

**RESOLUTION NO. 622**

**A RESOLUTION ESTABLISHING SANITARY SEWER SYSTEM  
DEVELOPMENT CHARGES BASED ON EQUIVALENT WATER METER  
SIZE AND MULTI-FAMILY DWELLING UNITS METHODOLOGY**

**WHEREAS**, Oregon revised Statute 223.304 requires that the City adopt a resolution that establishes the methodology for determining the amount of system development charges; and

**WHEREAS**, the Canby City Council has determined that there is a need for sewer system development charges in order to provide capital for sewer improvements to increase capacity, and capital for reimbursement of constructed excess capacity; and

**WHEREAS**, City Ordinance No. 868, which was enacted and became effective September 18, 1991, expressly provides in Section 24, that the City Council, by Resolution, shall establish appropriate system development charges for connection to the municipal sewer system; and

**WHEREAS**, all future collection of system development charges for connection to the City of Canby sanitary sewer system shall be deposited to the "Sewer Reserve Fund"; and

**WHEREAS**, the meter size method is based on the fact that sewerage system components are designed to meet both average and peak demands and that the water meter size is a good indicator of demand; and

**WHEREAS**, multiple family housing units have been identified by water meter records to contribute a proportional amount per dwelling unit as single family residential units; and

**WHEREAS**, the City Council has determined that the rates hereinafter specified and hereby established are just, reasonable and necessary, now therefore it is hereby

**RESOLVED** by the Canby City Council as follows:

The system development charge (SDC) is based on the cost of prior capital improvements which resulted in excess capacity and projected capital improvements needed to increase the capacity of the system.

The basis for the reimbursement and improvement cost estimates is contained in the 1996 Update, Wastewater Systems Development Charges, City of Canby, by Raymond J. Bartlett, June 24, 1996, and is hereby incorporated by reference.

The reimbursement component of the system development charge equals the proportionate capital costs of wastewater system components already constructed. This consists of the treatment plant, pump stations, and publicly funded portions of the collection system.

Capital cost of collection system improvements for determination of reimbursable costs shall be based upon the value of oversize (greater than 8") construction paid by private development or the total cost if paid by the City, to benefit future connections. The following table shall be used to establish cost per lineal foot of construction:

#### **PIPELINE REIMBURSEMENT SCHEDULE**

<b>Line Size</b>	<b>Average Depth</b>	<b>Construction Cost</b>	<b>Oversize Cost</b>
8"	7'	\$30	\$0
10"	10'	\$41	\$11
12"	12'	\$48	\$18
15"	12'	\$59	\$29
18"	12'	\$74	\$44
21"	12'	\$84	\$54
24"	12'	\$92	\$62
30"	12'	\$100	\$70

All capital improvements eligible for reimbursement shall be included in the City's inventory of fixed assets.

The reimbursement fee is based on the greater of water meter size or multi family unit calculation as indicated below:

### REIMBURSEMENT FEE

Meter Size	3/4" Meter Equivalent	Reimbursement Fee (greater value)	
		By Meter Size	MF Per Unit
3/4"	1	\$520	\$509
1"	2	1,040	509
1 1/2"	5	2,600	509
2"	10	5,200	509
3"	25	13,000	509
4"	35	18,200	509

The improvement component of the systems development charge equals the proportionate cost of construction and financing attributable to projected capital improvements providing increased capacity. These components include projected improvements to the wastewater treatment plant as listed in the SDC document.

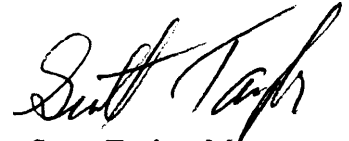
The improvement fee is based upon the greater of meter size or multi family unit calculation as indicated in the following table:

### IMPROVEMENT FEE


Meter Size	3/4" Meter Equivalent	Improvement Fee (greater value)	
		By Meter Size	MF Per Unit
3/4"	1	\$500	\$489
1"	2	1,000	489
1 1/2"	5	2,500	489
2"	10	5,000	489
3"	25	12,500	489
4"	35	17,500	489

**BE IT FURTHER RESOLVED** that the Canby City Council hereby classifies the charges imposed herein as not being subject to the limitations imposed by Section 11 (b), Article XI of the Oregon Constitution and that the City Recorder is hereby directed to publish notice in accordance with Section 26 (8) of Chapter 459 of Oregon Laws, 1991.

**ADOPTED** by the Canby City Council on the 7<sup>th</sup> day of August 1996.

  
Scott Taylor, Mayor

ATTEST:

  
Marilyn K. Perkett, City Recorder

**1996 Update  
Waste Water Systems Development Charges  
City of Canby**

June 24, 1996

Raymond J. Bartlett  
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## SUMMARY

Since Canby adopted its current waste water SDC in 1991, it has reconstructed and expanded the waste water treatment plant and updated the fixed-asset-accounting records. These changes affect the amount of the waste water SDC.

Also, the Canby Utility Board, which operates the Canby water utility, completed a study of water usage by meter size and by type of residential customer.<sup>1</sup> We use these data to revise the 3/4-inch meter equivalency tables for non-residential developments, and to more accurately assess multi-family residential developments.

A waste water SDC may consist of a reimbursement fee, an improvement fee, or both. The current SDC is a reimbursement fee only. The proposed SDC includes both the reimbursement fee and the improvement fee. Table 1 compares the current and proposed SDCs by meter size and shows the proposed SDC by housing unit for multi-family developments.

**Table 1**  
**Current and Proposed Waste Water SDCs**

Proposed Meter Equivalent Size 3/4" Meters		Existing SDC	Proposed SDC				Change \$ %	
			By Meter Size			By MF Unit 98%		
			Reimburse- ment Fee	Improve- ment Fee	Total SDC			
3/4"	1	\$1,200	\$520	\$500	\$1,020	\$998	(\$180)	-15%
1"	2	2,626	1,040	1,000	2,040	998	(586)	-22%
1 ½"	5	4,989	2,600	2,500	5,100	998	111	2%
2"	10	7,646	5,200	5,000	10,200	998	2,554	33%
3"	25	13,714	13,000	12,500	25,500	998	11,786	86%
4"	35	21,796	18,200	17,500	35,700	998	13,904	64%

Source: Raymond J. Bartlett, Economic & Financial Analysis.

<sup>1</sup>Canby Utility Board, \_\_\_\_\_, prepared by Curran-McLeod, Inc., Appendix C.



## I THE CURRENT SDC

Table 2 shows the current schedule of systems development charges for wastewater. It is an improvement fee, only. At the time we wrote the methodology, several components of the city's sewage treatment plant were operating at capacity. A reimbursement fee was inappropriate.

**Table 2**  
**Current Waste Water Systems Development Charge**

Meter Size	Equivalent 3/4" Meters	Existing SDC		
		Reimbursement Fee	Improvement Fee	Total SDC
3/4"	1	\$0	\$1,200	\$1,200
1"	2.2		2,626	2,626
1 1/2"	4.2		4,989	4,989
2"	6.4		7,646	7,646
3"	11.4		13,714	13,714
4"	18.2		21,796	21,796

Source: City of Canby, *Sewer Utility Financial Forecast and Rate Analysis*, prepared by Raymond J. Bartlett, Economic & Financial Analysis, October 1991, page 30.

The current SDC is assessed according to the size of a water meter to be installed in the development. Except in rare circumstances, sewage flow increases with water usage and customers obtain larger meters to use more water. Also, engineers design water and waste water systems to meet peaking demands. Large-size meters have a greater capacity to contribute to peak water and waste water demands than smaller-size meters. In the current methodology, an equivalency table is used to determine peak demands for meters larger than 3/4-inches in diameter. For example, a 1-inch meter will discharge as much water as 2.2 3/4-inch meters; therefore, the SDC for a 1-inch meter is 2.2 multiplied by the SDC for a 3/4-inch meter.

## II THE PROPOSED SDC

The city proposes to make three changes to the SDC.

1. Add a reimbursement fee to the SDC
2. Revise the 3/4-inch meter equivalents for 1-inch and larger meters
3. Assess multi-family developments based on the greater of the meter SDC or on the number of residential units

First, the City has expanded the waste water system. Since 1991, the city has made major capital improvements to the treatment plant, which it paid for by issuing a \$4.1 million revenue bond in 1992. These improvements increased the treatment capacity from about 1.1 million gallons per day (mgd) to about 2.0 mgd. Now that the city has excess capacity, it can assess a reimbursement fee for completed projects, and an improvement fee for projects to be constructed after fiscal year 1995.

Second, the City will change the schedule of 3/4-inch meter equivalents by meter size. The current SDC is assessed according to size of water meter size, which is a rough measure of actual sewage generation. The Canby Utility Board (CUB), which operates the water system in Canby, recently analyzed water usage by meter size and found water usage by customers with large size meters (2-inches and larger) is more than shown in the current SDC schedule. Table 3 compares the current and proposed 3/4-inch meter equivalents, and the current SDC using both schedules of meter equivalencies.

**Table 3**  
**Current and Proposed 3/4-inch Meter Equivalents**

Meter Size	3/4 Meter Equivalents			Current Improvement Fee Based 3/4 Meter Equivalents		
	Current	Proposed	% Current	Current	Proposed	% Change
3/4"	1	1	100%	\$1,200	\$1,200	0%
1"	2.2	2	91%	2,640	2,400	-9%
1 1/2"	4.2	5	119%	5,040	6,000	19%
2"	6.4	10	156%	7,680	12,000	56%
3"	11.4	25	219%	13,680	30,000	119%
4"	18.2	35	192%	21,840	42,000	92%

Source: Raymond J. Bartlett, Economic & Financial Analysis. Curran-McLeod, Inc., and Canby Utility Board data.

Third, the CUB study established a basis for assessing multi-family developments according to either the number of residential units or the meter size. In winter months when outdoor watering

is at a minimum, multi-family residents use about as much water as single-family residents on a 3/4-inch meter. The Census reports about the same number of persons per housing unit for multi-family as for single family, 2.72 persons/household and 2.78 persons/household. Therefore, a multifamily housing unit will produce about 98 percent as much sewage flow as a single family housing unit.

The proposed SDC accounts for the capital improvements made and to be made, the amount of water consumed by meter size, and the amount of water consumed by multi-family developments.

#### **A. REIMBURSEMENT FEE**

A reimbursement fee "...means a fee for costs associated with capital improvements already constructed or under construction." [ORS 223.314 (3)]. Tables 4 and 5 show the calculation of the reimbursement fee.

Table 4 shows the capital costs of the waste water system to be allocated to future development. The depreciated present value of the city's fixed assets in waste water facilities amounts to \$4,938,682, see Table 4. In Appendix A we derive this value by inflating the original cost of the fixed assets in the waste water system and by subtracting accumulated depreciation. We inflate the depreciation to 1995 dollars. Also, Appendix A shows we eliminated all assets that have been in operation longer than their depreciable life.

In fiscal year 1995, the city completed a reevaluation of fixed assets in the sewer system. In its 1995 audit, the city's auditors found that "...fixed assets accounting records of the Sewer Fund did not agree with amounts reported in the previous year's audited financial statements." The audit goes on to say "...and, the City now has sufficiently detailed fixed assets accounting records supporting balances reported in the June 30, 1995, audited financial statements." The data for prior investments is incomplete. The city's new fixed assets accounting system specifically records only those facilities that the city staff could positively identify, dated, and valued. A review of those records show that most of the inventoried assets are at the treatment plant and at major pump stations in the collection system. The city did not include any of the collection system in the fixed assets records. To estimate the value of the collection system built by the city, the city's engineer provided a present value and year of construction for the three major sewer lines that they built with city sewer revenues. We depreciated these assets for years in service.

Since the city is currently using 53 percent of the sewage system, only 47 percent of the total value (\$2,321,180) is used to calculate the reimbursement fee. The excess capacity amounts to 940,000 gallons per day of treatment capacity. The reimbursement fee is therefore, \$2.469 per gallon per day of capacity (i.e., \$2,321,180 / 940,000 gallons per day).

**Table 4**  
**Calculation of Proposed Reimbursement Fee**

	Current \$ Value, 1995	
Treatment Plant & Pump Stations, Net of Depreciation	\$4,192,231	
Collection System, Net of Depreciation and Contrib. Capital	746,451	
Fixed Assets, Net of depreciation	4,938,682	
Current Usage	53%	1,060,000 mgd
Excess Capacity	47%	940,000 mgd
Total Available	100%	2,000,000 mgd
Value of Excess Capacity	\$2,321,180	
Reimbursement Fee per Gallon	\$2.469 \$/gallon	
Reimbursement Fee per Cubic Foot	\$18.472 \$/cubic foot	
Average Daily Winter Water Usage, Single-family on 3/4-inch meter	28 cubic feet/day	
Reimbursement Fee, Single-family House, or 3/4" Meter	\$520	

Source: City of Canby, Annual Financial Report for Fiscal Year 1995, and Appendix A, compiled by Raymond J. Bartlett, Economic & Financial Analysis.  
Note: one cubic foot equals 7.48 gallons.

Single-family homes on a 3/4-inch water meter use an average of 841 cubic feet of water per winter month (November through April). At 7.48 gallons per cubic foot, the reimbursement fee for a single-family residence will be \$520 ( $\$2.469 \times 7.48 \text{ g/cf} \times 841 \text{ cf/month} / 30 \text{ days}$ , and rounded to the nearest \$10).

Table 5 shows the schedule of reimbursement fees by meter size and by multi-family residential unit. In a study of water consumption by commercial and multi-family customers, CUB determined the equivalent amount of water each size meter used compared with a 3/4-inch meter. Also, the study showed that whatever meter size, the average multi-family housing unit uses about 98 percent as much water as a single family housing unit.

Since 1991, the city has determined the waste water SDC on meter size. From CUB's findings, however, Canby proposes to assess its waste water reimbursement fee on new multi-family developments as the greater of meter size or number housing units. Also, for additions to existing multi-family developments, the city will assess the per unit SDC for each new housing unit.

**Table 5**  
**Proposed Reimbursement Fee**

Meter Size	Proposed Equivalent 3/4" Meters	Proposed Reimbursement Fee	
		By Meter Size	By M-F Unit 98%
3/4"	1	\$520	\$509
1"	2	1,040	509
1 1/2"	5	2,600	509
2"	10	5,200	509
3"	25	13,000	509
4"	35	18,200	509

Source: Raymond J. Bartlett, Economic & Financial Analysis.

Note: Canby Utility Board determined 3/4" meters equivalents from actual usage by meter size. According to the 1990 Census, multiple-family residences have about as many persons per household (PPH) as single-family: 2.72 persons to 2.78 persons.

## B. IMPROVEMENT FEE

Table 6 shows the list of future capital improvements and their cost in 1996 dollars. The city needs these improvements to fully realize the increase in treatment capacity to 2 mgd. Each project is allocated according to benefit to existing and future development. Only that portion allocated to future development is used to calculate the improvement fee. All of the projects except the new *Aeration Basin & Support Facilities* are allocated based on the percentage of unused capacity in the treatment plant (47 percent). Existing development will use 53 percent of these proposed improvements. The *Aeration Basin & Support Facilities* will be built only if needed and only to benefit future development, therefore, 100 percent of its cost is used to calculate the improvement fee.

The sum of the capital costs on the capital improvements list allocated to future development (\$2,251,930) divided by the quantity of unused and future capacity (940,000 gallons per day) equals the improvement fee per gallon of usage per day, \$2.396. Based on average household use of 841 cubic feet per month, the improvement fee per housing unit on a 3/4-inch meter is \$500 (\$2.396/gallon/day x 7.48 cf / gallon x 841cf / month x 30 days). This amount also applies to single-family residents on a 3/4-inch meter.

Table 7 compares the current and proposed improvement fees, and calculates the improvement fee based on meter size or on the number of housing units in a multiple-family building. Currently, Canby applies the improvement fee based only on meter size. Based on the CUB demand analysis, multi-family developments will be assessed as the greater of meter size or of number of residential units. The city will assess the improvement fee for non-residential developments (or residential developments on meters larger than 3/4-inch) based on CUB's determination of average usage by meter size, also shown in Table 7.

**Table 6**  
**Capital Improvements List and Calculation of Waste Water Improvement Fee**

List of Capital Improvements	Total Costs	Attributable To New Development	
		\$	%
UV Basin Cover	\$45,000	\$21,150	47%
Additional Covers & Odor Control	240,000	\$112,800	47%
Sludge Dewatering Facilities	500,000	\$235,000	47%
Screening Compactor & Dewatering	25,000	\$11,750	47%
New Aeration Basin & Support Facilities	1,820,000	\$1,820,000	100%
System Planning	109,000	\$51,230	47%
Total	<u>\$2,739,000</u>	<u>\$2,251,930</u>	82%
	<u>Gallons/day</u>		
Used Capacity	1,060,000		
Excess Capacity	<u>940,000</u>		
Total Capacity	<u>2,000,000</u>		
Improvement Fee			
Per Gallon of ADW Flow		\$2.396	
Per Cubic Foot		\$17.921	
Improvement Fee, Single-Family House, 3/4" Meter		<u>\$500</u>	

Source: Raymond J. Bartlett, Economic & Financial Analysis.

**Table 7**  
**Current and Proposed Improvement Fee by Meter Size, by Number of Residential Units**

Meter Size	Proposed	By Meter Size		By M-F Unit 98%	Change	
	Equivalent	Improvement Fee			\$	%
	3/4" Meters	Existing	Proposed			
3/4"	1	\$1,200	\$500	\$489	(\$700)	-58%
1"	2	2,626	1,000	489	(1,626)	-62%
1 1/2"	5	4,989	2,500	489	(2,489)	-50%
2"	10	7,646	5,000	489	(2,646)	-35%
3"	25	13,714	12,500	489	(1,214)	-9%
4"	35	21,796	17,500	489	(4,296)	-20%

Source: Raymond J. Bartlett, Economic & Financial Analysis.

Note: Meter equivalents are based on CUB figures.

### C. IMPROVEMENT FEE CREDIT POLICY

The SDC statutes require the city to have a credit policy for the improvement fee (but not for the reimbursement fee). Usually, when a developer builds an improvement on the list of capital improvements used to create the improvement fee (shown on Table 6), then the city must credit the developer for the cost of making the improvement. The credit reduces the amount of the improvement fee owing on the development.

A capital improvement must meet three conditions to qualify for a credit.

First, the improvement must be on the list of capital improvements for SDC funding (Table 6). If it is not on the list then it does NOT qualify for a credit.

Second, the city must require the public improvement to be built as a condition of development approval. That is, the city must specifically state to the developer (preferably in writing) that unless the developer builds the improvement, the city will deny the proposed development permits to build.

Third, the public improvement (or portions of it) must either be off-site of the proposed development, or on-site but with excess capacity.

Two criteria determine the value of the credit. First only the cost of that portion of the improvement that exceeds the minimum standard facility size or capacity needed by the development can count toward the credit. Second, the total value of the credit cannot exceed the amount of the improvement fee, unless the city takes extraordinary actions.

When the credit exceeds the improvement fee, then the government may (but it does not have to provide for any further credit) apply the remainder against subsequent phases of the original development. Also, the statute “. . . shall not prohibit a unit of government from providing a greater credit, or from establishing a system providing for the transferability of credits, or from providing a credit for a capital improvement not identified in the plan [meaning those shown on Table 6], or from providing a share of the costs of such improvement by other means, if a unit of government so chooses.” [ORS 223.304 (4)(b)] If the city uses these extraordinary credits indiscriminately, then the SDC will become a very inequitable charge on those who do pay it. If it uses these credits excessively, then it destroys the revenue producing purposes of the SDC.

Since all of the improvements shown on Table 6 involve the treatment plant, which private developers are unlikely to build, no credits likely will be given for the current or proposed SDC. Generally, in waste water systems the only type of improvement credit is when the list of capital improvements includes portions of the collection system and a developer builds a part of these improvements. Then only for the over-sizing of the lines.



### III USES OF SDC REVENUES

SDC revenues can be used only for capital improvements. The city may use the reimbursement fee revenues on any sewer related capital expenditure including replacement of existing facilities, purchase of new facilities, and repayment of indebtedness.

The improvement fee revenues cannot be spent to replace existing facilities. They may be spent on purchasing new facilities that increase either performance or service provided by existing facilities, or to acquire new facilities, or on indebtedness used to purchase those facilities. Also, these revenues must be spent such that “. . . The portion of such improvements funded by the improvement fees must be related to current or projected development.” [ORS 223.307 (2)] For example, since only 47 percent of the cost of the proposed UV Covers is included in the SDC improvement fee, then only 47 percent of the cost should be paid for with improvement fee revenues. The remaining 57 percent must come from other sources such as user fee revenues.

The revenues from either fee cannot be used to pay for administrative buildings unless it is an incidental cost of a larger sewer improvement. The city can use any SDC revenues to pay the cost of developing and administering the SDC program.

Beyond these legislated restrictions on the uses of SDC revenues, the City pledged its SDC revenues to repayment of its 1992 Series Sewer Revenue Bonds (Resolution No. 521, *Authorizing the issuance of Sewer Revenue Bonds, Series 1992*). While these bonds are outstanding (through year 2018), the city pledges to use the gross revenues of the sewer system, including revenues from systems development charges, “. . . to the payment of principal and interest on all Bonds.” [Resolution No. 521, Section 10 page 18] Resolution No. 521 goes on to stipulate that only after meeting all of its operating and maintenance costs, debt service on the bonds, funding of a reserve account, and other bond-related expenses, can the net revenues of the system be used for any other purposes.

### IV SUMMARY OF CHANGES

We propose three changes for the SDC. First, the city creates an improvement fee and decreases the current reimbursement fee. When we made the current SDC findings, the city had no excess treatment capacity on which to develop a reimbursement fee. Since then, the city has made significant improvements in the treatment plant and expanded its capacity. As a result the value of the improvements and the excess capacity allow for a reimbursement fee.

The second change is in how the city will apply the SDC. We have changed the number of 3/4-inch meter equivalents for 1-inch and larger water meters to averages developed by the Canby Utility Board that operates the water system. Also, since multi-family housing units use about 98 percent as much water as single-family units on a 3/4-inch water meter in winter, the SDC for multi-family developments will be based on the number of housing units or the meter size,

whichever is greater.

Third, the current SDC does not include any portions of the collection system in the improvement fee. In the proposed reimbursement fee, we include those portions of the collection system that the city built.

Table 7 summarizes the current and proposed SDC by meter size. The total SDC for 3/4-inch, 1-inch, and 1 1/2-inch meter sizes installed in single-family residential and non-residential commercial developments will decrease from the current SDC. The total SDC for 2-inch and larger size meters will increase for these types of development. The proposed changes result for two reasons. First, the planned capital improvements in the current SDC cost less to construct than had been expected. Second, the CUB water demand study shows that customers on large-size meters (2-inches and larger) consume more water than had been known when we formulated the current SDC. As a result, the cost of a 3/4-inch meter equivalent shifts from small-size to larger-size meters.

For multi-family developments the proposed SDC may increase or decrease from the current SDC depending upon the size meter installed and the number of units in a proposed development. For example, a 28-unit apartment complex with a 2-inch water meter would pay \$7,646 currently. Using the proposed SDC by number of units, the development would pay \$27,944 (i.e., \$998/unit x 28 units). A duplex on a 1-inch meter would pay \$2,626 currently, and only \$1,980 using the proposed SDC for a 1-inch meter. Notice that the city assesses the SDC as the greater of the meter size or number of units. For a duplex on a 1.5-inch meter, the SDC by meter size is greater than the SDC by number of units.

## APPENDIX

### Notes to the Appendix:

Following is an itemized list of fixed assets currently in use by the waste water utility. For each asset, the columns show the year installed, the original acquisition cost, the 1995 book value (i.e., the original cost minus accumulated depreciation), the expected life, the replacement value in 1995 dollars, and the depreciated value in 1995 dollars. We determined the 1995 dollar value by applying the Construction Cost Index provided by the *Engineering News Record* using January of each year. The following equation determines the depreciated value in 1995 dollars.

$$\text{Depreciated Value 1995 \$'s} = \frac{\text{Replacement Value}}{\text{Expected Life} \times (1995 - \text{Year Installed})}$$

Because the data used in the 1995 audit were updated since the beginning of fiscal year 1996, we had to adjust the totals in the appendix by reducing the amount 1.1 percent. We show the correction at the end of the Appendix table.

Since the auditors included none of the collection system in the 1995 audit, we estimated these values separately at the end of the Appendix table. We include only three major sewer lines. The city's consulting engineers estimated the replacement cost of these lines in 1995 dollars, determined the year installed, and we depreciated the replacement costs by the number of years in services.

Construction Cost Index as of January,									
1947	0.368	1957	0.661	1967	0.971	1977	2.322	1987	4.0441
1948	0.411	1958	0.695	1968	1.035	1978	2.488	1988	4.1585
1949	0.442	1959	0.727	1969	1.136	1979	2.674	1989	4.2575
1950	0.45	1960	0.759	1970	1.222	1980	2.915	1990	4.35
1951	0.5	1961	0.78	1971	1.369	1981	3.139	1991	4.4475
1952	0.51	1962	0.799	1972	1.556	1982	3.449	1992	4.5508
1953	0.546	1963	0.825	1973	1.711	1983	3.687	1993	4.7206
1954	0.571	1964	0.858	1974	1.806	1984	3.825	1994	4.9674
1955	0.599	1965	0.886	1975	1.958	1985	3.853	1995	5.0673
1956	0.632	1966	0.923	1976	2.142	1986	3.9151	1996	5.1418

Source: Data Resources Incorporated, *Engineering News Record*.

Description	Year Installed	Original Acquisition Cost	1995 Book Value	Expected Life	Replacement Value in 1995	Depreciated Value in 1995
CENCO Model 95470-16	1984	\$224.65	\$0.00	10	302	0
HACH - Model 2300	1992	\$2,000.00	\$1,600.00	10	2,260	1,582
Coming - pH/Ion	1984	\$299.53	\$0.00	10	403	0
Blue M Model DV-5000-2	1992	\$2,000.00	\$1,600.00	10	2,260	1,582
Electromantle -MA	1990	\$234.50	\$140.70	10	277	139
Hanna Model 8733	1988	\$83.37	\$33.35	10	103	31
OHAUS Port-O-Gram Model # C301P	1990	\$281.40	\$168.84	10	333	166
HACH Model 41100-52	1988	\$166.75	\$66.70	10	206	62
CENCO Model 34532-1	1984	\$112.32	\$0.00	10	151	0
EIMCO	1977	\$242.72	\$0.00	15	537	0
ISCO Model 2700	1987	\$2,570.59	\$1,370.98	8	3,268	0
Primary Clarifier, Equipment	1980	\$60,500.00	\$38,028.57	35	106,717	60,981
Furnas, PC Vault	1982	\$7,904.92	\$1,580.98	15	11,785	1,571
Furnass	1987	\$7,568.00	\$4,036.27	15	9,622	4,490
Walles & Turnan 44-11	1987	\$2,788.00	\$1,486.93	15	3,545	1,654
AQUA-Aerobic FS0015	1982	\$17,965.73	\$3,593.15	15	26,783	3,571
AQUA-Aerobic FS0015	1982	\$17,967.73	\$3,593.55	15	26,786	3,572
G E - Motor Control Center	1972	\$11,342.45	\$0.00	15	37,481	0
Hydromatic 40 MPV - AB Recirc.	1972	\$4,000.00	\$0.00	15	13,218	0
Portable Generator, 85 KVA, 850KR1R	1972	\$36,000.00	\$0.00	15	118,962	0
Hydromatic Trash Pump, 40EP-VH4D	1982	\$10,000.00	\$2,000.00	15	14,908	1,988
7MV-B	1987	\$8,568.62	\$4,569.93	15	10,894	5,084
6MV-B	1987	\$6,426.47	\$3,427.45	15	8,171	3,813
6MV-B	1987	\$5,000.00	\$2,666.67	15	6,357	2,967
ISCO Model 2100	1982	\$2,155.89	\$431.18	15	3,214	429
Homelite Model 662	1992	\$1,800.00	\$1,560.00	15	2,034	1,627
EMPAC - 386	1992	\$1,700.00	\$1,020.00	5	1,921	768
Viewsonic - color	1992	\$450.00	\$270.00	5	508	203
Panasonic KXP1180	1992	\$275.00	\$165.00	5	311	124
Metal Double Pesestal	1987	\$465.79	\$302.76	20	592	355
Power Distribution Bldg. Structure	1971	\$44,000.00	\$15,085.71	35	165,259	51,938
Power Distribution Bldg, Miss Equip.	1994	\$153,657.55	\$143,413.71	15	159,052	148,449
Ded. \$2000 from Canby Ex Final Paym	1995	\$2,720.40	\$2,720.40	35	2,760	2,760
Sink & Eyewash Install - P&L	1995	\$247.00	\$247.00	10	251	251
Eyewash Install - RAS C12	1995	\$413.58	\$413.58	10	420	420
RP-BP Install	1995	\$213.00	\$213.00	10	216	216
Intrusion/Smoke System	1995	\$619.50	\$619.50	7	629	629
Sludge Pump Controler	1995	\$440.02	\$440.02	5	446	446
Air Dryer/Controler - Bar Scr.	1995	\$224.16	\$224.16	5	227	227
Desks, Chairs, etc For New Office	1995	\$3,195.04	\$3,195.04	10	3,242	3,242
Map Folder	1995	\$289.00	\$289.00	25	293	293
IDE Controler Card	1995	\$35.00	\$35.00	3	36	36
CPU Fan-2	1995	\$50.00	\$50.00	3	51	51
Mini-Tower Case	1995	\$60.00	\$60.00	3	61	61
Fan & CMOS battery	1995	\$65.00	\$65.00	3	66	66
New Cables, Connectors	1995	\$100.00	\$100.00	5	101	101
Network Interface Card	1995	\$125.00	\$125.00	5	127	127
Inst/Engin Labofor Upgrade DigiBoard	1995	\$130.00	\$130.00	3	132	132
Novell Connect 1.0 SW, Install & Prg	1995	\$2,000.00	\$2,000.00	3	2,029	2,029
486DX2-66 Mother board	1995	\$195.00	\$195.00	3	198	198
Reachout Modem Host & Viewer	1995	\$199.00	\$199.00	3	202	202
4 MEG Memory Upgrade HP4 printer	1995	\$220.00	\$220.00	5	223	223
Backup Tapes - DAT	1995	\$225.00	\$225.00	3	228	228
Installation & Eng. For Tape Backup	1995	\$260.00	\$260.00	5	264	264
4 MEG RAM memory	1995	\$260.00	\$260.00	5	264	264
Eng/Labor install Backup System	1995	\$260.00	\$260.00	3	264	264
Phone/FAXModem switch	1995	\$280.00	\$280.00	3	284	284
Reachout Network (4-User)	1995	\$295.00	\$295.00	3	299	299
CD ROM Drive	1995	\$330.00	\$330.00	3	335	335
Modem 28.8 Microcom	1995	\$375.00	\$375.00	3	381	381
Faxserve For Novell (5 user)	1995	\$650.00	\$650.00	3	660	660
Novell 4.12 - File Server - Main	1995	\$650.00	\$650.00	3	660	660
Upgrade DigiBoard	1995	\$675.00	\$675.00	3	685	685

Description	Year Installed	Original Acquisition Cost	1995 Book Value	Expected Life	Replacement Value in 1995	Depreciated Value in 1995
12 MEG RAM memory	1995	\$780.00	\$780.00	3	791	791
28.8 Modem (Microcom)	1995	\$500.00	\$500.00	3	507	507
28.8 Modem (Microcom)	1995	\$500.00	\$500.00	3	507	507
ProComm +, Install & Program	1995	\$1,000.00	\$1,000.00	3	1,015	1,015
DOS 6.22, Windows for Work Groups	1995	\$1,200.00	\$1,200.00	3	1,218	1,218
Engineering/Labor	1995	\$2,400.00	\$1,200.00	3	2,435	2,435
Norton AntiVirus for Netware + inst	1995	\$1,200.00	\$1,200.00	3	1,218	1,218
SCSI Hard Drive	1995	\$1,660.00	\$1,660.00	3	1,684	1,684
2 Gig Tape Backup system	1995	\$1,825.00	\$1,825.00	3	1,852	1,852
Modem Setup, NW Connect User Setup	1995	\$2,325.00	\$2,325.00	3	2,359	2,359
Transfer Switch & Breaker	1995	\$8,446.00	\$8,446.00	10	8,570	8,570
Phase I Bond Construction	1994	\$1,484.00	\$1,441.60	35	1,536	1,492
Rebuild Sec. Generator & Electrical	1995	\$9,272.17	\$9,272.17	15	9,408	9,408
Phase I Bond Construction Liq Damag	1994	\$3,480.00	\$3,380.57	35	3,602	3,499
Sec. Generator Startup & Voltage Set	1995	\$257.78	\$257.78	15	262	262
Workshop Manual	1995	\$31.35	\$31.35	15	32	32
Phase I Bond Construction	1994	\$1,161.00	\$1,161.00	35	1,202	1,167
Engineering Services KB Lift Station	1995	\$3,264.00	\$3,264.00	35	3,312	3,312
Engineering Services Phase I Design	1995	\$1,161.00	\$1,161.00	35	1,178	1,178
Engineering Services KB Lift Station	1995	\$500.00	\$500.00	15	507	507
Engineering Services KB Lift Station	1995	\$76.00	\$76.00	35	77	77
Engineering Services KB Lift Station	1995	\$446.00	\$446.00	35	453	453
Engineering Services KB Lift Station	1995	\$742.00	\$742.00	25	753	753
Secondary Gen. Transfer SW Design	1995	\$304.00	\$304.00	15	308	308
Secondary Gen. Transfer SW Design	1995	\$494.00	\$494.00	15	501	501
Secondary Gen. Transfer SW Design	1995	\$212.00	\$212.00	15	215	215
Engineering Services KB Lift Station	1995	\$1,484.00	\$1,484.00	35	1,506	1,506
Engineering Services KB Lift Station	1995	\$1,484.00	\$1,484.00	35	1,506	1,506
ISE NH3-N Probe	1995	\$393.75	\$393.75	3	400	400
New BOD Incubator	1995	\$2,463.00	\$2,463.00	15	2,499	2,499
Analytical Balance	1995	\$2,667.17	\$2,667.17	10	2,706	2,706
Eye Wash station	1995	\$196.28	\$196.28	15	199	199
7' Aluminum Tri-Pod	1995	\$650.00	\$650.00	7	660	660
2752-G50 Extractor II	1995	\$1,950.00	\$1,950.00	7	1,979	1,979
SP2 UPS	1995	\$100.00	\$100.00	5	101	101
SP1 UPS Backup	1995	\$260.00	\$260.00	5	264	264
#4 Swing Top Receptacle (3)	1995	\$278.43	\$278.43	15	283	283
Torpedo Receptacle(1)	1995	\$92.05	\$92.05	25	93	93
D33H8 Discharge Silencer #4 Blower	1995	\$1,285.43	\$1,285.43	15	1,304	1,304
7MLV-BHC Blower	1995	\$4,160.93	\$4,160.93	7	4,222	4,222
Control Switch - Replacement	1995	\$48.00	\$49.00	5	49	49
Input/Output Card - SP2	1995	\$798.22	\$798.22	5	810	810
Controller SP2 & PW Pump Controls	1995	\$195.00	\$195.00	5	198	198
PLC & WW Control Engineering	1995	\$215.83	\$119.17	15	219	219
PLC & WW Control Engineering	1995	\$215.83	\$119.17	15	219	219
PLC & WW Control Engineering	1995	\$215.83	\$119.17	15	219	219
PLC & WW Control Engineering	1995	\$215.83	\$119.17	15	219	219
PLC & WW Control Engineering	1995	\$215.83	\$119.17	15	219	219
PLC & WW Control Engineering	1995	\$215.83	\$119.17	15	219	219
N- Clarifier SB Monitor Remote -W W	1995	\$130.00	\$130.00	10	132	132
S- Clarifier SB Monitor Remote -W W	1995	\$130.00	\$130.00	10	132	132
Eff. Totalizer PCL Prog for WW	1995	\$195.00	\$195.00	15	198	198
TS Pump PID Control to SP2	1995	\$195.00	\$195.00	15	198	198
3PSS Poly Valve Feed Control	1995	\$334.00	\$334.00	5	339	339
GE 90-20 PLC Spare	1995	\$613.20	\$613.20	5	622	622
WonderWare Upgrade & Install	1995	\$4,570.00	\$285.00	15	4,637	4,637
RAS Pump WW Programing (PLC)	1995	\$455.00	\$455.00	15	462	462
WW Prg Totalizer from SP2/Batchmate	1995	\$650.00	\$650.00	15	660	660
WW Prg LS Remote Control-HR Meters	1995	\$715.00	\$715.00	15	726	726
RAS VFD #1 Remote Control	1995	\$750.00	\$750.00	15	761	761
RAS VFD #2 Remote Control	1995	\$750.00	\$750.00	15	761	761
Water Service Alarm/Shut Off	1995	\$785.00	\$785.00	15	797	797
GE Advantage Motor Starter	1995	\$789.10	\$789.10	15	801	801

Description	Year Installed	Original Acquisition Cost	1995 Book Value	Expected Life	Replacement Value in 1995	Depreciated Value in 1995
UV lamp Module Cleaning Tank	1995	\$1,250.00	\$1,250.00	15	1,268	1,268
GE9030 240 Card, Rem. Reset RAS Pump	1995	\$798.22	\$798.22	15	810	810
Blower Control/Alarm Prg/Engineer	1995	\$981.25	\$981.25	15	996	996
2 GE Advantage Starters -New/Install	1995	\$1,165.70	\$1,115.70	15	1,183	1,183
2 GE Advantage Starters -New/Install	1995	\$1,165.70	\$1,115.70	15	1,183	1,183
Remote Control Programing	1995	\$1,495.00	\$1,495.00	15	1,517	1,517
Remote Control Programing	1995	\$1,495.00	\$1,495.00	15	1,517	1,517
Remote Control Programing	1995	\$1,495.00	\$1,495.00	15	1,517	1,517
RAS Mannual Controller Build&Instal	1995	\$2,209.69	\$2,209.69	15	2,242	2,242
Remote Control Programing	1995	\$1,495.00	\$1,495.00	15	1,517	1,517
GE 90-30 Anag Cards -RAS Pump Contr	1995	\$1,214.00	\$1,214.00	5	1,232	1,232
Window Blinds for Cont Rm & Lab	1995	\$994.00	\$994.00	35	1,009	1,009
Starter Rewind to 24V Sec Gen Conv	1995	\$310.00	\$310.00	10	315	315
AD50-UL-C Air Compress Refrig Unit	1995	\$1,490.00	\$1,490.00	15	1,512	1,512
Knott St. Sewer Repair	1995	\$3,721.57	\$0.00	0	3,776	0
Safety Signs	1995	\$666.95	\$666.95	15	677	677
KB LS Pump #2 Rebuild	1995	\$1,681.00	\$1,681.00	15	1,706	1,706
Rebuild PS DD Pump	1995	\$1,711.35	\$1,711.35	10	1,737	1,737
Phase I Bond Construction	1994	\$135,281.40	\$131,416.22	35	140,031	136,030
Rebuild Pump #1	1995	\$1,090.00	\$1,090.00	10	1,106	1,106
Rebuild Pump #2 SCLS	1995	\$1,486.00	\$1,486.00	10	1,508	1,508
Start/Stop Switch P&L	1995	\$80.00	\$80.00	10	81	81
Start/Stop Switch P&L	1995	\$80.00	\$80.00	10	81	81
Cover for Secondary Generator	1995	\$2,411.00	\$2,411.00	35	2,446	2,446
Install VFD for SS Trans Pump	1995	\$2,261.67	\$2,261.67	15	2,295	2,295
Wiring Upgrade	1995	\$103.40	\$103.40	35	105	105
Wiring Upgrade	1995	\$298.52	\$298.52	35	303	303
Wiring Upgrade	1995	\$342.41	\$342.14	35	347	347
Wiring Control Upgrade	1995	\$423.36	\$423.36	35	430	430
Wiring Upgrade - Blower Alarm/Crtl	1995	\$816.57	\$816.57	35	829	829
WT60W White Wastebaskets (4)	1995	\$85.08	\$85.08	15	86	86
Diffuser Replacement Parts	1995	\$250.00	\$250.00	8	254	254
RAS Pump Reset Relays & Calibrate	1995	\$251.00	\$251.00	5	255	255
Water Service Pump Replacement	1995	\$1,588.00	\$1,588.00	10	1,611	1,611
Water Service Pump Replacement	1995	\$1,036.67	\$1,036.67	10	1,052	1,052
Phase I Improvments -Final Payment	1995	\$135,281.40	\$135,281.40	35	137,270	137,270
Phase I Improvments - Landscaping BD	1995	\$315.00	\$315.00	35	320	320
Cabinet work in Control Bldg.	1995	\$950.00	\$950.00	35	964	964
YSI	1994	\$900.00	\$810.00	10	932	838
34th Street, Structure	1993	\$24,000.00	\$23,314.29	35	26,141	24,648
34th Street, Equipmmt	1993	\$15,000.00	\$14,000.00	15	16,338	14,160
Willow Creek, Structure	1993	\$15,000.00	\$14,571.43	35	16,338	15,405
Willow Creek, Equipmmt	1993	\$15,000.00	\$14,000.00	15	16,338	14,160
Knights Bridge, Structure	1964	\$20,000.00	\$2,857.14	35	119,855	13,698
Knights Bridge, Equipment	1964	\$8,000.00	\$0.00	15	47,942	0
Shopping Center, Structure	1975	\$8,000.00	\$3,657.14	35	21,008	9,004
Shopping Center, Equipment	1975	\$8,000.00	\$0.00	15	21,008	0
3rd & Baker Drive, Structure	1970	\$8,000.00	\$2,514.29	35	33,662	9,618
3rd & Baker Drive, Equipmmt	1970	\$8,000.00	\$0.00	15	33,662	0
11th & Pine LS, Structure	1980	\$8,000.00	\$4,800.00	35	14,111	8,064
11th & Pine LS, Equipment	1980	\$8,000.00	\$0.00	15	14,111	0
Headworks/ Control Bldg. - Structure	1994	\$286,000.00	\$281,600.00	65	296,041	291,487
Headworks/ Control Bldg. - Equipment	1994	\$78,000.00	\$72,800.00	15	80,738	75,356
Lab, Structure	1984	\$57,200.00	\$40,857.14	35	76,892	52,726
Primary Sludge Vault, Structure	1981	\$80,000.00	\$50,285.71	35	131,043	78,626
Primary Sludge Vault, Equipment	1984	\$29,000.00	\$9,666.67	15	38,984	10,396
Primary Clarifier, Structure	1981	\$121,000.00	\$76,057.14	35	198,203	118,922
Aeration Basin, Structure	1970	\$220,000.00	\$205,168.54	35	925,692	264,484
Aeration Basin, Equipment	1970	\$66,500.00	\$0.00	15	279,812	0
Secondary Clarifier-N, Structure	1994	\$176,000.00	\$170,971.43	35	182,179	176,974
Secondary Clarifier - S, Structure	1994	\$176,000.00	\$170,971.43	35	182,179	176,974
RAS Pump Station, Structure	1994	\$35,200.00	\$34,194.29	35	36,436	35,395
RAS Pump Station, Equipment	1994	\$1,000.00	\$933.33	15	1,035	966

Description	Year Installed	Original Acquisition Cost	1995 Book Value	Expected Life	Replacement Value in 1995	Depreciated Value in 1995
UV Basin, Structure	1994	\$132,000.00	\$128,228.57	35	136,634	132,731
UV Basin, Equipment	1994	\$165,000.00	\$154,000.00	15	170,793	159,407
Stabilized Sludge Tank Structure	1970	\$165,000.00	\$51,857.14	35	694,269	198,363
DFlow, 403-3D-DI, Equipment PUMP	1994	\$25,000.00	\$23,333.33	15	25,878	24,153
MULTIRANGER Plus- PL313	1994	\$2,500.00	\$2,250.00	10	2,588	2,329
Wash Tank, Structure	1971	\$88,000.00	\$30,171.43	35	330,517	103,877
Wash Tank, Equipment	1994	\$32,000.00	\$29,866.67	15	33,123	30,915
North Storage Pond	1994	\$66,000.00	\$64,114.29	35	68,317	66,365
Storage Ponds, Equipment	1994	\$11,000.00	\$10,685.71	35	11,386	11,061
South Storage Pond	1994	\$66,000.00	\$64,114.29	35	68,317	66,365
Blower Building, Structure	1986	\$35,200.00	\$27,154.29	35	46,229	34,342
Blower Building, Equipment	1987	\$66,000.00	\$35,200.00	15	83,915	39,160
Flammable Storage, Structure	1980	\$15,400.00	\$9,240.00	35	27,164	15,522
Solids Handling Building, Structure	1994	\$198,000.00	\$192,342.86	35	204,952	199,096
Lime Silo, Structure	1994	\$99,000.00	\$94,050.00	20	102,476	97,352
Lime Silo, Equipment	1994	\$16,500.00	\$15,400.00	15	17,079	15,941
Gas Storage Shed - Hoses & Tools	1982	\$2,000.00	\$1,314.29	35	2,982	1,874
Empac - 486-33	1994	\$3,000.00	\$2,400.00	5	3,105	2,484
Barnstead, A-1013-M8116268	1985	\$1,506.00	\$0.00	10	2,010	0
4 Object, UNILUX, KYOWA	1989	\$2,800.00	\$1,400.00	10	3,382	1,353
DO Meter, YSI - F9103634	1989	\$1,150.00	\$575.00	10	1,389	556
Wheaton, Model 8000	1992	\$2,437.00	\$1,949.60	10	2,753	1,927
Kenmore, Model 15.1	1985	\$1,163.84	\$465.54	15	1,553	518
Low Temp Hotpoint, Model 46-04502	1988	\$3,095.00	\$1,238.00	10	3,827	1,148
YSI, 54A - 10957	1994	\$575.00	\$517.50	10	595	536
Thermolyne, Model 1500	1985	\$1,223.00	\$0.00	10	1,632	0
Corning, Model 255 -2503	1993	\$2,900.00	\$2,610.00	10	3,159	2,527
IEC Clinical	1986	\$595.62	\$119.12	10	782	78
All American, Model 25X	1993	\$350.00	\$315.00	10	381	305
Lab Conco	1985	\$1,223.00	\$0.00	10	1,632	0
Boekel	1985	\$355.69	\$0.00	10	475	0
Euatherm, Model 213-116	1991	\$515.90	\$361.13	10	596	358
Mettler, Model H31AR	1985	\$2,800.00	\$0.00	10	3,737	0
000M385619	1994	\$3,500.00	\$2,800.00	5	3,623	2,898
Panasonic, Model KX-p1191	1990	\$430.00	\$0.00	5	508	0
VWR, Model SA55NNXG1TC	1985	\$1,500.72	\$0.00	10	2,003	0
Acid Storage	1991	\$562.80	\$393.96	10	651	390
GAS TEK	1991	\$2,063.58	\$1,444.51	10	2,386	1,431
GE, Model P5Crr56CEN	1994	\$1,470.14	\$1,323.13	10	1,522	1,370
GE 8000 Line	1994	\$25,000.00	\$22,500.00	10	25,878	23,290
SP1	1994	\$35,000.00	\$31,500.00	10	36,229	32,606
RS Pump #1	1994	\$15,000.00	\$13,500.00	10	15,527	13,974
RS Pump #2	1994	\$15,000.00	\$14,000.00	15	15,527	14,492
RS Pump #3	1994	\$15,000.00	\$13,500.00	10	15,527	13,974
Vulcan, Mechanical	1994	\$20,000.00	\$18,000.00	10	20,702	18,632
Vulcan	1994	\$10,000.00	\$9,000.00	10	10,351	9,316
Sampler, 800SL, Model 3000-INF	1994	\$3,200.00	\$2,880.00	10	3,312	2,981
Ultra Sonic OCM III, Flow Meter -INF	1994	\$2,500.00	\$2,250.00	10	2,588	2,329
HW, Purafil	1994	\$25,000.00	\$22,500.00	10	25,878	23,290
Smith & Loveless	1994	\$20,000.00	\$18,000.00	10	20,702	18,632
Goodman, Model 15	1994	\$13,000.00	\$11,700.00	10	13,456	12,111
Mitac, 486-66	1994	\$4,500.00	\$3,600.00	5	4,658	3,726
Royal	1994	\$900.00	\$720.00	5	932	745
HP Laserjet IV	1994	\$1,800.00	\$1,440.00	5	1,863	1,491
Mitac - 486-66	1994	\$4,500.00	\$3,600.00	5	4,658	3,726
GS24X8DA	1994	\$1,300.00	\$1,213.33	15	1,346	1,256
Whirlpool, Model MH7100ZYB-0	1994	\$400.00	\$373.33	15	414	386
Hotpoint	1994	\$500.00	\$466.67	15	518	483
Hotpoint	1994	\$500.00	\$466.67	15	518	483
Barnstead Nanopure, Model D4744	1994	\$2,900.00	\$2,610.00	10	3,002	2,702
Royce Interface Level, Model 2511	1994	\$5,000.00	\$4,500.00	10	5,176	4,658
Royce Interface Level, Model 2500	1994	\$5,000.00	\$4,500.00	10	5,176	4,658
Kaman, RAS Pump Control	1994	\$7,000.00	\$6,300.00	10	7,246	6,521

Description	Year Installed	Original Acquisition Cost	1995 Book Value	Expected Life	Replacement Value in 1995	Depreciated Value in 1995
Kaman	1994	\$7,000.00	\$6,300.00	10	7,246	6,521
Secondary Clarifier Drive, North	1994	\$45,000.00	\$42,000.00	15	46,580	43,475
Secondary Clarifier N - Equipment	1994	\$40,000.00	\$36,000.00	10	41,404	37,264
Secondary Clarifier Drive, South	1994	\$45,000.00	\$40,500.00	10	46,580	41,922
Secondary Clarifier S Equipment	1994	\$40,000.00	\$36,000.00	10	41,404	37,264
Model 200 DFAA Generator	1994	\$45,000.00	\$40,500.00	10	46,580	41,922
OT400 Switch Gear	1994	\$15,000.00	\$13,500.00	10	15,527	13,974
GE 8000, Model 4-948997	1994	\$20,000.00	\$18,000.00	10	20,702	18,632
RS Pump Hoist, Model 5334	1994	\$1,500.00	\$1,350.00	10	1,553	1,397
Milltronics OCM III Ultra Sonic	1994	\$2,500.00	\$2,250.00	10	2,588	2,329
Sampler - Influent, Model 300	1994	\$3,000.00	\$2,700.00	10	3,105	2,795
American Sigma Samp. Enclosure	1994	\$500.00	\$450.00	10	518	466
Budget, 1/2 Ton Overhead Crane	1994	\$4,600.00	\$4,293.33	15	4,762	4,444
7 Station Comdial Phone System	1994	\$4,500.00	\$4,050.00	10	4,658	4,192
SandPiper	1994	\$8,000.00	\$7,200.00	10	8,281	7,453
2- Hydrostal, Model D4K-S-DOS	1994	\$15,000.00	\$13,500.00	10	15,527	13,974
Clarifier Alge Brushes	1994	\$8,500.00	\$7,650.00	10	8,798	7,919
Clarifier Alge Brushes	1994	\$8,500.00	\$7,650.00	10	8,798	7,919
PolyBlend, Stranco, Model 10-4.5	1994	\$5,000.00	\$4,500.00	10	5,176	4,658
Lightrin Dara Mix, Model E77R3026T	1994	\$750.00	\$675.00	10	776	699
Chem Taner Tank	1994	\$2,000.00	\$1,800.00	10	2,070	1,863
Chem Taner Tank	1994	\$2,000.00	\$1,800.00	10	2,070	1,863
Borneman Pump, Model EH675-P1	1994	\$10,000.00	\$9,000.00	10	10,351	9,316
Borneman Pump, Model EH-236-P1	1994	\$10,000.00	\$9,000.00	10	10,351	9,316
Wet Sludge Loadout	1994	\$25,000.00	\$22,500.00	10	25,878	23,290
DF TSTP, Model 403-2D-D1	1994	\$27,000.00	\$24,300.00	10	27,948	25,153
Eimco, 2 Meter GBT	1994	\$110,000.00	\$99,000.00	10	113,862	102,476
Wemco Hydrostal, Model D4X-DE3A4	1994	\$12,000.00	\$10,800.00	10	12,421	11,179
Kaman, RAS Pump Control	1994	\$8,500.00	\$7,650.00	10	8,798	7,919
Kaman, PPC	1994	\$8,500.00	\$7,650.00	10	8,798	7,919
Kaman, LP	1994	\$8,500.00	\$7,650.00	10	8,798	7,919
Kaman, TSP	1994	\$8,500.00	\$7,650.00	10	8,798	7,919
Process Water Pump	1994	\$4,000.00	\$3,600.00	10	4,140	3,726
Process Water Pressure Tank	1994	\$3,000.00	\$2,700.00	10	3,105	2,795
DFlow, TSTP, 403-2D-D1	1994	\$25,000.00	\$22,500.00	10	25,878	23,290
SP-2 Panel, GE 90-30 PLC	1994	\$8,000.00	\$7,200.00	10	8,281	7,453
STSP, VFD	1994	\$8,500.00	\$7,650.00	10	8,798	7,919
Pond Trans Pump, Model 403-3D-D1	1994	\$25,000.00	\$22,500.00	10	25,878	23,290
Pond transfer Bldg. - Structure	1994	\$5,000.00	\$4,857.14	35	5,176	5,028
Para Fil Air Scrubber	1994	\$25,000.00	\$22,500.00	10	25,878	23,290
Anoxic Zone Mixer	1994	\$5,000.00	\$4,500.00	10	5,176	4,658
Desk & Chair	1994	\$435.00	\$391.50	10	450	405
Desk/chair, 36x72	1994	\$1,060.00	\$1,007.00	20	1,097	1,042
Bookcase/Oak	1994	\$299.00	\$284.05	20	309	294
Filing Cabnet	1994	\$127.00	\$120.65	20	131	125
Filing Cabnet	1994	\$127.00	\$120.65	20	131	125
Map Hanger	1994	\$289.00	\$274.55	20	299	284
Table & Chairs, 42x42	1994	\$510.00	\$484.50	20	528	502
Furnas, PS Vault	1982	\$2,500.00	\$500.00	15	3,727	497
Dylastir Model 25103	1984	\$93.60	\$0.00	10	126	0
Waring	1984	\$112.32	\$0.00	10	151	0
Letter, 2 Drawer	1978	\$58.35	\$11.67	20	121	18
Letter, 4 Drawer	1986	\$129.57	\$77.74	20	170	94
Steno	1982	\$97.92	\$39.17	20	146	51
Steno	1976	\$64.43	\$6.44	20	155	8
Missellaneous	1988	\$10,000.00	\$4,000.00	10	12,365	3,709
5 Folding	1976	\$44.45	\$4.45	20	107	5
Metal, Upholstereed	1985	\$87.24	\$47.98	20	116	58
folding	1976	\$33.32	\$3.33	20	80	4
Swivel Arm	1976	\$88.86	\$8.89	20	213	11
Side - Upholstered	1976	\$48.87	\$4.89	20	117	6
Legal, 4 Drawer	1985	\$158.62	\$87.24	20	212	106
Sub. Sump Pump	1989	\$320.41	\$213.61	15	387	232



Description	Year Installed	Original Acquisition Cost	1995 Book Value	Expected Life	Replacement Value in 1995	Depreciated Value in 1995
Sub Pump - Spare	1979	\$189.36	\$0.00	15	364	0
Process Pipe, Valves, & Fittings	1981	\$5,097.23	\$679.63	15	8,349	557
3 Set	1978	\$152.22	\$30.44	20	315	47
1 Set	1978	\$50.74	\$10.15	20	105	16
Air Compressors D255-A	1982	\$20,000.00	\$4,000.00	15	29,816	3,975
SandPiper SB3-A	1982	\$7,500.00	\$1,500.00	15	11,181	1,491
Process Piping	1982	\$6,960.00	\$1,392.00	15	10,376	1,383
Pipes & Valves	1972	\$19,500.00	\$0.00	15	64,438	0
Work Bench	1976	\$222.16	\$22.22	20	533	27
Wrenches, Hammers, Saws, Etc.	1982	\$2,500.00	\$500.00	15	3,727	497
4 Drawer Legal	1987	\$169.38	\$110.10	20	215	129
Wood - three tier	1987	\$118.57	\$77.07	20	151	90
Steno	1987	\$122.80	\$79.82	20	156	94
Metal - Upholstered	1987	\$93.16	\$60.55	20	118	71
Letter - 2 Drawer	1987	\$97.39	\$63.30	20	124	74
Business machine	1987	\$169.38	\$110.10	20	215	129
40 MPV, 4" x 4" 100 gpm, 25' Head	1981	\$4,842.00	\$645.60	15	7,931	529
Alarm System - Old System	1991	\$979.00	\$783.20	15	1,132	830
Hydromatic Submersible, 3-hp	1972	\$1,458.32	\$0.00	15	4,819	0
Hydromatic Submersible, 3-hp	1972	\$1,458.32	\$0.00	15	4,819	0
Alarm system	1974	\$817.50	\$0.00	15	2,327	0
Alarm System	1976	\$415.61	\$0.00	15	998	0
Alarm System	1972	\$324.07	\$0.00	15	1,071	0
Alarm System	1979	\$1,402.00	\$0.00	15	2,696	0
Chain Link, 3-Wire Safety	1972	\$4,462.00	\$0.00	20	14,745	0
Walkway & Parking Area	1972	\$2,339.16	\$0.00	20	7,730	0
DD Pump, Sandpiper, 2"	1990	\$1,000.00	\$733.33	15	1,182	788
10 Foot Boat For AB Maintenance	1987	\$1,000.00	\$650.00	20	1,271	763
PUMP, Trailer Mounted, Hydronix 4"	1987	\$3,500.00	\$1,866.67	15	4,450	2,077
ISCO, Model 3700	1991	\$2,800.00	\$2,240.00	15	3,237	2,374
Sandpiper 3" Waste Pump	1982	\$7,500.00	\$1,500.00	15	11,181	1,491
RPBP on City Water	1992	\$400.00	\$346.67	15	452	362
Underground	1982	\$91,657.00	\$36,662.80	20	136,643	47,825
PC DOS Based Software	1992	\$8,000.00	\$4,800.00	5	9,039	3,616
Coming, Model 107	1987	\$375.00	\$112.50	10	477	95
HACH COD Digester	1987	\$175.00	\$52.50	10	223	45
Group of Miscellaneous Glassware	1992	\$18,000.00	\$14,400.00	10	20,338	14,236
Mettler - Table Type	1982	\$1,050.00	\$0.00	10	1,565	0
Miscellaneous Minor Lab Equipment	1987	\$12,000.00	\$3,600.00	10	15,257	3,051
15 KVA Portable, For LS	1985	\$25,000.00	\$0.00	10	33,362	0
SAD Aerator #1	1982	\$20,000.00	\$4,000.00	15	29,816	3,975
SAD Aerator #2	1982	\$27,500.00	\$0.00	10	40,997	0
Stabil-Therm	1987	\$1,025.00	\$307.50	10	1,303	261
Boekel	1984	\$425.00	\$0.00	10	571	0
HACH - Analog Type	1972	\$2,700.00	\$0.00	10	8,922	0
Coming	1985	\$875.00	\$0.00	10	1,168	0
With Heater & Mixer	1985	\$390.00	\$0.00	10	520	0
Bod Incubator	1971	\$1,600.00	\$0.00	10	6,009	0
Piping, Primary Clarifier	1982	\$2,000.00	\$400.00	15	2,982	398
Total		\$4,721,472.05	\$3,659,160.31		7,481,916	4,239,884
Audit, 1995			\$3,618,034.00	26		
Difference			\$41,126.31	1.1% Adj. Value		4,192,231
Collection System						
Redwood Insutrial Sewer	1989			50	783,112	689,139
Township Road Interceptor	1994			50	24,600	24,108
South Pine Street Oversizing	1995			50	33,204	33,204
						746,451