

CAPITAL IMPROVEMENTS PROGRAM SUMMARY

(1) Department Enterprise Activities

(2) Division Water Utility

PROJECT TITLE(S)	TOTAL PROJECT COST (4)	TO BE FUNDED (IN THOUSANDS) (5)						(6)	(7)	(8)	(9)	(10)	(11)	
		G/O BONDS	REVENUE BONDS	FEDERAL	STATE	OTHER *	**	19_77	19_78	1979	1980	1981	1982	
1. Distribution	2,432.0		2,432.0					262.0	360.0	390.0	430.0	470.0	520.0	
2. Transmission	4,990.0		4,990.0					2,223.0	500.0	500.0	456.0	570.0	741.0	
3. Upgrade Distrib.	1,807.0					1,807.0		490.0	313.0	251.0	251.0	251.0	251.0	
4. Upgrade Transmis.	3,819.0					2,124.0		300.0	228.0	456.0	456.0	285.0	399.0	
			1,695.0					1,695.0						
5. New Connects	750.0							150.0	150.0	150.0	100.0	100.0	100.0	
6. Meters	866.0							148.0	148.0	171.0	171.0	114.0	114.0	
7. Auxiliary Power	228.0							57.0	57.0	57.0	57.0			
8. New Equipment	675.0					228.0		276.0	91.0	137.0	57.0	57.0	57.0	
9. Distrib. Reservoir	5,395.0		5,395.0			675.0		1,317.0	1,129.0	40.0	1,379.0	276.0	1,254.0	
10. Production Wells	3,062.0		3,062.0					542.0	376.0	570.0	502.0	502.0	570.0	
11. Telemetry	330.0					330.0		68.0	103.0	63.0	38.0	29.0	29.0	
12. State Hwy. Project	1,315.0		1,315.0					724.0	125.0	108.0	108.0	125.0	125.0	
13. Resource Develop.	11,400.0		11,400.0					741.0	3,762.0	2,508.0	1,254.0	1,254.0	1,881.0	
14. Relocation and Upgrade of Facilities	1,179.0		837.0					142.0	171.0	131.0	131.0	131.0	131.0	
						342.0		57.0	57.0	57.0	57.0	57.0	57.0	
15. Misc. Requirements & Cont.	1,065.0		1,065.0					188.0	188.0	188.0	125.0	188.0	188.0	
16. Building Addn.	371.0		371.0					371.0						
<b>TOTAL (12)</b>	<b>39,684.0</b>		<b>32,562.0</b>			<b>5,506.0</b>	<b>1,616.0</b>	<b>9751.0</b>	<b>7758.0</b>	<b>5777.0</b>	<b>5572.0</b>	<b>4409.0</b>	<b>6417.0</b>	
<b>* OTHER SOURCE OF FUNDS (13)</b>			<b>FUNDING (14)</b>											
* operational revenues			General Obligation Bonds											
** contributions in aid			Revenue Bonds				8205.0	6611.0	4435.0	4385.0	3516.0	5410.0		
			Federal											
			State											
			Other * operational revenues				1248.0	849.0	1021.0	916.0	679.0	793.0		
			** contributions in aid				298.0	298.0	321.0	271.0	214.0	214.0		
			<b>TOTAL</b>				<b>9751.0</b>	<b>7758.0</b>	<b>5777.0</b>	<b>5572.0</b>	<b>4409.0</b>	<b>6417.0</b>		

## CAPITAL PROJECT ESTIMATE

(1) Department and Division: Enterprise Activities-Water Utility (2) Project Title: Distribution

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 77 (5)	Estimated Requirements in Thousands					
				19 78 (6)	19 79 (7)	1980 (8)	19 81 (9)	19 82 (10)	
(11) Equipment (Moveable)									
(12) Land									
(13) Buildings									
(14) Other Improvements	2,133.0		230.0	316.0	342.0	377.0	412.0	456.0	
(15) Overhead	299.0		32.0	44.0	48.0	53.0	58.0	64.0	
TOTAL	2,432.0		262.0	360.0	390.0	430.0	470.0	520.0	
(16) Source of Funds									
Bonds - _____	2,432.0		262.0	360.0	390.0	430.0	470.0	520.0	
Grants - _____									
- Operational _____									
TOTAL									

(17) Gross Floor Area N/A Sq. Ft.  
 (18) Building Cost Per Sq. Ft. \$ N/A  
 (19) Project Status Preliminary Engineering

(20) Architectural and Engineering Fees: 9%  
 (21) Percent of Building Cost N/A %  
 (22) Estimated Start Date January 1, 1977  
 (23) Estimated Completion Date December 31, 1977

## (24) Project Description and Justification (Continue on Additional Sheets. Same Size)

This item provides for the design and construction of distribution mains (8" to 16") throughout the service area. Included are the Improvement Districts, Water Main Extension Agreements, and Subdivision Agreements which may be financed by the Municipality in whole or part.

1. Improvement District #306 - 56th Avenue/ "A" Street-Denali Street	\$ 60,000
2. Improvement District #307 - Turnagain Heights	110,000
3. Miscellaneous Projects & Agreements	60,000
	<u>\$ 230,000</u>

## CAPITAL PROJECT ESTIMATE

(1) Department and Division: Enterprise Activities-Water Utility (2) Project Title: Transmission

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 <u>77</u> (5)	Estimated Requirements in Thousands				
				19 <u>78</u> (6)	19 <u>79</u> (7)	19 <u>80</u> (8)	19 <u>81</u> (9)	19 <u>82</u> (10)
(11) Equipment (Moveable)								
(12) Land								
(13) Buildings								
(14) Other Improvements								
(15) Overhead	4,380.0		1,950.0	440.0	440.0	400.0	500.0	650.0
TOTAL	<u>610.0</u>		<u>273.0</u>	<u>60.0</u>	<u>60.0</u>	<u>56.0</u>	<u>70.0</u>	<u>91.0</u>
(16) Source of Funds	4,990.0		2,223.0	500.0	500.0	456.0	570.0	741.0
Bonds - _____	4,990.0		2,223.0	500.0	500.0	456.0	570.0	741.0
Grants - _____								
Operational _____								
TOTAL								

(17) Gross Floor Area N/A Sq. Ft.(18) Building Cost Per Sq. Ft. \$ N/A(19) Project Status Preliminary Engineering(20) Architectural and Engineering Fees: 9%(21) Percent of Building Cost N/A %(22) Estimated Start Date January 1, 1977(23) Estimated Completion Date December 31, 1977

(24) Project Description and Justification (Continue on Additional Sheets. Same Size)

This item includes design and construction of transmission mains (16" and larger) to complete the Water Utility transmission system grid.

1. 36" Supply Line/Water Treatment Plant - Diversion Dam	\$ 1,900,000
2. PRV Station/Baxter & N. Lights	<u>50,000</u>
	\$ 1,950,000

CAPITAL PROJECT ESTIMATE

(1) Department and Division: Enterprise Activities-Water Utility (2) Project Title: Upgrade Distribution

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 77 (5)	Estimated Requirements in Thousands				
				19 78 (6)	19 79 (7)	19 80 (8)	19 81 (9)	19 82 (10)
(11) Equipment (Moveable)								
(12) Land								
(13) Buildings								
(14) Other Improvements	1,585.0		430.0	275.0	220.0	220.0	220.0	220.0
(15) Overhead	222.0		60.0	38.0	31.0	31.0	31.0	31.0
<b>TOTAL</b>	<b>1,807.0</b>		<b>490.0</b>	<b>313.0</b>	<b>251.0</b>	<b>251.0</b>	<b>251.0</b>	<b>251.0</b>
(16) Source of Funds								
Bonds - _____								
Grants - _____								
Operational _____	1,807.0		490.0	313.0	251.0	251.0	251.0	251.0
<b>TOTAL</b>								

(17) Gross Floor Area N/A Sq. Ft. (20) Architectural and Engineering Fees: 9%  
 (18) Building Cost Per Sq. Ft. \$ N/A (21) Percent of Building Cost N/A %  
 (19) Project Status Preliminary Engineering (22) Estimated Start Date January 1, 1977  
 (23) Estimated Completion Date December 31, 1977

(24) Project Description and Justification (Continue on Additional Sheets. Same Size)

This item covers various loop-ties and distribution system upgrading to include the replacement of wood stave pipe throughout the distribution system.

- |  |                  |
|--|------------------|
| 1. Upgrade Institutional Area with 16" Force Main                    | \$330,000        |
| 2. Upgrade Well No. 2  | 50,000           |
| 3. Replacement of Wood Stave, 8/9 Alley, Barrow Street to "D" Street | 50,000           |
|  | <b>\$430,000</b> |

## CAPITAL PROJECT ESTIMATE

(1) Department and Division: Enterprise Activities-Water Utility (2) Project Title: Upgrade Transmission

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 <u>77</u> (5)	Estimated Requirements in Thousands				
				19 <u>78</u> (6)	19 <u>79</u> (7)	19 <u>80</u> (8)	19 <u>81</u> (9)	19 <u>82</u> (10)
(11) Equipment (Moveable)								
(12) Land								
(13) Buildings								
(14) Other Improvements	3,350.0		1,750.0	200.0	400.0	400.0	250.0	350.0
(15) Overhead	469.0		245.0	28.0	56.0	56.0	35.0	49.0
<b>TOTAL</b>	<b>3,819.0</b>		<b>1,995.0</b>	<b>228.0</b>	<b>456.0</b>	<b>456.0</b>	<b>285.0</b>	<b>399.0</b>
(16) Source of Funds								
Bonds - _____	1,695.0		1,695.0					
Grants - _____								
Operational _____	2,124.0		300.0	228.0	456.0	456.0	285.0	399.0
_____								
<b>TOTAL</b>	<b>3,819.0</b>		<b>1,995.0</b>	<b>228.0</b>	<b>456.0</b>	<b>456.0</b>	<b>285.0</b>	<b>399.0</b>

(17) Gross Floor Area N/A Sq. Ft.(18) Building Cost Per Sq. Ft. \$ N/A(19) Project Status Preliminary Engineering(20) Architectural and Engineering Fees: 9%(21) Percent of Building Cost N/A %(22) Estimated Start Date January 1, 1977(23) Estimated Completion Date December 31, 1977

(24) Project Description and Justification (Continue on Additional Sheets. Same Size)

This item covers the transmission system upgrading which is necessary as older portions of the Municipality increase in population density. Included is the design and construction of the 42" replacement for the 24" wood stave in Fifth Avenue from Airport Heights to Fifth and Ingra.

Replace 24" wood stave/Airport Heights Drive - Gambell Street \$1,750,000

CAPITAL PROJECT ESTIMATE

(1) Department and Division: Enterprise Activities-Water Utility

(2) Project Title: New Connections

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 <u>77</u> (5)	Estimated Requirements in Thousands				
				19 <u>78</u> (6)	19 <u>79</u> (7)	19 <u>80</u> (8)	19 <u>81</u> (9)	19 <u>82</u> (10)
(11) Equipment (Moveable) (12) Land (13) Buildings (14) Other Improvements (15) Overhead TOTAL	750.0		150.0	150.0	150.0	100.0	100.0	100.0
(16) Source of Funds								
Bonds - _____ Grants - _____ - Operational _____ Contribution-In-Aid _____ TOTAL	750.0		150.0	150.0	150.0	100.0	100.0	100.0

(17) Gross Floor Area N/A Sq. Ft.

(18) Building Cost Per Sq. Ft. \$ N/A

(19) Project Status N/A

(20) Architectural and Engineering Fees: N/A

(21) Percent of Building Cost N/A %

(22) Estimated Start Date In Progress

(23) Estimated Completion Date Continuing

(24) Project Description and Justification (Continue on Additional Sheets, Same Size)

This project provides a contribution in aid of construction to furnish material and labor for service connects to be made in the coming year. We are estimating making 600 connections of various sizes.

## CAPITAL PROJECT ESTIMATE

(1) Department and Division: Enterprise Activities-Water Utility

(2) Project Title: Meters

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 <u>77</u> (5)	Estimated Requirements in Thousands				
				19 <u>78</u> (6)	19 <u>79</u> (7)	19 <u>80</u> (8)	19 <u>81</u> (9)	19 <u>82</u> (10)
(11) Equipment (Moveable)								
(12) Land								
(13) Buildings								
(14) Other Improvements	760 .0		130 .0	130 .0	150 .0	150 .0	100 .0	100 .0
(15) Overhead	106 .0		18 .0	18 .0	21 .0	21 .0	14 .0	14 .0
<b>TOTAL</b>	<b>866 .0</b>		<b>148 .0</b>	<b>148 .0</b>	<b>171 .0</b>	<b>171 .0</b>	<b>114 .0</b>	<b>114 .0</b>
(16) Source of Funds								
Bonds - _____								
Grants - _____								
Operational _____								
Contribution-In-Aid _____	866 .0		148 .0	148 .0	171 .0	171 .0	114 .0	114 .0
<b>TOTAL</b>								

(17) Gross Floor Area N/A Sq. Ft.(18) Building Cost Per Sq. Ft. \$ N/A(19) Project Status N/A(20) Architectural and Engineering Fees: N/A(21) Percent of Building Cost N/A %(22) Estimated Start Date In progress(23) Estimated Completion Date Continuing

(24) Project Description and Justification (Continue on Additional Sheets. Same Size)

This item covers the purchase of water meters for sale to customers to complete the metering of all commercial, 4-plex units and larger, and industrial buildings. This is in accordance with the Water Utility Tariff.

CAPITAL PROJECT ESTIMATE

(1) Department and Division: Enterprise Activities-Water Utility

(2) Project Title: Auxiliary Power

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 <u>77</u> (5)	Estimated Requirements in Thousands				
				19 <u>78</u> (6)	19 <u>79</u> (7)	19 <u>80</u> (8)	19 <u>81</u> (9)	19 <u>82</u> (10)
(11) Equipment (Moveable)								
(12) Land								
(13) Buildings								
(14) Other Improvements	200.0		50.0	50.0	50.0	50.0	50.0	
(15) Overhead	28.0		7.0	7.0	7.0	7.0	7.0	
<b>TOTAL</b>	<b>228.0</b>		<b>57.0</b>	<b>57.0</b>	<b>57.0</b>	<b>57.0</b>	<b>57.0</b>	
(16) Source of Funds								
Bonds - _____								
Grants - _____								
- Operational _____	228.0		57.0	57.0	57.0	57.0	57.0	
<b>TOTAL</b>								

(17) Gross Floor Area N/A Sq. Ft. (20) Architectural and Engineering Fees: 9%  
 (18) Building Cost Per Sq. Ft. \$ N/A (21) Percent of Building Cost N/A %  
 (19) Project Status Preliminary Engineering (22) Estimated Start Date January 1, 1977  
 (23) Estimated Completion Date December 31, 1977

(24) Project Description and Justification (Continue on Additional Sheets. Same Size)  
 This item covers the installation of auxiliary power at the Water Utility production wells so that adequate supplies of water will be available for domestic use and fire prevention during emergencies and power outages.

<u>1977</u>	<u>1979</u>
1. Well #3 \$50,000	3. Well #8 \$50,000
<u>1978</u>	<u>1980</u>
2. Well #4 \$50,000	4. Well #2 \$50,000



## CAPITAL PROJECT ESTIMATE

(1) Department and Division: Enterprise Activities-Water Utility (2) Project Title: New Equipment

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 <u>77</u> (5)	Estimated Requirements in Thousands				
				19 <u>78</u> (6)	19 <u>79</u> (7)	19 <u>80</u> (8)	19 <u>81</u> (9)	19 <u>82</u> (10)
(11) Equipment (Moveable)	592.0		242 .0	80 .0	120 .0	50 .0	50 .0	50 .0
(12) Land								
(13) Buildings								
(14) Other Improvements								
(15) Overhead	83.0		34 .0	11 .0	17 .0	7 .0	7 .0	7 .0
TOTAL	675.0		276 .0	91 .0	137 .0	57 .0	57 .0	57 .0
(16) Source of Funds								
Bonds - _____								
Grants - _____								
Operational	675.0		276 .0	91 .0	137 .0	57 .0	57 .0	57 .0
TOTAL								

(17) Gross Floor Area N/A Sq. Ft.(18) Building Cost Per Sq. Ft. \$ N/A(19) Project Status No(20) Architectural and Engineering Fees: N/A(21) Percent of Building Cost N/A %(22) Estimated Start Date In Progress(23) Estimated Completion Date Continuing

(24) Project Description and Justification (Continue on Additional Sheets. Same Size)

Replacement and purchase of new equipment as existing equipment is worn out or new equipment is needed to upgrade existing fleet. This includes the purchase of a replacement for the Ensley backhoe used by maintenance and the purchase of smaller tools and equipment on a replacement and addition basis.

Treatment Plant	22,000
Maintenance	180,000
Customer Account	25,000
Engineering	15,000
	<u>242,000</u>

(Refer to following page for unit breakdown)

## Enterprise Activities - Water Utility

New Equipment - 1977

Maintenance

Line Truck to replace #0714 with air compressor, electric hoist and generator set.

3/4 ton with 110 generator and long bed to replace #2175.

3/4 ton with side packs, long bed and generator to replace #2306.

3/4 ton with side packs and long bed to replace #2180.

Two 2.5 KW light plants to replace 1965 existing.

20 foot van on 10 ton truck to replace #0700.

Drott 40 - to replace existing Ensley backhoe.

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\$180,000.00

Customer Service

Three 1/2 ton pick-up trucks and one economy truck to replace #2173, #2178, #2179, and #2181.

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\$ 25,000.00

Treatment Plant

Two 1/2 ton pick-ups to replace #2176 and #2623.

One 3/4 ton pick-up with 4-wheel drive, snow plow and heavy suspension to replace #2624.

Lab equipment

Air pack sniffer

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\$ 22,000.00

Engineering

3/4 ton pick-up to replace #2177.

Surveying instruments, miscellaneous equipment, calculators, drafting boards, reprint machine, and supplies.

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\$ 15,000.00

**CAPITAL PROJECT ESTIMATE**

(1) Department and Division: Enterprise Activities-Water Utility      (2) Project Title: Distribution Reservoir

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 <u>77</u> (5)	Estimated Requirements in Thousands				
				19 <u>78</u> (6)	19 <u>79</u> (7)	19 <u>80</u> (8)	19 <u>81</u> (9)	19 <u>82</u> (10)
(11) Equipment (Moveable)								
(12) Land								
(13) Buildings								
(14) Other Improvements	4,732.0		1,155.0	990.0	35.0	1,210.0	242.0	1,100.0
(15) Overhead	663.0		162.0	139.0	5.0	169.0	34.0	154.0
<b>TOTAL</b>	<b>5,395.0</b>		<b>1,317.0</b>	<b>1,129.0</b>	<b>40.0</b>	<b>1,379.0</b>	<b>276.0</b>	<b>1,254.0</b>
(16) Source of Funds								
Bonds - _____	5,395.0		1,317.0	1,129.0	40.0	1,379.0	276.0	1,254.0
Grants - _____								
- Operational _____								
<b>TOTAL</b>								

(17) Gross Floor Area <u>N/A</u> Sq. Ft.	(20) Architectural and Engineering Fees: <u>9%</u>
(18) Building Cost Per Sq. Ft. \$ <u>N/A</u>	(21) Percent of Building Cost <u>N/A</u> %
(19) Project Status <u>Preliminary Engineering</u>	(22) Estimated Start Date <u>January 1, 1977</u>
	(23) Estimated Completion Date <u>December 31, 1977</u>

(24) Project Description and Justification (Continue on Additional Sheets. Same Size)

This item covers the design and construction of distribution reservoirs for additional storage of treated water to meet the peak system demands for domestic distribution and fire protection. There presently exists one 5 million gallon reservoir at Tudor Road and Patterson Street and a ringwall at the Water Treatment Plant.

1977	1. 5 Million Gallon Reservoir On Existing Ringwall of Water Treatment Plant	\$ 935,000
	2. Ringwall for second 5 Million Gallon Reservoir at Water Treatment Plant	<u>200,000</u>
		\$1,155,000
1978	Second 5 Million Gallon Reservoir at the Water Treatment Plant	
1979	Design of Second 5 Million Gallon Reservoir at Tudor Road and Patterson Street	
1980	Second Ringwall and 5 Million Gallon Reservoir at Tudor Road and Patterson Street	
1981	Ringwall for 5 Million Gallon Reservoir in Western portion of system	
1982	5 Million Gallon Reservoir in Western portion of system	

## CAPITAL PROJECT ESTIMATE

(1) Department and Division:

Enterprise Activities-Water Utility

(2) Project Title:

Production Wells

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 <u>77</u> (5)	Estimated Requirements in Thousands				
				19 <u>78</u> (6)	19 <u>79</u> (7)	19 <u>80</u> (8)	19 <u>81</u> (9)	19 <u>82</u> (10)
(11) Equipment (Moveable)								
(12) Land								
(13) Buildings								
(14) Other Improvements	2,685 .0		475 .0	330 .0	500 .0	440 .0	440 .0	500 .0
(15) Overhead	377 .0		67 .0	46 .0	70 .0	62 .0	62 .0	70 .0
TOTAL	3,062 .0		542 .0	376 .0	570 .0	502 .0	502 .0	570 .0
(16) Source of Funds								
Bonds - _____	3,062 .0		542 .0	376 .0	570 .0	502 .0	502 .0	570 .0
Grants - _____								
Operational _____								
TOTAL								

(17) Gross Floor Area N/A Sq. Ft.(18) Building Cost Per Sq. Ft. \$ N/A(19) Project Status Preliminary Engineering(20) Architectural and Engineering Fees: 9%(21) Percent of Building Cost N/A %(22) Estimated Start Date January 1, 1977(23) Estimated Completion Date December 31, 1977

(24) Project Description and Justification (Continue on Additional Sheets. Same Size)

This item consists of the design and construction of test wells, production wells, well houses, and transmission pipe lines. The Water Source Study done by Tryck, Nyman, & Hayes recommends development of production wells to supplement present water supply sources.

Production Well #6 - Well House, Auxiliary Power, and 12-inch Main	\$ 200,000
Production Well #5 - Test Well, Production Well, Well House, Auxiliary Power, and 12-inch Main.	\$ 275,000
	\$ 475,000

CAPITAL PROJECT ESTIMATE

(1) Department and Division: Enterprise Activities-Water Utility

(2) Project Title: Telemetry

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 <u>77</u> (5)	Estimated Requirements in Thousands				
				19 <u>78</u> (6)	19 <u>79</u> (7)	19 <u>80</u> (8)	19 <u>81</u> (9)	19 <u>82</u> (10)
(11) Equipment (Moveable)								
(12) Land								
(13) Buildings								
(14) Other Improvements	288.0		60.0	90.0	55.0	33.0	25.0	25.0
(15) Overhead	42.0		8.0	13.0	8.0	5.0	4.0	4.0
TOTAL	330.0		68.0	103.0	63.0	38.0	29.0	29.0
(16) Source of Funds								
Bonds - _____								
Grants - _____								
Operational	330.0		68.0	103.0	63.0	38.0	29.0	29.0
TOTAL								

(17) Gross Floor Area N/A Sq. Ft.  
 (18) Building Cost Per Sq. Ft. \$ N/A  
 (19) Project Status Preliminary Engineering

(20) Architectural and Engineering Fees: 9%  
 (21) Percent of Building Cost N/A %  
 (22) Estimated Start Date January 1, 1977  
 (23) Estimated Completion Date December 31, 1977

(24) Project Description and Justification (Continue on Additional Sheets. Same Size)

This item consists of the design and installation of a monitoring system from the Treatment Plant for all the wells, reservoirs, pressure reducing stations, booster stations, and valve pits in the water system.

Connect Wells #5, #6, #7, and the Turpin Pressure Reducing Station to the Treatment Plant \$60,000

CAPITAL PROJECT ESTIMATE

(1) Department and Division: Enterprise Activities-Water Utility

(2) Project Title: State Highway Projects

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 77 (5)	Estimated Requirements in Thousands				
				19 78 (6)	19 79 (7)	19 80 (8)	19 81 (9)	19 82 (10)
(11) Equipment (Moveable)								
(12) Land								
(13) Buildings								
(14) Other Improvements								
(15) Overhead	1,155 .0		635 .0	110 .0	95 .0	95 .0	110 .0	110 .0
TOTAL	1,315 .0		724 .0	125 .0	108 .0	108 .0	125 .0	125 .0
(16) Source of Funds								
Bonds - _____	1,315 .0		724 .0	125 .0	108 .0	108 .0	125 .0	125 .0
Grants - _____								
Operational _____								
TOTAL								

(17) Gross Floor Area N/A Sq. Ft.

(18) Building Cost Per Sq. Ft. \$ N/A

(19) Project Status Preliminary Engineering

(20) Architectural and Engineering Fees: 9%

(21) Percent of Building Cost N/A %

(22) Estimated Start Date January 1, 1977

(23) Estimated Completion Date December 31, 1977

(24) Project Description and Justification (Continue on Additional Sheets. Same Size)

This item covers the design and construction of utility relocation, adjustments, and system upgrading prior to future Department of Highways road construction.

- 1. Debarr Road- \$ 425,000
    - Extend 16" main 6,500 LF
    - Construct PRV Station and Rehabitate PRV Station
  - 2. International Airport Road- 170,000
    - Extend 16" main 550 LF
    - Relocate/Install 12 Fire Hydrants
  - 3. Lake Otis- 40,000
    - Relocate Fire Hydrants
    - Miscellaneous Stub-Outs
- \$ 635,000

**CAPITAL PROJECT ESTIMATE**

(1) Department and Division: Enterprise Activities-Water Utility

(2) Project Title: Resource Development

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 <u>77</u> (5)	Estimated Requirements in Thousands				
				<u>1978</u> (6)	<u>1979</u> (7)	<u>1980</u> (8)	<u>1981</u> (9)	<u>1982</u> (10)
(11) Equipment (Moveable)								
(12) Land								
(13) Buildings								
(14) Other Improvements	10,000 .0		650 .0	3,300 .0	2,200 .0	1,100 .0	1,100.0	1,650.0
(15) Overhead	1,400 .0		91 .0	462 .0	308 .0	154 .0	154.0	231.0
<b>TOTAL</b>	<b>11,400 .0</b>		<b>741 .0</b>	<b>3,762 .0</b>	<b>2,508 .0</b>	<b>1,254 .0</b>	<b>1,254.0</b>	<b>1,881.0</b>
(16) Source of Funds								
Bonds - _____	11,400 .0		741 .0	3,762 .0	2,508 .0	1,254 .0	1,254.0	1,881.0
Grants - _____								
- Operational _____								
<b>TOTAL</b>								

(17) Gross Floor Area N/A Sq. Ft.

(20) Architectural and Engineering Fees: 9%

(18) Building Cost Per Sq. Ft. \$ N/A

(21) Percent of Building Cost N/A %

(19) Project Status Preliminary Engineering

(22) Estimated Start Date January 1, 1977

(23) Estimated Completion Date December 31, 1977

(24) Project Description and Justification (Continue on Additional Sheets. Same Size)

This item provides for design and construction of facilities necessary to meet the growing demand for treated water. Included is the design and construction of additional basins at the Treatment Plant and the study for off-stream storage at Ship Creek.

- |                                 |                   |
|---------------------------------|-------------------|
| 1. Off-Stream Storage           | \$ 275,000        |
| Feasibility Study by Consultant |                   |
| 2. Treatment Plant Modification | 375,000           |
| Design by Consultant            |                   |
|                                 | <u>\$ 650,000</u> |



## CAPITAL PROJECT ESTIMATE

(1) Department and Division: Enterprise Activities-Water Utility (2) Project Title: Relocation and Upgrade of Facilities

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 77 (5)	Estimated Requirements in Thousands					
				19 78 (6)	19 79 (7)	19 80 (8)	19 81 (9)	1982 (10)	
(11) Equipment (Moveable)									
(12) Land									
(13) Buildings									
(14) Other Improvements	1,035.0		175.0	200.0	165.0	165.0	165.0	165.0	165.0
(15) Overhead	144.0		24.0	28.0	23.0	23.0	23.0	23.0	23.0
<b>TOTAL</b>	<b>1,179.0</b>		<b>199.0</b>	<b>228.0</b>	<b>188.0</b>	<b>188.0</b>	<b>188.0</b>	<b>188.0</b>	<b>188.0</b>
(16) Source of Funds									
Bonds - _____	837.0		142.0	171.0	131.0	131.0	131.0	131.0	131.0
Grants - _____									
Operational _____	342.0		57.0	57.0	57.0	57.0	57.0	57.0	57.0
_____									
<b>TOTAL</b>	<b>1,179.0</b>		<b>199.0</b>	<b>228.0</b>	<b>188.0</b>	<b>188.0</b>	<b>188.0</b>	<b>188.0</b>	<b>188.0</b>
(17) Gross Floor Area <u>N/A</u> Sq. Ft.				(20) Architectural and Engineering Fees: <u>9%</u>					
(18) Building Cost Per Sq. Ft. \$ <u>N/A</u>				(21) Percent of Building Cost <u>N/A</u> %					
(19) Project Status <u>Preliminary Engineering</u>				(22) Estimated Start Date <u>January 1, 1977</u>					
				(23) Estimated Completion Date <u>December 31, 1977</u>					
(24) Project Description and Justification (Continue on Additional Sheets. Same Size)									
This item covers the relocation, adjustment, and construction of utility appurtenances prior to Municipal paving projects.									
1. Wisconsin Street-									
1300 LF 12" Main									
\$125,000									
Miscellaneous Hydrant Relocations/Stub-ins									
(Approximately \$75,000 will be assessable to property owners)									
2. Miscellaneous-									
Valve Adjustments/Stub-ins/Hydrant Relocations									
25,000									
3. Upgrade Water Utility Headquarters Building									
25,000									
\$175,000									

CAPITAL PROJECT ESTIMATE

(1) Department and Division: Enterprise Activities-Water Utility (2) Project Title: Miscellaneous Requirements & Contingencies

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 77 (5)	Estimated Requirements in Thousands					
				19 78 (6)	19 79 (7)	19 80 (8)	19 81 (9)	19 82 (10)	
(11) Equipment (Moveable)									
(12) Land									
(13) Buildings									
(14) Other Improvements	935.0		165.0	165.0	165.0	110.0	165.0	165.0	165.0
(15) Overhead	130.0		23.0	23.0	23.0	15.0	23.0	23.0	23.0
<b>TOTAL</b>	<b>1,065.0</b>		<b>188.0</b>	<b>188.0</b>	<b>188.0</b>	<b>125.0</b>	<b>188.0</b>	<b>188.0</b>	<b>188.0</b>
(16) Source of Funds									
Bonds - _____	1,065.0		188.0	188.0	188.0	125.0	188.0	188.0	188.0
Grants - _____									
Operational _____									
_____									
<b>TOTAL</b>									

(17) Gross Floor Area N/A Sq. Ft. (20) Architectural and Engineering Fees: 9%  
 (18) Building Cost Per Sq. Ft. \$ N/A (21) Percent of Building Cost N/A %  
 (19) Project Status Preliminary Engineering (22) Estimated Start Date January 1, 1977  
 (23) Estimated Completion Date December 31, 1977

(24) Project Description and Justification (Continue on Additional Sheets. Same Size)

This item covers emergency situations unforeseen at this time, such as rescheduled projects and the unscheduled replacement of equipment.

*130,000 est 12" water main & 200 ft*

**CAPITAL PROJECT ESTIMATE**

(1) Department and Division: Enterprise Activities, Water Utility (2) Project Title: Building Addition

Estimated Cost	Estimated Total Cost (3)	Approp. Prior Years (4)	New Appropriation 19 <u>77</u> (5)	Estimated Requirements in Thousands				
				19 <u>78</u> (6)	19 <u>79</u> (7)	19 <u>80</u> (8)	19 <u>81</u> (9)	19 <u>82</u> (10)
(11) Equipment (Moveable)								
(12) Land								
(13) Buildings	325.0		325.0	0	0	0	0	0
(14) Other Improvements								
(15) Overhead	46.0		46.0					
<b>TOTAL</b>	<b>371.0</b>		<b>371.0</b>					
(16) Source of Funds								
Bonds - _____	371.0		371.0					
Grants - _____								
Operational _____								
_____								
<b>TOTAL</b>								

(17) Gross Floor Area 8,000 Sq. Ft.  
 (18) Building Cost Per Sq. Ft. \$ 35.00 - \$50.00  
 (19) Project Status Preliminary Engineering

(20) Architectural and Engineering Fees: \$32,500  
 (21) Percent of Building Cost 10 %  
 (22) Estimated Start Date January 1, 1977  
 (23) Estimated Completion Date December 31, 1977

(24) Project Description and Justification (Continue on Additional Sheets. Same Size)

This item is for the design and construction of a building addition to the existing building to accomodate the Sewer Utility personnel and vehicles now located at the Water Utility Headquarters.

Vehicle Warm Storage	
\$35.00 per SF - 5,000 Square Feet	\$ 175,000
Offices	
\$50.00 per SF - 3,000 Square Feet	150,000
	<u>\$ 325,000</u>

The primary object of the Water Utility is to provide quality water to all existing and new customers for domestic, commercial, industrial and fire protection needs within the service area certified to the Water Utility by the Alaska Public Utilities Commission.

The Capital Improvements Program, as prepared, covers the development of additional sources of water, additional storage, new mains to serve new customers, and upgrading the existing system to meet the expanding demands within the service area. No funds have been included to expand service beyond our existing boundaries or to acquire other water systems. The CIP also contemplates that the Water Utility will continue to finance source developments, transmission facilities, and replacements. More emphasis is being placed on developers financing their own distribution system and turning it over to the Utility upon completion.

The major item in the capital budget for the Water Utility is for expanded sources of water supply including additional wells, treated water storages, expansion of the water treatment plant, and off-stream storage. This item accounts for \$19,817,000 over the next six years or 49.9% of the total capital budget. The next major item is the construction of additional transmission mains toward completion of a grid system and the upgrading of the older transmission mains to provide ample water at all portions of the service area and more particularly in the high value area (i.e. CBD for fire protection).

Approximately 2.5 million dollars will need to be expended in the next 6 years to relocate existing facilities and to stub mains out from under the paving projects of the State and Municipality. A telemetry system is proposed in 1977 to provide more automated controls of the various sources of water and to monitor the system.

The Water Utility presently has \$11,000,000 in authorized but unsold revenue bonds. These bonds were approved by the voters in 1974 to fund the 1975 CIP. None have been issued due to coverage problems which are trying to be corrected by a rate increase which is entangled with the Alaska Public Utilities Commission and the State Courts. To finance 1975 essential construction a short-term note of \$1,500,000 was obtained and secured by the future sale of revenue bonds. Lack of a rate increase made it necessary to also partially finance the limited, approximately \$800,000, 1976 CIP from the same note. The remainder was financed by depreciation funds. To provide funds for the 1977 CIP program \$8.2 million of the unsold revenue bonds will have to be issued.

The new estimate for funds required in 1977 is \$9,751,000 to fund the program as generally envisioned two years ago and those projects that were deferred due to lack of funds.