

Impact Fee Study Public Facilities Needs Assessment

Prepared for:
Oregon Water Utility
Village of Oregon, Wisconsin

Prepared by:
Earth Tech, Inc.
200 Indiana Avenue
Stevens Point, WI 54481

October 2004

Earth Tech Project No. 64910

TABLE OF CONTENTS

	<u>Page</u>
TABLE OF CONTENTS	i
LIST OF FIGURES	i
LIST OF TABLES	ii

Section

1.0 BACKGROUND AND INTRODUCTION	1
1.1 Oregon Master Plan.....	1
1.1.1 Future Water Need	1
1.1.2 Water System Evaluation	1
1.1.3 Projected Timing	3
1.1.4 Projected Costs	3
1.2 Impact Fee.....	3
1.3 Proposed Improvements.....	4
2.0 IMPROVEMENTS FOR CURRENT DEFICIENCIES	4
2.1 Pressures.....	4
2.2 Fire Flow	4
2.3 Supply and Storage	4
2.4 Current Improvements.....	7
3.0 IMPROVEMENTS FOR FUTURE DEVELOPMENT	7
3.1 Future Service Area.....	7
3.2 Improvements.....	9
3.2.1 Pressures	9
3.2.2 Fire Flow	9
3.2.3 Supply and Storage.....	9
3.2.4 Overall Improvements	10
3.3 Population Serviced with Facility Improvements	11
4.0 CONCLUSION	12
4.1 Capital Costs for Future System Improvements.....	12
4.2 Impact on Affordable Housing.....	12
4.3 Impact Fee Requirements.....	12

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1-1 Oregon Water System Improvements.....	5
3-1 Low Pressure Areas	8

LIST OF TABLES

<u>Table</u>		<u>Page</u>
1-1	Future Pumpage Projections	2
1-2	Capital Improvements Plan.....	6
4-1	Capital Costs for Improvements Remediying Future Deficiencies	13

1.0 BACKGROUND AND INTRODUCTION

The Village of Oregon, Wisconsin, is a community of approximately 7,514 persons (2000 census) located in south-central Wisconsin, approximately 7 miles south of Madison. Oregon's public water utility provides water services primarily to residences and businesses located within the Village limits.

The Village's location, with respect to other major urban centers and principal transportation corridors, offers potential for continued future growth and development. The Village has experienced rapid growth in the last 10 years and is anticipated to continue growing at a rate exceeding state and local averages.

From 1990 to 2000, the Village of Oregon experienced a 66 percent population increase. It is projected that the Village will continue to see this large percentage of growth over the next 20 years. As the population continues to expand, the water utility must continue to grow to meet the increased water demands. For this reason, Oregon updated the Water System Master Plan in 2003 to provide projected needs to meet system demands.

1.1 Oregon Master Plan

1.1.1 Future Water Need

The population in the Village is projected to be:

- 2013: 11,408
- 2023: 14,403

The increased population will result in increased water demand. Future water demand was determined by evaluating previous per capita water use and then assuming the same per capita use in future years. The future water demands are presented in Table 1-1.

1.1.2 Water System Evaluation

The water system was evaluated using a water system model to determine the current and future water system improvements needed. Improvements may be needed to meet required fire flows, pressures, or adequate supply and storage.

Both the primary pressure zone (PPZ) and the high level pressure zone (HLPZ) were evaluated to determine the needed pumping capacities and storage requirements for each area.

During the evaluation, the following deficiencies were noted:

- Currently, due to topography, the vicinity close to the south standpipe has pressures below the recommended 35 pounds per square inch (psi).
- An area in the western portion of the PPZ with elevations above 1,000 feet USGS will not be serviceable with current facilities.
- Currently, there are several locations in the system where fire flow requirements are not met.

Table 1-1

Future Pumpage Projections

Oregon Water Utility
Village of Oregon, Wisconsin

	Actual <u>2002</u>	Projected <u>2013</u>	Projected <u>2023</u>
Total Annual Sales (MGY)	238	323	403
Total Annual Pumpage (MGY)	275	380	470
Average Day Pumpage (MGD)	0.754	1.041	1.288
Design Maximum Day Pumpage (MGD)	1.474	2.499	3.090
Design Peak Hour Demand (gpm)	1,600	2,800	3,400

Notes

1. Year 2013 and 2023 design maximum day pumpage projections were estimated using a ratio of maximum to average day pumpage of 240 percent.
2. Year 2002, 2013 and 2023 design peak hour demand projections were estimated using a ratio of peak hour demand to maximum day pumpage of 160 percent.

- The Village does not have adequate reliable supply for maximum day demand throughout the planning period or storage capacity to meet current or future optimum requirements.
- The Village does not have adequate booster pumping capacity for the PPZ in the year 2023.

1.1.3 Projected Timing

The projected timing of future projects was based on development time frames and projected populations. The projected times for some key developments are:

- 2003 - Development north of Lincoln to the west of the Village (Bergamont)
- 2004 - Development south of Jefferson Street and west of the Village (Alpine Meadows)
- 2005 - The Alpine Dairy Industrial Park on the northwest side of the Village.
- 2008 to 2009 - Residential areas south of Lincoln Road in the HLPZ.
- 2010 to 2011 - Southeast area at the intersection of Highways 138 and 14 - This area will be used for commercial properties.
- 2010 - Northwest area with high elevations.

These development times were some of the key criteria that were used in developing the schedule of water system improvements.

1.1.4 Projected Costs

Projected costs for each anticipated improvement were developed based on similar projects. The preliminary cost estimate may vary dramatically from the actual costs at the time of construction. The projected total cost of improvements through 2023 is \$7,972,000. A large portion of the projected costs can be contributed to future growth.

1.2 Impact Fee

The Village desires that current residents not be overburdened by taking on additional costs contributed by future growth; therefore, the Village would like to institute an impact fee so that developing areas will meet the costs of improving the water system to meet the demands required by the community growth.

Further information on impact fees is presented in the Virchow, Krause & Company, LLP, *Report on Impact Fees* dated October 29, 2004. This assessment will be combined with the work completed by Virchow, Krause & Company, LLP, to complete the documentation necessary for initiation of an impact fee.

One key criteria of the impact fee is that it only covers improvements needed for development. An impact fee cannot be used to fix current system deficiencies.

1.3 Proposed Improvements

Figure 1-1 highlights the locations of proposed improvements. The estimated costs for these improvements are included in Table 1-2.

These improvements are further discussed in Sections 2 and 3.

2.0 IMPROVEMENTS FOR CURRENT DEFICIENCIES

The current water system is divided into the PPZ and the HLPZ. The system operates the following utilities:

- North Standpipe - PPZ - 0.4 million gallons (MG)
- South Standpipe - PPZ - 0.4 MG
- Well No. 3, reservoir, and pump station - PPZ - 800 gallons per minute (gpm)
- Well No. 4, reservoir, and pump station - PPZ and HLPZ - 850 gpm
- Well No. 5, reservoir, and pump station - PPZ and HLPZ - 850 gpm

2.1 Pressures

Currently, one area of the distribution system has pressures below 35 psi. This location, near the south standpipe, can be moved onto the HLPZ if another distribution main is added in the area. Figure 1-1, No. 19, shows the location of a recommended 8-inch line that could be added to supply these homes with adequate pressure.

2.2 Fire Flow

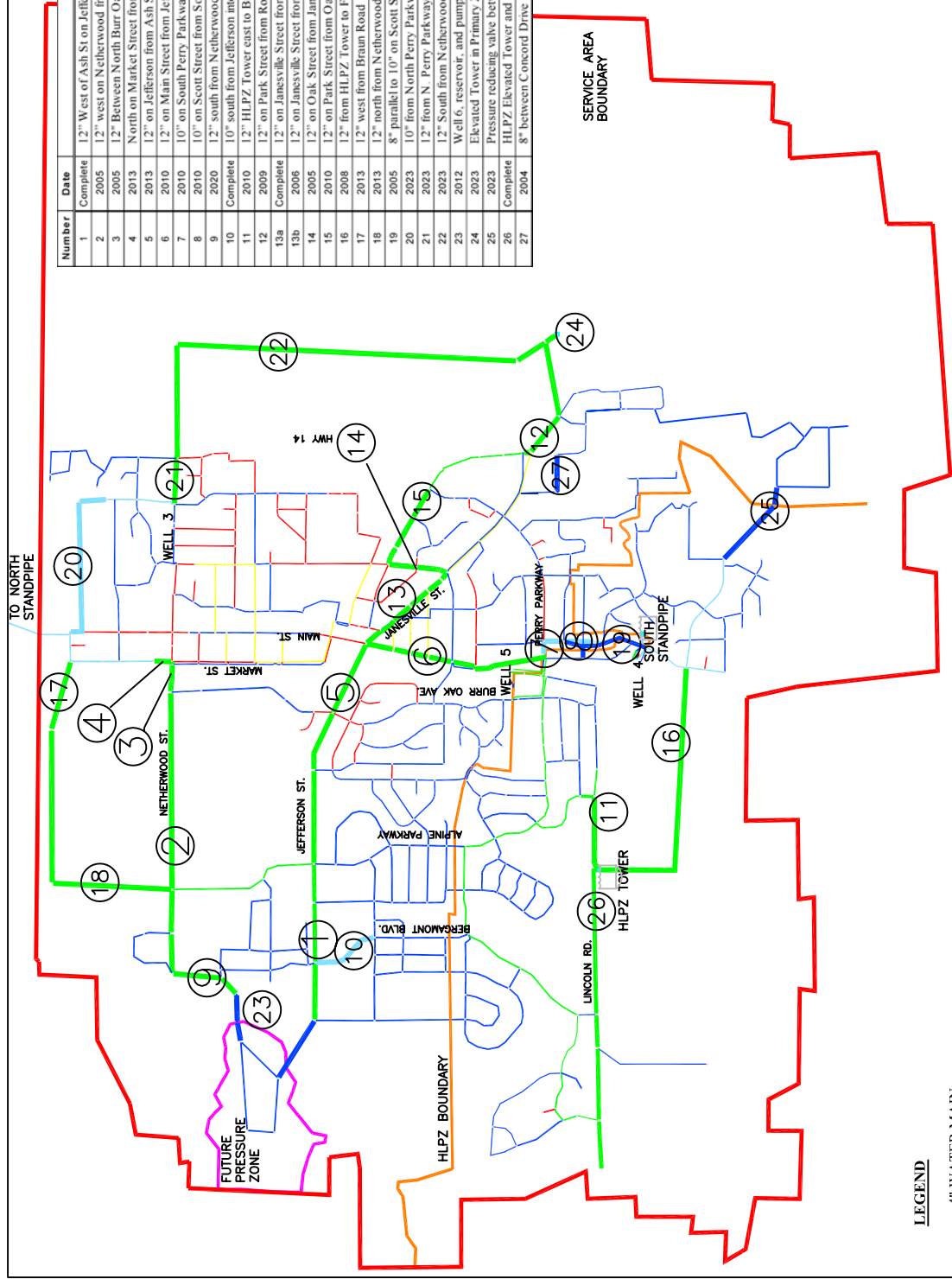
Some areas are lacking sufficient available fire flow capacities. This would include areas served by 4-inch water main and the dead end section of water main in the southeastern portion of the PPZ. It is suggested that regions with fire flows below 1,000 gpm in the service area should be improved to provide fire flows greater than 1,000 gpm. The area around the Oregon Middle School on Pleasant Oak Drive has an available fire flow less than 1,500 gpm. An available fire flow of 1,500 gpm or greater is suggested for school areas.

Improvement No. 12 will improve fire flows at the dead end in the southeastern portion of the PPZ. Improvement No. 8 will improve fire flow in the vicinity of the Oregon Middle School on Pleasant Oak Drive.

2.3 Supply and Storage

The utility currently operates three wells with a total combined capacity of 2,500 gpm. The reliable supply capacity, with the largest unit out of service, is 1,650 gpm. The current maximum day water demand is 1,257 gpm. The Village has sufficient water supply to meet current demands.

In general, storage facilities should be adequately sized to provide sufficient quantities of water for fire protection on days of maximum customer demands. Customer demands may exceed supply capacities during peak hour conditions; these excess demands may be met by using available storage. The amount of storage depleted is referred to as equalizing storage for peak hour requirements. Storage should also be available for fire protection purposes. To assure a reliable supply for fire protection, this reserve storage should not be utilized to meet peak hour requirements.



Number	Date	Location	Size (inch)	Length (ft)
1	Complete	12" West of Ash St on Jefferson with development	12	4732
2	2005	12" west on Netherwood from North Burr Oak with development	12	5173
3	2005	12" Between North Burr Oak and Market on Netherwood	12	580
4	2013	North on Market Street from Netherwood to present 10"-12"	12	352
5	2010	12" on Jefferson from Ash Street to Main Street	12	2630
6	2010	12" on Main Street from Jefferson South to South Perry Parkway	12	3489
7	2010	10" on South Perry Parkway from Main Street to Scott Street	10	264
8	2010	10" on Scott Street from South Perry Parkway to Current 10"	10	959
9	2020	12" south from Netherwood to future Well 6	12	1496
10	Complete	10" south from Jefferson into new development	10	1305
11	2010	12" HLPZ Tower east to Brynhill Drive and Leeward Lane	12	1956
12	2009	12" on Park Street from Rosewood Avenue to Highway 138	12	1050
13a	Complete	12" on Janesville Street from Spring Street to Oak Street	12	1645
13b	2006	12" on Janesville Street from Spring Street to Jefferson Street	12	362
14	2005	12" on Oak Street from Janesville Street to Park Street	12	1144
15	2010	12" on Park Street from Oak Street East to 12"	12	1625
16	2008	12" from HLPZ Tower to Foxfield Road	12	5215
17	2013	12" west from Braun Road	12	4243
18	2013	12" north from Netherwood to Braun Road	12	2271
19	2005	8" parallel to 10" on Scott Street between Miller Dr. and S. Main St.	8	1800
20	2023	10" from North Perry Parkway Northwest to Braun Road	10	3221
21	2023	12" from N. Perry Parkway to Dunn Ave. on Netherwood St.	12	887
22	2023	12" South from Netherwood through future Industrial Park	12	9237
23	2012	Well 6, reservoir, and pumping station for Future Pressure Zone	850 gpm	
24	2023	Elevated Tower in Primary Zone	0.5 MG	
25	2023	Pressure reducing valve between HLPZ and PPZ (set at 1050 for 30psi)		
26	Complete	HLPZ Elevated Tower and water main to the west on Lincoln Road	0.3 MG	
27	2004	8" between Concord Drive and Wolfe St.	8	720

- LEGEND**
- 4" WATER MAIN
 - 6" WATER MAIN
 - 8" WATER MAIN
 - 10" WATER MAIN
 - 12" WATER MAIN



FIGURE 1-1
 OREGON WATER SYSTEM
 IMPROVEMENTS
 OREGON WATER UTILITY
 VILLAGE OF OREGON, WISCONSIN

OCT 2004

64190

TABLE 1-2

CAPITAL IMPROVEMENTS PLAN
 EXISTING SYSTEM REINFORCEMENT AND FUTURE DEVELOPMENT COSTS
 OREGON WATER UTILITY
 VILLAGE OF OREGON, WISCONSIN

Short-Term Improvements (2004- 2007)	<u>Budget Estimate</u>
Distribution System Expansion	See Note 2
HLPZ Elevated Tower / Lincoln Road Water Main	\$1,101,519
SCADA Improvements Phase 1	\$100,000
SCADA Improvements Phase 2	\$151,000
Distribution System Improvements	
No. 1 - 12" West of Ash St. on Jefferson St.	\$275,445 actual completion cost
No. 10 - 12" south from Jefferson St. into new development	\$59,215 actual completion cost
No. 2 - 12" west on Netherwood from N. Burr Oak Ave.	\$367,100
No. 3 - 12" Netherwood St. from N. Burr Oak Ave. to Market St.	\$96,100
No. 13a - 12" on Janesville St. from Spring St. to Oak St.	\$145,590 actual completion cost
No. 13b - 12" on Janesville St. from Spring st. to Jefferson St.	\$32,055
No. 14 - 12" on Oak St. from Janesville St. to Park St.	\$80,900
No. 19 - 8" parallel to 10" on Scott St. near tower	\$113,600
4-inch water main replacement	\$163,900
Total	\$1,333,905
TOTAL	\$2,686,424
Intermediate-Term Improvements (2008 - 2013)	
Distribution System Expansion	See Note 2
Distribution System Improvements	
No. 16 - 12" from HLPZ tower to Foxfield Rd.	\$254,600
No. 12 - 12" on Park St. from Rosewood Ave. to Hwy 138	\$74,300
No. 6 - 12" on Main St. from Jefferson St. south to S. Perry Parkway	\$248,000
No. 7 - 10" on S. Perry Parkway from Main St. to Scott St.	\$18,600
No. 8 - 10" on Scott St. from S. Perry Parkway to Current 10"	\$67,700
No. 11 - 12" from HLPZ tower to Brynhill Dr. and Leeward Ln.	\$100,500
No. 15 - 12" on Park St. from Oak St. east to 12"	\$115,800
No. 4 - North on Market St. from Netherwood St. to present 10"-12"	\$25,100
No. 5 - 12: on Jefferson St. from Ash St. to Main St.	\$241,500
No. 17 - 12" west from Braun Rd.	\$356,200
No. 18 - 12" north from Netherwood St. to Braun Rd.	\$161,700
4-inch water main replacement	\$196,700
Total	\$1,860,700
Well 6 and Pumping Station	
Well 6	\$196,700
Pumping Station (Subtracted \$50,000 for Future Pressure Zone Pumps)	\$994,300
TOTAL	\$3,051,700
Long-Term Improvements (2014 - 2023)	
Distribution System Expansion	See Note 2
Elevated Tower in PPZ	\$874,100
Distribution System Improvements	
No. 9 - 12" south from Netherwood St. to Well 6	\$106,000
No. 20 - 10" from N. Perry Parkway northwest to Braun Rd.	\$228,400
No. 21 - 12" from N. Perry Parkway to Dunn Ave. on Netherwood St.	\$63,400
No. 22 - 12" South from Netherwood St. through future Industrial Park	\$655,600
4-inch water main replacement	\$295,000
PRV Update No. 25	\$10,900
Total	\$1,359,300
TOTAL	\$2,233,400

Notes:

1. Budget estimates include engineering, contingency, financing, legal, and administrative costs.
2. Estimated costs for distribution system expansion will be contingent upon the rate of development and need for water utility services in the Oregon future service area.

An additional 393 gpm of water supply is available to meet peak hour demands. Currently, the Village utilizes excess supply to meet peak hour demands. If the additional water supply is utilized, the Village will meet both current supply and storage requirements with the present facilities.

2.4 Current Improvements

The improvements needed to meet current deficiencies cannot be included in the impact fee. These improvements include:

11,954 feet of water main updated from 4-inch to 8-inch in the following areas:

Location	Length (ft)
N. Main St. from Netherwood St. to Grove St. (completed 2003)	2,349
Dewey St. from N. Main St to Oak St	1,287
Oak St. from Netherwood St. to Lincoln St.	1,135
Lincoln St. from Market St. to Oak St.	1,851
W. Monroe St. from Market St. to N. Main St.	554
Johnson St. from Market St. to N. Main St.	549
Grove St. from Main St. to Spring St.	330
Brook St. from Spring St. to Oak St.	1,224
Elm St. from S. Main St to Janesville St.	541
Washington St. from S. Main St. to Janesville St.	887
State St. from S. Main St to Janesville St.	1,247

Also, the following from Figure 1-1:

Number	Date	Location	Size (inch)	Length (ft)
8	2010	10-in. on Scott St. from South Perry Parkway to Current 10-in.	10	959
12	2009	12-in. on Park St. from Rosewood Ave. to Highway 138	12	1,050
19	2005	8-in. parallel to 10-in. on Scott St. between Miller Dr. and S. Main St.	8	1,800

3.0 IMPROVEMENTS FOR FUTURE DEVELOPMENT

3.1 Future Service Area

Existing land use within the Village of Oregon is well documented in the 2004 Comprehensive Plan. Land uses consist primarily of residential developments, with commercial developments located in the Village's central business district and along principal transportation routes. Figure 3-1 identifies the boundaries for the year 2023 Village of Oregon urban water service area. The urban service area is defined as the area in which the Village of Oregon is anticipated to provide water service during the next 20 years.

Insert Figure 3-1

Further service area expansion is projected to occur primarily in the south, west, and east portions of the Village. Distribution system expansion is not projected to the north because of the municipal boundary between Fitchburg and Oregon. It was determined that water service would be conveyed where sewer service is conveyed; therefore, the water system service area boundary matches the sewer drainage basin boundaries.

3.2 Improvements

3.2.1 Pressures

The PPZ provides adequate pressures to areas up to 1,000 feet USGS. The HLPZ was developed to supply the higher elevation areas to the south of the Village. A region of elevations above 1,000 feet USGS in the western portion of the PPZ will not have adequate pressure with the current facilities and is outside the HLPZ boundary.

Figure 3-1 highlights an area of higher elevations within the future service boundary that will require an additional booster station to make a separate future pressure zone. Improvement No. 23 includes a booster station for this area.

3.2.2 Fire Flow

Areas of commercial and industrial development will require higher available fire flows than residential areas. This would include the projected industrial parks on the northwest side of the current Village and on the east side of Highway 14 and the commercial development at the intersection of Highways 14 and 138.

Twelve-inch water main is suggested to connect these future areas of high fire flow demand with the rest of the distribution system. Also, locating key future facilities near these areas will offer additional fire flow capacities.

The southeastern portion of the future planning area has lower elevations than most of the HLPZ and will be served by the PPZ. This area will require an interconnection with the HLPZ to supply fire flow if the need arises. The interconnection between the HLPZ and the PPZ in the area should be equipped with a pressure reducing valve, No. 25, and should be installed when the area is developed.

3.2.3 Supply and Storage

By 2013, 85 gpm of additional supply is needed, and in 2023, an additional 500-gpm supply source is needed. By 2013, the system will need 450,000 more gallons of storage. This amount will increase to 540,000 gallons by 2023.

Oregon's continued growth will cause a water supply deficit by the year 2013. An additional well (Well 6) will be needed to meet the increased demand in the Village. The recommended location of the well is in the northwest portion of the Village near the future industrial park on proposed 12-inch water mains. With the high volume water mains already proposed for this area, this would appear to be the optimal location for a new well. This location for the well is also preferred, because it will provide additional available fire flow to the future industrial park. This well may also be equipped with a pumping station to supply the future pressure zone in the northwest portion of the PPZ.

The HLPZ tower was constructed in 2004. The water tower capacity is 300,000 gallons. This tower will not meet the 2023 required storage volume.

Based on projected growth of water system customer demands, the utility should plan 0.5 MG of additional water storage volume above the HLPZ tower volume by the year 2023.

The addition of an elevated water tower in the PPZ is recommended to meet the additional storage needs. A possible location in the PPZ for an additional tower is near the future development at the Highway 14 and Highway 138 intersection. As the commercial area develops, increased water demands and fire flows will be required. This area will require larger water mains to meet fire flow requirements. Since the water mains will already be available, this would be a prime location for the tower. This will also result in higher available fire flows in the area around the tower.

It is suggested that Well 6 be installed prior to 2013 to meet future supply needs and to provide additional supply to offset the deficiencies in storage until the PPZ water tower can be constructed.

3.2.4 Overall Improvements

Water main replacements needed to meet future system expansion and growth include:

Number	Date	Location	Size (inch)	Length (ft)
3	2005	12-in. between North Burr Oak Ave. and Market St. on Netherwood St.	12	280
4	2013	North on Market St. from Netherwood St. to present 10-in. - 12-in.	12	352
5	2013	12-in. on Jefferson St. from Ash St. to Main St.	12	2,630
6	2010	12-in. on Main St. from Jefferson South to South Perry Parkway	12	3,489
7	2010	10-in. on South Perry Parkway from Main St. to Scott St.	10	264
13a	Complete	12-in. on Janesville St. from Oak St. to Spring St.	12	1645
13b	2006	12-in on Janesville St. from Spring St. to Jefferson St.	12	362
14	2005	12-in. on Oak St. from Janesville St. to Park St.	12	1,144
15	2010	12-in. on Park St. from Oak St. East to 12-in.	12	1,625
21	2023	12-in. from North Perry Parkway to Dunn Ave. on Netherwood St.	12	887

Some water main installation may be implemented when developments are constructed. These improvements include:

Number	Date	Location	Size (inch)	Length (ft)
1	Complete	12-in. West of Ash St. on Jefferson St. with development	12	4,732
2	2005	12-in. west on Netherwood St. from North Burr Oak Ave. with development	12	5,173
9	2020	12-in. south from Netherwood St. to Well 6	12	1,496

Number	Date	Location	Size (inch)	Length (ft)
10	Complete	10-in. south from Jefferson into new development	10	1,305
11	2010	12-in. New Tower to Brynhill Dr. and Leeward Lane	12	1,417
16	2008	12-in. from HLPZ Tower to Foxfield Road	12	2,819
17	2013	12-in. west from Braun Rd.	12	4,243
18	2013	12-in. north from Netherwood St. to Braun Rd.	12	2,271
20	2023	10-in. from North Perry Parkway Northwest to Braun Rd.	10	3,221
22	2023	12-in. South from Netherwood St. through future Industrial Park	12	9,237

The facility improvements include:

- Well 6 (No. 23)
- Well 6 booster pumping station (No. 23)
- PPZ elevated tower (No. 24)
- Pressure reducing valve near southeastern portion of the Village (No. 25)

3.3 Population Serviced with Facility Improvements

The 300,000-gallon HLPZ tower provides additional supply during peak hour demand and fire flow events. The addition of the tower brings the Village to 965,000 gallons of available storage. The fire storage of 630,000 gallons is utilized throughout the Village. The HLPZ will be 31 percent of the Village storage and should supply 31 percent of the fire flow needed. When the percentage used for fire flow storage is subtracted from the HLPZ tower total volume, an additional 105,000 gallons is available for future peak hour and reserve storage. Peak hour storage is based on maximum day demand curves that create peak hour equalizing storage requirements. Reserve storage is 15 percent of the total storage and is needed for proper operational flexibility. Storage of 105,000 gallons will serve up to 3,295 people or 941 residential equivalent units (REUs).

Phase 1 SCADA system improvements are necessary to control the tower operations and were implemented at the same time as the tower construction. Phase 2 SCADA system improvements will update the current control system and is scheduled for 2005.

The new 850 gpm Well 6 will provide the Village of Oregon with reliable capacity until the population reaches 16,913 people. This value was determined using current per capita water use trends and assumes that the wells are required to supply maximum day demand. The assumption was made that current water use trends will not change dramatically. Currently, the Village can serve up to 10,850 people before Well 6 is needed. The additional population that will be serviced by Well 6 is 6,063 people or 1,732 REUs.

4.0 CONCLUSION

4.1 Capital Costs for Future System Improvements

The estimated capital costs for future system improvements to serve new developments are provided in Table 4-1.

4.2 Impact on Affordable Housing

The Village will review developments of low-cost housing on an individual basis in order to determine the effect the impact fee and the capital improvements will have on the housing.

By using an impact fee, current affordable housing within the Village will not experience rate increases related to capital improvements for developing areas.

4.3 Impact Fee Requirements

This report meets the requirements of Wisconsin State Statute Section 66.0617 (4). The Village may use this report along with the Virchow, Krause & Company, LLP, *Report on Impact Fees* dated October 29, 2004 and continue into the public hearing phase of the impact fee.

TABLE 4-1
CAPITAL COSTS FOR FUTURE DEVELOPMENT ONLY
 OREGON WATER UTILITY
 VILLAGE OF OREGON, WISCONSIN

Short-Term Improvements (2004 - 2007)	Budget Estimate
Distribution System Expansion	See Note 2
HLPZ Elevated Tower / Lincoln Road Water Main	\$1,101,519
Distribution System Improvements	
No. 1 - 12" West of Ash St. on Jefferson St.	\$275,445 actual completion cost
No. 10 - 12" south from Jefferson St. into new development	\$59,215 actual completion cost
No. 2 - 12" west on Netherwood from N. Burr Oak Ave.	\$367,100
No. 3 - 12" Netherwood St. from N. Burr Oak Ave. to Market St.	\$96,100
No. 13a - 12" on Janesville St. from Spring St. to Oak St.	\$145,590 actual completion cost
No. 13b - 12" on Janesville St. from Spring st. to Jefferson St.	\$32,055
No. 14 - 12" on Oak St. from Janesville St. to Park St.	\$80,900
Total	\$1,056,405
TOTAL	\$2,157,924
Intermediate-Term Improvements (2008 - 2013)	
Distribution System Expansion	See Note 2
Distribution System Improvements	
No. 16 - 12" from HLPZ tower to Foxfield Rd.	\$254,600
No. 6 - 12" on Main St. from Jefferson St. south to S. Perry Parkway	\$248,000
No. 7 - 10" on S. Perry Parkway from Main St. to Scott St.	\$18,600
No. 11 - 12" from HLPZ tower to Brynhill Dr. and Leeward Ln.	\$100,500
No. 15 - 12" on Park St. from Oak St. east to 12"	\$115,800
No. 4 - North on Market St. from Netherwood St. to present 10"-12"	\$25,100
No. 5 - 12: on Jefferson St. from Ash St. to Main St.	\$241,500
No. 17 - 12" west from Braun Rd.	\$356,200
No. 18 - 12" north from Netherwood St. to Braun Rd.	\$161,700
Total	\$1,522,000
Well 6 and Pumping Station	
Well 6	\$196,700
Pumping Station (Subtracted \$50,000 for Future Pressure Zone Pumps)	\$994,300
TOTAL	\$2,713,000
Long-Term Improvements (2014 - 2023)	
Distribution System Expansion	See Note 2
Elevated Tower in PPZ	\$874,100
Distribution System Improvements	
No. 9 - 12" south from Netherwood St. to Well 6	\$106,000
No. 20 - 10" from N. Perry Parkway northwest to Braun Rd.	\$228,400
No. 21 - 12" from N. Perry Parkway to Dunn Ave. on Netherwood St.	\$63,400
No. 22 - 12" South from Netherwood St. Through future Industrial Park	\$655,600
PRV Update No. 25	\$10,900
Total	\$1,064,300
TOTAL	\$1,938,400
Notes:	
1. Budget estimates include engineering, contingency, financing, legal, and administrative costs. 2. Estimated costs for distribution system expansion will be contingent upon the rate of development and need for water utility services in the Oregon future service area.	