" c.i. |
| Derby | Glassoock | Elmwood | 1,080 | 6" c.1. |
| Chapman | Fruitvale | Lancaster | 400 | 6" c.i. |
| 45th Ave. | E. 12th St. | E. loth St. | 1,050 | 6 ^m c.i. |
| E. 10th St. | 45th Ave. | 50th Ave. | 1,500 | 6" c.i. |
| 50th Ave. | E. 10th St. | Garfield | 310 | 6" c.1. |
| Garfield | 50th Ave. | 54th Ave. | 1,020 | 6" c.i. |
| 54th Ave. | E. 14th St. | Garfield | 2,220 | 6" c.i. |
| 48th Ave. | E. 14th St. | E. 12th St. | 715 | 6" c.i. |
| 48th Ave. | E. 12th St. | E. 10th St. | 600 | 8" c.i. |

| Street | Betwe | e e n | Approx. Length Feet | Size & Wind |
|----------------|-------------|----------------------|---------------------------|---------------------|
| 35th Ave. | E. 14th St. | E. 18th St. | 1,820 | 6" c.1. |
| E. 16th St. | 35th Ave. | Bridge Ave. | 525 | 6" c.1. |
| Bridge Ave. | E. 16th St. | Foothill Bl. | 1,010 | 6" c.1. |
| 39th Ave. | E. 18th St. | Foothill Bl. | 575 | 8" c.i. |
| E. 18th St. | 39th Ave. | 40th Ave. | 260 | 6" c.i. |
| 40th Ave. | E. 18th St. | E. 17th St. | 175 | 6" c.i. |
| E. 17th St. | 40th Ave. | Rosedale | 260 | 6" c.1. |
| Rosedale | E. 17th St. | E. leth St. | 340 | 6" c.i. |
| E. 16th St. | Rosedale | 41st Ave. | 290 | |
| 41st Ave. | E. 14th St. | Foothill Bl. | 1,400 | 6" c.i. |
| 45th Ave. | E. 14th St. | Foothill Bl. | 1,160 | 6" c.1. |
| 47th Ave. | E. 14th St. | Foothill Bl. | 1,160 | 6" c.i. |
| 50th Ave. | Foothill | Bond | 350 | 6" c.1. |
| Hampel | Park Blva. | Everett | 1,980 | 6" c.i. |
| Everett | Hampel | E. 33th St. | 1,140 | 8" c.i. |
| E. 38th St. | Everett | Hopkins. | • | 8* c.i. |
| Ellston | Hampel | E. 38th St. | 440 | 8" c.i. |
| Randolph | Hampel | • | 985 | 6" c.i. |
| Everett | Park Blvd. | E. 38th St. Vista | 985 | 6" c.i. |
| Vista | Everett | | 850 | 6" c.i. |
| Hampel | | Wellington | 700 | 6" 0.1. |
| Fleet Road | Park Blvd. | Fleet Road | 650 | 6" c.i. |
| Creed Road | Hempel | Creed Roed | 275 | 6" c.1. |
| | Cavanaugh | Fleet Road | 450 | 6" c.i. |
| 19th Ave. Eat. | E. 12th St. | Dennison | 2,500 | 8 [#] c.1. |
| Celeveras | Prospect | Seminary | 2,650 | 6" 0.1. |
| Seminary | Calaveras | Outlook | 1,875 | 6" c.i. |
| Patterson | Harbor View | Bayo | 1,000 | 6" c.i. |
| Harbor View | Patterson | 35th Ave. | 1,200 | 6" c.i. |

| Street | Between | | Approx. Length Feet | Size & Zind |
|------------|---------------|-------------|---------------------------|---------------------|
| • | | | • | |
| 35th Ave. | Harbor View | Celifornia | 1,010 | 8" c.1; |
| Wisconsin | 35th Ave. | Leurel | 1,725 | 6" c.i. |
| Laurel | Wisconsin | California | 900 | 6" c.i. |
| High St. | Hopkins | Bedging | 350 | 8" c.1. |
| Redding | High | Meldon | 875 | 8" c.1. |
| Meldon | Redding | Birdsall | 700 | 8" c.i. |
| Birdsall | Meldon | Fleming | 3,140 | 8" c.1. |
| worcom . | Birdsall | Keyes | 700 | 6" c.1. |
| Keyes | Morcom | 55th Ave. | 675 | 6" ci1. |
| 55th Ave. | Keyes | Fleming | 1,440 | 6" 0.1. |
| 38th Ave. | Foothill | Carrington | 1,430 | 8" 0.1. |
| Monticello | Brookdale | Fairfax | 790 | 6" c.1. |
| Bond | 50th Ave. | 55th Ave. | 2,833 | 6" 0.1. |
| 51st Ave. | E. 14th St. | Bond | 1,150 | 6" c.1. |
| Fairfax | 55th Ave. | Foothill | 1,270 | 6"·c.i. |
| 55th Ave. | E. 14th St. | Bond | 2,470 | 6" c.i. |
| 23rd Ave. | E. 24th St. | E. 26th St. | 675 | 6" c.1. |
| 22nd Ave. | 23rd Ave. | E. 27th St. | 585 | 6 ^m 0.1. |
| Brookdale | Fruitvale | Humboldt | 2,665 | 6" o.i. |
| Davis | Peralta | 35th Ave. | 1,490 | 6ª o.1. |
| Seminary | Celaveras | 73rd Ave. | 3,375 | 6" 0.1. |
| 73rd Ave. | Seminary | Foothill | 4,575 | 60 C.1. |
| 82nd Ave. | Olive | Dowling | 1,225 | 100 0.1. |
| 82nd Ave. | Dowling | Hillside | 350 | 8" c.i. |
| 82nd Ave. | Hillside | Foothill | 940 | 6" c.i. |
| #illside | 82nd Ave. | 79th Ave. | 1,135 | 6" cii. |
| Dowling | 82nd Ave. | 87th Ave. | 1,825 | 6" c.1. |
| 98th Ave. | 98th Av.Wells | Edes | 1,600 | 8".c.1. |

148

| Street | Between | <u>:</u> | Teot | Size & Zind |
|-------------|---------------|-------------------------|--------------|-----------------|
| rges | 98th Ave. | ರೆಗ್ಗಾರಂ | 1,885 | 6" c.i. |
| Quince | Báes | Pearmaine | 69O · | 6" c.i. |
| Pesimaine | Quince | Moorperk | 1,050 | 6" c.i. |
| Coma | Hale | Edes | 420 | 6" c.1. |
| Eslo | Cary | Douglas | 1,075 | 6" c.i. |
| Eamilton | 68th Ave. | 75th Ave. | 1,450 ~ | 6" c.i. |
| Hawley | ôsth Ave. | 75th Ave. | 1,450 | 6" c.i. |
| 75th Ave. | Rudsdale | Eawley | 1,760 | 10" c.i. |
| 78th Ave. | Rudsdale | No. to Hyd. | 590 | 6" c.i. |
| 79th Ave. | Rudsdele | No. to Hyd. | 710 | 6" c.i. |
| 81st Ave. | Rudsdale | "B" St. | 785 | 6" c.i. |
| S4th Ave. | "D" St. | E. 14th St. | 1,735 | 6" c.i. |
| Jean | Santa Rosa | Sunnyslope | 335 | 8" c.i. |
| Sunny Slope | Jean | Grand | 630 | 8" c.i. |
| Grand | Sunny Slope | Grofton | 185 | 8" c.i. |
| Crofton | Crand | Walker | 3 \$0 | 8" c-1. |
| Walker | Crofton | Cottage | 1,740 | 8" c.i. |
| Mandana | Grand | Lake Shore | 1,450 | 6" c.i. |
| Worfield | Boulevard Way | Fairbanks | 940 | 6" c.i. |
| Feirbanks | Warfield | Warfield | 145 | 6" c.i. |
| Lake Shore | Ecrverd | Walavista | 1,865 | 6" c.i. |
| Carlston | Welsviste | Mandana | 910 | 8 <u>"</u> c.i. |
| Mandana | Cerlston | (Piedmont (city line | 1,785 | 10" c.i. |
| Portal | Mandana | Ashmount | 435 . | 6" c.i. |
| Ashmount | Portal | lisndana | 1,665 | 5" c.1. |
| Calmar | Mandana | Pelome | 1,580 | 6" c.i. |
| Paloma | Mandona | Leride | 1,065 | 6" c.i. |
| Lerida | Paloma | Rosal | 710 | 6" c.i. |

.

. .

.

,

.

سر پر مالکار

| Street | <u>Be</u> # | neen | Approx. Length Feet | Size & Rind |
|---------------|---------------|-----------------|---------------------------|---------------------|
| Harrison Blvd | . 19th Street | 20th St. | 690 | 6" c.1. |
| 20th Street | Harrison | Webster | 500 | 6" c.i. |
| 19th Street | Broadway | 1 ackson | 1,915 | 12" 8.1. |
| Jackson | 19th Street | Lake St. | 270 | 12" s.i. |
| Lake | Jackson | Oak | 785 | 12" s.i. |
| Oak | Lake | 13th St. | 1,390 | 12" s.i. |
| Fairmount | Moss | Frisbie | 1,750 | 67 c.i. |
| Kempton | Fairmount | Fairmount | 1,275 | 6" 0.1. |
| Frisbie | Fairmount | Walsworth | 380 | 6" c.i. |
| Walsworth | Santa Clara | 29th St. | 1,850 | - 6" c.i. |
| Santa Clara | Jean | Perry | 1,930 | 6" c.i. |
| Croscent | Santa Clara | Perry | 895 | 6" c.i. |
| Valle Vista | Santa Clara | Flwood | 430 | 6" c.i. |
| Haddon Road | Athol | Hilligirt Cir | 1,260 | 6" c.1. |
| Brooklyn | Park Blvd. | Mewton | 2,315 | 6" c.i. |
| Cleveland | Merritt | Montelair | 1.880 | 6" c.i. |
| Montelair | Cleveland | Prospect | 465 | ·6" c.1. |
| Prospect | Montclair | Montelair | 150 | 6" c.i. |
| Montclair | Prospect | Excelsion | 685 | 6" c.1. |
| R.of W.& Path | s Excelsior | Mandana | 1,340 | 10" 0.1. |
| Waltor | 98th Ave. | Clara | 1,220. | 6" c.i. |
| Morcom | Zeyes | Eirdsall | 2,300 | 6" c.1. |
| Redding | Meldon | Pierson | 1,685 | 6" c.i. |
| Pierson | Redding | Moreom- | 480 | 6 ^m c.1. |
| Tomplins | High | Buell | 1.750 | 6" c.i. |
| Steele | High | Euntington | 575 | 6" c.i. |
| Euntington | Tompkins | Albert | 940 | 6 ² c.1. |
| | • | 5. | | ¥ . |

| Stroot | Between | : | Approx. Length Reat | Size & Kind |
|----------------|------------|-------------|---------------------------|---------------------|
| Pampas | Erep | Madrone | · 500 | 6 ^w c.i. |
| Madrone | Pampas | Talip . | 245 | 6" c.i. |
| Tulip | Madrone - | Green Acre | 480 | 6" c.i. |
| Peralta | leth St. | 34th St. | 6,885 | 12" s.i. |
| Mountain Blyd. | Present 6" | Spring Tak. | 1,730 | 6" c.i. |

EXEIBIT "D"

| Street | Betw.ee | n. | Approx. Length Feet | Siz sn Kin | iđ. |
|--------------|---------------|---------------|---------------------------|------------------|------|
| Morgan Ave. | | Richmond Res. | 600 | 8" | C.I. |
| Water | Richmond Res. | Santa Fe Ave. | 400 | 87 | Ħ |
| Santa Fe | Water | Bishop | 30 0 | 87 | π |
| Eishop | Santa Fe | Washington | 500 | 8# | 11 |
| Washington | Bishop | Richmond | 1400 | 8# | 17 |
| Richmond | Washington | Alvarado | 1700 | 8" | Ħ |
| Alvarado | Richmond | Scenic | 500 | 8π | 17 |
| Scenic | Alvarado | A.T.&.S.F.Ry. | 1600 | 811 | π |
| Vine | A.T.&.S.F.Ry. | Washington | 700 | 84 | π |
| Railrosd | Richmond | Standard | 1050 | 12" | s.i. |
| 7th | Lucus | Pennsylvanie | 550 | 8# | C.I. |
| Pennsylvania | 7th | Turpin | 750 | 8" | 77 |
| Turpin & 5th | Pennsylvania | Nevin | 2200 | 877 | # , |
| 4th | Nevin | Chanslor | 1700 | 877 | Ħ |
| Chanslor | 4th | Espel | 5100 | 10" | 17 |
| Espel | 21st | 23 d | 1000 | 10" | 77 |
| 234 | A.T.&.S.F. | Pullman | 200 | 10" | π |
| 3rd_ | Ohio | Main | 1000 | 8" | Ħ |
| Main | 3 đ | 17th | 37 00 | 87 | 11 |
| Main | 17th | 28th | 3200 | 8# | π |
| 28th | S.P.R.of W. | Pullman | 200 | 8# | Ή |

WHIBIT "D" (Continued) CITY OF RICHMOND

| Street | 70 | | Approx. Length | Size and |
|-----------|--------------|------------|-------------------|--------------------|
| Street | Betwe | e n | Feet | Kind |
| Clinton | loth | l2th | 550 | 8" C.I. |
| 12th. | Clinton | Macdonald | 2400 | 8" " |
| Pine Ave. | 23d | 26th | 1100 | 844 4 |
| 26th | Pine | Market | 600 | 811 11 |
| Roosevelt | Portola | 234 | 2300 | 8 ¹⁷ 17 |
| Gaynor | 23d , | 18th | 1400 | 84 4 |
| 18th | Gaynor | Roosevelt | 1700 | 8". " |
| Nevin | 21st | 234. | 600 | 8m × m × |
| Esmond | 23d , | San Pablo | 5300 . | 8 ¹¹ 11 |
| Clinton | 234 | 30th | 2600 | 8π. π |
| 30th | Esmond | Grant | 1300 | 84 4 |
| Grant | 30th . | 29th | 300 | 811 11 |
| 29th | Grant | Barrett | 1500 | 8m. w |
| Barrett | 234 | 30th. | 2300 | 8#. т |
| Barrett | 30th | Wilson | 4000 | 8". " |
| Barrett | Wilson | San Pablo | 300 , | 811 11 |
| MacDonald | 23d | 32d | 2600 | 12" S.I. |
| MacDonald | 324 | Wilson | 42 00. | 12" " |
| MacDonald | Wilson | San Pablo | 300 , | 12" " |
| 37th | MacDonald | Main | 2200 | 8" " |
| South | Pullman | Becir | 700 - | 8" " |
| South | Beck | . Wall | 300 | 8" " |
| Wall | South | 47th | 3200 | 8,4 |
| Wall | 47th | San Pablo | 1500 | 8 ^m m |

EXHIBIT "D" (Continued) CITY OF RICHMOND

| Street | Bet | ween | Approx. Length Feet | Siz an Kin | đ. |
|----------------|---------|----------------|---------------------------|------------------|----------|
| 46th | Wall | Willow | 2300 | 87 | C.I. |
| 46th | Willow | Potrero | 200 | 8™ | . |
| Cypress | 47th | 50th | 1200 | 8" | π |
| 50th | Cypress | Bay View | 1600 | 817 | |
| Bay View | 50th | San Pablo | 3000 | 8# | 17 |
| 7th | Nevin | A.T.&.S.F.R.W. | 2000 | 8π | π |
| A.T.&.S.F.R.W. | 7th | Richmond Pump. | 2000 | 87 | Ħ |
| lOth | Nevin | MacDonald | 450 | 16" | S.I. |

EXHIBIT "E"

CITY OF SAN LEANDRO

| Street | Betw | <u>een</u> | Approx- imate Length Feet. | Size and Yind |
|--------------------------|-----------------|------------------|-------------------------------------|---------------|
| The second of the second | ; ; | | | |
| Durant Ave. | Kenilworth | - Hollywood Blvd | 1100 | 12" 5.1. |
| Thornton St. | Washington Ave. | - Martinez St. | 1840 | 87 C.I. |
| Mertinez St. | Thornton St. | - Davis St. | 1880 | 8" C.I. |
| Broadmoor Blvd. | Kenilworth | - Breed Ave. | 2550 | 6" C.I. |
| Breed Ave. | Combridge Ave. | - Broadmoor Blvd | 250 | 6" C.I. |
| Cembridge Ave. | Breed Ave. | _ E. 14th St. | 1340 | 6* C.I. |
| Haas Avc. | E. 14th St. | - Woodland Ave. | 1660 | 6" C.I. |
| Beverly Avo. | Broadmoor Blvd. | - Dutton Ave. | 1520 | 6" C.I. |
| Bancroft Ave. | Broadmoor Blvd. | - Dutton Ave. | 1800 | 6" C.I. |
| Dowling Blvd | Kenilworth | - Lewis Ave. | 1840 | 6"'C.I. |
| Mitchell Ave. | Hollywood Blvd. | - Dutton Ave. | 1780 | 6" C.I. |
| Victoria Ave. | Kenilworth Ave. | - Hollywood Blvd | 1:900 | 6" C.I. |
| | | | | |

EXHIBIT "F"

TOWN OF EMERYVILLE

| Street | <u>Between</u> | Approx- imate Length Feet | Size and Kind |
|---------------------------|---|------------------------------------|--|
| 63rd St Hollis & Green | 63rd. St Berkeley Line Doyle St Berkeley Line South of Powell San Pablo - Adeline | 1950 510 700 710 | 8" C.I. 6" C.I. 6" C.I. 6" C.I. |

EXHIBIT "C"

CITY OF PIEDMONT

| Street Botween Botw |
|--|
| Mountain : Avenue "P" and Hagar : 150 8" C.I. Right of Way : Scenic and Scenic : 475 8" C.I. Scenic : Right of Way and Path : 1020 8" C.I. Path : Scenic and Pala : 180 8" C.I. Union : Crecker and Indian Road : 1075 8" C.I. Moraga Road : Mesa and Morth of Pala : 1930 6" C.I. Pala Avenue : Horaga Road and Mesa : 2060 6" C.I. Mesa Avenue : Pala and Moraga Road 850 6" C.I. Moraga Road : Bonita and Eighland 350 6" C.I. Bonita : Moraga and Ramona 560 6" C.I. Bonita : Horaga and Ramona 560 6" C.I. Pacific : Caklend and Mountain 480 6" C.I. Rountain : Pacific and Caperton 1185 6" C.I. Caperton : Mountain and Sheridan 530 6" C.I. Pacific : Dormidera and Eagar 245 6" C.I. Pacific : Dormidera and Eagar 245 6" C.I. Hagar : Pacific and Mountain 165 6" C.I. Hagar : Pacific and Mountain 165 6" C.I. Hagar : Pacific and Mountain 165 6" C.I. Lake View : Sea View and Road from 500 6" C.I. Lake View : Sea View and Road from 600 6" C.I. Lincoln : Crocker and Soc View 680 6" C.I. Highland : Caperton and Wildwood 440 6" C.I. Wildwood : Highland and Sheridan 650 6" C.I. Woodland Way : Wildwood and Woodland Way 400 6" C.I. Lake Ave. : Between Sunnyside and Linda 300 6" C.I. |
| |