

City of Gem Lake Comprehensive Plan

Gem Lake, Minnesota

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1.0 City of Gem Lake Comprehensive Plan Summary

This comprehensive plan covers the following:

- Chapter 2, “*Use of the Plan*,” outlines the purpose of this document, which is intended to guide long-term growth. It defines the roles of the Planning Commission, City Council, and citizens of Gem Lake. It also covers compliance with and amendments to the plan.
- Chapter 3, “*Community Development Trends and Determinants*,” provides background information on the city’s past and present conditions. Elements covered are geographical setting, natural features, population growth and characteristics, employment, economic base, region-serving facilities and land development. The purpose of the chapter is to determine the current status of Gem Lake, and where the City may be headed. The chapter identifies possible resources that may be available and those that should be preserved.
- Chapter 4, “*Plan Assumptions, Goals, and Issues*,” covers the assumptions that the plan is based on, the goals that have been established and the principal issues that must be faced.

The goals relate to a “vision” of Gem Lake’s future. They stress the preservation of the “small town” character and natural environment of the City.

- Chapter 5, “*Land Use Goals and Policies*,” divides the city into planning areas, describes each area, and identifies specific land use policies for each.
- Chapter 6, “*Transportation Plan*,” describes existing roadways, as well as transportation issues that face Gem Lake residents. Policies to guide the future development and maintenance of the transportation system are covered.
- Chapter 7, “*Sanitary Sewer Plan*,” describes the City’s overall approach to sanitary sewer services, including goals and policies. The current sanitary sewer and possible future extension of services are summarized here. The ordinances which regulate individual sewage treatment systems (Ordinance 46 and 61), and the operation of the municipal sanitary sewer system (Ordinance 64) are also covered.
- Chapter 8, “*Water Supply Plan*,” examines City options regarding its water supply now and in the future. The need for conservation and emergency plan procedures are covered.
- Chapter 9, “*Housing Plan*,” describes the current housing situation within the City. Census data is summarized. This chapter also includes a list of goals and policies to guide the future housing mix (quantity, quality, density, and type).
- Chapter 10, “*Local Water Management Plan*,” identifies goals and policies that relate to the storm water management system.
- Chapter 11, “*Community Facilities and Service Plan*” covers the current status of various community facilities and service arrangements. Police and fire protection, road maintenance, professional assistance, municipal building, public schools, health facilities, and outdoor recreational facilities are dealt with.
- Chapter 12, “*Parks and Open Space Plan*” outlines current parks and open spaces, as well as regional facilities serving Gem Lake.
- Chapter 13, “*Plan Implementation*,” covers the official controls that are currently in place, as well as developing a Capital Improvement Plan.



2.0 Use of the Plan

Purpose of Preparing the Plan

The Gem Lake Comprehensive Plan has been prepared with the primary purpose of guiding the long-term physical development of the City. This includes investments in both privately and publicly owned resources. The City Planning Commission and City Council have both recognized that investments in physical facilities within Gem Lake are usually long-term fixed assets that establish the development character of the City for many years. Accordingly, this document has been prepared to firmly establish the manner in which citizens and their elected and appointed representatives wish the City of Gem Lake to develop.

This plan document is the fourth Comprehensive Plan prepared for the City. The first plan was prepared in 1962, but was not officially adopted by the municipal government. A second plan was prepared in 1978, and revised in 1982 to meet Metropolitan Council (hereafter referred to as the Met Council) approval, and the third plan was completed in 1997.

This plan draws freely upon the proposals of the 1997 plan, but incorporates more recent development trends within Gem Lake and in the immediate vicinity of the City. It also introduces a new mixed use planning area to the City. New goals and policies of the City are also established. This plan supersedes all of the contents of the 1997 plan document.

The Comprehensive Plan represents the collective position of the City Planning Commission and the City Council at the time of its adoption. While consultant assistance was sought in the preparation of this plan, the actual recommendations and policy statements represent solely those of the City Council, the Planning Commission and, to the maximum extent possible, the citizens of Gem Lake.

While the plan is intended primarily as a policy document with the main objective of guiding the orderly physical development of the City, the plan should not be considered a detailed program for the implementation of City policies nor should it be considered a regulatory device for accomplishing this end. Rather, it is expected that all plan procedures and regulatory devices legally available to the City will be used in accordance with the provisions of the plan. The general time frame of the plan is approximately 15 to 20 years, at which time it is anticipated that most, if not all, land holdings within Gem Lake will be committed to some form of urban development.

Use of Plan by the City Planning Commission

The Planning Commission of Gem Lake is a three-member body appointed by the City Council of Gem Lake. Members of the Commission serve at the pleasure of the City Council. They may be reappointed.

Specifically, with regard to the Comprehensive Plan, the Planning Commission has the following major responsibilities to:

- Periodically review (not less than biannually) and make suggested additions and amendments to the Comprehensive Plan



- Assure that all provisions of the City’s development control ordinances (or proposed amendments or additions to these ordinances) are in accordance with the principles of the plan
- Review proposed public capital investments of the City of Gem Lake to determine their consistency with the Comprehensive Plan
- Review proposed private capital investments within Gem Lake to assure that they are in accordance with the principles and proposals of the plan

While the Planning Commission’s responsibilities are primarily advisory — the City Council has prime authority in carrying out the plan’s features — the Planning Commission nevertheless is considered to be the City’s primary body in terms of making explicit interpretations of the plan’s stated proposals.

Use of the Plan by the City Council

The City Council is a five-member body directly elected by the citizens of Gem Lake. Council members are elected to four year staggered terms. The Mayor is also elected to a four-year term. As the primary policy making body of the City of Gem Lake, the Council has the following principal responsibilities in relation to the Comprehensive Plan to:

- Help ensure, to the maximum extent possible, that the policies contained within the Comprehensive Plan document represent the viewpoint of the citizens of the community
- Attempt to make incremental policy decisions in normal council deliberations that are consistent with the plan’s provisions
- Make public capital and related expenditures consistent with the principles of the plan
- Exercise the ultimate review and adoption of all original plan provisions and amendments to the plan forwarded to the Council by the Planning Commission.

Relationship of Other Municipal Bodies and Citizens to the Plan

Beyond guiding the actions of the Planning Commission and the City Council, the plan is designed to be an educational device. It covers the unique assets, liabilities, and key development issues facing the City in the coming years. Citizens interested in interpretations of the provisions of the Comprehensive Plan, or revisions to it, are encouraged to meet with the Planning Commission at its regularly scheduled sessions.

Compliance with the Plan

The Comprehensive Plan for the City of Gem Lake is designed to be more than a mere document spelling out general City policies. It is intended as a decision-making aid for guiding the expenditure of public capital funds and establishing the underlying rationale for developing codes and ordinances, which more specifically control private development within the City. The Comprehensive Plan is the guiding document of zoning.

Minnesota State Statute 462.356 (Subdivision 2) further spells out required compliance with the plan where public capital investments are involved:



“After a Comprehensive Municipal Plan or Section thereof has been recommended by the Planning Agency (the Gem Lake Planning Commission) and a copy filed with the governing body (the Gem Lake City Council), no publicly owned interest in real property within the municipality shall be acquired or disposed of, nor shall any capital improvement be authorized by the municipality or special district or agency thereof or any other political subdivision having jurisdiction within the municipality until after the Planning Agency (City Planning Commission) has reviewed the proposed acquisition, disposal, or capital improvements and reported in writing to the governing body (City Council) or other special district or agency or political subdivision concerned, its findings as to compliance of the proposed acquisition, disposal or improvement with the Comprehensive Municipal Plan. Failure of the Planning Agency to report on the proposal within 45 days after such a reference, or such other period as may be designated by the governing body (City Council), shall be deemed to have satisfied the requirements of this subdivision. The governing body (City Council) may, by resolution adopted by two-thirds vote, dispense with the requirements of this subdivision when in its judgment it finds that the proposed acquisition or disposal of real property or capital improvement has no relationship to the Comprehensive Municipal Plan.”

Amendments to the Plan

The Comprehensive Plan for the City of Gem Lake is designed to be amended as the City grows and changes. The City Council provides authority to the Planning Commission to conduct an annual review. Any amendments to the Comprehensive Plan beyond an editorial level will be executed only after a public hearing. This hearing must be duly advertised in the officially designated newspaper of the municipality at least ten days prior to the hearing. Any amendments to the plan can be accomplished by a 2/3 majority vote (of the members of the City Council). Amendments must be formally submitted to the Met Council for review and will be placed on file with the Council as well as with all governmental units with boundaries contiguous to the City of Gem Lake.

3.0 Community Development: Trends and Detriments

The City of Gem Lake has many unique features that should be considered when developing a comprehensive plan. Physical development within the City, its natural resources, people, economy, and governmental plan must be placed in context with the larger metropolitan area. The communities in the immediate vicinity should also be given special attention. The following subject areas impact the City's plan:

Creation of Gem Lake

The City of Gem Lake was created through a referendum conducted in 1959. The City was one of several municipal jurisdictions, which was incorporated during the 1950s, in response to a rapid increase in urbanization pressures. In addition to the City of Gem Lake, the municipalities of Little Canada, Maplewood, North Oaks, Shoreview, and Vadnais Heights, all within a five mile radius, were incorporated during that time frame.

Geographical Setting

The City of Gem Lake encompasses a land area of approximately 725 acres in the north central portion of Ramsey County. The City is located approximately seven miles north of the central business district of St. Paul, and approximately 11 miles northeast of the central business district of Minneapolis. Gem Lake is bounded on the north by White Bear Township. The City of White Bear Lake generally bounds the City on the east. Vadnais Heights bounds the City partially on the east, entirely on the south and west, and partially on the north. The northern and eastern boundaries of the City are well defined by the rights-of-way of the Burlington Northern Santa Fe Railroad. Most of the southern boundary of the City is also County Road E. The western border of the City is also Labore Road. In proximity to the City's western border is I-35E. U.S. Highway 61 cuts through the southeastern portion of the City.

Natural Features of Gem Lake

The natural environment of Gem Lake is unquestionably of a very high quality, the preservation or enhancement of which should be considered as the City more fully develops.

Topography

The topography of the community is generally rolling, exhibiting glacial morainic surface features. Elevations vary approximately 90 feet (from 920 feet to 1,010 feet above sea level). The greatest elevation variations are in the west central and northwestern portions of the City, where there are several areas of higher elevations. Virtually, all steeper slopes over 10 percent grade are also in this portion of the City. The northeast and southern portions of the City range from gently rolling to flat.

Surface Water and Drainage

Most of the City of Gem Lake lies on a low plateau more than 950 feet above sea level. This plateau drains north, west, and south. Since Gem Lake is in a relatively high elevation with respect to surrounding lands, no permanent streams exist within its boundaries. However, as is typical of glacial landscapes, much of the municipality is imperfectly drained. Much of the surface water currently drains into low lying



depressions with no surface outlets. The largest of these depressions is the water body called Gem Lake which covers approximately 38 acres including its attendant wetlands. Much of the central portion of the City drains into this water body. The second largest area of standing water is a pond covering about six acres in the northeastern portion of the City. Most of the lands north of the Gem Lake Drainage Area and south of Goose Lake Road drain into this surface feature. There are many other smaller pockets of intermittent and permanent surface water storage areas scattered throughout the municipality.

Soils

Most surface soils within Gem Lake are glacial tills. Consequently, the character of soils can vary significantly in a relatively small area. Gravel deposits displaying coarse soils are located in knobs in the northwestern portion of the City. In contrast, fine sediments are located in the Gem Lake and associated wetland area not far away. Overall, the soils might be characterized as medium to fine in all but the knob areas, and in the northeastern area of the City where coarser soils predominate.

Vegetation

Much of the City is significantly wooded, especially in the central portion around Gem Lake. There are also extensive stands of trees in the northwestern portion of the City along Goose Lake Road.

Population Growth of Gem Lake and Vicinity

Gem Lake is located in the northeast portion of the Minneapolis-St. Paul metropolitan area, which has experienced very rapid urbanization. This area reached the population “take-off” stage during the 1950s, accelerated during the 1960s and has since stabilized.

The populations of the cities of Gem Lake and White Bear Lake have witnessed a slight decrease in population from 1990 to 2000; while the City of Vadnais Heights and White Bear Township have increased substantially in the same time period (refer to Table 3.0).

Table 3.0 - Population Trends and Projections for Gem Lake and Contiguous Governmental Units

Govt. Unit	1990 pop.	2000 pop.	% Change			% Change 2000-2030	
			1990-2000	2010 est.	2020 est.		2030 est.
Gem Lake	439	419	-4.7%	490	630	770	84%
Vadnais Heights	11,041	13,069	18%	13,800	14,300	16,800	22%
White Bear Lake	24,642	24,325	-1.3%	27,200	27,850	27,950	15%
White Bear Twnshp	9,424	11,293	20%	13,100	13,500	13,500	20%

Current and future population trends as estimated by the Met Council indicate that the populations of the Cities of Gem Lake and White Bear Lake will grow from the



year 2000 to 2030. While Gem Lake’s percentage of growth is the most significant when viewed against its neighbors, the actual number of people added is low in comparison.

To date, low density residential areas have been prevalent in the City. In addition, much of the City is already developed. Therefore, it is expected there will be added development pressure for greater density on currently undeveloped or underutilized properties.

Characteristics of Population

Table 3.1 summarizes selected characteristics of the population of Gem Lake and adjoining municipalities.

The median age of Gem Lake residents is 37.5, which approximately two years older than the U.S. average of 35.3. Very similar is the age of both the City of White Bear Lake and White Bear Township residents, with the median age being 37.4 and 37.5 respectively. However, the City of Vadnais Heights is much closer to the national average at 35.9 years of age.

The 2000 median family income level in Gem Lake (\$82,909) was the highest of the adjacent communities. White Bear Township was the next closest at \$79,171. Approximately 5.9 percent of the population within Gem Lake was viewed to be below the poverty line as defined by the 2000 U.S. Census. This is an increase over the 1990 level of 2.3 percent. This poverty line percentage in Gem Lake is higher than some adjoining communities. For instance, only 2.8 percent of citizens in White Bear Township live below the poverty level, with the highest percent of nearby populations below the poverty line being 4.4 percent (City of White Bear Lake).

Table 3.1 - Selected Characteristics of the Population for Gem Lake and Contiguous Governmental Units

Govt. Unit	2000 pop.	Ages 0-5	Ages 6-17	Age 18+	Age 65+	Median Family Income	% Below Poverty Level
Gem Lake	419	25	56	292	46	\$82,209	5.9%
Vadnais Heights	13,069	907	1,597	9,548	1,017	\$74,178	3.2%
White Bear Lake	24,325	1,474	1,006	18,295	3,550	\$60,196	4.4%
White Bear Twnshp	11,293	699	1,600	8,023	971	79,171	2.8%

Employment and Economic Base

The City of Gem Lake currently has more job opportunities than the population could reasonably be expected to support (Table 3.2). The nature of commercial development and employment opportunities is generally geared to a trade area much larger than Gem Lake. Auto dealerships are the dominant commercial enterprises with ‘Highway Service’ establishments, such as automotive or marine accessories or repair services constituting a large share of remaining commercial activity. Due to the City’s small population, there is very little in the way of commercial development at this stage of the community’s development geared to serving the resident population.



Development of Region Serving Facilities

Within in the last ten years, region serving facilities have continued to improve and expand in ways that help to shape, and sometimes accelerate development in and around the City of Gem Lake. Examples include the following:

- The interstate highway system located in close proximity to Gem Lake has been expanded to accommodate an ever increasing traffic volume. Interstate freeways I-694 and I-35E come together in the area, locating Gem Lake close to a major freeway interchange, with nearby on and off ramps. The two freeways are now part of a huge renovation project, centered near Gem Lake, which is called “unweave the weave.” This renovation is design to allow a greater number of drivers to safely use the highways each day.
- Two large regional shopping malls now serve the area, Maplewood Mall, located approximately two miles away, and Rosedale Mall in Roseville, located approximately seven miles away. Both malls have extended strip mall facilities surrounding them, making each a regional shopping district for the area.
- Several smaller but equally as important retail shopping areas have reached fruition in the area. The include but are not limited to the discount shopping area located at the 35 E and County Road E intersection, which includes a Target, a Wal-Mart and other assorted facilities; and the charming downtown White Bear Shopping area, which has undergone a facelift in the past decade.
- The City of Maplewood now plays host to an extended health care zone about five miles to the south of the City of Gem Lake surrounding St. John’s Hospital, which includes a large number of doctors’ offices and healthcare clinic and facilities.
- Metropolitan trunk sewers have been expanded north beyond Gem Lake. This provision of major trunk interceptors has made larger scale development possible in the areas between the Cities of White Bear Lake and Forest Lake.
- The City of Vadnais Heights has located its city hall, fire department and several office complexes just to the west of the City of Gem Lake, which has created a city center feeling to the area. This has also led to the building of two nearby hotels at the intersection of County Road E and I-35E.

Table 3.2 - Existing and Projected Population, Households, and Employment in Gem Lake

	1960	1970	1990	2000	2010	2020	2030	% Change 2000- 2030
Population	305	216	439	419	490	630	770	84%
Households	78	54	140	139	170	220	300	85%
Employment	—	250	320	548	720	840	870	59%
Employment/ Population Ratio	—	1.16	0.73	1.31	1.47	1.83	1.12	—

Land Development in Gem Lake and Vicinity

Residential Development

Gem Lake residents are overwhelmingly housed in single-family owner-occupied homes (79 percent of dwelling units; refer to Table 3.3). The adjoining communities range from 69 to 86 percent single-family owner-occupied homes. Housing values are very similar in Gem Lake and White Bear Township (\$158,400 to \$159,600). The remaining two communities are lower, at \$130,400 and \$143,800.

Table 3.3 - Selected Characteristics of Housing for Gem Lake and Contiguous Governmental Units - 2000

Govt. Unit	Housing Units	Single-family owner occupied	% Single family owner occupied	Median Value
Gem Lake	139	113	79%	\$159,600
Vadnais Heights	5,128	3,548	69%	\$143,800
White Bear Lake	9,855	6,864	70%	\$130,400
White Bear Twtnshp	4,051	3,491	86%	\$158,400

Commercial Development

There are several areas of commercial development in and around Gem Lake. The Maplewood Mall has significant development, as does Downtown White Bear Lake, Vadnais Heights, and the Rosedale Center. There is limited commercial development in the “Hoffman Corner’s” area of Gem Lake. There are also many auto dealerships in this area.

Office and Other Employment Concentrations

There is a limited amount of office development in the immediate vicinity of Gem Lake. These are small concentrations in Vadnais Heights and in the downtown areas of White Bear Lake and North St. Paul. The largest concentrations of office space near Gem Lake are in the central business district of St. Paul, the Midway District of St. Paul, and in Roseville, near the intersections of Snelling and Highway 36.

Industrial Development

There are no concentrations of industrial development within Gem Lake. However, within a five-mile radius of the City, there are some concentrations in Little Canada, Maplewood, North St. Paul, and Vadnais Heights. Most significantly, the abutting governmental units of Vadnais Heights and White Bear Township have planned extensive amounts of industrial land adjacent to Gem Lake. The White Bear Township plans industrial development abutting Gem Lake’s northern boundary; Vadnais Heights plans industrial development beginning a few hundred feet south of Gem Lake’s southern boundary.

Public Open Space and Recreational Areas

There are no publicly owned open spaces or recreational areas within the City of Gem Lake at this time. There is a commercial golf course located in the northeastern portion of the City that is expected to remain a golf course for the purpose of this planning timeframe.

Within the surrounding area, substantial amounts of open space or recreational areas exist, including the Tamarack Nature Center and the Bald Eagle-Otter Lake Regional Park, enormous parks located approximately one mile north of Gem Lake in White Bear Township. Approximately two miles to the west are substantial forest preserve lands owned by the City of St. Paul Water Utility and being developed by Vadnais Heights as parkland. In addition, one mile to the southeast of Gem Lake is a large community park, the Lakewood Hills Park, located within the City of White Bear. Extensive walking/biking trails exist in the immediate area. For instance, there is a trail that can be entered on Centerville Road in Vadnais Heights, which is located near Gem Lake's western border, and a shorter trail located along County Road E near Gem Lake's southern border, also in Vadnais Heights.

Comprehensive Plan and Development Characteristics in Contiguous Municipalities

Due to the small size of Gem Lake, it is very important that the community monitor and closely coordinate its development with the contiguous governmental units on its boundaries. White Bear Lake and Vadnais Heights are the most developed of these. Both cities exhibit a generally diversified development pattern. That portion of White Bear Lake closest to Gem Lake is planned principally for commercial development. The Vadnais Heights plan (based on the zoning map) calls for commercial development along all but a small portion of the entire south and western portion of the City of Gem Lake. White Bear Township is expanding an industrial district on the northern border of Gem Lake.

4.0 Plan Assumptions, Goals, and Issues

While an assessment of the current and projected characteristics of Gem Lake is important, there is also a need to examine the assumptions, goals and issues upon which this plan is based. Gem Lake's plan assumptions section explains the geographic and economic context in which the plan was written. The City's goals section provides the framework for policy proposals. Finally, the issues section of this chapter presents the unique challenges Gem Lake faces in bringing this plan to reality.

Plan Assumptions

It is assumed that:

- The economy of the Minneapolis-St. Paul metropolitan area will remain healthy and that sub-regional population projections, as established by the Metropolitan Council, will be reasonably accurate.
- The comprehensive development plans and physical development ordinances of the contiguous local units of government will remain essentially as they are today.
- Additional shopping and employment opportunities within municipalities located within a five-mile radius of Gem Lake will become available in reasonable proportion to population increases.
- The major open space acquisition and development plan will be completed as proposed by Ramsey County and the Metro Council.
- Facilities (such as roads, sanitary sewer and water) presently estimated by the Gem Lake City Engineer and/or projected will be adequate for the projected population.

Community Goals

The following goals are established as the principal guidelines for the physical development of Gem Lake. All policies, as presented in later chapters of this plan document, should be considered supplemental to these basic goals that the residents of Gem Lake desire to:

- Preserve and maintain a "small town" environment in a natural setting. Such an environment should promote an atmosphere of quiet, relaxed living, with maximum regard to maintaining openness of the physical environment as well as preserving trees, water areas, grass lands, and wetlands.
- Control the individual tax load of their property. The City Council has suggested that this be done by guiding the development of additional residential and commercial/business structures and facilities constructed in the city, so as to increase the overall tax base.
- Create and maintain a high quality man-made environment. Good design, combined with a common sense approach to aesthetics, will be valued. All new residential and commercial development and auxiliary structures and signs should be developed to high standards of design, beauty and efficiency. Furthermore, all existing structures and auxiliary buildings and lands will be maintained to high standards to enhance the quality of the life in Gem Lake.

- Make plans for a commercial/business area in the city in the County Rd E/Hwy 61 intersection area to provide a “downtown” area of the city. An approximate residential and commercial mix of 50/50 is envisioned for this area
- Have a low-profile government that provides only essential public services necessary for their health, safety, and welfare. It is a further goal that these public services should be obtained on a long-term contractual basis with surrounding municipalities. It is hoped that these types of arrangements will help keep per capita expenses low for both the residents of Gem Lake and surrounding communities.
- Cooperate with adjacent communities to achieve a compatible land development and public service patterns.

Recognizing the small size of Gem Lake in relation to the substantial urbanizing pattern in the vicinity, the City will place considerable importance on cooperation. Gem Lake will work with other local units of government in encouraging the compatible development of this sub-region of the metropolitan area.

Principal Issues

Gem Lake, like most public communities, face significant issues that need to be considered as it develops. The issues listed below are the most critical and establish a focus for many of the plan proposals. The succeeding chapters of this document address these issues in more detail and demonstrate how they could affect plan performance if not dealt with properly.

Density of Residential Development

Residential development density has been discussed in great length in Gem Lake. The consensus of opinion calls for low overall density in the center of the City, which includes areas surrounding the water body called Gem Lake. This area currently includes large estate type and executive housing development.

This plan will make provision for higher densities on the periphery of Gem Lake in mixed use areas. An approximate residential/commercial mix of 50/50 would be sought. The goal of this plan is to have new residential development in the mixed use planning area that averages at least three units per acre, to conform to Metropolitan Council guidelines for land use. It is also important to note that mixed use areas directly adjacent to existing low density development will be planned to fit in harmoniously with these neighborhoods. An example would be to provide single-family low-density homes as a buffer between the existing low-density areas and planned mixed-use areas.

Commercial Expansion and Improvements – Mixed Use

Redeveloping the entire business area called ‘Hoffman’s Corner’ as a master planned mixed use development is desired. This redevelopment should be done in conjunction with similar plans for adjacent areas that are in City of Vadnais Heights. This includes Vadnais Heights land parcels that are next to Hoffman Corners on the same side of the street and on the opposite corner of the County Road E / U.S. Highway 61 intersection.

Developing the open parcels of land on County Road E (entirely in Gem Lake) also should be mixed use as specified above.



An up-grading of the existing structures in the commercial area along the east side of Scheueneman Road between County Road E and U.S. Highway 61 would also be encouraged.

Quality of New Construction and Maintenance of the Existing Man-Made Environment

Consistent with the goal of having a high quality and aesthetic man-made environment, the City of Gem Lake intends to help ensure that all development within the community is based on high standards spelled out in implementation controls and procedures. The City further intends to help ensure high quality maintenance of existing man-made structures (e.g., facades, signage, etc.) by vigorous enforcement of regulatory controls. These controls include, but are not limited to, subdivision, zoning, housing, building code, sign, landscaping and tree preservation regulations. It is anticipated that these measures may be resisted by some land developers, community residents, and the business community. These resistances must be met, however, so that a high quality environment can be maintained for all residents.

Provisions for Public Utilities

Sanitary Sewer: Sanitary sewers are being installed in the neighborhoods of the City of Gem Lake as requested by the residents of a designated area and as piping and facilities allow. The City of Gem Lake has a city sanitary sewer system presently serving 85 property owners. (The breakdown includes 35 business and 50 residential customers.) These services are being installed in accordance with the sewer plan of the city and its relevant ordinances. Sanitary sewers are being installed to help promote the desirability of the residents to maintain a high quality environment.

In the areas of the City where sanitary sewers are not currently available; measures are being taken to help ensure high quality, individual, and on-site facilities are installed and regularly inspected.

Water: Public water system piping and locations where water might be obtained from adjacent communities with public water systems are identified in the water plan. It is the intention of the City that public water should be installed in all commercial and retail business areas as soon as possible. Water mains will be proposed and should be constructed as the roads in the City are up-graded. Hydrants for fire fighting should be installed as part of each neighborhood expansion.

Storm Sewer: Storm sewers are not currently used in the City of Gem Lake except in recent housing developments. All of the city streets presently have a “rural road profile” which allows for ditches on each side to handle storm water. Storm sewer systems will be needed in the commercial and retail business districts of the City as they develop. Storm sewer water should be pre-treated as close as possible to the source.

Engineered storm water systems will need to be installed in all commercial and residential areas as they are developed or re-developed.

Storm water routed to the water body called Gem Lake needs to be pre-treated and limited in quantity as Gem Lake does not have an outlet and large quantities of storm water routed to this water body might cause flooding of land areas close to the lake.

Service Agreements with Cooperating Governmental Units

Cooperative service agreement with other municipalities is a cost effective and efficient arrangement for smaller cities. Gem Lake will work to secure long-term service packages, with these factors in mind. Currently, the City of Gem Lake cooperates with White Bear Township for City Administration services.

Public or Semi-Public Open Space and Recreational Areas

There are no publicly held open and recreational spaces within Gem Lake at this time. The only recreational facility within the City is a private golf course. It is City's desire to have the golf course property remain recreational in nature. Although there are recreational facilities in adjacent communities and in nearby regional recreational facilities, there may be a need in the future for small neighborhood "parks" within Gem Lake.

5.0 Land Goals and Policies

Background

Gem Lake’s Land Use Plan is a general guide to physical growth and development in the City. Included in this section are policies for the appropriate timing and location of development, as well as strategies for protecting the environment as the development occurs.

This Plan will be used by the City to help evaluate the viability of various public investments. Private development proposals will also be considered in light of the overall goals of this plan. Therefore, it should be regarded as a general guide to the legal regulation of land development that is controlled by the City of Gem Lake Zoning Ordinance and Zoning Map, under the powers granted to the City by the State of Minnesota.

Descriptions and maps that generally illustrate the location of future land use classifications within the City of Gem Lake are covered in this chapter. The boundaries of the use districts, as shown in the various illustrations, are approximate, and subject to interpretation and adjustment, as necessary, to conform to actual field conditions.

The Met Council has designated Gem Lake as a “developed community” in the “System Statement” which was used as a guideline for this Plan. This designation is based on Gem Lake’s location within the region, forecasted growth, availability of infrastructure and existing land uses. The policies and information contained in this land use chapter are based on policies and requirements for “developed communities” in the Met Council 2030 Regional Framework Plan.

Policies and Objectives

Chapter 462 of Minnesota Statutes, Municipal Planning and Development, authorizes cities to prepare and implement a comprehensive plan. This statute enables a municipality to carry on comprehensive municipal planning activities to guide the future development and improvement of the municipality. It further enables the City to prepare, adopt, and amend a comprehensive municipal plan and implement such plan by ordinance and other official actions.

In addition to Chapter 462, the Metropolitan Land Use Planning Act, Chapter 473, requires local units of government (LUG) in the metropolitan area to either adopt or update their comprehensive plans to make them consistent with certain standards and policies as established by the Met Council. The intent of this state statute is to control and guide urban development in the metropolitan area.

Gem Lake’s 2008 Comprehensive Plan Update is written in response to the Met Council’s “System Statement” for the City, and takes into account new growth projections and policies published in the 2030 Regional Development Framework. This plan also provides updates in policies of other state and regional plans.

Existing Pattern of Land Use in the City of Gem Lake

Understanding present development in the City of Gem Lake is the key to creating an appropriate future pattern of land use. The *Figure 1 - Existing Land Use Map (2008)* illustrates the generalized pattern existing as of January 2008.



Current land use within the City of Gem Lake represents historical patterns that have occurred since the City was formed in 1959.

Commercial/Business Land Use

The existing commercial/business land uses in the City of Gem Lake are concentrated in and around the U.S. Highway 61/County Road E intersection. This includes two large car dealerships, other auto/motorcycle oriented businesses, and a marine sales retailer. A small neighborhood bar, a coffee shop, and a retail floral establishment also exist in this area. There are approximately 43 acres in this category.

Single Family Residential Land Use

Existing single family residential land makes up the largest portion of the city and ranges from:

- A 45 acre horse ranch located along Goose Lake Road
- Several single family estates around the water body called Gem Lake
- A large number of executive size houses on 2 to 3 acre lots in the Little Fox Lane, Big Fox Road and the Hillary Farm Lane areas
- Several single family homes on $\frac{3}{4}$ to one acre lots along Scheueneman and Goose Lake Roads
- Some single family homes on $\frac{1}{4}$ to $\frac{1}{2}$ acre lots in the northeast corner of the City. There are approximately 486 acres in this category.

Institutional Land Use

The White Bear Montessori School is located at the southwestern corner of the City and comprises the only public land use at this time. A Gem Lake City Hall is available to the residents of the City in the northeast corner of the City and is part of a joint project by White Bear Township and the City of Gem Lake. The City Hall is sited on a lot in White Bear Township that is directly on the White Bear Township/Gem Lake City Limits, and, as such, it is not identified on the following City of Gem Lake map. There are approximately three acres in this category.

Park, Recreational, or Preservation Land Use

The recreational land use is comprised of the Gem Lake Hills Golf Course in the northern portion of the City, which is privately owned and operated. The golf course land is designated in existing land use plans as low-density residential, though re-development has never been sought. The City of Gem Lake currently owns no property for park, recreational or preservation areas. There are approximately 63 acres in this category.

Agricultural Land

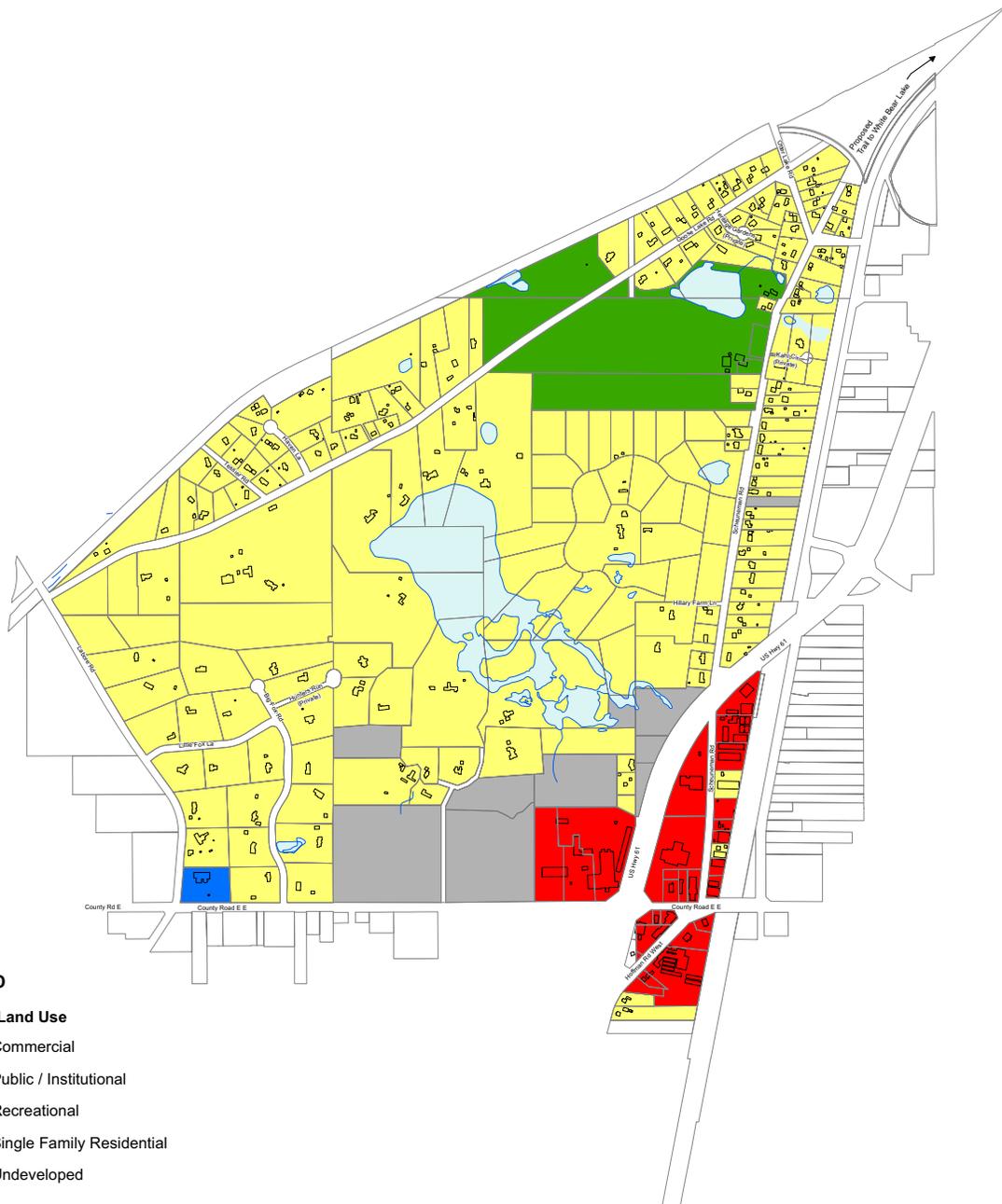
A portion of the approximately 17 acre parcel on County Rd E is currently used for macro-agriculture, though zoned for office or low density business development.

Undeveloped Land

The term undeveloped land refers to those parcels that currently have no structures on them. *Figure 1 - Existing Land Use Map (2008)* on the following page illustrates the existing land use in Gem Lake.

City of Gem Lake

Existing Land Use Map (2008)



LEGEND

Existing Land Use

- Commercial
- Public / Institutional
- Recreational
- Single Family Residential
- Undeveloped



DRAWING SCALE IN FEET
0 250 500 1,000

July 2008
Figure 1



Future City of Gem Lake Land Use thru 2030

In order to guide use in subsequent decades, the City of Gem Lake has prepared a future land use plan. The plan brings together goals, policies, and recommendations for future land use, and is intended to assist with decision making on a going-forward basis.

Acres for future land uses within Gem Lake are identified in *Table 5 - Future Land Use Acreage Breakdown*. Although Gem Lake covers a total of 725 acres, only 653.6 is reflected in the table below. The difference in acreage is consumed by roadways, wetlands and open water.

Table 5 Future Land Use Acreage Breakdown

Land Use Category	Acres
Single Family - Residential	128.3
Single Family - Executive	213.4
Single Family - Estate	148.1
Gateway & Village Center Use (mixed use)	91.7
Open Space	6.2
Recreational Open Space	63.0
Public/Institutional	2.9
Total	653.6

NOTE: The balance of the total 725 acres that make up the City of Gem Lake are used for roads or occupied by the surface of Gem Lake and other water bodies and wetlands in the city.

Future Land Use Classifications

Residential development will remain the primary land use with the City of Gem Lake. The land for residential development is broken down into three main categories:

Single Family - Residential

The last residential category is “Single Family Residential,” and is primarily found along the edges of the city, particularly on the east/northeast side and the northwestern portion of the City. This district is fully developed with single family homes and this plan does not project or assume any gains in housing units from this planning area. The minimum density in this area is 1 lot per acre and the maximum is 3 lots per acre. Sanitary sewer expansion is not proposed in this area prior to 2030. Homes along Scheueneman Road are already served with sanitary sewer.

Single Family - Executive

Roughly 33 percent of the total land area of the City is comprised of “Single Family Executive” land uses. “Single Family Executive” land uses are found primarily in the southwest and north central portions of the City. The maximum density is 1 lot per 3 acres in this district and the minimum is 1 lot per 40 acres. Sanitary sewer expansion is not proposed in this area prior to 2030. The McNulty Development within this district is already served with sanitary sewer.

Single Family - Estate

This planning area within the City of Gem Lake encompasses most of the interior residential land area in the City, located around the water body called Gem Lake. The

minimum density is 1 lot per 2 acres and the maximum density is 1 lot per 5 acres in this district.

Gem Lake Gateway and Village Center Special Planning District (Mixed Use)

This area is located at and near to the intersection of County Road E and U.S. Highway 61 where major transportation nodes and high sewer capacity are available. Roughly 13 percent of the total land in the City is found in this District. It will be guided for mixed use development, at an approximate 50/50 mix of residential and commercial/business uses. The actual percentages may vary dependent upon the project.

Subsequent development that is planned for “Mixed Use” under the *Figure 2 - Future Land Use Map* will be developed in a tiered fashion, to minimize the visual feel of the existing single family neighborhoods and preserve the value of existing homes. The minimum density in this area is three units per acre and the maximum is six units per acre (assumes this density will be necessary for providing an adequate amount of affordable housing). The Gem Lake “Gateway and Village Centers Vision Corridor Master Plan” document provides more specific details on how this could be accomplished. The Master Plan graphics are found on upcoming pages.

Open Space

The City has a small amount of land that could potentially be classified as future “Open Space.” This area consists of less than 1 percent of the total acreage of the City. It is located adjacent to U.S. Highway 61 and consists of passive open space. The land is comprised mainly of wetlands and other small water features that could support a hiking or biking trail along U.S. Highway 61. The City of Gem Lake projects that it will acquire the property through direct purchase or by developer dedication during this planning period.

Recreational Open Space

Approximately 60 acres of residentially zoned land is identified as recreational open space within the City of Gem Lake. This area is currently used as a private golf course and is located in the northern portion of the City. The course is abutted by “Single Family Estate,” “Single Family Executive” and “Single Family Residential” land uses. By all accounts, the course is economically viable and is not projected to develop as a different use during this planning period.

The City of Gem Lake desires that this golf course /recreational space use continue in the future. Based on past zoning practices, the owner’s wishes, and the City’s likely inability to purchase the golf course property at any point in this planning period, the golf course will continue as a conditional use within residential zones, likely a mix of “Single Family Executive” and “Single Family Residential,” based on its location in the City.

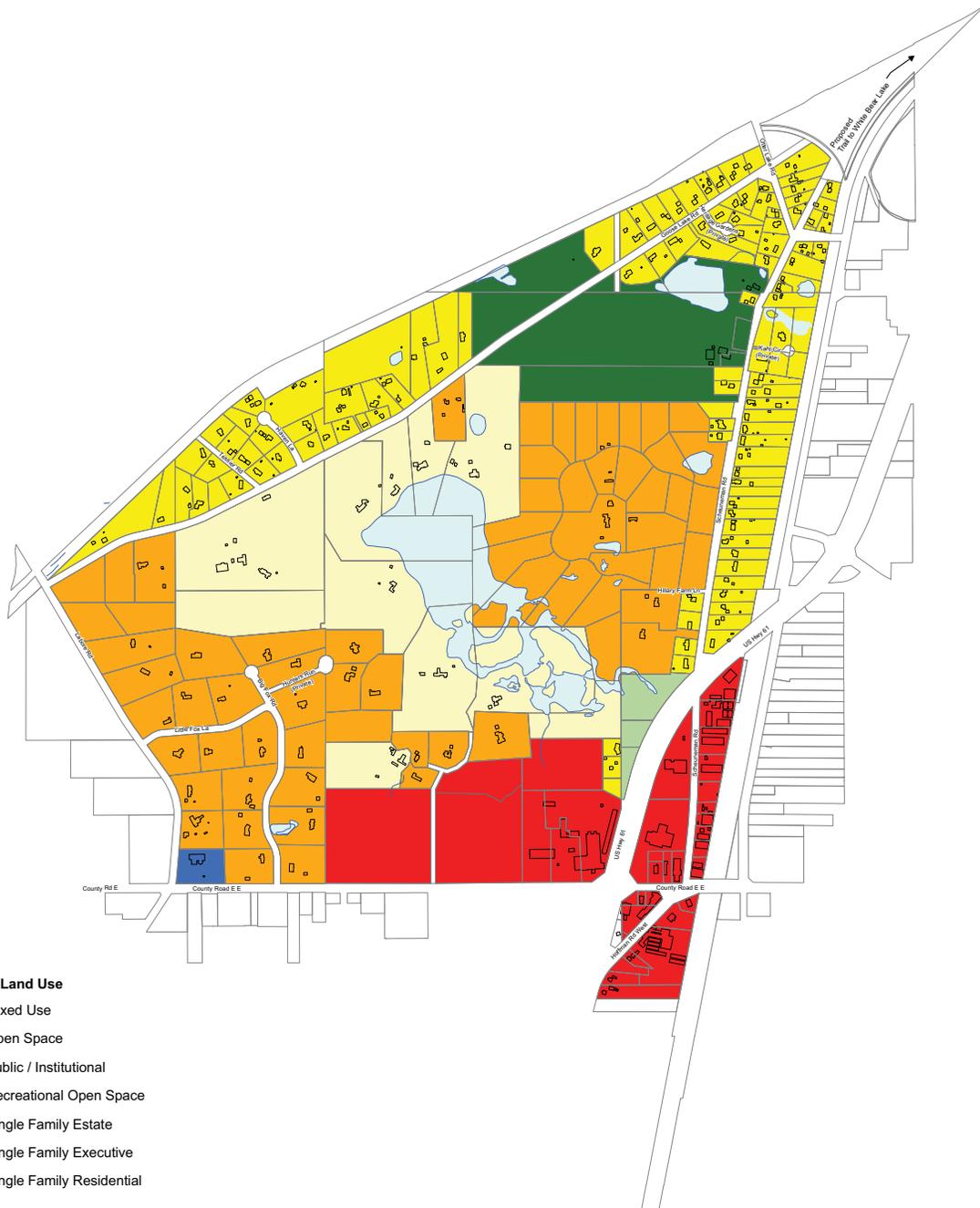
Public/Institutional Open Space

The White Bear Montessori School is located at the southwestern corner of the City and comprises the only public land use at this time. No expansion of this area is expected.



City of Gem Lake

Future Land Use Map



LEGEND

Proposed Land Use

- Mixed Use
- Open Space
- Public / Institutional
- Recreational Open Space
- Single Family Estate
- Single Family Executive
- Single Family Residential



DRAWING SCALE IN FEET
0 250 500 1,000

July 2008



Land Available For Development

The land available for development by 2030 is reflected in Table 5.1 below. All of the land covered by this table to develop for residential use consists of the “Gateway and Village Center Vision Corridor” and the remaining fully sub-divided, but as of yet un-built, areas within the “Single Family Executive” planning area shown on the future land use map. Some of the land in this mixed use area is already developed, necessitating redevelopment at a date that has yet to be determined. Between the two projected areas of housing development, Gem Lake well exceeds the population and housing stock growth projected in the Metro Council’s System Statement for the City. The plan also affords ample opportunities to exceed the affordable housing allocations, particularly in the mixed use development area, which is oriented towards the proposed transit nodes at U.S. Highway 61 and County Road E.

Table 5.1 - Residential Land Availability - Acreage and Population Projections for Anticipated Growth Areas (2007-2030)

Land Use Category	Acres	Units per acre	Total Housing Units	Persons/ Unit	Forecasted/ Population
Single Family - Executive	76	1/3	25	2.2	55
Special Planning District	91.7*	3	137	2.2	301
Total	122		162		356

**For planning purposes only half of the developable land in the mixed-use area is planned for residential development. The other half is planned for commercial development. If growth were to occur by the year 2030, the estimated number of housing units needed would be 162 units.*

Development Staging

Gem Lake is classified as a “developed community” in the 2030 Regional Development Framework. According to the Met Council, Gem Lake should focus on protecting natural resources, ensuring sufficient public infrastructure, and developing transition strategies to increase density and encourage infill development. It is important to note that the Gem Lake “Gateway and Village Centers Vision Corridor” Plan addresses all these goals. It will also increase the chances of connecting housing with shopping and employment activities in a thoughtful and well planned manner.

The Regional Development Framework from the Met Council discusses the City’s role in implementing specific strategies developed communities may use to reach long-term development objectives. These strategies include:

- Accommodating growth forecasts through reinvestment at appropriate densities
- Approving and permitting reinvestment projects that increase density and make cost effective use of infrastructure
- Adopting ordinances that accommodate growth and use land and infrastructure efficiently
- Supporting the conversion or reuse of under utilized lands in order to accommodate growth forecasts
- Helping to ensure efficient use of existing infrastructure investments to meet community needs

- Planning for infill development, redevelopment, and adaptive reuse of structures to diversify housing, connect housing and jobs, and integrate new development into existing neighborhoods
- Encouraging preservation of existing neighborhoods and expansion of housing choices within the city
- Adopting ordinances to increase life-cycle and affordable housing in mixed use areas

Table 5.2 indicates projected development by category and estimated land demand needed for implementation. This information is broken into five year increments from 2010 to 2030.

Table 5.2 - Land Use in Five Year Stages - Existing and Planned Land Use (in acres)

Within Urban Service Area	Existing (2000)	2010	2015	2020	2025	2030	Change 2000-2030
Residential							
Single Family - Estate	285.5	148.1	148.1	148.1	148.1	148.1	0
Single Family - Executive	0	157.4	176.4	188.4	200.4	212.4	75
Single Family - Residential	128.3	128.3	128.3	128.3	128.3	128.3	0
Mixed Use - Primarily Residential	0	17.5	25	30	35.3	44.3	44.3
Zoned R but undeveloped	113.9	75.6	41	0	0	0	-113.9
C/I Land Uses							
Commercial	48	28	25	20	14.7	0	-48
Office (zoned/undeveloped)	12	0	0	0	0	0	-12
Mixed Use - Primarily Comm/Office	0	30.5	33.5	38.5	38.5	44.2	44.2
Public/Semi-Public Land Uses							
Institutional	2.9	2.9	2.9	2.9	2.9	2.9	0
Parks and Recreation	63	63	63	63	63	63	0
Open Space	0	0	6.2	6.2	6.2	6.2	6.2
Roadway Rights-of-Way	11.4	12.7	13.6	13.6	13.6	13.6	2.2
Utility	0	1	2	2	2	2	2
Subtotal	665	665	665	665	665	665	0
Undeveloped							
Wetlands	16	16	16	16	16	16	0
Open Water, Rivers, and Streams	44	44	44	44	44	44	0
Total	725	725	725	725	725	725	0

* For Mixed Use categories - include information regarding the estimated minimum and maximum housing density ranges and acres/percentage of residential use.

Land Use Development Constraints

With the many natural resources in Gem Lake, there are also associated development constraints. The City of Gem Lake is a significant natural resource area, including a lake, wetlands, and hardwood forests. Care needs to be exercised in the design and construction of any new development in the City. Sensitive areas should be protected as open space. Master planning, cluster development, and similar land use concepts should be used to minimize impacts on natural resources and maximize efficiency of services.



Aggregate Resources

Demand for aggregate resources continues to grow in the metropolitan area. As local resources become depleted, aggregate needed for urban development will have to be imported from outside the seven-county metropolitan area. The City will permit gravel mining operations where appropriate and consistent with the City's zoning ordinance. It is important to note that the City of Gem Lake doesn't have any aggregate resources and doesn't anticipate any in the future.

Solar Access Protection

Since 1978, the Metropolitan Land Planning Act has required communities to include verbiage in their plans to protect access to direct sunlight for solar energy systems. The purpose of this provision is to protect solar collectors from shading by adjacent structures and/or landscaping.

The City of Gem Lake recognizes the value of solar access protection and energy conservation in general; however, the community is experiencing limited new construction in its urbanized area. In addition, while a considerable amount of new development will occur throughout the City in the future, the application of this provision will be difficult within the context of an established land use patterns and natural topography. For this reason, the City will look beyond solar accessibility alone and will address the conservation of energy in general, through its comprehensive planning efforts.

Historic Preservation

There are not any structures or sites within the City that are listed on the National Register of Historic Places or properties of State or local significance by the State Historic Preservation Office (SHPO). The City will work with SHPO and local property owners to take the appropriate steps to preserve any historic or cultural resources that may be added or discovered in the future.

Land Use Goals and Policies

General Land Use Goals

- Protect and enhance the natural environment in the City of Gem Lake.
- Help ensure that all development and re-development contributes to a clear, orderly, and harmonious pattern of design, guided by professional planners, engineers, and designers.
- Preserve the large estate and executive lots in the interior of the City and surround them with compatible smaller lot residential, open space, recreational and business/commercial uses. These uses will connect housing with shopping and employment opportunities wherever feasible.
- Provide a safe, healthy, and attractive residential environment, which offers a broad choice of housing opportunities including affordable housing.
- Provide buffers using berms, trees, and other natural resources to insulate the residential areas of the City from noise, light pollution, and traffic.
- Guide the development of an attractive special planning area around Hoffman's Corner at U.S. Highway 61 and on County Road E for a mix of business, commercial, retail, open space, and residential uses.



General Land Use Policies

- At the community's ultimate development stage, the dominant share of total land within the City of Gem Lake should be residential property.
- The City has provided detail in its zoning ordinances and subdivision ordinance on both cluster development and similar land use devices, in order to help ensure open space retention, reduce development costs, and efficient provision of utilities. Incentives, such as density bonuses, are provided for well designed developments.
- It is the policy of the City of Gem Lake that substantial high density residential housing shall be constructed as part of the re-development of the Hoffman's Corner area.
- It is the policy of the City of Gem Lake to discourage all industrial land uses. Extensive industrial development can be easily found in other nearby portions of the metropolitan area.
- It is the policy of the City of Gem Lake to review proposed institutional developments on a case-by-case basis. It is possible that this development could be permitted within other zoning areas in the city, if compatible with its overall land use goals.
- It is the policy of the City of Gem Lake that it will support the viability of the present golf course in the City as recreational and open space, and to try to acquire additional public open space for passive viewing of other attractive areas.
- It is acknowledged that the character and natural environment of the City of Gem Lake depends on the continuance of natural vegetation within and along its borders. The City will encourage the continued planting of new and the preservation of existing trees to sustain and improve the natural beauty of the community.
- Aesthetic considerations for new and existing construction should be addressed through better performance standards in the zoning ordinance and other ordinances. Controls addressing signage, lighting, appearance, landscaping and vegetative screening, among other items, will be defined in the City's zoning ordinances. The natural character of the City of Gem Lake, as well as general quality of life found here, is very important to residents. At the same time, the controls should not be so restrictive that they stifle the creativity and individuality of planners and designers, or place an unreasonable financial burden on the property owner. Perimeter landscaping and screening of parking lots, loading areas, outdoor storage and building mechanical units will be regarded as important components of development. However, minimizing light and noise pollution will be important considerations.
- It is important that the development of property which borders other communities be done in coordination with these communities. There is now a need for dialog and coordination of plans with the City of White Bear Lake, White Bear Township and the City of Vadnais Heights.
- Discussion with adjoining communities to facilitate cooperation and sharing of existing public utilities, such as water and sanitary sewer, should be initiated. Extensions of such utilities from adjacent communities will likely provide the most cost effective method of delivering these utilities to the City of Gem Lake. Each of these adjacent community's services could be used in selected portions of the City.

Potential joint power agreements with the City of White Bear Lake, White Bear Township and the City of Vadnais Heights may result from the initiation of discussion by Gem Lake.

- The review of conditional or interim use permits or re-zonings of particular areas of the City must take into account impacts on adjacent uses, air and water quality, traffic generation, public safety and health, aesthetics and economic effects.
- Wildlife and natural vegetation in the City adds to the quality of life in Gem Lake. The wildlife and natural vegetation should be preserved and protected from over-development.
- Additional protection to wetland areas and the water body called Gem Lake is needed. The requirements for soil erosion and storm water controls are already included in the City's zoning ordinance. Additional protective measures should be placed on storm water that enters the Gem Lake water body, which has no outlet. Both pre-treatment and rate controls will be needed to keep the Gem Lake water body clean, and to prevent it from overflowing.

City Planning Area Policies

Beyond Gem Lake's general land development policies, an additional set of policies has been established to more clearly delineate the type of development which is to be encouraged within the various "Planning Areas." (refer to *Figure 2 - Future Land Use Map* for details of these areas) The policies listed below are preceded by a brief description of existing conditions in each planning area.

Gem Lake Gateway and Village Center Special Planning Area (Mixed use)

The Gateway and Village Center planning areas in the City of Gem Lake are broken up into five specific land areas, defined as follows:

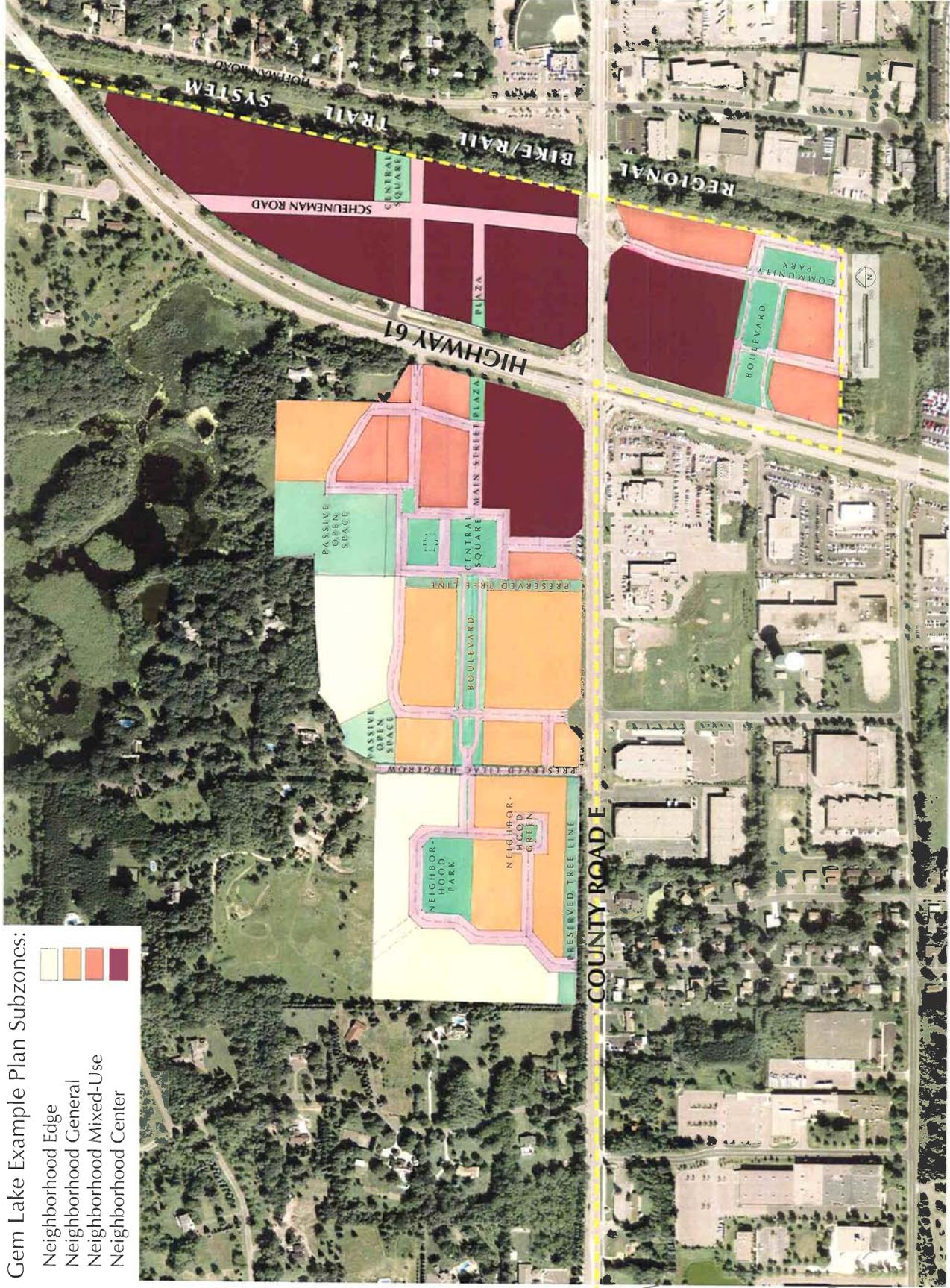
- The southeast corner of U.S. Highway 61 & County Road E (Hoffman's Corner)
- The northeast corner of U.S. Highway 61 & County Road E
- The northwest corner of U.S. Highway 61 & County Road E
- A 17-Acre Parcel on County Road E (East County Rd E parcel)
- An 18-Acre Parcel on County Road E (West County Rd E Parcel)

The "Gem Lake Gateway and Village Center Special Planning Area" defines areas where commercial, business, retail, office and residential uses could be constructed in combination with each other. This would connect housing with nearby opportunities for shopping, working and social interaction. Subsequent graphics and text sections provide details on how these various uses could be successfully meshed within a mixed use district.

Examples of possible layouts of the Mixed Use Gem Lake Gateway and Village Center Special Planning area are on *Figure 3 - Gem Lake Example Plan Subzones* and *Figure 4 - Gem Lake Example Concept Site Plans* on the following pages:

Gem Lake Example Plan Subzones:

- Neighborhood Edge
- Neighborhood General
- Neighborhood Mixed-Use
- Neighborhood Center



CLIENT

Gem Lake
MINNESOTA

PROJECT

GATEWAY & VILLAGE CENTERS VISION CORRIDOR TRANSITIONAL & MIXED-USE GUIDELINES

SHEET TITLE

EXAMPLE LAND USE PLAN

CERTIFICATION

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer in the State of Minnesota.

Name: **Mark Paves**
Date: **June 14th**

DESIGNED **DRAWN**

M.P. BT

DATE

ISSUED: FEBRUARY 2008
DRAWN:
TRANSMITTED:

CONTRACT

0 2007 PUTMAN PLANNING & DESIGN
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NO.	DATE	DESCRIPTION

JOB NUMBER

SCALE OF SHEET

PROJECT LOCATION

PUTMAN PLANNING & DESIGN, INC.

1500 Hill Ridge Drive, Suite 100, St. Paul, MN 55108
Phone: 651.352.7474
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www.putmanplanninganddesign.com

CLIENT

Green Lake
MINNESOTA

PROJECT
GATEWAY & VILLAGE
CENTERS
VISION CORRIDOR
TRANSITIONAL
& MIXED-USE
GUIDELINES
SHEET TITLE

EXAMPLE
CONCEPT
SITE PLANS
A2, B2, C1, D1, E3 & F2

CERTIFICATION
I hereby certify that this site plan prepared by me or under my direct supervision and I am a duly Licensed Professional Landscape Architect in the State of Minnesota.

DESIGNED: **DRASIN**
M.P., E.T.

DATE
DESIGNED: SEPTEMBER 2008
DRAWN: [blank]
REVISIONS: [blank]

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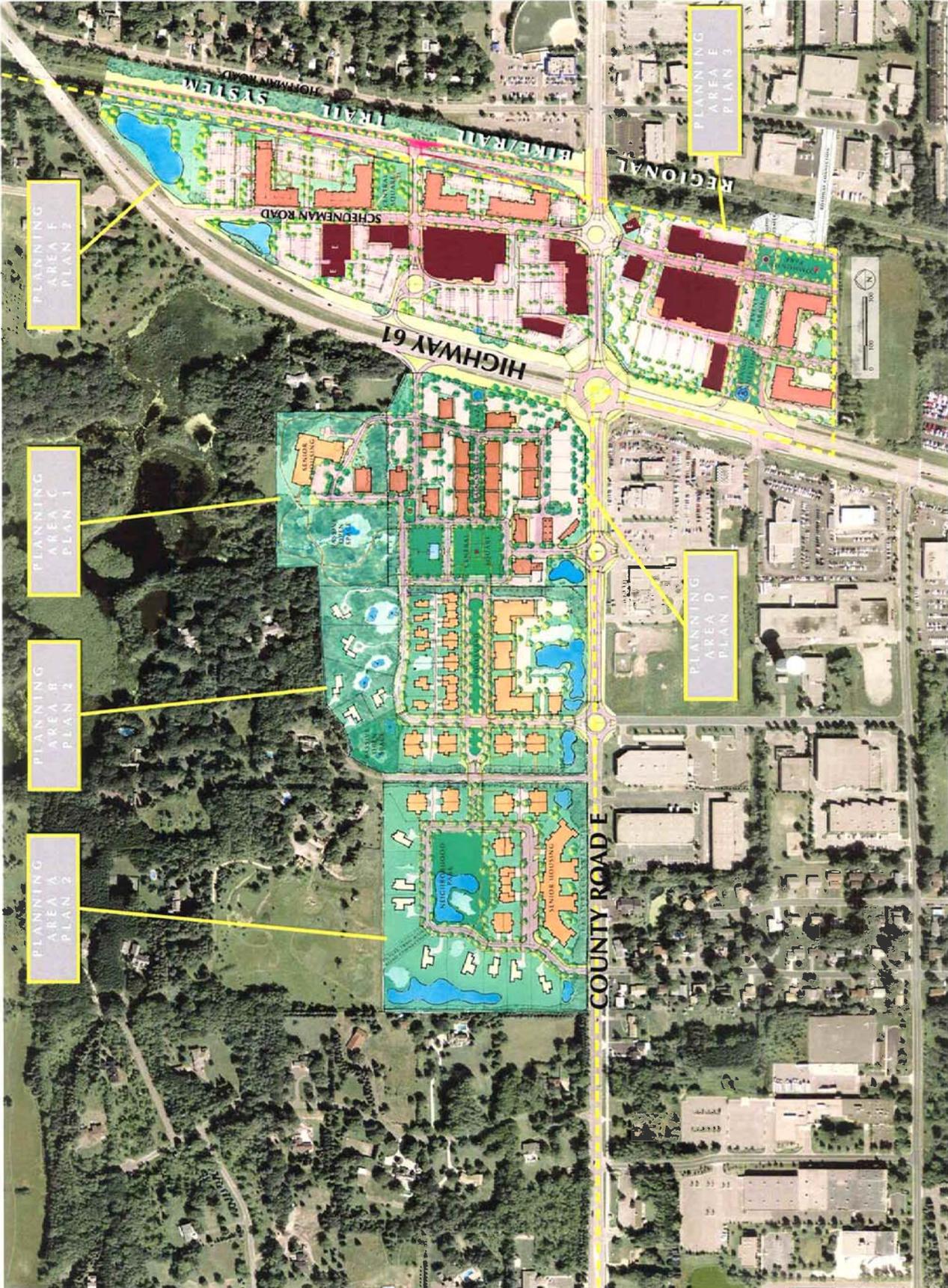
JOB NUMBER

SHEET OF SHEET

LANDSCAPE ARCHITECTURAL
REGISTRATION
ILLUSTRATION
OF THE DESIGN

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& DESIGN

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PLAN 3

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PLANNING
AREA B
PLAN 2

PLANNING
AREA A
PLAN 2

PLANNING
AREA D
PLAN 1

PLANNING
AREA E
PLAN 3

HIGHWAY 61

COUNTY ROAD E

SCHENDEMAN ROAD

TRAIL SYSTEM

REGIONAL



General Gateway and Village Center Planning Area Details (Mixed Use)

The five Gateway and Village Center planning areas are shown on *Figure 3 - Gem Lake Example Plan Subzones* and *Figure 4 - Gem Lake Example Concept Site Plans* on the preceding pages. The colored areas on *Figure 3 - Gem Lake Example Plan Subzones* indicate the suggested land uses (subzones) in each of these planning areas. These subzones are designed to express a range of mixed uses including residential, small-scale commercial, ground floor retail with offices and residential/rental above, with residential building densities, transitioning from rural to urban conditions. The subzones provide for allocation of building types, open space standards and design guidelines. These subzones are intended to accommodate a diverse mixture of building types and uses, housing choices (including adequate supply of affordable housing) and land use. The particular mix encouraged in each subzone is based on the relative position of that subzone within the Gateway and Village Center planning area.

Figure 4 - Gem Lake Example Concept Site Plans shows how structures might be placed in the areas in the Gateway and Village Center mixed use area.

The subzones identified in *Figure 3 - Gem Lake Example Plan Subzones* are defined as follows:

Neighborhood Edge. This subzone is intended primarily for lower density residential development, and to act as a transition between new construction and existing single-family detached structures on adjacent lands. This subzone will accommodate single-family dwellings on larger lots, or more compact homes (sometimes called “villas”). These villas could be placed either on larger lots or on compact lots with enhanced buffers, shared with ancillary buildings and served from a front or side driveway.

Neighborhood General. This subzone is intended to accommodate single family structures on compact lots or multi-family structures that look like individual large homes. Garages will be served from an alley, or if from the street, to a turned garage mass. Attached row houses, providing common side walls and vehicular access from an alley or rear parking area, are also suggested.

Neighborhood Mixed-Use. This subzone is intended to establish a neighborhood focus that is distinguished by civic buildings, small-scale commercial/business/office and mixed use buildings, together with other residential buildings at higher densities (to support the inclusion of affordable housing) than exist in the “Neighborhood General” zone. This district will allow for density bonuses to ensure a density of at least 6 units per acre is available for affordable housing as a means for achieving affordable housing goals. This subzone will accommodate a variety of activities and services within easy walking distance from homes, supporting daily convenience shopping and personal service needs, and also providing opportunities for public gathering and social contact.

Neighborhood Center. This subzone is intended for the most urban conditions within all of the shown mixed use areas. The mixture of land uses emphasizes ground-floor retail with offices and residential/rental above (as market acceptance matures), and structures providing commercial space for medium and large-sized retailers. Street frontages throughout this subzone should be pedestrian-oriented, and defined by building facades at the back of the sidewalk.

Off-street parking is best provided in structures or located between large retailers and perimeter arterials (U.S. Highway 61 and County Road E). On-street parking could also be included as a component of the total parking program.

Note: Any long-range plan must be flexible enough to respond to changing market conditions. Therefore, this plan recognizes that designations for all zones, except the Neighborhood Edge, may shift up or down one level to accommodate community needs.

Each of the above five listed mixed use planning areas must be developed using a “Master Plan” and, as appropriate, using the PUD process and conditional use permits. The planning areas may be developed in stages, but must be guided by the master plan as each stage occurs. It is important that the developers of adjacent planning areas work together to provide continuity of design, utilities, roadways, and uses.

The following general guidelines should be followed for the entire Gateway and Village Center planning area:

- Each of these five planning areas is to be a master planned development/re-development area of retail/service type businesses/offices, possibly including an integrated community of mixed use residences. The residences should be used for senior, affordable or other type of housing that would be compatible with, and use the services provided by, the shopping/retail service/office center.
- Co-operation with the City of Vadnais Heights on directly adjacent parcels located to the south of the first planning area will be necessary. These adjacent parcels would provide part of a logical access point into this development. They are adjacent to Willow Lake Road. This re-aligned access point could then allow for roads to proceed north thru the development area to connect and line up with Scheueneman Road at County Road E in the City of Gem Lake.
- The present Tousley Ford dealership could be evaluated as a “large-box” retail structure for the mixed use land parcel Number 3 in the “Gateway and Village Center Vision Corridor.” There may be future opportunities to provide road extensions from the adjacent parcel that would then allow access to other building opportunities in the rear (north) of the current Tousley Ford store.
- Pedestrian and bicycle friendly paths should be planned in the mixed land use parcels. This would provide shopping and social opportunities for residents living in adjacent parcels.
- Municipal water and an upgraded sanitary sewer system need to be installed in all of these mixed use planning areas. All businesses/offices/multiple use residences in these planning areas should have fire protection sprinklers.
- Cohesive signage design will be required as part of the initial site plan. All signs in this mixed use planning area should be similar in design and consistent in appearance.
- Adequate “green areas” need to be provided in this planning area to increase the pedestrian-friendly nature of the Gateway area.
- An engineered storm water system needs to be designed to gather storm water from each of these planning areas. Adjacent areas may need to work together to provide a conveyance system.

- The existing “border trees” along County Road E, and also along the railroad tracks on the eastern City limits should remain in place, if possible, or be replaced with new trees and berms. This would insulate each planning area from the noise and traffic coming from County Road E and adjacent industrial areas in Vadnais Heights.
- The overall planned density of residential use in the Gateway and Village Center zone should average at least one residence per 1/3 acre. If senior housing can be staged in these areas, much higher densities may be possible.

Residential Planning Areas

The residential areas in the City of Gem Lake are defined as follows:

- “Single Family - Estate”
- “Single Family - Executive”
- “Single Family - Residential”

Details on these residential areas are provided in the following sections.

Single Family - Estate Planning Area

This planning area comprises the residential use lots, all greater than 5 acres in size, existing in the center of the City of Gem Lake. This land is generally gathered around the north, west and south of the water body called Gem Lake. Some undeveloped lots of this size also exist in various other areas in the center of the City. Most of these areas are blessed with a wooded, rolling and varied topography. Access to these lots is via Goose Lake Road, and a private road off of County Road E.

In response to these existing conditions, the following specific policies for this planning area are as follows:

- The continuation of moderately low density residential development continues to be encouraged in this planning area. It is possible to have some smaller lot development in the future along the perimeter throughfares to provide diversity of housing.
- Principle and accessory buildings shall be located in the “Single Family Estate” area so to allow for possible future subdivision to “Executive” or “Single Family Residential” lots.
- Engineered storm water collection/settling areas and discharge rate controls must be added before storm water is allowed to leave this area.
- ISTS systems are not allowed within 150 feet of the shorelines of the water body called Gem Lake, and its attendant wetlands.
- Municipal water should be extended into these areas, as feasible.
- Shoreline protection for the water body called Gem Lake, and its attendant wetlands, must be strictly enforced.
- Housing maintenance rules shall be strictly followed to keep existing estate homes in good repair.

Single Family - Executive Planning Area

This planning area consists of the following parts of the City:

- The housing development bordered by County Road E and Labore Road, and served by City maintained Big Fox Road and Little Fox Lane

- The area called “Hunters Run,” served by the private road called Hunters Run Road and the private road running north from County Road E, which is owned by the South Road Owners Association
- Lots north of County Road E, and served by the private road owned by the South Road Owners Association
- Homes in the development called “Hillary Farm,” located just west of Scheueneman Road, and served by the private road called Hillary Farm Lane

Some of these areas have lots that are larger than two to three acres in size but contain moderate cost single family homes.

In response to these existing conditions, the following specific policies for this planning area have been established:

- The continuation of moderately low density residential development continues to be encouraged in this planning area.
- Engineered storm water collection/settling areas and discharge rate controls will be required before storm water is allowed to leave this area.
- If sanitary sewer service is not available, executive lots must be of a large enough buildable size to support a well and an ISTS system, as well as space for a complete backup ISTS system.
- Municipal water should be extended into this area, as feasible.
- Shoreline protection for the water body called Gem Lake and its attendant wetlands must be enforced.
- Housing maintenance rules shall be strictly followed to keep existing homes in good repair.

Single Family - Residential Planning Area

This planning area comprises the following areas in the City of Gem Lake:

- Areas east of Scheueneman Road from U.S. Highway 61 North to the Otter Lake Road. The homes on the private road called “Kahl Circle” are also included. One double home is also now located in this area
- Areas west of Scheueneman Road from U.S. Highway 61 north to the “Hillary Farm” Development, and from the northern boundary of “Hillary Farm” to Otter Lake Road
- Areas west of Goose Lake Road between Labore Road and the Gem Lake Hills Golf Course
- Areas northeast of the golf course along Goose Lake Road, and on both sides of Otter Lake Road
- Areas along the private road that extends north of Scheueneman Road at its intersection with Otter Lake Road
- The area along each side of Otter Lake Road

These areas have existing single family dwellings with lot sizes that vary from just over one acre in size to ½ to 1/3 acre in size. These lots contain medium cost single family homes. Most of the areas identified above are fully developed.

In response to these conditions, the following specific policies for this planning area have been established:



- The continuation of low density residential development continues to be encouraged in this planning area.
- If further residences are added in this area, master planning, clustering, and similar concepts should be used to maximize the benefits from community resources, such as municipal water and sanitary sewer.
- If sanitary sewer service is not available, lots must be of a large enough buildable size to support a well and an ISTS system, as well as space for a complete backup ISTS system.
- Municipal water should be extended into this planning area, as feasible.
- Natural buffers of plants, trees or berms are encouraged in areas that border business and commercial zones in White Bear Lake or Vadnais Heights.
- Housing maintenance rules shall be strictly followed to keep existing homes in good repair.

Park, Recreational, and Preservation Planning Area

An 18-hole golf course is presently located in the Single Family Executive planning area. The private golf course (Gem Lake Hills Golf Course) now provides the only semi-public open space in the City of Gem Lake and substantially enhances the feeling of open space and natural environment treasured by the residents of the City.

In response to these existing conditions, the following specific policies for this planning area are offered:

- Continued maintenance shall be required, under a conditional use permit, for the grounds and structures located on the golf course, to maintain its high quality natural environment.
- Golf courses shall be retained, as a lawful conditional use, in residential areas under city zoning codes. The land of the golf course shall be mapped into one or more residential zones based on compatibility with adjacent lands and prevailing conditions when and if development occurs.
- The City of Gem Lake shall continue to explore options for acquiring true public open or preservation areas, focusing on land which directly impacts the water quality of Gem Lake itself.

6.0 Transportation Plan

Most Gem Lake residents work, shop, and obtain entertainment and educational services outside Gem Lake city limits. Therefore, the quality of the transportation system is key to the quality of life for residents. It will be especially important as the City grows, and will require close cooperation with other governmental bodies.

With this in mind, the City of Gem Lake recognizes the importance of the I-35E corridor, and remains active as part of the I-35E “Unweave the Weave” Management Team. The Transportation Plan of Gem Lake is also intended to enhance the natural and man-made environments within, and bordering, the City limits.

The Existing Roadway System

The most important component of the transportation system within Gem Lake for the foreseeable future will be the street and highway network. This network accommodates both private and public motor vehicles. The functional classification and jurisdictional responsibility for maintaining this system is summarized in Tables 6 and 6.1. The existing roadway system is shown in Figure 5.

Arterials

The most heavily traveled arterial route through the community is U.S. Highway 61 which serves as a major artery connecting the Cities Gem Lake with White Bear Lake and the more intensively developed portions of the metropolitan area to the south. The highway connects with the Interstate beltway loop (I-494, I-694) around the Twin Cities at a point approximately one mile south of City limits. The next most traveled arterial within the community is County Road E, which forms part of Gem Lake’s southern boundary. County Road E intersects with U.S. Highway 61 in the southeast portion of Gem Lake, serves the southern portion of White Bear Lake to the east, and connects with I-35E approximately one mile west of the western boundary of Gem Lake. This interstate highway is the only “principle” arterial near the City. Other arterials include Labore Road on the western boundary, Goose Lake Road, located in a southwestern-northeastern orientation near the northern boundary of the community, and Otter Lake Road located in the northeastern portion of the community.

Collectors

Collector streets include Scheueneman Road N., which provides access to Gem Lake Golf Course and the residential area of Gem Lake, and Scheueneman Road S., which provides access to the commercial/business area.

Local Streets

The remaining roads within the community can be classified as local, serving principally adjacent land users. These local streets comprise approximately 50 percent of the total roadway mileage within the community.



Table 6.0 - Inventory of Roads, Streets, and Highways

Name of Facility	Functional Classification	Jurisdiction	Length (miles)
U.S. Highway 61	"A" Minor Arterial	State	.03
County Road E	"A" Minor Arterial	Ramsey County	0.9
Goose Lake Road	"B" Minor Arterial	Ramsey County	1.4
Labore Road	"B" Minor Arterial	Ramsey County	0.6
Otter Lake Road	"B" Minor Arterial	Ramsey County	0.2
Scheueneman Road (N.)	Major Collector	Gem Lake	0.8
Scheueneman Road (S.)	Major Collector	Gem Lake	0.3
Hoffman Road	Local	Gem Lake	0.2
Tessier Road	Local	Gem Lake	0.1
Haven Road	Local	Gem Lake	0.1
Big Fox Road	Local	Gem Lake	0.4
Little Fox Lane	Local	Gem Lake	0.2
Unnamed private road connecting County Road E to residences to the north; Hillary Farm Lane; Kahl Circle, & Heritage Garden Road	Local	Private	1.3
Total			6.8

CITY OF GEM LAKE

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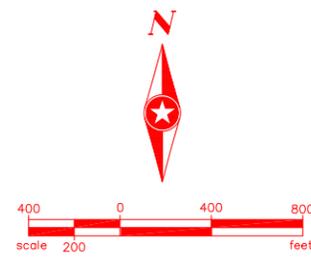
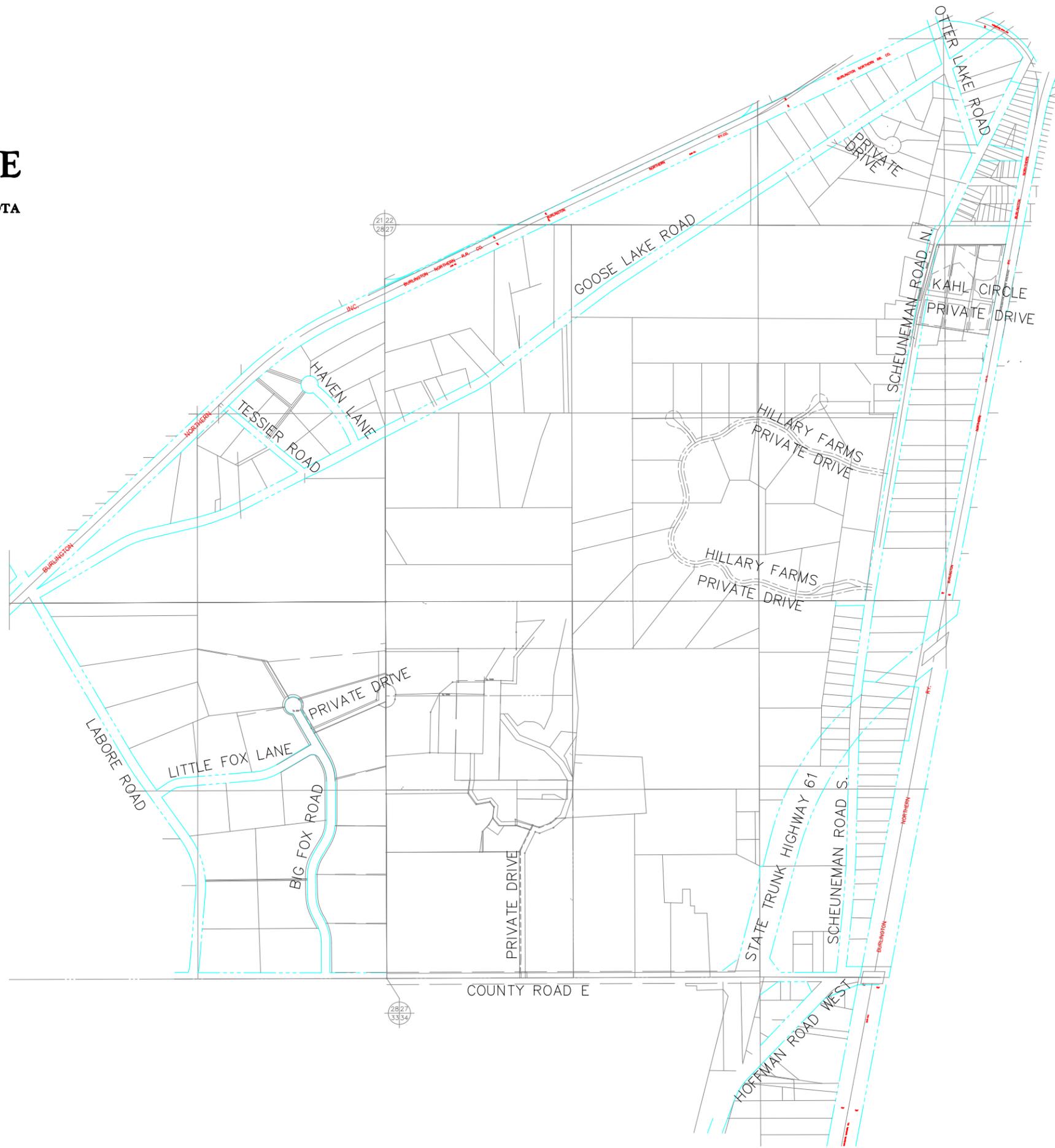


Table 6.1 - Summary of Existing Road Mileage by Jurisdiction and Functional Classification

Jurisdiction	Minor Arterial	Collector	Local	Total	% of Total
State	0.3	—	—	0.3	4
Ramsey County	0.9	2.2	—	3.1	46
Gem Lake	—	—	2.1	2.1	31
Private	—	—	1.3	1.3	19
Total	1.2	2.2	3.4	6.8	100

Jurisdiction

Ramsey County currently maintains 46 percent of the total 6.8 miles of roadway within Gem Lake (refer to Table 6.1) including most of the arterial, all of the collector, and over half of local street mileage. Gem Lake maintains 2.1 miles (approximately 31 percent) of the total mileage. The remaining roads are under state or private jurisdiction.

Public Transit

Gem Lake is located in transit market area III. This City is presently served by Lake Area Bus which provides call-in service from 6:00 A.M. to 6:00 P.M. Monday through Friday. On weekends, the City receives services on an as space is available basis during the hours of 8 AM and 4 PM. Transfers are available from this service to mainline Metro Transit and Northeast Suburban Transit bus routes.

In addition, for those who have disabilities, special transportation services are available through the Lions Club.

Airports

There are no airports, proposed airport sites, search areas, or other related facilities located in Gem Lake. The City is served by the Minneapolis-St. Paul International Airport and the St. Paul Downtown Airport. In addition, a private, small aircraft airport is located in White Bear Township, approximately five miles north of Gem Lake.

The airports have no direct impact on the City of Gem Lake, and any development in Gem Lake will have no impact on the regional aviation system.

The City Clerk/Administrator will notify the Federal Aviation Administration (FAA) and the Minnesota Department of Transportation (Mn/DOT) of any structure to be constructed within Gem Lake that may affect navigable airspace.

There presently are no structures in Gem Lake that are 200 feet or greater in height. The existing zoning ordinance does not allow any sign or building to exceed 36 feet in height.

While the height limitation of 36 feet does not apply to such structures as transmission towers for commercial radio broadcasting station or television antennas, these would both require special use permits.



Future Roadway System

Roadway Changes

The I-35E Corridor Study recommended roadway changes within Gem Lake and the immediate area. The following information briefly summarizes the status of each recommendation.

Completed:

- County Road E turn lanes at Labore Road
- U.S. Highway 61 double left turn lanes at County Road E

In Process:

- Major redesign and rebuilding of the I-35E/I-694 intersection and commons area. This project is called “Unweave the Weave.”

Not Started (planned):

- Connection of White Bear Parkway and Labore Road
- Realignment of the Otter Lake Road/County Road F connection

Another change within the City has been the closure of the access of Scheueneman Road on the north side of Highway 61.

A proposed change that will be based on future development is the installation of a traffic signal at the intersection of County Road E and International Drive. This will be coordinated with the City of Vadnais Heights and Ramsey County when area growth dictates its necessity.

As with all roadway changes, the citizens of Gem Lake have expressed a desire for quality design and construction that enhances rather than detracts from the existing natural environment.

Traffic Forecast

Year	Daily Traffic Counts	
	2007	2030*
County Road E	19,000	24,000
U.S. Highway 61	24,000	35,100

* Year 2030 Daily Traffic Forecasts are from the Met Council Regional Traffic Forecast Model

The following socio-economic data was input into the model concerning Gem Lake. The City lies mostly within Traffic Assignment Zone (TAZ) 992, with small areas in 986 and 979. The area of this zone is shown in *Figure 6.2 - Transportation Analysis Zones (TAZ) map* on the following page.

Gem Lake Socio-Economic Data

TAZ #979	2000	2010	2020	2030
Population	9	9	0	0
Households	3	3	0	0
Employment	68	90	120	120

TAZ #986	2000	2010	2020	2030
Population	0	0	0	0



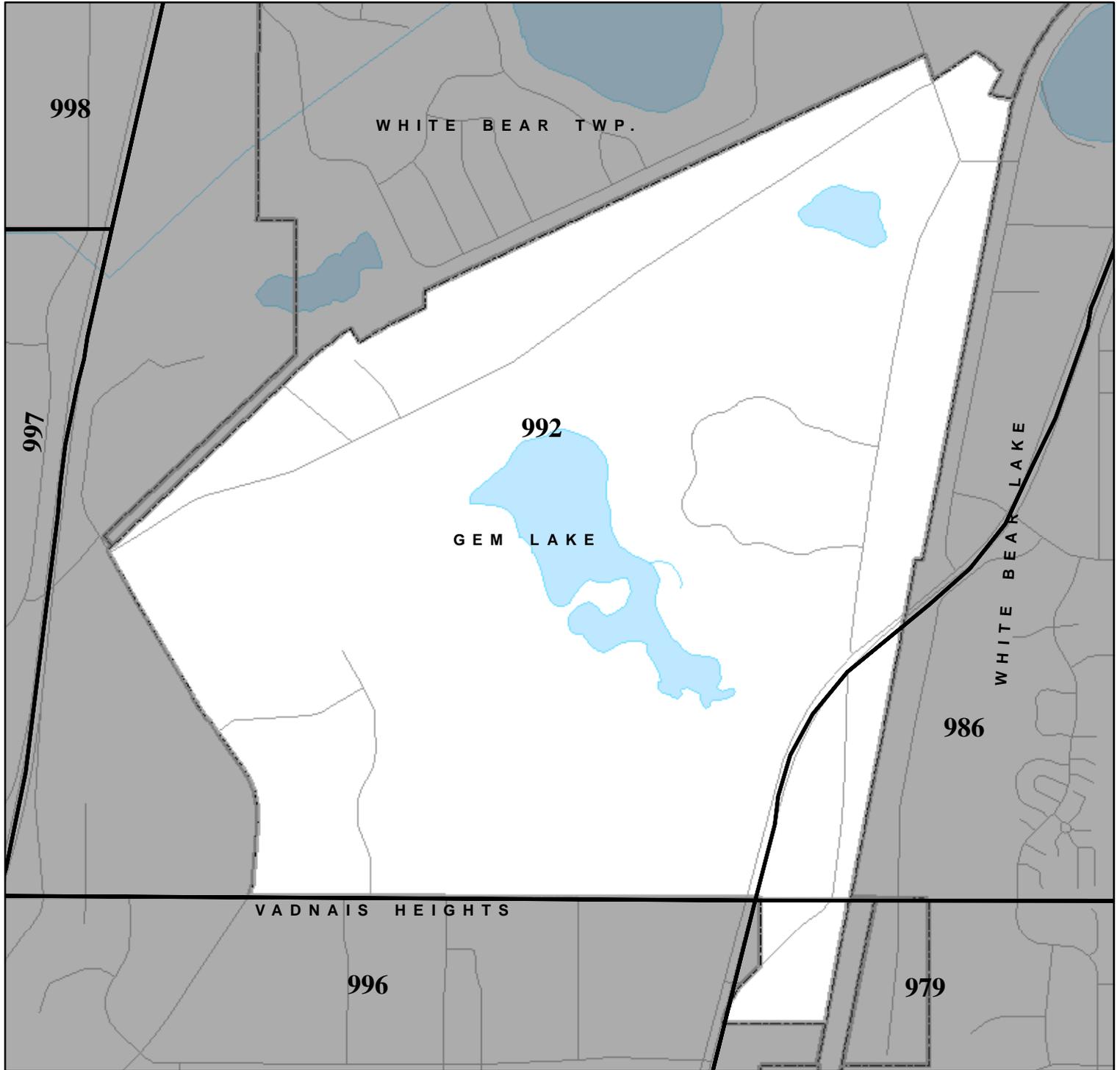
Households	0	0	0	0
Employment	325	425	450	450

TAZ #992	2000	2010	2020	2030
Population	419	481	633	775
Households	136	171	220	301
Employment	155	205	270	300

Total	2000	2010	2020	2030
Population	419	490	633	775
Households	139	174	220	301
Employment	548	720	840	870

Transportation Analysis Zones (TAZ)*

Gem Lake



SOURCE: The geography for the TAZ's are based on the Twin Cities Regional Travel Demand Forecast Model. Local Roads are from The Lawrence Group's Street Centerline data. Community Boundary, Stream, and Open Water are from DataFinder.org

* Some users describe TAZ's as Traffic Analysis Zones or some other closely related words. In principle, they refer to similar transportation planning areas.

- 1148** TAZ Identification Number
- TAZ Boundary
- Local Roads
- Community Boundary
- Stream
- Open Water



Roadway Consolidation and Maintenance

The City of Gem Lake has taken possession of several roadways which had been under Ramsey County jurisdiction. This was done as part of the Functional Roadway Consolidation Project now being implemented by the County and the State of Minnesota. The roadways include that portion of:

- Scheueneman Road in the City of Gem Lake from its intersection with U.S. Highway 61 to the south to its intersection with Otter Lake Road to the north
- Scheueneman Road in the City of Gem Lake from its intersection with County Road E to the south to its intersection with U.S. Highway 61 to the north
- Hoffman Road in the Hoffman's Corners area of the City of Gem Lake, from its intersection with U.S. Highway 61 to the south to its intersection with Ramsey County Road E to the north.

Transportation Policies

The following policies have been established by the municipal government of Gem Lake to enhance the quality of transportation for citizens of the community:

- Gem Lake officially supports the recommendations of the I-35E Management Team. A recent I-35E Corridor study identified the need to establish arterial and collector routes serving the northeastern metropolitan area. The relocation of Otter Lake Road connecting it directly to County Road F and the connection of Labore Road and White Bear Parkway can further this objective. However, Gem Lake's objective of maintaining a rustic, natural environment will require attention to minimize the impact that an increase in traffic may have on the City's road system and residential neighborhoods.
- Gem Lake encourages the incorporation of parkway design criteria and the use of natural landscape barriers in any reconstruction of arterial and connector routes. (e.g., Labore Road/White Bear Parkway connection.)
- Further development of private roads serving more than one property will be encouraged. This is consistent with the City's desire to maintain a low profile government. However, the City should strictly oversee the development of any private roads to ensure that City construction and design standards and specifications are met.
- The basic arterial and collector road system of Gem Lake has been established. Therefore, future streets should be designed to channel local traffic onto County Road E, Labore Road and Goose Lake Road. Accommodating through traffic on new streets will be discouraged.
- All future streets should be designed to discourage additional surface water runoff into Gem Lake and its attendant wetlands. Gem Lake, and its attendant wetlands, has no natural outlet. Therefore, additional storm runoff created by the impervious surfaces of streets into this basin should be discouraged.
- The City of Gem Lake has limited need for public transit service due to planned low density development. However, it will cooperate with adjacent communities to secure improved bus service as needed along its minor arterial street system. Bus service in other areas of the City will be discouraged consistent with its planned low density and desired rustic environment.

- Gem Lake officially recognizes that any development affecting navigational air space within the community is subject to Minnesota Department of Transportation, Aeronautics Division, and Regulations. The community will routinely consider such regulations as part of the development review process.
- The operation of private airports, including heliports and seaplane bases, is prohibited in Gem Lake.
- Gem Lake encourages the future development of hiking/biking trails on the Burlington Northern right-of-way along the eastern boundary of the City, and on the Canadian National Railroad right-of-way along the northern boundary. The City will work with adjacent communities and provide access to trails.

7.0 Sanitary Sewer System Plan

The City of Gem Lake currently owns and maintains a sanitary sewer system that currently serves all of the businesses at the Hoffman's Corners area and a segment of the residential area along Scheuneman Road north of U.S. Highway 61. The City of Vadnais Heights supplies sanitary sewer services to the Tousley Ford property, the Montessori School at the corner of County Road E and Labore Road, and several residences that neighbor the school.

Existing Sanitary Sewer System

The current system consists of approximately 13,400 Linear Feet (LF) of sanitary sewer pipe ranging from 8" to 12" in diameter of both vitrified clay pipe (VCP) and polyvinylchloride pipe (PVC). There are approximately 65 manholes in the system. There are no lift stations or forcemains within the existing system. Figure 7 shows the City's current sewer system.

Currently the system discharges into the Metropolitan Council Environmental Services (MCES) System in four locations as shown in Figure 7.1. The system discharges into a combination of both the VH-423 Interceptor and the 7122 Interceptor. Currently the Met Council does not have a metering station near the city limits of Gem Lake.

The existing condition of the City's sewer system was evaluated in the fall of 2006 / spring of 2007. A sanitary sewer system plan was developed in May of 2007 by SEH for the City. This plan was developed based on the field inspections of manholes and a closed circuit televised (CCTV) inspection of the pipes.

Projected Flows

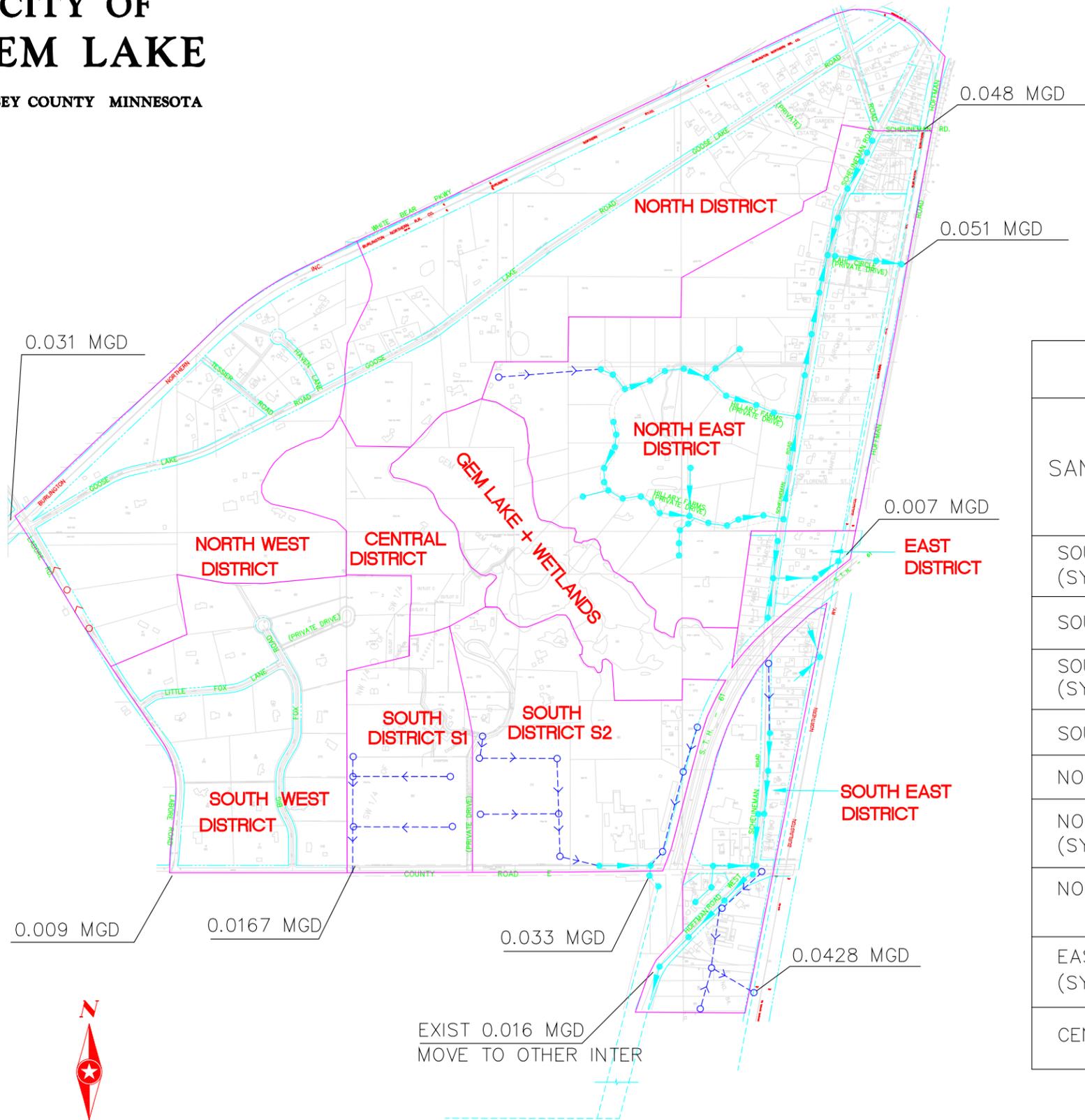
Projected flows for the sanitary sewer system shown in Table 7.1 uses the data from the City's System Statement prepared in 2005 and linear projections to estimate future flows. The projections were estimated based on historical flow data and projected sewer housing and employment information. In 2006 the City's average sanitary sewer flow measured by MCES was recorded as 0.027 million gallons per day (MGD) and their current billing is 10 million gallons per year.

CITY OF GEM LAKE

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LEGEND

- SANITARY SEWER DISTRICT BOUNDARY
- EXISTING GEM LAKE SANITARY SEWER
- POTENTIAL EXTENSIONS THROUGH 2030
- MCES INTERCEPTOR
- 0.00 MGD ULTIMATE FLOW FROM SANITARY SEWER DISTRICT



ULTIMATE FLOWS TO SANITARY SEWER SERVICE AREA

GEM LAKE SANITARY SEWER DISTRICT	INTERCOMMUNITY CONNECTION OR INTERCEPTOR	PEAK HOURLY FLOWS (CFS)	DAILY FLOW (MGD)
SOUTH EAST (SYSTEM B)	MCES BELT LINE INTERCEPTOR 7122	0.265	0.0428
SOUTH S1	VADNAIS HEIGHTS	0.104	0.0167
SOUTH S2 (SYSTEM A)	MCES BELT LINE INTERCEPTOR VH-423	0.206	0.033
SOUTH WEST	FUTURE VADNAIS HTS	0.055	0.009
NORTH WEST	FUTURE VADNAIS HTS	0.191	0.031
NORTH EAST (SYSTEM D)	MCES BELT LINE INTERCEPTOR 7122	0.316	0.051
NORTH	FUTURE MCES BELT LINE INTERCEPTOR 7122	0.300	0.048
EAST (SYSTEM C)	MCES BELT LINE INTERCEPTOR 7122	0.044	0.007
CENTRAL	MCES BELT LINE INTERCEPTOR 7122	0.004	0.001

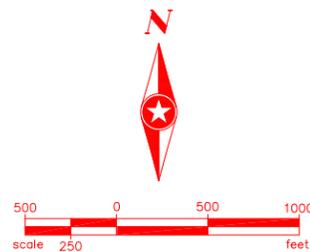


Table 7.1 - Projected Wastewater Flows (2007 - 2030)

Year	2007	2010	2015	2020	2025	2030
Sewered Population	125	170	242	313	384	455
Unsewered Population	294	320	320	320	320	320
Sewered Households	50	54	77	100	141	181
Unsewered Households	93	120	120	120	120	120
Sewered Employment	548	720	780	840	855	870
Sewered Commercial Acres	46.7	46.7	46.7	46.7	46.7	46.7
Average Annual Wastewater Flow (MGD) **	0.051	0.059	0.066	0.073	0.078	0.084
Allowable Peak Hourly Flow (MGD) *	0.21	0.24	0.26	0.29	0.31	0.34

*Flows determined as follows: 75gal/day-person population, 25gal/day-person employment & 600gal/day-acre commercial

Existing & Potential Sanitary Sewer Related Issues

To continue with the ‘rustic’ feeling of the City in a natural environment and to maintain the low-density development desired, the following shall be considered the goals of the City of Gem Lake sanitary sewer plan:

- A. Zoning and lot sizes will be regulated to allow adequate space for onsite septic systems in residential areas. Current rules require adequate space for a second drain field on each residential tract, in case the first one fails.
- B. All onsite septic systems in the City are inspected bi-annually to insure the correct operation of these systems. Inspections are performed by the City’s contracted inspector.
- C. A backup plan for providing a City operated sanitary sewer system has been developed and will be put in place if necessary in any area of the City where onsite septic systems cannot operate.

Within these goals the following specific items have been implemented:

- A. City-wide Sanitary Sewer System Plan was developed for the City in May 2007. This plan provides for a potential municipal sanitary sewer connection for each part of the City that could possibly use gravity flow



sewer. This plan does require extensive excavation and construction through some of the areas of the City.

Figure 7 illustrates possible extensions to the sanitary sewer system of Gem Lake. Any expansions to the system would be connected to either the Vadnais Heights system or the MCES belt line interceptors. The average daily flow of the existing connections to the public system is 0.027 MGD or 10 million gallons per year based in the Met Council's current billing. With the future possible extensions, the ultimate daily flow would be 0.239 MGD or 87.4 million gallons per year. Table 7.2 illustrates estimated future sewer flows based on the City's proposed zoning and land use. The anticipated flows from the various sewer districts were determined by applying typical flow rates. For residential areas a flow rate of 275 gallons per day per residential unit was used. For the commercial / industrial areas a flow rate of 600 gallons per day per acre was used.

It must be noted that Figure 7.1 and Table 7.2 data were based on zoning and land use acres. Thus Table 7.1 is slightly different since it was based on population projections.

TABLE 7.2

Gem Lake Sewer District	Inter Community Connection or Interceptor	Proposed Future Community Connection or Interceptor	District Acres	Existing Estimated Flows 2007					Estimated Flows 2010					Estimated Flows 2015					Estimated Flows 2020															
				Existing Land Use	Residential Land Use Density (units/acre)	Estimated No. REC	Estimated Comm. Acres	Estimated Flows	Estimated Existing District Flows (MGD)	Land Use	Residential Land Use Density (units/acre)	Estimated Acres	Estimated No. REC	Estimated Comm. Acres	Estimated Flows	Estimated Ultimate District Flows (MGD)	Land Use	Residential Land Use Density (units/acre)	Estimated Acres	Estimated No. REC	Estimated Comm. Acres	Estimated Flows	Estimated Ultimate District Flows (MGD)	Land Use	Residential Land Use Density (units/acre)	Estimated Acres	Estimated No. REC	Estimated Comm. Acres	Estimated Flows	Estimated Ultimate District Flows (MGD)				
South East	MCES Belt Line Interceptor VH-423	MCES Belt Line Interceptor 7122	40	Comm.			36	0.0216	0.0216	Mixed Use	4.5			36	0.0216	0.0216	Mixed Use	4.5	7	31.5	30	0.027	0.027	Mixed Use	4.5	7	31.5	30	0.027	0.027				
				Single Fam. Est.	0.083					0.083					0.083												0.083							
				Single Fam. Exec.	0.4					0.4				0.4							0.4						0.4							
				Single Fam. Res.	3					3				3							3						3							
South S1	None	Vadnais Heights	37	Res. R1	0.33				0	Mixed Use	4.5					0	Mixed Use	4.5	9	40.5	8.1	0.016	0.016	Mixed Use	4.5	9	40.5	8.1	0.016	0.016				
				Single Fam. Est.	0.083					0.083					0.083												0.083							
				Single Fam. Exec.	0.4					0.4				0.4							0.4						0.4							
				Single Fam. Res.	3					3				3							3						3							
South S2	MCES Belt Line Interceptor VH-423	MCES Belt Line Interceptor VH-423	65.5	Comm.			10.7	0.00642	0.00642	Mixed Use	4.5			10.7	0.00642	0.00642	Mixed Use	4.5	9	40.5	8.6	0.016	0.016	Mixed Use	4.5	9	40.5	8.6	0.016	0.016				
				Res. R1	0.33					0.33					0.33												0.33							
				Single Fam. Est.	0.083					0.083				0.083							0.083						0.083							
				Single Fam. Res.	3					3				3							3						3							
South West	None	Vadnais Heights	79	Res. R1	0.33				0	Mixed Use	4.5					0	Mixed Use	4.5					0	Mixed Use	4.5									
				Single Fam. Est.	0.083					0.083					0.083												0.083							
				Single Fam. Exec.	0.4					0.4				0.4							0.4						0.4							
				Single Fam. Res.	3					3				3							3						3							
North West	None	Vadnais Heights	91	Res. R1	0.33				0	Mixed Use	4.5					0	Mixed Use	4.5					0	Mixed Use	4.5									
				Res. R2	1					1				1													1							
				Single Fam. Est.	0.083					0.083				0.083							0.083						0.083							
				Single Fam. Res.	3					3				3							3						3							
North East	MCES Belt Line Interceptor 7122	MCES Belt Line Interceptor 7122	152	Res. R1	0.33	3		0.0008	0.011	Mixed Use	4.5					0.0135	Mixed Use	4.5					0.0188	Mixed Use	4.5									
				Res. R2	1					1				1													1							
				Res. R3/4	1.204	37		0.0102			30.3	12	0.0033		78.3		31	0.0086		78.3	31.32	0.009					0.4	78.3	31.32	0.009				
				Single Fam. Res.	3			0.0102			37		0.0102		37			0.0102		37		0.0102					3	30	90.00	0.025				
North	None	MCES Belt Line Interceptor 7122	138	Res. R1	0.33				0	Mixed Use	4.5					0	Mixed Use	4.5					0	Mixed Use	4.5									
				Res. R2	1					1				1													1							
				Res. R3/4	1.204					1.204				1.204							1.204						1.204							
				Single Fam. Res.	3					3				3							3						3							
East	MCES Belt Line Interceptor 7122	MCES Belt Line Interceptor 7122	9	Res. R1	0.33				0.0028	Mixed Use	4.5					0.0028	Mixed Use	4.5					0.0028	Mixed Use	4.5									
				Res. R2	1					1				1													1							
				Res. R3/4	1.204	10		0.0028			3.4	10	0.0028		3.4		10	0.0028		3.4	8.62	26		0.0071			0.4	8.62	26	0.0071				
				Single Fam. Res.	3					3				3							3						3							
Central	None	MCES Belt Line Interceptor 7122	29	Res. R1	0.33				0	Mixed Use	4.5					0	Mixed Use	4.5					0	Mixed Use	4.5									
				Single Fam. Est.	0.083					0.083				0.083													0.083							
				Single Fam. Exec.	0.4					0.4				0.4							0.4						0.4							
				Single Fam. Res.	3					3				3							3						3							
TOTALS				MGD						0.042						0.044						0.081						0.099						
				MG/yr						15.25						16.18						29.40						36.29						

Notes:

1. Ultimate flows based on 2007 Sanitary Sewer Comprehensive Plan prepared by SEH.
 2. Flow Estimates based on:
 Residential Rate: 275 gal/day-REC (Residential Equivalent Unit)
 Commercial Rate: 600 gal/day-acre
 3. Estimates for flow in 2010-2030 are based on assumed percentages of ultimate development in the various districts
 4. Estimated Flows for 2007 are based on the above rates, however the annual flow appears to be higher than the current flows being estimated by MCES. This may be due to the lack of public water supply in Gem Lake.
 5. Peak hourly flows: Residential flows were peaked using a 4.0 Peak Factor
 6. Mixed Use Density is min 3units/acre, max 6units/acre. Used 4.5units/acre for calculation purposes.
 7. Single Family Estate Density is min 1unit/20acre, max 1unit/3acre. Used 1unit/12acre for calculation purposes.
 8. Single Family Executive Density is min 1unit/3acre, max 1unit/2acre. Used 1unit/2.5acre for calculation purposes.
 9. Single Family Residential Density is min 1unit/acre, max 3units/acre. Used 3units/acre for calculation purposes.
- ** = Residential land use density calculations shown are for estimated ultimate sewer flows beyond 2030 planning purposes only. They do not reflect any future land use policies or decisions. Future land use will be reviewed every 10 years when the Comprehensive Plan is updated.

Inflow & Infiltration Reduction

The City of Gem Lake, like the many communities in the metropolitan area, has spent considerable time and energy managing inflow and infiltration (I/I) within their sanitary sewer collection system. The Met Council (MCES) has implemented a surcharge program which is designed to encourage metropolitan communities to reduce I/I entering their portion of the sanitary sewer collection system. However the City of Gem Lake does not qualify for this program because of the size and small flows generated by the city. While the City has not exceeded the pre-determined maximum peak level established by MCES, it continues its effort to minimize I/I. The City has prepared and is currently implementing an I/I program.

The I/I reduction program is used to isolate and prioritize sewer rehabilitation in the sanitary sewer collection system, both on the public and private side of the system. With this in mind, the City conducts both an annual cleaning and a regular closed circuit television inspection. Gem Lake also continues to conduct a sewer rehabilitation program, which includes follow-up inspections in areas with significant I/I potential. The City should develop a program for lateral service inspection and repair.

The City currently enforces its city ordinance (#64) that was developed to prohibit illegal connections. The City also encourages voluntary compliance through public education.

To reduce infiltration the City annually inspects manholes and repairs any contributing to this problem. In addition to routine maintenance the City has also adopted a plan to replace or repair sewer lines that are cracked and/or in need of repair. The City's operation and maintenance plan was developed in May 2007. The City's O & M plan can be found in the Sanitary Sewer System Plan.

Sewer Ordinances

The City of Gem Lake has enacted ordinances which regulate individual sewage treatment systems (Ordinance 46) and the operation of the municipal sanitary sewer system (Ordinance 64).

Ordinance 46 - ISTS systems

Ordinance 46 is designed to protect and promote the health, safety and general welfare of the people of Gem Lake by regulating seepage discharges and the location, installation, alternation, operation and maintenance and monitoring of all individual sewage treatment systems (ISTS). Individual sewage treatment systems must be installed in accordance to Chapter 7080 of the Minnesota Rules. The ISTS shall be designed to receive all sewage from the dwelling(s), building(s), or other establishment(s) served by the system, including laundry waste and basement floor drainage. Surface, roof and foundation drainage and other storm water shall not be allowed to enter any part of the system. Not more than one dwelling, commercial, business, institutional, or industrial unit shall be connected to the same ISTS, unless such multiple connections was specified in the application submitted and in the permit issued for the system. No ISTS shall be installed or renovated on lands to which public sewer service is currently available, without a system permit. Within the Urban Service Area, as identified in a Met Council approved a comprehensive sewer plan,



developers will place any ISTS systems where they can later be most cost effectively connected to the public sewer system, when it becomes available.

No preliminary plat shall be approved by the City of Gem Lake City Council, unless the engineer makes a favorable recommendation regarding the ability of each lot to accommodate a satisfactory ISTS. A system permit, obtained from the administrator, is required for any installation or renovation of an ISTS. No building permit for any building including the installation or renovation of an ISTS shall be issued until a system permit for the involved facility has been approved.

There are currently 109 ISTS in operation within the City as of June 26, 2009. The city ordinance provides for an inspection of all ISTS by a professional to take place every other year. The City hires an outside consultant to perform this service. Computer records are maintained as to which property owners have ISTS. At the time of the inspection the inspector will make sure that the ISTS is in proper working condition. The inspector will provide maintenance tips to the property owner to keep the system in proper working condition. If the ISTS is found to be in need of repair, the inspector will review the repair or replacement needs with the property owner. The inspector will also notify the City for tracking and inspection of the repairs or replacement which ever is required. All ISTS records are kept at the City.

The City of Gem Lake has instituted an inspection program for ISTS. The initial inspection is to determine if installation or renovation has been accomplished in compliance with Chapter 7080 of the Minnesota Rules and with the Gem Lake Individual Sewage Treatment System Ordinance. The City's inspector shall inspect any individual ISTS when a written complaint signed by two residents of the City of Gem Lake is received.

It is the responsibility of the owner of any premises using an ISTS, for which a permit has been issued, to provide for the periodic maintenance by a qualified septic system company. Reports of the maintenance should be submitted to the administrator.

It is the duty of the administrator to create, update and maintain an accurate inventory of each ISTS for which permits have been issued within the City of Gem Lake. The inventory should include location, system description, renovation description and maintenance reports. The City may inspect any system it deems necessary as a result of the reporting program. The City, at cost to the land owner, has each and every ISTS inspected every even year. Any system which fails the inspection must be renovated or replaced. Ordinance 61 defines the bi-annual inspection and maintenance routines.

Ordinance 64 – Municipal Sanitary Sewer System

Ordinance 64 is designed to regulate the operation of the municipal sanitary sewer system. The ordinance contains language that does the following:

- Regulates connections to be made to the municipal sanitary system
- Establishes regulations as to type and kinds of waste that may be disposed of in the municipal sanitary sewer system
- Prohibits the discharge of any type or kind of surface waters into the municipal sanitary sewer system. Also prohibits the connection of sump pumps, rain leaders, and passive drain tile to the sanitary sewer system.
- Prescribes rates and charges for sewage disposal services



- Provides for the issuance of permits for and supervision of all connections to the municipal sanitary sewer system
- Prescribes certain materials and methods to be used for said connections
- Provides for licensing of sewer contractors
- Prescribes penalties for the violation of the provisions of this ordinance

The timing of the possible expansions would depend on funding and need. The first priority would be to connect all commercial establishments to public sanitary sewer. A second priority would be properties where soil or topographic conditions make the installation of an ISTS difficult.

Goals and Policies

Goals

- Maintain the high quality natural environment
- Meet water quality standards
- Provide a sanitary sewer system that is cost-efficient to the City and which encourages a fiscally responsible development pattern

Policies

- City to extend sewer mains as needed as shown in *Figure 7.1 - Sanitary Sewer Comprehensive Plan*. The first priority shall be commercial establishments. The second priority will be areas where soil or topographic conditions limit effectiveness of onsite sewage disposal systems.
- Onsite sewage disposal systems will not be allowed where there exists a service limitation, such as wetness, low soil percolation and other unfavorable soil conditions.
- Further written working agreements with Vadnais Heights and MCES will be sought, as necessary, to coordinate required extension of sewage service to their systems.
- Appropriate on-site disposal regulations will continue to be enforced in those areas not served by the centralized sanitary sewer system. Minnesota Department of Health and Minnesota Pollution Control Agency (MPCA) standards for installation of ISTS will be strictly enforced.
- The bi-annual inspection of all individual sewage treatment systems in the City will be continued.
- Water pollution from onsite treatment systems will be minimized.
- All applicable state or federal requirements for sewage effluent will be met or exceeded.
- Wastewater generation served by ISTS systems will be required by the City to connect to the public system within one year of the time service is made available.
- A capital improvements program, which includes sewer system improvements, will be developed.
- Minimum lot sizes adequate to provide for all expected improvements to ISTS systems will be required. This will allow for the installation of two ISTS systems to help ensure space for an alternate system or system expansion, in case of inadequacy or failure.
- A continuing education program on the function and maintenance of ISTS systems will be established.
- Outside funding sources for programs to locate and upgrade substandard wells and ISTS systems will be sought.

- When sewer service is available, larger lots are encouraged to subdivide. These lots should meet Met Council standards for density and be at least 3-units per acre.

8.0 Water Supply System Plan

At present, there is no city-wide public water distribution system within Gem Lake. Tousley Ford, in the Hoffman's Corners West area of the City, and the Montessori School in the south west corner of the City currently receive their water supply from Vadnais Heights. All other properties in Gem Lake, residential and non-residential, obtain their water supply via private wells.

The City has a number of options with regard to its water supply. The first would be to continue to rely on private wells. A second option would be to purchase water from the Vadnais Heights, White Bear Lake, and White Bear Township water distribution systems for all properties within Gem Lake. A third option would be to purchase water for only the commercial properties.

Connecting to an existing municipal system would address a number of potential problems. Water quality would be enhanced by connecting to a public system that includes water treatment facilities. With private wells, there is the potential of contamination and of the well going dry.

There are some steps that the City should undertake if it continues to primarily rely on private wells for its water supply. For instance, a program should be set up to require periodic testing of water from every well in the City to determine water quality. This program could include steps to take in the event water quality fails to meet minimum standards.

In addition, an educational program should be set up to promote water conservation measures within the City of Gem Lake. Although each residence and business has its own private well, it would be beneficial to the community to have some type of water conservation program in order to maximize groundwater supply. It would be difficult for the City to impose water conservation regulations on properties with private wells. However, an educational program could recommend voluntary water conservation measures to property owners. Space in the city newsletter could be devoted to describing and/or recommending water saving techniques, devices and appliances (i.e., how to cut down on water use, the best and worst times to use water outdoors, etc.). The educational program could emphasize the value and importance of conserving water, regardless of whether or not the City has municipal water.

An emergency preparedness/contingency plan should also be considered by the City. Again, although the City of Gem Lake does not have a public water supply, it may be in the City's best interest to be prepared in case of an emergency. One option would be to adopt the emergency plan and consider policies of the water supplier.

The City should make arrangements with the adjacent neighboring communities to obtain water from them for its citizens in case the groundwater supply ever becomes contaminated. The City should also have a list of contacts available in case of an emergency. It would also be helpful to make available to residents, steps that should be taken in case of contamination to an individual's water supply.

Water Supply Policies

The following policies have been established by the municipal government of Gem Lake with regard to the water supply for the citizens and businesses of the community:



- The possibility of developing a centralized water distribution system within Gem Lake will be considered. The system might either be developed based on a well supply within Gem Lake or by attachments to the Vadnais Heights, White Bear Lake or White Bear Township systems.
- Water service should be extended to each targeted area at the same time and in the same priorities as the sanitary sewerage service, in order to minimize street reconstruction and traffic disruption.
- The possibility of connecting only the commercial area of Gem Lake to the Vadnais Heights, White Bear Lake, or White Bear Township water distribution systems will be explored.
- The adoption of a mandatory water quality testing program for private wells will be considered.
- An educational program promoting water conservation measures within the City of Gem Lake will be developed.
- An emergency preparedness plan with regard to the water supply will be developed, or the City will adopt the policy of the water supplier.

Proposed Water Supply System

Figure 8 - Water Supply Comprehensive Plan on the following page shows the City's proposed water supply system, which includes supply from all three of the surrounding communities. Due to the differences in the treatment systems performed by the three communities, no two systems can be inter-connected. Therefore the City water supply consists of three separate water main loops through the City.

9.0 Housing Plan

Housing Supply

The housing supply in Gem Lake is rather homogeneous. The 2000 census of the population showed that there were 145 housing units within Gem Lake, with 139 of those units classified as “single-family detached.” Of those single-family detached housing units, 130 of them were owner-occupied, and nine were renter-occupied. There were also two multiple-family dwelling units within Gem Lake. Both of these units were duplexes. The 2000 US Census showed that only six housing units were vacant at that time.

The condition of housing within Gem Lake is generally good. Over half the homes in Gem Lake have been built since 1970. A majority of the housing within the community was built between 1970 and 1989. A total of 68 units were built prior to 1970, while 12 have been built since 1990, according to US Census Data.

The median value of housing in Gem Lake in 2000 was \$159,600. A majority of the housing was valued between \$100,000 and \$149,000. Only 17 housing units were valued less than \$100,000, while there were 21 housing units valued over \$300,000. Two units were valued between \$500,000 and \$1,000,000. The median gross rent in Gem Lake in 2000 was \$813 per month.

The 2000 census shows that there are 419 persons and 139 households in Gem Lake, for an average of 3.01 persons per household. This compares to 3.14 in 1990. Due to an aging population, smaller households have become a national trend.

The median household income in 2000 for Gem Lake was \$64,167. Median family income was \$82,909. That compares to \$41,994 and \$50,046 respectively to the United States.

Supply and types of housing in the City of Gem Lake are limited. Few are vacant or available and almost all of the housing stock is classified as single family detached. Virtually nothing in the way of multiple family buildings, (other than two duplex units) senior or planned affordable housing currently exists.

More diverse housing options currently exist within the neighboring communities of Vadnais Heights, White Bear Lake, and White Bear Township. While the planned mixed use development near Hoffman Corner’s may provide an opportunity for senior and multiple family housing, Gem Lake also needs to explore region wide efforts to provide for more housing diversity.

Overcrowding is not a problem in the City of Gem Lake. The majority of houses in the City have three or more bedrooms, which meshes well with the average household size of 3.01 persons.

Also, the cost of housing is not excessive as a percentage of household income. The 2000 census shows that median monthly owner cost is \$1,210 with a mortgage and \$263 without a mortgage.

Almost 79 percent of the households spend less than 30 percent of their income on housing costs. Median rent for non-owner occupied households is \$813. All renters spent less than 25 percent of their income on rent.

Although there are a great number of employment opportunities within Gem Lake, few residents are also employed here. Of the 69 responses to the last residential community survey, only seven residents stated that they or someone in their family were employed in the City.

Housing Goals and Policies

The following goals and policies have been established by the municipal government of Gem Lake with regard to housing:

- Continue to encourage low, to very low, density residential development within the existing core area of the City.
- Encourage a better variety of housing by adopting wording in the zoning ordinance allowing for different types of housing (townhomes, villas, row houses etc.) as redevelopment occurs, and in the mixed use areas.
- Encourage the construction of more dense housing along the transit corridors of County Road E and Highway 61. This is where all of the mixed use plan areas are identified.
- Consider participating in the Metropolitan Livable Communities Program.
- Encourage the development of life-cycle housing opportunities.
- Encourage the rehabilitation and continuous maintenance of existing housing.
- Preserve the identity and improve the quality and appearance of existing residential neighborhoods.
- Help ensure that all new housing, including affordable housing, adheres to the highest community design, planning and construction standards.
- Encourage the preservation of owner-type housing for low and moderate income households.
- Protect residential neighborhoods adjacent to commercial developments through physical and/or vegetative buffering, and through the placement of ‘transitional’ land uses on the periphery. Adequate buffering should be an explicit objective of site plan review and approval.
- Explore local fiscal initiatives for housing, including but not limited to, the use of housing revenue bonds, tax increment financing, Community Development Block Grants, and Minnesota Housing Finance Agency programs.
- Examine alternative transportation services that relate to life-cycle housing opportunities.
- Consider adapting the current Gem Lake Planned Unit Development and Cluster Development Standards to allow for more creativity and flexibility with regard to life-cycle housing opportunities.
- Consider working with the Ramsey County Housing and Redevelopment Authority (HRA) in the development of a housing strategy for the City of Gem Lake.
- Explore the possibility of participating in region-wide efforts to develop a wide variety of housing types.

Affordable Housing Units Needed 2011-2020

The City of Gem Lake will strive to add 19 units of affordable housing between 2011 and 2020 per Metropolitan Council recommendations.



10. Local Water Management Plan

The Gem Lake Local Water Management Plan has been prepared as a separate stand alone document.

11. Community Facilities and Services Plan

As stated in Chapter 4 of this plan, Gem Lake residents wish to maintain a low profile government. This would mean providing a minimum of urban services, consistent with the needs of a low density “small town” community. With this in mind, the City of Gem Lake intends to establish long-term service commitments with other governmental units in the area. Given the relatively small ultimate population planned for the community, it would not be cost efficient to maintain separate municipal commitments for many community services.

Police

Currently, the City receives police protection on a contractual basis from the Ramsey County Sheriff. As the population of Gem Lake increases, there will be a need to increase police surveillance. There is a Ramsey County Sheriff’s sub-station located at Gem Lake City Hall which does cause a better patrol presence in the City.

Policy:

The City of Gem Lake will seek to combine with other governmental units in the area in maintaining and improving upon a high quality sub-regional police force. The City will continue to support the Sheriff’s substation at the Gem Lake City Hall.

Fire Protection

The City of Gem Lake currently contracts with the City of White Bear Lake for fire protection services. These services are currently based on a flat rate, plus a fixed charge per fire occurrence.

Policy:

The City will seek a longer term commitment with either Vadnais Heights or White Bear Lake for fire protection services. In the future, these services might be charged on an annual basis. The fees could be based on mutually agreed upon criteria, such as assessed property valuation.

Road Maintenance

Approximately 2.1 miles of roads are currently maintained under Gem Lake jurisdiction.

Policy:

The City will continue to contract for road maintenance.

Professional Assistance

There are no full-time employees of the City of Gem Lake. All professional assistance including lawyers, engineers and planners are paid for on the basis of time and materials. The City contracts with White Bear Township for City Administration and other related services.

Policies:

Legal, engineering and planning assistance will continue to be on a time and materials basis. The contracting of City Administration services by White Bear Township will be continued.



Municipal Building

Gem Lake recently constructed and opened a City Hall in January of 2008. This structure is a joint project between the City of Gem Lake and White Bear Township. The facility is expected to provide adequate space for the City for the next 20 or more years.

Policy:

The City should review space needs every 5 to 10 years to determine if can be met with the current building. There is adequate space on the current site to expand the building if necessary.

Public Schools

District 624 provides education to Gem Lake residents.

Policy:

The City will continue to support high quality elementary and secondary public education for residents of Gem Lake.

Health Facilities

At present, there are no hospital facilities in Gem Lake or in any of the contiguous municipalities adjoining it. The closest hospital facility is St. John's Hospital in Maplewood, approximately two miles away.

Policy:

Gem Lake should cooperate with other local governments in encouraging the development of medical facilities within a more convenient proximity as area population growth dictates. Plans for a medical clinic in the SW parcel of the City of Gem lake Gateway and Village Planning area have been discussed.

Outdoor Recreational Facilities

There are no publicly held open spaces or recreational facilities within the community. All existing outdoor recreation in Gem Lake must currently occur on privately developed lands, vacant lots, or on the streets.

Policies:

- Some form of neighborhood-oriented park will be provided as the community develops. This might include a picnic ground and/or playground facilities.
- The community will continue to rely on Ramsey County for development of larger natural resource based recreational facilities.
- The City will explore bicycle trail options and methods for providing access to regional trails.
- The City will encourage the continued operation of the private golf course now located in the NE portion of the City.

12. Park and Open Space Plan

The *2030 Regional Parks Policy Plan* adopted by the Met Council in June 2005 and updated December 2010 is the official system plan for regional recreation open space. Local comprehensive plans must conform to the principles of this parks policy.

This system statement summarizes significant elements of the metropolitan system plan and highlights those elements that apply specifically to the City of Gem Lake. In addition to reviewing this system statement, Gem Lake should consult the entire *2030 Regional Parks Policy Plan*, the *2030 Regional Development Framework* and other pertinent regional planning and policy documents to ensure its comprehensive plan and plan amendments conform to the metropolitan system plans. A PDF file of the entire *2030 Regional Parks Policy Plan*, the *2030 Regional Development Framework*, the *Local Planning Handbook* and other regional planning and policy documents of the Metropolitan Council are available online at the Metropolitan Council's website:

<http://www.metrocouncil.org/planning/framework/timeline.htm>

To meet the needs of the region in 2030, the *2030 Regional Parks Policy Plan* includes the following changes to the current regional parks system:

Designate two existing county parks and three trails as "regional"

- In Washington County, Pine Point Park
- In Ramsey County, Tony Schmidt Park
- In Ramsey County/St. Paul, three regional trails – Trout Brook, Summit Avenue, and Lexington Parkway

Acquire and develop three new parks. Search areas include:

- Northwestern Anoka County
- Empire Township in Dakota County. Please note that the Metropolitan Council approved a park master plan and a boundary for the park has been established
- Blakeley Township in Scott County

Acquire and develop seven new trails. Search areas include:

- The Crow River, in Carver County and Three Rivers Park District
- Both a north/south and an east/west trail traversing Dakota County
- An east/west trail traversing Scott County
- In Three Rivers Park District, a trail connecting parts of Baker Park Reserve; a trail connecting Baker and Crow-Hassan Park Reserves; and a trail connecting Crow-Hassan and Elm Creek Park Reserves

Acquire land within the current boundaries of 30 existing parks and four trails.

Acquire natural-resource lands adjacent to six existing parks and six existing trails.



Beyond 2030

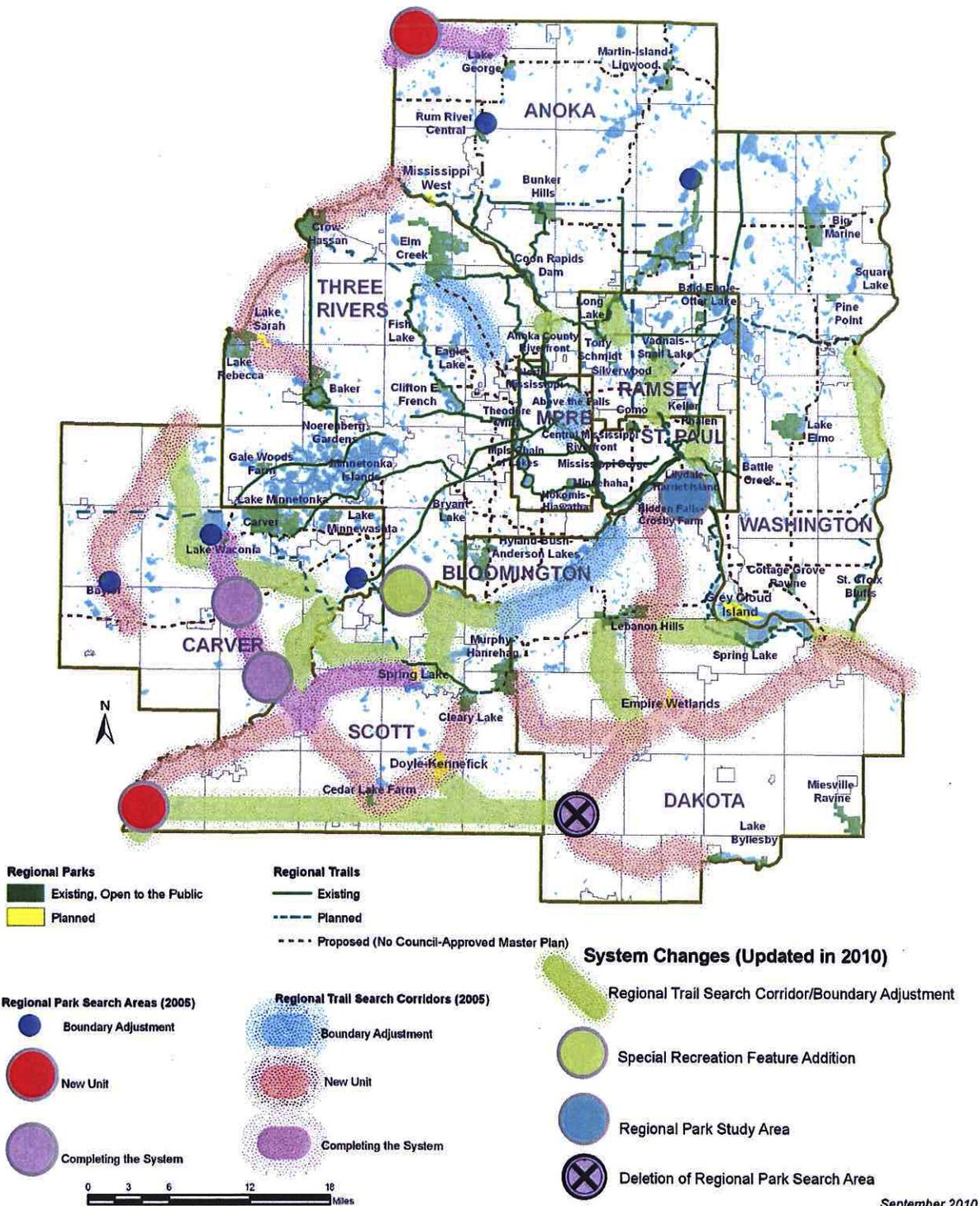
To meet the needs of the region beyond 2030, the Council proposes that four new regional parks (or reserves) and three new trails be acquired. These parks and trails would not be developed until after 2030, but the opportunity to acquire them will likely be lost if the lands aren't identified and purchased before 2030. The goal is to complete the acquisition of the regional park system and secure opportunities for future generations. Search areas include:

- **Parks:** Miller Lake area and Minnesota River Bluff and Ravines in Carver County; southwestern Dakota County; and Cedar Lake area in Scott County.
- **Trails:** Northwestern Anoka County; central to south Carver County; and Minnesota River to Spring Lake in Scott County.

Refer to *Figure 9 - All Additions and Changes to Regional Park System Plan* map on the following page.

2030 Metropolitan Regional Parks System Plan Update

Regional Parks System Additions 2010



September 2010

Figure 9

Regional Parks System Plan Considerations Affecting Gem Lake

Regional Parks and Trails in Gem Lake

The following regional parks and trails along the boundaries of the City of Gem Lake as contained in the adopted 2030 Regional Parks Policy Plan are:

- Bruce Vento Regional Trail
- St. Anthony Rail Road Spur Regional Trail

Bruce Vento Regional Trail. This regional trail is partially complete and open to the public. The section on the eastern border of the City of Gem Lake is not yet complete. The trail alignment is shown in Figure 2 and is acknowledged by the City of Gem Lake.

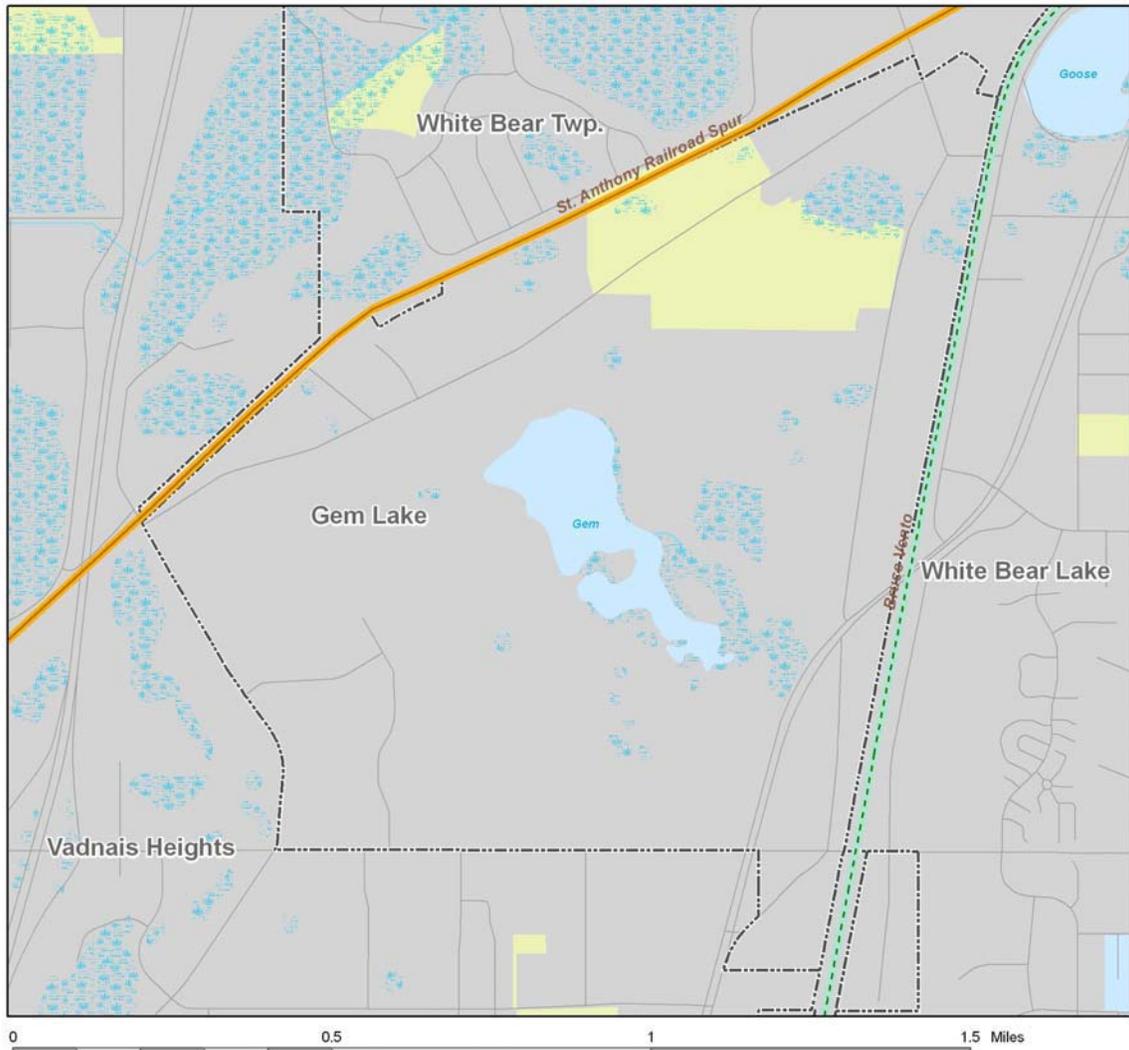
St. Anthony Rail Road Spur Regional Trail. This is a proposed regional trail that would follow the existing railroad corridor long the northwest border of the City of Gem Lake. Since there is an active railroad operating on this corridor tracks, trail planning would not take place until there is a change in the status of the use of the tracks. At that time, the County will work with Gem Lake and others to master plan the trail. The general alignment of the proposed trail is shown in Figure 2 and is acknowledged by the City of Gem Lake.

Figure 10 - Map of Gem Lake with Regional Parks and Trails shows the locations of all parks and trails listed above within the City of Gem Lake, plus any additional parks and trails adjacent to the City's border.

Figure 10: Map of Gem Lake with regional parks and trails in the city and adjacent to the city

Figure 2. Regional Parks System Statement Map July 2005

Gem Lake



<p>Regional Park Search Areas *</p> <ul style="list-style-type: none"> Boundary Adjustment Recognition of Regional Status New Unit Completing the System 	<p>Regional Trail Search Corridors *</p> <ul style="list-style-type: none"> Boundary Adjustment Recognition of Regional Status New Unit Completing the System <p><small>* Search areas (parks) and corridors (trails) as shown are for planning purposes only and are not indicative of specific proposed park boundaries or trail alignments.</small></p> <p><small>Proposed boundaries within park search areas pending master plan approval are highlighted in yellow</small></p>	<p>Parks and Preserves</p> <ul style="list-style-type: none"> Federal Land Private Non-Profit Regional State Land Local and County Land <p>Regional Trails</p> <ul style="list-style-type: none"> Existing Planned Proposed State Existing 	<ul style="list-style-type: none"> Wetlands (NW) Lakes and Major Rivers Minor Rivers and Streams Trout Streams 2020 MUSA TLG Street Centerlines (2005)
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City of Gem Lake Parks and Trails Policies

Parks

The City of Gem Lake does not see the need for a City park at this time, or in the planning horizon of 2030. Should the City of Gem Lake consider a park, it most likely would be a playground/picnic area located in the Northeast corner of the City near the City Hall.

Trails

The City of Gem Lake would like to see trails constructed along existing roadways. A marked bike trail now exists along the shoulder of Goose Lake Road in the City. As Goose Lake Road is a Ramsey County maintained road, the City suggests that a blacktop trail be built along the side of the existing roadway when roadway maintenance or construction occurs. Other trails could be constructed along the Highway 61 right-of-way and along County Road E, either on the road right-of-way or on private land being developed inside the border trees along the city's southern border.

Private trails along land parcels in the City of Gem Lake constructed along easements or property lines could be considered as trails, but are usually set up by agreements between individual property owners and are not considered part of a formal trails network, and will NOT be included in this Gem Lake Comprehensive Plan.

Potential trail connections between trails in the City of Gem Lake and the Bruce Vento Trail could be located at Hoffman's Corner (Highway 61 & County Road E area) or near the Schuenuman Road crossing of the current railroad track in the Northeast corner of the City.

Potential trail connections to the St. Anthony Rail Road Spur trail could be made at:

- Tessier Road, where it intersects with this current rail road track
- Along a 40-foot wide strip of land running from Goose Lake Road to the railroad tracks, that is currently owned by the railroad
- Otter Lake Road railroad crossing in front of the Gem Lake City Hall

13. Implementation

Background

Implementation of Gem Lake’s comprehensive plan will occur on a number of fronts, ranging from encouraging private investment to ownership and construction of public improvements. After formally adopting the plan, the city can insure it orderly implementation in a number of ways:

* *Policies (land use types and locations)*

- Regulations
- Public Investments
- Public Incentives
- Public Services

The comprehensive plan provides a rational basis for guiding development, making public investments, encouraging private investments and establishing the policies and regulations necessary to implement the plan. For the City of Gem Lake, plan implementation means weaving together the needs of citizens and investors with public policies, public investments and city regulations.

The comprehensive plan establishes the background and policies for the orderly development and reinvestment in the City. Implementation strategies link plans to actions and resources. Public investments serve development objectives and allocation of available resources. Regulations can be a natural extension of the planning process translating agreed upon ideas into practical application, with the assistance of clear and publicly administer guidelines.

The first implementation step is the formal adoption of the comprehensive plan. Plan adoption procedures are prescribed by state law. These procedures involve a report and recommendation by the planning commission after public notice and public hearing. This is followed by a 4/5 vote of the City Council.

The significant elements of Gem Lake’s comprehensive plan revision include:

- An inventory of the physical and natural resources that impact public and private development
- Identifying county, state, school district, watershed district and water management organization and neighboring communities plans and policies
- Identifying, and coordinating with, Met Council system plans and plan review policies
- Identifying current and future community values, needs, opportunities and objectives
- Projecting population and land use trends
- Developing a comprehensive set of policies by which all other plan elements are evaluated
- Identifying economic development strategies and policies
- Evaluating available vacant land
- Determining a logical distribution of land uses within the environmental and natural resources protection framework



- Identifying the supporting public service system plans including utilities, transportation, parks and open space, fire protection, public facilities and schools
- Developing public investment strategy which considers direct and indirect financial investment including public infrastructure
- Preparing to implement regulations

It is important to note that the comprehensive plan is much more than a simple map with descriptive text. It is an interwoven blueprint for the physical and economic development of the community.

Regulations

The major land use regulation tool is the zoning ordinance. Allied regulations include those dealing with subdivision of land, wetlands, nuisances, property maintenance and shore lands.

The City of Gem Lake’s chief regulatory tool is the zoning ordinance.

Zoning Ordinance

The zoning ordinance guides the use of land and the placement of structures on that land to assure a sense of order and to protect the public health, safety and general welfare. The zoning ordinance has often been considered a protective implementation tool, but it can also provide incentives to encourage good site design, general harmony, adequate open space and the reduction of congestion. A number of implementation issues and policies that need to be reviewed are discussed here.

Mixed Uses

A new mixed use district (defined by a planning venture of the City titled “Gateway & Village Centers Vision Corridor”) allows for a multitude of land uses for the business district of the city centered around ‘Hoffman’s Corners.’ This area is located at the intersection of County Road E and Highway 61. It also extends west along County Road E to cover two undeveloped land parcels of approximately 18 acres each.

The professional planner for this district recently envisioned many different uses along two major transportation corridors. A 50/50 mix of office/commercial/retail and residential is suggested.

With this Vision Corridor document, developers are presented a variety of planning ideas for the five different land parcels that make up this area. The document allows creative levee way for developer input, as long as concepts fit within the general guidelines. Ideas expressed in the document range from the use of second story condos over office or retail spaces, to the building of multi-story senior housing. Areas for a medium scale retail shopping center, with many “shoulder type” retail uses, are also suggested.

Any or all of these concepts would be constructed within a master plan and through a PUD. The City desires that this development provide an “integrated community where opportunities for shopping, working, recreation and social interaction can co-exist.”

Given changing economic conditions and needs, tiered development by different developers is a possibility that needs to be planned for. This would require careful

coordination to result in the unified look and feel that the City seeks for this Gateway area.

Residential Densities

Residential densities listed in this plan refer to the required lot size per housing unit or the number of units per acre. Lot size or density regulations allow a community to provide reasonable estimates as to the size of the needed public infrastructure. This insures that transportation, sewer, water, parks and other public services can be delivered in an economical and efficient manner.

Varied densities permit a variety of differing housing types and give the community the ability to attract a range of age and income groups. In this plan, higher densities have typically been directed to areas of higher land values, adjacent to transportation opportunities and other amenities.

In some cases, higher densities generally reduce the projected cost per unit for amenities such as water, sewer, parkland and other services. Well planned high density development can also accomplish lower service costs without sacrificing quality design. In fact, quality design can reduce the visual impact of higher density area and relieve the feeling of congestion that poorly plan developments often result in.

Paramount is the ability to create scale and quality of development that is consistent with the site and the neighborhood. Clearly, density evaluation must examine building scale (mass and height), building design and orientation, noise protection, vehicle circulation and storage, useable open space, type of land (hilly, rolling, flat) and what natural resources (forests, trees, water bodies) exist on them.

Related Zoning Ordinance Revision Considerations:

- The City of Gem Lake’s existing comprehensive plan now designates four updated single family residential development districts within the City. These districts are:
 - Single Family Estate
 - Single Family Executive
 - Single Family Residential
 - Mixed Use Residential

Appropriate changes must be made in the zoning ordinance to identify the land uses for each of these districts and other features such as lot coverage, setbacks and minimum lot frontage needed. The list of appropriate principal uses, allowed accessory uses and conditional uses needs to be examined and possibly updated.

- All new construction plans (residential and commercial) must be reviewed by a plan review committee. This committee will need to update plan review check-lists to allow for the newer districts.
- Shore land management - Gem Lake and its attendant wetlands are currently protected in the zoning ordinance with a 100-foot no construction buffer and a 150-foot buffer where ISTS systems cannot be constructed. The area around the lake and wetland is protected from tree and vegetation cutting from 50 feet into the lake to 100 feet from the lake and wetlands. These distances should be reviewed against DNR regulations to see if any changes are needed.



The Vadnais Lake Water Management Organization (VLAWMO) has informed the City that the water body known as Gem Lake does not have an outlet. Therefore, inlets to the lake must be filtered and flow control added.

- Wetland protection - VLAWMO and Ramsey Washington County Metro Watershed District (RWMWD) recently adopted updated water management plans that might require changes in the storm water section of the zoning ordinance.

The Gem Lake has two years from the date these plans were adopted to update its City storm water management plan appropriately.

- Subdivision regulations - The City of Gem Lake has adopted a new set of subdivision regulations. These regulations should be reviewed to allow for smaller lots (and zero lot line construction) that might occur with PUDs that include town homes or other similar structures.

Private Investment

The basis for a comprehensive plan diminishes rapidly absent private investment. Therefore, implementation policies recognize the desirability of encouraging private land ownership, protection of environmentally sensitive areas, enhancement of business/commercial opportunities, construction and maintenance of a broad range of life-cycle housing, and provision of resident and visitor oriented retail and service facilities. Promoting the qualities of the area and providing cost effective public services are at the core of the public strategy to encourage and support private investment.

Other public policies affecting private investments include tax increment financing, special assessments, coordination of community and business promotion activities, cooperative ventures and development sensitive regulatory frameworks.

Public Investments

In carrying out the objectives of the comprehensive plan, the components and staging of public investment is important. Understanding the basis for, and phasing of, public investments stimulates private investments in terms of location and timing. Public capital improvements involve the acquisition of land and the construction of public facilities. Public ownership has historically been the case, but varying ownership arrangements are emerging. Many municipal capital improvement budgets also include major equipment purchase such as fire trucks, road maintenance vehicles, office furniture, and so on. Maintenance expenditures (such as resurfacing a road) overlap between maintenance and capital expenditures. The majority of parkland and roadway rights-of-way have been acquired through dedication. Subdivision regulations provide for that dedication. In the case of future rights-of-way, they will need to be purchased by agreement or condemnation.

Municipal Capital Improvement Program 2008-2018

Background

The capital improvement program provides a working strategy for guiding public investment within the comprehensive planning framework. Resources are finite and rarely meet all needs. A well thought out capital improvement program results in a comprehensive “shopping list” where all desired investments are cataloged and prioritized. Absence of current available funding should not keep a project off the



shopping list (funding approaches are dynamic and changing) but will impact its priority.

Funding Sources

A number of funding sources are available or can be made available to municipalities. Some have specific requirements or limits. Increasingly, creative financing approaches are being undertaken which leverage private or public funds and/or engage partnerships with private business or other government entities. Some investment and debt funding sources for public capital investments include:

General Fund – general property tax dollars and fees make up the broad category general funds.

Enterprise Funds – water and sewer utilities usually operate as an “enterprise” account that collects more than is spent for services purchased. The extra funds are kept in a separate account that is used for operation, maintenance and upgrades of the supported system. A one-time initial installation charge is also collected from each connection made to the sewer or water system. This charge is called a Sewer Availability Charge (SAC) or water availability charge (WAC), and is usually used to expand capabilities.

General Obligation Bonds – certificates of indebtedness paid for by a property tax levy, backed by the property values of the city and authorized by the voters or by statutory provision.

Revenue Bonds – bonds supported by the specific revenue stream of the specific investment (i.e. fees collected for an ice arena).

Tax Increment Financing – this revenue source is the captured increased property value resulting from the investment, which would not have occurred without the public financial assistance. This revenue is specifically pledged to qualified improvements for a specified period of time.

Debt financing is not mandatory and the income stream could be used to pay investors or lenders on a periodic or annual basis. Tax increment bonds are generally backed by the full faith and credit of the City and its taxpayers.

The legislature has continued to reduce the flexibility of this tool in response of a limited number of practices that have been considered objectionable. Changing of tax rates for commercial properties at the state level also has significant impact on revenue projections. The City of Gem Lake currently does not currently have any tax increment financing districts.

Special Assessment Bonds – revenues are derived from the specially benefited property served by the improvement.

Capital Improvement Reserve Funds – special assessments are required to be satisfied when property ownership is transferred. The result is that advance payment of special assessments in reserve produces additional earnings until they are applied to the bond payment schedule. These funds can be used to restructure debt or to be used for capital investments.

Utility bonds – a bond defrayed by the revenues derived from utility changes.

Transportation Equity Act (TEA21) Funds – In conjunction with the Twin Cities Metropolitan Planning Organization transportation planning and programming, federal matching funds are available for transportation and enhancement related projects.

Grants – A diminishing number of grants are available for specifically qualifying projects, such as park and trail development, or utility improvements.

Loans – revenues to repay the loans would have to come from one of the sources listed above, or from some specific future equity position in the project. The general policy of public financial assistance should be loan before grant, to keep the money working for the community.

Donations- private contributions given for general or specific purposes. A significant amount of private wealth is anticipated to be passed to the next generation in the near future. Having a policy in place for accepting donations would give security to donors, insure the proper management of donated funds and, potentially, foster additional gifts.

Donations or grants could come from individual, businesses or non-profits. Funding sources from other governmental jurisdictions are somewhat limited, and fall into the above categories. However, other jurisdictions do make investment decisions affecting the City and need to be considered in collateral requirements. Pathway and trail funding would be a case in point. The Minnesota Department of Natural Resources and Ramsey County currently have primary jurisdiction when securing financial participation from regional, state and federal government entities. Part of the implementation process involves working with the various agencies and private interest groups to secure the improvements, and to be prepared to provide local supporting action and investments.

Investment Purposes

Public investment purposes are broadening to include equity positions in some private (but public purpose) property, such as affordable housing. In some cases, historically public facilities are being converted into private or joint ventures with or without direct lease payments to or from the municipality. These investments fall into general groups that might be labeled as land acquisition, facilities acquisition and development projects.

There are also some limited incentive investments that are made to directly induce private investment. Direct public investments would focus on land acquisition, public improvements and community facilities.

Recent Capital Investments

The City of Gem Lake made its first capital investment in 2007-2008 in conjunction with White Bear Township (WBT) in building a joint Gem Lake City Hall/WBT meeting room. This facility is jointly maintained, with WBT handling the grounds and the City of Gem Lake handling the building.



Future Capital Improvements

Projected future capital improvement projects can be classified in a number of different ways to reflect the objectives of the comprehensive plan and the reality of funding availability. A central debate revolves around whether or not the community should plan for something if it does not have available resources. One school of thought calls for planning only to realized funding. Another school of thought suggests prioritizing needs (which nearly always exceed resources) and developing a program that can respond to differing financing trends and programs. Establishing a realistic but extended plan that exceeds available resources permits capturing opportunities when new or special funding occasions occur.

Many funding sources are competitive and require long term planning and perseverance. It is important to develop a comprehensive strategy that compiles improvement by: 1) investment type (economic, development, parks), 2) priority (immediate to future), 3) funding source (General Obligation Bond, Assessment, etc.), 4) or other management category. The purpose of this comprehensive capital improvement strategy is to continually match changing community objectives with potential funding sources, thus assisting the City in determining priorities.

The current list of capital improvements, included as part of the section, does not involve revenue source estimates or specific assistance in non-defined public assistance areas. This allows the City to remain flexible in evaluating multiple potential funding sources and selecting the best solution, given current conditions.

There is no absolute answer on the amount of debt that a community should carry, only carefully weighed considerations relating to benchmark levels, community needs and community acceptance. \$ 900 to \$1200 debt per capita provides a national experience range benchmark. Consideration must also be given to overlapping debt from other jurisdictions. Special assessments for street and water system improvements, properly administered, are self-liquidating through special assessments or service charges. Capital outlays are projected annually over the next 0 to 5 and 5 to 10 years.

Community Facilities

Sometime in the next 10+ years, an expansion of City Hall is anticipated. Depending upon population growth, additional space will probably be needed for city offices and record storage. The parking lot at the City Hall most likely also requires expansion.

Transportation

Trails

Trails have generally been installed as on-road facilities, coordinated with Ramsey County road construction/reconstruction projects. Expansion of the trail system is, therefore, tied to County maintenance development and road turn-back programs. The City of Gem Lake has partnered with Vadnais Heights to construct some bike trails along County Road E. Additional connecting trails will be added by Gem Lake as conditions and finances allow.

Road turnbacks and road construction

The road turn-back program was set up by a state aid program, to align jurisdictional responsibilities of county roads. An amount of funds was set aside to permit transferring the roads and sufficient resources to bring them up to standard.

Several City of Gem Lake roads were replaced, rebuilt or overlaid in the last three years. Approximately .7 miles of Scheueneman Road and Hoffman Road, located in the Gem Lake Business District that were accepted by a “turn-back” from Ramsey County in 2007 still needs repairs.

Capital Improvement Program List

Refer to the Capital Improvements Plan on next page.

<u>Capital Improvement Plan</u>				
<u>Area</u>	<u>Project</u>	<u>Est Cost</u>	<u>Provider</u>	<u>Time Frame</u>
1. Sewer rest of Schneuman Rd and down Goose Lake rd to Golf Course	Sewer	\$ 900,000	Gem Lake System	0-5 Yr
2. Sewer Red Fox Hills Area (Little Fox and Big Fox Roads) 23 lots	Sewer	\$ 1,200,000	Vadnais Heights System	5-10 Yr
3. Sewer to Mixed-Use Area on Co Rd E.	Sewer	\$ 1,000,000	Vadnais Heights System	5-10 Yr
4. Replace Sewer in Hoffman's Corner Area	Sewer	\$ 2,000,000	Gem Lake System	0-5 Yr
5. Water to Schneuman Road (Co Rd 61 to Boundary to include Goose Lake to Golf Course	Water	\$ 950,000	White Bear Township	0-5 Yr
6. Water to Red Fox Hills Area	Water	\$ 1,100,000	Vadnais Heights	5-10 Yr
7. Water to Mixed-Use Area on Co Rd E.	Water	\$ 1,100,000	Vadnais Heights	5-10 Yr
8. Water to Hoffman Corner	Water	\$ 1,900,000	Vadnais Heights	5-10 Yr
	Total Est	\$ 10,150,000		
9. Expansion of City Hall building and or property		\$1,000,000		5-10 Yr
10. Stormwater Projects Flow control on flowage into Gem Lake itself.		\$50,000		0-5 Yr
11. Schneuman rd behind Barnett will need major reconstruction in the next 5 years		\$100,000		0-5 Yr
12. Right of way acquiring the intersection of Big Fox and Co Rd E.		\$30,000		5-10 Yr
13. Larger Barrier on the Cul-De Sac of Schneuman Road		\$5,000		0-5 Yr
14. Budget for purchase of open land for open space or park land		\$50,000		0-5 Yr
15. Trail right of Way development Fund		\$30,000		0-5 Yr
16. Traffic control of some sort at International Drive		\$5,000		0-5 Yr
	Total	\$1,270,000		
	Key			
			Sewer	
			Water	
			Road	
			Land	
			City Hall Expansion	
			Trails	