

## **CHAPTER 4      Utilities and Community Facilities Element**

66.1001(2)(d) Wis. Stat.:

**Utilities and Community Facilities element.** A compilation of objectives, policies, goals, maps and programs to guide the future development of utilities and community facilities in the local governmental unit such as sanitary sewer service, storm water management, water supply, solid waste disposal, on-site wastewater treatment technologies, recycling facilities, parks, telecommunications facilities, power-generating plants and transmission lines, cemeteries, health care facilities, child care facilities and other public facilities, such as police, fire and rescue facilities, libraries, schools and other governmental facilities. The element shall describe the location, use and capacity of existing public utilities and community facilities that serve the local governmental unit, shall include an approximate timetable that forecasts the need in the local governmental unit to expand or rehabilitate existing utilities and facilities or to create new utilities and facilities and shall assess future needs for government services in the local governmental unit that are related to such utilities and facilities.

Village of Amherst residents are provided with a variety of community facilities and basic services that help define their quality of life and maintain their health and well-being. Utilities, police/fire/rescue, parks, local governmental facilities, schools, and quasi-public facilities all help make Amherst a more attractive community in which to live.

### **Section 4.1      Public Utilities Inventory**

The physical well-being of Amherst is dependent upon the adequacy of its public utilities and services. A safe and ample source of water, an adequate means of disposing of liquid and solid waste, and adequate supplies of energy are essential in maintaining the public health, economy and natural resource base of the area.

#### **A. Wastewater Treatment Facility**

In the spring of 1995 the Village of Amherst began construction of a new wastewater treatment plant and wastewater collection interceptors. The long-awaited project replaced the original facilities that were built in the 1940's. The age of the original plant, along with new regulations on sludge storage and phosphorus removal, led the Village to undertake the new construction.

The \$3.3 million project was funded through a \$1.9 million grant and a \$1.4 million loan from the Federal Rural Development Authority (formerly Farmer's Home Administration). Previously, the Village was unable to qualify for grant funding from the Wisconsin Department of Natural Resources because it had maintained compliance with clean water standards.

The new treatment facility included an influent pump station, septage receiving station, grit removal, biological wastewater treatment, aerobic sludge digestion and storage, phosphorus removal, and ultraviolet disinfection. Two new buildings housing mechanical equipment were also constructed as part of the project. The influent pump station is located on the east side of the Tomorrow River (Map 4.1), allowing the majority of the village to be served by gravity flow.

Wastewater is lifted and transported from the pump station to the wastewater treatment facility. An area control panel, located in the primary treatment building, allows the operator to change operation modes and control water levels in the lift station in a matter of seconds. Continuous operation of the lift station is assured because of the inclusion of a back-up power generator located at the wastewater treatment facility. The treated wastewater is discharged to the Tomorrow River, a class II trout stream. Solids and sludge material removed from the wastewater is treated and applied to 26 acres of agricultural land adjacent to the facility.

The current wastewater treatment plant was constructed to meet a design population capacity of 1,250, with an average daily flow of 214,000 gallons per day (GPD), average daily biological oxygen demand (BOD) of 255 pounds per day, average daily total suspended solids (TSS) of 260 pounds per day, average daily ammonia of 38 pounds per day, and average daily phosphorus of 4.5 to 9.0 pounds per day. Average monthly flows were approximately 96,000 GPD in 2003. The peak flow was recorded for May at 102,000 GPD, or slightly less than 50% of design capacity. Average monthly BOD loading in 2003 was 284 pounds. May had the highest monthly BOD loading at 425 pounds, which was 170 pounds above the designed BOD loading. There were nine months in 2003 when BOD loading exceeded the design loading.

BOD and TSS loadings in surface water discharge from the treatment plant in 2003 occurred at levels approximately 10% of the limits established by their discharge permit. The Village has sufficient sludge storage capacity (>6 months) and land disposal site access (>36 months); these are the highest categories in the State Compliance Maintenance Annual Report (CMAR) review form. The CMAR evaluates the treatment facility over nine different categories, and assigns a score for each part. The score for the Amherst facility in January 2004 was 67. Scores of 0 to 70 points place the facility in the “voluntary range”, meaning any change or update to the facility is controlled by the Village, and nothing is “required” at this time. Scores of 71-120 points fall into the Departmental Recommendation Range; scores over 120 fall into the Departmental Action range. A majority of the 2003 points (60) coming from the influent loadings category, which is directly related to the amount of outside waste that is hauled to the Amherst plant for processing, and not from wastewater from the Village. By accepting the hauled waste, the Amherst plant provides a valuable service to the surrounding area.

In fall of 2002, The Village of Amherst was honored by the Federal Environmental Protection Agency (EPA) as having one of the finest wastewater treatment plants in the United States. The Amherst treatment plant was chosen as the top facility in the small secondary category, due to initiatives taken by the Village to demonstrate environmental stewardship with the plant’s record of compliance and operation, innovation in system modifications, successful sewage receiving program and efficient sludge handling operation. The Village was also awarded the EPA Region 5 Award for Excellence in the operation and maintenance of its water pollution control facility.

Areas of potential development throughout the Village of Amherst, which had been limited by the location and capacity of the old treatment system, have been expanded by installation of the new interceptors and influent lift station. Extension of Village utilities to the Amherst Business Park can now be easily completed when development occurs. Extension of utilities for any development west of Cty Rd KK will be undertaken should it be necessary to protect the groundwater supply (Map 4.1).

The existing plant, currently operating at approximately 50% of capacity, is designed to meet the treatment needs for Amherst throughout the 20-year planning period. The plant was designed to allow it to be mirrored, or doubled, on the same site.

Map 4.1: Wastewater Treatment Plant & Sewage Collection System

## B. Sewage Collection System

Amherst's sewage collection system is a network of sewers used to collect liquid waste for subsequent treatment and disposal. As of December 31, 2003 the collection system consists of 7.314 miles of sewer, of which 6.81 miles (35,954 feet) are 8 inch sewer, 1,335 feet are 10 inch sewer, 350 feet are 12 inch sewer, and 984 feet are 15 inch sewer (Map 4.1). Approximately 3.4 miles of the system were installed prior to 1968 and consists of about 300 feet of cast iron pipe, with the remainder vitrified clay pipe. The 3.9 miles of sewer pipe installed since 1968 are made of PVC, a heavy duty plastic. The collection system requires 2 lift or pump stations and pipe depth ranges from 4.5 to 18.0 feet, with the average depth being 8.5 feet.

The sewage collection system has in the past experienced significant problems with clear water infiltration and inflow. Infiltration and inflow are clear waters that enter the collection system through surface runoff, illegal connections and defects in sewer pipe. They carry a considerable amount of sand and grit, which cause abrasive action that can damage wastewater treatment plant equipment and reduce the carrying capacity of sewer pipes, in some cases completely blocking wastewater flow. Excessive clear water infiltration is attributed to high groundwater levels in the Village and is magnified by defects in the sewage collection system.

Surface runoff is minimal. The discharge of clear and storm water into the sewage collection system has been prohibited, leaving vitrified clay pipe as the primary cause of clear water infiltration. A number of problem areas have been identified by the Director of Public Works. Repairs were made to a portion of the system in 1995 which significantly reduced infiltration. Some problems still remain on Main Street. It would be financially unfeasible to replace the entire line. The Village will continue to monitor infiltration and televise the sewer lines, if needed, to identify any other problem areas. The Village could then use this information to prioritize and address dilapidated sections of sewer pipe. With the latest portions of the system updated the infiltration has been greatly reduced and the overall status of the collection system is fair to good.

## C. Municipal Water Supply

### 1. Wells

The Village's drinking water supply is obtained from underground aquifers that are replenished by precipitation falling to the earth and moving through the soil. Groundwater flows to the Village wells from the north/northwest, although it is likely that the wells are also recharged from the Tomorrow River. A public water supply for fire protection was first installed in 1931. The water was obtained from a gravel wall well which was not sufficiently cased to provide satisfactory water for human consumption. This system served the business area and about 50% of the residential area. The Village of Amherst Water Utility currently operates three wells that supply the Village's potable water (Map 4.2).

#### a. Well #1

In 1946 a new 60 foot deep screened well with gravel pack wall (Well #1) was drilled for general use, and in 1947-48 the system was extended to serve the entire Village.

In 1981, Well #1 was modified to pump directly to the Village water tower (see section below). A 30 HP motor was installed which pumps approximately 510 gpm against the head of the tower. Well#1 was also equipped with a chlorine pump and a flow meter.

b. Well #2

The installation of Well #2 was completed in November of 1976. Well #2 is 57 feet in depth with a diameter of 16" and 12 feet of screen. It has a 25 HP Jacuzzi Pump which pumps directly to the water tower and a 60 HP LP gas stand-by generator in case of power outage. The well is equipped with a chlorine pump and tank to disinfect water supply and a flow meter to record daily flows. It pumps approximately 215 gallons per minute against the head of the tower. Well #2 is located about 100' from Well #1.

c. Well #3

At the end of 1990, a nitrate problem was discovered with the water from Well #1. The Village worked diligently to identify a new source of potable water. After evaluating several sites, a test well was constructed at the site of Well #3 (see Map 4.2 above). The test well was constructed to a depth of 140' utilizing an 8" diameter steel casing. Rock types at the test well site consist of crystalline bedrock overlain by a mantle of glacial outwash. Estimated depth to bedrock is 170'. The test well was constructed in the water bearing glacial outwash (sand and gravel aquifer) above the bedrock. An aquifer performance test was conducted to determine the ease with which water can flow through the aquifer (hydraulic conductivity) and that amount of water stored in the pores of the aquifer (storage coefficient). Based on this test, a decision was made to construct a permanent well at the test well site.

Because the DNR had issued orders to the Village to stop the use of Well #1 (see Section C(1)d. below), the Village became eligible for financial assistance from the State of Wisconsin's Clean Drinking Water Grant Program. The Village was awarded 85% of the total project cost of \$511,415, and was only obligated to pay \$70,941 of the cost. The permanent well was completed by December 1991. The pump station was constructed through the winter, with substantial completion of the facility on June 1, 1992. Well #3 has chlorine gas for disinfecting and polyphosphate for corrosion inhibition. There is also the capability of fluoride for dental health enhancement should that be desired in the future.

d. Nitrates

In 1972, the nitrate level in Well #1 was 2.6 parts per million (ppm). In 1987-88 nitrate levels in the water supply began to elevate. Well #1 was tested at 7 to 8 ppm and Well #2 tested at 4 to 5 ppm. In 1990, the levels in Well #1 rose to 9 to 10 ppm, while Well #2 stayed at about 5 ppm. On December 19, 1990, the Department of Natural Resources (DNR) issued an order to close down Well #1 when two test results showed readings of 11 ppm and 12 ppm. State and Federal regulations advise that nitrate levels in drinking water not exceed 10.00 ppm for health reasons. In May of 2003, test results for nitrates were 7.4 ppm for Well #1, and 6.7 ppm for Well #2. In the fall of 2003, Well #1 was re-instated into service by the DNR. As a part of re-instatement, daily nitrate testing is required. Well #3 is currently providing water with nitrate levels below .22 ppm. In 2004, however, the use of Well #3 was decreased due to high iron concentration. All three wells are now being used in a rotation to maintain a good blend.

## Map 4.2: Municipal Water Supply

## 2. Water Distribution System and Usage

The distribution lines and a 60,000 gallon water tower were installed in 1946-47. As of December 31, 1951 there are 15,011 feet of 6" main and 5,444 feet of 8" main. Also on that date there were 142 metered customers. There were 37 public hydrants and one public drinking fountain. The average daily pumpage was 29,000 gallons.

In December 1990 there was 19,905' of 6" main and 7,721' of 8" main along with 54 hydrants. There were 320 metered customers and 344 meters in the system. Average daily pumpage was 111,900 gallons. Some customers use a 2<sup>nd</sup> meter to record water used for lawn watering, etc., as their sewer billing is based on water usage.

In December 1997 there was 22,825' of 6" main and 10,223' of 8" main, along with 1,696 feet of 10" main. There were 71 hydrants and 356 metered customers. Average daily pumpage was 76,640 gallons. This is less than in 1990 due to the leaks that were corrected (see Section 4.1(C)(4) below).

As of December 31, 2003 there was a total of 43,552 feet of water main within the Village of Amherst and a total of 535 meters. Table 4.1 below details the breakdown of pipe size and material, while Tables 4.2 and 4.3 describe the size and type of use of meters. The Village's water distribution system is shown in Map 4.2.

**Table 4.1: Description of Existing Village of Amherst Water Mains, 2003**

Pipe Material	Main Function	Diameter in Inches	Number of Feet		
			First of Year	Added During Year	End of Year
M	D	6.00	20,365	0	20,365
P	D	6.00	2,460	0	2,460
M	D	8.00	11,229	2,270	13,464
P	D	8.00	5,022	0	5,022
P	D	10.00	2,241	0	2,241
Total Water Main within Water Utility			41,317	2,270	43,552

M = metal (non-lead); P = plastic; D = distribution

Source: Village of Amherst Water Utility PSCW Annual Report for 2003

**Table 4.2: Number of Village of Amherst Water Utility-Owned Meters, 2003**

Size of Meter (in.)	First of Year	Added During Year	Retired During Year	End of Year	Tested During Year
0.625	479	20	8	491	20
0.750	3	0	0	3	0
1.000	24	3	1	26	3
1.500	6	0	0	6	0
2.000	7	0	0	7	0
3.000	2	0	0	2	0
<b>Total</b>	<b>521</b>	<b>23</b>	<b>9</b>	<b>535</b>	<b>23</b>

Source: Village of Amherst Water Utility PSCW Annual Report for 2003

**Table 4.3: Classification of Water Meters at End of 2003, by Customer Type**

Size of Meter (in.)	Residential	Commercial	Industrial	Public Authority	Other Use	In Stock & Deduct Meters	Total
0.625	369	53	2	14	0	53	491
0.750	0	2	0	0	0	1	3
1.000	0	12	1	3	0	10	26
1.500	0	0	0	3	0	3	6
2.000	0	1	0	0	0	6	7
3.000	0	0	0	1	0	1	2
<b>Total</b>	<b>369</b>	<b>68</b>	<b>3</b>	<b>21</b>	<b>0</b>	<b>74</b>	<b>535</b>

Source: Village of Amherst Water Utility PSCW Annual Report for 2003

A breakdown of Amherst's water consumption for 2003 is shown in Tables 4.4 and 4.5. All water pumping is accomplished by electricity.

**Table 4.4 Amherst Water Consumption, 2003**

	Gallons Pumped	Daily Average (GPD)
January	2,869,000	92,548
February	2,432,000	86,857
March	2,480,000	80,000
April	2,148,000	71,600
May	2,191,000	70,677
June	2,480,000	82,667
July	2,732,000	88,129
August	2,732,000	88,129
September	2,761,000	92,033
October	2,085,000	67,258
November	1,861,000	62,033
December	1,974,000	63,677
<b>Total Pumpage</b>	<b>28,745,000</b>	<b>78,753</b>

Source: Village of Amherst Water Utility PSCW Annual Report for 2003

The highest amount of water pumped in a month in 2003 was recorded for January (Table 4.4). According to Village records, a water main ruptured on January 21<sup>st</sup>, resulting in 252,000 gallons of water being pumped, the most in any one day of the year. The next highest monthly pumping totals were for July, August and September. The least amount of water pumped in any one day was November 29<sup>th</sup> (29,000 gallons); November was also the month with the least amount of water pumped.

Table 4.5 details water consumption by type of user. Residential users continue to be the largest consumers of Village water.

**Table 4.5 Amherst Water Consumption by User Type, 2003**

Water User	Annual gallons	Daily Average (gallons)	Percent of Total Pumped
Residential	15,652,000	42,882	55%
Commercial	5,590,000	15,315	19%
Industrial	734,000	2,011	3%
Public Authority	2,478,000	6,789	9%
Pumped, not sold			
Accounted for	1,725,000	4,726	6%
Not accounted for	2,566,000	7,030	9%
<b>Total Pumped</b>	<b>28,745,000</b>	<b>78,753</b>	<b>100%</b>

Source: Village of Amherst Water Utility PSCW Annual Report for 2003

### 3. Water Tower

As previously stated, the 60,000 gallon Village water tower was constructed in 1947 (Map 4.2). The water tower's interior was last painted in 1985 with an epoxy paint system. A December 1998 inspection report from Lane Tank Company rated the tower in good condition, with only one small failing spot located by the side pressure manway. This spot was less than one square foot in size, leaving 99.9% of the interior coating intact.

The exterior of the tank was reported to have a good foundation with no settling, cracking or spawling detected. The exterior was last over-coated with an alkyd aluminum paint system in 1994. The report stated that there are currently many coats of aluminum paint on the exterior of the tower, and some of the former primers may be, and probably are, hazardous because of a lead, cadmium, or chromium content. The existing coatings are starting to get to the point where they will not support many more coats. Also the aluminum paint that is compatible with the paint currently on the tower may not be on the market due to the V.O.C. (Volatile Organic Compounds) compliance. If the paint is still on the market, possibly one more coating could be applied. If not, the tower would need to be sandblasted, tented, contained and the hazardous material disposed of properly, at a cost that may exceed the cost of a new tower. The report also mentioned the option of not doing anything with the exterior, stating that the tower would take another 20-plus years to rust through from the outside, but that this option would become aesthetically unacceptable.

The tower was inspected again in 2001, as part of the installation of a ladder climbing safety device. At that time, representatives of the Lane Tank Company estimated that the interior of the tank would need painting in 2003 or 2004, based on their discovery of some small spots that were starting to fail. They estimated that sandblasting and applying an epoxy coating would cost approximately \$18,000. Lane Tank Company also recommended spot-priming and overcoating the exterior of the tank with aluminum paint at the same time as the interior work. The ballpark estimate for this work was \$20,000.

The tower is becoming a bit under-sized for the Village as it continues to grow, but its size is also considered a positive as it refills more often, keeping the water fresh. Several new locations for a water tower have been discussed, with no exact plan in place at this point.

#### 4. Protection of the Municipal Water Supply

The water supply is continuously chlorinated with a distribution residual of .1 to .35 ppm with hypo-chloride and gas chlorine for safety purposes. There is also bimonthly bacterial testing done that checks that the water is safe from bacteria. In addition to this bimonthly testing done on the distribution system, all three of the wells are tested individually on a quarterly basis.

The Village of Amherst has implemented several policies and procedures to protect the water system. These protective measures include a cross-connection ordinance (preventing the connection of a private well to the public water system) and a well abandonment ordinance to deter private wells. An emergency chlorination policy has been implemented, along with a procedure for hydrant flushing and valve exercising to maintain the system in top operating condition. There are natural gas generators to power the pumps at Wells #2 and #3 during power outages, to insure that there is a continuous supply of water.

There is also a Wellhead Protection Ordinance prohibiting certain development within a radius of the wells within the Village boundary. The recharge area for the Village wells is shown in Map 8.4. The groundwater flow velocity in sand till, in a drift province such as Amherst is located, has been cited to be less than one foot per day. In other words, it would take a minimum of 14.5 years for groundwater to travel one mile in the Amherst area. This suggests that the recharge area closer to the wells is of greater importance from a protection standpoint, because groundwater closer to the wells will contribute contaminants faster without the opportunity for dilution.

Since Wells 1 and 2 are located in the center of Amherst, spills from Village retail and industrial uses could potentially affect municipal well water. Underground storage tank leaks and fertilizer, pesticide or chemical spills are possible near the well. A spill in the downtown area may be within the wells' cone of depression, or just upgradient to it, and could contaminate the Village's water supply in less than one year.

Other potential pollution sources in the recharge area include point sources such as the Portage County Landfill, and abandoned landfills in the Village of Amherst (just south of the wells, along the Tomorrow River) and Amherst Junction. Potential non-point pollution sources include agricultural chemicals and fertilizers, lawn fertilizers and street and parking lot runoff.

The Village had groundwater in the well recharge area tested in the early 1980's to determine if contamination was present. The testing did not detect any aldicarb, volatile organic compounds or atrazine. The Village's water supply is tested annually for other contaminants, of which all are below Environmental Protection Agency standards.

A special concern of the Village is the amount of water lost through leakage. During 1989, the water utility reported that 16.1 percent of the total water pumped, could not be accounted for. A majority of this amount was due to leakage. In past years the record keeping for the utility was not as accurate as the current practices; when pumpage totals were calculated at the end of the year and compared to the gallons sold, the difference was considered "lost".

Map 4.3: Storm Water Drainage Facilities

The current record keeping system accounts for events such as hydrant flushing or sale of large sums of water, so that they are no longer counted as lost. In 2003, water lost through leakage has been reduced to 9% of water pumped, or 2,566,000 gallons. During that year the Village also fixed three water mains, two of which were problems caused by the extremely cold winter, and the third was a smaller leak that just surfaced. Because of these repairs, it is expected that the amount of water lost will be reduced in 2004. The State of Wisconsin has set standards for public water utilities regarding leakage. If the percentage of water that cannot be accounted for exceeds 25 percent of the total amount of water pumped by the utility, the Village would be required to implement a leak detection program and take remedial action.

#### D. Storm Water Management

There are a minimal number of storm water problems within the Village of Amherst. Storm sewers in the Village are located downtown along Main and Mill Streets and along Jungers Street extending eastward to the Tomorrow River (Map 4.3 above). In other areas, the Village has incorporated open ditches and culverts to facilitate drainage. These areas should be inspected yearly to ensure proper drainage. The Village will need to monitor the natural drainage way in the western part of the Oak View Meadow Subdivision. This drainage way handles large volumes of water during spring thaw and has posed problems as this subdivision has developed. Zoning and subdivision ordinances should be updated to require more complete review of drainage plans for future developments.

#### E. Solid Waste & Recycling Facilities

The Village landfill site, located one-half mile east of the Village on Cty Rd T, was closed on October 1, 1986. Although officially closed to regulated waste, the Village landfill is currently used as a disposal site for yard waste, brush, concrete and wood. A DNR permit is required for this continued use. Since October 1986, the Village has utilized the Portage County landfill. Waste is collected weekly and hauled, at a cost of \$44.00 per ton (2004), to the County landfill. The Village currently has a contract with Wittenberg Disposal to provide this service. The Portage County landfill is scheduled to close in 2006, after which the waste will be trucked to a landfill in Marathon County. The disposal of hazardous waste, yard waste, newsprint, aluminum cans, waste oil, and car and truck batteries is not permitted in the County landfill. Recyclables are picked up bi-weekly.

#### F. Corporate Utilities

1. Natural Gas and Electrical Power is available through Alliant Energy.
2. Telephone service is provided by the Amherst Telephone Company, located at 120 Mill Street in Amherst.
3. Cable Television is provided through the Tomorrow Valley Cable Television Company, located at 120 Mill Street in Amherst.

### **Section 4.2 Community Facilities Inventory**

#### A. Fire, Rescue, Emergency Response

The Village of Amherst is part of the Amherst Fire and Safety District, located at 4585 Fairgrounds Road, Amherst. The Amherst Fire District (Map 4.4) protects approximately 6000 people living in a 90 square mile area including the Villages of Amherst, Amherst Junction,

Nelsonville, and Town of Amherst. Portions of the Towns of Lanark and Stockton contract for their fire protection service with the Amherst Fire District. The Town of New Hope utilizes Emergency Medical Technician (EMT) services from the Amherst Fire District. Amherst has 12 to 14 EMT's. Ambulance service is provided by Portage County.

The department was reorganized in 1992, combining three smaller departments. A new fire station building was constructed in 1995. As of 2004, there are 8 vehicles within a single fire station including:

- 3 engine/pumpers
  - 1<sup>st</sup> out -1250 gallon per minute pump rate with 500 gallon capacity with foam application and aerial boom with ladder
  - 2<sup>nd</sup> out – 1000 gallon per minute pump rate with 1000 gallon capacity
  - 3<sup>rd</sup> out/reserve – 1,250 gallon per minute pump rate with 500 gallon capacity
- 2 tankers having a 2,000 and 3,000 gallon capacity
- 1 rescue vehicle
- 1 utility/grass fire vehicle
- 1 EMT Response vehicle

Water for these vehicles is usually pumped from the water hydrants located in the Village of Amherst. There is an irrigation well within the Town of Amherst to provide additional water, and there are a number of dry hydrants across the area. Three irrigation wells (two in Town of Lanark, one in Town of Amherst) are available as an additional resource for fighting fires. The fire district also has an agreement with other fire districts in Portage County to utilize their water sources if needed.

## B. Police Protection

Currently, the Village does not have its own police department. The Portage County Sheriff's Department provides protective services through regular patrols and on a "call-out" basis. Portage County is divided into 3 districts for patrol purposes. The district in which Amherst is located is bounded by STH 66 to the north, the Portage County line to the east, and STH 54 to the south. During the day shift 1 officer is assigned to each district, plus an additional officer "floats" throughout the County. During the night shift, 2 officers are assigned to each district, plus 2 additional officers float throughout the County. Officers may drive through the Village any number of times during each shift to check on businesses and residences.

The Portage County Sheriff's Department provides an expanded community policing program and a school liaison program, both of which the Village would like to see continued and strengthened.

## C. Village Facilities (see Map 4.5)

### 1. The Amherst Village Hall

Village Hall is located at 161 Mill Street, along the west bank of the Tomorrow River. It houses the Village Clerk's office, a meeting room, and well pump #1. Because the pump is in close proximity to the meeting room, minor distractions result if the pump is engaged. The major limitations of the current site are lack of storage space available on-site, and that the building is not handicap accessible.

### 2. The Amherst Post Office: is located at 187 N. Main Street, Amherst.

Map 4.4: Amherst Fire District

Map 4.5: Community Facilities

### 3. The Lettie W. Jensen Public Library

The library is located at 278 North Main Street and was constructed in 1988 with funds donated to the Village. The Library is run by an appointed Village library board. The library contains an estimated 18,000 volumes and is open hours: Monday 9 -12; 2-5, Tuesday 2-5, Wednesday 2-8, Thursday 2-5, and Saturday 9-1. The Lettie W. Jensen Library is a member of the South Central Library System. The Library offers internet access, various computer programs, interlibrary loan, large-print books, audio books, videos, magazines, a local history room, a copy machine, Story time kits, a book discussion group, and a weekly preschool story hour.

### 4. Public Parking

There are a number of parking facilities available in the central business district (CBD). The Village provides for horse parking needs in an area located across from the Village Hall, behind the Village garage. There is also a vehicle parking area adjacent to Nelson Park, behind the Village Hall, which is hard surfaced and frequently used. In addition, hard surface parking is available to downtown shoppers in the Peace Lutheran Church lot. This parking facility was constructed through mutual cooperation of the Village Board and Peace Lutheran Church. The International Bank maintains a hard surface parking facility on Wilson Street, as does the Jungers Holly Funeral Home, located on Main Street, adjacent to Nelson Park. The Village of Amherst will ensure adequate availability of parking through review of proposed development projects.

## D. Schools

### 1. Tomorrow River School District

The Tomorrow River School District encompasses approximately 198 square miles of Portage County, and serves the entire Villages of Amherst, Nelsonville, and Amherst Junction, and portions of the Towns of Amherst, Buena Vista, Lanark, New Hope and Stockton. District facilities include an elementary, middle and high school. The entire student population (Pre-Kindergarten through grade 12) is educated on one site, within a 160,693 sq. ft. interconnected structure in Amherst, Wisconsin. The District serves an estimated 2001 population of 4,948 and employs 128 people. Enrollment for the 2003-04 school year was 868 students. The school is governed by a 5-member school board elected to three-year terms on a rotating basis.

The original high school building was constructed in 1895 on the Mill Pond, across the street from today's facilities. The high school moved to a new 11,000 square foot building on the west side of Main Street in 1922. Additional building projects since 1922 include: a 7,500 square foot shop building added during the 1940's; a new 14,300 square foot gym and 2,650 square foot band building in 1953; a 12,075 square foot elementary school in 1960; and a 13,440 square foot elementary school addition in 1970; a new 7,200 square foot shop building in 1976; a 24,000 square foot high school addition in 1978; and a 16,000 square foot elementary school addition in 1988. The area between the high school and elementary buildings has gradually been utilized for expansion, so that both buildings are now under one roof. A total of 858 students were enrolled in 2004, including 404 elementary students (K-5), 191 middle school students (6-8) and 263 high school students (9-12).

School facilities are a major benefit to Village residents. The school playground and equipment and athletic fields provide a wide variety of recreational activities not available elsewhere in Amherst. The school's organized athletic programs play an important role in the community, as a major source of recreation and as a focal point of community pride and identity. The school's teams are called the "Falcons".

## 2. Mid-State Technical College

Mid-State Technical College (MSTC) is one of 16 publicly supported colleges in the Wisconsin Technical College System. Approximately 16,000 full- and part-time students enroll annually. MSTC offers technical training in nearly 50 careers by granting one- and two-year technical diplomas and two-year associate degrees in four areas: business, health, service technologies, and technical & industrial. In addition, MSTC also awards certificates for the successful completion of a single course or a combination of courses. The Mid-State Technical College District includes full-service campuses in Marshfield, Stevens Point, and Wisconsin Rapids; a center in Adams; and several outreach sites. The Village of Almond is considered one of the outreach sites of the Stevens Point Campus. Adult and Continuing Education programs ranging from CPR to agriculture to computers are offered at the Almond High School each year.

## 3. University of Wisconsin-Stevens Point

Since 1894 when Stevens Point Normal School opened its doors to 300 students, the University of Wisconsin–Stevens Point has grown to become a major comprehensive university, with about 8,700 students enrolled. Its academic programs offer 100 choices within 51 majors and 78 minors plus 16 graduate programs. UWSP is home to four colleges (fine arts and communication, letters and science, natural resources and professional studies), and is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. In addition, the UWSP has initiated a variety of innovative, regionally, or nationally recognized programs, including the National Wellness Institute, the Center for the Small City, the Central Wisconsin Economic Research Bureau, Becoming an Outdoors Woman, Environmental Education, the American Suzuki Talent Education Center, and the UWSP International Programs.

The 400-acre main campus includes seven major buildings in addition to Old Main, UWSP's administrative building, the University Center and 13 residence halls housing approximately 3,000 students. North campus includes Schmeckle Reserve, a 225-acre nature area with a 24-acre lake, nature center and trails that are part of Portage County's 30+ mile Green Circle Trail.

The Stevens Point campus is part of the University of Wisconsin System that includes 13 four-year campuses, 13 two-year centers and the University of Wisconsin-Extension. The University of Wisconsin system represents one of the finest educational institutions in the world. Access to information and research on virtually any topic is available.

In 2004, the University of Wisconsin-Stevens Point placed among the top public universities in the Midwest. The publication U.S. News & World Report ranked UWSP number seven in the top tier of Midwestern public master's degree-granting institutions. This was the fifth consecutive year that the university placed in the top ten. U.S. News and World Report uses several criteria in rating the campuses including academic reputation, retention, faculty, students, financial resources and alumni giving.

## E. Quasi-Public Facilities (see Map 4.5)

### 1. The Jensen Community Center

The Lettie W. Jensen Community center is located on Main Street, just north of the Tomorrow River Schools. Constructed in 1988 with funds donated as a memorial to Lettie W. Jensen, a former resident of Amherst, and is privately owned and operated by the Amherst Area Foundation. Major facilities include a large community/meeting room, heat and serve kitchen, recreation room that is home to the Boys and Girls Club, number of meeting rooms that are rented for multi-purpose activities and a recently completed 250 seat theater featuring state-of-the-art computer stage lighting and curtains available for theatrical/music performances, seminars and many other public gatherings. The Center is home to elderly meal site on Monday, Wednesday and Fridays; Yoga, Tai Chi, Weight Watchers, and other events are also frequently offered. The Jensen Center is a popular location for wedding receptions, anniversary parties, fund raisers, and baby and bridal showers. In March of 2003 the Jensen Center began publishing “Our Community Spirit” a community newspaper for the Villages of Amherst, Amherst Junction, Nelsonville and Towns of Amherst, Lanark, Stockton, and New Hope. The community newspaper has a circulation of over 2,500 residents. *“Where People Meet Along the Tomorrow River”*

2. Other quasi-public facilities include: Greenwood Cemetery on Wilson Street, Peace Lutheran Church on South Main Street, St. James Catholic Church on South Main Street, St. Olaf Episcopal Church on North Main Street, St. Paul Lutheran Church on Grant Street, United Methodist Church on Laconia Street, and Amherst Bible Church on Wilson Street.

The Village of Amherst is also located near five cemeteries located in the Amherst area: Amherst Cemetery, St. Mary – Mount Carmel Cemetery, Lower Amherst Cemetery, Bickel Cemetery on Hwy B, and Oak Grove Cemetery.

## F. Health Care Facilities

Amherst Family Medical Center, located at 272 Christy Street, provides complete primary care services for acute and chronic conditions. Patients range from infants to older adults, including newborns, pediatric, adult and geriatric care, and women’s health. The Village is also home to chiropractor and dentist offices.

## G. Child Care Facilities

There are 2 different categories of state licensed child care:

- Licensed **Family** Child Care Centers provide care for up to 8 children. This care is usually in the provider’s home, but it is not required to be located in a residence.
- Licensed **Group** Child Care Centers provide care for 9 or more children. These centers are usually located somewhere other than a residence and may be small or large in size.

The following is a listing of state-licensed child care facilities in the Village of Amherst:

- Amherst’s Own Child Care Inc. (235 Lincoln St.)
- Great Escape – Amherst School (357 N. Main St.)
- St. Paul’s Lutheran Preschool (203 Grant St.)
- Young Wonders Lutheran Preschool (293 S. Main St.)
- Sarah Torres – (202 High St.)

For a complete list, contact the Regional Division of Children and Family Services at: 2811 8th St. - Ste. 70, Wisconsin Rapids, WI 54494, Phone: (715) 422-5080 Fax: (715) 422-5091.

## **Section 4.3 Parks and Recreation Inventory**

There are approximately 10.8 acres of land available for recreation in the Village of Amherst. Village recreational facilities are shown below in Map 4.6. In addition, the Portage County Fairgrounds are located on the west edge of the Village, and Cate, Lake Emily and Sunset are County parks located within eight miles of the Village.

### **A. Park Facilities and Open Space**

#### **1. Tomorrow River School District Grounds**

The Tomorrow River School District grounds are located on the north end of the Village and encompass 43 acres, of which approximately 20 acres are available to Village residents for outdoor recreational activities. Major activities include baseball, football, and basketball. Facilities include the following:

- 3 swing sets
- 1 baseball diamond
- 1 softball diamond
- 1 football field
- 10 basketball courts
- 5 picnic tables
- all-weather running track
- general playground equipment

#### **2. Portage County Fairgrounds**

The 32 acre Portage County fairgrounds are located just outside of the Village on the west side of Cty Rd KK. While not a Village facility, the fairgrounds provide open space for the residents of Amherst. Facilities on the site include a one-mile track, viewing stands, stables and exhibition buildings.

#### **3. Nelson Park**

Nelson Park lies along the west bank of the Tomorrow River in the center of the Village. It is located behind the CBD, and access is somewhat limited and inconvenient. The park is crowded in relation to its location and has little expansion and buffering space. The major activities of the two acre park are picnicking and softball. Nelson Park also serves as an assembly point for snowmobilers that come to the Village. Facilities include a lighted, fenced softball diamond, nine picnic tables, one enclosed pavilion, park benches along the Tomorrow River, one swing set, and additional playground equipment.

#### **4. Water Tower Park**

Water Tower Park, located on the corner of Lincoln Street and Clinton's Court, is 1.3 acres in size. The site is currently used for passive recreation and picnicking. Residential expansion around the park suggests there may be a need to add facilities; however, poison ivy exists in the wooded portion of the park and should be eradicated before further development is encouraged.

#### **5. Boat Landing**

There is a public boat landing on the eastern shore of the Mill Pond off Pond Street. Facilities include a boat landing and two picnic tables. The circular approach to the boat landing is constructed of crushed stone. The Village will need to monitor the condition and performance of the approach surface.

Map 4.6: Amherst Recreation Facilities

6. Mill Street Public Access

During the spring of 1985 the Village obtained the services of the Wisconsin Conservation Corps to help create an attractive public access area on the west bank of the Tomorrow River, just below the dam. Trees and brush were removed, riprap was installed to stabilize the west bank of the Tomorrow River, and a picnic table was placed on the site. Today, many people take advantage of the aesthetic open space provided by the Mill Street public access, which is owned by the Village of Amherst.

7. Hughes View

Undeveloped scenic overlook of the Mill Pond on Pond Street.

8. Lettie Jensen Library

Green space used as “public lawn” by Village residents, located on Main Street, south of the high school.

9. Prairie View Street

21 acres of land adjacent to the Wastewater Treatment Facility that have been identified as possible future park land.

10. Well #3 Grounds

This Village municipal water well site, located on Pond Street, contains 5 acres of land that should remain as open space.

11. Tree Nursery

The Village tree nursery, with flower garden, is located near the wastewater treatment facility. The nursery is managed by the Tree Board and provides stock for street trees and other municipal landscaping uses. The Village of Amherst has been designated as a “Tree City” as part of the Tree City USA program since 1997.

12. County Parks

There are three County parks within close proximity of the Village of Amherst. They include Lake Emily, Sunset and Cate Parks. Lake Emily attracts users from throughout Portage County and is located along the western edge of Amherst Junction. This 143 acre, Countywide Park abuts 96 acre Lake Emily. Major activities include swimming, picnicking, fishing, camping and motor boating. Other features of the park include historical Indian mounds. Sunset Park is heavily used by Portage County residents and is located just east of Cty Rd A, north of STH 161. This 18-acre local park is best known for its high quality swimming lake. Other activities include picnicking and fishing. Cate Park is a locally used facility and is located just north of the Village, along Cty Rd A. This park is located on the Amherst Mill Pond and is nine acres in size. Major activities include fishing and picnicking, and it is a trail head for the Tomorrow River State Trail.

13. Tomorrow River Trail

The Tomorrow River State Trail currently is a 14 mile trail developed along an abandoned railroad grade. It is located in Central Wisconsin starting in the Village of Plover and ending at Scandinavia in Waupaca County.

The trail consists of a surface of crushed limestone which is packed smooth. It is open to bicyclists, hikers, joggers, and horseback riders in the spring, summer, and fall. During the winter months the trail is open to snowmobilers, skiers, and dog sledgers. The horse trail is a separate 9 mile trail along the limestone trail from Plover to Amherst Junction.

Waupaca County will be developing their 14 mile section in the next few years.

#### 14. Ice Age Trail

The Ice Age Bicycle Trail runs north and south along the glaciated areas of eastern portage County for a total of 48 miles. The trail was designed specifically for bicyclists as it runs along portions of major roadways. With the reconstruction of US Highway 10, the Ice Age Bike Trail may connect with the Tomorrow River State Trail to provide for a safer crossing.

The proposed Ice Age Walking Trail winds in and out of the County along the eastern border between Portage County and Waupaca County. Portions of the Ice Age Trail are complete; however, easements across private land are still needed for much of the trail. When completed, the Ice Age trail will extend 1,000 miles among the glacial features throughout Wisconsin.

#### 15. Standing Rocks Park and Trail

Standing Rocks Park is located approximately seven miles east of the Plover/Stevens Point area. The 524 acre park is open year round for a variety of outdoor activities. Including: cross-country skiing, Approximately 10 miles of trails for hiking and mountain biking, 18 hole disc golf course, 1 mile cross country/dog exercise trail, downhill skiing and a 26 acre field target archery course.

### B. Forest Land and Surface Water

Surface water features and natural forest land are important recreational and scenic resources for the Village of Amherst. Surface waters include the Mill Pond and Tomorrow River, while natural forest land is located near the southwest and northeast edges of the Village.

#### 1. Mill Pond

The Mill Pond is a 48 acre, shallow, hard water impoundment on the Tomorrow River. The basic bottom material is sand covered with silt. Many stumps and snags protrude from the water. The Mill Pond, along with the Tomorrow River, was treated with fish toxicants in 1971 to remove rough fish. Preferred species were then restocked. Currently, the Pond provides good fishing for warm water species, and occasionally trout from the Tomorrow River. Wildlife present includes muskrats, eagles, hawks, shore birds, ducks, geese and a few deer.

A Village-owned stop log dam exists at the southern end of the Mill Pond. During 1987, the Village and Tomorrow Valley Cooperative made structural repairs to the dam. In 1996, the Village bought the dam and entered into an agreement to lease the dam to Roy Kleisch of Phlox Hydro for hydroelectric generation purposes. 22% per year of the Phlox Hydro gross income from the dam is paid to the Village, which results in about \$1200 per year. Since the dam began being used to generate power, the water level of Mill Pond has not fluctuated, thereby maintaining the stability of ecosystems and environmental quality.

Major detractors from the Mill Pond include algal blooms, aquatic weed growth and siltation. Algal blooms and aquatic weed growth result from the shallow depth of the Mill Pond (the pond averages five feet deep in the river channel, two to three feet deep outside the channel) and nutrient loading from non-point pollution sources. Siltation is a natural result of stream bank erosion that carries silt into the Mill Pond and erosion along the shores. There is currently a Portage County lakes project underway that may provide more detailed information regarding the condition of the Mill Pond.

## 2. Tomorrow River

The Tomorrow River originates as an intermittent trickle from the marshes south of Twin Lakes in the Town of Sharon to become one of the most scenic and productive streams in Portage County. In Amherst, the River flows into the Mill Pond and returns to its natural state below the dam. The bottom consists of sand, silt, gravel and boulders, and ranges from 30 to 50 feet wide. Siltation and fluctuating water temperature are the major problems of the Tomorrow River. The major uses of the river in the Amherst area include canoeing and trout fishing. Use of the River is heavy at times.

## 3. Natural Forest Land

Two areas of forest cover exist in Amherst. One is located in the southwest corner of the Village and extends into the Town of Amherst. Although this area remains largely undeveloped at this time, development pressures are expected. Most of the surrounding area is used for intensive agriculture. The other area is located in the northeast part of the Village. This rolling, wooded area extends well north of the Village and has experienced low-density development just south of the Tomorrow River State Trail.

### **Section 4.4 Utilities and Community Facilities Conclusions**

- The existing wastewater treatment plant, currently operating at approximately 50% of capacity, is designed to meet the treatment needs for Amherst throughout the 20-year planning period. The plant was designed to allow it to be mirrored/doubled on the same site.
- The Village will continue to monitor infiltration and televise the sewer lines, if needed, to identify any other problem areas. The Village could then use this information to prioritize and address dilapidated sections of sewer pipe. With the latest portions of the system updated the infiltration has been greatly reduced and the overall status of the collection system is fair to good.
- Daily nitrate testing of wells is required. All wells are performing in compliance with State nitrate standards ( $\leq 10$  ppm); Well #1,2, and 3 are currently providing water with nitrate levels of 7.4, 6.7 and 0.22 ppm respectively. In 2004, however, the use of Well #3 was decreased due to high iron concentration. All three wells are now being used in a rotation to maintain a good blend.
- The Lane Tank Company has estimated that the interior of the tank would need painting in 2003 or 2004, based on their discovery of some small spots that were starting to fail; the exterior of the tank could also use spot-priming and over-coating with aluminum paint at the same time as the interior work. The tower is becoming a bit under-sized for the Village as it continues to grow, but its size is also considered a positive as it refills more often, keeping the water fresh. Several new locations for a water tower have been discussed, with no exact plan in place at this point.

- The Village has an effective program in place to reduce leakage/loss in the water system.
- Storm water management within the Village is considered to be adequate. However, zoning and subdivision ordinances should be updated to require more complete review of drainage plans for future developments.
- Solid waste collection and recycling within the Village are considered to be adequate.
- Corporate Utilities with the Village are considered to be adequate.
- Police, fire and emergency rescue services currently available within the Village are considered adequate.
- Village Facilities, educational opportunities, and quasi-public facilities offered within the Village are considered adequate. The school district has purchased land immediately south of the present property in anticipation of additional need. If additional land is needed, it should be contiguous to existing school district property.
- Park and recreation facilities and plans should be included in the Portage County Outdoor Recreation Plan to ensure that the Village is eligible for State and Federal funding.
- Projects recommended as part of 2004 park planning work completed by UW-Madison student should be considered for implementation.
- The area located at the NW corner of the intersection of Washington and Dicallen Streets is a logical and desirable location for future park consideration. The land is currently identified as “Single Family Residential” on Village of Amherst Future Land Use Map 8.2.

#### **Section 4.5 Utilities/Community Facilities Goals, Objectives and Policies**

##### **A. Public Utilities and Services Goals, Objectives, Policies**

No single element of community development will have a greater impact on future growth in Amherst than the availability of public utilities (water, gas, electricity, telephone, cable, sewage treatment and refuse disposal facilities), all of which are necessary for the maintenance of a healthful environment. Properly designed public utility systems can provide maximum protection of community health and guide desirable future growth on a basis of a fair and equitable distribution of benefits and costs.

1. Goal: To provide public utilities and services in a manner that will promote efficient and orderly growth and development.
2. Objectives
  - a. Provide sanitary sewer, water and other necessary public utilities to existing and planned future development.
  - b. Encourage the provision of public utilities in areas that can be most efficiently and economically served.
  - c. Promote the extension of public utilities only in areas environmentally suitable for urban development.
  - d. Promote the fair and equitable distribution of benefits and costs for future public utility extensions.

### 3. Policies

- a. Significant natural storm drainageways should be protected from development to allow natural drainage and thereby avoid costly man-made drainage devices.
- b. Development at urban densities should be permitted only in areas that can be efficiently and economically served by public utility systems.
- c. A capital improvements program should be updated and reviewed on a regular basis to complement land use strategies of the Comprehensive Plan.
- d. Land developers should be responsible for the cost of providing facilities and services in order to promote the fair and equitable distribution of costs and benefits.
- e. Maintain and protect the quality of the Village water supply.
- f. Work with adjoining municipalities in planning for future growth and development.

### C. Community Facilities Goals, Objectives, Policies

Government services, police and fire protection, education and health care represent a few of the facilities and services necessary for the full development of the community, for the fulfillment of individual potentials, and for the safeguarding of human rights and personal property. The rate of Amherst's growth should be managed to correspond to the community's ability to provide essential facilities and services.

#### 1. Goal

To maintain and provide community facilities and services that will make Amherst a more attractive community in which to live and work.

#### 2. Objectives

- a. Provide adequate police and fire protection to all areas of the community.
- b. Promote health and medical facilities and social services to meet the needs of all residents.
- c. Provide a full range of governmental services to the citizens of Amherst.
- d. Encourage the provision of a wide variety of social, cultural and educational activities for the benefit and enjoyment of all residents.
- e. To provide adequate ambulance and emergency medical services to all areas of the Community.

#### 3. Policies

- a. The Village of Amherst should continue to provide fire protection services that will attain the highest levels of efficiency in providing for the residents safety and welfare.
- b. An effective capital improvements program should be implemented to insure long range financial planning for needed public facilities.
- c. Develop a strategy for soliciting resident feedback on services provided within the Village.

## D. Recreation and Open Space Goals, Objectives, Policies

Open space is land set aside for uses other than buildings or roads, such as park and recreation sites, areas surrounding lakes, rivers and streams and other undeveloped land. Open space areas protect diminishing natural resources while providing areas for conservation, recreation and production.

A growing regional population, increased mobility, more leisure time and a growing interest in outdoor recreation can be expected to place greater demands on the recreational facilities of the Amherst area. The challenge to Amherst will be to provide open space and recreation facilities adequate to serve the needs of its growing population.

### 1. Goal

To ensure that adequate open space and recreation facilities are provided for and made accessible to all the residents of Amherst, with emphasis on preserving unique historic and natural features.

### 2. Objectives

- a. Provide a full range of recreational facilities to serve Amherst residents on a year-round basis.
- b. Provide park and recreation facilities to serve all existing and future residential areas.
- c. Encourage the multi-use of park and school facilities.
- d. Preserve structures and sites that reflect the historical and natural heritage of the area.
- e. It is essential to maintain and preserve the dam on the Mill Pond to maintain the historical significance, recreational opportunities, energy production, and aesthetic value to the Village of Amherst.

### 3. Policies

- a. A variety of outdoor recreational activities should be provided, reflecting the effective use of Amherst's natural resources.
- b. Require new residential neighborhood development to put in parks or dedicate money to the park fund to developed suitable and accessible park and recreation facilities.
- c. The Village should encourage the cooperative development of open space and recreation facilities such as school/park sites.
- d. Efforts should be made to increase public accessibility to the Mill Pond and its shoreline.
- e. Park and recreation facilities and plans should be included in the Portage County Outdoor Recreation Plan to ensure that the Village is eligible for State and Federal funding.