

**ORDINANCE NO. 2003-5**  
**AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE**  
**ARMONA COMMUNITY SERVICES DISTRICT**  
**APPROVING**  
**CAPITAL FACILITIES IMPROVEMENT PLAN**  
**AND CONFIRMING REVISIONS THERETO**

The Board of Directors of the Armona Community Services District does hereby find and determine as follows:

WHEREAS, the Armona Community Services District ("District") is a California community services district formed and existing under and by virtue of the provisions of the California Community Services District Law, codified at Government Code §§ 61000-61800, inclusive, and all acts and laws amendatory thereof or supplementary thereto, and possessing all of the powers thereof; and

WHEREAS, the District has heretofore established, and annually reviewed, a Capital Facilities Improvement Plan ("Plan"); and

WHEREAS, the District reviewed the current Plan and held public hearings on the Plan at meetings held on September 10, 2003, October 8, 2003, and November 12, 2003; and

WHEREAS, at the public hearings, the District received comments on the Plan; and

WHEREAS, after the conclusion of the public hearing on November 12, 2003, the Board voted to adopt the Plan, with certain revisions, in the form as set forth in Exhibit A attached hereto.

NOW, THEREFORE, the Board of Directors of the Armona Community Services District does hereby enact as follows:

That the Capital Facilities Improvement Plan, in the form attached hereto as Exhibit A, entitled "Armona Community Services District 2003 Adopted Capital Facilities Improvement Plan" and dated November, 2003, be, and hereby is, confirmed as the Capital Facilities Improvement Plan of the Armona Community Services District commencing November 12, 2003, and until next reviewed and revised.

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WHEREFORE, this Ordinance is passed and adopted by the Board of Directors of the Armona Community Services District on December 10, 2003, by the following vote:

AYES: 5 Bittner, Maciel, Schales, Danielson, Plooy

NOES: 0 None

ABSENT: None

ABSTAIN: None

  
ED BITTNER, PRESIDENT

ATTEST:

  
JAMES MACIEL, SECRETARY

**CERTIFICATE OF SECRETARY**

I, JAMES MACIEL, the duly appointed and acting Secretary of the Board of Directors of the Armona Community Services District, do hereby certify that the foregoing Ordinance was passed and adopted at a Regular Meeting of the Board of Directors of the Armona Community Services District, duly noticed and held at Armona, California, on December 10, 2003.

[DISTRICT SEAL]

  
JAMES MACIEL, SECRETARY

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**EXHIBIT A**  
**ARMONA COMMUNITY SERVICES DISTRICT**  
**ADOPTED 2003 CAPITAL FACILITIES IMPROVEMENT PLAN**

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Armona Community Services District  
Ordinance No. 2003-5

## **ARMONA COMMUNITY SERVICES DISTRICT**

# **2003**

### **ADOPTED CAPITAL FACILITIES IMPROVEMENT PLAN**

#### Introduction

Armona Community Services District, as stated in the previous Capital Facilities Improvement Plans, is faced with capital expenditures necessary to satisfy infrastructure demands resulting from growth of the population served. Connection fees are imposed as a means to collect monies from developments to be served by the District. This document serves to update the District's anticipated infrastructure requirements.

The projections of population growth used in this plan are based upon projections compiled by Kings County. The Land Use Map of Armona, as included in the Kings County General Plan is included as Figure 1. To date, the population of Armona has not followed those projections. Further, the time frame for the individual improvements are based upon actual population growth, not the projected year that said growth will be realized. The original base population for Capital Facilities Improvement Plans was 3,100. For the purposes of this report the population is approximately 3,500 persons.

### Specific Growth Anticipated in Armona

Ultimate population equivalent (residential and commercial/industrial) projections for the community of Armona exceed 11,000 population equivalents (see Appendix).

Future residential growth in Armona has been identified with three proposed subdivisions.

Tract No. 728, consists of 64 equivalent units and is located south of Hanford-Armona Road near the Cornelia Street alignment. The anticipated population increase from this subdivision is approximately 220 persons.

Tentative Tract No. 787, consisting of 50 lots (presently defined as Phase 1 of Tentative Tract No. 756) has been approved for development north of Front Street east of the Oak Street alignment. The anticipated population increase from this subdivision is approximately 170 persons.

Tentative Tract No. 756 is also a proposed subdivision, although no specific improvement plans have been received by the District for review and comment. The Tentative Tract is divided into seven phases as outlined below:

<u>Phase</u>	<u>Lots</u>	<u>Estimated Population</u>	<u>Accumulated Population</u>
2	54	184	184
3	46	156	340
4	50	170	510
5	48	163	673
6	45	153	826
7	52	177	1003
Total	296		

Note that one of the lots is dedicated for use as a well and water storage tank site. Population estimates are based on 3.4 persons per residence.

The locations of the proposed subdivisions are shown on the attached Figure 2.

## General Improvements

The District's office and shop are marginally adequate to serve the present population. The office in particular is crowded and does not satisfy ADA requirements. It has been determined that a modified office and shop may be needed to accommodate future growth. The modified shop is anticipated to be adequate to serve the needs of a population of approximately 4,500 people. The modified office is anticipated to be adequate for 2,400 people more than the present population.

Additional facilities are expected to be required for the shop and office subsequent to the above growth. No estimates are included at this time for these future facilities. The capital costs associated with shop and office improvements have been discounted by 50 percent due to the benefit derived by the existing community of Armona.

## Water

Water supply facilities include treatment, storage and booster pumping facilities at Well No. 1 (Dillon Well) and water storage and booster pumping facilities at Well No. 2 (7th Day Well). Actual cost of construction of the improvements is identified in this report. The water treatment facilities for the wells are expected to be adequate for between 1,500 and 2,000 people beyond the base population. The capital cost of the treatment facilities has been discounted by 30 percent prior to incorporation into connection fee estimates due to benefits to the existing population in the form of higher pressures, reliability of water supply and quality of water supply. The capital cost of the treatment facilities has also been reduced by the amount of grant money that was included with the funding assistance to construct the facilities (15 percent).

A water main along Hanford-Armona Road east of Oak Street has been identified as necessary to serve future growth in Armona. Specific growth in this vicinity is commercial development. This improvement will provide a benefit to the existing population in the form of enabling additional commercial development to receive potable water along this corridor, aiding in employment opportunities. This water main extension would also serve as a basis for future looping of the water distribution system east of the community, thereby enhancing fire flow capabilities. The capital cost of this water main has been reduced by 15 percent prior to incorporation into the proposed connection fee.

Water mains constructed along Oak Street and 14th Avenue have also been identified as necessary to serve future growth in Armona. These improvements provide benefit to the existing population in the form of higher pressures and better distribution of emergency flows. Therefore, the capital costs of these two mains have been reduced by 30 percent prior to incorporation into the proposed

connection fee. As with the water treatment and storage facilities, the capital cost of the water mains has been further reduced by 15 percent due to that portion of the funding assistance package that was granted to the District. The net reduction is 40 percent.

Future growth will require two additional wells during the 5th and 6th Benefit period (See Table 1). Prior to issuance of the will serve letter for Phase 5 of Tract 756 the new water storage tank and booster pumping facilities should be constructed and operational. Subsequently, prior to issuance of the will-serve letter for Phase 6 of Tract 756 Well No. 3 should be constructed and operational. The site for future Well No. 3 has been acquired by the District and is located within Tentative Tract No. 756. The production capacity of Well No. 3 is anticipated to be 1,000 gpm for the purposes of this report. Well No. 3 is expected to serve an additional 3,300 people and Well No. 4 is expected to be required for a total population of up to 8,600 people. The site for future Well No. 4 has not yet been acquired by the District. It is recommended that future well sites be investigated north of State Route 198 and east of Oak Street.

Due to the water quality of the existing wells, treatment facilities are expected to be necessary for the two future wells. In addition to the wells, water storage facilities will be needed in the future. Supplemental information regarding the projected capacity of capital improvements is included in the Appendix.

#### Sewer and Wastewater Treatment and Disposal

The sewer system expansion and wastewater treatment and disposal facilities constructed in 1992 were financed in part by a loan of \$203,685 from the water fund. The expansion is expected to be adequate for 1,800 additional people beyond the 3,100 persons used as the original base population. This additional capacity is reduced somewhat (equivalent to approximately 800 persons) due to the backwashing required at the water treatment facilities at Well No. 1. Therefore, the first planned expansion of the wastewater treatment plant (consisting primarily of aeration and disposal pond improvements) is required prior to the issuance of the will-serve letter for Phase 4 of Tract 756.

Soils in the Armona area are generally silty sands. The existing ponds at the wastewater treatment and disposal facilities experience significant erosion due to wave action. Capital improvements consisting of erosion mitigation facilities are included and will benefit all existing and future populations served by the Armona CSD.

Additional population growth will impose a need for sewer trunk lines and additional expansions to the treatment and disposal facilities. Construction of Tentative Tract No. 787 includes the construction of a sewer main along the Oak Street alignment from Front Street to Hanford-Armona Road. This capital improvement was

specifically identified in previous capital facilities plans and may involve the participation of connection fee revenues. The previous estimate for construction of the sewer main was \$52,000.

Relatively minor capital cost expansions at the wastewater treatment plant may be accomplished until the population reaches approximately 6,600 people. The third treatment plant expansion may require significant physical improvements to the facilities and a shift from aerated ponds to more intensive treatment processes. The estimate of construction costs associated with the treatment plant expansion has been reduced in this analysis.

#### Connection Fee Revenues Available for Utilization

Based on information provided in audited financial statements through June 30, 2001, the District had accumulated connection fee cash of \$ 32,704 in the sewer fund and \$281,085 in the water fund. Unaudited connection fee revenue between July 1, 2001 and June 30, 2002 consisted of \$118,690 in the sewer fund and \$149,850 in the water fund. Therefore, as of June 30, 2002, the total funds available for capital improvements through connection fee revenues are \$151,394 in the sewer fund and \$430,935 in the water fund. As of June 30, 2003, total funds available for capital improvements through connection fee revenues are \$ 129,309 in the sewer fund and \$ 420,289 in the water fund.

#### Recommended Priority List for Capital Improvements

Based upon comments received during the September and October, 2003 Public Meetings a preliminary priority list of Capital Improvements, and the associated estimated costs are as follows:

Water Treatment at Well No. 2	\$400,000
12 inch water main in Hanford-Armona Rd. from Oak Street east to the State Route 198 On-Ramp.	\$120,000
6" Sewer in Hanford Armona Road from Randall Street to 14 ½ Ave. May also require sewer lift station.	\$ 52,800
Office Modification Upgrades	To be determined

Based upon comments received during the September, 2003 Board Meetings of the Armona Community Services District, improvements to the existing District office or consideration of a new District office to address ADA requirements and office utilization requirements are also to be considered for prioritization of Capital Improvements.



It is recommended that the Board direct staff regarding implementation of improvements associated with ADA compliance and any other office or shop improvements to be considered. Upon determination of District intent, it is recommended that the District retain the services of an architect to provide more specific cost estimates and building permit requirements associated with anticipated improvements.

It is also recommended that the District consider conducting pilot testing of water treatment alternatives for Well No. 2. Technology of treatment alternatives has improved in the past 8 years. Similarly, characteristics of the water may also have changed in the past 8 years. Pilot testing of the site may offer opportunities for reduction of the capital cost estimate for water treatment facilities.

Construction of the 12 inch water main in Hanford-Armona Road is associated with commercial development east of Oak Street and includes the replacement of a non-standard water line.

Construction of the 6" sewer in Hanford-Armona Road is associated with replacement of non-standard sewer lines west of Randall Street. The existing sewer line between Randall Street and 14<sup>th</sup> Avenue does not conform to District Standards (it has a slope flatter than standard). There does not presently exist sufficient information associated with existing ground elevations and the recommended alignment of the sewer along Hanford-Armona Road. Construction of an extension of the sewer along Hanford-Armona Road to District Standards will result in a shallow sewer. Sufficiency of the proposed sewer to serve existing or proposed development requires evaluation. The alignment of this proposed sewer extension is across the frontage of proposed Tract No. 728. It has been determined that a sewer lift station is required to serve this proposed subdivision. Extension of the sewer should incorporate provisions for the proposed sewer lift station.

### Summary

The location of future Well No. 3, water storage facilities, water main, and sewer line improvements included in the Capital Facilities Improvement Plan are shown on Exhibits A through G.

The known developments are expected to bring an additional population to the community of Armona associated with the first and second benefit periods identified in Table 1. In addition, the need for Well No. 3, additional water storage and the first expansion of the wastewater treatment plant may be required. The first expansion of the wastewater treatment plant would be required prior to development of Phase 4 of Tract 756. The additional storage facilities would be required prior to development of Phase 5 of Tract 756, and Well No. 3 would be required prior to development of Phase 6 of Tract 756.

The total cost to the District for the required projects to accommodate growth to a population of 8,600 people is estimated to be \$ 6,684,657. Several alternatives were presented and considered in determining the appropriate connection fees associated with the capital improvements identified.

These alternatives included the following:

Table 1A Capital Improvements Identified for a Projected Population of 8,600

Table 1B Capital Improvements Identified for the 5<sup>th</sup> Benefit Period, generally associated with a population of 6,600

Table 1C Capital Improvements Identified for the 4<sup>th</sup> Benefit Period, generally associated with a population of 5,500

Table 1D Capital Improvements Identified for the 5<sup>th</sup> Benefit Period, generally associated with a population of 6,600. Although the benefit period is the same as identified in Table 1B, the connection fees have been reduced to approximately 75 percent of the maximum to maintain total connection fees identical to the existing connection fee.

Note that capital improvement in the 5<sup>th</sup> and 6<sup>th</sup> Benefit Periods are included in Tables 1B, 1C, and 1D because these improvements benefit a population beyond the population identified.

Based upon direction from the Board of Directors received during the November, 2003 Board Meeting, the capital facility requirements for this plan and the associated connection fees are based upon a population of 6,600 persons, and approximately 90 percent of the maximum identified cost.

#### Implementation

The allocation of connection fees to two-bedroom apartments, as defined in Ordinance 1992-1, is 80% of a single family residence. Single bedroom apartments are charged 60% of a two bedroom apartment.

Other commercial and industrial connections that impose water or sewer demands that vary from typical residential uses would require determination of the appropriate equivalent dwelling unit value. For example, an industrial connection that would discharge wastewater with characteristics with high BOD, suspended solids, electroconductivity, or other component, requires determination of the appropriate equivalent dwelling unit value on a case-by-case basis.

## APPENDIX

Figure 1 – Land Use Map of Armona

Summary of projected population equivalents

Alternative summaries of Capital Improvements

Table 1A

Table 1B

Table 1C

Table 1D

Table 2

Exhibit A – Location of Future Well No. 3 and Future Water Storage

Exhibit B – Future 12" Sewer along Oak Street from Front Street to Hanford-Armona Road

Exhibit C – Future 12" Sewer along Oak Street from Walker to Hood  
Future 24" Sewer along Oak Street from Hood to wastewater treatment plant

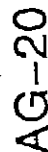
Exhibit D - Future 18" Sewer along Hume from 14<sup>th</sup> to Oak Street

Exhibit E - Future 15" Sewer along 14<sup>th</sup> from Hanford Armona Road to Hwy 198  
Future 18" Sewer along 14<sup>th</sup> from Hwy 198 to Hume Avenue

Exhibit F - Future 6" Sewer along Hanford Armona Road from Randall Street to 14 ½ Avenue.

Exhibit G - Future 12" Water main along Hanford-Armona Road from Oak Street to SR 198.

LAND USE MAP OF ARMONA



ARMONA COMMUNITY SERVICES DISTRICT

SEWER AND WATER CONNECTION FEE ANALYSIS

ESTIMATE OF POPULATION FOR ARMONA CSD  
PER KINGS COUNTY LAND USE ELEMENT

EXISTING POPULATION ESTIMATED 3,500

POPULATION ESTIMATE BEYOND EXISTING

LAND USE	ACREAGE	POPULATION DENSITY	TOTAL POPULATION
RESIDENTIAL			
Very Low Density	16.07	9.52	153
Low Density	107.833	9.52	1,027
Low-Medium Density			0
Medium Density	122.29	23.8	2,911
Medium-High Density			0
High Density	27.03	40.8	1,103
			0
COMMERCIAL			0
Multiple			0
Retail			0
Rural	110	9.52	1,047
Service	16	23.8	381
Transportation	72	2	144
			0
INDUSTRIAL			0
Heavy Industrial	1	95.2	95
Light Industrial	32	28.56	914
			0
AGRICULTURAL			0
Limited Agriculture	assume no population equivalent		0
			0
PUBLIC	assume no population equivalent		0
			0
SCHOOLS	assume to be included already		0
			0
SUBTOTAL			7,774
TOTAL ULTIMATE POPULATION EQUIVALENT			11,274

Sewer Demand Estimates

High Density	5000 gpd/acre	12 units per acre	40.8 population per acre
CR, CS	1000 gpd/acre	2.8 units per acre	9.52 population per acre
Medium Density	2500 gpd/acre	7 units per acre	23.8 population per acre
Low Density, Very Low Density	1000 gpd/acre	2.8 units per acre	9.52 population per acre
Heavy Industrial	10000 gpd/acre	28 units per acre	95.2 population per acre
Light Industrial	3000 gpd/acre	8.4 units per acre	28.56 population per acre

Assume 3.40 persons per unit

Per Kings County General Plan range of medium density units is 7 through 11 units per acre.

**TABLE 1A Capital Improvements Identified for Projected Population of 8,600  
ARMONA COMMUNITY SERVICES DISTRICT**

## SEWER AND WATER CONNECTION FEE ANALYSIS

[illegible]

IMPROVEMENT COST PER CONNECTION @ 3.4 PERSONS/CONNECTION

Job # 21710003

[illegible]

Note: Base population estimate of 3,100 persons in 1990.  
Present estimated population of 3500 persons (year 2003)

TABLE 1C Capital Improvements Identified for Projected Population of 5,500  
ARMONA COMMUNITY SERVICES DISTRICT

SEWER AND WATER CONNECTION FEE ANALYSIS

PROJECTED POPULATION										IMPROVEMENT COST PER PERSON										TOTALS		



TABLE 10 Capital Improvements for Projected Population of 8,600  
ARMONA COMMUNITY SERVICES DISTRICT

SEWER AND WATER CONNECTION FEE ANALYSIS

PROJECTED POPULATION										IMPROVEMENT COST PER PERSON										TOTALS	

IMPROVEMENT COST PER CONNECTION @ 3.4 PERSONS/CONNECTION

\$3,325	\$1,269	\$4,613
\$2,662	\$1,032	\$3,694

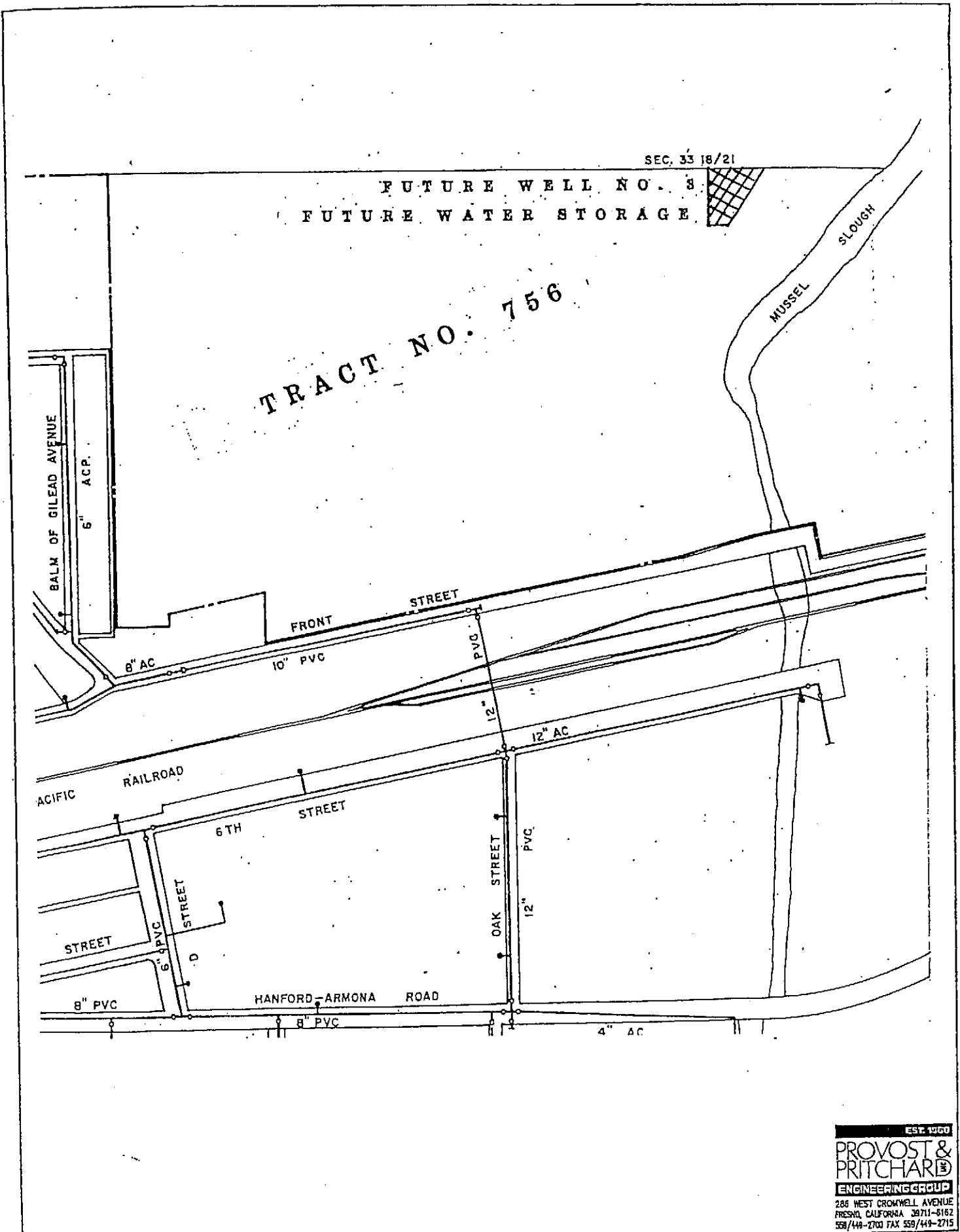
Note: Base population estimate of 3,100 persons in 1990.  
Present estimated population of 3500 persons (year 2003)

TABLE 2 PROPOSED CONNECTION FEES									
TYPE CONNECTION	ORD. 1988-1		ORD. 1992-1		MAXIMUM ALLOWED		ADOPTED		
	SEWER	WATER	SEWER	WATER	SEWER	WATER	SEWER	WATER	
Single Family Residence Developer Credit	2,000 (500)	1,050 (350)	2519	1971	2,917 (A)	3,757 (A)	1,160 (0)	2,992 (0)	
Apartments 2 or more bedrooms 1 bedroom	1,200 725	600 450	2016 1,210	1576 946	2,334 1,400	3,006 1,803	928 557	2,394 1,436	
Commercial/Institution Per fixture unit Minimum fee	54 500	25 750	90 1,264	49 980	104 1,459	94 1,879	46 644	83 1,663	

NOTES:

(A) Local Option, there is no maximum or minimum.

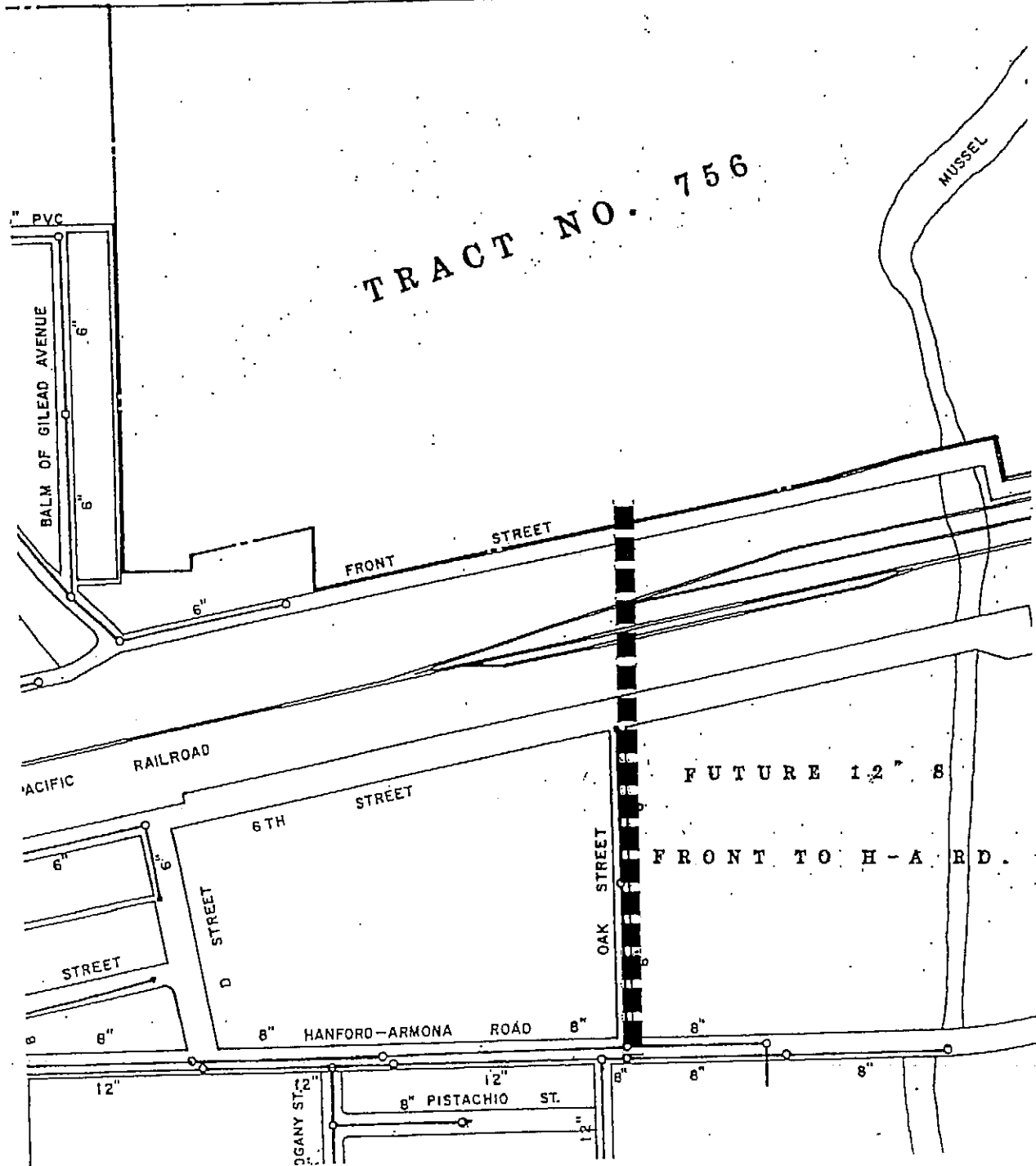
# EXHIBIT A



ADMONA COMMUNITY SERVICES DISTRICT

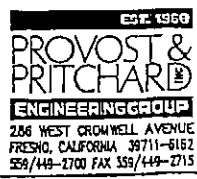
# EXHIBIT B

SEC. 33 18/21



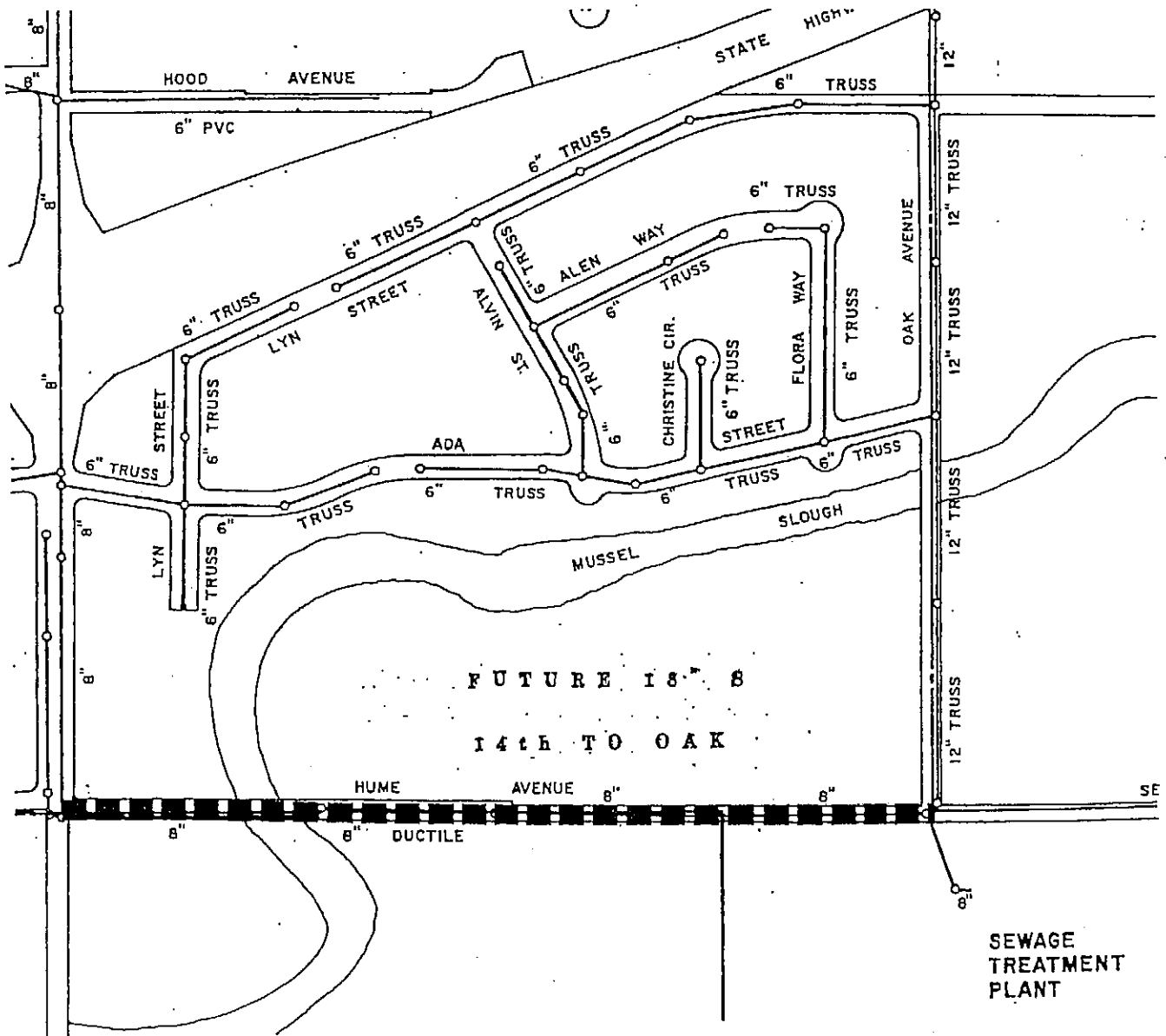
EST. 1950  
**PROVOST & PRITCHARD**  
ENGINEERING GROUP  
286 WEST CROWWELL AVENUE  
FRESNO, CALIFORNIA 93711-6162  
509/449-2700 FAX 509/449-2715

**THE**



## ARMONA COMMUNITY SERVICES DISTRICT

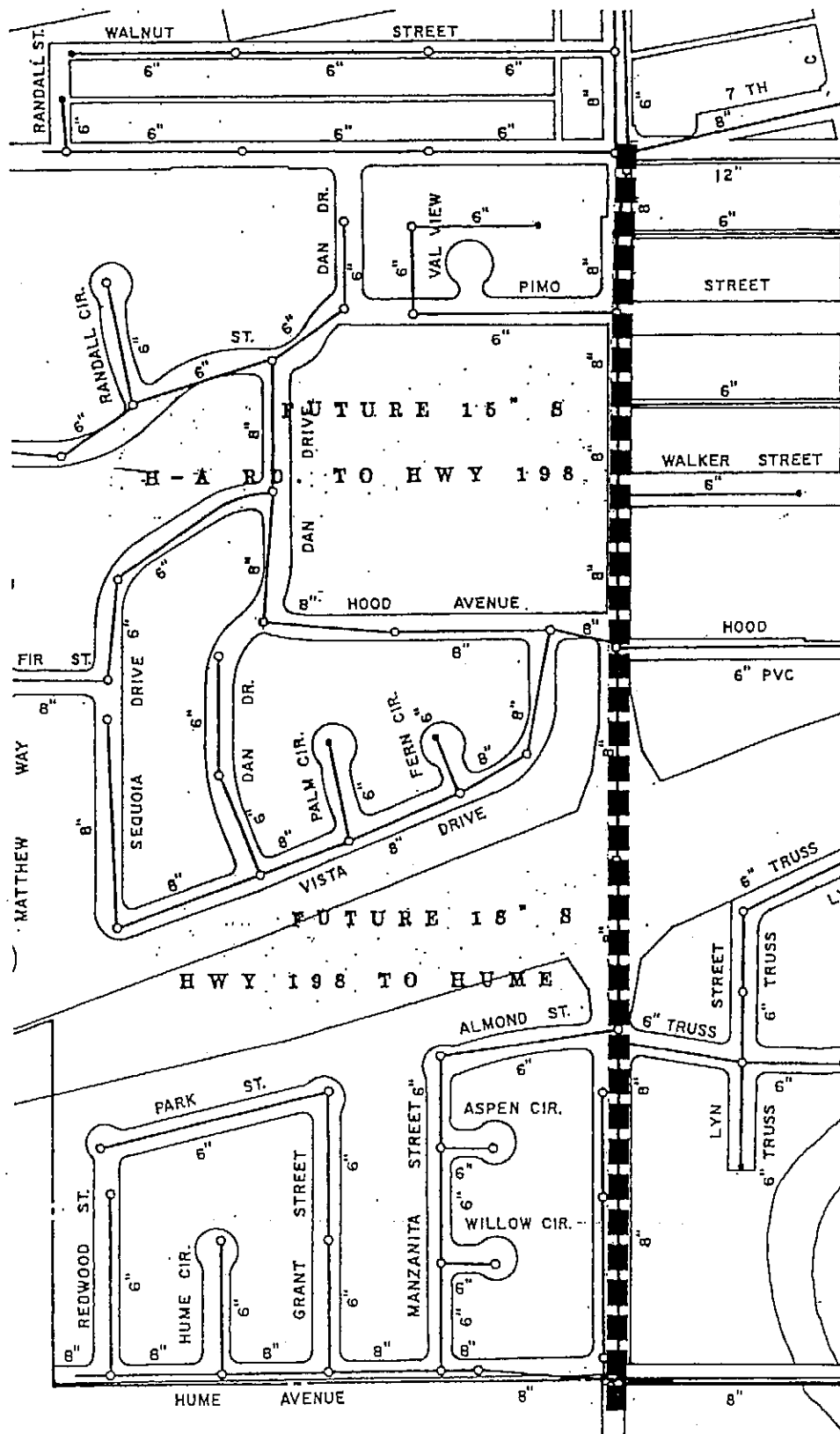
# EXHIBIT D



EST. 1969  
**PROVOST & PRITCHARD**  
 ENGINEERING GROUP  
 286 WEST CROWTHER AVENUE  
 FRESNO, CALIFORNIA 93711-6162  
 559/449-2700 FAX 559/449-2715

ARMONA COMMUNITY SERVICES DISTRICT

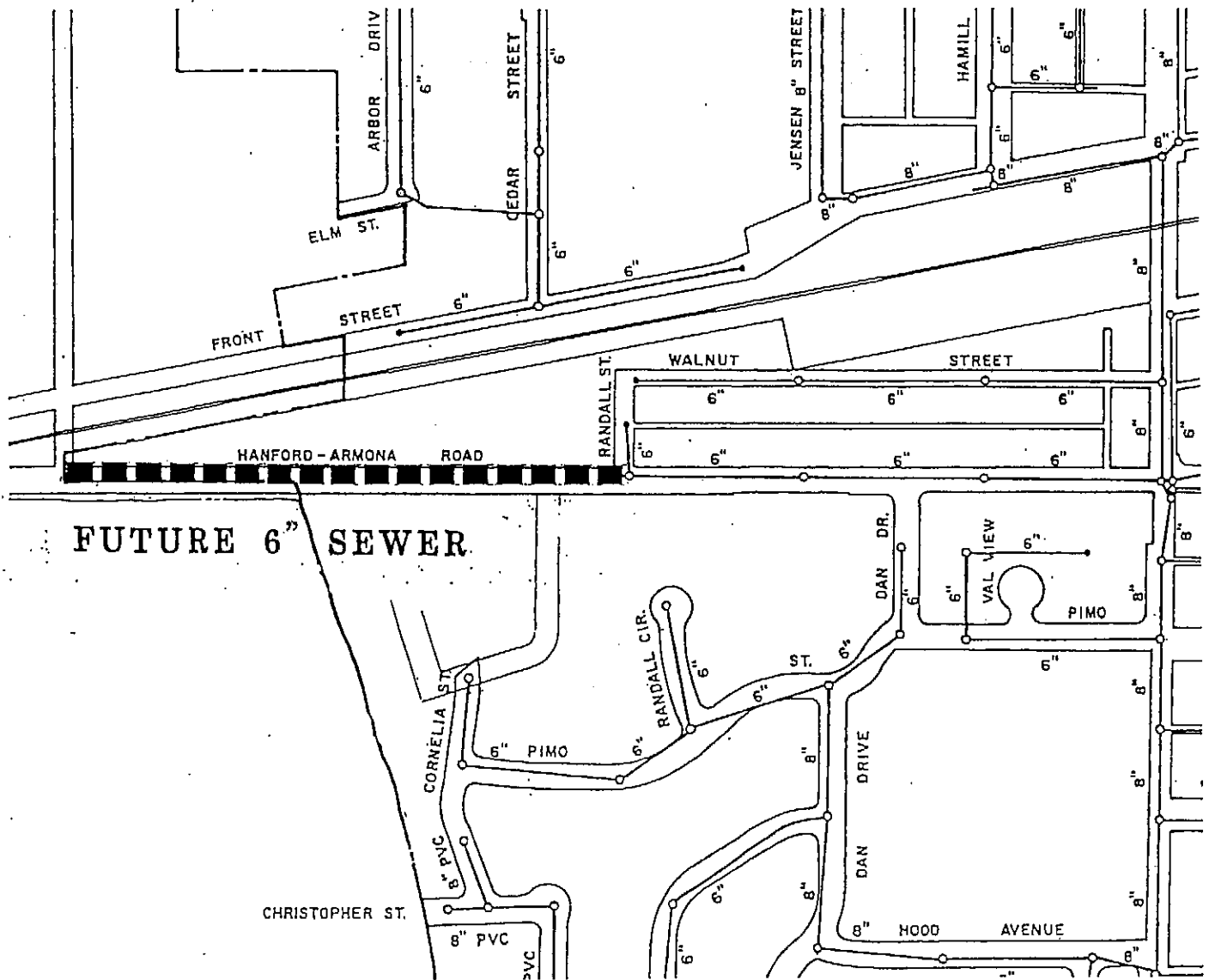
# EXHIBIT E



EST. 1960  
**PROVOST & PRITCHARD**  
**ENGINEERING GROUP**  
 286 WEST CROMWELL AVENUE  
 FRESNO, CALIFORNIA 93711-6162  
 559/449-2700 FAX 559/449-2715

ARMONA COMMUNITY SERVICES DISTRICT

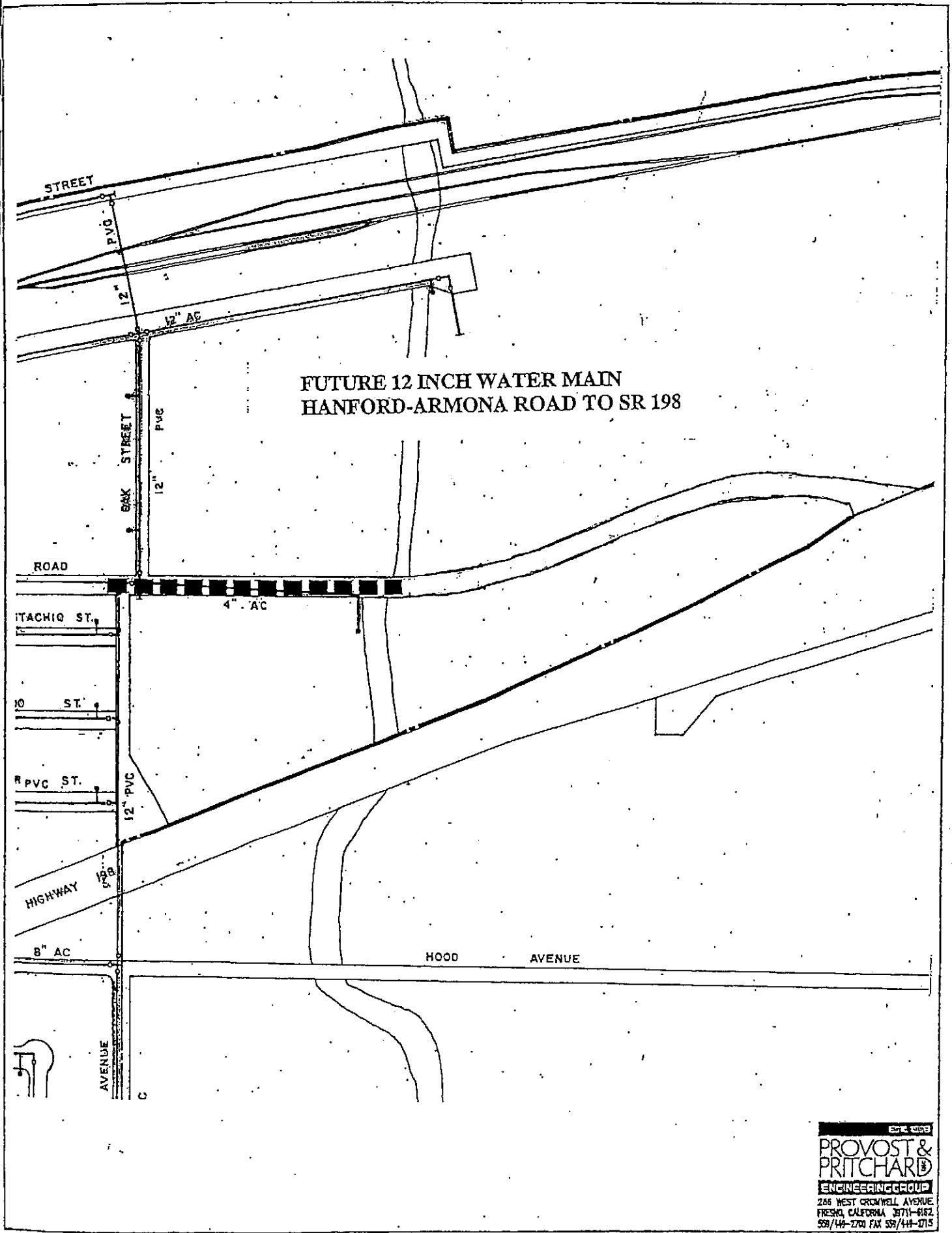
# EXHIBIT F



C-1000  
**PROVOST & PRITCHARD**  
 ENGINEERING GROUP  
 286 WEST CROWWELL AVENUE  
 FRESNO, CALIFORNIA 93711-8162  
 509/449-2700 FAX 509/449-2715



# EXHIBIT G



FUTURE 12 INCH WATER MAIN  
HANFORD-ARMONA ROAD TO SR 198

EST. 1983  
**PROVOST & PRITCHARD**  
ENGINEERING GROUP  
256 WEST CROWWELL AVENUE  
FRESNO, CALIFORNIA 93711-6182  
559/448-2700 FAX 559/448-0715